Class SF481

Book 7085

VOL. 1.

SEPTEMBER, 1901.

NO. 1.

Poultry Investigator

LIBRARY OF CONGRESS
RECEIVED
DEC 1 1901
PERIODICAL DEPT.

394
586

ADVANCE TO SUCCESS

A Trio of Mammoth Light Brahmas, owned and bred by Mrs. Ella Thomas of Quarles, Mo. Read her article on Light Brahmas in this issue.

25 ¢ a year

Buff Wyandottes Buff Leghorns.

S. C. B. Leghorns, S. C. W. Leghorns; Ducks and Geese. Young stock for sale after Nov. 1st. We will now sell 1 choice Leghorn cock (Buff) at \$1 each. Barnes and Houston's strain; all prize winners. Our Whites are Hawks and Wyckoff strain; our Browns are Braes strain direct. Buffs are Harris, Barnes, Arnold, and Braes. Write us for bargains.

W. A. BLOOMER & SON, Lebanon, Kas.

Nothing but direct external and internal treatment will kill roup germs. Buy the best; don't be deceived. 8 and for test samples. Price 50c and \$1.00 per box, postpaid. Agents wanted. J. D. W. HALL, Box 60 Dec Moines, Iowa.

200 White Plymouth Rocks FOR SALE.

Our specialty. White birds large size winter layers. Prices 75c each; \$5 per doz.
F. J. KOLASCE, DeBois, Nebr.

A Fall Fair

Is a good place to show your poultry and other live stock, but for pity's sake do not take them there lousy.

Lambert's Death to Lice Remedies are adapted for exterminating vermin on anything anywhere. Sample 10c. 64 page book free.

D. J. LAMBERT,
Appanaug, R. I.

Box 642.

Choice Cockerels & Stock Eggs for Hatching.

The Result of 25
Year's Breeding.
Line Bred at the
American Poultry
Farm.

From Barred and White Plymouth Rocks, White and Silver Wyandottes, White and Brown Leghorns, Golden Sebright Bantams, Bronze Turkeys, and Pearl Guineas.

Belgian Hares, Jersey Cattle.
Valuable Circular.

F. M. MUNGER & SONS, DeKalb, Ill.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered strain, from a long line of prize-winning ancestors have made them a specialty for 19 years. Now offering line exhibition and grand breeding stock of both two and four hatch at moving prices. If taken soon. Send for illustrated circular with half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Buff P. Rocks Exclusively...

We have Judge Harris' entire stock. These, together with our own prize winners, gives us the best flock of Buff Rocks in the country. We can please you both in quality and prices. Write us if you want winners bred from winners. Pekin ducks, Toulouse Geese for sale.

MRS. FLORA SHROYER,
Clay Center, Neb.

Let The Hens Lay

but Hatch Chickens by Steam

The best, surest and most economical method of hatching is with the

EXCELSIOR Incubator

Simple, yet thoroughly durable; absolutely regulates itself. Hatches the greatest proportion of fertile eggs at the least expense. Costs less than any other first-class hatching machine.

The **Wooden Hen**—for 50 eggs—in the most perfectly automatic, self-regulating, small incubator ever made. Write for incubator book and information—free.

CEO. H. STAHL,
114-122 S. 6th St.,
Quincy, Ill.

HERE is an Opportunity

To obtain
S. C. B. LEGHORNS

Two Cocks and ten Hens of superior merit for sale WAY DOWN. Send for illustrated catalogue—it's free.

GEO. W. OSTERTROUT, David City, Nebraska.

Silver Laced Wyandottes

With Royal Blood in Their Veins.

See this—Winners at Cedar Rapids, Sioux City and Nebraska State show at Lincoln. At the latter show we took 1st cock, 1st, 2d, 3d cockerel, 1st, 2d, 3d pullet, 2d hen. The cockerel which scored 92½ was cut one and one-half points on weight, having been on road two days and two nights. This makes him a 94½ point bird. How is that for a S. L. Wyandotte breeding? If anybody in America can please you on Silver Laced Wyandottes, we can.

I. & N. M. CONNER, Ponca Neb.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS.

Are better than ever as they have farm range. Have 280 young and 30 old ones to draft from the coming sale season. Was winners of all firsts and part second in state show the last two years, also have been winning for customers in strong competition. Satisfaction guaranteed. Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

BLOOD TELLS.

Scientific breeding and square dealing have made Whitney's National Strain line bred Barred Plymouth Rocks and Single Comb Brown Leghorns popular. Start right and you will always be right. If you want birds that can win and that will produce winners send for my circular and prices. Address, J. W. Whitney, Chatham, Ohio, P. O. box 1.

Mr. and Mrs. C. A. Blanchard,

Friend, Nebraska.

BREEDERS OF

White Plymouth Rocks, White Holland Turkeys Pekin Ducks and Toulouse Geese. At Nebraska State Show, 1901, we won 1 hen, 1 cock, 1 pen, 3 cockerel. Entered three single birds and one pen, so got prize on every entry. Won 2 pen, 3 cock, and missed the \$5 special by ¼ point at Oret, Neb., December, 1900. Best display, 1 pen fowls, 3 pen chicks, 1 and 2 hen, 1 cock, 1 and 3 cockerel at Seward, Neb., Nov. 1900. Stock and eggs in season.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

POULTRY INVESTIGATOR

For Practical Poultry Raisers.

VOL. 1.

CLAY CENTER, NEBR., SEPTEMBER, 1901.

NO. 1.

Three Requisites of Success.

By A. Upton, Fairbury, Neb.

(Written for Poultry Investigator.)

Failures in the various pursuits called "business," or, in other words, mercantile ventures, are usually attributed to three causes—first, lack of ability; second, lack of capital; and, third, too much competition, whereby the supply is rendered greater than the demand, and hence a cutting of prices to get rid of an overstock, which results in such a sacrifice that the firm cannot prosper, and therefore fails.

Raising poultry for profit, when it takes the nature of a business, can be compared to other pursuits of a similar object, and must, like all mercantile ventures, be run on business principles, or certain failure will be the result. The majority of poultry plants are run for profit, and are either a distinct business by themselves, or a part of a general dairy, fruit or farm business. The minority are run at a loss, and are usually conducted by wealthy amateurs who enter into the pursuit of a fad, or to gratify a love for poultry keeping, or perhaps to improve the different breeds, willing to sacrifice the money for the good of the industry, and with no idea of profit.

Raising Poultry for profit is subject to two or three influences which govern any other business pursuit. It requires ability and capital, but so far has not been affected by the third, namely, competition, over-production and its consequent disasters.

The first quality necessary therefore, either in any ordinary business pursuit, or in raising poultry, is ability. There are thousands and thousands of small flocks of poultry throughout this country which add many welcome dollars to the other crops of a farm and produce the bulk of all our eggs. There are also a few hundred large poultry plants, housing from three hundred to a thousand or more head. These,

both large and small, are run on strictly business principles, as their success, year after year, denotes, and the profit realized from them shows conclusively the ability of the men running them.

When this ability can accumulate money it is turned into capital, which is invested in enlarging the plant, and the business continues to grow in proportion.

There is a class of enthusiastic novices who write to know if they can make a living at the poultry business. They might as well ask if they can make a living at watch making. A living can be made at watch making by one who knows all about it, but for one who knows nothing about it, it would certainly be a complete failure, and he would soon be in the poor house, for he would not know how to begin.

One can make a living at the poultry business—if he knows how. No novice can do it, and we are frank to say so, but it will at least cost the novice less to begin and try to learn at the poultry business than in any other direction. It is rather strange that a man should expect to succeed in a business in which he has no experience, yet we find every day men rushing into poultry keeping, certain that they will succeed, without a moment's experience in poultry raising.

Now, when any pursuit is prosperous, it does not attract out attention specially, because we see at a glance that with its system and business principles and the business principles running it, it is bound to succeed.

We therefore pass it by and stop at a well-equipped plant, where we realize at once that plenty of capital has been invested, and where in appearance everything should be prosperous, but where, on the contrary, everything is a failure. The capital in this case is being sacrificed through the lack

of ability to turn it into a profitable channel.

Raising poultry is a peculiar and at the same time a fascinating pursuit. The person who enters it must, above all, have a great fondness for it. It at no time becomes mechanical or commonplace.

The foreman of a canning factory would not therefore succeed in raising chickens if he ran them on the same principles he had been running his canning room.

As each season comes round there is something new, something different to learn about chickens. As a rule, it is all in the line of improvement, and with an aim to be more successful each year. When disaster and bad luck overtake the breeder, it is his great fondness for the pursuit which carries him through. He must also have a sufficient quantity of common sense and knowledge of his business to be able to make up losses and finally come out with a prosperous season.

The secret of the failures of well-equipped poultry plants, where capital is plentiful, lies in the fact that the owners think to make a profit by hiring some man (of course a poultry man preferred) to run the establishment and make it succeed for them. This is not an impossible thing to do, but one of the first requisites is the poultryman, or, in other words, the ability.

First class poultrymen out of employment are as scarce as hens with teeth. Again, a first class poultryman hired by a man who knows nothing about raising poultry soon becomes a second class man at everything.

There may be exceptions to this rule, but they are scarce.

Of course, there are many instances in other business enterprises where one man invests capital and another man tries by ability to make a profit for the concern, but in such a case the capitalist must have confidence in the ability of his partner to make a success, or he would not entrust money to him. So it should be in the poultry business.

If a capitalist hires a poultryman

to provide the ability, which means, or should mean, successful experience, the former ought to get a fair return for his wages at least; but the truth of the matter is that there are no first class poultrymen to be had.

They are either all working for some one else or are in business for themselves.

The second quality necessary for a successful poultry plant is capital. Without this all the ability in the world cannot succeed. The capital may be great or small, but capital it must be, and available at the start.

There is really more chance for a

other may fall who invests largely and goes into the venture on an extended scale. One should learn to creep before he walks in this as in any other business. Master the numerous details step by step, and eventually master the business.

There may not be any very large fortune in poultry raising, but there is a handsome living for one who has the love for the pursuit, the ability to raise and care for the stock, and a small capital to start with.

These three things must go hand in hand; separately, they cannot bring success.

A. UPTON.

ing they will lead the leghorns. The pullets lay at four to six months old. I had one lay at four months, five months steady and hardly missed a day. They are very hardy birds, not subject to disease like other varieties and always on the go. These points are bound to put them to the front, ahead of all others. This is an important point and they will sell where others will not.

To new beginners: If you are thinking of starting in the poultry business, select some good leading breed. There are cheap and dear birds in all varieties. Get good ones, go

The Auditorium at Lincoln, Nebraska.

The auditorium at Lincoln, Nebr., is one of the largest convention halls in the west. This hall has been secured by the Nebraska State Poultry Association for its annual exhibit, which will be held Jan. 13, 14, 15, 16 and 17, 1902. It is a model place to hold a poultry show, and everything points to there being one of the largest shows ever held in the west on the above dates at Lincoln. Nebraska legislators are loyal to the poultry industry and annually appropriate \$1,000 to this association for exhibition purposes. Nobody need go away without the money they earn in

premiums. The cash is always ready, and we pay out in premiums more money every year than any other association of its kind in the U. S. The Nebraska State Poultry Association extends a cordial invitation to all fanciers to show with us this coming winter. We will treat you nice; come and see if we do not. The semi-annual meeting of the association takes place at the state fair grounds on Thursday, Sept. 5. I hope to see all members present.

L. P. HARRIS,
Pres. Nebr. State Poultry Association.

man with capital who is willing to learn by experience than for a man with ability and no capital.

At the beginning of one's career in poultry raising, there are houses and yards to make, stock and eggs to be bought, and a living to be paid for before any returns can be counted on. Investment of capital should be by easy stages, never putting in more money than you can control. One man may succeed with a hundred hens who invests a few hundred for their housing and keeping, and an-

THE BUFF ORPINGTONS.

Editor Poultry Investigator:

There is no breed in America today that has made as much headway as the Orpington in the last two years. While yet a new breed, they are coming to the front rapidly. As a table and market fowl they are unsurpassed, with smooth, white, pinkish legs. They are large, the cocks weighing ten to twelve pounds, cocks, nine to ten pounds; hens, eight to ten and pullets seven to nine pounds. They make good mothers and for lay-

slow and stick to it.

Yours respectfully,

A. L. HOUSTON.

Keota, Iowa.

Do not fool away your flock of poultry because you can't sell at once or at a big figure. A good flock is good property in dull times.

Stop the first symptom of disease unless you wish an "eternal worry."

Inspect your flock often these days.

Barred Plymouth Rocks of Today.

By J. W. Whitney, Chatham, O.

(Written for Poultry Investigator.)

The past few years have been characterized by a steady and marked improvement in the methods of mating and catering to thoroughbred fowls. Much more of thought and system is in evidence. The better class of breeds have cut loose from old worn and unsatisfactory methods and have shown their intelligence by their new and progressive ideas. Fancy poultry culture of today is fast taking on the serious and thoughtful attention it deserves. It is no longer the simple means of recreation for the invalid, the child, or professional man, as formerly. It has asserted its right to a place among the legitimate and paying industries of the age in and of itself.

Among others, the Barred Plymouth Rock fowls have been receiving their share of deserving attention. We are of the opinion no other breed requires more judgment or intelligence in its successful production. The later methods of mating are seriously handicapped by the previous handling of the breed, as old tendencies are in evidence, and a disposition to revert to former systems of mating very annoying to the hopes of champions of progressive line breeding. Perhaps no breed is more so, from the fact that they are a made breed and were created from foundation stock, possessing marked extremes in color and have been in the past almost universally bred along these lines. While I have no radical views regarding the double or two-mating system of breeding Barred Plymouth Rocks, and not wishing to be understood as in any way belittling that system (for I know by past experience most of our highest scoring birds have been so produced), I believe the time is coming when such practices by our more progressive breeders will become unpopular. Line breeding is fast receiving the attention and consideration it deserves by those who have intelligently given it time to assert its superiority, and many old and supposedly correct theories have been exploded and proven fallacious.

I am free to admit my first attempt to produce Barred Plymouth Rocks by the standard or one-mating system

proved a decided failure, and the cause is not difficult to find. I was in too big a hurry for satisfactory results. The American people are always in a hurry. They like to see things move. They do not take kindly to slow but sure methods in any line of employment, and right here lies the secret of their aversion to line breeding. For the benefit of those who have had no experience in line breeding, I will hint at a few of the more salient points to be kept steadily in mind in its successful operation. Probably the better way with most breeders is to start with a single pair, thus saving much attention, labor and care. The selection of this pair is a very important consideration. A mistake here means failure or a loss of much time. There must not be the least suspicion of serious defects or disqualifying tendencies. Size, constitution, blood elements, all must be of the very best. The first year's production of chicks must not be criticised too close. If you get a pair or more which at maturity are the equal and resemble their sire and dam in shape, color and general makeup, you can feel yourself fortunate. In case you do not, especially in color, don't feel disappointed or discouraged. They will come if you have the patience to wait. The more important features to be avoided are crooked backs, beaks, wry tails, weakly constitutions and disease of any kind. If these crop out your doom is sealed with that pair as a foundation. The only safe thing to do is to start over. If you are so fortunate as to start right, the rest, while not easy, will come. Line breeding requires patience and judgment above everything else, and is a slow but sure way of making the most possible out of your matings when blood lines once become firmly established. I seek no quarrel or controversy with the breeder of Barred Plymouth Rocks who chooses to cut cross-lots and by the two-mating system of breeding produce 50 per cent of standard colored birds. If he chooses to sacrifice half his product for the privilege of saving a year or two of time, he is the loser, not I.

Now, to come down to solid facts, I will say no breeder has any reason to expect good results from his mat-

ings by the standard or one-mating system of breeding until he has the blood elements in his fowls subjected to his method and ideas of breeding. This may take one year; it may take ten—depending upon his judgment and intelligence and also the material he has to work with. Great care and intelligence should be used in the choice of blood as a foundation. If blood can be procured that has been bred along these lines until it has become subdued, and takes kindly to this new system of mating, much time and annoyance can be saved.

As a sample of what can be accomplished by intelligent line breeding, I wish to call your attention to the illustration of "Queen Mary" in this issue of The Poultry Investigator. She is the seventh generation removed from the foundation cross of a line-bred strain of Barred Rocks known as the "National strain," the foundation of which was made from a single male and female, and no other blood added up to the time she was produced, except two males containing 75 per cent of pure National strain blood before they were used in the breeding pen. Her sire contained 87½ per cent of same blood as the foundation cock seven generations back and her dam contained 75 per cent of same blood as the foundation hen seven generations back. She has won seven first, three second and several third prizes, and scored by two judges (Felch and Northrop) to 94 points.

I desire those who have heretofore been so determined in their opposition to single mating and line breeding, and whose alarmists who have rushed into print with the intelligence that inbreeding reduces size and constitution, to point out the weak points in this pullet. Her weight when picture was taken, one and one-half years ago, at eleven months of age, was nine and one-fourth pounds, and she has sisters and daughters as heavy and her equal in every way, and some her superior, except in comb, and as producers of eggs this strain of Rocks has few, if any, superiors. The pullet whose picture is presented has produced 56 eggs in 56 days. Many of her sisters and daughters are as good, and perhaps, were they tested and a record kept, her superior. It has been my experience in line breeding that to be assured of success requires strict attention to every little detail. No guess work, no item of care or judgment must be overlooked. Houses, yards, feeding, mating, and, above all, patience, is required. Never give up is the price of the production of line-bred fowls. Be sure your foundation

stock is O. K., then go ahead. If you have patience and good judgment, each year makes their production more easy and the quality produced of a higher degree of perfection.

With the hope the above remarks may be of value to the breed and the fancy in general, I am, yours for better and higher scoring fowls.

CURE FOR INDIGESTION AND LEG WEAKNESS.

Editor Poultry Investigator:

As soon as you see a fowl in this way, or off their feet, give ten drops of Higginson's cholera cure, five drops of camphor, a teaspoonful of castor oil, all mixed together, once or twice a day. Four to six days will cure. Don't feed anything.

A. L. HOUSTON.

OVER-CROWDED COOPS.

About this time of year the new crop of poultry needs looking after. The brooder chicks will be outgrowing their coops, also the hens have weaned their broods and the chicks are piling up here and there. The sweating process in small coops at night and the cool mornings do not average up good. The sooner we get the new crop to roosting in the larger poultry house the better, but do not shut the house up on the winter style until we have winter. Lots of trouble grows out of cooping them up too close in the fall months. We have never yet picked a sick chick off the apple and plum trees in the fall. It seems to be good for them to grow up where the air is pure and plenty. Twice we have gathered them up in the fall and stored them away in their winter quarters, both times we were too good to them and they got sick on our hands. They get the sneezes and a variety of complaints and finally got the roup. We don't pick them off the trees so early now and we don't shut the house up so closely. We remember one fall we could hardly get the half grown chicks to perch on the roosts. We put a small pet pig in the house and every chick was glad to roost. Our doctrine is that fowls are clothed with feathers to protect them. A chick hatched in the fall will feather out very quickly. In various ways nature is getting ready for winter. We haven't so much faith in hot houses for poultry in winter as we did at one time. It is true that a warm house and suitable feed will bring some winter eggs, but taking everything into consideration, is it not very profitable. Wouldn't the flock be healthier if we conformed to nature's plan a little closer. By all means

SIR HENRY.

Score, 95 $\frac{1}{4}$, the foundation of Mr. G. B. Clary's flock of "Pure White" Wyandottes. Anyone wanting something fine address him at Fairbury, Neb.

have the poultry house comfortable, but do not shut off the ventilation in order to have the house too much of a contrast from out of doors. We have noticed lots of warm houses where the flocks were allowed to run in the cold all day. Can't see any good logic in this; would prefer averaging thing up a little better.

M. M. JOHNSON.

PERSONAL MENTION.

Among our advertisers you will find the name of E. B. Omohundro, of Bowling Green, Mo., a breeder of White Rocks and Black Langshans. Mr. O. has been a very successful exhibitor and has won highest honors in the best of company. You will find his stock strictly first class and up to date, and you will be treated right if you place your orders with him.

Mr. and Mrs. J. W. Wells own a nice tri-colored house cat. A few days ago she became the mother of five kittens. In a day or so after the advent of the kittens an old hen with motherly notions spied the little felines and when mamma cat returned to her babies she was surprised to find biddy in full possession of her home and children. She has continued ever since to watch over the young family with as much care as though they were so many chicks. The kittens have learned to come when she calls and if one of them wanders too far away biddy tenderly, with her beak, will roll the little fellow back in the nest again. The cat nurses them, but the hen does the rest.

Look up the advertisement of E. W. Orr of Clay Center, Neb., if you wish to buy Buff Wyandottes that are buff. They breed nothing but the best and are reliable people to deal with.

We have with us as a correspondent J. W. Whitney of Chatham, Ohio. Mr. Whitney has spent years in the breeding of thoroughbred poultry, and is expert authority on the subject of mating, and his services are in great demand during winter and spring months. His article this month contains a good many good things, and his remarks are worthy of careful consideration. His stock is first class, line bred, and "down to date."

Poultry Culture for Women

By Mrs. Mattie Webster, Belmont, Wis.

Editor Poultry Investigator:

Women anxious to earn money for themselves are to be found in all classes of society and in all conditions of life. Sometimes this desire is entertained because circumstances make self-support necessary, but often women who are not dependent upon their own efforts for a living have this wish, born of an independent spirit to have some money of their "very own," earned by themselves. Pick up any one of the many magazines for ladies and many inquiries will be seen upon its pages as to ways and suggestions for earning pocket money, and many different plans are unfolded and work described that are designed to accomplish the desired end, in reply to these queries. A woman may have a good husband, a comfortable home and have all immediate needs supplied and yet have little money to expend for the many little things so dear to the feminine heart.

Perhaps pocket money could be had for the asking, but an independent woman feels a reluctance to ask for money to buy that which is to give pleasure only, and might not be thought useful or necessary by the good man of the house.

A man and his wife are partners, whether this fact is recognized or not, and should, as in all other partnership business, have equal rights and privileges. If the business is sufficiently prosperous to justify the head of the firm an indulgence in luxuries, then also should some of the "dividends" accruing therefrom find their way into the pocket of the "lesser" member of the firm. This is as it should be; but, alas, not always as it is. Hence, woman's desire to engage in something that will bring in money. This wish is nothing to be ashamed of.

Among all the occupations and work open to women, there is none more pleasant, suitable or profitable than poultry culture. Women are well adapted to this work because of their love for pets, their painstaking performance of little duties and their persevering efforts to maintain cleanliness and neatness in all places that know their presence. Some of the would-be money earners may be so situated that it is impossible to engage in the work of raising poultry, but many who think they would like

poultry culture, but are deterred because they have so little outdoor space, might find a small pen of fowls a pleasure and a profit. It is surprising what can be done with a few chickens in a very limited space. While dressmaking, millinery work and many other like occupations exclusively for women are very confining and wearing on nerves and general health, poultry raising is a very healthful work; so much of one's time, if engaged in it, is spent out of doors in the fresh air and sunshine. If one has a love for the beautiful, a flock of thoroughbred fowls, uniform in size and color, will delight the eye, and because of a love and admiration for and a pride in such a flock, much pleasure will be found in working among and for them. Caring for a pen or two of fowls means work, pleasant work, but often hard work; but I do not mind it for I enjoy being out among my birds and I know that I shall be well repaid for the labor of my hands, as poultry culture is a profitable occupation or business as well as a pleasant and healthful one. Should the women desirous of earning pocket money have a home on the farm, then indeed, are her chances excellent to make a success of poultry raising, if the venture is made. Her advantages over her sister in town or village suburb are many. Perhaps the farm fowls are considered her especial property, and although hitherto unappreciated and unadmired, now represent her capital for a beginning in better fowls with better accommodations. Then the farm wife has nearly all necessary food for her fowls right at hand, and no ready money must be paid out for them. If the business is to be conducted in a business like way, as every business should be, all articles used for food for the poultry should be charged up to them, and all eggs and fowls consumed on the home table credited to them. On town or village lots not so great or immediate profits will be realized because of the outlay in cash for all supplies, but if rightly managed the work will grow into a money making business, improving from year to year just in proportion to the time, energy and brain work spent upon it. My sisters, if you are willing to work, and have a love for fine fowls, try poultry culture as a means to earn the much longed for

pocket money. Suppose your beginning must be small, so very small that it must necessarily consist of a sitting of eggs from some reliable breeder's yard of thoroughbred fowls, do not be afraid to make the venture. Buy the eggs and set them under some good old Biddy that you bought for a few cents, and when the chicks hatch, furnish them with a dry, snug coop, and give them the best of care; remember they are the foundation of your future flock. Women whom necessity compelled to make just as small a beginning as you would have to make have through careful management, wise planning, stick-to-it-iveness, perseverance and determination, become well known, successful fanciers, and stand today witnesses to the fact that poultry culture is a profitable business.

What these women have done you may do if you have their determination and perseverance.

We take pleasure in referring to the advertisement of the Midland Poultry Food Co., of Kansas City, Mo., and can say this company are surely putting up a good food and are good people to deal with. You will find their balanced rations not only good, but profitable to feed. This is proven by their satisfactory sales and the increasing demand for their goods. Look them up.

Among all the breeders in Nebraska there are none more enthusiastic than Mrs. Ida J. Buehler, Kenesaw, Neb., and there are none that breed a better class of stock than what she has in her yards. Many of the specimens came to her direct from England and are as good as money could buy. Those wanting something "gilt-edged" try her.

We call your attention to the advertisement of F. H. Shellabarger of West Liberty, Iowa. He is known all over the states as a first-class breeder, an honest and painstaking poultry judge, and if you doubt his popularity read the list of his shows this season and be convinced.

You will find in our columns the advertisement of George H. Stahl, Quincy, Ill., manufacturer of incubators and brooders. This is one of the oldest companies in the states that put out these goods, and wherever you go you will find the Excelsior incubator and brooder. This is proof positive that their goods are popular. The company are thoroughly reliable and send out good goods.

How to Succeed with Poultry.

By Mrs. Bettie Glover Mackey, Clarksville, Mo.

(Written for Poultry Investigator.)

It is always a pleasure to me to see a good poultry journal launched on the sea of life, and if any word of mine can give it smoother sailing than it would otherwise have, the word is always cheerfully given. I hope that The Investigator will be in reality what its name indicates, and that it will be published in the interest of more and better poultry by the masses and not in the interest of a few fanciers who can spend hundreds of dollars in advertisements. Do not understand me as objecting to these fanciers or their advertisements; they are all right. But they can live and thrive regardless of obstacles and disappointments, while the amateur, either on the farm, as a market poultryman, or as a fancier, needs encouragement, instruction and words of cheerful sympathy. And the amateur of today is blessed far beyond his power to appreciate the blessings. Only we who commenced almost a decade ago can see the advantage the beginner of today has over one of twenty years ago. He is reaping the benefit of our experience and disappointments. And yet every one must have a personal experience before he can attain success.

Perhaps it will be well to give in this, the first issue of The Investigator, an inventory of what I believe to be essentials to success in poultry culture. I may not give them all, but the elements and articles I shall mention are to my mind indispensable. First, a good stock of practical common sense. There are a great many learned people in the world who never can amount to anything in a business way. Some of the brightest intellects are financial failures simply because they have no practical sense. Again, I do not believe that financial success is the highest degree of attainment in any department of life. True success is to so live that the world will be better for our having lived and labored in it.

If financial prosperity can be attained as we work to achieve the highest point of excellence in our vocations, all right, but let our first object be to strive for the best results to the world. With a good stock of common sense our next necessary capital will be a few dollars, not many.

I believe the investment of a large amount of money has stranded the barque of more amateurs than the lack of funds to carry on the business ever has. Decide what you wish to do, that is, what branch of the poultry business you wish to take up, and be sure, don't take up too many branches or breeds. If you love the beautiful and are quick to appreciate color and form and can be unselfish enough to see the faults of that which belongs to you, and also discern the good in stock not your own, you will, other things being equal, make a suc-

Hen bred by A. Upton, Fairbury, Nebr.

cessful fancier. But if you look only at fowls from a commercial standpoint, and think only of the money you can make out of them, caring for nothing except the meat and eggs you can get from them, do not think one moment of going into the fancy poultnature and willing to become cultured. Though if you have industry, patience and love the care of poultry, you may succeed as a market poultryman. However, one thing you will learn even as a market poultryman—that there is more money in an even flock of chickens than in one of many colors. If you decide you are fitted by nature and willing to become cultured in the knowledge of fancy poultry, make a small investment the first year in one breed of chickens, and one of turkeys if you are situated to handle

the latter. And whatever of extension you wish to make in the future, let it be more of the same breed, and if you find after a year or two you can add another breed with profit to your business, do not attempt to keep the two breeds on the same place. That is, do not try to keep them yarded in breeding pens separated by a fence only. Not that it cannot be done, but because you do too much work, and you can always find a lover of chickens who will handle one breed for you at less expense than you can raise them, if you consider labor and worry worth anything. Your next need will be an incubator. If you are wise you will not attempt to sell any eggs the first season. Get the stock in the fall as early as possible and start the incubator in January. This will also necessitate a brooder, or perhaps two. In fact, I think two a necessity if only you have an hundred egg incubator. Crowding chicks does not pay. Chamberlain's Perfect Chick Feed is the next essential to raising chicks. And make up your mind that with all the work and precaution possible you will meet many disappointments. If you do not you will certainly be an exception to the rule. Don't be in a hurry to advertise. Wait until you have something to sell. Then when you do advertise don't expect the whole poultry fraternity to send you their orders exclusively. And don't advertise that you have all the good stock in the world, for smart people are afraid of such advertisers. Go to some first class poultry show not run by a ring in the interest of local fanciers. A state show is the most impartial I have ever attended. But if you cannot go to the best, do the best you can and go to some show. If possible, get acquainted with the judge or judges, and get from them all the information possible. If you cannot do this, notice the blue ribbon birds and compare them with those that have no ribbons. You may not be able to detect the superiority of the first prize bird over the fourth or fifth prize one. If you cannot do this there is always some one willing to show you the superior points of the first prize bird. If no one else will do it, I am very sure the owner of the bird will take pleasure in pointing them out to you (for your accommodation exclusively). Really shows are great educators, and I think every fancier should attend at least one show a year.

If you find your birds are not first class, then determine to make them so. But remember that it does not

necessarily follow that they are not first class because they do not win in the show room. These are the points you must study and learn to raise from the best birds, regardless of show record. In order to do this, get a first class judge to visit your wards and instruct you. But if you raise for market only it will not be necessary to spend money for the fancy points in fowls. Get some good thoroughbred stock and raise all the chickens you can. Raise early chicks and sell as soon as possible in spring, as the early broilers bring the highest prices. But be sure you keep enough of the pullets to make winter layers next winter, and enough of the late pullets to make early layers next spring. Keep enough yearling hens to have good healthy chicks next year. I like to raise from yearling hens and early pullets. Late pullets are not good breeders until late in the season. The first eggs are small and often unfertile, and if fertilized the chicks as a rule are not very strong. I have spoken of stock, of incubators, brooders and feed, but have said nothing about houses.

I think a great deal more has been said about houses than has been sensible. If I were able to put up the fine poultry houses described in the poultry journals I should be able to retire from business, and would not build any, but would leave the business in the hands of younger and poorer people. What you need is to have plenty of house room and range. I prefer cheap, small houses to large, expensive ones. Have them warm in winter and cool in summer. Keep them clean and dry. Do not crowd too many fowls in a house. Writers to the contrary notwithstanding, I do not like a house too close in winter. I believe the fancier goes to one extreme and the farmer to the other. The fancier rears his chicks so tenderly they have no constitution, and the farmer neglects his almost to cruelty. Between these two extremes will be found best results. I have simply given general outlines in this and will be more explicit in future. I hear some one say, "She never said a word about being honorable in your dealings." No, I believe I did not, and I am inclined not to say anything for the reason that if you have come to years of maturity and haven't learned the only true success in life is obtained through honorable conduct in every department of business, it would simply be a waste of time for me to try to impress you with the truth at this late day.

MRS. BETTIE GLOVER MACKEY.
Clarksville, Mo.

Look up the advertisement of W. H. Bushell. He is the largest importer of Buff Orpingtons in the west and keeps nothing but first class stock. Mr. B. is a reliable business man and treats his customers in a satisfactory manner. His birds are winners wherever shown. If you want something right try him.

Mrs. May Taylor of Hale, Mo., breeds Light Brahmas, Barred P. Rocks, S. C. B. Leghorns, each on a separate farm by a specialist. She is in a position to furnish you stock equal to the best at reasonable prices, and Mrs. Taylor does an extensive poultry business and gives the best of satisfaction at all times.

A. J. Williams of Clay Center is an all-round pet stock breeder, keeps nothing but the best in bantams, hares and covies. If you want a pet for the little child write him.

Cockerel bred in yard No. One, by A. Up-ton, Fairbury, Nebr.

If you are in want of a good leg band look up the ad. of Frank Meyers of Freeport, Ill. He manufactures the Ideal Aluminum band. Your humble servant has used several thousand of these bands and they have given good satisfaction and I can recommend them to all. Prices right.

Those wanting good Light Brahmas will do well to write Mrs. Ella Thomas at Charles, Mo. She is an expert at breeding prize winners and her stock is in great demand. If you want something good write her.

L. R. Oaks of Bloomington, Ind., is an old and reliable manufacturer of incubator and brooder supplies and are always ready to fill your order satisfactorily. Their goods are first class.

David Larson, Wahoo, Nebraska, Expert Poultry Judge

I have had years of experience in breeding, mating and judging. For reference to qualification, write **POULTRY INVESTIGATOR**, Clay Center, Neb. I am open for engagements.

Grow Fruit ..

Poultry helps Fruit; Fruit helps Poultry; great combination. If you want the best fruit paper, at 50c per year, send for

"Western Fruit Grower" - St. Joe, Mo.

Capital City Poultry Ranch

E. E. Smith, Prop.

Mammoth Pekin Ducks. I won every 1st at State Fair and State Show. I have the best in the west.

E. E. SMITH, Lincoln, Neb.

POULTRY CUTS at CUT PRICES. CATALOGUE FREE. Harper Eng. Co., Columbus, O.

Flemish Giants...

We have strictly A. No. 1 Giants, headed by WINDSON, imported Sept. 1900. One of the largest and best Giant bucks of his age in America. His ancestors present an unbroken line of England's best champions. 8 weeks old Giants \$5 to \$10 per head. You cannot get better ones at any price. Dr. I. C. Stephens & Co., Carleton, Neb.

300 Buff and Black Wyandotte Chicks.

For sale now. Breeders or fine exhibition stock. Give me a chance to please you.

HENRY HESS, Winona, Minn.

White P. Rocks Exclusively....

My Rocks are of the best strains to be found and I have a fine lot of chicks to sell reasonable. Write,

MRS. NANCY WATSON,
Lincoln, Nebr.

INCUBATOR ON TRIAL

The Perfected Von Culin.

Successful result of 25 years' experience. Scientifically correct, practically perfect. Non-explosive metal lamps. Double and packed walls.

Perfect regulation of heat and ventilation. Made of best materials, and highest quality of workmanship and finish.

PRICES \$7.00 AND UP.

SATISFACTION GUARANTEED OR NO PAY. We make Brooders, Bee Hives & Supplies. Catalog and Price List sent Free.

THE W. T. FALCONER MFG. CO.,
Dept. 213 Jamestown, N.Y.

Poultry Investigator

Is published the first of each month at
Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.00 per inch each insertion. One inch one year \$10.00. These are our only rates for advertising and will be strictly adhered to. We treat alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of *POULTRY INVESTIGATOR* is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in *THE POULTRY INVESTIGATOR*.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

EDITORIAL.

Don't allow your fowls to drink stagnant water. It will cause you lots of trouble.

Pure bred fowls degenerate very rapidly under poor management. If the weakly, deformed, runty ones are not regularly weeded out, the flock as a whole will in time be no better than scrubs.

Salutatory.

We present to the poultry reading public this month the first issue of the *POULTRY INVESTIGATOR*. We ask you not to criticize us too harshly, as we are new and must have time to grow. We are aware that there is a wide field for a good, live poultry paper in the west, and it is our purpose to make the *POULTRY INVESTIGATOR* all that its name implies. We shall from month to month improve it and will push it to the front as fast as is possible. Everything will be done that can be done to make it pay its advertising patrons, and we want all poultry fanciers to feel that the *POULTRY INVESTIGATOR* is your paper and that its proprietors are your friends. We thank you kindly for the support you have given us in this, the first issue, and hope that from the results of our efforts we may merit a continuance of your patronage.

Yours for success with poultry,

L. P. HARRIS, Editor.

Don't allow your chicks to become stunted. A stunted bird is a disgrace to its owner and an unmarketable product.

The value of the droppings depend upon the food consumed. Hens that are fed upon bones and meat will double the value of the droppings compared with hens fed upon grain.

No breeder of thoroughbred fowls can afford to have one dissatisfied customer. If you wish to please do not over-describe your stock, and educate yourself to know a good bird from a poor specimen.

Your fowls are moulting now and should have the best of care. Give them the ground bone, plenty of good, substantial food that is not fattening. Be sure there is no lice to sap away their vitality and keep them where they can get plenty of green food and where they can get plenty of shade and fresh water.

Many a valuable hen dies this season of the year solely because they do not have proper care during this critical period of moulting. If ever you should take good care of your birds it is just now while they are putting out their new feathers.

These late hatched chicks should have extra good care. It will pay you to give them a little more of your time and more extra feed. There has been but few chicks raised this season and you will wish before next May comes that you had taken better care of the late ones. They will save you many dollars for your extra trouble with them. If they were worth a starting they certainly are worth maturing and if grain is expensive they will pay their way by taking good care of them.

Watch the favor courting of the editor of one of our best poultry journals this coming season and see how many best flocks he or his judges will find of one variety during the season. It will be too bad if you are not the last one he calls on. The same is applicable to many judges in show rooms. The patrons of the first show he judges in the season are not in it with those of the last show. It is "the best class of Mediterranean," "the best class of Rocks," "the best Cochins I ever saw," everywhere he goes. They are lobbying for a job.

Young and growing chicks should be kept entirely separate from the old fowls during the next five months by all means. This is seldom done. A great many times you will find old, reliable breeders letting their chicks and fowls run together, but more especially you will find this practiced among farmers. Young growing birds need more feed than old matured fowls, and if allowed to run together the fowls get too fat, and the chicks are robbed of the feed they should have, consequently they do not make the growth they should. It really is to your interest to separate fowls from the chicks and if you have plenty of room separate the males from the females.

Now is a good time to sell off those culls. What are you keeping them for? They never pay you anything. They are only worth what they will fetch by the pound and the sooner you get rid of them the better chance your good birds will have and the faster they will thrive. So do not put off marketing them at once. If you are keeping fowls for the eggs only, be sure to dispose of all the males except those to be used as breeders. The others are a nuisance and should be taken to market at once. See to it. Don't put it off. If you do you will not get the best results from the balance of your flock.

When your poultry business gets dull take a good dose of printer's ink. If the first dose does not revive the trade, take a second. If followed up at regular intervals it is a sure cure for a dull or slow trade.

Yes, the farmers are becoming fanciers. The farmers holding a poultry show a few years ago would have been a curiosity. Right now they are taking a hand everywhere, even holding shows exclusively their own. This is as it should be. It makes a friendly rivalry in the right direction and will help both the city fancier and the farmer fancier. It works up a pride that will be a permanent good to all concerned.

Some time ago we ordered a four-roller Century press especially for this paper, but owing to the machinists' strike in the east the press was delayed. We have hardly had time to let the foundation set until we commence printing this paper. It has been a hurry-up job and possibly a few mistakes will occur. Hereafter we promise a nice job of printing on The Investigator. Our press is especially suitable for bringing out half-tones in good shape and each month will mark an improvement in illustrations.

This is the time when the flock wants watching on account of symptoms of diseases. If you let roup, canker or diarrhoea get started in your flock now it will be almost an impossibility to get rid of it before it will practically ruin your flock. We will soon be getting cold nights and the flock wants looking after. See that they do not huddle or too many get into your small houses and sweat, then run out in the cold morning air and catch cold; then in a few days you will see a lot of well developed cases of roup and you will wonder how these chickens came to have the roup. Be sure to keep them from sweating.

Were Your Crops Injured

by the drought? Well, even so, you needn't starve to death. A good flock of chickens will pay your taxes, buy your groceries, and leave a surplus besides. The

Hawkeye Incubators

will hatch them for you, with less bother and greater certainty than any other incubator sold to-day. Perfect regulation of temperature, ventilation and moisture. In actual results the Hawkeye takes a back seat for nobody. Three sizes—60, 100 and 200 eggs, at prices that are right. We make brooders, that really take care of the chicks after they are hatched. Our motto is "The Hawkeye Incubators are Good Incubators," and it means exactly what it says. Better send for our catalogue. See our special offers and guarantee. Book free, or send the and get also a year's subscription to a leading poultry paper.

Hawkeye Incubator Co.,

Department 103.

Newton, Iowa.

Sure Hatch Poultry Company

Has the largest aggregation of thoroughbred poultry in the west.

We import, breed, buy and sell
All Varieties.

Each variety is bred separately on a farm. No chance for mixing up. Prices reasonable. Stock the best. Write your wants. Address,

Sure Hatch Poultry Co.

Clay Center, Neb.

TAKE THE

Kansas City & Omaha Line

For all points east, south or west. Close connections made on all junction points.

For rates and information call on or address, S. M. ADSIT, G. P. A. St. Joe, Mo. S. M. WALLACE, Agent, Clay Center, Nebraska.

..WORLD'S CHICK FEED..

..Beyond Comparison..

Chamberlain's Perfect Chick Feed 100 lbs. \$2.50; 50 lbs. \$1.50; 30 lbs. \$1.00.

Chamberlain's Perfect Hen Food will make your hens lay. 100 lbs \$1.75. Goods shipped from St. Louis.

Manufactured By **W. F. CHAMBERLAIN, Kirkwood, Mo.**

Buff Orpingtons AND White Wyandottes

No better Stock
Raised.

I never have failed to win in
largest shows. Birds score from
90 to 95%.

C. ROCKHILL,
Harvard, Nebraska.

Partridge Cochins Golden Sebright Bantams Fancy Pigeons

I will close out my entire stock of Cochins.
None better. At low prices. They have al-
ways won for me and will for you.

Wm. HOLCOMB, Clay Center, Nebr.

Blue Barred Plymouth Rocks

Choice breeding and fine exhibition
birds for sale. Winners wherever and
whenever shown. Prices low. Must
sell. Write for printed folder.

M. M. HOLT, Marshalltown, Iowa.

Barred Plymouth Rocks.

We have Quality and Quantity.

Farm raised prize winning stock,
cheap for quality. If you want Rocks
write us.

H. B. LOUDEN, Clay Center, Nebr.

Silver Laced Wyandottes, White
Wyandottes, Buff Leghorns, Black
Leghorns and White Pekin Ducks.
First class birds for sale. Mrs. Willie
E. Tibbitts, Imperial, Neb.

Cornish and White Indian Games.

Stock for Sale.

J. C. NAUMAN, Clay Center, Nebr.

Eli-Fli Chaser...

The Man's money saver. The animal's
friend. Try it once—have it always. Guar-
anteed. Your stables and stock freed from
the summer pests at a cost of less than 5 cts.
per month. Cheap. Safe. Effective is Eli-Fli
Chaser. For \$1.00 enough liquid for 10 cows
15 days and a sprayer, or 25 cents per quart
for liquid alone. Address,

The Vail Seed Co., 150 N. Delaware
St., Indianapolis.

Special price on 5 gallon cans.

A. J. WILLIAMS,

...Breeder of...

Silver & Golden Sebright,
White & Buff Pekin, B. B. Red
Came BANTAMS; Belgian
Hares, White Rats, Cavies.

Write for Prices.

CLAY CENTER, NEB.

Please mention the INVESTIGATOR
when answering advertisements. It
will accommodate both the advertiser
and us.

FARM POULTRY

By Mrs. C. A. Blanchard, Friend, Neb.

As a usual thing the farm poultry
is the property of the wives and
daughters of the farm. The farmer
himself pays very little, if any, at-
tention to it, except to scold if we
visit the wheat bin too often. All
work and no play makes the farm a
dull place, while all corn and no
wheat and oats will not make the
large frames and good muscles which
we need in our farm poultry.

We have less to contend with in
many ways on the farm than the town
poultrymen, while in others their
birds are much safer than ours.
Hawks very seldom bother theirs,
while to us they are a very great
source of annoyance.

On the farm our poultry can roam
at their own sweet will, and we want
a breed that is fond of roaming and
rustling.

While we still had our flock of mon-
grel fowls, with only a few white
ones that we kept yarded through the
breeding season, it was an easy mat-
ter to see which were the rustlers.
The mixed ones were on the roost at
least an hour before the white ones
in the evening and if the doors were
left open they were out at first peep
of morning. We were not long in dis-
posing of all the mixed flock, and
have never been sorry of our choice of
White Plymouth Rocks.

There is much room for improve-
ment in farm poultry all over the
country. Take note, any of you, in a
drive anywhere you go, or any dis-
tance, and count the farms that have
pure bred poultry. We have driven
long distances and kept note a good
many times, and have found the pure
bred poultry farms few compared
with the others.

This state of things is not as it
should be. The Poultry Investigator
company is doing a fine thing, print-
ing this poultry journal, and in giving
a subscription free with every order
for Sure Hatch incubators. We
know that their incubators go into
many a home where a poultry
journal is not considered a neces-
sity, so in this way our Poultry
Investigator will find a place in the
homes of thousands. We hope
it will be the means of much improve-
ment in farm poultry. We should all
have our homes as comfortable as our
financial circumstances will allow. It
is a duty we owe ourselves, our fam-
ilies and our neighbors. Farms are
worth more in a neighborhood where
things are neat and pretty.

A flock of pure bred poultry is much
handsomer than the usual mongrels
found on farms. If you do not think

so, try it and see. People never drove
into our yard to ask about our mon-
grel chickens. But many a one drives
in to inquire about those "pretty
white chickens," while others will
walk their horses by the place and
watch the chickens. I am proud of
our poultry. They are an ornament.

In noting the difference between
town and country bred poultry, the
farm poultry at most times of the
year hunt a good share of their liv-
ing. Pure bred will do equally as well
on the same care as the mongrel.
Many times a little different manage-
ment will make either kind pay bet-
ter. If we live in a country where
there is little gravel it pays to buy
grit. If we want lots of eggs for
hatching in early spring it pays to buy
green bone or meat meal. But you
can be sure the chickens would live
and lay eggs without them. Later
in the season poultry finds a good

Mrs. C. A. Blanchard, Friend, Neb., breed-
er of White P. Rocks, and correspondent for
POULTRY INVESTIGATOR.

supply of fresh meat in the form of
bugs, flies, grasshoppers and worms.

The town breeder who is obliged to
confine his poultry in small yards is
also obliged to supply many of those
things in order to make his poultry
profitable at all. A dozen hens will
soon pick the gravel off a small yard,
and as biddie has no teeth what would
she do without gravel? Simply die of
indigestion, and we would say the
poor thing had cholera. The same
with houses. While it may pay, and
does pay, to have comfortable, warm
houses for poultry, many kinds of
pure bred poultry will give us as poor
returns as mongrels if left to roost in
the machine shed, corn crib or horse
stable. In fact, many of them prefer
having a hundred and fifty dollar
binder to roost on in preference to a
common pole. Now, farm wives, get
a coop of chickens or a setting or two
of eggs, then some poultry netting for
a yard to keep them by themselves,
and in a year or two at least you can
rid the farm of the mongrels.

One Day's Work

(Written for Poultry Investigator.)

What shall I write for the journal that will be of interest? Is often a most perplexing question to the many writers, especially a beginner. I never could write fancy articles, so with the editor's permission I will simply tell what I have been doing in the poultry house.

The hatching season is practically over and those of us who are so fortunate as to have an incubator for incubating don't have the question of how shall I keep down the lice and mites, as those of us who have our favorite biddies for setting, and to keep free from those dreadful pests. With me, I have not one of those much wanted machines, so use hens for incubating. These have a separate room, made by dividing part of one of the poultry houses. In this room are nest boxes for twenty hens, feed box and water fountain. I have taken one day for cleaning this room. All nest boxes were removed, then with an old broom the ceiling, sides and floor were thoroughly swept, and with a wash boiler full of boiling water, to which I added one quart of kerosene and one quart of salt, I gave the room a scrubbing, as was each nest cleaned of nest material, every particle of broken egg and dirt, and given a scrubbing with the same solution, inside and out, with a scrubbing brush, put in the sun to dry, then neatly piled in one corner of the room, ready for next spring's work. I did this in one day with my other household duties, and was very tired when night came. Yes, and how refreshing was a bath, for I was not only tired, but dirty, too. I also give my poultry houses such a cleaning every two weeks, and the roosts are painted

Sample feathers taken from some of A. Upton's Fairbury, Neb., prize-winning Barred Rocks. Mr. Upton has long been a breeder, and means to have the best.

each alternate week with Liquid Lice Killer. I know I have not lost a chick from lice or mites this year.

If this does not find the editor's waste basket I may come again, if he will kindly correct my many errors.

IDA E. BARD.
Imperial, Neb.

(It is just what we are doing in the poultry yards that interests all. Come again. We are glad to get these everyday experiences.—EDITOR.)

Dr. I. C. Stephens, Carleton, Neb., breeds Flenish Giants of a superior quality and will sell reasonable. The F. Giants are the largest specimen of the hare or rabbit and are very handsome and profitable. They are quite rare at present, but are fast coming to the front and will be as popular as the Belgian hare in time.

I. & N. M. Conner of Ponca, Neb., are visiting in New York for a month or so. No doubt they will see the good eastern birds and come back perfectly satisfied that they have as good as are raised in Silver Wyandottes. Friend Conners surely may be proud of their stock.

William Holcomb, Clay Center, Neb., is offering his entire stock of Partridge Cochins, without reserve, at prices that will astonish you. If you have use for P. Cochins, now is the chance of your life.

I recently visited the yards of Mr. and Mrs. C. A. Blanchard, Friend Neb. I found they have a fine lot of White Rocks in the pink of condition—large, early batched chicks, just the kind for the early shows. If you need any such, write them.

Catch The...

...Early Trade

**BY
ADVERTISING**

..NOW..

**The Poultry Investigator's Rate
on Application..**

There were but few chicks raised this year and the **Early Advertiser** is the one that will **Reap the Harvest**. Send copy at once and get your share of the trade.

**Neglecting Advertising is neglecting
...Business...**

Mating Light Brahmas

By Mrs. Ella Thomas.

(Written for Poultry Investigator.)

After eleven years of study and experience in mating Light Brahmas, I still consider myself an amateur. Besides, in one sense of the word, that is for years I have used one or two points and pedigree as well as proper essential to success when it comes to points and pedigree as well as proper line breeding, that I find many breeders do not live up to. That is the single mating in our Light Brahmas; they should have a universal bluish undercolor. We should forever discard the idea that some are even now advocating, and that is the white undercolor for our exhibition specimens. We must have a bluish undercolor. I say it advisedly, because time has proved to me that a universal blue undercolor is as essential as the blue undercolor of our Barred Plymouth Rocks. Unless we mean to still practice this double mating system in any breed we will lose hundreds of amateur breeders from our ranks. For they, after a year or two of unsuccessful breeding, buying and spending almost their last dollar in the hope of producing something worthy of the money they have expended, will give up in disgust and try something else, and perhaps this something else will be to try to support several of the family by working by the day. Does this sound rather strong, brother and sister fanciers? It is putting the matter before you in a very mild form, indeed, so mild that many could tell of very miserable lives, even separations of families over such a great stumbling block, and money losses, as I have just mentioned, the double mating system. But enough of this. It is not to baranque the poultry fraternity that I have dedicated this article and placed it in the hands of one of our best and most beloved western judges, who is to edit The Poultry Investigator and helps of more and better poultry, such as we have worked for, planned and dreamed about for many years. May it enlighten the eastern people in the next few years fully as much or more than the eastern people have aided the west for so long. The east is silently winning our laurels now, and have been for some time, paying the west one-half the price they charge us for the same score. I trust we may not

always hide our light under a bushel. We western people can explode the idea many eastern people have, namely, that the western judges score higher than the eastern judges. Judge Felch has scored Brahmas for me, in customers' hands, higher on yearling birds than judges in our home scored them as young birds; so has Pierce and Butterfield. And birds sent out by score cards from several of our home judges, scored in our yards, have gone to large shows east and south, where they scored one to one and one-half points more in our eastern judges' hands. So I consider this talk by people in our journals just so much wind, as many people's fault-finding of the birds we send them is only wind and sometimes worse—fabrication, pure and simple. It is

Cornish Indian Games bred by Cottle Bros., Edgar, Nebr. They have won largely in the show room for the past five years.

not always that people aim to misrepresent us; it is ignorance of what constitutes a bird of a certain score. Some people judge a bird almost solely by the wing, others by foot-feathering, etc. My idea of a bird is one with sections cut about the same throughout the bird. I would not give a bird cut one-half point throughout each section for one-half dozen birds cut one and one-half points in one or two particular sections and one-half in the rest, or perhaps cut nothing in several places. I know how hard it is to overcome such defects and get the progeny into a uniform lot of birds, yet that is and must be our aim in breeding for exhibition birds. A bird is good when scored or compared as a whole.

Our editor has asked me to give an exhaustive article on mating and

breeding Light Brahmas according to my idea and point of view. If I can be of use I am always pleased to do so, hoping always to lead out other and more experienced minds than my own, because I am anxious to know, too, all that is to be learned. Mr. A. F. Hunter of Farm Poultry used to condemn the line breeding, yet, in the hands of a practical breeder, I believe it is the only safe line of breeding out Light Brahmas, or any other breed for that matter. Do not men follow line breeding in horses, cattle, sheep, and hogs, and those who produce the greatest specimens are proven from some great sire or great dam? Why not our fowls? It must be done if we would succeed. I condemn Cochins in our Brahmas, because they are the English and not the American type, not that I wish to condemn the English birds more than they deserve as compared with our American-bred birds. The English type, as I have found them, were poor layers, poor foragers. Our American type are rustling, practical, vigorous birds, and great layers. They will make more pounds of meat and lay more eggs in a year than any known breed. One objection some people find to Light Brahmas is the immense leg and toe feathering, but owing to their great size, marked vigor and hardness and gentle practical qualities, they are loved by all fanciers who have studied their gentle disposition, their response to kind treatment with evident affection. I can sympathize with the enthusiasm of the general fancier because the number is not large, that proved exceptionally high scoring specimens, except where those who understood the art of mating for the best results, and who know how to breed their birds in line without injuring their utility.

Mr. L. K. Felch once spoke of being amused because I referred to my first 95-point cockerel being the sire of two 95-point cockerels, and the best one of those being sire of four 95-point and one 95¼-point cockerel. Yet when we practice what we preach, as I did in this instance, and mated both the best 95-point cockerels to their dame and produced the large number referred to. If one of her eggs produced a 95-point bird, why should not others? Besides her pullets and those of her sisters in the same yard produced 95-point to 96-point pullets. I had 94, 95 to 96-point pullets, one 96¼ from the mating. They were the foundation of some of the greatest winners ever in this country. I feel sure because old hens four years old have won, even in the very largest shows of the east. The past season

I had only three good yards mated, sold no eggs except to a few old friends to accommodate them. These yards contained birds descendants of the grandest blood I ever owned—the real cream of years of study and care, and I never had such promising chicks, but the severe drouth in this section has been most trying on our birds, so I cannot say what the outcome will be, yet they are very promising now, though they have not grown as I expected them to.

I am to keep my reservoir of color in my old hens—another idea that I know few practice, yet the only safe one. I consider it so important when I find I have a hen or several hens that hold their color at two and even four years old like pullets, I always put them where every egg can be carefully set and cared for, and in this way we can increase the color of our birds, or rather produce a strain that will not fade in one year. For such a mating to produce a large per cent of extra fine birds, I find we must select birds to come as near standard requirements in each section as possible. The cockerel should, according to my idea, be medium on legs, not too long or too short, standing well apart, giving breadth to breast and body. A bird just standard weight or a little better, in prime condition, that is, not too fat, the comb evenly set and deeply serrated with seven middle points and five side points, comb to extend well back on top of head, though I find this a weak point. With many Brahmas the comb is too short. I like small combs and I find that one weak point with many of my fowls is that the comb does not extend back as far as I would like. The head should be broad, short, with over-hanging eyebrows, and the higher and more oval the top of the head, the more handsome it is, because it shows great vigor and intelligence, and a quiet practical disposition. A well developed throat, wattles and ear lobes. Ear lobes pendulous and bright red; a particular point, too, is a deep bay eye, and not only in all males, but in all females. A bluish undercolor throughout the plumage in both males and females—an even blue undercolor, not a charcoal undercolor, nor an inch and a half white next to the skin, then a line of blue or blackish undercolor, but a blue undercolor from the skin out, one-third or one-half the length of the feather, the other pure white. I know it can be produced and bred with satisfactory results, for I have practiced it for five years, and am more pleased with this blue undercolor every year. I find such birds do not get a washed-out,

QUEEN MARY.

This hen was bred by J. W. Whitney, Chatham, Ohio, and shows what he is able to do in the breeding line. Parties wishing advice or help in mating this wonderful breed of fowls will do well to see or correspond with Mr. Whitney.

faded look in the black points; they do not become mixed up with gray and white in wings and tails, but will breed black wings with the proper white vein, black tails to the skin, coverts edged with pure white like the hackles, and such pullets still retain it even at four year old and will score 95 points, as old hens, under such judges as Pierce, Felch and others. I suppose these judges think them yearling hens, for as such they would pass. I like the black in hackles to extend up about four-fifths of the feather. On such dark birds it is really proper, in my estimation, with pure white edging all around the feather, black running to a sharp point in hackle of males, but broader and more rounded in females. Wings solid black except the white vein at edge of each feather, no gray should be allowed in either males or females in the web of the feather. This makes a beautiful wing and one hard to improve upon, unless we can get solid black flights. I have had them, lost a five-year-old hen this season that had them, and I have several pullets from her, but the back is full of black spots. I am keeping them to experiment with and, of course, have an idea of what I hope to accomplish with them, but cannot make a report until some time in the future. I had two cockerels with the same solid black flights, not a particle of white in either, produced from this old hen, and a pure white with delicate bluish undercolor, but had bad luck with both. One was killed and the other got a bone in his throat, so I could not relieve him and I lost him. I shall try to keep these pullets to produce cockerels again, for although the pullets have black in hackles I found the cockerels had deep bluish undercolor only, and were simply good in points throughout. I shall not give up in despair, but try again. Tails should be black to skin, first row of coverts the same, the row following edged with pure white like the hackles, and as many rows as come after, the same. In the hens I want every row from one to three, whatever there are, edged with pure white. Breast broad and full, body long comparatively, wings well folded, giving depth to body as well as breadth. Feet well feathered on outer and middle toe, and mottled with black. Hackles full and closely feathered, giving a close, well rounded hack. Many of the Brahmas of today show the loss of the broad head, heavy eyebrows, full throat, short, well-arched beak, broad and well spread tails, broad, deep breasts, proper length of body, etc., that characterize the best Brahmas. I am a great lover

of strong color, but do not care to sacrifice the above to get color and leg and toe coloring. We should try to weed out all characteristics other than Brahma. The young breeder has much to learn, and who of us "knows it all?" Are not the best of us capable of learning much more? I like the close-feathered Brahmas best, with rather a long body, longer thigh and hocks, closely feathered. But in breeding for heavy leg and toe feathering we do not see as many such close trimmed hocks as we would like. I believe our breeding for small combs, longer, heavier, fluffy bodies and immense foot feathering, has made our birds more Cochlin shape and not such good layers; besides it is not the type that takes the eye of any true fancier. Let us stop before it is too late and breed for the true American type of Light Brahmas. After summing up this article, would you still ask what I like in my Brahmas? Well, I have not gotten just what I want yet. I am glad I have not. I would have nothing to strive for. But in a few specimens I have something near it, and they are treasured by their owner. I might have had dozens of them now had I not helped others to lay a foundation for stock, that are in the front ranks of Light Brahma breeders today, and I am silently proud of the record they are making. To sum up what I want in my Light Brahmas: I want shape as well as color, and color as well as shape. I want a deep bay eye as well as serrated comb extending back properly on the head, broad, short heads, well oiled on top, good sized wattles and ear lobes. I want broad saddle as well as broad shoulders, with wing folded high enough to make broad, flat back, across the shoulders well rounded, yet broad as it sweeps in concave to tail. Color where it should be and plenty of it, and I like black in feet of females as well as males, and I believe it impossible to

get proper color anywhere in our males unless we are more particular of the color in our females. It is nonsense to believe the males must have the most color. For my part the pullets and hens I have with almost solid black flights, heavy necks, edged with pure white, tails black to skin, legs and toes covered with feathers mottled with black, blue undercolor throughout the plumage, are absolutely beautiful to me. I am cordially yours, MRS. ELLA THOMAS, Breeder of the "Mammoth Strain" Light Brahmas.

NOTES.

The cheapest and most convenient method of keeping a record of our flock so as to be able to tell the age of our fowls is as follows:

In the fall, while the young stock is yet small enough that we can easily tell them from the older ones, we band all that were hatched the year before. If an odd year banding them on the left, if an even year banding them on the right leg, and each year banding after this plan. In this way we can tell at a glance what age any fowl in the flock is. With either fancier or market poultry raiser this is of much value, as soon an expert would find it a difficult task to tell the age of a fowl simply from its appearance.

Bands without figures on can be obtained in large quantities for about one-half cent each, so that the cost is very little.

Of those who sell all their old stock as soon as the young is ready to take their place the foregoing will, of course be of little interest, but to those who know the value of one and two year old hens as layers and breeders it should be of interest and may be of value. We have carefully studied the matter and believe that it pays to keep the hens, especially of the laying breeds, until their third

The above is a cut of Mr. E. B. Omohundro's White Rock cock, "White Chief," score, 94½ by Myers, 93½ by Ropp; first at N. C. Mo., poultry show in 1900, also at Lincoln county poultry show in 1900. If you want something nice write Mr. Omohundro, Bowling Green, Mo.

year, and as a breeder from which to raise large, strong, healthy stock the hen in her second or even third year is much better than in her pullet year.

R. R. FRENCH.

Ford City, Mo.

E. A. Peglar of Lincoln, Neb., can be found at his place of business with a full line of poultry supplies, incubators and brooders. Anything in his line you can get as good as can be found and as cheap as can be bought anywhere.

Rev. G. W. Chamblin, Uniontown, Kan., writes he has a fine lot of Hamburgs that show up fine at this writing, and he will make very reasonable prices to customers. We trust the reverend will receive the support and hearty co-operation of Hamburg breeders in his efforts to organize a Hamburg club. Come one, come all, and join hands with Rev. Chamblin. Look up his article on the same.

Poultry Supplies.

We keep a full line of all standard goods, as follows:

Ideal Leg Bands,
Smith Seal Bands,
Score Cards,
Standards,
Oyster Shells,
Lime Stone Grit,
Mica Grit,

Humphrey Bone Mills,
Spray Pumps,
Liquid Lice Killers,
Bone Meal,
Raw Bone,
Beef Scraps,
Blood Meal,

Granulated Bone,
Broiler's Teeth,
20 Century Poultry Food,
Midland Poultry Food,
Conkey's Roup Cure,
Chamberlin Chick Feed,
Reliable Spring Punch.

Anything you want. Write us; if we do not have it will get it for you.

SURE HATCH POULTRY CO., Clay Center, Nebraska.

AS SEEN THROUGH OUR SPECS

By **Hattie Byfield.**

(Written for Poultry Investigator.)

There is an anxious inquiry for something new under the sun, but I don't believe we find much in poultry literature, leastwise in that emanates from our pen. We have quit giving our newest discoveries to the public as a surprise, feeling all the while that we are benefiting the whole poultry-loving world by so doing. Nowadays when we publish our latest discovery it is with the certain knowledge that it is ancient with a great many people, therefore the only people the wonderful discovery can benefit will be amateurs in the chicken business, but there are plenty of novices eagerly searching for the time-worn articles that resemble each other so nearly, no difference who edited them. Every day we meet people who question us as to our methods of disposing of lice, chicken cholera, etc., just as if these questions had not been discussed from every point of view since ever people became aware that poultry raising was a business worthy of attention.

The day was when we read the advice that was time-worn to many with great interest. It was new to us and now we could have done without it is not comprehensible, therefore if we repeat ourselves we may be sure that to many the lines will be new and helpful. Just now we would like a little advice on fortifications. We have neighbors, too, who would like a share. The mysterious disappearance of many chickens is the cause of our anxiety. Watch dogs, light roosting places and traps have availed us nothing. Our neighbor discovered that a pet cat had robbed him of 125 fine thoroughbreds. We banished cats altogether and are resorting to poison and traps for rats and mice. A dog also assists in catching rats. A huge Newfoundland dog is turned loose to do guard duty at night, but our heart is heavy over our losses. Tell us, how shall we fortify?

The moulting season has begun and much depends upon the management of our fowls during the present month. If we manage rightly our hens will have new feathers and be ready to begin the egg-laying business in October. While the hens have their clothes off is a good time to thoroughly cleanse them of vermin. There are many ways of doing this. If Liquid Lice Killer is used one must use caution. We never had any loss from its use, but very often we

hear of disaster in other flocks. We do not always use Lice Killer, and when we do we repeat the treatment several times. Do you know we are so old-foggyish that we often resort to grease? We first clean every crevice of our houses, using the spray pump and coal oil emulsion flavored with carbolic acid, for the purpose. Then when the biddies go to roost, assisted by an agile boy that we raised ourselves, we give the hens each a turn at the grease pot. We allow a tablespoonful of coal oil to each cup of lard, also a few drops of carbolic acid. This mixture is death to scaly leg, so while we rid our flocks of lice we also put the feet and legs in shape. We visit all the old mother hens with our grease pot, greasing well under the wings, on the head and around the

is scarce. We can eat chicken if—if well, won't some of our readers tell us how to fortify so that we may eat chicken?

Notwithstanding the extreme heat the health of the fowls about here has been good. Small chicks thrived wonderfully, barring unseen enemies. Eggs hatched badly with the majority of people. Our turkey and duck eggs hatched well, which goes to show that some condition was wrong with the hens. Had we been alone in this respect we should have blamed our matting, but we heard of poor hatches all about us. The vigor of the chicks that hatched was rather mystifying, considering the poor hatches.

The Western Fruit Grower is published in the heart of the great fruit growing section of the United States. Thousands of acres are being planted every year. These fruit growers are the most intelligent and prosperous farmers in the country. They use good machinery, keep good poultry and stock, buy good nursery stock and are, in a word, a class of advertisers we all would like to reach, and the Western Fruit Growers of St. Joseph, Mo., is just the medium to reach the bulk of this trade. Try them.

David Larson, Wahoo, Neb. The subject of this illustration has been a member of the State Poultry Ass'n for several years and one of its most foremost breeders. Mr. Larson is an expert in breeding and judging Mediterranean, in fact is a good judge on all variety of poultry. Any association needing a good conscientious judge will do well to correspond with Mr. Larson.

vent, as well as feet and legs. Later in the season the show birds and birds to be scored and sold will be subjected to many good foot baths. That pays for the extra trouble. The old hens will lay all winter and set in time to hatch your show birds if the proper care is given them during the moulting season. We all know it is the old hens that give us most of the show birds.

If the fowls can be turned out of the pens but little extra care need be used in feeding. Nebraska hen pastures are provided by nature with two of the most perfect foods, namely, wild sunflowers and grasshoppers. There never was such a country for poultry, even if the milk and honey that the human race so hanker after

The Poultry Investigator introduces to its readers the well known writer, Mrs. Mattie Webster of Belmont, Wis. Her writings are much appreciated by the poultry fraternity, and more so by those who are acquainted with her at her home and know her personally. She has had valuable experience and we will all profit by her candid, sincere methods in handling her subject. She is a breeder of White Rocks and White Wyandottes and appreciates the beautiful as well as the profitable.

Poultry Investigator

Is edited by a practical poultryman of 30 years experience and is full of plain, common sense articles by those that breed poultry and work instead of theorizing. It is just what you want. Send us the names and addresses of 15 persons interested in breeding good poultry and we will send you the **POULTRY INVESTIGATOR** one year for your trouble. Subscription price 25c. Address,

Poultry Investigator Co.,
Clay Center, : : Nebraska.

THE POULTRY INDUSTRY

By Cora Rickards, Ogden, Utah.

(Written for Poultry Investigator.)

There is many a delicate girl who would think poultry culture a hard proposition from the fact that embroidery, needle work, music and painting seem more like the work that should be given to a girl. Yet we know there are women who are a success in nearly all lines of business. We heard of three sisters who did work on their farm, using machinery and riding when doing plowing and the most of the work in planting, gathering grain, etc., etc. To the writer it would seem too hard to do as these girls did. They enjoyed and made a success of it, and each one had been a school teacher, so it was not lack of learning that made them desire outdoor work.

The writer, on account of being obliged to seek outdoor work to gain health, lost from bookkeeping in my father's office, went to Colorado, that land of sunshine, where an eastern invalid could not think of remaining so, for one receives renewed energy and life and cannot long be idle in that high altitude. The writer, from her earliest recollection, had a desire to make money, and the desire increased in Colorado. The outdoor air under a pine tree, with the wind blowing the leaves gently, made one feel like sitting and dreaming of a beautiful future and the many things most desirable in life. The writer looks back with much pleasure on those past thoughts. Some of the girls will ask, Did I realize my day dreams? They were not so unreasonable but that most of them have been realized. They were in most cases for a little home and poultry business, well established and paid for, so my expectations have truly been realized, though it took years, and some days the work seemed so trying. We remember when we tried to have beautiful pansies, and after so much labor and care of them to have a mother and her brood scratch them all up by getting into the garden through a gate that some one had left open.

We have a great love for the beautiful, trees, flowers, books, music, painting, and we could hardly give up our flowers. Since coming to Ogden we have not had time for flowers. The business demanded every minute of our time.

We started to make a success of poultry culture, and in order to establish a business such as we aimed

for it took work, and while the writer gained in health, she could never do all that she wished. As stated, beautiful flowers and fancy work always delight and comfort me. However, I found, and still find, a great pleasure in fine poultry, and as that was my chosen line, I dropped the others and followed poultry culture, and while we feel advanced from our continued work, still there is so much ahead to reach out for and mistakes in the past that make the desire so great to keep climbing higher.

Each year we have advanced and do not feel we are going back, but that we have a desirable poultry business. While the thermometer on our porch registers 101, we can hear the bid-dies cackle over the new-laid egg, and to count the number that are making

G. B. Clary, Fairbury, Neb. Breeder of "Chalk White" White Wyandottes.

the noise means that our busy workers are coining the cash in those lovely eggs, for that is what our customers call them, and we could sell many more even though each biddie on our place lay their share of eggs.

We would like to have the farmers and the farmers' wives take a more practical view of the poultry industry and lay hold of new ideas and new breeds for the improvement and advancement of chickens on the farms. The selection of a fine Leghorn cockerel or two for breeding purposes would be a great step forward if eggs in large numbers are wanted, and eggs pay, especially to have them in winter when prices are high. Better still is the thoroughbred fowl. The idea is prominent among a large majority of farmers that the thoroughbred fowl is all a myth. They see no real merit in well-bred poultry. Ask them why

there is no practical value in a high-class fowl and they may tell you that after all your fussing a chicken is but a chicken. They may ridicule him who has a natural love for the feathered tribe and dub him a "chicken crank," but as some have gracefully put it, "It takes a crank to make the wheel go around."

If there is no utility in cultivating the feathered thoroughbred, is there any in the culture of other pure bred live stock? Let us consider the Morgan, the Percheron, the Clydesdale and the lithe thoroughbred that steps a mile in 2:03 is of no more account than the raw-boned, discouraged horse hitched to the old worn delivery wagon; the Durham, the Jersey, the Guernsey, the Galloway of no more value than the native scrub cow. Is there nothing, too, in the beautiful to appeal to our finer senses, and to present to us an argument of merit? The writer has had years of practical experience with nearly every variety of poultry. Here in Ogden, Utah, eggs sell readily at good prices. There is especially good sale for winter eggs.

The Jersey cow for butter and plenty of rich milk stands ahead, as do the Brown Leghorns for egg producers. We have bred Leghorns for over fifteen years and have had a pullet who was a first premium bird lay 274 eggs in one year. It costs no more to keep such a hen than it does one that will not lay more than 80 eggs in one year. Think of the difference.

In order to have the best results on the farm the ground must be cultivated right. The same interest must be taken in poultry, the houses cleaned and kept free from lice, good houses and nests provided, a variety of food. Cheap stock that do not lay are expensive in the end. It is not so much a question of the cost as any grain, and poultry are dear if results are not obtained.

Why Do I Keep Poultry

(Written for Poultry Investigator.)

In the first place, I am a farmer's wife, and what farm is complete without poultry. Oh, yes, at first I kept dunghills. But a poultry loving sister said, "Why not keep thoroughbreds? The cost is no more when it comes to feed and buildings, and your profits are double." I took the advice given me, and at first I got one pen of S. L. Wyandottes, five hens and a rooster. My, oh my, they were lovely to look at and they have proved themselves lovely in more than one way. I have found them good layers, winter and summer, good mothers, good rus-

ters, very tame, will stand confinement the best of any breed I know of, and a good table fowl, with yellow legs and sweet, juicy meat. I was not satisfied with one pen, so I have a fine start in Buff Leghorns and Black Langshans. I believe the Buff Leghorns to be the world's egg machines. Buff Leghorns will commence to lay when five months old, six weeks earlier than other breeds, and when my heavier breeds are wanting to set they keep right on laying. Leghorns for eggs and S. L. Wyandottes for an all-purpose fowl. I know the Buff Leghorns to be better than the Brown. They lay just as well and a larger egg, and they are larger than the Brown or White Leghorns. The first year I kept thoroughbreds my profits were small, with a good income the second, and there is pleasure in raising thoroughbreds as well as money. Now, my poultry-loving sisters, make a start. First study your surroundings, then your climate, make a choice of some breed that will thrive both winter and summer. The Rose Combs for cold winters and the Single Combs for light winters has been my experience. Of course, one with means can build for the Single Comb varieties, but when the comb freezes the laying stops, or that has been my experience.

I have found the White Pekin ducks as profitable as chickens, and they are in good demand the year around. One can get good prices for them and they are very hardy and thrive well in any climate. I don't consider any poultry farm complete without them. Some say I am a poultry crank, but I find pleasure and profit in poultry, so I am in the poultry business to stay. No, it is not all sunshine in the poultry yard. One must expect ups and downs, but if you once start and have the right kind of backbone you are sure to succeed.

(Many thanks, Mrs. Tibbetts. We shall be pleased to have you tell us more of your experiences in the poultry yards and shall be glad to hear from one or all our readers in this line. Do not be backward.—EDITOR.)

Pan-American Exhibition

Undoubtedly one of the grandest displays of poultry to be held this year will be at the Pan-American exposition, Buffalo, N. Y., October 20th to 31st.

The following from the official premium list gives full information in regard to entries, prizes, etc.:

Class E—Entries in this class will close September 16th, but should be sent as long before this date as possible.

sible.

The entry fee, which includes care, feed and coop rent, will be as follows: Poultry pens, \$2 each; single birds in the open class, also turkeys, geese, ducks and ornamental fowls, \$1 each; pigeons, 50 cents each.

All fowls are to be shown singly or in breeding pens. A breeding pen will consist of one male and four females. Prizes for pens will be awarded on all varieties of poultry and ducks. Prizes will not be awarded for birds impaired in value for breeding purposes.

The American Standard of Perfection will be the guide in judging. Prizes for poultry in all the open sections, including turkeys, ducks, geese and ornamental fowls, will be: First prize, \$4; second prize, \$2; third prize, \$1; fourth prize, very highly commended; fifth prize, highly commended; sixth prize, commended; seventh prize, diploma; eighth prize, diploma. In the poultry classes

The above cut is that of Mr. E. B. Omohundro's White Rock hen, "Belle of Pike," scored by Myers 94½, 93½ by Rapp. She wins 1st at N. C. Mo. show, 1900, 2nd at Lincoln County 1900, Poultry show; 1st at Quincy, Ill., in 1899, scoring 94½.

there will be eight awards, and a diploma given with each award. Birds entered in the open sections cannot compete in the pen sections.

The prizes in open classes for pigeons will be: First prize, \$3; second prize, \$1.50; third prize, 75 cents; fourth prize, very highly commended; fifth prize, highly commended.

Premiums in this class will be paid October 31, 1901. For premium list address Frank A. Converse, Superintendent Live Stock Division, Pan-American Exposition, Buffalo, N. Y.

I will exchange Belgian Hares for White Wandotte Pullets

I have also some fine
LIGHT BRAHMA HENS
for Sale. Good ones.

Address, Mrs. Hattie Byfield,
McCook, Neb.

1892. 1901. Mammoth Strain

Light B's and Bronze Turkeys. Winners in America's leading shows of hundreds of prizes in my own and customers' hands. The "Common Sense" remedies for poultry are "perfection" when properly used. Cholera Cure kills all disease germs and makes blood, bone and feather. Hundreds of poultrymen claim they are making poultry breeding easy and practical by their use. A sample of either for a dime. 1 lb can post paid for 50c. Yours for success,

MRS. ELLA THOMAS, Quarles, Mo.

LOOK! For the next sixty days I will sell my fine Barred Plymouth Rocks Cockerels and Pullets at one half price as I have sold my place. I have some fine large March and April Cockerels now ready to ship and will guarantee satisfaction with every sale.

L. D. GREEN, Red Oak, Ia.

BUFF WYANDOTTES,

EXCLUSIVELY. Our Buff Wyandottes are bred from the best strain obtainable and in line. We breed the pure golden Buff, not the dark red. They're prize winners.

E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

Rosecomb White Leghorns.

Needing room for young stock, will sell part of my this year's breeders, including 1st cockerel St. Paul last February.

J. F. REINELT, Tripp, S. D.

Buff ORPINGTONS and COCHINS.

Bred from my own Importations.

I won more premiums than any two other exhibitors at the Nebraska State Show, 1901. Before buying anything write me—it will be a pleasure to give you prices.

IDA J. BUEHLER, Kenesaw, Neb.

Barred Plymouth Rocks

EXCLUSIVELY.

If you want winners bred from winners that will win for you, write me.
FRED TOWNSEND, Clay Center, Nebr.

Does Your Lamp Smoke?
That means uneven heat and danger of explosion.
Don't run any risk. Put a
Hydro-Safety Lamp
on your incubator and brooder and save oil,
attention and avoid all danger. Water jacket
keeps burner cool. Price, \$25. In \$2.75. Catalogue
of all incubator supplies. **FREE.**
L. R. OAKES, Mfr., No 12 6th St., Bloomington, Ind.

F. A. CROWELL,

GRANGER, MINN.

Breeder of Strictly High Class Buff Orpingtons, Leghorns, and Cochins; Light Brahmas, Indian Runner and Pekin Ducks. Stock for sale that will please you. Circular free.

Golden Wyandottes.

Our Wyandottes never have failed to win in the best company. Young stock for sale.

J. C. KAPSER, Clay Center, Neb

F. H. SHELLABARGER, WEST LIBERTY, IOWA.

Has bred

Barred Plymouth Rocks

for 20 years. We have them that are up to date in size, shape and color. Write me if you need any. 20th annual circular which fully describes our Breeding stock is free. Mention this Journal and address as above.

O. MO. HUN. DRO.

Breeder of Prize-Winning IMPERIAL WHITE P. ROCKS.

Stock for sale at all times. Eggs in season.

E. B. OMOHUNDRO, Bowling Green, Mo.

G. B. CLARY, Fairbury, Nebraska.

Breeder of { Chalk White Wyandottes,
Mammoth Light Brahmas
Buff Orpingtons.

Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

Still 10 Cents a Year.

Until further notice you can still get the **POULTRY, BEE AND FRUIT JOURNAL** for 10c per year. Or by getting four of your friends to send with you, we will either extend your subscription one year or make you a gift of a good poultry book. Send today—now—before it is too late, as this offer may be withdrawn at any time. Send your dime and get the neatest, boiled down, right-to-the-point, stop-when-you've-said-it, monthly journal an entire year. Thirty words in **Breeders' Column** for 25c. Display advertising 75c per inch, net. No discounts for time or space. A guarantee of satisfaction written in every contract.

POULTRY, BEE & FRUIT CO., Davenport, Iowa.

SHIPPING COOPS

By Mrs. May Taylor, Hale, Mo.

Editor Poultry Investigator:

And Nebraska is to have a new poultry journal. Well, we hardly know which way the congratulations belong. To the people of the state, who will surely appreciate the efforts of the hustling Sure Hatch people or the S. H. Company itself for being located among such a wide awake, hustling poultry people. We believe the congratulations belong both ways and we give them without stint.

We have known the Nebraska poultry people for many years by reputation, a few personally. They were a success unto themselves long before they had any poultry paper to help them out, and long before the incubator factory opened up for business in their midst.

We hardly know what to write to a fraternity of this kind, for although the paper is a "new beginner," the most of the people who read it are not. The number can be counted in three figures who began at the beginning when I did and before. But as I don't know it all yet and am all along on the lookout for new items to help me out, especially in artificial hatcheries, we expect to learn much from an exchange of ideas in the months to come. We will wait and watch and when we have an idea that we think will help some one out of a difficulty we will send it along.

Just now the question of shipping coops is uppermost. Those advertised on the market cost too much, besides they come in different sizes and unless you are in the business on the wholesale order you don't know how many of each size to order. You don't know how your own orders are going to run. You don't know whether you are going to have the most orders for single birds or for pairs or for trios or pens, and you may order a dozen coops that will be of no use to you.

Now we can get berry boxes, egg cases, peach crates, and even tree wrappers made of thin wood, and in bulk, so that a few minutes time only suffices to nail them together, and I have often thought why can't some enterprising firm make chicken crates all the same height and width and in lengths that could be cut easily, charging so much per running foot for top, bottom and sides, and end pieces out of heavier stuff, each end piece to take the place of partition of a coop if more than one apart-

ment is needed. Those extremely thin boards can be sawed easily, at home, by putting two or three of them together and sawing through three or four at one time. Anybody can use a hammer and saw, that is anybody in the hen business can, and these coops could be cut and made at home as easily as those elaborate affairs that cannot be changed to suit the number of fowls sent.

R. R. French, the White Leghorn man from Ford City, Mo., is with us with a trial advertisement, and we know he is a good breeder, as we have his stock in our yards and they are fine. If you want a square deal we would recommend you to Mr. French.

If any of our readers want a leg band that will surely stay on, and one of the most essential things in having a band is to know positively that it will stay, try W. H. Smith & Co.'s, Blithedale, Mo., seal leg band. When once put on it must be cut off if removed at all. Their advertisement is in this paper. Look it up.

Frank Patton of Surprise, Neb., writes us that he has this season the best Buff Rocks he ever raised, and, readers, you know what this means. When you show against Patton it will take a gem to win over his. Friend Patton always breeds winners, and is no afraid to show them and always carries home the most of blues in his class.

The 5th of August we visited the Capital City Poultry Ranch, three miles west of Lincoln. I was shown the finest lot of Pekin ducks I ever saw. E. E. Smith, the proprietor, knows how to raise ducks to perfection. Watch him sweep the platter clean at the State fair.

A large number of our personal items were omitted from this issue because of lack of space. They will appear in our next issue.

BUFF COCHINS

Exclusively.

Just What You Are

Looking For . . .

The Pure Golden Buff. Winners in any company. Elegant in shape, profusely feathered, as good as the best. Prices low, write me.

B. H. DUNN, Clay Center, Neb.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough tap-bound. Contains all the pit rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Heels, Handling, Nursing and every thing relative to the royal sport of cocking.

By Dr. H. F. CLARKE, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator, one year

For 25 Cents.

Address, THE INVESTIGATOR, Clay Center, Nebraska.

Mammoth Light Brahma

Exclusively..

Mammoth Bronze Turkeys, some 1 year old. Stock for sale. Young stock for sale after September 1. Write, describing what you want.

E. W. MATHENY,
Clay Center, Neb.

The SMITH SEALED LEG BANDS.

Before banding your birds don't fail to send for catalogue. They are the only band that can't be beat. 10 for 25c. 25 for 50c. 100 for \$1.50. Plain sealer and 100 bands \$1.75. Send stamp for two samples and price-list. Hundreds of testimonials received. Greatest show band on earth.

W. H. SMITH & CO., Blythedale, Mo.

BARGAINS IN BREEDING STOCK

At Golden Rule Poultry Yards. I have a few birds that I used in my breeding pens this season that I will sell at a bargain. They are hens and two cocks, White Plymouth Rocks, Empire strain. Write for prices.

Young stock. White Plymouth Rock and pure Dustons. White Wyandottes for sale this fall.

MRS. MATTIE WEBSTER,
BELMONT, WIS.

BUFF ORPINGTONS ..and.. BARRED PLYMOUTH ROCKS..

My stock is equal to any in the west. My prices are right and I will treat you right. Prices on application. Write.

John A. Ling,
HARVARD, : NEBRASKA.

Standard Silver Wyandottes

Two fine flocks on separate farms. Lt. Brahmas, Barred Plymouth Rocks, S. C. B. Leghorns, each kind on separate farm, cared for by specialist of that kind. Eggs carefully packed, have shipped over 200 this season. Not one broken. Stock of the above varieties \$1.00 and \$2.00 each. A sure cure for Roup 50 cents post paid.

MRS. MAY TAYLOR, HALE, MO.
LOCK BOX 176.

Barred P. Rocks and Cornish Indian Games.

8 years as breeders, 8 years as winners in every exhibit where we exhibited winning highest awards.

Stock for sale reasonable. Write, COTTLE BROS., Edgar, Nebraska.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

SHOW DATES

WEST LIBERTY, Ia., July 29, 1901
—List of shows I am to judge for the coming winter:

Plow City Poultry and Pet Stock Association, Moline, Ill.—Dates, November 26 to 30. H. E. Biggs, secretary, Moline.

Yorkville Poultry Association, Yorkville, Ill.—December 2 to 6. A. P. Hill, secretary, Yorkville Ill.

Missouri State Poultry Association, Chillicothe, Mo.—December 9 to 13. C. W. Nuss, secretary, Tina, Mo.

Columbus Junction Poultry Association, Columbus Junction, Ia.—December 12, 13 and 14. H. L. Duncan, secretary, Columbus City, Ia.

Upper Iowa Poultry Association, Mason City, Ia.—December 17 to 20. John D. Reeler, secretary, Mason City.

Des Moines Poultry and Pet Stock Association, Des Moines, Ia.—December 23 to 28. Charles H. Clarke, secretary, Des Moines, Ia.

Iowa State Poultry Association, Bloomfield, Ia.—December 31 to January 3, 1902. S. J. Henderson, Bloomfield, Ia.

Galena Poultry Association, Galena, Ill.—January 6 to 9. F. H. Turner, secretary, Galena, Ill.

Muscatine County Poultry and Pet Stock Association, Muscatine, Ia.—January 8, 9 and 10. G. M. Porter, secretary, Muscatine, Ia.

Aurelia Poultry Association, Aurelia, Ia.—January 13, 14 and 15. H. B. Green, secretary, Aurelia, Ia.

Luverne Poultry Association, Luverne, Minn.—January 16, 17 and 18. N. R. Reynolds, secretary, Luverne, Minn.

North Dakota State Poultry Association, Fargo, N. D.—January 21 to 24. Samuel F. Crabbe, secretary, Fargo, N. D.

Monona County Poultry Association, Onawa, Ia.—January 28 to 31. C. M. Willey, secretary, Onawa, Ia.

Southeastern Wisconsin Poultry Association, Delavan, Wis.—February 4 to 8. E. J. Scott, secretary, Delavan, Wis.

Very truly,

F. H. SHELLABARGER.

JACKSONVILLE, Ill., July 29, 1901.

—Mr. L. P. Harris: Dear Sir—Your favor of 26th received. Success to you in your new calling. As you request my show dates for 1901 and 1902 I give them to you below. Respectfully yours,

D. T. HEIMLICH.

Bunceton, Mo., August 29, 1901. W. B. Kerns, secretary.

Rockford, Ill., September 4, 1901. J. B. Whitehead.

Pueblo, Colo., September 23-27, 1901, State Fair. J. F. Munsey.

Booneville, Mo., November 25-29, 1901. H. P. Mason.

Bowling Green, Mo., December 2-3, 1901. L. T. Sanderson.

Kirksville, Mo., December 4-7, 1901. F. A. Buckingham.

Springfield, Ill., December 7-12, 1901. J. Lauterbach.

Jacksonville, Ill., December 12-14, 1901. F. C. Brewer.

Hoopston, Ill., December 16-18, 1901. Wenona, Ill., December 18-20, 1901.

U. R. McAdams.

Table Grove, Ill., December 23-28, 1901. W. D. Hall.

Salina, Kan., December 30-January 4, 1902. L. D. Arnold.

Whitewater, Wis., January 13-19, 1902. Will A. Cowles.

QUINCY, Ill., July 29, 1901.—Mr. L. P. Harris, Clay Center, Neb.: Dear Sir—In answer to your kind favor of July 26th, will say my show dates as contracted for the present time are:

Pan-American Poultry Show, October 20-31, 1901.

Cleveland, December 4-8, 1901.

Elgin, December 23-26, 1901.

Peoria, December 26-29, 1901.

Illinois State Poultry Show, Joliet, second week in January, 1902.

Cedar Rapids, third week in January, 1902.

These are the only shows that I have contracted for. Please make note in your journal that it will be impossible for me to accept any further contracts. I have refused at least a hundred. My time is so taken up with other business that it is im-

Brief Business Catchers.

**30 WORDS
SINGLE INSERTION
50 CENTS**

Under these headings cards of **THIRTY WORDS** or less will be inserted for **FIFTY CENTS** a single insertion, or twelve insertions for **THREE DOLLARS**. No display can be allowed and all cards must be uniform in size and style. A change in makeup allowed each quarter.

**30 WORDS
WITH INVESTIGATOR
1 YEAR \$3.00**

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert R. Sweet, 364 Mosley St., Elgin, Ill.

BLACK LANGSHAN, W. P. Rockall old stock for sale at \$1.00 each, young white Pekin ducks 6 for \$4.00 all from high scoring stock. Mrs. Henry Shrader, Berlin, Nebraska.

BUFF COCHINS and Rose Comb White Leghorns bred from the best of stock. Prize winners. For sale. John A. Johnson, Pilot Mount, Iowa.

J. W. WHITNEY, Chatham, Ohio. Poultry Judge. All Varieties. Private scoring and expert mating a specialty.

100 S. S. HAMBURGS. Stock for sale. Eggs at prices to suit the season. Stock in good condition fashionably bred and artistically marked. Rev. G. A. Chamblin, Uniontown, Kansas.

IF YOU WANT the blood of Boston and New York winners in Barred Rocks, S. C. Brown and White Leghorns, I have it and can please you in stock at low prices. Eggs in season. Elm Lodge Poultry Yards, Centerville, Md.

SEE HERE. Fine Light Brahma Cockerels \$1.25 each. Pullets \$1.00. Pairs \$2.00. Trios \$3.00. Also fine Barred Plymouth Rock Cockerels \$1 each. Order now. Richard J. Holt, Utica, Minn.

SPECIAL BARGAINS in Buff Wyandottes, pure Bufts. Winners at Chicago and Cedar Rapids, Iowa. Also a fine line of Bantams such as Game Cochins, Sebrights and Japanese. Write for prices. M. F. Yegge, De Witt, Iowa, Box 26.

BLUE BARRED P. ROCKS. Choice breeding and fine exhibition birds for sale. Winners wherever and whenever shown. Prices low. Must sell. Write for printed folder. N. M. Holt, Marshalltown, Iowa.

PARTRIDGE COCHINS a specialty. The cream at Chicago and Cedar Rapids, 1901. 150 youngsters for sale after October 1, finer than ever, superior feathering, shape and color. Always satisfaction guaranteed. U. J. Shanklin, Wanbeck, Iowa.

possible for me to do any judging. With kind regards, yours very truly,
THEO. HEWES.

November 11-13, 1901—Tabor County Poultry Association, Tabor, Ia. E. H. Harrison, secretary.

November 14-16, 1901—Mercer County Poultry Association, Princeton, Mo. Mrs. E. D. Loe, secretary.

November 19-22, 1901—Harrison County Poultry Association, Gainsville, Mo. Mrs. E. A. Wilson, secretary.

November 26-29, 1901—Galesburg Poultry Association, Galesburg, Ill. D. E. Blick, secretary.

December 3-6—Harvey County Poultry Association, Newton, Kan. C. M. Glover, secretary.

December 6-9—Kansas City Poultry Club, Kansas City, Mo. C. S. Huntington, secretary.

December 10-14—Missouri State Poultry Association, Chillicothe, Mo. C. W. Nuss, Tina, Mo., secretary.

December 18-21—Bloomington Poultry Association, Bloomington, Ill. Israel Root, secretary.

December 23-25—Des Moines Poultry Association, Des Moines, Iowa. Chas. H. Clark, secretary.

December 31-Jan. 3, 1902—Iowa State Poultry Association, Bloomfield, Iowa. S. J. Henderson, secretary.

January 6-11, 1902—Illinois State Poultry Association, Joliet, Ill. C. E. Ellsworth, Danville, Ill., secretary.

January 13-18, 1902—Nebraska State Poultry Association, Lincoln, Nebraska. L. W. Garoutte, secretary.

January 20-24, 1902—National Fanciers' Poultry Association, Chicago, Ill. F. L. Kimmey, secretary.

January 23-27, 1902—Interstate Poultry Association, Wabash, Ind. B.

F. Clemans, secretary.

January 30-Feb. 2, 1902—South Dakota State Poultry Association, Mitchell, S. D. C. C. Bras, secretary.

August 26-31—Iowa State Fair.

September 2-6—Nebraska State Fair.

September 9-13—Missouri State Fair.

September 16-20—Indiana State Fair.

September 20-Oct. 5—Illinois State fair.

October 7-12—St. Louis Fair.

October 21-23—Pan American Exposition.

Ottumwa, Ia. W. S. RUSSELL.

Editor Poultry Investigator:

KILDARE, Okla., July 29, 1901.—Mr. L. P. Harris, Clay Center, Neb.—Dear Sir: Yours at hand. Our time is so taken up with farm and stock interests that we shall judge no shows this season unless it may be one or two as an outing.

Very truly,
JOHN C. SNYDER.

SHOW ENGAGEMENTS—1901-1902—TOPEKA, KANSAS.

Clay County Poultry Association, Clay Center, Kansas, Nov. 26 to 29, 1901. Mrs. J. W. Pinkerton, secretary; C. H. Rhodes, judge.

California Poultry Fanciers' Club, California, Mo., Dec. 3 to 6, 1901. R. M. Ramsey, secretary; C. H. Rhodes, judge.

Grand River Valley Poultry Association, Albany, Mo., Dec. 13, 1901. R. R. French, secretary; C. H. Rhodes, judge.

Jefferson County Poultry Association, Valley Falls, Kansas, Dec. 16 to 19, 1901. E. S. Mitchell, secretary; C. H. Rhodes, judge.

Pottawattamie County Poultry Association, Onago, Kansas, Dec. 20 to

Pride of the West...

Is Mackey's own Strain of Bronze Turkeys, bred in line for 15 years. Show record on open book. They are in the yards of many of the best fanciers in the U. S. and Canada. B. P. Rocks, Conger & Felch; Black Langshans, Emory Felch & Robinson. Felch Lt. Brahmans, eggs at all seasons from hens. Young stock now ready to ship. Write for prices. Mackey's Magic Cholera Cure is a **sure cure**.

HILLSDALE POULTRY YARDS,

Mrs. B. G. Mackey, Proprietor.

CLARKSVILLE, : : : MISSOURI.

Single Comb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

Cora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS,
Ogden, Utah.

POULTRYMEN Your stationery won't look well unless **PRINTED** neatly. I do it it is well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

Please mention the **INVESTIGATOR** when answering advertisements. It will accommodate both the advertiser and us.

21, 1901. Mrs. Minnie Chambers, secretary; C. H. Rhodes, judge.

Manhattan Poultry Club, Manhattan, Kansas, Dec. 23 to 25, 1901. W. H. Lamb, secretary; C. H. Rhodes, judge.

Delphos Poultry Ass'n, Delphos, Kansas, Dec. 26 to 28, 1901. E. M. Swain, secretary; C. H. Rhodes, judge.

Republican Valley District Association, McCook, Nebraska, Dec. 30, 1901, to January 4, 1902. B. G. Gossard, secretary; C. H. Rhodes, judge.

Kansas State Poultry Association, Topeka, Kansas, Jan. 6 to 11, 1902. Geo. H. Gillis, secretary; judges, C. H. Rhodes, L. P. Harris.

Nebraska State Poultry Association, Lincoln, Nebraska, Jan. 13 to 18, 1902. L. W. Garrouette, secretary; judges, W. S. Russell, C. H. Rhodes.

Central Oklahoma Poultry Association, Kingfisher, Oklahoma, Jan. 21 to 24, 1902. H. F. Stephenson, secretary; C. H. Rhodes, judge.

Rooks County Poultry Association, Plainville, Kansas, Jan. 27 to 28, 1902. M. Melott, secretary; C. H. Rhodes, judge.

Poudre Valley Poultry Association, Greeley, Colorado, Jan. 28 to Feb. 1, 1902. R. T. Armstrong, secretary; C. H. Rhodes, judge.

Kansas State Agricultural College Exhibit, Manhattan, Kansas, February, 1902. School of instruction in judging poultry. C. H. Rhodes, judge and instructor.

Ravenwood, Mo. Dates,
C. H. Rhodes, judge.
Orrsburg, Mo. Dates,
C. H. Rhodes, judge.

Red Oak, Iowa, Nov. 23 to 28. J. M. Scott, secretary.

Hebron, Neb., Dec. 31 to Jan. 4. F. P. Hensel, secretary.

Fremont, Neb., Jan. 8, 9, 10. G. W. D. Reynolds, secretary.

Shenandoah, Iowa, Aug. 13 to 16.
Malvern, Iowa, September 3 to 5.
Montgomery County Fair, September 17 to 20.

J. E. THOMPSON,
Malvern, Iowa.

We will judge at the following shows this winter:

The Pan-American, Buffalo, N. Y., October.

Mount Vernon, November 19-22.

Cleveland, O., December 4-10.

Mansfield, O., November 27-30.

Richwood, O., December 18-20.

Van Wert, O., first week in January, 1902.

Pittsburg, Pa., second week in February, 1902. Yours truly,

IRA C. KELLER.

Prospect, O., August 7, 1901.

INVESTIGATE BEFORE YOU BUY.

We want our customers to be perfectly satisfied before they spend their money. Investigate the claims of all incubators and then decide. We believe you will find that the

SURE HATCH INCUBATORS

AND COMMON SENSE FOLDING BROODERS are giving better satisfaction than any other made. It's because they are so simple, available and sure. They are built for busy people, who haven't time to fuss and bother. Our catalogue is FREE. We don't ask you to pay for it. Isn't it worth examining?

SURE HATCH INCUBATOR COMPANY, CLAY CENTER, NEBRASKA.

Poultry Supplies. For the next 60 days I will sell Grit and Shell in lots of 500 pounds or over at greatly reduced figures. It will pay you to lay in your winter supply now. Agent for Cyphers Incubators and Brooders, and Humphrey's Bone Cutters. Write for anything you need in poultry supplies.

E. A. PEGLER, 241 S 11 St., Lincoln, Neb. Box 463.

is the acknowledged leader. It loosens off is impossible as it is made with a double clinch and is guaranteed to stay on. It is light, neat, strong and durable, easily and quickly put on. It is absolutely the best band on the market today. Read what others say:

Yermouth, Me.-Mr. Frank Meyers. Dear Sir: I have been thoroughly testing your leg band and also others of the latest make. The Ideal Aluminum Leg Band is certainly the best one that I have ever used and I believe I have used about all of them. Please ship me 1000 as follows: 200 No. 6, 50 No. 7, 400 No. 8, 100 No. 9, 200 No. 10, 50 No. 11.

Prices of bands, post paid, 12 for 20c, 25 for 35c, 50 for 55c, 100 for \$1, 500 for \$4, 1000 for \$7. Send 4c in postage for circular of Barred Plymouth Rocks and sample bands.

FRANK MYERS, Box 14, Free Port, Ill.

Barred Plymouth Rocks and Black Langshans

We have some extra bargains in our this year breeders that we would be glad to tell you about and if you will drop us a card we will tell you what we have for sale and probably can do you some good. Rocks scoring to 94 points and Langshans to 95½ points by Harris. Young stock for sale and at a bargain considering quality.

MR. and MRS. A. UPTON & SON, Fairbury, Neb.

Buff Orpingtons

THE COMING BREED

W. H. BUSHELL, IMPORTER AND BREEDER, DAVID CITY, NEBRASKA.

No Eggs for Sale! A nice lot of young chicks for sale in pairs and trios. Bred from the best matings of imported stock. I have hundreds of February and March hatched chicks for sale. Mention this Journal.

White Leghorns.

Layers and winners. An Inducement to buy at once and of us—tested breeders, hens \$8, \$10 and \$12 per dozen. Cocks \$1.50 to \$2.50 each. Scottish Terrier puppies \$3.

PRACTICAL POULTRY FARM,
R. R. French, Mgr. Box 47, Ford City, Mo.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

BUFF P. ROCKS Exclusively. Pure Burdick Gold Nugs. My Buff Rocks are as good as can be found, and are up-to-date in every respect. Some fine specimens for sale; reasonable prices on application. Address

MRS. ELLA PATRICK, Clay Center, Neb.

BUFF ORPINGTONS—WYANDOTTES. R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock, fit to breed and exhibit for sale. Thos. H. Mills, Poultry Judge, Port Huron, Michigan.

Imported Buff Orpingtons.

Are winners at B. P. R. Madison Square, Wash., N. J., Keota, Iowa City, Iowa State Shows. Orpington \$7. to \$30 per trio. Will close out all the Rocks, Bradley Rus. and Lathams Straubs. One pair of 1 yr old show birds for sale cheap. \$2 to \$2.50. A fine lot of young show birds in both varieties. Always win; sure to please. Better get in the push. **A. L. HOUSTON, Keota, Ia.**

SHOW BIRDS FOR SALE.

8 Grand Breeders for sale at a bargain. Also 300 selected Langshan chicks. Address,

BEN S. MYERS, Crawfordsville, Ind.

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free.

H. SHIVVERS, Knoxville, Ia.

Lock box 500.

Barred P. Rocks...

Extra fine, Extra large, Extra color

In the show room they have shown their excellence, have scored from 90 to 94 by prominent judges. Write wants. **C. F. HINMAN, Friend, Nebraska.**

Buff P. Rocks.

Motto:—"Good stock at moderate price." Stock for sale after Sept. 15.

W. D. SWAIN, Paura, Ia.

will put birds in as fine a show condition as No. 4. Try it and be convinced. It is not a stimulant or condiment. Our price is \$1.40 per two bushel bag at factory. Write your nearest agent for prices and save freight charges. It is the most economic food you can use. It requires no accessories, as green bone, etc.; and will produce results you cannot otherwise attain. Write for our booklet, "The Science of Poultry Feeding," to any of the following agents: Boston, Mass., Jos. Breck and sons, 51 N Market St. New York City, Excelsior Wire & Poultry Supply Co., 28 Vesey St. Philadelphia, Pa., Johnson & Stokes, 217 Market St., or Midland Poultry Food Co., N. E. Cor. 2nd and Main Sts., Kansas City, Mo.

THE FEED, NOT THE BREED

Is responsible for results.

THE BALANCED RATION

For Poultry is here at last.

The 200 Egg Hen is now a Possibility.

Midland Formulas...

Ready Mixed.

1. Nursery Chick Food.
2. Growing Chick Food.
3. Fattening Chick Food.
4. Egg and Feather Producing Food.
5. Nursery Duckling Food.
6. Growing Duckling Food.
7. Fattening Duckling Food and Gosling Food.
8. Laying Duck Food.
9. Stock Ducks' Summer Food.
10. Growing Gosling Food.

Our efforts to furnish the poultry world with a complete food for a specific purpose, and built on a scientific and practical basis by men of experience and ability, has met with unqualified success. Our food is now being used by the most progressive men in every state in the Union. To prove its merits, order a bag or two of our No. 4, feed your flock through the moulting season and thereby shorten it one-half and they will begin laying early and continue all winter, if fed as directed. Don't wait until it is too late to recover the lost time. There is nothing that will put birds in as fine a show condition as No. 4. Try it and be convinced. It is not a stimulant or condiment. Our price is \$1.40 per two bushel bag at factory. Write your nearest agent for prices and save freight charges. It is the most economic food you can use. It requires no accessories, as green bone, etc.; and will produce results you cannot otherwise attain. Write for our booklet, "The Science of Poultry Feeding," to any of the following agents: Boston, Mass., Jos. Breck and sons, 51 N Market St. New York City, Excelsior Wire & Poultry Supply Co., 28 Vesey St. Philadelphia, Pa., Johnson & Stokes, 217 Market St., or Midland Poultry Food Co., N. E. Cor. 2nd and Main Sts., Kansas City, Mo.

Tiffany's Paragon Lice Killer.

Kills lice and mites on poultry, hogs and animals. Is the strongest and best lice killer made. With our double tube sprayer you can save one half the liquid and penetrate all cracks and spray the bottom of the house where you find the mites or spider lice. It gets there every time. Every can is guaranteed or money refunded.

Write and learn how to get a Sprayer and can of Lice Killer FREE.

Tiffany's Paragon Poultry Powder.

Kills lice on heads of baby chicks and turkeys, fleas on dogs, ticks on sheep and lice on cattle and horses, is a powerful disinfectant, keeps moths from your clothing and carpets. A large, free sample for 10 cents to pay postage. We give liberal terms to agents. We want one in every town.

THE TIFFANY COMPANY, - - - Lincoln, Nebraska.

OUR NEW... CATALOGUE

is published in five separate editions and printed, in addition to English, in the French, German, Swedish and Spanish languages.

Why was this necessary? Merely to keep up with the constantly increasing demand for the

SUCCESSFUL INCUBATORS AND BROODERS

and reliable information concerning them sought by foreign countries. This is the first incubator manufactory that has ever been compelled to adopt such a measure simply and solely from the reputation and recognized merits of its machines. It would seem impossible to hide the reputation of our goods. Those who are using them here at home will not wonder at this, as they are well acquainted with their merits. They know from experience that the **SUCCESSFUL INCUBATORS** will hatch any egg that can be hatched in any way, that they are entirely automatic in supplying heat, moisture and ventilation and that every chick hatched has the strength to live and grow. They know also that our brooders will successfully brood and grow every chick that can be grown in any way. They know further that our entire line of **SUCCESSFUL, ECLIPSE and CRESCENT INCUBATORS** and our complete line of **BROODERS** are each the best machines of their kind made. Send 6 cents for our new 156-page catalogue and learn all about them and the reason of their unequalled popularity.

DES MOINES INCUBATOR CO.,
Box 601, DES MOINES, IA.

VOL. 1.

OCTOBER, 1901.

NO. 2.

Poultry Investigator

LIBRARY OF CONGRESS
RECEIVED
DEC 14 1901
PERIODICAL DEPT.

ADVANCE TO SUCCESS

25 ¢ a year

Buff Wyandottes Buff Leghorns

S. C. B. Leghorns, S. C. W. Leghorns; Ducks and Guineas. Young stock for sale after Nov. 1st. We will now sell 4 choice Leghorn cocks (Buff) at \$3 each, Barres and Houston's strain; all prize winners. Our Whites are Hawks and Wyloff strain; our Browns are Brace strain direct; Buffs are Harris, Barnes, Arnold, and Brace. Write us for bargains.

W. A. BLOOMER & SON, Lebanon, Kas

Nothing but direct external and internal treatment will kill ring worms. Buy the best; don't be deceived. 3 ad for testimonials. Price 50c and \$1.00 per box, postpaid. Agents wanted, J. D. W. HALL, Box 60 Des Moines, Iowa.

200 White Plymouth Rocks FOR SALE.

Our specialty. White birds; large size winter layers. Prices 75c each; \$6 per 12.

F. J. KOLASCE, DeBois, Nebr.

Box 642.

A Fall Fair

Is a good place to show your poultry and other live stock, but for pity's sake do not take them there lousy. **Lambert's Death to Lice** Remedies are adapted for terminating vermin on anything anywhere. Sample 10c. 64 page book free.

**D. J. LAMBERT,
Appanau, R. I.**

choice cockerels & Stock Eggs for Hatching.

From Barred and White Plymouth Rocks, White and Silver Wyandottes, White and Brown Leghorns, Golden Shagbills, Bantams, Bronze Turkeys, and Pearl Guinea.

Belgian Hares, Jersey Cattle.
Valuable Circular.

F. M. MUNGER & SONS, DeKalb, Ill.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered Strain, from a long line of prize-winning ancestors; have made them a specialty for 19 years. Now offering fine exhibition and grand breeding stock of both 1900 and 1901 hatch at moving price. If taken soon. Send for illustrated circular with half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Buff P. Rocks Exclusively...

We have Judge Harris' entire stock. These, together with our own prize winners, gives us the best flock of Buff Rocks in the country. We can please you both in quality and prices. Write us if you want winners bred from winners. Pekin ducks, Toulouse Geese for sale.

**MRS. FLORA SHROYER,
Clay Center, Neb.**

Let The Hens Lay

but Hatch Chickens by Steam

The best, surest and most economical method of hatching is with the

EXCELSIOR Incubator

Simple, yet thoroughly durable; absolutely regulates itself. Hatches the greatest proportion of fertile eggs at the least expense. Costs less than any other first-class hatching machine.

The **Wooden Hen**—for 50 eggs—in the most perfectly automatic, self-regulating small incubator ever made. Write for incubator book and information—free.

**CEO. H. STAHL,
114-122 S. 6th St.,
Quincy, Ill.**

HERE is an Opportunity

To obtain
S. C. B. LEGHORNS

Two Cocks and ten Hens of superior merit for sale **WAY DOWN**. Send for illustrated catalogue—it's free.

GEO. W. OSTERTROUT, David City, Nebraska.

Silver Laced Wyandottes

With Royal Blood in Their Veins.

See this—Winners at Cedar Rapids, Sioux City and Nebraska State show at Lincoln. At the latter show we took 1st cock, 1st, 2d, 3d cockerel, 1st, 2d, 3d pullet, 2d hen. The cockerel which scored 92½ was cut one and one-half points on weight, having been on road two days and two nights. This makes him a 94½ point bird. How is that for a S. L. Wyandotte breeding? If anybody in America can please you on Silver Laced Wyandottes, we can.

I. & N. M. CONNER, Ponca Neb.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS.

Are better than ever as they have farm range. Have 280 young and 30 old ones to draft from the coming sale season. Was winners of all firsts and part second in state show the last two years, also have been winning for customers in strong competition. Satisfaction guaranteed. Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

BLOOD TELLS.

Scientific breeding and square dealing have made **Whitney's National Strain** line bred Barred Plymouth Rocks and Single Comb Brown Leghorns popular. Start right and you will always be right. If you want birds that can win and that will produce winners send for my circular and prices. Address, J. W. Whitney, Chatham, Ohio, P. O. box 1.

Mr. and Mrs. C. A. Blanchard,

Friend, Nebraska.

—BREEDERS OF—

White Plymouth Rocks, White Holland Turkeys and Pekin Ducks. At Nebraska State Poultry show 1901 we won 1st pen, 1st hen, 1st cock, 3d cockerel, which was a prize on every bird entered. At the Nebraska State Fair, 2d to 6th of Sept., 1901, we won 1st pen chicks, 1st hen, 1st pullet, 1st cockerel—a first prize on every bird entered. We have a fine lot of young stock for sale.

Please mention the **INVESTIGATOR** when answering advertisements. It will accommodate both the advertiser and us.

POULTRY INVESTIGATOR

Vol. 1.

Clay Center, Nebraska, October, 1901

No. 2.

Interior View of the Lincoln Auditorium.

This month we present to our readers an interior view of the Lincoln Auditorium where the Nebraska State show will be held next Jan. We last month gave notice that the show would be held Jan. 13 to 18, but at semi-annual meeting at State Fair it was changed to comply with state law governing it, to Jan. 21 to 26, 1902. Be sure to remember the dates and to show with us. L. W. Garoute, Secretary, Lincoln, Nebr. L. P. Harris, President, Clay Center, Nebr.

CHICKEN FIXINGS FOR WINTER

By
 HATTIE
 BYFIELD

Sod buildings for poultry have been denounced as unhealthy, wet, rat breeding and vermin infested places, the only merit being that they were warm, until the rats had filled them with air-holes.

We once had a good sod chicken house. The roof was made of boards covered with tar paper, and well sodded. Inside it was plastered in rather a poor fashion; water would not freeze in that house, roup and disease

were unknown. In the big deep windows the hens that were not laying sang all the winter days. Wheat was worth a dollar a bushel, but the hens paid their way and some more. That house was comfortable for the chickens and a comfort to me, but the rats came, and poisons, cats and dogs seemed useless—a real rat dog I could not use because it would tear the house down. The sod house eventually fell down because of the perforations in

the walls. I was forever discouraged from building sod buildings, although no other had been so comfortable.

A few weeks ago I visited a lady who lived in a pretty house newly papered. The house was built on a stone foundation and the exterior corresponded with the interior in attractiveness; the window seats were deep and full of blooming plants. "Of what material is this house constructed?" I asked. "This is a sod house," she replied. "It has stood for nine years and there is no visible signs of decay. The cement on the outside prevents the weather from destroying it." "But the rats?" I queried. "Don't you have rats?" "Oh, yes, but the stone foundation and the cement prevents their working into the walls; we keep cats, of course, to help."

Then we can have thick, warm sod houses, and have them durable. That house proves it, and if we can have the sod houses we can have plenty of winter eggs. There are a whole lot of people who could not afford lumber to build. Cement is not expensive, and in many places stone for the foundation could be had for the hauling. But laying the question of expense aside, the sod house is a good house if well built. Cemented on the outside, it would not be damp. If window and door frames are well fitted a sod house can be successfully fumigated, and no house that is too open for that operation is fit for a chicken to dwell in. I am told that "ivory cement" is distasteful to insect life. Of course, it would be if applied when moist, but friends tell me that insects dislike to roam over its smooth surface. Now, say what you like, there is nothing in common lime to discourage the peregrination of bedbugs, neither their rapid breeding. Whitewash highly flavored with "carbolic acid" is an able assistant in destroying vermin. Carbolyzed lime, with a proportion of one ounce of carbolic acid to the bushel of lime, is not much good; multiply the acid by six and then it will do the work.

A neighboring poultry man intends building a winter poultry house of "adobe brick," but unless such a house were cemented outside and in, it would be worth little more than tough sods.

If one's means allowed of a stone building or buildings it would probably be better, but we prefer the sod, if it can be made rat proof, to any cheap frame.

Feed will be high in this section. Wheat, unthreshed, if it can be bought at a reasonable figure, will be best for the poultry people. Threshing out their own wheat makes the hens lay. Bran and shorts for the mashers will be hard

to obtain unless shipped in. Some of the country people are disposing of their chickens because they won't lay without feed, and they have nothing to feed them. We never saw feed so high in price that well hens would not pay for it. A woman complained to me that she got no good of her fowls because she had nothing to feed them. This looked foolish to me, for if she had fed, the eggs she could have sold would have brought back the price of the feed. We never could get into the new way of giving mashers at night. We think the morning best, and as the mashers are soon digested the fowls are not discouraged from scratching by their light, warm breakfast. A cold hen is not very energetic; does not seem to understand that scratching has anything to do with her blood circulation. The warm breakfast makes her energetic and bran mash alone is not all she craves. Straw in the poultry house, in the scratch pen and in the yards is what we want—so much straw that Biddy cannot get a kernel of grain unless she earns it by the sweat of her—well, a hen has a brow, hasn't she?

I wish some of the poultry folks would discuss dogs, the different breeds and their merits, in the poultry yards. We have a splendid Newfoundland. He sucks eggs and likes ducks to eat. As a watch dog, his appearance and bark would discourage thieves. Dogs are an adjunct that no poultryer can be without. We know that, but our own experience with them has been discouraging. The ferrets were not better and they utterly failed to rid the place of rats. Ferrets catch rats, but the rats do not flee, as we were led to believe they would.

In building and in all our arrange-

ments, safe grounds against thieves and vermin ought to occupy a large share of our attention. Thieves are perhaps rare, and yet when we least expect it a raid is made. Vermin is generally plentiful. Skunks and weasels are great pests and if we could keep dogs that would destroy them. We would not hear much about bad luck.

Who has had experience with cement floors? Somebody tell us about them. It will be of general interest, we feel sure. **HATTIE BYFIELD.**

NOTICE.

We show on the front page of the *INVESTIGATOR* this month a cut of White Pekin ducks enjoying a morning swim on an irrigation reservoir at the Capitol City Poultry Ranch. E. E. Smith, proprietor, Lincoln, Nebr.

A flock of White Wyandottes owned by the Capitol City Poultry Ranch, Lincoln, Neb., E. E. Smith, proprietor.

The first B. P. Rock hen at Friend, Nebr., at state show, 1901. Owned and bred by C. F. Hinman, Friend, Nebr.

NEBRASKA STATE FAIR

The Largest and Best Show This Fall.

The Nebraska State Fair has come and gone. It was held in Lincoln, September 1 to 6. It was a most wonderful success. One of the best attractions was the large and fine display of poultry and pet stock which numbered over 1,600 specimens in all and they were all Nebraska raised; stock firms out of the state for some cause not being shown—every exhibitor was a Nebraska fancier. There was a large exhibit of Belgian hares and some very fine specimens. This exhibit took up nearly one-half of one of the large wings of the building and the hares had many admirers. There was a fair exhibit of pigeons and pets. Four incubator firms were represented in the exhibit and it was by great odds the best exhibit ever made in the state. In the poultry display there were many new fanciers and many of them carried home the blue ribbon on their stock.

There were 1,360 specimens in poultry, 54 ducks; 24 geese, 170 pigeons, 95 hares, 4 incubator displays, 158 B. P. Rocks, 78 Buff Rocks, 30 Buff Wyandottes, 60 S. C. W. Leghorns, 70 Brown Leghorns, 62 White Rocks, and so on, nearly every variety being represented by a fairly good exhibit.

Among the best displays were B. P. Rocks, Buff P. Rocks, Buff Wyandottes, Golden Wyandottes, Buff Cochins, S. C. W. Leghorns and Brown Leghorns. In all the above were specimens fit to show among the best and win.

The new breeds were fairly represented, namely, Buff Orpington, a very popular breed; the Partridge, Wyandotte and Klondikes.

LIST OF PREMIUMS.

HOUDANS.

Cock—First premium, D. Larson; second premium, D. W. Evans.

C. I. GAMES.

Penfowls—First premium, Robert Black; second premium, Cottle Bros.

Pullet—First premium, S. H. Poultry Co.; second premium, S. H. Poultry Co.

Cockerels—First premium, S. H. Poultry Co.; second premium, Robert Black.

Hen—First premium, Robert Black; second premium, Robert Black.

Cock—First premium, Robert Black; second premium, Robert Black.

Cock—First premium, Robert Black; second premium, Robert Black.

S. C. BLACK LEGHORNS.

Pen fowls—All to Eggart.

S. C. BUFF LEGHORNS.

Pen chicks—First premium, S. H. Poultry Co.

Fowls—First and second premiums, S. H. Poultry Co.

Pullets—First premium, S. H. Poultry Co.; second premium, J. A. Bridge.

Cockerel—First premium, S. H. Poultry Co.; second premium, J. A. Rudge.

Hen—First premium, S. H. Poultry Co.; second premium, J. A. Rudge.

Cock—First premium, S. H. Poultry Co.; second premium, J. A. Rudge.

BUFF WYANDOTTES.

Pen chicks—First premium, S. H. Poultry Co.; second premium, S. H. Poultry Co.

Pen fowls—First premium, S. H. Poultry Co.; second premium, H. C. Young.

Pullet—First premium, S. H. Poultry Co.; second premium, S. H. Poultry Co.

Cockerel—First premium, S. H. Poultry Co.; second premium, S. H. Poultry Co.

Hen—First premium, H. C. Young; second premium, H. C. Young.

Cock—First premium, F. H. Brown; second premium, S. H. Poultry Co.

BUFF ROCKS.

Pen chicks—First premium, G. H. Green; second premium, Albert Lemon.

Pen fowls—First premium, Albert Lemon; second premium, S. H. Poultry Co.

Pullet—First premium, S. H. Poultry Co.; second premium, S. H. Poultry Co.

Cockerel—First premium, S. H. Poultry Co.; second premium, S. H. Poultry Co.

Hen—First premium, S. H. Poultry Co.; second premium, S. H. Poultry Co.

Cock—First premium, S. H. Poultry Co.; second premium, Albert Lemon.

BLACK JAVA.

Pullet—First premium, J. A. Rudge.

Hen—First premium, J. A. Rudge; second premium, J. A. Rudge.

Cock—First premium, J. A. Rudge.

WHITE MINORCA.

Pen chicks—First premium, E. H. Eggart.

Pen fowls—First premium, E. H. Eggart.

Pullet—First premium, E. H. Eggart; second premium, E. H. Eggart.

Cockerel—First and second premium, E. H. Eggart.

ANDULUSION.

All to E. H. Eggart.

HOUDAN.

Pen chicks—Second premium, D. W. Evans.

Pen fowls—First premium, D. Larson; second premium, D. W. Evans.

Pullets—First and second premium, D. W. Evans.

Cockerels—First and second premium, D. W. Evans.

Hen—First premium, D. W. Evans.

ROSE COMB W. LEGHORN.

Pen chicks—First premium, E. H. Eggart.

Pen fowls—First premium, E. H. Eggart; second premium, Casper Dice.

Pullet—First and second premium, E. H. Eggart.

Hen—First and second premium, E. H. Eggart.

Cockerels—First and second premium, E. H. Eggart.

Cock—First and second premium, E. H. Eggart.

SINGLE COMB W. LEGHORNS.

Pen chicks—First premium, Casper Dice; second premium, J. Cook Johnson.

Pen fowls—First premium, J. C. Johnson; second premium, L. C. Huntington.

Pullet—First premium, J. C. Johnson; second premium, Casper Dice.

Hen—First premium, Casper Dice; second premium, L. C. Huntington.

Cock—First premium, Casper Dice; second premium, J. C. Johnson.

ROSE COMB BROWN LEGHORN.

Pen chicks—First premium, Jennie Birdsall; second premium, E. H. Eggart.

Fowls—First premium, E. H. Eggart; second premium, Jennie Birdsall.

Pullet—First premium, Jennie Birdsall; second premium, E. H. Eggart.

Cockerel—First premium, Jennie Birdsall; second premium, E. H. Eggart.

Hen—First premium, Jennie Birdsall; second premium, E. H. Eggart.

Cock—First premium, Jennie Birdsall; second premium, E. H. Eggart.

S. C. BROWN LEGHORNS.

Pen chicks—First premium, J. A. Rudge.

Pullet—First premium, H. C. Young; second premium, J. A. Rudge.

Cockerel—First and second, J. A. Rudge.

Hen—First premium, H. C. Young; second premium, A. P. Hollenbeck.

Cock—First and second, A. P. Hollenbeck.

MINORCA.

Hen—First and second, Joseph Hillmen.

Cock—First premium, Joseph Hillmen.

The poultry fanciers at the 1901 Nebraska State Fair. A jolly set of cranks that can tell a good chicken a mile away. Let us meet again at the State Poultry show.

W. F. B. SPANISH.

All to R. Striker.

WHITE WYANDOTTE.

Pen chicks—First premium, Casper Dice; second premium, A. C. Cook.

Fowls—First premium, A. C. Cook.

Pullet—First and second, F. B. Duey.

Cockerels—First and second, Casper Dice.

Hen—First premium, A. C. Clark; second premium, Casper Dice.

Cock—First premium, A. C. Clark; second premium, W. B. Swisher.

GOLDEN WYANDOTTE.

Pen chicks—First premium, S. H. Poultry Co.; second premium, Ethiel Payne.

Pen fowls—First and second premium, S. H. Poultry Co.

Pullets—First and second, S. H. Poultry Co.

Cockerels—First and second, S. H. Poultry Co.

Hen—First and second, Ethiel Payne.

Cock—First premium, S. H. Poultry Co.; second premium, Ethiel Payne.

SILVER LACE WYANDOTTE.

Pen chicks—First premium, F. W. Doyle; second premium, J. A. Lemon.

Fowls—First premium, F. W. Doyle; second premium, A. R. Smythe.

Hen—First premium, T. E. Wheeler.

Cock—First premium, T. E. Wheeler.

WHITE PLYMOUTH ROCK.

Pen chicks—First premium, C. A. Blanchard; second premium, E. O. Spencer.

Pen fowls—First premium, J. A. Rudge; second premium, S. H. Poultry Co.

Pullets—First premium, C. H. Blanchard; second premium, E. O. Spencer.

Cockerel—First premium, C. H. Blanchard; second premium, E. O. Spencer.

Hen—First premium, C. H. Blanchard; second premium, C. H. Green.

Cockerel—First premium, E. O. Spencer; second premium, S. S. Hall.

BARRED PLYMOUTH ROCKS.

Pen chicks—First and second, T. L. Norval.

Pen fowls—First premium, T. L. Norval.

Fowls—Second premium, S. H. Poultry Co.

Pullets—First premium, T. L. Norval; second premium, C. R. Coffin.

Cockerel—First and second, T. L. Norval.

Hen—First and second, T. L. Norval.

Cockerel—First premium, E. M. Coffin; second premium, T. L. Norval.

WHITE LANGSHANGS.

Pen fowls—First premium, J. A. Wheeler.

Pullet—Second premium, J. A. Wheeler.

Hen—First premium, J. A. Wheeler.

Cock—First and second, J. A. Wheeler.

BLACK LANGSHANG.

Pen chicks—First premium, J. C. Johnson; second premium, Albert Lemon.

Pen fowls—First and second, Albert Lemon.

Pullets—First and second, J. Cook Johnson.

Cockerel—First premium, J. Cook Johnson; second premium, Albert Lemon.

Hen—First and second, Albert Lemon.

Cock—First premium, J. C. Johnson; second premium, R. L. Ball.

PARTRIDGE COACHINS.

Pen chicks—First premium, H. C. Bowman; second premium, S. H. Poultry Co.

Pen fowls—First premium, S. H. Poultry Co.

Pen pullets—First premium, H. E. Bowman.

Pullet—Second premium, S. H. Poultry Co.

Cockerel—First premium, H. E. Bowman; second premium, S. H. Poultry Co.

Hen—First and second, S. H. Poultry Co.

Cock—First premium, W. F. Holcomb.

WHITE COCHINS.

All to S. H. Poultry Co.

DARK BRAHMAS.

Pen chicks—First premium, L. J. Barger; second premium, J. A. Rudge.

Pullet—First and second, L. J. Barger.

Cockerel—First premium, L. J. Barger.

Hen—First and second, J. A. Rudge.

Cock—First premium, Robert Black; second premium, J. A. Rudge.

LIGHT BRAHMAS.

Pen chicks—First premium, Casper Dice.

Pen Fowls—Second premium, Casper Dice.

Pullet—First premium, S. H. Poultry Co.; second premium, Casper Dice.

Cockerel—First premium, S. H. Poultry Co.; second premium, Casper Dice.

Hen—First and second, Casper Dice.

Cock—First and second, Casper Dice.

GEESE.

First premium—Mrs. M. M. Kirkpatrick.

PEKIN DUCKS.

All to E. E. Smith.

B. B. RED GAMES.

Fowls—First and second, Sure Hatch.

Chicks—First premium, Sure Hatch.

W. C. BANTAM FOWLS.

First and second—Sure Hatch.

PEKIN BANTAM.

First and second—Sure Hatch.

S. S. BANTAMS.

First and second—Sure Hatch.

G. S. BANTAMS.

First premium—Sure Hatch; second premium, Mrs. Kirkpatrick.

PET GAMES.

Pen chicks—First premium, O. Hoffmuser.

Pen fowls—Second Premium, Ridge-way Poultry Co.

Pullet—First premium, O. Hoffmuser; second premium, Sam'l Forrest. Cockerel—First and second, O. Hoffmuser.

Hen—First premium, Sam'l Forrest; second premium, S. Abbott.

Cock—First premium, Sam'l Forrest; second premium, S. Abbott.

B. B. RED GAMES—BANTAMS. All to Sure Hatch.

S. S. HAMBURGS.

Pen fowls—First premium, J. A. Rudge.

Hen—First and second, S. H. Poultry Co.

Cock—First premium, S. H. Poultry Co.

INDIAN RUNNER DUCKS.

In spreading a knowledge of the good qualities of this very beautiful and wonderfully profitable duck, I feel I am doing some good, for by only reading of them will many become aware of their profitable qualities and be induced to try them.

Indian Runners were brought to England from India by a sea captain, hence their name India, and Runner from their way of running over the ground instead of waddling like other ducks. In England their good qualities quickly captivated duck fanciers. Individual ducks there have made a record of 225 eggs a year. In this country a flock—not picked layers—have made a record of 192 eggs per duck per year. In India they were bred for their laying qualities, no attention being paid to color, and they vary somewhat in color in a general flock, some being fawn and white and some gray and white, while some come with pure white wings, while others have dark feathers in wings and drakes come with blue wing bars which is a big disqualification. In others the white becomes mixed with the fawn, giving them a mottled appearance. Don't think from this that they don't breed true, for with careful mating they breed very true and it is only by careful selection and culling that we advance with any breed or variety.

Standard weight of drake is $4\frac{1}{2}$ lbs.; duck, 4 lbs.; but many far exceed these weights.

Our first drake at Detroit, January, 1900, weighed 6 lbs. and ducks $5\frac{1}{2}$; 5 3-4 lbs. When young they grow very hardy. The fertility of Indian Runner eggs is remarkable. Out of 36 eggs set at one time we got 35 young

and of others set later every egg hatched. At ten weeks old they are ready to market and at five months old they are matured. Their business is to lay eggs and this they do to perfection. They lay all winter and from first of April to moulting time every duck will lay an egg every morning. Such laying I never heard of before. English breeders claim that eight year old ducks will lay as well as yearlings, so age is no bar to their usefulness.

Breeders of Pekins had settled down to the idea that their favorites were the "whole thing," but Indian Runners are casting a shadow over them as general purpose ducks and as layers have simply left them in the shade. To show the profit in Indian Runners compared with Pekins, I give herewith the result of a test made by Dayton Bros.:

A prize winning Barred Plymouth Rock owned and bred by C. F. Human, Friend, Nebr.

Egg production—Pekins, 112 eggs per year.

Egg production—Runners, 192 eggs per year.

Food consumption one month, per 100—Pekins, 2,250 lbs. (about); Runners, 1,500 lbs. (about).

Time required to reach market size—Pekins, 10 weeks; Runners, 10 weeks.

Time required to reach maturity—Pekins, 6 to 9 months; Runners, 4 to 5 months.

This is an interesting comparison—an average of 192 eggs from a general flock is extraordinary and throws the work of the speckled hen away in the shade. It will be seen that the cost of producing a Pekin egg is nearly double that of producing a Runner egg. Runners given a range will pick up their own living and often will

leave feed, given them, uneaten, to range, which seems to suit their nature better.

In quality, Runner eggs are much like hen eggs, not strong like other duck eggs. We have cooked dozens of them and prefer them to the hen eggs.

These ducks are bound to become very popular. They are very beautiful and very profitable and all lovers of the almighty dollar will love them, for they are manufacturers of the "long green." They are here to stay. Try them! THOS. H. MILLS.

Port Huron, Mich.

STATE FAIR AT YANKTON, S. D.

South Dakota State Fair came off September 10 to 15, and as it happened it was a bad week, as it rained from Saturday to Tuesday night and but few entries were made to what there would have been had the entry days been pleasant. Still there was a fair show, the most noticeable being that of the poultry department. The poultry business in the Dakotas is in its infancy as compared with other older states, yet there was quite a creditable exhibit and some very fine specimens, especially in B. P. Rock, Golden Wyandotte, White Wyandotte, Buff Wyandotte and Buff P. Rocks. There was the best trio of B. B. Red Game Bantams shown for some time. Owing to the manner of making entries and keeping books it was impossible to get list of awards so they could be published.

There were three incubator companies represented and each made a creditable hatch on the grounds, namely, Sure Hatch Incubator company, the Klondike Incubator company and the Cypress Incubator company. The little chicks bursting forth from their pent up quarters in the shell interested large crowds of people, who took away with them quantities of advertising matter and will in the near future be raising poultry by artificial means.

Much credit is due the superintendent, H. S. Fletcher, of Watertown, S. D., for his courteous treatment to all and the able manner in which he cared for every thing in his department. He certainly is the right man in the right place.

L. P. HARRIS.

Blue Barred Rocks

The Kind That Wins

1st at Peoria; 1st at Geneseo; 1st at Cedar Falls; 1st at Davenport; 1st at Mason City; 1st at Marshalltown; 1st at Ottumwa. A fine lot of breeding and exhibition birds for sale, including early chicks for the fall shows. Write for prices and folder. J. M. HOLT, Marshalltown, Iowa.

October Essentials

By Mrs. ELLA THOMAS.

The lovely fall weather is here now with all its varied foliage of trees and flowers, but most of our fowls show the effect of the intense heat of summer and need extra care and feed from now until winter. I have been very busy going over all my chicks with a heavy coat of insect powder, literally filling the plumage full of it to get rid of every semblance or vestige of vermin. This will greatly aid the chicks to develop bright, beautiful plumage and retain the deep, glossy sheen the new feathers, just now coming in, should have. Nothing causes so much loss to the color of the plumage as lice constantly sapping the feathers. My next work was culling out all the young stock I do not care to keep over to sell as breeders and exhibition stock and for next season's breeders. I find this very interesting work, yet full of anxiety lest I should do as I once did—sell off culs while yet frying size, my best fowls—but mistakes like this cannot so often happen to the experienced and painstaking breeder, and I can now, even at this stage, select my Brahmas and Barred Plymouth Rocks with almost an assurance of selecting the poorer specimens, yet all who breed Light Brahmas know it is not the easiest matter in the world. I have too much color in a few this season instead of lack of color, and that was caused by my lack of experience in breeding for the bluish undercolor spoken of in the September number, but it takes time to do all things well, and I hope to aid others who might make the mistakes I have made in the past. When we bring together as breeders fowls whose ancestors were noted for deep color, we may get too much undercolor in the progeny, causing so much black in back as to disqualify the birds, but if such birds are pullets I retain them, for no money could purchase them all, for I keep them as a reservoir of color exclusively, because you know the male is half the flock, and he should never be a disqualified bird, even to bring back or retain rich, black markings. Rather, I select the cockerels with as intense black points as possible, yet a very slight bluish undercolor throughout the plumage. You see, I am perfecting the male first, knowing that when I can produce perfect Brahma males I can have the females something near it, because as a general rule the fe-

males score the highest. Our poultry journals, our poultry shows, our sensible, practical breeders, are the foundation of our large numbers of profitable, beautiful breeds now given in the Standard, all gradually climbing for the pinnacle of fame in poultry culture. Let us be full of emulation for the common good, feeding neither envy nor spite, nor accusing each other of having an "ax to grind," but cleave to each other as they do in any other brotherhood. I believe the most of our old breeders take this broad-minded view of the work before us, else why so much accomplished in the past two years? We must be mutual and inseparable friends to accomplish what we have undertaken, not only the perfecting of our breeds, but a bond of friendship's union of the hearts of the noblest men and women on every part of our globe. When we take this view of the matter, brothers and sisters, we put our beloved vocation on a plane that is equal to any in the world, for it will be God-like. How many Christian men and women will work to this end? To those who do we can promise them their names will go down in history and be enscrolled in letters of gold on the very pinnacle of Fame's temple.

Now, I have my next duty to perform. It is to put my fowls that I wish to exhibit to themselves in yards with the house filled in with from four to six inches of sand; it is so easily kept clean for the fowls and for my feather-footed fowls I put nothing else, because I do not want them to scratch. The Barred Plymouth Rocks I put four or six inches of straw, to induce them to scratch; it makes the feet and legs so bright and clean. My Brahmas I wash the feet and legs in strong soap-suds when I put them up, and if they show scaly legs or feet I dip in a strong solution of tobacco juice first, then wash the feet, then pull out, one by one, all the brother feathers in the feet and all that look soiled and broken; in fact, I generally pull out all the feathers in wings, tails, hackles and outside fluff feathers, jerking out with a quick, upward jerk a very few at a time. If done properly it does not give much pain, and the fowl, if fed sweet milk with a little lime in sunflower seed, linseed meal, etc., will moult quickly, alternately feeding wheat or kaffir corn, oats, etc. Any

fowl for exhibition, if not cut for creamy color in back and on wing-bows, must be kept out of the sun except late of an evening, and even black or buff breeds have a richer sheen when kept out of the sun. If the hens show a disposition to begin laying change to another house, for laying retards the process of moulting, because it takes the life principal that forms the white of the egg in large quantities from the system. That is why sweet milk is so essential. If the fowls look pale or get pale in comb from confinement take a quart of vinegar and add old irons to it; give two to four tablespoonfuls of the liquid to each gallon of water until the comb gets its proper color. This preparation should not be given unless needed to white fowls or those having white in plumage, because it gives them a brassy look on back. Pure, fresh water with plenty of grit and greed food of some kind makes a perfect bill of fare for fowls for exhibition, unless you are to give meat and cut bone, but I do not like either, unless cooked, as it increases the size of the comb too much. My laying or outside stock get the range of the farm, to prey on the insects, eat all the refuse, such as potato parings, apple parings, scraps from the table, parsley, cabbage leaves, etc., all dumped into a large kettle, cooked and thickened with bran, salt added. This, fed in the morning, is all they get, and kaffir corn or corn at night.

No theory should be considered in our poultry culture that cannot be put in practice. To practice what we preach is what counts. Our efforts should be directed by reason, and the work of each season should show some improvement over that of the preceding season. To excel is one of the incentives of the true breeder and fancier. Good luck and reason, or proper management, are very intimate acquaintances—in fact, mutual friends.

MRS. ELLA THOMAS.

E. E. Smith exhibit of White Pekin ducks as shown at Nebraska State Show at Lincoln January, 1901.

A view of a flock of Pekins at the Capitol City Ranch, Lincoln, Nebr.

An Incubator Talk

Incubator talk seems somewhat out of place at this time of the year, and yet, for those who are not already in possession of an incubator, it is the proper time for them to begin looking them up, in order to determine what kind they want.

During the fall fairs and winter poultry shows many of the different makes are on exhibition, with good long-winded people in attendance to tell of their excellent qualities. While for the defective points you have to go fishing yourself. We have used artificial methods of hatching for several years and would not go back to the hens.

Many people have such funny notions about just the proper place for things. If they cannot have just what they consider the proper place for an incubator they won't have one at all.

This calls to my mind a gentleman who came to our yards last spring to purchase a cockerel. He asked to see our incubator, and when shown it said, "Why! Can you run it there?" I told him that was the only place in the house I could find room for it, so there was where it had run and done nicely, even if one corner of it was four feet from the cook stove. He remarked: "Well, if you can run an incubator in a place like that I am going to have one." At one time we run two small machines in place of the large one we now have. We have run those machines in all parts of the house where it was convenient to have them sitting. An incubator is a very nicely finished piece of furniture and is no disgrace to the sitting room, if that is the most convenient place you have in which to run it.

There is no little or dirt except at hatching time, and one can have a basket or box for the shells and need have no dirt them. I hear some one say lamp. Yes, there is always a lamp, but if it is kept proper there is no smudge from it. If lamps are allowed to become so miserably filthy and dirty as you see them sometimes they cannot help but smoke, and it is no disgrace to the lamp, but to the one that runs it. If you want an incubator, just hunt out the one you like the best and buy it. Sit it wherever it is convenient, give it proper attention and you will see that it will do its part. This incubator work is no longer an experiment, but an established fact. Incubator inventors are obliged to run their machines in all conditions of wind and weather before they can place them on the market, therefore we are pretty sure of getting something that will hatch chickens in whatever kind we choose.

MRS. IDA BLANCHARD,

UNITED FANCIERS' POULTRY AND
PET STOC KASSOCIATION,
RED OAK, IOWA,

Will hold their annual poultry show at Red Oak, Iowa, November 26 to 30, 1901, with the following judges:

Mrs. J. J. Buchin, Pierson, Ia.; J. E. Thompson, Malvern, Ia.; Curtis Green, New Providence, Ia.

J. M. SCOTT, Secretary.

DODGE COUNTY POULTRY ASSO-
CIATION.

The Dodge County Poultry association will hold its first annual exhibit at Fremont, Neb., on January 8, 9 and 10, 1902. J. E. Thompson, judge. Competition open to the state. For particulars address G. W. D. Reynolds, Fremont, Neb.

SELECTING AND PREPARING THE WHITE LEGHORN FOR THE SHOW.

With the show Leghorn the head and its appendages are of much importance, but not "the whole thing." The carriage and "station" of this variety are one of its chief attractions to those who are viewing them in the exhibition coops. Besides the well formed comb, not too large and coarse, the smooth white lobe and clear white plumage, which many seem to think the first essential, let us look to the breast, see that it is well developed, round and full, when viewed from in front, one side and above. Look now to the carriage of the head, neck and tail and that the back is short, especially in the male, and that the tail does not cut into the saddle or cushion and form a sharp angle. Now, if the bird is well up in other standard points it is worth putting into perfection for the show.

The first thing is to tame them; if they will not tame they will not show to any advantage. Train them to so carry themselves as to show off every good point to the best advantage. If one carries its tail a trifle too high, stroke it down over the back and tail so as to teach it to carry it lower. Induce it to carry its head well up and somewhat back and thus throw its breast well out. Handle them every day, teach them to be perfectly at home either in the exhibition coop or in your hands.

Now for the final preparations, the finishing touches, just before the show. If the birds are very dirty they should be thoroughly washed in soap and water and rinsed in bluing water; if only a little dirty in spots, use a sponge, washing the dirt well off, then sponging the surface of the feathers all over with bluing water and drying.

The legs should be thoroughly cleaned and oiled with sweet oil in which a little coal oil has been put. The face, comb, wattles and beak should receive very much the same treatment.

The feeding of birds for show is very much the same as feeding them for health, growth and good condition for any other purpose. If you want good white lobes on your Leghorns try feeding them white feed. If you think this an old foggy notion—a theory exploded years ago—just try it for yourself or if you prefer go on feeding your yellow corn, etc., and let the fellow who does feed white score one-half to one point on lobes over you.

R. R. FRENCH.

Ford City, Mo.

PACKING EGGS...

... By Mrs. B. G. MACKEY.

Certainly the editor may be congratulated on the first issue of Poultry Investigator. The writers all take hold of practical work and write in a plain, common sense manner. My experience teaches me that the little everyday care and attention of fowls is very necessary, and that in the most commonplace things we often need instruction, as amateurs. Even experienced poultrymen can sometimes learn from those he considered his inferiors in knowledge.

However, I never write for the benefit of the experienced fancier. Still if I happen to tell the amateur something the fancier has not learned long ago he is welcome to the information. This is the season for the amateur to look about for breeding stock for next season. There are advantages and disadvantages in buying in the fall, the advantages being you can get the stock very much cheaper, and should get choice stock; the disadvantages being the risk of taking them through the winter. But it is well to get rid of all your surplus as early as possible, and this will give you room to care for your imported birds. Do not make the mistake of trying to keep too many hens during the winter. I believe there is more profit in taking good care of a few hens than in many neglected ones. Most chickens and turkeys are now almost through moulting. Chicken hens are beginning to lay. I do not know how the market is generally, but I believe every person can create a special demand for his or her produce in any line if they only make it above the grade put on the market. There is never a time when I cannot sell my butter and eggs above market price, and the customer comes to the house for them. Any man or woman can, by close attention to details, soon command a higher price for the eggs they take to market than is given to the general market man.

The following rules are very simple, but it is very necessary to observe them if you wish highest market prices for eggs. Always gather the eggs fresh. Do not wait to have a large number to take to town, but take them when fresh and on days when there will be a demand for them. Most farmers' wives send or take their eggs to market Saturday. Unless you have them previously engaged there can

scarcely be a worse day. Why? Because every one else takes their eggs that day, and generally eggs are cheaper Saturday than any other day in the week. Now if you will take your eggs from Thursday morning until Friday afternoon, I mean any time intervening between Thursday morning and Friday afternoon, you will find you will get from one to three cents more on the dozen. Or if you take them about Tuesday you will generally get the highest price. The reason is clear. People generally use more eggs Saturday and Sunday than any other days. But they either buy them Friday or very early Saturday morning, so those brought in after early morning must lie over until next week, and in hot weather this is very inconvenient to the groceryman doing a small business. In extreme cold weather it is just as inconvenient, as they are liable to freeze. The better way is to have them engaged for certain days, and take them at the appointed time.

Yet I am aware that there are times when the price is very low. Still at these times the cost of production is very little, in fact, on the farm absolutely nothing. From the time grass and clover are plentiful on the farm a flock of one hundred hens may be kept without a special feed until cold weather sets in. For these hens will catch insects, eat grass, clover and seeds, with waste grain, for on a grain farm, as one where stock is fed, there is always enough that otherwise would go to waste to furnish the necessary grain food for one hundred hens during the spring, summer and fall. Until I was able to sell my eggs the year around above market price, I managed to keep eggs fresh and sold only when prices were good. One asks how I did this? I will explain first, though six and eight cents a dozen seems low, yet during July and August one can afford to take even these prices, though it has been years since I knew eggs to be as low as six cents on the market. Still I may not be well posted, as I never take eggs to market now. The first of September I began to pack eggs, and after that time always received good prices. I hear some one say, "I don't have any use for packed eggs." Neither did I until I learned how to pack them. I am surprised that so few people know this simple method of packing

eggs. I use either a keg or a very large stone jar. I suppose a square box would do just as well to pack in. Have either very dry sand, sawdust or oats. Wheat bran or hay chaff will do for packing material. When you have from two to ten dozens eggs, depending on how many eggs you get daily (I generally packed every other day), beat the white of an egg for every dozen eggs to pack, but just as you would for cake. Glaze each egg thoroughly with beaten white. I applied with my hands. Put the eggs thus glazed on a table and let them dry thoroughly before packing. Then cover bottom of vessel in which they are to be packed with packing material mixed with salt (I think a pint of salt to half gallon of packing material; I never measure, but put in what I think enough to keep material cool). Put the eggs in, small end down. My reason for this is, the small end contains the white and the yellow will never settle if packed with small end down. When I begin packing I first use a two or three gallon jar. When this is full I use the packed eggs and pack the fresh ones. I continue to do this until cold weather; then I use the packed eggs and sell the fresh ones, as there is a very just prejudice to packed eggs. I seldom have offered them for sale, though once I did sell twelve dozen at twenty cents per dozen. I could have sold them for fresh eggs, but I asked the groceryman to examine and tell me if he could find any difference between them and fresh eggs. He said he could not and paid me twenty cents, while a neighbor living not three miles from me took much less per dozen and lost half of the eggs she packed in salt and lime. Discretion must be used in packing. Everything must be bone dry, so to speak. The eggs may be packed just close enough not to touch each other or sides of jar. Each layer must be well covered with packing material. Put it on so it will be between all the eggs and between eggs and jar. Let it be a full half inch, it will not hurt, on top of the eggs. Then put another layer of eggs, and cover in same way. Do not let eggs come closer than one inch to top of jar. Cover to top with packing material, put a plank top on jar and weight top down heavily. Keep in a cool, dry place. If you have a dry cellar this is the best place to keep them. I would not advise keeping those packed in very warm weather during the winter, but you can keep them fresh by using the packed ones and packing the fresh ones. If the family is small you can watch the market and sell when eggs are scarce,

between the first of October and Thanksgiving. Before taking to market wash each egg with clear, tepid water and a clear white cloth. Dry with a towel. If properly packed you can boil and eat eggs in March packed in November, provided they have been kept in a perfectly dry cellar and not allowed to freeze. It will surprise you when I tell you that a city lady taught me to pack eggs by this method. She bought them in the fall when they were cheap and packed to use when they were high in winter. Of course the cold storage process prevents low prices prevailing during summer, and also prevents the excessive high prices that once ruled in winter, but this only evens up the egg money and does not injure the business at all.

As long as the United States imports eggs there will never be an oversupply. Now is the time to plan for the early chicks next spring. True, the excessive heat has prevented us from doing much needed work. This will have to be done later. I think the vermin have not bothered chicks nearly so much this season as usual. The exceedingly dry weather has provided dust baths in profusion and chickens have taken advantage of them. On account of high prices of food it will not pay the fancier to keep any culls through the winter. But it will pay farmers who raise market poultry to buy some of these culls to grade up his mongrels. The fancier may preach that it is dishonest to sell one or two dollar chickens, but I must say that all the dishonesty has not been centered in dollar birds. I could tell of fifty dollar pens of B. P. Rocks with feathers on the legs, not down feathers. But the point I wish to make is that there are birds in every fancier's yard which are not worth high prices. True, those high up in the business may call them five dollar birds, but the fancier will not touch the high-priced man's five dollar chicken, for he knows that to him it is not worth a cent. If the amateur buys it he loses his money and his year's work, but grows rich in experience. But the fancier not so high up in prices, who cannot afford to advertise so much, can sell many as good birds for two dollars as the top man asks five for, and these are a real benefit to the market poultryman, who has only a mixed flock. Whether he buys only cockerels or both males and females, he can, by using these cheap birds, even up his flock in color and size until it will bring higher prices on the market. When he finds that he receives more money for an even lot of chickens than for a mixed lot, the argument for better birds is

convincing. He will not in all probability, be satisfied next year with the same quality of breeding stock he bought this year, but will reach out and get something better at a higher price. He will create a demand in his neighborhood for better fowls. His neighbors will buy cockerels from him at an advance over market price at first, until they, too, will decide that higher grades will pay better. So often by degrees and almost unconsciously the market poultryman becomes a fancier, and all by being induced to buy a low-priced thoroughbred bird first. The fancier must buy the very best his money can reach, and then he will often be sorely disappointed, but he must not give up, only try again.

Some persons are natural fanciers, while others have acquired the characteristics of the fancier. Still others are not, nor never can be, made fanciers, but they can always have fried chicken before any one else and can raise hundreds of chickens to the fancier's dozen. All we can hope to do with such a one is to convince him that there is more money in an even colored lot of chickens than in the lot of all colors and sizes. Yet this is a benefit to him and to the fancier as well. True, the fancier cannot afford to advertise one and two dollar birds, nor can he afford to be at the expense of much correspondence and trouble of shipping in small lots. But there is always a local demand for these culls, and it is preferable to sell them at these figures to putting on the market, as many advocate. For unless they are decapitated they are bought for breeding purposes from the market poultryman. Last spring a huckster went through our township offering an advanced price for chickens, turkeys and eggs, assuring the farmers who have thoroughbreds that not one would be sold as breeders, and that the eggs would be shipped immediately for culinary purposes. Not long after several of my friends informed me they had purchased toms from him guaranteed as pure Mackey stock, giving names of parties from whom he bought them. Some of them were as good birds as I had raised last year. He also sold cockerels and eggs to be used in breeding yards and for incubation. The parties paid him more than he could make by shipping and bought cheaper than they could otherwise have done. I prefer selling my surplus and culls where I know they will not be put out as Mackey's best, and think all fanciers feel the same way. MRS. B. G. MACKEY.

CHICKENS AND TREES.

I had often thought that it would be fine if we could supply all our trees, especially fruit trees, with an abundance of poultry manure. I have almost let that idea pass, because in advocating such a policy too often we give the trees too much of the good thing, and thus do more damage than good. Let me apologize here for speaking about trees in a poultry paper, but any poultry yard is not complete without trees, no home is a model home without trees, no table is set without fruit; then trusting I am not intruding, I will pursue the course.

I am a lover of trees, and so are chickens. I have known persons to shovel out the hen manure and waste it; others scatter it in the orchard in scoop shovelfuls, as if they thought like "Pat" did with the pills. When he read the directions to take three and expect relief in a few hours, he thought that to take more would bring results quicker and better, consequently he took the entire box and did not have long to wait for results. So I say, the poultry manure is all right, but spread it sparingly. I remember that some six or seven years ago I had a pen of big Light Brahmas, and in order to keep them separate from the Langshans for breeding I made a little yard and enclosed therein a young pear tree. Just outside of the fence were other trees, just the same. The old hens used to pass much of their time by sitting under that little tree for shade. They did not scratch much, but how that tree grew that summer was a caution. I believe it grew three or four times as much as the others. It was remarkable. Now there is two reasons. One is the manure, and the other, and by far the most important is the fact that the breathing pores of the under side of the leaves took in a great amount of plant food from the breath of the chickens that went up through the leaves. Thus you see plants and poultry go well together. Yes, to be sure, the turkeys and the cabbage seem to do well, or rather the turkeys do up the cabbage. On a farm don't fence up the poultry, but fence up the garden. The chickens will destroy many insects, furnish plenty of eggs and lots of things. Don't think because biddy don't score 98 she does not deserve your friendship and care. The ten color hen is often nearly as profitable as the "up there." None of them can live on wind or roost on the fence always. Befriend your friends, the chickens.

JAMES PEARSON.

Germantown, Neb.

GRADING Up the FLOCK

MATTIE
WEBSTER

One engaged in any business, if interested in the work and alive to his or her own interest, feels disappointed and discouraged if the close of each year does not show that progress has been made.

This ambition stimulates to the bending of every energy of brain and hand that its accomplishment may be possible, and it is with much satisfaction and self-congratulation that one sees the realization of this desire.

In poultry culture every earnest, successful breeder feels this spirit of progress within, and all the planning and every day's work is a consequence of this desire.

Seldom, at the close of one season,, does the breeder's flock show characteristics and qualities exactly as was possessed by the flock of the previous season. I say seldom, simply because others may have witnessed such an equality, but in my own experience I never have. If the flock, as a whole, does not show marked improvement, deterioration is plainly discernible. Breeders "grade up" their flock every year that the desired improvement may be attained, and not only is this "grading up" practiced by small breeders, beginners and amateurs, but by the successful, long-time breeders as well, whose fowls, to the inexperienced eye, appear already perfect in quality. Systematic grading up consists in a careful selection of the birds possessing finest quality or marked points of excellence, because of which they approach most nearly the perfect fowl as portrayed in the Standard of Perfection, and retaining these birds for next season's breeding pens. Often has it been demonstrated that "like produce like," and such being nature's law, the parent stock must be fine in quality if the young birds show excellence in form, plumage and general characteristics. Perhaps the beginner, of only a season or two in poultry raising, may have a flock that are pure-blooded or thoroughbred fowls, and yet, when compared with the standard birds of same breed or variety, they fall so far short of the acknowledged requirements of their particular breed that there is very little satisfaction or pride in the possession of such a flock. They may be thoroughbred and still be culls, with defects so marked that the prosperous breeder would, if the birds belonged

to him, doom them to the hatchet and the block. But beginners in poultry culture cannot always afford to purchase the very best stock for the foundation of their flock, and so sometimes feel as if second-rate or inferior fowls must answer. Looking upon such a flock, do not be utterly discouraged and give up the business, but set your teeth hard and with a determination to have a flock much better in quality another season. Go to work earnestly, without any loss of time, for now is the best time to commence your work for improvement in the quality of your birds.

Take your Standard of Perfection, the poultry breeder's guide (if you have not one, get it without delay), take your biddies, one at a time, and section by section, compare them with the description of the Standard's perfect bird. Of course they will none of them very closely approach perfection, but some will be much better than others, and perhaps some will have disqualifying defects. Select only the first, even if very few in number, and reject the last, even if half the flock, and keep these best for your breeding pens the coming season. Study the advertisements of reliable breeders of the breed or variety of your fowls, and write to one of these breeders that you feel you can trust, explaining fully your plan for the bettering of your flock, telling of the most glaring defects of the females, and ask this breeder to send you a male to head your pen the coming season. If a beginner, it is much better to trust to the greater poultry wisdom and experience of an old-time breeder than to use your own judgment in making a selection. Do not be frightened if the price far exceeds your idea of the value of a single bird, but remember this bird is half your pen, and console yourself with the thought that you are doing your best to become a progressive breeder, and hope, work and watch for the great improvement in next season's flock. This system of grading up the flock should be practiced every fall; that is, a selection of the most choice specimens of hens and pullets should be retained for the coming season's breeding pens, and if no desirable male is found in the home flock to head the pen, send for one as first advised. Certainly it is more preferable that the foundation stock should be as near perfection as possible, but as it takes a nice sum of money to buy such fowls, many of our beginners may look may look with longing eyes upon such desirable birds, but must be content with others—thoroughbreds, yet lacking in quality, perhaps culls from the

same yards that contained the more desirable fowls. It is to encourage such beginners that I advise this grading up, which patiently and perseveringly practiced, season after season, will satisfy and delight you with its final results. MATTIE WEBSTER.

Belmont Wis.

I have though perhaps my experience with raising chickens would help some other women to raise them without hens, as I have done. I have not been able to have an incubator and brooder, so I have hatched chickens under hens every year; then I raise them by hand. I take a box that I can carry around and fix it so one side is six inches higher than the other and put a window sash on it. I keep my chicks in that until they are three weeks old before I let them on the ground. I put in some sand and earth and fine trash from the hay mow; I take them out of the box every night into a basket that has a piece of woolen stuff in it and cover them up warm. I have better success raising them in this way than with hens. If it is cold and cloudy I set a jug of hot water in with them. This year I had one bunch of forty-eight and raised forty-four of them. They are fine, healthy birds; of course, this is more work than a regular brooder would be, but I have learned to do a good many things for the comfort of my chicks without buying expensive things: but thanks to my fowls I expect to use a good incubator and brooder next year.

Wishing every one success in poultry for next year.

NANCY WATSON.

Delaware Poultry association, Delaware, Ohio, will hold their first show at Delaware, Ohio, November 26 to 29, 1901. President, C. C. Reed; secretary, H. D. Courter; treasurer, S. S. Blair; judge, S. B. Lane.

This is one of the largest county poultry associations in the state, having over 200 members, and there is no reason why they will not have the largest local show in the state. Their catalogue will be ready for distribution soon.

SEND IN SHOW NEWS.

Yes, our columns are open to the secretaries of any and all shows and you are free to use them to boom your shows. We will print full reports of any and all shows where the associations take interest enough in their shows to send in the reports and items of interest with list of awards. This paper is your paper. See to it that your secretary is aware of this fact.

Poultry ^{IN} Washington

. By CORA RICKARDS.

Cora A. Richards, Ogden, Utah.—Dear Madam: I read your article in the poultry paper and take the liberty to write you whether you know any drawbacks in poultry raising in Seattle. There are so many ranches offered for sale, I am somewhat suspicious. Any information will be greatly appreciated. Respectfully,

C. E. TUCKER.

In answer to the above one can learn of success and failure in the same town. The right kind of climate is a great aid to successful poultry culture.

We have heard through parties who had poultry in Seattle that it was much harder to make a success with poultry on account of so much damp, rainy weather. Here in Utah the climate is very favorable for successful poultry culture, prices for eggs always good and price of wheat very reasonable, being less as a rule than most places in the east. The great Salt Lake being only about eleven miles distant, and the mountains three miles, gives pure air that is considered very healthy, our winters are mild, do not have much snow or rain, not as much as we used to have in Iowa and Nebraska in the spring and fall.

When a man cleans out his chicken house once a week, or as often as is necessary through the winter time, he says his chickens are supplied with fresh dirt, and they are, but the only advantage it is to the chickens is that it helps to promote cleanliness and gives them a chance to scratch, but he probably does not stop to solve the problem far enough, for he must remember that earth has life the same as a person or animal, but on a different principle.

Earth has life the same as all living animals and birds, and without it no creature could live, as it requires life to produce life. It is only living objects of the animal and vegetable kingdom that can produce it, and it is the same with earth or dirt, from which all human beings, animals and vegetables are fed. If earth is taken from the ground (or in its natural state) and is placed in barrels or chicken houses, it becomes stagnant or dead, and not even a louse will live in it.

The effect that chicken droppings or manure has on life, earth or the open ground, is that it will cause the land

to become so rich and of such a nature that it will breed angle worms, also start up tender blades of grass to feed the grasshoppers and other living insects, which will be meat for the chickens and will promote life and cause them to grow to be strong and healthy; but if droppings are deposited on dead earth, or that which is placed in the chicken houses, if the utmost care is not taken, disease will be the result, or lice will breed in fast numbers and destroy the life of the chicken.

To sum up the whole thing in a few lines, chickens, to be raised in winter time, should have the privilege of the open ground, where every necessary of the open ground can be offered them.

The next thing of special importance is pure, wholesome fresh air and moisture also; and I want to expressly impress upon your minds that wholesome air wants to contain a great deal of moisture and of the right kind, too.

We know that plants and vegetables that are raised artificially in green-houses or hot beds, require moisture, as they are constituted principally of water, and they must have it in order that they may expand and be vigorous and healthy, and the reason that it is so is that where air is applied artificially by the use of furnaces and stoves, that it becomes of such a dry nature that, unless they were watered, they would soon wither and die; but where they are raised in the open ground they do not, in most cases, require to be watered or they seldom obtain it, as they receive moisture enough from the ground as well as what is in the air.

Chickens do not require near the amount of moisture that plants or vegetables do, hence a wet climate is not good. While water promotes and advances life to the vegetables, if used in the same manner in the brooding houses by sprinkling the water on the surface of the dirt, it would be destructive and destroy the lives of the chickens, as there would be such dampness that it would cause all kinds of disastrous diseases, as well as breed lice by the thousands.

Where chickens are confined to brooders or buildings that are heated by furnaces or stoves and are thus confined to dry, close air, it has a

tendency to cause the bones and muscles to become contracted and stunt or stop the progress of the chicken to a certain extent.

Where chickens have their liberty of the open ground, with the natural moisture from the air and earth, it causes their bones and muscles to expand, and they have every advantage that can be offered them in this direction for being strong, vigorous and healthy chickens.

The next and last thing of special importance is heat.

Heat is something that is not to be trifled with for it is one of the principal formations of all animal and vegetable life, and with anything of so tender a nature as chickens and early vegetables the greatest care must be applied, and it is a well known fact that vegetables grown in the open ground are stronger in nature and far superior to those grown in hot beds, and it is the same with chickens, for the less artificial heat that is applied to them and the more natural heat of the warm sun's rays and having the privilege of the open, ground, the stronger and healthier they will be, and the faster they will grow.

Heat promotes the life of chickens just as much as the food they eat, or the water they drink, and they must have it. It makes all the difference in the world how heat is applied to them, but it is not a complicated matter or hard work to determine whether one climate would be more favorable than another. We know that severe frost and cold of some climates in winter means much artificial heat to rear winter chickens.

Our own experience has been that February, March and April chickens thrive best, for at that time we have it so that the little fellows can come out or, the natural earth for awhile. Sheds can be arranged so as to keep them free from snow or such ground space as will give chickens access to sunshine and outdoor earth.

Dry sand in sacks we have put away for winter use and for the early broods, but we have found it advisable to arrange for the outside ground as well and see that it is spaded up and left in a live condition for the early spring pooters.

We do not neglect the fall work, for it may mean success for the next season. Without clean, dry quarters one need not expect to have success in any branch of poultry culture.

The hens and pullets are carefully selected; what is wanted for next year's breeders. These are kept with a view to making the best profits for us, and if we do not make them comfort-

able and do the best we can for them, we may be the loser by not having the breeding stock in condition to lay the eggs that will hatch the profitable chickens, as the parent stock must never be neglected. Hence it will be necessary for the beginner to prepare ahead, and even now look to it that he is getting ready for next season's brood of chickens.

After chickens have been in broop coops or roosting in trees it is sometimes a hard matter to break young stock of this habit. Frequently the chickens remain in such quarters until snow comes and covers the earth as well as the chickens in the trees.

Fall rains, great changes in the weather from heat to cold is not supposed to promote the health of neglected poultry.

We all desire to make money. If we work, to do a part of the work well, and then from needed care allow the profits to come up on the wrong side of the ledger it is the way those who claim chickens don't pay do it.

At this time one should have comfortable houses provided for the young stock, houses built on good dry soil, set up a little so the ground will drain off each way, as clay or such soil as holds dampness, loads of fine gravel should be hauled.

The average farmer who has thought very little about chickens may say, "Bother the hen!" she has made her living around the barn and can continue to do so. The same farmer, however, may have a good stable for the horses and cows. The stable is well cleaned every day for the horses and kept in fine condition.

There is nothing on the farm that needs care more than poultry and nothing that pays a better profit, counting money and labor invested. Until people understand that poultry demand attention and are the equal of any of the stock, they cannot be expected to pay a handsome profit.

How many city people there are as well as farmers who do not cull out their stock; let cockerels and pullets run together, the good and the poor specimens. Some may understand me as meaning poor in flesh. It is the best specimens of the kind that should be saved; the disqualified birds as a rule should be culled out, if our reader knows what that means.

A Brown Leghorn, for instance, who has white under color, such a bird is not worth keeping for breeding purposes. If one wants to improve his stock in standard qualities, such a pullet may lay as well.

We receive many letters asking how

White can be bred out of the Brown Leghorn. We suggest breeding it by selecting birds as free from it as far back as possible. Young chickens may show white feathers and moult them, and when the last plumage comes score up. We would not advise culling the stock so close if handling thoroughbred stock to sell or show; one may get deceived, as a friend once sold a bird cheap on account of a very poor comb. Later this same bird won over the former owner's stock in the show room.

It is the finest thing in the world to interest one who loves poultry to raise exhibition birds.

Thousands of people have only an eye to the fresh eggs and a few chickens for home use; whether it is many or few it pays to keep only the best. A yard of good size should be made for the cockrels and these put up and fed on considerable corn to make fat for market. The pullets then have more room to do much better. Their main feed should be wheat, ground bone and all the green food necessary. If it is convenient have them where they can have a grass run. Alfalfa is the best of anything for green food, as it can be cut three times in summer and grow until winter, and when the snow melts green leaves peep out of the ground. It would pay to raise it in the east as well as in the west. People have visited our place from the east who had never seen alfalfa before. The roots run down in the ground so far that after a few years even in a country like this where irrigation is necessary, it don't need it. We have a field of it that has not been irrigated for eight years. We have it cut fine in summer and put it away for winter use.

The Leghorn that is bred right is not so inclined to take on fat as the Plymouth Rock or large breeds of poultry. We would keep all pullets in a nice thriving condition by affording plenty of range on large yards.

Mashes made of the different ground grains, such as ground corn, oats and bran, fed on clean boards, or better still, a trough, which every one ought to feed soft feed in. We advise wheat in the morning and mashes at night or as the last feed.

The pullets if put in comfortable quarters and handled right and are the right kind of stock will soon give returns in eggs when eggs are high. But don't think for one minute the neglected pullet, crowded in a brood coop, left until the last thing and until it gets distemper or some other ailment, is going to give satisfactory returns.

Many a breeder, even now, has the

nouses all cleaned thoroughly and some of the poultry yards plowed and sowed to rye.

We are acquainted with a lady who hatched one thousand chickens by an incubator; six hundred have died from lack of proper care. The showing was fine, there was plenty of room, but fences were put up to fence in the little fellows so as to crowd the chickens beyond reason.

Why have chickens more than can be given proper care and proper food?

So many people start out in the spring with a view to hundreds of chickens—some thousands—when they have no idea what such a number require.

People should plan for sufficient yard and house room, also consider the grain and food it will take to bring the stock to maturity.

The pullets do not commence to lay until September, October and November and unless cared for right will not do so then.

CORA RICKARDS.

Ogden, Utah.

PIGEONS AT THE STATE SHOW.

At a meeting of the board of managers of the Nebraska State Poultry association the board made provision for an exhibit of pigeons at the annual show to be held in Lincoln, January 21 to 27, at the Auditorium. Since that time John Haman of Topeka, Kan., has been secured to judge the pigeons, and as Mr. Haman is one of the best judges in the United States of these beautiful pets, it is safe to say that this attraction will be worth the going of many miles to see. No one who is not acquainted with the vast amount of money paid for pigeons every year could hardly believe themselves. It is enormous. Remember that this attraction at the State Fair will be up-to-date and worth seeing.

L. P. HARRIS,
Pres. Neb. State Poultry Ass'n.

The Delaware County Poultry and Pet Stock association has been organized with over 200 members. They will give their first annual exhibition November 26, 27, 28 and 29. They have selected as poultry judge S. B. Lane of Spiceland, Ind. The officers are C. C. Reid, president; H. O. Courter, secretary; S. S. Blair, treasurer; Amos Glover, G. L. Stayman, F. B. Karl, executive committee. Many good special cash premiums will be given. The success of the exhibition is assured. Any information desired will be cheerfully furnished by either the president or secretary. The catalogue will be issued about October 1.

AMONG OURSELVES

Velma Caldwell-Melville.

And now it is the Investigator!

We like the name; it sounds business like, and if there is a subject that will bear investigation it is that of poultry raising. Of course, there are fanciers whose methods will not bear the searchlight of truth, and whose practices are shady, to say the least; parties whose consciences allow them to pull off-colored feathers and otherwise attempt to deceive; but such people are not numerous; indeed, we believe as a class there is none more honest than the fancier; and as for the business itself, it is straight, and the more we learn of it the better pleased we are with it.

Our own start on this "fortune's highway" (?) was the purchase of a hen—she was nothing but a hen—and nine chickens. We made the investment during the temporary absence of the other one—our better-half, you understand—and on his return had them domiciled in a barrel of straw. Almost immediately we added to our possessions by the purchase of a sitting hen and enough eggs to set her up in housekeeping in another barrel. And between those barrels we vibrated, dreaming golden dreams; no thought of up-to-date poultry houses, incubators, brooders or any other modern paraphernalia of the poultry business disturbed our serenity; we enjoyed those chickens, dowdy little mongrels as they were, as we could not now enjoy a pen of birds worth fifty dollars. Our next venture was the Black Langshans—beautiful birds they were, with their glossy plumage and fine carriage. They were excellent layers until over accumulation of fat induced death on the nests.

Somewhat discouraged, we went out of the business for a time, beginning again with the Black Hamburgs. Oh, but that was an experience. We make pets of every living thing, but we defy anybody to make pets or even "passing acquaintance" of that bird. The moment one of us appeared at the gate of the run we were greeted by a chorus of unearthly shrieks and a terrible rustle of wings, and the lot—a male and a dozen hens—flew to the remotest and highest point in the hen house. If we followed, the cries and wild dashing of bodies against anything and everything was, to say the least, disconcerting, and again we went out of business.

The Barred Rock came in next and

there was no excuse for complaint save they grew so fat and their eggs came to lack fertility; then we adopted the White Rock, and the White Rock it is, just right in size, flavor of flesh, a bird easy to dress for table use, a perfect beauty, tame, friendly, prolific layers, good mothers, good sellers, either as market or fancy fowl—what more can mortal ask?

For all its blue blood, the White Rock is a healthy bird, and, with decent care, an all winter egg producer. As much, however, can be said of most birds, and we hold that the poultryman who does not get eggs all the year around has himself to blame for it. Of course, not all the hens can lay all the time, but there should be some of them laying all the time.

Why not plan for this by encouraging early moulting as well as by having pullets of different ages coming on all the while? And then the hens—we like two and even three year old hens, a good sized pen of them. They lay oftentimes when the capricious pullet will do nothing but parade her rose colored comb and sing the latest popular songs of Hendom, and they will sit when you don't want them to, of course, but sometimes when you do.

As the autumn and winter comes on we hope the Investigator will give us uncertain sound on the subject of "Winter Care of Poultry." Never, until the rank and file of chicken folk provide warm, well ventilated quarters, feed a well balanced ration and intelligently fight vermin, will the profits of the poultry business assume anything like a proper magnitude.

We are not afraid to venture the assertion that they are not one-half what they ought to be or will be when chickens are treated—well, humanely. There is enough vitality sucked out of many flocks every night by mites to, if properly utilized, fill the egg basket once or twice a week.

Plenty of people say they have no mites, at least they never see any. Try rumaging about among your birds at night, handling them and the roosts pretty freely, and then see if there are not almost unseeable little specks on your hands, or on your clothes, if they are light colored. Or, even in the day, lay white cloths where the chickens roost and then examine them. We once, in buying sitting hens, became thoroughly infected with the pests before we knew it, one fine white hen dying before her term of incubation was over, literally devoured, so far as blood and vitality were concerned, by the red mites. Lice have no terror for us compared with these. Persian In-

sect Powder will set the lice to route, but the mites, oh!

There are simple methods for extermination, however, but it means eternal vigilance. Thoroughly immersing roosts and dropping boards, in fact every part of the premises, with boiling water is a cheap and reasonably sure method of getting rid of them, but the operation must be oft repeated. Then there is kerosene—not so cheap, but efficacious if oft repeated and thoroughly used. For those living where they can get cedar boughs, a strong tea made from them will exterminate any vermin. If there are other or better remedies we hope to hear of them through these columns.

Herein lies one strong argument in favor of the incubator; vermin do not go with it. The poor little chicks are not born with a heritage of lice and mites all ready to enter into.

For ourselves we are going to test the virtues of the wooden hen the coming season "for all that she is worth."

One of our hobbies is raising poultry for market; somehow we never expect to raise any \$100 birds for the trade, though we have made fair profits on those we have sold and are not in the least discouraged along this line.

Only today we were reading of two brothers who, six years ago, went into the market poultry business. They were within three or four miles of a good sized town.

Their yearly sales were as follows: In 1896, \$750; in 1897, \$1,229.49; in 1898, \$2,965.59; in 1899, \$4,542.63; in 1900, \$5,062.08. We readily understand that from such sales the profits must have been very satisfactory.

These men only have six acres of land; house room for 200 head of laying stock, and brooder room for 2,000 chicks.

Their sales were made by contract with hotels and the like.

Even common market prices are not, however, to be despised, but one can soon build up a reputation and trade where he can regulate his prices for himself.

"These men," says the Practical Farmer, "are at present getting 35 cents a pound for chickens, 30 cents for ducks and 28 cents a dozen for eggs."

Let us go and do somewhat likewise.

Dr. H. P. Clark of Indianapolis, Ind., is the publisher of a book entitled "Rules of the Cock Pit." It is a recognized authority on rules governing this sport. Price, 25 cents. We will send this book and the Poultry Investigator one year for 25 cents.

Poultry Investigator

Is published the first of each month at
Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.00 per inch each insertion. One inch one year \$10.00. These are our only rates for advertising and will be strictly adhered to. We treat all alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of *POULTRY INVESTIGATOR* is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in *THE POULTRY INVESTIGATOR*.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

Not many days ago we visited the yards of C. Rockhill of Harvard, Neb. We found everything kept in fine order. We also were convinced that Mrs. Rockhill is a thorough fancier and breeder of pure White Wyandottes and has a fine lot of chicks started that promise good. We also admired her Buff Orpingtons, of which she has a fine start. Mrs. Rockhill can show a large string of blue ribbons she has won on her White Wyandottes.

PLEASANT OUT DOOR WORK.

These pleasant days are just suited for out door work, not too hot, nor too cold, but just comfortable to accomplish the many little needs in and around the poultry house, for presently it behooves every owner of live stock of whatever kind to be prepared for Jack Frost and those fierce wintry blasts, and it is well "to make hay while the sun shines." Now is the time to replace with new ones the broken window panes, plaster up the little crevices in the foundation of the poultry house if they are built on one, or if the house is old and boards full of cracks it can be made comfortable by covering with building paper, which is not expensive, if nothing better can be had use waste paper such as newspapers, etc.; tack on the inside by using lath or small bits of boards, these will keep it in place better than by tacking on the paper. Look closely that all is comfortable about the house that will add to the comfort of our feathered pets.

Now let us think of a scratching shed—almost a necessity to poultry when Mother Earth is covered with snow. If we can't have one made with boards, there are many other ways to make them with very little expense. Some use muslin, but I found that tore so easily in our western country, so I will give the readers of this journal a description of how I made a scratch shed in a few years. I admit it was a description of how I made a scratch the purpose for a scratch bed I would have, although not a vestige of it remains, for a new poultry house was built in its place, but another one will be made same as the old one if boards are not forthcoming soon. I used three posts, set them quite deep in the ground; these made the corners and a corner of the poultry house made the fourth corner. To these posts I nailed boards top and bottom, also several on top full length of pen. I was now ready for small boards of all lengths that were laying around; these were nailed top and bottom to the long boards of pen, two feet apart, or less if they were not extra strong.

I had one hundred feet of poultry netting not in use which I stapeled to each corner of pen, leaving what I did not need to go around pen. When the team was hitched to the wagon I had coarse hay hauled to the poultry yard (as we don't have straw). I then proceeded to finish my scratch shed by firmly packing the hay all around the pen, except the south. With the remainder of the netting I stretched back as well as I could on the outside of hay to keep it in place and nailed end

of netting to the poultry house. The top was made from the same way, only I did not use netting, using weights to keep the hay in place. Every day that it was too cold for my fowls to be out of doors and every day that the snow was too deep, I turned my fowls in the scratch shed where they were kept busy and warm scratching in a deep carpet of hay for the grain. I would scatter their singing and laying as though it were not cold, and the owner was happy, too, for I had made a scratch shed without any expense or trouble to any one, for I did all the work except to haul the hay; for would you believe it, not all men like poultry, except when they can revel in fried chicken, and don't have time to fix necessities for bid-dy's comfort. My shed not only was used for winter but of use as shade in summer by removing the hay from end and side.

Well do I remember a lady once said to me she "wouldn't do such work—it made her hands rough and black"; such work was left for the men if they had time, if not it went undone. I admire all that is beautiful, even to white, smooth hands, but if mine are not kept white by the use of mittens and at bid-dy's expense, then black my hands must be.

Every one with patience can make poultry pay, but not simply by admiring their beauty. IDA E. BARD.

Barred P. Rocks can be had of H. B. Loudon of Clay Center, Neb., that are farm raised, strong and healthy and bred from prize winning stock. Loudon knows how to breed Rocks as well as red hogs.

Mrs. Flora Shroyer tells us she has a fine trade this season in Buff Rocks, Pekin ducks, and Toulouse geese. Mrs. Shroyer spares no money in getting good stock and has splendid success in mating and rearing. Her Buff Rocks are a sight to behold and will set some of the old timers to thinking when they meet her stock in the show room. You will surely find her there, too.

I remember several years ago when I was at the State fair at Lincoln, Neb., I noticed in one coop three extra large, extra fine Barred Plymouth Rock chicks. They were beauties in every particular and up to date. I found on making inquiries that Mr. C. F. Hinman of Friend, Neb., owned them. It is needless to say they won it all so far as the three could. I have seen his birds several times since in our best shows. They always get a place, and deserve it, too.

Buff Orpington Cock

Orpington Fowls

THOS. H. MILLS.

Owned by W. H. Bushell, David City, Nebr.

Mr. Bushell Says of Orpingtons.

The Buff Orpington is of large size, vigorous and hardy, of gentle disposition, and is a wonderfully prolific layer. It is a symmetrical bird with fine carriage, color a soft even buff, body very compact, with broad and deep breast, back short and broad, legs short and heavy and free from feathers, ear lobes and face red, comb medium size.

I imported some very fine females this spring from England, and have raised some splendid stock from them. I am importing now this fall from England, one Gold Buff Orpington cock bird 18 months old. He is winner of three first, two second premiums and championship for best bird in show room for shape and condition. Also two spring cockerels, solid Buff birds, from two of the best breeders' yards in England. These birds are to mate up my own yards for next year's breeding; also a pen of six pullets and cockerels of solid buff color. These birds, with what I have now in my yards, will put me in the best possible shape to furnish eggs of the best possible stock of Buff Orpingtons that ever came to the United States.

Many of our readers have never seen Orpingtons and many inquiries are received every day asking what they are like and in what respect they differ from the Buff Rocks. They are much like the Buff Rocks in color, but are different in shape, being shorter in length of body and leg, more like Wyandottes in body than Rocks. They have single combs, red ears, white beak, pinkish white legs, and paler eye than Rocks. In size they are fully heavier than Rocks. Cocks will weigh from 9 to 11 pounds; hens, 7 to 9 pounds; cockerels, 8 to 10 and pullets, 6 to 8. They are wonderful layers for a large fowl. They mature earlier than Buff Rocks, and lay more eggs in a year. During last winter we had seven Rocks, nine Leghorns and nine Orpingtons penned in one house. They were fed alike and cared for alike, and the pen of Orpingtons laid more eggs than the other pens put together. They were just so much more profitable.

The breeds used in the make up of the Orpingtons were Hamburgs, Dorkings and Buff Cochins. They have the great laying qualities of the Hamburg; the meaty qualities of the Dorkings and the size and color of the Buff Cochins. The object of Mr. Cook in producing these beautiful and wonderfully prolific fowls was to make a combination of merit, the product of which would be the long sought "ideal general purpose fowl." That he succeeded in a wonderful degree is attested by all who have given them a trial. The first importations were made in America in February, 1898, and were followed in March and April by other lots. They stood the long and trying sea voyage well and at once commenced to shell out the eggs, and their wonderful production was an eye opener to their importers. They have captured America by storm, their merit winning them thousands of staunch friends. Some objected to their white legs, but after a trial their objections were all gone. They have merit which will break down prejudice; money talks, and Orpingtons are money makers from start to finish. A fowl that can make money like Orpingtons will never go begging for friends.

Last week I received a copy of the Home Garden, published at Moss Vale, New South Wales. It is devoted to garden, fruit and poultry. The editor contributes an article under the head of Farm Poultry. He advises farmers of Australia to keep thoroughbred poultry. For a general purpose fowl he advises Wyandottes and Orpingtons as the best breeds. He says: "The Orpington is a large bird and matures quickly; it is a good layer and makes splendid mothers. The Plymouth Rock is also an excellent breed when a good strain is kept but we do not consider them on a whole so good as the above mentioned." This is a good testimonial for our American Wyandottes and the

Orpingtons from far away Australia and shows they can adapt themselves to any climate and conditions. So the Orpingtons have found friends in all parts of the world. Mr. Cook has exported a goodly number of them to South Africa and New Zealand and has only good accounts of them.

There is plenty of room for Orpingtons in this country. The fowl that can make the most dollars will win. Some obsolete varieties or breeds will be dropped and the Orpingtons will take their place. Some say the Orpington can never become popular and attract attention when Buff Rocks are so popular, but the number of Buff Rock breeders who have taken them up or are taking them up, contradicts that statement. Many breeders of Buff Rocks say the Rocks are not in the run with the Orpingtons at all. There is room for both lots of room. They will take the place of unpopular, unprofitable breeds. The fittest will survive. Poultry Gazette.

NEBRASKA STATE POULTRY ASSOCIATION SEMI-ANNUAL MEETING.

The meeting of the Nebraska State Poultry association was held at Lincoln on the State Fair grounds Thursday, September 5, in a tent near the Poultry Hall on the Fair grounds. Of the three hundred or more members of the association there were twenty-two present at roll call.

The report of special committees on legislation appointed at the annual meeting last January was considered. Their special work was to secure the passage of a law so as to have the dates of holding the show come earlier in the month, at the discretion of the board of managers. The bill was prepared and introduced in both the senate and house. It passed the senate and was reported by several members of the house to the effect that it had passed, but upon investigation it was found that it had been "pigeon-holed," and lost sight of in the scramble for senator. So there is no alternative except to hold our show the same as has been before—the third Tuesday in January, which will be the 21st to the 25th. The officers of the association are very sorry it has so happened, but it couldn't be helped, so must be endured, as to hold it on any other date without a change of the law regulating it would lose us our appropriation of \$1,000 annually, and we cannot afford that by any means.

The treasurer's report was read and showed cash on hand of \$530.57.

The matter of a permanent building for the state association on the fair grounds was taken up and after some discussion a committee was appointed to draw plans and solicit subscriptions and report the same to the state association in January, 1902. The members of this committee are Messrs. Lemen of Lincoln, Osterhout of David City and Mickel of Lincoln.

Some of Geo. B. Clary's prize winners at Lincoln and Hebron, Nebr., 1901.

Several communications from judges were read and referred to the board of managers. On motion the board of managers were instructed to set aside \$25 of the funds of the association to be used as premiums for best display of eggs at next winter's show, to be given as board decides.

The meeting was harmonious and pleasant, the interest shown was good and the prospects for a big show are brighter than ever before.

L. P. HARRIS.

Thinking my experience with the incubator would be of some help, I will write a little. I have always raised chickens since a little girl from the old biddy, and I thought with an incubator I could do so much better, so sent for one in April. Every evening for two weeks I sent to the depot, but to my great disappointment it did not come. Then I sat down and in a good-natured way roasted the company, and to my great horror found out my dear husband had carried the order in his pocket all that time. It came, but too late for early chicks, and I find one can't work on the old plan. It's altogether new, and the hatching is the easiest part, but the most essential part is the brooder. It makes no difference how hot the weather is, it wants to be kept running and the chicks brooded until they are six weeks old; in fact, two brooders are needed with every incubator.

I thought the brooder was too warm and put the chicks in coops in the daytime and in boxes at night, and with all of my unnecessary hard work lost over half of them. Handling them is very much against the busi-

ness. I am confident if I had stuck to the brooder my losses would have been small.

I have my incubator filled (200 capacity) that will hatch the 16th day of September, and if it would interest any of the family, will let you know my success with fall chicks, but I assure you I will pay strict attention to my brooder and feed, for I know the Incubator will do its part if eggs and care are all right.

VILLA HOLLENBECK.

Salix, Ia.

The SMITH SEALED LEG BANDS.

Adopted as official bands at

— PAN AMERICAN —

and other leading shows. Ten for 25 cents. Sixty for \$1.00. 100 for \$1.50. 100 bands and plain sealing tool \$1.75. Illustrated circular free. Sample for stamp.

W. H. SMITH & CO., Blythedale, Mo.

Bonniedale Poultry Farm!

S. WYANDOTTES, Barred Rocks, \$2 each; \$3.50 per pair.

LT. BRAHMA, S. C. B. Leghorns \$1 each;

\$2 per trio.

ROUF CURE. Our make. Cures when eyes are swollen shut. Powder for half pint. Small syringe and full instructions 50 cents postpaid.

SCORE CARDS. U. S. Postal card stock 50 cents per 100, \$3 per 1000. Water fountain galvanized iron, hangs on nail, 1 gallon size 50 cents.

CREAMOLINE. Tablespoonful to quart of water paints your hen roost. Trial bottle 25 cents postpaid. Circular free.

MRS. MAY TAYLOR, HALE, MO.

LOCK BOX 176.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

AVOID MOISTURE and DRAUGHTS

M. M. JOHNSON.

If we avoid moisture and draughts we will then be rooting out a large percent of all the failures.

It is an impossibility to succeed unless we guard against damp, sour quarters, and draughts through the coops or houses. Poultry is like people to a great extent, and we should not expect poultry to do the best in unhealthy coops or houses any more than we should expect to grow fat there ourselves. If poultry were kept dry and comfortable the "chicken doctors" would lose their jobs. Young chickens kept in damp, sour places get the bowel trouble; then the feed question is up. If the little chicks are kept dry and comfortable there is not so much in the feed. For the reason that they have bowel trouble we surmise that some kind of feed has done the mischief, when in fact bowel trouble is about all the indications that we have that the chick is sick. Piling up and sweating will bring it on; damp, sour quarters will bring it on; getting wet and chilling will bring it on, and feeding them too soon after they are hatched will bring it on, but four times out of five the feed is blamed. Of course, it will not do to load them up with soft, sloppy feed, but if they are kept comfortable the feed question is not so important. So many get the idea that the feed should be soft, an idea growing out of "such little babies having no teeth." The chick's craw is for a purpose; it is a grinding mill, and it's on a line with nature for the mill to work. Small seeds, cracked grain and the like are nature's feed, and they will do their own mixing if water is handy.

I did not intend to make a "small chick" lecture out of this, but damp, sour quarters and the question of feed get so mixed up that I thought calling attention might do some good. With grown fowls, damp quarters and draughts bring on colds, and the continued exposure brings on roup, and prolonged exposure makes them rotten. I might say it brings on genuine consumption and not misname it very much. It debilitates the whole flock, brings on cholera and bowel trouble—in fact, it aggravates all temporary ailments and steals the profits in poultry raising. Fowls have feathers to protect them from cold, but are not protected from dampness; their feathers and body absorb the moisture. It's different with ducks; their feathers are oily and water does not make them so wet, but with hens we must keep them dry to succeed at all. Bare

floors or board floors should be dry, and as a precaution they should be covered with dust; straw and chaff absorb moisture. Use anything that will take up the moisture and leave the hens dry. The old-fashioned straw sheds never bred disease, were a great place to breed lice and mites, but otherwise it was a healthy place for poultry.

Before long now we will be housing our new crop of chicks. We should be at it right now, and they should be forced to take to the roosts. If we let them pile up in boxes here and there until winter is really here then we will have trouble on our hands with sneezes and colds, and possibly the roup. They should be made to roost before the nights get cold. If you can't make them take to the roosts any other way pen them up in the house. Turn in a pet pig or a pup; if nothing else is handy put a cat or some ducks in, anything that will make the chicks want to get up out of the way will answer the purpose.

Don't kill them off with kindness by making the house too close and warm; gradually toughen them up for winter. If we are careful to get them into cold weather in a good, healthy condition we need not fear the cold if we keep them dry and away from the draughts.

M. M. JOHNSON.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough cardboard. Contains all the pit rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Heels, Handling, Nursing and everything relative to the total sport of cocking.

By Dr. H. P. CLARK, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator one year

For 25 Cents.

Address, THE INVESTIGATOR, Clay Center, Nebraska.

Mammoth Light Brahmas

M. B. TURKEYS

Cockerels \$2 each; trio \$5; young toms \$3 each after Nov. 1st.

E. W. MATHENY, Clay Center, Nebr.

Finer and Cheaper

than ever. Buy early. Games, Henhwoods, Irish and Mexican Grays, Irish Blk. Reds, Tornados, and Cornish Indians. Free illustrated circular.

C. D. SMITH, - Ft. Plain, N. Y.

Buff Orpingtons AND White Wyandottes

No better Stock
Raised.

I never have failed to win in largest shows. Birds score from 90 to 95½.

C. ROCKHILL,
Harvard, Nebraska.

Partridge Cochins Golden Sebright Bantams Fancy Pigeons

I will close out my entire stock of Cochins. None better. At low prices. They have always won for me and will for you.

WM. HOLCOMB, Clay Center, Nebr.

Barred P. Rocks and Cornish Indian Games.

8 years as breeders, 8 years as winners in every exhibit where we exhibited winning highest awards.

Stock for sale reasonable. Write, COTTLE BROS., Edgar, Nebraska.

Barred Plymouth Rocks.

We have Quality and Quantity.

Farm raised prize winning stock, cheap for quality. If you want Rocks write us.

H. B. LOUDEN, Clay Center, Nebr.

Silver Laced Wyandottes, White Wyandottes, Buff Leghorns, Black Leghorns and White Pekin Ducks. First class birds for sale. Mrs. Willie E. Tibbitts, Imperial, Neb.

Cornish and White Indian Games.

Stock for Sale.

J. C. NAUMAN, Clay Center, Nebr.

Eli-Fli Chaser...

The Man's money saver. The animal's friend. Try it once—Have it always. Guaranteed. Your stables and stock freed from the summer pests at a cost of less than 5 cts. per month. Cheap, Safe, Effective is Eli-Fli Chaser. For \$1.00 enough liquid for 10 crows 15 days and a sprayer, or 25 cents per quart for liquid alone. Address,

The Vail Seed Co., 150 N. Delaware St., Indianapolis.

Special price on 5 gallon cans.

A. J. WILLIAMS,

...Breeder of...

Silver & Golden Sebright, White & Buff Pekin, B. B. Red Came BANTAMS; Belgian Hares, White Rats, Cavies.

Write for Prices.

CLAY CENTER, NEB.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

ASBESTOS

Mrs. MAY TAYLOR.

Probably a little talk on asbestos will be as interesting as anything else I could write about this morning, as it is entering so largely into the manufacture of the things we use in the poultry business and is so useful in many other forms about the premises.

It is described as a fibrous mineral and one of nature's unique productions. In the illustration of it in its natural state it looks like a piece of petrified wood with little fibrous particles curling down and away from it on all sides. "It is found in various parts of the world, usually in narrow veins or seams, and when treated mechanically it yields a soft, white, delicate and exceeding strong fibre, which can be spun, woven or otherwise manufactured into many useful articles." It is fire proof, as many of you know, for there is scarcely a household but what has one of those round mats for putting on the stove, under the preserving kettle, but it is also acid proof, and is practically indestructible.

It is made into numberless articles; into cloth for covering hot pipes of all sorts, into cement for mending all sorts of heated iron surfaces, and is also made into what is called the asbestos cold water weather proof paint.

We used in the cement in stopping leaks in the hot water pipes in our sectional brooder. These pipes are the common black iron tubing and will not take solder. They spread apart in places at the seams and one of our hardware men worked faithfully for half a day trying to stop the leaks with solder, first pounding the seams as near together as possible. He said the only way to mend black pipe was to cut the "leak" out and put in a new piece of piping. We wrote to the firm which makes these brooders and they said practically the same thing. We wrote to two big firms, who have everything you "want or use," asking them if they had anything for mending pipes in the condition our were in, but their answer was also practically the same, but when the hardware man above mentioned gave up and was about to start for home, I asked him if he did not have some kind of iron cement in his store; I had read about it somewhere. The thought struck him; yes, he said, they had, and he believed it would be the very thing. They had so little call

for it that he had entirely forgotten about having it in the store. We got some of it, which is called asbestos cement, and spread it over the leaks. Now on a hot dry surface it would have hardened instantly and nothing else would have been needed, but we could not get the pipes hot without the hot water flow through them, and just as soon as the water pressure started it forced the cement out of the larger leaks. On these we placed pieces of the roll felt and wrapped them with twine. I think there were six leaks altogether. We held the flame of a lamp under two of them and hardened the cement. When it was once hard it was like the iron itself.

The cement is made of asbestos fibre and cementing material which is fire and acid proof, and the hotter the surface to which it is applied the better the work can be done. It comes already prepared and a one pound can costs 25 cents.

The roll fire felt comes in rolls like cloth. It is thirty-six inches wide

Shows tail, back and wing of C. F. Hinman's B. P. Rock, a prize winner.

and in different thicknesses, from very thin to one-fourth of an inch thick. The kind we used was the thinnest and is about six cents per square foot. It is made entirely of asbestos and is used most generally for covering hot pipes to keep the heat in and to keep the apartment, say like a furnace in the cellar, from being overheated. It cuts like cloth with the scissors, but will not tear, but there is now on the market an asbestos pipe covering which would have suited our case exactly, but we did not know of it then. It comes in lengths of three feet, and is for cold pipes, also for low pressure and for high pressure steam. The materials used are a little different for each use. For high pressure the materials are carbonate of magnesia and asbestos fibre. Outside of this there is a canvas covering, held in place by metal bands. While this is not given as an article for mending leaks, yet I feel pretty certain that it would have answered our purpose very well. For a one-inch pipe like ours it would cost

about 75 cents for the outfit.

One more article in the line of asbestos for poultry people and I will stop and this is the cold water paint, of which you see so much mention in the papers. We painted our hen house with it over a year ago and it is all right yet. It comes in the form of a powder and can be had in black, white or several different colors. White is the cheapest and black the costliest. We got the white for the body color of the house and one of the colors for the strips. I don't know the names of the colors, as they go by numbers. The color we selected would be a cross between a red and a brown. The contrast, I think, is very tasty. We bought five pounds of the white powder at 1 cent per pound and another pound of color for the strips. The color we selected was also 10 cents, making 60 cents for the paint. The white powder covered 300 square feet of smooth surface (planned pine boards), two coats. It was mixed with cold water simply, not a particle of oil. Five pounds is said to be enough for one gallon of paint. We made a little more than that out of ours.

To the farm woman who likes to see things tidied up and has not the necessary cash to keep pace with her tastes, this asbestos paint is exactly what she wants. It dries more quickly than oil paints, and is not any harder to put on. I painted our hen house myself, mixed the paint and put it on, and painted the strips before putting them up. I painted another hen house with oil paint. It had more surface to paint over than this, so I know what I am talking about. I have also mixed and put on a good many hundred square feet of whitewash in the years I have been in the hen business. The asbestos paint is almost as cheap as whitewash, and it won't scale or rub off. It isn't as hard to mix as lime wash, but is a little harder to mix than oil paint, because it has to be mixed slowly, and it mixes up considerably like batter cakes, and is a little tough at first until thinned down to the proper consistency, but it still has this tendency of hanging together which makes it easy to spread and not splatter about like either oil paint or whitewash. Yours for conveniences and looks this time.

MRS. MAY TAYLOR.

Hale, Mo., Lock Box 176.

If you want Rose Comb White Leghorns that are bred to the standard and that will win for you, look up the advertisement of J. E. Reivelt of Tripp, S. D. He has what you want.

NOTES FROM OUR MINNESOTA VISIT.

We have recently had the pleasure of a visit in southwestern Minnesota, Lyon county. I did not meet as many of the "chicken people" as I would like to have met. A morning walk located the poultry yards in that part of town. When I came back and asked about who lived in such a house I was told they did not keep chickens; those people were some of the society folks. But I was familiar enough with poultry yards to know one when I saw it. A few mornings later a lady called. She told mother she heard there was a chicken woman visiting her, and she wanted to meet her.

I afterwards visited her and had a closer view of her yards than I had gained from the sidewalk. I found a woman something after my own fashion, who could go from the poultry yards to the paint easel and do both with credit. She has a beautiful home, is a woman of culture, and has taken up the poultry business because she likes "biddies," and for the outdoor exercise it will give her. There is lots of care and not very clean work about our poultry yards, but I found this woman could get right around after it just as well as I can. She can even take hammer and nails and build coops, for she said when she done it herself she had it just the way she wanted it. She was still running her incubator, and was going to turn the surrey room into a brooder room for those late chicks. Our chicken women are not all found among the farm wives and poorer classes.

We drove about thirty miles one way, and about twenty another. In those drives we kept watch for pure-bred poultry. We saw a larger per cent of Black Langshans, that we thought were pure, than any other breed. One farm we passed showed more improvements in poultry yards than in any of the other farm building. There was a very good start of White Plymouth Rocks and some Barred Rocks, but there were some mongrels that spoiled the looks of the place. Had I been alone I would have stopped and had a talk with that farm wife, but the rest of the crowd did not belong to the "chicken people," so we did not stop.

In our drives we noticed more White Holland turkeys than any others, and pretty well bred ones, too. Minnesota is a good poultry country. Where so much wheat is raised the poultry find their share and full egg baskets is the result.

Those immense wheat fields with the stray wheat heads and good crop of

grasshoppers that always go with them cannot help but put those turkeys in fine trim for Thanksgiving.

MRS. C. A. BLANCHARD.

Friend, Neb.

BUFF LEGHORNS.

Every farmer and every breeder of poultry have their favorite breeds, but we think you will allow that no breed has risen to such popularity in so short a time as the Buff Leghorn, and no breed is better adapted as a general purpose fowl.

In almost every poultry journal we read of some one, who has been in this business for a long time, and who has always made a specialty of one or two breeds, adding to their list Buff Leghorns, and who can blame them? It is a breed that finds favor wherever known, and is a fine addition to any yard.

They are of the Leghorn class, which has long been getting the best all purpose fowl for broiler, farmer and fancier. For the breeder because they grow rapidly, make plump broilers, have yellow legs and no dark or black pin feathers. For the farmer because they are great layers and a fine table fowl, and the fancier can find satisfaction and pleasure in developing their fine qualities. And they have that color which meets with so much approval everywhere. What looks nicer upon a lawn than a nice flock of Buffs? You attend an exhibition and no class attracts more attention or it more admired than the Buff Leghorns.

Let us take better care of our birds, let us cull our stock more carefully and more closely, and let us take greater pains in mating our breeding pens, and we will certainly receive results that will more than pay us for our work. We will thus develop the fine qualities of this beautiful and useful breed more rapidly.

GEO. S. BARNES.

Battle Creek, Mich.

OLENTANGY ..POULTRY..
.....YARDS.....

CHAS. C. REID, Manager.

DELEWARE, OHIO

**Barred Plymouth Rocks
Ruff Cochins Bantams
Cornish Indian Games**

Stock in breeding pens score from 91 to 95½.
Send for circular.

Bargains

in Buff Wyandottes, line bred (Brey's Strain) ½ and ¾ grown. Extra selected for exhibition and breeding. 4 pullets and 1 cockerel only \$10.00.

JOHN BREY, Specialist, Neola, Ia.

I will exchange
Belgian Hares
for
White Wandotte Pullets

I have also some fine
LIGHT BRAHMA HENS
for Sale. Good ones.

Address, Mrs. Hattie Byfield,
McCook, Neb.

1892.

1901.

Mammoth Strain

Light B's and Bronze Turkeys. Winners in America's leading shows of hundreds of prizes in my own and customers' hands. The "Common Sense" remedies for poultry are "perfection" when properly used. Cholera Cure kills all disease germs and makes blood, bone and feather. Hundreds of poultrymen claim they are making poultry breeding easy and practical by their use. A sample of either for a dime. 1 lb can post paid for 50c. Yours for success,
MRS. ELLA THOMAS, Quarles, Mo.

LOOK!

For the next sixty days I will sell my fine Barred Plymouth Rocks Cockerels and Pullets at one half price as I have sold my place. I have some fine large March and April Cockerels now ready to ship and will guarantee satisfaction with every sale.

L. D. GREEN, Red Oak, Ia.

BUFF WYANDOTTES,

EXCLUSIVELY. Our Buff Wyandottes are bred from best strain obtainable and in line. We breed the pure golden Buff, not the dark red. They're prize winners.

E. W. ORR, Clay Center, Neb
Chester White Hogs for sale

Rosecomb White Leghorns.

For sale, 1st cockrel St. Paul, February 1901 and nine one year old hens, score 92½ to 94½, by Russell, for \$15.

J. F. REINELT, Tripp, S. D.

**Buff ORPINGTONS
and COCHINS.**

Bred from my own Importations.

I won more premiums than any two other exhibitors at the Nebraska State Show, 1901. Before buying anything write me—it will be a pleasure to give you prices.

IDA J. BUEHLER, Kenesaw, Neb.

Hens as Money Makers

(Paper read by Mrs. W. H. Parkinson at a meeting of Evans Grange, Marshall County, Ill., April 13th, 1901.)

Poultry keeping is an industry, the importance of which should not be overlooked nor under estimated in connection with other farm industries. It is said France is the only nation that recognized poultry raising as a source of wealth to her people, giving it the same encouragement as that of any other branch of agriculture. Why should the farmers of this country stand idly by while France is shipping her millions of dollars worth of eggs to this country every year, which should be produced at home. If France can produce eggs on her high priced foods, pay transportation and a duty for the privilege of selling them in the markets here in competition with our own eggs, then what is the American hen good for if we cannot produce eggs at a much larger profit than France?

The keeping of poultry seems to be almost purely a feminine occupation, perhaps on account of woman's gentleness and eternal vigilance, for success or failure in poultry keeping does not depend entirely on any one thing, but upon many little things which men dislike so much to do. It can scarcely be doubted that when Noah was collecting the different species of the feathered tribes into his ark, he insisted upon leaving out the old hen, saying "she was of no account anyway," but, of course, Mrs. Noah had her way about it, as most women do when the question involved is poultry.

Hens as money makers? you ask. Why, there is no doubt about it. Statistics tell us that the total value of poultry consumed in the United States, including eggs, foots up in one year the neat sum of \$300,000,000, a greater sum than that derived from any other one product, not even excepting the wheat or the mineral output. Can any one think of this immense sum and then despise the hen as a money maker? And this with but a small outlay of capital, and no risk of plunging into the financial pitfalls that infest the business man's pathway.

Of all varieties the Leghorns are unexcelled as layers. Evidently Mr. Grime's legendary was a Dominique Leghorn.

"For ten long years she lay

At morn and eve Old Grimes an egg,
But none the Sabbath day.

Her back was brown and speckled
o'er

With spots inclined to gray."

As general purpose fowls, none are more popular than Plymouth Rocks, closely followed by Wyandottes, less hardy but more stylish and gentler.

At present there are too many farmers who would just as soon do business with a poor scrub hen as with a good one, unless they could get the good one for nothing, and even then they would soon mix them, and as a consequence they would make no money in the poultry business. There is need of a larger class of poultry raisers among farmers who would be proud to be pointed out as poultry cranks, and who would take as much pride in the pure-blooded strains of poultry as cattlemen do of their Herefords, or as horsemen do in their Percherons. One who spends time and food on scrub poultry will sooner or later be heard to say, "There's no money in poultry." Those raising poultry for profit should study the balanced or perfect rations the same as the dairyman studies a balanced ration for his cows. Their food should contain a large per cent of protein. Flesh-forming foods might be preferable to feed during the moulting sea-

son. No matter what the food given, if hens are allowed to roost in a leafless tree, or some other unsheltered place, the result will not be satisfactory, for the hen that shivers during the night cannot be counted on to fill the egg basket.

I am a firm believer that there is more money in keeping poultry for eggs than in raising poultry for the market, and for that reason I believe there is more profit in a purely egg-producing breed than in a general purpose breed. I have the White Leghorns, which are my favorite breed. I have one hundred and twenty-five hens that occupy a comfortable house, which keeps them well protected from the storms of winter, and they are at liberty to bask in the sunshine of a southern exposure. I have twenty hens that cannot be induced to adopt civilized habits and in consequence roost on fences and post piles. Those twenty hens have been kept all winter at a loss, producing no eggs, while the one hundred and twenty-five hens that have been well housed and well fed will see from the following figures:

"Since this machine came out 'our business' is laying eggs."
--Mrs. Light Brahma.

When a Brahma hen gives it up, there must be something in it. The above photo is a sample of nearly 200 that will appear in our big new catalogue (out Nov. 1st); Photographs of our patrons, their Sure Hatch Incubators and poultry yards, from all over the U. S. and several foreign countries, goes to make our 166 page catalogue interesting; besides, it contains page after page of useful practical poultry information. It's a book for the every day poultry raiser. It costs us thousands of dollars, but it is free to all who send for it. Mention catalogue No. 5. Address nearest office.

Sure Hatch Incubator Co.

COLUMBUS, OHIO. - - - - CLAY CENTER, NEBR.

Sold from the first day of January to the first day of March, 114 dozen of eggs, at 20 cents per dozen\$22.80
 From the 1st to the 30th of March, inclusive, 243 dozen, ranging in price from 18 to 10 cents per dozen 28.64
 Total 357 dozen eggs; total amount received\$51.44

It will be seen that I have sold \$11.40 worth of eggs for each of the two winter months, and \$28.64 worth of eggs for March. In no week do I except to sell less than five dollars worth of eggs until fall, when my hens begin to moult.

I feed oats in the morning, scattered on straw, where biddy will scratch and sing all day if the sun shines, even on the coldest days. I feed corn at night, not shelled, but on the cob, cutting the ear into five or six pieces. By feeding on the cob they necessarily eat slower, and by cutting it into small pieces all the hens can eat at one time, which would not be the case if the ear was only broken into two pieces.

I give them milk to drink when I have it to spare, and believe it is a profitable way to dispose of the milk. The milk and water is given to them warm in cold weather. Always keep water before the hens, both summer and winter, to keep them from drinking out of the stagnant pools. You might as well starve a hen for food as for water.

On our black prairie soil in central Illinois there is a scarcity of grit for poultry, which should be supplied artificially, and if only one kind is supplied it should be ground oyster shells, as it answers very well for grit and furnishes material for the egg shells. Any one feeding oyster shells to their hens cannot but observe a much greater quantity eaten by them in the flush of the laying season.

We improve the dairy cow in her production of milk, so why not improve our hens in the production of eggs. The Maine experiment station has been experimenting along this line, on the possibility of securing breeds of hens that would excel in eggs production of a flock of 236 employed, 39 laid 160 eggs or more, 35 laid less than 10 eggs in a year. Breeds that are good foragers are the best layers, and when we take into consideration that a good forager will secure its own living six months out of the year, and if 125 hens will produce \$5 worth of eggs per week for nine months in the year, then is not the hen a money maker?

MRS. W. H. PARKINSON.
 Wenona, Ill.

COMMUNICATION FROM EMMA PERKINS, RAVENWOOD, MO.

(Written for Poultry Investigator.)
 I think you have chosen a wise title for the new poultry journal, as poultry or anything else cannot be successfully carried on without investigation. So we hope the investor will investigate through the columns of The Investigator for the best plans and results of poultry raising, and make the coming years even more successful than those of the past.

I will say as to this year's work in the poultry line, the business has not been a failure at the Morning View Poultry Yards by any means. As a consequence of our untiring efforts we have a nice lot of young, healthy stock outgrowing their feathers.

We began last spring (or in February, rather) with two incubators. Our first hatches were not good on account of unfertile eggs. I know this was the cause, as I have run an incubator long enough to know it was not the machine's fault, but our last hatches were fine, and I have already stated the results, and regardless of the dry, parched earth and small potatoes, if the water and grasshoppers will hold out a while longer we will

still have something to live on.

Last spring we plowed up one of our chicken yards and sowed it in oats, and now the chicks have a variety of corn and oats and rabbits and grasshoppers for their meat, and I really believe they have a greater variety than we have.

And now, while the sensible old hen is taking her rest, is the time we should be laying our plans and doing our head work for the coming year. We should not enter into any business without first doing a lot of thinking and head work beforehand.

The persistent old hen will perform her part if we will do the thinking for her.

Begin right and you will end right. When she lays her laying out and each day as she leaves her precious nest, follow her and take the eggs, so that you can give them the proper care until you have enough to start your machine. Replace the deficiency by placing china eggs in the nest, and she will never know the difference. It is her business to lay the eggs, though some still claim it is her business to hatch them, too. But we think it is needless to try to develop an old hen's brain so that she may

Conkey's Roup Cure

all others. One 50 cent package makes 35 gallons of medicine. Directions with every package. If it fails to cure money refund. Postpaid, small size 50c. large \$1. Conkey's Louse Killer never fails to kill. Try it. 25 cents per package, and 15 cents extra for postage.
Conkey's Egg Food and Poultry Tonic will keep your fowls in perfect health, and produce more eggs than any similar preparation. 25 cents per package and 15 cents extra for postage. **C. E. CONKEY & CO., Cleveland, O.**
 Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal.; Eastern wholesale office: No. 8 Park Place, New York City and S. H. T. Co., Clay Center, Nebr. For sale by all poultry supply houses. Agents wanted.

Cure Guaranteed!

THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, especially in pigeons, this cure excels

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one piece. Nothing to go astray. The newest and strongest coop on the market.

Wm. MILLER, North Bend, Neb.

200 Mammoth Pekin Ducks

100 White Wyandotte Cockerels

If you need big drakes or cockerels get my prices. Look up my record. Get my circular if free.

Lincoln, Neb., Box 456

E. E. SMITH.

learn. It is too slow a process to wait on her for her little clutches of fives or tens, so we just put her in a comfortable place till she forgets her trouble, and set the incubators and start the business on the fifties and hundreds scale. But treat the old hens kindly. Put them in a nice clean coop, feed and water them regularly and they will be ready to fil the machines by the time the hatches come off. Some people will imprison their setting hens and try to starve their desire to set out, and I have heard of others who will tie a red string fast to their tails and start them into perpetual motion, but in either case they will give up in despair, entirely unfit for their duty which lies out before them.

When your incubator is ready to hatch, be the owner of a good brooder if you can, but if you cannot afford one, select the most motherly old hens you have to mother the chicks.

The first few days should be spent in solitude by the little chicks and old hen as well, as the little chicks need sleep as much as a tiny baby, and the old hen is liable to get her clumsy feet on some and kill them. So the more quiet she is kept the better.

The best food I find for little chicks for the first week is hard boiled eggs. Brown the shells in the oven, crumble up fine, and feed this as their first grit.

After the first few days give them their liberty, as their strength will allow. Not the old hen's strength, but the chicks, if they be so unlucky as to have a hen mammy, and more often she is a step mammy than their own. Only give her limited territory by fastening a stout string to her leg and tie her fast, for if you give her an inch she will take a mile if she can.

But if the little chicks are reared in the brooder they will never leave their parental roof very far, until they are large enough to look out for themselves.

We have nineteen youngsters from two settings of W. S. Russell of Otumwa, Ia., from his two first pens, one mated for fine pullets and the other for fine cockerels. They are all doing fine and I am expecting as a natural consequence to have better stock next year than ever before.

Wishing the new poultry journal success and prosperity in its efforts of trying to raise poultry onto a higher standard, I will close and leave space for the more efficient writer.

EMMA PERKINS.

Ravenwood, Mo.

List of Specialty Clubs

For the convenience of those breeders who would like to become members of the specialty club devoted to their favorites, we publish the following list of specialty clubs and the names and postoffice addresses of the secretaries. We believe the list is correct and complete, but if any of our readers know of any omissions or corrections we would be under obligations to them if they will inform us of the fact.

American Plymouth Rock Club—H. P. Schwab, secretary-treasurer, Rochester, N. Y.

American White Plymouth Rock Club—Frank Heck, secretary-treasurer, 325 Dearborn street, Chicago, Ill.

New England Barred and White Plymouth Rock Club—W. B. Atherton, secretary-treasurer, 30 Broad street, Boston, Mass.

American Buff Plymouth Rock Club—W. C. Denny, secretary-treasurer, Rochester, N. Y.

National White Wyandotte Club—George C. Rose, secretary-treasurer, Shawneetown, Ill.

New England White Wyandotte Club—G. A. Newhall, acting secretary, Perryville, Mass.

Eastern White Wyandotte Club—C. A. Briggs, secretary, Taunton, Mass.

Western Wyandotte Club—J. D. W. Hall, secretary-treasurer, eDs Moines, Iowa.

National Wyandotte Club—C. S. Mattison, secretary-treasurer, South Shaftsbury, Vt.

Silver Wyandotte Club of America—E. S. Tarbox, secretary-treasurer, Yorkville, Ill.

American Golden Wyandotte Club—A. L. Ringo, secretary-treasurer, 333 Rookery building, Chicago, Ill.

The Partridge Wyandotte Club of America—Theo. Haight, secretary-treasurer, Astoria, L. I., New York.

American Buff Wyandotte Club—W. R. Wooden, secretary-treasurer, Battle Creek, Mich.

New England Light Brahma Club—George W. Cromack, secretary, Stoneham, Mass.

Western Light Brahma Club—W. S. Gregory, secretary-treasurer, Keota, Iowa.

American Dark Brahma Club—Clark E. Adams, secretary, Racine, Wis.

American Langshan Club—A. H. Asche, secretary-treasurer, Princeton, Ill.

American Cochín Club—Arthur R. Sharp, secretary, Taunton, Mass.

American Leghorn Club—George H.

Burgott, secretary, Lawton Station, N. Y.

American Single Comb Brown Leghorn Club—C. M. Davison, secretary, Chicago Lawn, Ill.

American Buff Leghorn Club—Geo. S. Barnes, secretary-treasurer, Battle Creek, Mich.

American Rose Comb Brown Leghorn Club—C. R. Milhous, secretary-treasurer, Spencer, Ind.

American Houdan Club—Thomas F. Rigg, secretary-treasurer, Iowa Falls, Iowa.

Blue Andalusian Club of America—Robert W. Lovett, secretary, 234 Marlborough street, Boston, Mass.

American Black Minorca Club—Charles L. Blanton, secretary, Falls Church, Va.

American White Minorca Club—William Sapper, secretary, Erie, Pa.

American Indian Game Club—C. S. Whiting, secretary-treasurer, Darien, N. Y.

American Polish Club—M. V. Caldwell, secretary-treasurer, Leetonia, Ohio.

National Exhibition Game and Game Bantam Club—W. W. Withee, secretary-treasurer, La Crosse, Wis.

American Dorking Club—Frank H. Prentice, secretary, North Grafton, Mass.

American White Wonder Club—A. L. Merrill, secretary, Auburn, Me.

American Rhode Island Red Club—John Crowther, secretary-treasurer, Fall River, Mass.

National Bantam Association—E. Latham, secretary, Flat Bush, L. I., N. Y.

National Bronze Turkey Club—Mrs. B. F. Hislop, secretary, Milford, Ill.

Western Turkey Club—Mrs. F. A. Hargrave, secretary-treasurer, Richmond, Kan.

Water Fowl Club of America—Theo. F. Jager, secretary, Pingrove, Pa.

The Cottle Bros. visited the editor recently. They tell us they will be in it this winter when the Cornish Indian class is judged. The boys know good birds, raise good birds and exhibit good birds, and take a good lot of ribbons home, and are good people to deal with.

We call the attention of our readers to the advertisement of W. H. Smith & Co. They manufacture a superior leg band. When once sealed on will never come off unless cut off. It is a sure thing.

WHAT BREED TO CHOOSE.

Editor Poultry Investigator:

Much has and is being written in favor of this and that breed or family of poultrydom, and each individual writer has his or her special favorite, and in their love and enthusiasm for their pets leave the impression that that particular breed is the only one that is worth bothering with, when in fact any of the standard breeds will do well if properly and intelligently handled.

And right here we want to say that there is no best breeds, but there are certain purposes for which certain breeds are best adapted. If one wants to breed for meat, then some of the medium weight birds are best; if for eggs the smaller ones are the ones to cling to.

An over sized chicken will eventually get there in weight, but it takes him several months to grow the frame work on which to hang the flesh and muscle to create the strength to carry his superior weight. While the larger breeds are laying the foundation for large bodies, the smaller and middle weight birds will develop into compact and plump bodies and in ten to twelve weeks are ready for market, weighing one and a half to two and a quarter pounds each, while females of the mediteranian class are rapidly developing into profitable layers. Another point in favor of the small birds is the amount of feed consumed. A Hamburg, for instance, will live and do well on four ounces of food per day, while the Asiatics and kindred breeds will consume eight to ten ounces per day per bird. This does not seem to be a great amount of difference, it is so small, but when one has a flock of a hundred or perhaps 50 birds it cuts something of a figure in the expense account; in other words, twice as many Hamburgs or Leghorns can be kept on a given amount of feed as can those of the larger kinds. And when it comes to eggs, take them head for head and the small ones will produce three times as many eggs for the same amount of feed used; besides you will have, as a rule, as much meat as the large ones would produce. Then to sum up for a given amount of feed used in producing a flock of small birds, you have three times as many eggs and an equal amount of meat to send to market.

We are asked where is the wonderful profits in the laying kinds as compared with the others. Well, we have figured a great deal on the subject and must confess that we have failed to find the much talked of big chickens in it.

Now about the healthfulness and strength of the young of each kind. The young of the heavy weights are large, strong and robust to start with and if the two are penned or cooped together they will trample the smaller ones to death. They will eat and gorge themselves and presently they have indigestion or apoplexy or break down in the legs and are done for. They will chill and die, or certain other kinds will take dropsy of the heart and that ends the chapter. The smaller ones are not so strong and robust and are not in as much danger of over eating, and in fact rarely ever do, and when allowed to roost by themselves prove to be spry and active and are always moving around, thus keeping up a good healthy circulation, and rarely if ever suffer from the rialadies subject to the others. Taken all in all we are in favor of the medium to small varieties, but must insist that if the reader has a "hankering" after the big breeds that he will do better with them than any other kind.

Select your breed, stick to it, advertise it and it will pay every time.

REV. G. A. CHAMBLIN.

Unlontown, Kan.

Mrs. Ella Patrick of Clay Center, Neb., has long been a breeder of the Nugget strain of Buff Rocks and treats her patrons right. Her birds are prize winners.

Flies are a pest these days, but if you will look up the advertisement of the Vail Seed Co., Indianapolis, Ind., they have a liquid chaser that puts them out of the way.

Judge Thomas H. Mills, Port Huron, Mich., has something good in his line, and sells right birds that are right. His decisions are good in the show room.

L. D. Green of Red Oak, Iowa, breeds a superior strain of B. P. Rocks and has to sell them on account of moving at "let live" prices. His stock was in the Red Oak show last winter and I found them first class. If you want good birds write him soon.

We welcome to our columns this month Mrs. Cora Rickards of Ogden, Utah. She has been special correspondent for some of our best poultry journals for several years and we are pleased to be able to secure her services for a year, and we know her writings will be appreciated greatly by our readers. Mrs. Rickards breeds Barred P. Rocks and Leghorns and her stock is first class.

BUFF COCHINS

Exclusively.

Just What You Are

Looking For . . .

The Pure Golden Buff. Winners in any company. Elegant in shape, profusely feathered, as good as the best. Prices low, write me.

B. H. DUNN, Clay Center, Neb.

Poultry Investigator

Is edited by a practical poultryman of 30 years experience and is full of plain, common sense articles by those that breed poultry and work instead of theorizing. It is just what you want. Send us the names and addresses of 15 persons interested in breeding good poultry and we will send you the **POULTRY INVESTIGATOR** one year for your trouble. Subscription price 25c. Address

Poultry Investigator Co.,
Clay Center, : : Nebraska.

POULTRY CUTS at CUT PRICES. CATALOGUE FREE. Harper Eng. Co., Columbus, O.

Flemish Giants

We have strictly A No. 1 Giants, headed by WINISOR. Imported Sept. 1900. One of the largest and best Giant bucks of his age in America. His ancestors present an unbroken line of England's best champions. 8 weeks old Giants \$5 to \$10 per head. You cannot get better ones at any price. Dr. I. C. Stephens & Co., Carleton, Neb.

300 Buff and Black Wyandotte Chicks.

For sale now. Breeders or fine exhibition stock. Give me a chance to please you.

HENRY HESS, Winona, Minn.

White P. Rocks Exclusively...

My Rocks are of the best strains to be found and I have a fine lot of chicks to sell reasonable. Write,

MRS. NANCY WATSON,
Lincoln, Nebr.

Buff ORPINGTONS
and Brown Leghorns

Young or old stock, first class birds cheap. Hundreds to select from. Eggs all the time. M. F. HERMAN.
Bx 178, Hinsdale, Ill

Moulting.

Moulting is a very trying experience through which fowls have to go annually, and to have them come through with a good suit of feathers and in good laying condition is the problem with which every poultry raiser has to deal, writes Geneva March in the "Epitomist." The easiest and most profitable way of caring for fowls during this period is to make them moult as easily as possible. I say easiest because the fowl that is slow in moulting is in bad health; then the period should be shortened as much as possible. One of the easiest and best methods I ever used for hastening the moulting season is to feed the fowls with all the sunflower seed they will eat, or feed with corn and wheat and give a little sulphur in their soft feed. In this way I can bring the fowls to moult whenever I wish and keep them in good health, too. The cocks should be separated during moulting season and each one kept by himself, and if a hen persists in laying change her from one place to another; if running at liberty, coop her up. My plan is to bring on the moulting season by feeding as described and make the period one of rest as much as possible. Give shade, plenty of cool water not exposed to the heat of the sun, keep the coop clean, and if fowls droop give them a tonic of muriated tincture of iron, one teaspoonful to a gallon of water. Give plenty of sharp grit and occasionally mix clean sand in their soft feed, and a pan of crushed charcoal where they can have free access to it is a good thing.

CARE OF THE LEGS—All fowls must be kept free from lice during the moult or they will become so debilitated that it will take all fall to

recuperate, and in that case you will get no eggs until the next spring. As the legs are a part of the moult, if you want pretty yellow, white or black legs, as the case may be, have a shed large enough so fowls can be fed in it. Here have about six inches of sand on the floor and into this scatter the grain and rake it well under, leaving just enough on top to encourage the fowls to scratch for more. This sand should be perfectly clean and free from lime or any foreign substance that is apt to discolor the legs. If the sand is nice and white as well as clean, it will get all the dirt out from under the scales that one has so much trouble with at show time. If the fowls have a few scabs or scaly legs and the legs are yellow, treat them with sulphur and lard, adding a few drops of carbolic acid; this applied to the legs about four times, two days apart, will generally clean the leg if it is not too scaly. When you find one that is very bad first apply coal oil the same number of times and then follow with the lard and sulphur. With constant scratching in the sand and the grease on their legs it will not take long to have them polished up like young legs, and they should, if the right color were there to begin with, be as bright as those of the youngest fowl. For white legs use oxide of zinc instead of sulphur.

"DOES A POULTRY PAPER PAY?" Editor Poultry Investigator:

Belle I subscribed for these two papers at the fair today.

Another farm paper with a poultry department. Father, don't you think you are taking farm papers enough? A poultry paper is something that we never have taken. As for poultry I know how to raise poultry without

any Poultry Herald assistance. I think that dollar is just thrown away. All poultry papers amount to anyway is just to puff and blow the incubators and brooders. They are no earthly good. I just hate them, for there is not one I know of here that makes a success. If they hatch any chickens they don't many of them live, and what do, don't look like my chickens.

I have always wanted glasses I could keep in place. He gave me these glasses and this poultry manual for \$1.00.

I hope, father, you will get a dollar out of the glasses.

The next week a friend called who is raising Belgian hares. I gave him the Herald. The September and October came. I looked them over and laid them aside. November came and as I looked it over my eyes caught this heading, "Chats With Feminine Friends," by Nellie Hawks. As I had lost lots of chicks by hawks, I read the article hoping to find some way to prevent hawks from carrying away my dear little chickens. Then I read it over and later read it to my father. In less than a week five postals were sent for incubator catalogues. In March we were taking the crate off a 200-egg incubator and a 200-chick brooder. April 29 my first hatch came out—ninety-nine chicks—big balls of down; just two eggs left. July 29, I have hatched out 570 chickens. I never had as lively or as strong chicks or any as large and all are beauties.

I read everything I see about chickens. Father got me two more poultry papers, brother lends me one, and now Mr. Johnson comes to the front with one more poultry paper for me.

I will tell you later what the interest on \$1 for a year has been. I wish I could know every farmer's wife or children had an incubator,

Catch The....

...Early Trade

by

ADVERTISING

..NOW..

**The Poultry Investigator's Rate
on Application.**

There were but few chicks raised this year and the **Early Advertiser** is the one that will **Reap the Harvest**. Send copy at once and get your share of the trade.

**Neglecting Advertising is neglecting
...business...**

two brooders, three little buildings for chicks of different ages, one inch mesh poultry netting, enough for two good big yards. I could not get as much netting as I wanted and shall order a roll next year myself and not depend on our dealers here.

I have raised 158 chicks in one flock, but I think fifty would grow faster while in the enclosed netting yard. I shall run out two more hatches, then rest awhile and try and do better next year.

I shall get a Humphrey bone cutter this fall, and hope then to have more fertile eggs for hatching.

MRS. BELLE UTLEY.

New Hampton, Iowa.

AMERICAN WHITE WONDER CLUB

President—Dr. I. C. Stephens, Carleton, Neb.

Vice President—H. F. Corning, Hartford, Conn.; A. H. Heath, Piermont, N. H.; Albert Young, Aberdeen, Neb.

Secretary and Treasurer—A. L. Merrill, Auburn, Me.

Directors—Henry E. Voigt, Hamburg, Wis.; Mrs. May French, New Haven, Vt.; E. T. Stockwell, Dodge City, Kan.; E. Ramsey, London, Ont., Canada; Dr. A. W. Fossum, Aberdeen, S. D.; Dr. L. F. Diffendorf, Aberdeen, S. D.; E. V. Guthrie, Bruning, Neb.

PRINTING FOR POULTRYMEN.

We are fitted out for poultry job work and would like to figure with you on your printed matter. We have special arrangements with an engraving house and can furnish you half-tones and zinc etchings that will talk for themselves. The Investigator wants a share of your patronage and will turn you out satisfactory work at the right prices. Let us get you up something nice.

Kind readers, please look up the article of Emma Perkins of Ravenwood, Mo. She has a lot of good things to say. She is an old breeder of B. P. Rocks and has good ones.

Were Your Crops Injured
by the drought? Well, even so, you needn't starve to death. A good flock of chickens will pay your taxes, buy your groceries, and leave a surplus besides. The

Hawkeye Incubators

will hatch them for you, with less bother and greater certainty than any other incubator sold to-day. Perfect regulation of temperature, ventilation and moisture. In actual results the Hawkeye takes a back seat for nobody. Three sizes—60, 100 and 200 eggs, at prices that are right. We make brooders, that really take care of the chicks after they are hatched. Our motto is "The Hawkeye Incubators are Good Incubators," and it means exactly what it says. Better send for our catalogue. See our special offers and guarantee. Book free, or send 10c and get also a year's subscription to a leading poultry paper.

Hawkeye Incubator Co.,
Department 108.

Newton, Iowa.

Sure Hatch Poultry Company

Has the largest aggregation of thoroughbred poultry in the west.

We import, breed, buy and sell
All Varieties.

Each variety is bred separately on a farm. No chance for mixing up. Prices reasonable. Stock the best. Write your wants. Address,

Sure Hatch Poultry Co.
Clay Center, Neb.

TAKE THE

Kansas City & Omaha Line

For all points east, south or west. Close connections made on all junction points.

For rates and information call on or address, S. M. ADSIT, G. P. A. St. Joe, Mo. S. M. WALLACE, Agent, Clay Center, Nebraska.

..WORLD'S CHICK FEED..

..Beyond comparison..

Chamberlain's Perfect Chick Feed 100 lbs. \$2.50; 50 lbs. \$1.50; 30 lbs. \$1.00.

Chamberlain's Perfect Hen Food will make your hens lay. 100 lbs \$1.75. Goods shipped from St. Louis.

Manufactured by **W. F. CHAMBERLAIN, Kirkwood, Mo.**

POULTRY, BEE and FRUIT INDUSTRY

By A. B. RINGO.

A. L. Ringo in Poultry, Bee and Fruit Journal: Always on the alert for anything which tends to show that poultry, bees and fruit are a successful combination and should be cultivated as such, we glean the following from our esteemed contemporary, Commercial Poultry, which throws additional light on our hobby—the combination of the poultry, bee and fruit industries—for profitable results:

After ten years' experience as the owner of the Burr Oaks Fruit Farms in the St. Joe fruit belt, Berrien county, near St. Joseph, Michigan, I feel I can safely say to any and all who are interested in either poultry or fruit raising that both go hand in hand and that each is an advantage and benefit to the other.

This is the fruit growing time and all nature is glad. There is inspiration, hope and promise in the plan. The poet has sung, "The groves were God's first temples." Every orchard will furnish a place "not made with hands," but nature's handiwork, which to complete needs the fowls of the air and the homely chickens. Shade is absolutely essential to the welfare of fowls. To breed fowls successfully it is necessary to have runs in which to confine them.

After an experience of some eight years I have successfully adopted the following plan: My runs are 32 feet wide by 150 feet long. In these runs I have planted Japanese plum trees, 12 feet apart each way. These trees have made rapid growth and have annually yielded me for the past five years an unusually heavy crop of fully developed plums; more than twice that of those planted at the same time outside the runs. The reason for this is conceded to be the fact that the hen manure falls on the trees. Then, again, a number of times each season the soil is turned over in the runs. Each tree is thus cultivated. In this fresh soil the hens scratch and dust and by this means keep away the insects. Then, again, each morning my farmer goes into the yards and with a small mallet jars each plum tree, the curculio falls to the ground, and woe to his poor life—"Mrs. Hen" is sure to get him before he ever gets to the tree again. Therefore, we grow a good crop of plums on the trees and a good crop of chickens on the ground.

We also make it a rule to run in

the center of each alternate 12-foot row of plum trees a row of grapes planted 16 feet apart. The vines are grown on trellises. Under the dense shade of these grape vines the chicks may be found during the day enjoying the comfort of the cool shade or scratching in the earth for the insects, which in the summer months infest it and when developed creep into the vines and fruit trees, there to lay their eggs and thus damage the trees. The chickens prevent this.

After a careful observation running over some five years, by actual tests I have satisfied myself that plum trees and Concord grape vines in the poultry runs will outyield trees in the orchard and vines in the vineyard, pound for pound, two to one, each season, and bear every season. I have so arranged my runs that for four feet each side of the wire fences no tree or vine appears. This prevents the chicks getting over the fence by means of the trees; and then comes a row of plum trees. Midway between this and the next row of plum trees, a row of Concord grapes set 16 feet apart. This produces shade, and in three years fruit. This plan any one can follow, whether in country or city, no matter whether on a farm or city lot.

A man who loves nature will make his home surroundings as pleasing and attractive as possible. "To succeed in the love of nature is something that may develop in every human heart." "To embark in the raising of fancy poultry is to enjoy a raging fever." "To utilize one to help the other is to practice horse sense."

G. B. Clary, Fairbury, Neb., writes his stock of White Wyandottes never looked better and that they will have the best lot this season they ever raised. They are offering extra fine specimens low for quality of stock. They also have a fine flock of Buff Orpingtons.

F. A. Crowell of Granger, Minn., is a reliable and honest breeder of Orpingtons, Leghorns, Cochins and other varieties of thoroughbred fowls. He tries at all times to satisfy his customers, and it is an easy matter to do so when one breeds nothing but first class birds.

The Tiffany Co. of Lincoln, Neb., put up a superior article in the way of a liquid lice killer, and their sprays are among the best and just the thing to whitewash your houses with or to use the lice-killer with. Their goods are first class in every respect and as cheap as any. Look them up.

Kansas State Poultry Show.

Breeders, the show season will soon be upon us. You will soon be deciding where you will exhibit your choice birds. I want to urge you to not miss the Kansas State Poultry Show this year. You well know that for the past four or five years it has been one of the largest, cleanest and best shows in the west. All premiums have been paid in full at close of show. The Association now has enough money in the treasury to guarantee all premiums and I will get our banker to so certify. Such a guarantee as this is worth considering. We will this year put up nearly a thousand dollars' worth of premiums, competition will be open to the world, no favors will be shown to any one, every bird will receive the best of care in our hands, and I can promise you that you will be pleased with treatment you will receive. The officers have all had experience and know just what they are doing, and they mean business. Our entry fees will be the same popular ones heretofore maintained, and premiums will be better than ever. We have every possible shipping facility, and with a good hall, good light, good heating facilities, good ventilation, and the best of care, we know you will be pleased. What more could you ask? I confidently expect 1,500 birds this year; we had over a thousand last year. Judges Rhodes and Harris will place the awards. We want birds from surrounding states, and I would like to correspond with breeders desirous of exhibiting. Let me hear from you. Our dates are January 6-11, 1902. GEO. H. GILLIES, Sec., Topeka, Kansas

E. W. Matheny, the Light Brahma man has some very fine specimens to offer this fall at reasonable prices. You will note his ad in this issue.

INCUBATOR ON TRIAL

The Perfected Von Culin.

Successful result of 25 years' experience. Scientifically correct, practically perfect.

Non-explosive metal lamps.

Double and packed walls.

Perfect regulation of heat and ventilation. Made of best materials, and highest quality of workmanship and finish.

PRICES \$7.00 AND UP.

SATISFACTION GUARANTEED OR NO PAY. We make Brooders, Bee Hives & Supplies. 527 Catalog and Price List sent Free.

THE W. T. FALCONER MFG. CO.,
Dept. 213, Jamestown, N.Y.

We wish to call the attention of our readers to the valuable article written by Mrs. B. G. Mackey of Clarksville, Mo. She has had long experience in breeding poultry and turkeys, and birds from her yards have won largely in the best shows east and west. Mrs. Mackey will be one of our regular contributors for the next year and we welcome her to our columns, as she has had wide experience and she is able to tell us many things that will be of benefit to us all. Watch for her articles.

You will find in this issue the advertisement of J. A. Ling of Harvard, Neb., an old and reliable breeder of Barred P. Rocks and that new breed, Buff Orpingtons. Ling's Orps never have been beaten. They are as good as can be raised. He is an honorable dealer.

A. Upton of Fairbury is one of the pioneer breeders of the state, a lover of the true blue Barred Rocks, and the best he can get are none too good, and by judicious line breeding he has at last produced birds of superior merit and up to date. Write him.

J. C. Kapser of Clay Center, Neb., is an expert breeder of Golden Wyandottes. He has by his system of mating produced birds that have scored in competition as high as the best, and seen in the best shows. If you want something fine look him up.

BARGAINS IN BREEDING STOCK

At Golden Rule Poultry Yards. I have a few birds that I used in my breeding pens this season that I will sell at a bargain. They are hens and two cocks, White Plymouth Rocks, Empire strain. Write for prices.

Young stock. White Plymouth Rock and pure Dustons. White Wyandottes for sale this fall.

MRS. MATTIE WEBSTER,
BELMONT, WIS.

MY....

Buff Orpingtons

....Have no equal

B. Plymouth Rocks

(Thompson Ringlets.)
AND

White Wyandottes

If you want good stock I have it

John A. Ling,
HARVARD, : NEBRASKA.

Grow Fruit ..

Poultry helps Fruit; Fruit helps Poultry; great combination. If you want the best fruit paper, at 50c per year, send for

"Western Fruit Grower" - - St. Joe, Mo.

Capital City Poultry Ranch

E. E. Smith, Prop.

Mammoth Pekin Ducks. I won every 1st at State Fair and State Show. I have the best in the west.

E. E. SMITH, Lincoln, Neb.

POULTRYMEN

Your stationery won't look well unless **PRINTED** neatly. I do it well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

Pride of the West...

Is Mackey's own Strain of Bronze Turkeys, bred in line for 15 years. Show record on open book. They are in the yards of many of the best fanciers in the U. S. and Canada. B. P. Rocks. Conger & Felch; Black Langshans, Emory Felch & Robinson. Felch Lt. Brahmas, eggs at all seasons from hens. Young stock now ready to ship. Write for prices. Mackey's Magic Cholera Cure is a sure cure.

HILLSIDE POULTRY YARDS,

Mrs. B. G. Mackey, Proprietor.

CLARKSVILLE, : : : MISSOURI.

Single Comb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

Corra A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS,
Ogden, Utah.

Ducks from Door-knobs.

Some incubators promise everything in sight; either ducks from door-knobs, or chicks from china nest eggs, and a full grown bird in a week or two. The

PETALUMA INCUBATOR

won't do that. It's just a good incubator—made for hatching eggs in the best possible way. It is made on scientific principles of good honest material, by honest workmen. Consequently it will do all that a good incubator ought to do. We think our construction is a little better than any others; we are sure we take pains; we know we please the people. If you are looking for a machine that will hatch all the fertile eggs, you'll be interested in **THE PETALUMA**. Our large illustrated catalogue is sent free upon request.

We pay freight anywhere in the United States
We make a good brooder too.
Petaluma Incubator Co., Box 510, Petaluma, Cal.

E.B.W. Co.

Poultry Supplies.

We keep a full line of all standard goods, as follows:

Ideal Leg Bands,
Smith Seal Bands,
Score Cards,
Standards,
Oyster Shells,
Lime Stone Grit,
Mica Grit,

Humphrey Bone Mills,
Spray Pumps,
Liquid Lice Killers,
Bone Meal,
Raw Bone,
Beef Scraps,
Blood Meal,

Granulated Bone,
Broiler's Teeth,
20 Century Poultry Food
Midland Poultry Food
Conkey's Roup Cure,
Chamberlin Chick Feed
Reliable Spring Punch.

Anything you want. Write us; if we do not have it will get it for you.

SURE HATCH POULTRY CO., Clay Center, Nebraska.

Brief Business Catchers.

**30 WORDS
SINGLE INSERTION
50 CENTS**

Under these headings cards of **THIRTY WORDS** or less will be inserted for **FIFTY CENTS** a single insertion, or twelve insertions for **THREE DOLLARS**. No display can be allowed and all cards must be uniform in size and style. A change in makeup allowed each quarter.

**30 WORDS
WITH INVESTIGATOR
1 YEAR \$3.00**

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert R. Swett, 364 Mosley St., Elgin, Ill.

BLACK LANGSHAN. W. P. Rockall old stock for sale at \$1.00 each, young white Pekins ducks 6 for \$4.00 all high scoring stock. Mrs. Henry Shrader, Berlin, Nebraska.

BUFF COCHINS and Rose Comb White Leghorns bred from the best of stock. Prize winners. For sale. John A. Johnson, Pilot Mound, Iowa.

J. W. WHITNEY. Chatham, Ohio. Poultry Judge. All Varieties Private scoring and expert mating a specialty.

100 S. HAMBURGS. Stock for sale. Eggs at prices to suit the season. Stock in good condition fashionably bred and artistically marked. Rev. G. A. Chamblin, Moran, Kansas.

IF YOU WANT the blood of Boston and New York winners in Barred Rocks, S. C. Brown and White Leghorns, I have it and can please you in stock at low prices. Eggs in season. Elm Lodge Poultry Yards, Centerville, Md.

SEE HERE. Fine Light Brahma Cockerels \$1.25 each. Pullets \$1.00. Pairs \$2.00. Trios \$3.00. Also fine Barred Plymouth Rock Cockerels \$1 each. Order now. Richard J. Holt, Utica, Minn.

SPECIAL BARGAINS in Buff Wyandottes, pure Bufts. Winners at Chicago and Cedar Rapids, Iowa. Also a fine line of Bantams such as Game Cochins, Sebrights and Japanese. Write for prices. M. F. Yegge, De Witt, Iowa, Box 26.

BLUE BARRED P. ROCKS. Choice breeding and fine exhibition birds for sale. Winners wherever and whenever shown. Prices low. Must sell. Write for printed folder. J. M. Holt, Marshalltown, Iowa.

PARTRIDGE COCHINS a specialty. The cream at Chicago and Cedar Rapids, 1901. 150 youngsters for sale after October 1, finer than ever, superior feathering, shape and color. Always satisfaction guaranteed. U. J. Shanklin, Wanbeck, Iowa.

Fowls for Exhibition

From Poultry, Bee and Fruit Journal: There is no excuse for taking any birds that happen to be convenient a few days before the show and sending them there to compete with the best throughout the country. Most birds taken to a poultry show are selected many months before, and are given special care. The best specimens should be selected and kept separate from the rest of the flock. There will be a temptation to select some better looking birds that are running with the flock after the selection has been made, but any attempt to get them in show condition will not meet with the best results. If the birds are some of the white varieties they should be kept where there is plenty of cut straw. Not two or three inches of it, but several inches, or even a foot. It is a good plan to scatter millet seed where they can scratch the straw up and let it fall down on their plumage, which will both polish and clean the feathers white as it is possible to have them that had been kept so by this treatment.

We do not favor much pampering or doctoring. One of the main things to do is to keep the birds active and in good health, which can be done by feeding wholesome rations, with a little animal food. Continually cramming them with all sorts of mash mixed with stimulants should be avoided. Some fattening food will be required to bring them up to the standard weight, but beyond this there will be but little demand for it. Too much of this kind of feed is liable to ruin a fowl for breeding purposes.

A bird that has to be pampered

and dosed to keep it on its feet is not in show condition, and its true condition will be revealed when placed in the enervating temperature of a heated room, and the chances are that the bird will be left off of the list of prize winners. Keep show birds in specially prepared coops as much as possible, and if it can be done show room conditions should be arranged for. Each coop will be made roomy, airy and light, with a blanket over the front, to be let down in case of cold weather when in transit. Show rooms are very hard on birds, and they will have to be inured to this sort of trial if they are to stand the ordeal. Stamina is worth a great deal, and if the fowls do not come home with the rump, or otherwise the worse for the wear, they can be counted on as being very hardy and full of vitality.

The breeders of Kansas City, Mo., composing the Kansas City Fancy Poultry Club, have taken in hand the show matter for the coming winter, and propose to give a show Dec. 6-7-8, 1901. The judges will be W. S. Russell, of Ottumwa, Iowa, and Thos. W. Southard, of Kansas City. It is proposed to redeem the fair name of Kansas City as a show town. They offer a reduced entry fee, a reduced price of admission, and a square deal. Particulars can be had by addressing the secretary, C. S. Hunting, 3817 E. 13th St., Kansas City, Mo.

David Larson, Wahoo, Nebraska, Expert Poultry Judge

I have had years of experience in breeding, mating and judging. For reference of qualification, write **POULTRY INVESTIGATOR**, Clay Center, Neb. I am open for engagements.

THE EASY BONE CUTTER

HUMPHREY

Don't buy a bone cutter until you have seen and tried a **HUMPHREY**, the simplest in construction, the easiest in operation, the only open hopper type. Every Humphrey is sold subject to return if it does not cut more bone, and in less time and with less labor, cost less for repairs and produce better food, than any other type of bone cutter.

Send for free catalogue and egg-record book.

Humphrey & Sons, Box 70, Joliet, Ill.

SALES AGENTS.
Joseph Breck & Sons, Boston, Mass.
Johnson & Stokes, Philadelphia.
Griffith & Turner Co., Baltimore.
Surrey Hatch & Co., Clay Center, Neb.
E. J. Bowen, Portland, Oregon;
Seattle, Wash.
and San Francisco.

Perfect Chick Feed.

HEMATITE, Mo., June 17, 1901.
Mr. W. F. Chamberlain,
Kirkwood, Mo.

Dear Sir:

You will please find enclosed a Pacific Express money order for \$2.50, for which I will thank you to send me another 100 pound sack of chick feed as soon as possible, as I am nearly out of same and find your feed worthy of the highest praise. Yours,

D. W. CARROLL.

It Brings More Eggs

Get a Dandy Green Bone Cutter and double your egg yield. Our new cutter fells all about feeding green bone, and the best machine for cutting it.

Sold Direct PRICE \$5

on 30 days' trial. Write and up on 30 days' trial.

Stratton Mfg. Co., Box 48, Erie, Pa.

Barred Plymouth Rocks EXCLUSIVELY.

If you want winners bred from winners that will win for you, write me.
FRED TOWNSEND, Clay Center, Nebr.

Does Your Lamp Smoke?
That means uneven heat and danger of explosion. Don't run any risk. Put a
Hydro-Safety Lamp
on your Incubator and Brooder and save all attention and avoid all danger. Water jacket keeps burner cool. Price, 75c. to \$2.75. Catalogue of all incubator supplies. **PRICE \$3.00.**
L. R. OAKES, Mfr. No. 12 6th St., Bloomington, Ind.

F. A. CROWELL, GRANGER, MINN.

Breeder of Strictly High Class Buff Orpingtons, Leghorns, and Cochins; Light Brahmas, Indian Runner and Pekin Ducks. Stock for sale that will please you. Circular free.

Golden Wyandottes.

Our Wyandottes never have failed to win in the best company. Young stock for sale.

J. C. KAPSER, Clay Center, Neb

F. H. SHELLABARGER, WEST LIBERTY, IOWA.

Has bred

Barred Plymouth Rocks

for 20 years. We have them that are up to date in size, shape and color. Write me if you need any. 20th annual circular which fully describes our Breeding stock is free. Mention this Journal and address as above.

O. MO. HUN. DRO.

Breeder of Prize-Winning
IMPERIAL WHITE P. ROCKS.
Stock for sale at all times. Eggs in season.
E. B. OMOHUNDRO, Bowling Green, Mo.

G. B. CLARY, Fairbury, Nebraska.

Breeder of { Chalk White Wyandottes,
Mammoth Light Brahmas
Buff Orpingtons.

Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

Still 10 Cents a Year.

Until further notice you can still get the **POULTRY, BEE AND FRUIT JOURNAL** for 10c per year. Or by getting four of your friends to send with you, we will either extend your subscription one year or make you a gift of a good poultry book. Send today—NOW—before it is too late, as this offer may be withdrawn at any time. Send your dime and get the neatest, boiled down, right-to-the-point, stop-when-you've-said-it, monthly journal an entire year. Thirty words in Breeders' Column for 25c. Display advertising 75c per inch, net. No discounts for time or space. A guarantee of satisfaction written in every contract.

POULTRY, BEE & FRUIT CO., Davenport, Iowa.

MARK YOUR FOWLS

This has become a necessity for show, judging, pedigree and breeding pen purposes. There is no means of marking that gives the all around satisfaction of our

RELIABLE COPPER PLATE LEG BANDS.

Being exceedingly tough and durable they may be used indefinitely. They will stay where they are put, and will not chafe or canker the fowl. Made in sizes from 2 1/4 to 1 1/2 inches long, with consecutive numbers on band. Assorted sizes in the same order if requested. Our 20th Century Poultry Book illustrates and describes full line of poultry supplies and tells all about our 116 yards of thoroughbred poultry. We mail it for 10c. Write while they last. Reliable Incubator and Brooder Co., Box A-25, Quincy, Ills.

Poultry Supplies...

For the next 60 days I will sell Grit and Shell in lots of 500 pounds or over at greatly reduced figures. It will pay you to lay in your winter supply now. Agent for Cyphers Incubators and Brooders, and Humphrey's Bone Cutters. Write for anything you need in poultry supplies.

E. A. PEGLER, 241 S 11 St., Lincoln, Neb. Box 463.

**THE IDEAL
Aluminum
LEG BAND.**

Is the acknowledged leader. It loosing off is impossible as it is made with a double clinch and is guaranteed to stay on. It is light, neat, strong and durable, easily and quickly put on. It is absolutely the best band on the market today. Read what others say:

Yermouth, Me.—Mr. Frank Myers. Dear Sir: I have been thoroughly testing your leg band also others of the latest make. The Ideal Aluminum Leg Band is certainly the best one that I have ever used and I believe I have used about all of them. Please ship me 1000 as follows: 200 No. 6, 50 No. 7, 400 No. 8, 100 No. 9, 200 No. 10, 50 No. 11.

Prices of bands, post paid, 12 for 20c, 25 for 35c, 50 for 65c, 100 for \$1, 500 for \$4, 1000 for \$7. Send 4c in postage for circular of Barred Plymouth Rocks and sample bands.

FRANK MYERS, Box 14, Free Port, Ill.

Barred Plymouth Rocks and Black Langshans

We have some extra bargains in our this years breeders that we would be glad to tell you about and if you will drop us a card we will tell you what we have for sale and probably can do you some good. Rocks scoring to 94 points and Langshans to 95 1/2 points by Harris. Young stock for sale and at a bargain considering quality.

MR. and MRS. A. UPTON & SON, Fairbury, Neb.

Buff Orpingtons

THE COMING BREED

W. H. BUSHELL, IMPORTER AND BREEDER, DAVID CITY, NEBRASKA.

White Leghorns.

Layers and winners. An inducement to buy at once and of us—tested breeders. Hens \$8, \$10 and \$12 per dozen. Cocks \$15.50 to \$25.50 each. Scottish Terrier puppies \$5.

PRACTICAL POULTRY FARM,

R. R. Fr. nch, Mgr. Box 47, Ford City, Mo.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

No Eggs for Sale! A nice lot of young chicks for sale in pairs and trios. Bred from the best matings of imported stock. I have hundreds of February and March hatched chicks for sale. Mention this Journal.

BUFF P. ROCKS Exclusively. Pure Burdick Gold Nuggets. My Buff Rocks are as good as can be found, and are up-to-date in every respect. Some fine specimens for sale; reasonable prices on application. Address
MRS. ELLA PATRICK, Clay Center, Nebr.

BUFF ORPINGTONS—WYANDOTTES. R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock, fit to breed and exhibit for sale. Thos. H. Mills, Poultry Judge, Port Huron, Michigan.

Imported Buff Orpingtons.

Are winners at B. P. R. Madison Square Wash., N. J. Keota Iowa City Iowa State Shows. Orpington \$7 to \$30 per trio. Will close out all the Rocks, Bradley Bus, and Lathams Stratos. One pair of 1 yr old show birds for sale cheap, \$2 to \$2.50. A fine lot of young show birds in both varieties. Always win; sure to please. Better get in the push.

A. L. HOUSTON, Keota, Ia.

SHOW BIRDS FOR SALE.

8 Grand Breeders for sale at a bargain. Also 300 selected Langshan chicks. Address,

BENS. MYERS, Crawfordsville, Ind

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free.

H. SHIVERS, Knoxville, Ia.

Lock box 500.

Barred P. Rocks...

Extra fine, Extra large, Extra color

In the show room they have shown their excellence, have scored from 90 to 94 by prominent judges. Write wants.

C. F. HINMAN, Friend, Nebraska.

Buff P. Rocks.

Motto: "Good stock at moderate price." Stock for sale after Sept. 15.

W. D. SWAIN, Panama, Ia.

THE FEED, NOT THE BREED Midland Formulas...

Is responsible for results.

THE BALANCED RATION

For Poultry is here at last.

The 200 Egg Hen is now a Possibility.

1. Nursery Chick Food.
2. Growing Chick Food.
3. Fatting Chick Food.
4. Egg and Feather Producing Food.
5. Nursery Duckling Food.
6. Growing Duckling Food.
7. Fatting Duckling Food.
8. Laying Duck Food.
9. Stock Ducks' Summer Food.
10. Growing Gosling Food.

Our efforts to furnish the poultry world with a complete food for a specific purpose, and built on a scientific and practical basis by men of experience and ability, has met with unequalled success. Our food is now being used by the most progressive men in every state in the Union, to prove its merits, order a 5 or two of our No. 4, feed your flock through the moulting season and the rebly shorten it one-half and they will begin laying early and continue all winter, if fed as directed. Don't wait until it is too late to recover the lost time. There is no thing that will put birds in as fine a show condition as No. 4. Try it and be convinced. It is not a stimulant or condiment. Our price is \$1.00 per two bushel bag at factory. Write your nearest agent for prices and save freight charges. It is the most economic food you can use. It requires no accessories, as green bone, etc., and will produce results you cannot otherwise attain. Write for our booklet "The Science of Poultry Feeders," to any of the following agents: Boston, Mass. Jos. Breck and sons, 51 N. Market St. New York City, Excelsior Wire & Poultry Supply Co., 29 Vesey St. Philadelphia, Pa. Johnson & Stokes, 217 Market St., or Midland Poultry Food Co. N. E. Cor 2nd and Main Sts. Kansas City, Mo., the Harvey Seed Co., Buffalo N. Y., and A. C. Woolley & Co., Atlanta, Ga.

Tiffany's paragon Lice Killer.

Kills lice and mites on poultry, hogs and animals, is the strongest and best lice killer made. With our double tube sprayer you can save one-half the liquid and penetrate all cracks and spray the bottom of the house where you find the mites or spider lice. It gets there every time. Every can is guaranteed or money refunded.

Write and learn now to get a Sprayer and can of Lice Killer FREE.

Tiffany's Paragon Poultry Powder.

Kills lice on heads of baby chicks and turkeys, fleas on dogs, ticks on sheep and lice on cattle and horses, is a powerful disinfectant, keeps moths from your clothing and carpets. A large, free sample for 10 cents to pay postage. We give liberal terms to agents. We want one in every town.

THE TIFFANY COMPANY, - - - Lincoln, Nebraska.

OUR NEW... CATALOGUE

is published in five separate editions and printed, in addition to English, in the French, German, Swedish and Spanish languages.

Why was this necessary? Merely to keep up with the constantly increasing demand for the

SUCCESSFUL INCUBATORS AND BROODERS

and reliable information concerning them sought by foreign countries. This is the first incubator manufactory that has ever been compelled to adopt such a measure simply and solely from the reputation and recognized merits of its machines. It would seem impossible to hide the reputation of our goods. Those who are using them here at home will not wonder at this, as they are well acquainted with their merits. They know from experience that the **SUCCESSFUL INCUBATORS** will hatch any egg that can be hatched in any way, that they are entirely automatic in supplying heat, moisture and ventilation and that every chick hatched has the strength to live and grow. They know also that our brooders will successfully brood and rear every chick that can be reared in any way. They know further that our entire line of **SUCCESSFUL, ECLIPSE and CRESCENT INCUBATORS** and our complete line of **BROODERS** are each the best machines of their kind made. Send 6 cents for our new 15-page catalogue and learn all about them and the reason of their unequalled popularity.

DES MOINES INCUBATOR CO.,
Box 601, DES MOINES, IA.

VOL. 1.

NOVEMBER, 1901.

NO. 3.

Poultry Investigator

ADVANCE TO SUCCESS

25 ¢ a year

Buff Wyandottes Buff Leghorns

S. C. B. Leghorns, S. C. W. Leghorns; Ducks and Guineas. Young stock for sale after Nov. 1st. We will now sell 4 choice Leghorn cocks (Buff) at \$3 each, Barnes and Houston's strain; all prize winners. Our Whites are Hawks and Wykoff strain; our Browns are Brace strain direct; Buffs are Harris, Barnes, Arnold, and Brace. Write us for bargains.
W. A. BLOOMER & SON, Lebanon, Kas.

Nothing but direct external and internal treatment will kill roup germs. Buy the best; don't be deceived. Send for trial sample. Price 50c and \$1.00 per box, postpaid. Agents wanted.
J. D. W. HALL, Box 60, Des Moines, Iowa.

200 White Plymouth Rocks

FOR SALE.

Our specialty. White birds; large size winter layers. Prices 75c each; \$6 per 12.
F. J. KOLASCE, DeBois, Nebr.

Choice Cockerels & Stock Eggs for Hatching.

The Result of 25
Year's Breeding.
Line Bred at the
American Poultry
Farm.

From Barred and White Plymouth Rocks, White and Silver Wyandottes, White and Brown Leghorns, Golden Sebright Bantams, Bronze Turkeys, and Pearl Guineas.

Belgian Hares, Jersey Cattle.
Valuable Circular.

F. M. MUNGER & SONS, DeKalb, Ill.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered Strain, from a long line of prize-winning ancestors; have made them a specialty for 10 years. Now offering the exhibition and grand breeding stock of both 1900 and 1901 hatch at moving price if taken soon. Send for illustrated circular with half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Buff P. Rocks Exclusively..

We have Judge Harris' entire stock. These, together with our own prize winners, gives us the best flock of Buff Rocks in the country. We can please you both in quality and prices. Write us if you want winners bred from winners. Pekin ducks, Toulouse Geese for sale.

MRS. FLORA SHROYER,
Clay Center, Neb.

Let The Hens Lay

but Hatch Chickens by Steam

The best, surest and most economical method of hatching is with the

EXCELSIOR Incubator

Simple, yet thoroughly durable; absolutely regulates itself. Hatches the greatest proportion of fertile eggs at the least expense. Costs less than any other first-class hatching machine.
The Wooden Hen—for 50 eggs—is the most perfectly automatic, self-regulating, small incubator ever made. Write for incubator book and information—free.

CEO. H. STAHL,
114-122 S. 6th St.,
Quincy, Ill.

HERE is an Opportunity

To obtain
S. C. B. LEGHORNS

Two Cocks and ten Hens of superior merit for sale WAY DOWN. Send for illustrated catalogue—it's free.

GEO. W. OSTERTROUT, David City, Nebraska.

Silver Laced Wyandottes

With Royal Blood in Their Veins.

See this—Winners at Cedar Rapids, Sioux City and Nebraska State show at Lincoln. At the latter show we took 1st cock, 1st, 2d, 3d cockerel, 1st, 2d, 3d pullet, 2d hen. The cockerel which scored 92½ was cut one and one-half points on weight, having been on road two days and two nights. This makes him a 94¼ point bird. How is that for a S. L. Wyandotte breeding? If anybody in America can please you on Silver Laced Wyandottes, we can.
I. & N. M. CONNER, Ponca Neb.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS.

Are better than ever as they have farm range. Have 280 young and 30 old ones to draft from the coming sale season. Was winners of all firsts and part second in state show the last two years, also have been winning for customers in strong competition. Satisfaction guaranteed. Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

ARE YOU LOOKING FOR EXHIBITION BIRDS?

BARRED PLYMOUTH ROCKS. With that nice even ring barring to the skin as blue as the sky, and with elegant combs, golden beaks and shanks. Or heavy weight **SINGLE COMB BROWN LEGHORNS.** Elegant combs, fine striping to hacklet and saddle, and shape to burn. Pullets with that soft even brown color, fine striped hackles and elegant combs. In fact birds that give the other fellow that tired feeling in the show room. If so, address:
J. W. WHITNEY, Chatham, O., P. O. Box 1.

Mr. and Mrs. C. A. Blanchard,

Friend, Nebraska

—BREEDERS OF—

White Plymouth Rocks, White Holland Turkeys and Pekin Ducks. At Nebraska State Poultry show 1901 we won 1st pen, 1st hen, 1st cock, 3d cockerel, which was a prize on every bird entered. At the Nebraska State Fair, 2d to 6th of Sept., 1901, we won 1st pen chicks, 1st hen, 1st pullet, 1st cockerel—a first prize on every bird entered. We have a fine lot of young stock for sale.

ation the INVESTIGATOR when answering advertisements. It te both the advertiser and us.

NOTICE

We have this day purchased the Golden Egg of St. Louis, Mo., and the Poultry Investigator will be sent to all unexpired subscriptions and all contracts for advertising made by the Golden Egg Publishing Co. will be faithfully filled.

Poultry Investigator Publishing Co.

L. P. Harris, Editor and Manager

Vol. 1.

Clay Center, Nebraska, November, 1901.

No. 3.

BEGINNING

By Percy W. Shepard

To one who desires to establish a business that will earn him a living and give him a reputation as a fancier:

First, you must realize that in you and in you alone lies the source of your success. You are responsible for your success or failure. Your rise will not depend on some friend or on some other breeder, but on yourself. Hence, from the very beginning you must depend upon yourself. Advice is cheap and always plenty of it to be received. But, advice very often comes from an unreliable source. Oftentimes advice is given unintentionally wrong. Yet, whatever your friends' intention may have been, if you followed it disaster would result. The qualifications necessary to a perfect breeder are many. Although a breeder or rather the beginner has not all the qualifications necessary to perfection, he may get along remarkably well if he tries to do so, yet the better he is qualified for the work the more sure will be his success. The beginner should be energetic. If he has energy and uses it in the right direction, he will stand a fine chance for success. He should be patient and persevering. In order to be able to meet and overcome all the difficulties of poultry life. He must be ambitious for success. The one who lacks ambition is seriously handicapped for the work. Yet he will be able to overcome some of his defects, as I shall speak of later. He must have good judgment and plenty of common sense. These are neces-

sary, as any breeder, beginner or veteran, will have occasion to use his judgment several times every day. He must be willing to do the work, in fact, he must be anxious to perform all the duties of a breeder's life. Prompt in caring for his fowls and all his customers. Diligence in his work will greatly help along the struggle. And above all, he should love the work. No one succeeds well in any branch of life unless he has a special liking for the work. So with a breeder he needs to love the work and delights in caring for the birds.

I have given above most of the characteristics of a breeder who is in himself about perfect in his adaptability for the work. Now we will suppose that on one who is contemplating a start in the poultry industry lacks some of the above valuable qualities, for instance, he lacks energy. Can he not make himself energetic? Can he not arouse himself up and rush into the work carefully and do it as it should be done if he will? Yes, it is possible for him to make of himself just what he wants to be, if he works properly. So as I said before, it depends entirely on the breeder whether or not he will succeed. If you are bound to succeed you will succeed. If you are bound to obtain that which you desire you will obtain it. Success must come. But not to him who waits, but to him who goes after it.

I believe, in fact I know, that more of success depends on the breeder

than on the buildings and fowls. The right kind of a breeder will succeed under the most adverse circumstances, while the wrong kind of a breeder cannot succeed at all under the most favorable circumstances.

I have endeavored in the fore part of this article to give you a good description of an ideal breeder and now will speak of the buildings, fowls and management.

The building is the first essential that the breeder obtains after qualifying himself for the business. We will suppose that the one who is making the start has visited as many different breeders as possible and has very carefully studied their plans of buildings and methods of management. Also he has made a special study of different breeds of fowls, he has noted their characteristics and qualities. He has subscribed to several up-to-date poultry journals and made use of the much valuable matter in their columns. He has read several late poultry books, bought a Standard of Perfection and learned what a perfect bird is and knows how he is going to breed to seek to produce winners.

Fifty fowls are enough to start with for the first year. Twenty-five may be a better number. Never try to start with too many birds. This is taking a position too high upon the ladder and may result in disaster and discouragement. Better begin a little lower down and then rise up than to begin higher and be compelled to fall to the bottom. "Slow but sure" is the maxim that seems to have had no beginning and does not end at this great age of advancement. So applying it to poultry life we would begin

with a small number of fowls and increase as we gained experience. The beginner is without experience which becomes a valuable qualification later on. The veteran breeder has their advantage over a beginner—he has experience which money cannot buy. So there is no way of obtaining this priceless acquisition except through the school of life, which has numberless branches of which one is that of poultry.

It would be almost useless for me to give you a plan of my ideal of a poultry building. You, living in another climatic belt and surrounded by entirely different conditions and circumstances, would not find my plans suitable for your work. However, what the plans of your building may be, it must combine the essentials of warmth, light and convenience. If the poultry house is warm enough, if it has plenty of light admitted to it and is convenient, it will be very serviceable. The expense will depend on the size of your pocketbook. If you want an expensive and ornamental home for your fowls and you have plenty of money, you can have the building that you desire. But if you can't afford an expensive building, a cheaper one must suffice. If I were to have an extensive poultry plant I would build the cheapest buildings that would serve the purpose, although of course they would not lack anything that favors success. A cheap, well made house does just as well as one that is expensive without giving any more advantages. The building can be large enough for one pen of fowls or can be a long one divided into pens. I favor the continuous house as it is convenient. Twenty-five fowls are enough for one pen. This number will pay better than a larger number kept in one pen. For this size flock I would have a pen say ten by fifteen feet. This will allow six square feet to each fowl.

Your building completed and your choice fixed on some breed of fowls, you are ready to purchase your birds. Don't start with more than one breed. Buy of a reliable breeder. Select your birds yourself if possible. You will know how to select good ones if you have learned from your Standard of Perfection. In regard to the different breeds, for what are you going to breed? Is it eggs alone? If so, then select some of the smaller breeds according to your taste. In breeding for market alone select a larger breed, and if seeking a general purpose fowl, that is one for both eggs and market fowls, get some one of the American breeds. Of course, for whatever pur-

Light Brahmas and Pekin ducks in the yards of Mrs. Alice Allen, Clay Center, Nebr.

pose you may intend to breed them you will expect to exhibit them as it is your ambition to get prominently before the public. If you have no choice for either line of work and it makes no difference to you whether or not you breed for eggs, fowls, or both, then select your fowls according to your taste. It is a question as to which is the best breed. One breed will pay as well as another if managed according to their needs.

It is an apparently easy matter to erect the building and select and buy the fowls if you have the money. Always buy the best you can afford and never think of anything except pure birds.

After you have received the birds you must begin poultry life in earnest. The different breeds will need different management. You will learn this from the poultry journals and books which you have purchased before. Be regular in your work. Feed them regular. Don't feed at daylight one morning and nearly noon the next. Be interested in the work and do the work yourself. If you do it yourself you know that it is well done.

There are science in feeding fowls. No secret about it. You see that the fowls lay in summer. To get eggs in winter just make the conditions correspond with those of summer. Give them grain, green food, animal food, grit, pure water not iced, warmth, light, cleanliness, a good dust bath, charcoal, a variety of grains,

and plenty of work. This is just what they get in summer and just what they must have in winter. Go to nature and you have a perfect teacher. This same applies to the chickens as well as to fowls. Feed them as nature does and they make a remarkable growth. Of course eggs and chicks in winter are fruits out of season. So we must make winter like summer as far as possible. The first work will not be as profitable usually as will that which is done after you have acquired experience. But as long as you breed fowls you will never cease to learn something every day. The more you learn the better chance you will have for success. Keep a strict account of all receipts and expenditures, so you will know exactly how you stand. Try to improve your fowls, your plans, your work and your everything about the poultry. The world is moving on and upward. Keep up with it. Never fall behind when you have once made the start. Never neglect and never put off until tomorrow what you can do today. Do everything in time and just when it needs to be done. This will save time, discouragement and loss. You will meet discouragements, but never give up. There is a reputation for you if you press on and get it. Give just the right amount of care. No need of too much care. Be kind to the fowls. Make them tame and you will love the work better. Pay attention to the small details. Plan ahead. Remember that time is re-

quired to succeed. Rome wasn't built in a day, neither will you reach the highest step in the ladder in a day, or year, or even in a dozen years. But you can make a remarkable advancement in a short time if you know how, and you can learn how if you will. Be a genuine fancier and let every one know that you are such. And last but not least, be sure to exhibit your fowls when possible, as you will learn enough to pay you even if you win no prizes. It will show you where your fowls are deficient and you will see how to breed

been neglected early in life no amount of care will make them winners. So you see that there is something back of merely taking the birds to the shows and carrying off prizes. Begin right and stay right.

P. W. SHEPARD.

SOME REASONS WHY.

The reason why the Investigator will be a good advertising medium for poultry and poultry appliances is simply because the subscribers are poultry people and mail order buyers. To a very great extent the subscrib-

FORCED FEEDING.

No. 2 of the Investigator is really about the neatest little poultry paper it was ever my pleasure to see. Editor Harris may surely be proud of it.

Now I have a word to say about feeding to force extreme early maturity and egg production. Does it pay? Does not the pullet that is brought to laying at an unnaturally early age by the feeding of egg-producing compounds, etc., lose much of her value as a layer for the next season, and all of value as a breeder or a bird from which to produce good stock?

A half-tone from photo of Brandane Red Oak, an English-bred Scotch collie, owned by H. R. McLean, of Red Oak, Iowa. He now has ready for shipment pups sired by this wonderful dog.

to obtain better results, which will afterwards give you the blue ribbons. Here at the exhibition you will meet dozens of breeders whom you can talk with and learn of their ways of feeding and caring for their fowls to produce winners. So you see that it pays to exhibit, even if you cannot take to the show your birds, go yourself and carefully study the different birds. It will be of value to you. Your fowls need to be prepared for the show room. You know this, but let me ask you a question. Do you know just when to begin preparing them for exhibition? Well, you begin just at the time when you mate your fowls. Mate them to produce winners. Keep the chicks growing and give proper care all the way through. If they have

ers are the same people who have corresponded with the Sure Hatch Incubator company about incubators, poultry and poultry fixtures. The west has been a good field for business. On account of the big wheat crop and the general prosperity, the coming season will be better than ever. The western fairs were better than ever the past fall. Advertising space in the Investigator will be worth more in the near future. Come in on the ground floor and get acquainted while it does not cost much.

SPECIALTY CLUB.

The American Hamburg club. Rev. G. A. Chamblin, Secretary, Moran, Kansas.

I do not mean to say that this feeding for early maturity and great egg-production should not be done at all, but is it not overdone in some instances, and even carried so far as to be a positive detriment?

We have tampered very lightly with such things ourselves and have succeeded in producing a strain of layers that I think will compare very favorably with any, while even our two and three-year-old hens continue to lay well.

One thing is sure, I do not believe in using or sending our eggs for hatching from stock 'that have been fed a "forced ration."

R. R. FRENCH.

Ford City, Mo.

FOODS

By VELMA
CALDWELL-
MELVILLE.

There are some facts that will bear repeating, and this seems especially true in regard to the fundamental facts of caring for poultry. There is a deal of theorizing and experimentation going on, and there are poultry writers who fill columns telling things that when we try them won't work.

But if the proof of the pudding is in the eating, the proof of a well balanced ration for fowls comes out by the eating—their eating. At the same time plenty of people are succeeding admirably with chickens who feed just the two grains, corn and oats, with the table scraps. This fall the remarkable growth of grass gives the birds that have access to it a food that is ample in place of cut hay and the many other like foods so much recommended. The abundant rains and mild weather are bringing up the worms and tempting the insect world generally to display of itself, thereby affording a substitute for green bone and meat scraps; but this is early October, and by the time these lines are read there will doubtless "a change have come over the spirit of our dreams," and green food and animal food must be supplied.

We are fanciers on so limited a scale that not often shall we dare in our chats here set ourself and our experience up as authority, but it shall be our aim to present only such facts from the experience of others as are reliable; those that have proven by long use and grand results that they are worthy of imitation.

And now because of having spoken at length of what we hear of the wonderful Van Dreser poultry plant in New York, in some other columns, we will not dwell upon it here further than to the extent necessary to prove that the feeding there is of necessity reduced to something of a science.

It is known as a "3,000-hen plant," but a recent visitor in writing of it says: "Its capacity today is about 2,000 head of layers, but there will probably be 2,200 or 2,300 put into the houses this fall."

There is a part of the year when the egg income, per day is over \$38. Besides there is the selling of stock, running up into the thousands of dollars annually. The chief business of the plant is, however, the production of eggs for market.

As regards the feeding, Mr. Van Dreser raises all the food on his 200-

We present here a view of a flock of Buff Wyandottes in the yards of Mrs. E. W. Orr, Clay Center, Nebr.

acre farm, and right here we want to bring in one of our strong arguments in favor of poultry for profit—the fertilizer derived. Mr. Van Dreser put 550 pounds of hen manure on an acre prepared for wheat and produced on that acre 28½ bushels more than on adjacent acres that had not been fertilized.

The crops raised exclusively for his fowls are sunflower, oats, Canada peas, buckwheat and corn. Last year he raised 140 bushels of sunflower seed on a little less than one acre of ground.

Now, to quote from this recent visitor, Mr. Hunter of the Practical Farmer:

"In the morning the fowls have a grain feed of oats and peas, or wheat, thrown into the straw upon the floor of the pens, and this sets them to scratching—starts the blood circulating. About 10 a. m. in winter and in summer about 4:30 p. m. a mash is fed of equal parts of pea meal, wheat bran, middlings and ground beef scraps. This is thoroughly mixed together and wet up with boiling hot water. Oats and peas, buckwheat and corn (cracked or whole), are the grains fed, and all are thrown into the litter. It is the intention to keep the fowls just a little hungry, to avoid overfeeding, and so they shall come to their meals with a good appetite."

This man sows Canada peas and oats together, seeding in the proportion of two bushels of oats to one of peas. The writer says a field of 25 acres of these was being harvested on the day of his visit. It

had taken 84 bushels of the mixed seed to sow the piece.

Now, of course, we cannot all be Van Dresers. It would be a pity to turn all our farms into hen ranches, but there is money in poultry as surely as in stock raising or any other industry, and even a small flock of birds intelligently fed and humanely housed is bound to not only meet its own expenses, but turn quite a decent surplus into the family pocketbook.

Before bidding adieu to Mr. Van Dreser we want to mention that he feeds the mash in feed troughs made for the purpose. He supplies abundant dust boxes, boxes of grit and oyster shells and water. His method of watering is to put in each pen a shelf some eighteen inches from the floor and on this place the watering pan, said pan slipping under a board that leaves about two inches all around accessible.

His pens are fifteen feet square and he allows fifty birds to a pen, and, as we understand it, two or three males to a pen. Here we would think it might be wiser to have twenty-bird pens, allowing one male to each, but Mr. Van Dreser's birds are wonders in that the males do not fight.

Another poultry expert advises the feeding of new wheat at the season it can be obtained to make hens start laying. She has observed through long years of experience that this is the effect and makes a practice of buying shocks of new wheat each harvest for her yarded fowls.

She deviates from the old rule of giving the soft food in the morning

and gives it at night. We should advocate the mash at noon in winter.

"Many men of many minds."

Another fancier says he can make young birds grow faster on a diet of oats alone than on anything else; that is they grow large, but are a bit apt to be angular. Then he rushes in a few weeks of wheat to plump them out.

Our young birds do not like oats unless it is boiled. Besides oats is such a bulky food for the amount of nourishment in it. Our "pet" grain is wheat for young and old birds, with corn for supper in very cold weather.

Some one says, "Dry grains have all the elements of growth, but in so small a proportion, some of them, that it is necessarily slower. The soft foods are a 'short cut' to the desired goal, and it is well known that the quicker a chick can be grown to marketable size the more delicate and toothsome the flesh."

This writer gives the following as proof of her theory:

"We recently visited a most successful chicken raiser who marketed 4,000 birds between April 25th and August 19th, the 4,000 bringing him in \$1,839.03, of which \$1,000 was profit. * * * He told us that it took him nine weeks to make a 1½-pound chick and eleven weeks to make a 2-pounder. You can't do that with dry feed."

Then she goes on to say:

"Mr. T. begins with a soft—no sloppy—mixture of meals and a very little meat meal. This, with millet seed and finely cracked wheat, is the food for the first week; then finely cracked corn is added. They are fed five times a day until three weeks old. After this three times a day; in the morning a mash, at noon wheat, and at night cracked corn. The mash is made of either corn meal or gluten meals and wheat bran in equal parts, with maybe a little meat meal added. Besides these three regular meals they have green food in the middle of the forenoon, cut fresh bone in the middle of the afternoon and all the skim milk they can drink."

And now comes the surprising announcement that the cost in food for this man to raise a 2-pounder is just 8 cents.

A WARM HEN HOUSE.

Poultry Investigator, Clay Center, Neb.:

Your correspondent, Hattie Byfield, in her article on "Chicken Fixings for Winter," concluded that stone houses would be preferable to

sod houses.

I would suggest that she and others try building concrete houses for poultry. They can be put up cheaply, and will keep out rats, etc., and will always be warm, without any dampness whatever.

Almost any one can put one up—without much trouble.

First excavate a trench below the frost line, say eight inches wide, or wider if thought best, but eight inches will do.

Use Portland cement, gravel and sand. To one measure of Portland cement add three of sand and five measures of coarse gravel. Mix the three together very thoroughly, three or four times hoeing, then add water sufficient to make it damp, then hoe it again, adding just enough water so that you will have a stiff mortar or paste. Shovel this into the trenches, throwing into it loose stone or brick bats. Continue this process until the trench is full. Set 2x4 posts seven to eight feet apart around the trench both inside and out. Then by placing plank or boards on the inside of the posts you have a mould into which the cement mixture can be placed, the same as if it was put into the trench. The posts must be set perpendicular and plumb and strips nailed onto the posts to keep them in place.

By the time the one course is filled in around the building, the plank or board where the cement was first put in can be pulled up and a new course started. For openings for doors and windows frames can be set inside of the moulds. Always see that these frames are set plumb.

For a building 12x20 6x8 feet high would take about eleven barrels of Portland cement. The stone thrown in promiscuously should not exceed four or five inches in size, and too many will weaken the structure, just enough stone to take up the concrete. Tamping will give it solidity. The floors can be put in the same way, excavating below the surface at least six inches, fill in with sand or cinders, making a coating of at least two inches, giving it a slight fall to the outside. If a smooth job is desired, both for the floor and the outside, use one part of cement to two parts of clean sharp sand, troweling the same as a plasterer does his work. Blocks of stone can be marked off on the wall.

Such a house would be warm and free from insects, or the troublesome rat. It would virtually be a stone house.

The time is not far distant when

most of our homes will be built in this manner, as the price of Portland cement, in consequence of great increase of its manufacture, is getting down to where it can be economically used for home building.

O. G. VANDERHOOF.

Brazil, Ind.

A HANDSOME, HELPFUL BOOK.

"More Money from Your Hens" is the title of a new book issued by the Stratton Mfg. Co. of Erie, Pa., manufacturers of the well known line of Dandy Green Bone Cutters. It is attractively printed in two colors, well illustrated, and goes into the question of making poultry profitable in a very thorough manner. Of course it places special emphasis on the value of freshly cut green bone as an egg producer and growth promoter. There is no doubt in the minds of poultry raisers that a little green bone added to the feeding ration is productive of the very best results in two ways: It not only saves in the grain bill, an important feature this fall when grain is high, but it also makes the poultry more productive in every way. It is a double-headed money maker.

The "Dandy" Bone Cutter has been on the market a number of years with increasing popularity. It has an automatic feeding device, is strongly and substantially built, has a large cutting capacity, and we know that numerous of our readers have demonstrated that it is a satisfactory machine in every way. You will be interested in the handsome book which they send free.

HAMBURG BREEDERS, ATTENTION.

The American Hamburg club will hold its annual meeting at Topeka, Kan., January 6th to 11th. This will cover the dates of the Kansas State Poultry show.

Premiums are coming in. We have some grand ones already. Be sure that you help in this matter.

Let us know what and how much you will give to help out the premium list.

Send your birds to the show, and let us move along with the other up-to-date breeders.

G. A. CHAMBLIN, Secretary.

Morken, Kan.

Buff Cochins.
Rose Comb Brown
Leghorns

My birds score from 90 to 95 by Frank Hitchcock and have won for two years in the show room. Prices reasonable. Write your wants. Mrs. Ida Bard, Imperial, Nebraska.

Practical and Profitable Poultry Culture

By
L. E.
Keyser

By far the greater number of people who keep poultry, and especially the farmers and villagers, are interested in practical methods. They wish to produce the choicest eggs and meat at the lowest cost. The production of eggs and market poultry is a safe business and one that is fairly remunerative when conducted on either a large or small scale. It can be successfully carried on on the farm or the village acre, the amount of land required depending on the extent of the business and the manner in which it is conducted. The farmer wishes to produce his fowls with the least possible labor. Usually when the chicks are of an age to require the most attention he is busy with his spring work, so in many cases where poultry is made much of an item the care falls to the women of the family, and to lessen the labor the chicks are allowed free range as soon as they are large enough to leave the hen or brooder.

A SMALL BUT COMPLETE POULTRY PLANT.

Persons having less land at their disposal must in a measure confine their fowls and chicks, and for such a well-arranged poultry plant is more of a necessity. A model plant can be constructed on two acres of land, which will accommodate from 300 to 500 laying hens, and on which 2,000 or more market chickens can be comfortably raised to roasting size or maturity. Such a plant should have a good brooder house, and either long houses with at least twelve compartments, or their equivalent in small houses, with commodious yards at both sides of buildings. The writer was at one time actively engaged in raising market chickens and eggs and built a small but complete plant on two acres which I will briefly describe, as it may interest some who anticipate starting in poultry.

The brooder house was a double row building facing the south, 112 feet long by 24 wide, with a four-foot alley running the entire length of the building, while in the center was a compartment 12x24, in which was located the office, heating, picking and feed rooms, and under this was the incubator cellar and coal bin. From this compartment the brooder house extended fifty feet each way. All the pens in one wing and half of those in the other were heated by a pipe

system. The pens not thus heated had sectional brooders and were used for very young chicks. The pens in this house were 10x6 feet, excepting those in which were located the sectional brooders, which were divided by temporary partitions, making them 3x10 feet. Thus the house had forty pens and a capacity of 2,000 chicks, as we rated it, but many poultrymen would have placed twice that number in this house.

The houses for laying hens were two in number, each 10x96 feet, divided into six pens each 10x16 feet, each pen having a roosting room and an open scratching shed. At the front of each pen was a yard 16x150 feet, and at the rear another yard 16x50 feet. The front of the scratching sheds were closed with wire netting and from each shed there was a small door into the smaller yard, while one from the house led into the large yard. During the winter from 25 to 50 hens were kept in each of these compartments, but when the first lot of chicks were large enough to leave the brooders, the weather warm and then hens on the range in the large yards, they were given the scratching sheds and small yards. Thus the hen houses were made to do double service, and the brooder house was also kept full the entire season. This gave this apparently small plant a very large capacity. After the chicks were disposed of in the fall the small yards were sown to rye and seeded down, so as to have a fresh lot of green food and grass for the chicks the next season.

Such a plant as this, however, is entirely too extensive for those who only wish to go into the business in a small way, and could not be rec-

ommended unless one intended to devote his entire time to the business, depending upon it for a livelihood. In such a case it is necessary to have a good equipment of buildings, brooders and incubators, for they are the first requisite for success. Where a man depends upon poultry for a living it is necessary to have a good equipment, for if he be handicapped by miserable makeshifts the continual loss will cut deep into his profits and may result in a total failure.

Most people who are in the business in a small way or contemplate embarking in it have buildings of some kind or have plans for cheap and convenient structures which will answer well their purpose, so I will not devote valuable space in an attempt to formulate plans for them, as each must be guided by his own individual circumstances, surroundings, etc. Neither was it my design to go into detail about methods of hatching, rearing and feeding chicks, as most every one who has been engaged in the business has a plan of his own and will be slow to adopt any method which is a radical change from the one with which he has in a measure been successful, but I may, in a future article, as the hatching season draws near, explain the methods which have with me proven successful.

THE EGG THE SOURCE OF ALL PROFIT.

The source of all profit from poultry is the egg, whether we sell them in the market or use them for incubation, and to produce eggs at all seasons, and strongly fertile eggs during the hatching season especially, is the aim of every poultier. Some wish to make a specialty of eggs only, others depend on the sale of fowls for market, while many combine both branches. Where eggs only are desired it is only necessary to raise enough chicks to make good the laying stock, it being necessary to dispose of most of the hens after

Prize-winning Light Brahmas, such as G. B. Clary, of Fairbury, Nebr., breeds.

they are a year old, as pullets lay much better than hens. Even here it is necessary to go into the market poultry business to some extent, as the old hens must be disposed of and among the chicks hatched to replace them there will be a large percentage of cockerels. If we keep the egg strains—fowls of the Mediterranean class, such as Leghorns, Minorcas, Spanish or Hamburgs—the amount received from the sale of surplus stock will be small and will probably not be more than equal the cost of the food, but in egg farming this is one of the minor items. The main object being eggs, we must hatch the pullets early and get them to laying before cold weather sets in, and by proper housing and feeding keep them laying all winter. The greatest profit is derived from winter eggs, although when the hens are given free range and allowed to hunt all or the greater portion of their food summer eggs are nearly as profitable, because it costs nothing or very little to produce them.

Most farmers and cottagers, however, desire to combine both market poultry and eggs, and for such the heavy-laying strains of some of the larger breeds are to be preferred to those of the Mediterranean class. The Brahmas, Plymouth Rocks and Wyandottes are all excellent fowls for this purpose, and when dressed their carcasses will bring the highest price in the market. It is not necessary for the farmer or market poultryman to attempt to raise show birds or to breed his fowls too closely to feather. Egg-producing qualities and size should be given preference over fancy points, but pure bred fowls of any breed will be found vastly superior to mongrels, as they will be larger and more uniform in size and appearance and bring better prices when sold.

GRADING UP COMMON STOCK.

Where one has a mixed lot of hens which are fairly good producers he can build up his own strain and in a few years have them quite uniform both in shape and feather. Select the best hens you have and mate them to a thoroughbred male of such breed as you prefer. The next season select the largest and best pullets and either breed them back to the same male or secure a new male of the same breed and as near like the old cock bird as you can find. It is not necessary to purchase a high-priced bird for this purpose—one that a fancier would call a cull will answer the purpose very well—but we would insist on having one of large size fairly good shaped comb and yellow legs

and skin. Yellow-meated chickens sell for better prices than white-meated ones, and cost no more to raise. Buyers of poultry in the west are not as particular as those in the east, yet as the cold storage men are now taking many fowls which ultimately find sale in the eastern markets they will discriminate more closely every year, and it will pay to have a flock that will meet the requirements of the best markets.

EARLY HATCHES DESIRABLE.

It is desirable to get as many chicks hatched early in the season as possible, but unless one has a warm brooder house it is not desirable to bring off a hatch much before the first or middle of March in most sections. March, April and May are the hatching months and chicks hatched in these months are far superior, both for layers and market fowls, to those hatched later in the season, unless one is raising winter roasting chickens, when August, September and October chicks are required.

ADVANTAGES OF THE INCUBATOR AND BROODER.

If we wish to make the most of our opportunity we must employ the incubator. Of course, many chicks may be raised by the use of hens for incubation, but it is difficult to find many sitters early in the season, and the work of attending to them, in case they are found, is much greater than caring for an incubator or two. In fact we would as soon care for an incubator holding 200 eggs or more as to look after one sitting hen, and the same is true where a greater number of hens or machines are employed. It is also much easier to care for incubator chicks in brooders than to attend hens with their broods. The same time required to feed and care for a hen with a dozen chicks will care for fifty in a brooder. We several seasons ago discarded the use of hens entirely for incubation purposes, as we found we could do the work much easier, cheaper and better with the machine. One or more good incubators, then, are really necessary to carry on the business to any great extent, and one will be found profitable even where but a comparatively small number of chicks are to be raised, as with its use it is possible to get the chicks at a time when they are most desired, and thus do away with the vexation of depending on the caprice of the hen.

MARKETING POULTRY.

All old hens and the cockerels from the early hatches should be marketed as early in the season as possible.

During July, August and September the market is much better than later. There is very little good poultry in the market at this season, excepting broilers, and the old hens, if well fattened, will bring a good price. The cockerels can be sold as broilers or held until they are of sufficient size to make nice roasting fowls, as the market seems to indicate. Sometimes it will pay to sell when the birds weigh but three or four pounds to the pair, but unless the price for such fowls is high it is better to keep them until they weigh six to ten pounds to the pair. The additional weight will often more than make up for the difference in the price per pound between a broiling and roasting chicken. At any rate get all that is suitable off before October 15th, as by that time the great bulk of farm poultry will begin to come in and the market is usually glutted and prices rule low. Many farmers fat all their poultry for Thanksgiving or the holiday trade, and as a consequence there is an overstock at that time. Of late the cold storage men have helped the commission men out in these emergencies and taken large quantities of stock at very low prices, which otherwise would have spoiled on their hands. The poultryman should watch the markets closely and get the bulk of his stock off before the decline in prices.

Good business methods are essential to make poultry pay, and these in connection with a knowledge of the business, good buildings, energy and sufficient capital to successfully carry on the work, will assure success.

COLUMBUS SHOW.

Don't fail to be at the great Columbus show, December 16 to January 2. All railroads pulling into Columbus will carry passengers at half rate. The show will be held at the Columbus Auditorium, the largest hall in the state of Ohio, having more than 25,000 feet of floor space, not including galleries, etc.

The management has engaged the following well known judges to place awards: Judges H. A. Budge, Charles Kramer, S. B. Lane, M. M. Barger and Judge Robert Champion, the well known English judge who has judged birds at the great Crystal Palace show of London, England, beyond a doubt one of the most capable judges on the English varieties in the world.

For further information in regard to the great Columbus show, address the secretary, F. A. BRIGEL, Cor. 11th and N. 4th Sts., Columbus, Ohio.

Winter Comfort for Fowls

. . . By Mattie Webster . . .

Already the chill of coming winter may be felt in the air, and the careful "head of the house" has completed repairs and made all things ready for the coming of this cold stormy old King Winter. This forethought and labor have been that the members of the home circle may be warm, comfortable and happy within a comfortable home, around the glowing fire, while wintry storms and winds are raging without in all their fury. But how is it with your fowls? Have you made every house they call home snug and comfortable for winter, or have you been so engrossed with winter preparations around the home that the poultry has been utterly forgotten? Alas, too often, they are unsheltered and uncared for through driving snow and beating storm! It is late to commence repairs and improvements in and around the poultry houses, but even if late it is better to do all that is needful for the fowls' comfort now than to leave it altogether. A house of one thickness of lumber, if the cracks are battened, may be made sufficiently warm to insure the health and comfort of the fowls. Indeed I think such a house, with tight fitting windows and doors, well banked up on the outside and with no broken window panes to let in wind and snow, preferable to the house built of two thicknesses of lumber with paper between, unless such a house has built in it a good ventilator. If too warmly housed and too closely confined the poultry become tender and the least exposure is a fruitful source of disease in the form of colds, roup and consumption. Now, do not think for one moment that I advocate the bare limbs of trees or fence corners as roosting places for poultry, that they may become so hardened that they are perfectly healthy all winter long. Were my fowls so cruelly treated as to remain homeless and shelterless on cold, stormy nights, I could not rest in my warm bed, and sleep would not visit my eyes because of my consciousness of the poor biddies' suffering.

An open scratch shed on the south of the poultry house is a great help in keeping the house warm, and as the fowls have access to such a scratching room they keep warm exercising, while becoming accustomed to the cold weather, and will keep healthy, happy and prove profitable all winter.

If on the farm, nice, fresh straw is always handy for use in these winter scratch sheds, but if the breeder lives in village or town, a load should be obtained now and placed near the poultry house for future use. Many flocks of farm fowls are allowed to pick their own living all the year around, and they live upon the waste of the farm, but such flocks do not prove as profitable as the poultry that are housed and fed for winter egg production.

A very great part of the waste grain is corn, and while this grain is an excellent food for fattening the fowls and supplying warmth to their bodies, it is not one of the best foods for egg formation. A few years ago oats was condemned as a food for the fowls, because of the danger, as many declared, of the sharp grains cutting through the crop, thus causing death, but now very many of the most successful breeders tell us it is one of the most desirable foods for poultry. From my own experience with oats as a winter food, I can recommend it as healthful and appetizing food for the poultry, and when I have fed it extensively in winter my hens have proved profitable as layers. In very cold weather it is best to feed corn, warmed in the oven, for one meal a day, but let not this grain be the main winter food. Oats, wheat and barley should have precedence, with a mash of ground grains in which is mixed vegetables, or vegetable parings, or cut clover, as an evening meal. In winter the fowls often suffer from thirst. Water is given them occasionally, but soon becomes frozen, unless the house wherein it is placed is warm enough to prevent it. Twice a day the poultry should be supplied with water slightly warmed, that they may quench their thirst and as a help in egg production. We know that a very great part of the egg is water, therefore if we would have eggs water must not be withheld.

Cleanliness, freedom from lice and mites, and plenty of room are other essentials to winter comfort of the poultry. Because it is cold and unpleasant work removing the droppings in winter, they are often allowed to accumulate and remain undisturbed until spring, by the careless or indifferent breeder, but this is far from the right way. At least once a week the dropping boards, if dropping

boards are used, should be scraped off and the droppings carried out. If no dropping boards are under the perches, but the floor of the house catches the droppings of the fowls, then even more necessary is it that they be cleaned out often, for if allowed to remain the fowls must pick up their grain from among the filth, and such feeding cannot be conducive to health. The nest boxes need to be emptied and cleaned out occasionally during the winter, else lice or mites may find a safe hiding place in them. Winter though it is, the lice and mites will be always with us unless we are vigilant and continue our fight against them. Do not let us delude ourselves with the comforting thought that they are all frozen to death. This is the best time to wage war against them with lice killing machines, insect powders, kerosene, gasoline, carbolic acid and liquid lice killers galore, as they may be more easily exterminated now than when they are multiplying so fast, as they do in summer weather. Some sunshiny corner in winter house or scratch shed is a wonderful help in keeping these pests in subjection, and if one just stands and watches biddy for a few moments as she scratches, rolls and dusts herself, or lazily lies, half covered in dust sunning herself, no doubt of the happy content the fowls find in such a bath will be entertained. The dust bath serves a three-fold purpose. It is a source of the keenest enjoyment, rids the fowls of lice that are upon them, and cleans and brightens the plumage.

Overcrowding the poultry house is a great mistake. I know it sometimes seems unavoidable. One has retained only as many of the old stock as is needed for next season's work, but the young stock that are intended for home use and those that are for sale must be housed, and if house space is limited, often more are crowded in together than should be. Being so crowded no room is had for exercise, the walls of the house become frosted and damp from the breath of the fowls and the air becomes fowl and impure, and often disease and death follow such discomforts. Better to dispose of all except those that can be comfortably housed, even if one feels very loth to do so, or else provide larger or more houses.

MATTIE WEBSTER.

THE SAME OLD STORY.

Mister Editor:

Mariah's hoppin mad and declairs she'll never sell anuther burd as long es her heads warm. You see it cum round like this: she has a lawyer

fren wat lives in Saryeues and is a mighty smart feller. He's rased sum Barred Rocks this yere wat wood put yure i out and es he has a good meny frends around Dryden he thot he'd show them wat good burds wuz by sendin sum uv them tu the fare, so he stade to hume frum church the suudy fore the fare and looked over every fether and trimmed them up to the queans taste and then wen tha wuz already fer to put into the coops tu ship he run each oue thru his ex rap masheen and pernounsed em perfeck. There wuz one cockerel that wuz the pride uv his hart and Sary Ann (his wife) cum in frum church just as he wuz puttin him in the box to ship; he told her that that burd would skore 100 under any fare judge, and that as he couldnt go to Dryden on account uv bizniz if she wood go she mite hav the \$2 that he wuz bound to win, to by her a new caliker dress. She jumped at the chanst and wuz around the fare ez smillin ez a basket uv chips and wen the judges cum to this burd she hed that look on her face that the poet wuz thinkin uv wen he sed that sayin about the slips atween the cup and the lips; and wen the boss judge see this burd he jest stood and lookt at him fer awile and then sed "Put both first and second on that feller, he's a corker." The other judge sed "I spose we ow't to run him thru the new improved ex ray masheen jest fer form; but uv corse a bird with such breedin ez he has couldnt have anything rong with him." And so in he went. The first feller lookt and sed "All rite," but wen the uth'er feller had lookt a long time he called for a brighter lite and then he sed he could see sines uv fethers startin on his legs that wood surely be purty near the surface within the next two yeres, and under our incomparable Standard uv perfecshun he had to be throne out. Everybody sed he wuz the finest burd wat wuz ever shone in Dryden, and folks cum fer miles around to see him. Now Mariar says as how the fathers wat make our Standard had no idee uv the ex ray masheen being used to find fethers with, and if tha had it wood hev bin diferenter. She says she will devote the rest of her life to havin the Standard changed so ez there wont be no disqualifercashuns in it. Nearly all the hart burnins and the cuss wurds in the chickens shows for the past ten yere hev cum frum this pervision uv the Standard and it aint rite, and ort to be changed.

Yours fer reform,

ZACHARY YEAKLE.

—Practical Poultryman.

Mrs. Ella Patrick, Clay Center, Nebr., feeding her prize-winning Buff Rocks.

Experience with Poultry.

Mr. Editor:—As a farmer I would like to give my experience with poultry. When only a small boy I was poultry keeper, garden tender and chore boy, and have been nearly ever since.

To the best of my recollection I never saw a flock of thoroughbred chickens until after I was grown. My mother, like nearly all the other good mothers, would swap a setting of eggs with some friend and by that way change or add to her flock.

This was kept up until about four years ago, when I persuaded her to sell all her chickens except a few Barred Plymouth Rocks. Then I went and bought some pure bred males and commenced breeding up our flock. I am now picking out the defective ones and disposing of them and trying to improve our flock as fast as I can. There never was a poultry journal in our house, not even a sample copy, until a few months ago. Now I am taking two.

Pure bred cattle and hogs have proven to the farmer that they were the most profitable when properly cared for, and so will thoroughbred poultry.

"Ignorance is bliss," so is the mongrel fowl to those who do not know the value of the thoroughbred and how to care for them.

Not being able to keep but one kind I have selected the Barred Plymouth Rocks and think they are a good all-purpose fowl. On the first of last

March we reduced our flock to forty-four. On the first of October I found that besides supplying our table with eggs and fry chickens, we had sold eggs \$20 worth; fry chickens, \$10 worth, and had on hand about seventy-five fryns and the original flocks, less ten. Six we sold in August and four were lost during the summer, two from disease and two by accident. The eggs averaged 8 1-3 cents per dozen and the fryns 7 1/2 cents per pound. Counting the amount used equal to the amount sold, I think they have paid well for their feed and keeping.

We keep our chickens healthy and in good flesh, so whenever we want to dispose of any we find a ready market.

A chicken needs clean, comfortable quarters, pure water, plenty of range to exercise on and sufficient food to keep them in good flesh. If a farmer has a span of horses the same color and size, in good flesh and good travelers, or a herd of nice cattle or hogs, all even and the same color and in good flesh, he need not hunt for a buyer; they will hunt him. The same with your poultry.

If this finds a place in your valuable paper I will send you our methods of caring for our chickens. Yours respectfully,

R. E. L. BLACK.

TIMELY HITS.

By Percy W. Shepard.

If all preparations have not been made, as far as is possible, for winter, do not delay in getting everything in readiness for the coming season.

It is past time to whitewash your

Buff Leghorns on G. B. Lobb's farm, Clay Center, Nebr., owned by Sare Hatch Poultry Co.

poultry house. Yet if it has not been done you should lose no time in doing it. Whitewash is indispensable to your work. It makes the poultry house brighter, cleaner, much nicer, and leaves no place for vermin.

If there are any repairs needed for your buildings get them done as soon as you can get time. Make the buildings wind proof and warm, fix up all leaks and replace broken glass in the windows.

Have all your birds selected and also mated if you intend to raise any winter chickens. Do not try to select your birds in an hour. Get a Standard of Perfection and study up on points. Then go over each bird separately, carefully noting each part and considering size, color, shape, etc., as is mentioned in the Standard. In this way you will be able to select your birds to the best advantage. Do not winter any "scrubs" nor old birds. Young hens pay best.

A FEW CONTRASTS.

First we will consider line breeding in its true meaning, compared with inbreeding or incestuous breeding. There are so many who do not seem to distinguish the difference, though expressed rather extravagantly. For that reason I will term one as positive and the other as negative, as there is in reality a wide contrast in the two methods, or rather the first is the embodiment of method and forethought, with an adoption of the means to serve the ends, together with a comprehension of cause and effect, an original object conceived and con-

tinually kept in view. The latter, inbreeding, is the opposite or negative, and well said when called negligent breeding, as it may not necessarily be closer breeding, but for lack of above principles and care, yet may really be more incestuous and disastrous by far than line breeding in results, though each are destructive in unskilled hands, hence only those who are systematic and painstaking in their methods, keen in observation and possessed of sufficient patience to have mastered most of the problems of reversion by weighing the proportions of ancestral influence through years of practical experience should attempt line breeding. Again no strain of fowls can be intelligently established without resorting to a pedigree system of breeding. The only substitute would be the use of a breeding chart, so systematized as to show to a nicety and at a glance the exact proportions of preponderance of blood of each of the original ancestors, though better yet is the employment of both systems. However, one is but a duplicate of the other, but so formulated as to express a different purpose.

I will not attempt here to explain the workings and merits of either system, as each are deserving of an article devoted almost wholly to its own subject. While the topic of line breeding is in hand it may be well to explain there need only be one reason of close breeding and that of parents to their offspring. The most vigorous ones then should be used in preference to any other quality, re-

membering that uniformity is the one great object of line breeding, hence great care here is also necessary.

The mating of brothers to sisters is the rankest kind of incestuous breeding, and I would advise no one to attempt it if you would succeed. There are thousands upon thousands of people who are greatly interested in fine poultry, but there is a great contrast between those who aim to perpetuate and improve pure-bred poultry and those who seem to possess an inherent desire to continually keep crossing the pure breeds, and thus undoing that which has taken many different fanciers years of patience and study, yes, and sums of money, to accomplish. Perfect pirates, if I may be allowed the term.

There is yet another contrast that is quite significant to the scientific breeder, for the same evil propensities are instigated even among some of those who only breed one single variety, inasmuch that they continually mate specimens possessing extremes, either in size, color, shape, markings, early maturity, profligacy, etc., which by laws of reversion prove unsatisfactory.

M. L. EDSON.

Jacksonville, Ill.

ADVERTISING.

Poultry advertising pays because poultry pays. No one will question the statement. Had the poultrymen the competition, the full market and the thousand and one things (that he is free from) to deal with, would the class of advertising placed by the average poultryman pay? Would it pay to answer an inquiry promptly if competition was such that delay was dangerous to a sale? Would it pay to write an attractive ad. if every other advertiser did? And would it pay to have an ad. that appeared like a quarantined subject (out when the guards were away), or a live standing ad?

The poultry business can put up with poor backing; the fact is no other business could stand it, yet because it is able to stand the pressure is no reason why it should, and the day is not far distant when poultrymen will consider it necessary to look after not only the placing of ads and the style, but answering the inquiries in a manner approved by the most exact business methods.

Buff P. Rocks.

Motto:—"Good stock at moderate price." Stock for sale after Sept. 15.

W. D. SWAIN, Pauora, Ia.

The Belgian Hare

By S. J. Mitchell

From the number of queries in the question and answer department in some of the Belgian hare journals, pertinent to the diseases which hares are heir to, one would think that they are naturally among the sickliest of domestic animals. We see complaints of so many different characters and under so many different circumstances and conditions that the question has been raised, Are hares, under the present system of rearing and keeping, unduly prone to disease? Until the time of my recent trip to California in the interest of the Belgian, I had about formed the idea that this question was at least worth discussion, but since I have visited dozens of very prosperous rabbitries in that state and noticed the extreme vigor, health and unusual activity of the stock to be found there, I am fully convinced that if hares give evidence of more diseases than would appear usual to any other class of domestic stock, the fault is not with the hare, but the way he is reared and manner in which he is kept.

The particularly gratifying feature which I noticed among California rabbitries was the large amount of room given the stock for exercise. It is nothing wonderful to see a California farmer plant an acre or two of carrots and in due season turn a hundred head of hare into the patch to dig carrots and feed for themselves. If other breeders are not so fortunate as to have a carrot patch, then hares are very often allowed the entire freedom of a yard or grassy lawn, where they may choose for themselves just what kind of vegetation they prefer to eat, and not have it pulled and poked at them as they eke out an existence in the often filthy confines of a hutch.

Why there are so many authorities who still recommend raising hares in such close confines, and in this respect disagree what the size of a hutch should be, is a matter of wonder to me. I am fully satisfied that hutches should be used as little as possible in the hare business, and it is a great mistake to suppose that hares will not become domesticated enough to stay about the place, the same as dogs or poultry.

This is not only an economic plan

as to health, but will result in large saving in feed. California breeders give their hares but one feed per day of some light grain or mash and the animals about dusk come through fences and over fields in all directions as regular as chickens to roost, that they may receive their daily rations of grain. In rearing hares in this way some occasional losses may be expected, in case an animal wanders off too far never to be found again, or perhaps some neighbor's dog may win one in a chase, but even then this is far better than to have a lot of droopy, drowsy-looking stock, often

Geo. H. Gillies, of Topeka, Kans. The hustling secretary of the Kansas State Poultry Association and editor of the Poultry Gazette. Mr. Gillies is ready to mail you a premium list of their show to be held at Topeka, Kans., January 6 to 11, 1902.

seen when the hutch plan is resorted to entirely. It is proper that hutches should be used at times, in case of a doe after being bred, or for her young up to a time when they are large enough to shift entirely on their own responsibility, but for the sake of vigor and health to the animals, and a saving of feed and time, better let the stock live half their time at least in open yards or fields.

This has not only proven to be the economic plan, but it must be remembered in their mode of living while not in captivity and the natural heritage of the rabbit. In case of a hare now kept in hutches, and refusing to

yield to medicines in case of some ailment, just turn him out to care for himself and he will find some herb or grass that will supply the remedy to cure, and in a couple of weeks come up looking sleek, fat and healthy.

Regarding the condition of hares, I must say that some people suppose that because the score card standard specifies the long, rather spare-built racy appearance as most desirable in preparing an animal for the show room, it is necessary to almost starve him for a time to secure the necessary reduction of flesh. A pot-bellied appearance will certainly cause a heavy cut in the rib and flank sections, but this does not mean that the animal is to have the backbone so protruding that the joints can be counted or that his ribs or hip bones should be seen. I would rather risk the alternative of having the animal a trifle too fat than a trifle too poor, even for the show room, for it is a fact that an animal a little too fleshy has far the better of the proposition, when it comes to vigor, brightness of eyes, shape of ears and condition of fur. The exercise a hare gets in the field brings about that long, racy appearance so much desired in all the shape sections of the standard.

When I desire to enter my finest animals in the show rooms for prize winning, I invariably give them a month's vacation out of the hutches to do as they please, and I have noticed that they select the coolest places in the heat of the day, keep out of draughts and all wet, damp places, eat what they like best and thrive better than when in hutches with twice the attention and care. About a week before the show I catch up the animals I want to enter, and though I find them sadly in need of cleaning and grooming, they are as wild and full of vigor as they are healthy. A good warm bath, carefully administered, a few feeds of linseed meal, and with some grooming and brushing they are ready for the show room, and equally as ready to win from any stock placed in opposition to them.

S. J. MITCHELL.

Houston, Tex.

A. J. WILLIAMS,

...Breeder of....

Silver & Golden Sebright, White & Buff Pekin, B. B. Red Came BANTAMS; Belgian Hares, White Rats, Calves. Write for Prices.

CLAY CENTER, NEB.

Thieves

and

Dogs

By

Emma

Perkins

As this is the time when thieves do break in and steal chickens, and as Hattie Byfield ended up her good letter along this line, I will take up where she left off and write some of my experiences.

I am very sorry to say that three or four farmers in our immediate neighborhood have lost nearly all of this year's crop of chickens by chicken thieves. Professionals, too, do the work all up nicely in one night.

This is worse than any skunk or weasel's work, as they will only take a part of the flock and come back the next night, giving you a chance at their life.

I do not mean to say that professional thieves live here, they only drift down the river in high water time, and stop with us just long enough to fill themselves with chicken and then float off down the stream with the next rise, and the folks down the line had better be on the lookout for them. Now is when they are getting in their work.

I will tell the readers of the Investigator my experiences with dogs and chicken thieves (as you all know they are usually classed together).

We were aroused one night from our sound sleep by loud shrieks from the old hen. This meant an enemy in the camp. My husband jumped up and ran to the hen yards, but there were such thick bushes around the hen house the thief had time and a good opportunity to make his escape before he could get there.

Every few days we would hear of neighbors losing their chickens. I could not sleep at night, thinking our time would be next. I had about two hundred very fine Barred Plymouth Rocks all in one house. If they made a raid on those they would leave the platter empty.

I went out to the hen yard one evening, sat down upon a stump near by and set the wheels to working in my head. There was the gate leading from the chicken yard into the orchard, then the orchard was full of bushes and surrounded by a large hedge fence, with only a few openings in it for the accommodation of tramps and movers to get their supply of apples and peaches, and chickens, too, if they preferred them.

The surroundings were just as

The above cut shows a pen of White Wyandottes in the yards of Mrs. C. Rockhill, Harvard, Nebr. She breeds Orpingtons also.

handy as could be fixed for the chicken thief, and the problem to solve was, how could I make it handy for myself to know when they were there?

The happy thought struck me, I will run a telephone from the hen house to my bed room, and that will tell me if any one enters that door at night.

I placed a heavy post against the door, fastened a piece of common binding twine to the bottom of the door, let it run along on the ground under the fence and on to the house. Passing through the key hole and attached to a flat iron setting on a balance on the outer edge of a chair, it was ready to give the alarm by the slightest slack of the cord.

This being done, I could go to bed and enjoy a good night's rest. After this process was kept up for several weeks without any signs of molestation, we were awakened at the midnight hour by that awful alarm—the iron went tumbling to the floor. With trembling hands I seized the broom and my husband the shotgun, and we made our way toward the hen house, but before we got there we discovered a passing car had run over the string and gave the alarm. The hen house door was as I had left it, but had it been a thief we surely would have caught him before he had spent much time with the chickens.

As the telephone is used in most all kinds of business, why not use it to catch the chicken thief?

I knew another person who invented nearly the same plan to save a flock of turkeys. He had lost turkeys at different times, but saved them by

the telephone process. His plan was like ours only he extended the string from the door across over the head of his bed, tied a small tin pail to the end of the string and put a few small rocks in the pail, and it came tumbling down on his head.

But this all happened before we got a good dog to watch at night. I write this experiment for the benefit of those who have no watch dog. I have tried both and I'll take a good dog every time. But a good poultry dog must be trained from a pup to know that that is his business. The best one we ever had was a large bulldog. He was raised from a tiny pup with the chickens. He knew where they belonged and where they did not belong. He knew it was against the rules for a hen to be in the dooryard, and if one should get in and attempt to get out through a place too small to admit her body to pass through he would chew her legs off, so she never got in but once. But he was trained that that was his business to look after the chickens.

His sleeping box was in the hen yard and if anything made an attempt to molest the chickens he was right after it. We moved to town and had to find Cap, as we called him, a new home, as he had always been used to country life and taking care of poultry.

The family that were so lucky as to be the owner of Cap tied him to a post of their back porch until he would forget the home of his puppyhood. But one night loud and distressing shrieks came from the hen yard, at which Cap bounded up with all the force he could rise with and away he

went to the hen house, taking the post with him. He run the skunk under a pile of wood and gave the alarm for his new master to come to his rescue, which he did and killed his game.

I hope the time will soon be when we will not have to guard against thieves. But I do not think the time will ever come when we will not need a good watch dog. They are as essential as an incubator, for what will it profit us if we raise hundreds of chickens or poultry and have them carried off by vermin or stolen.

EMMA PERKINS.

Ravenwood, Mo.

Keeping Hens on a City Lot

Keeping poultry on a city lot has not all the advantages of the farms, but not as expensive as buying eggs and fowls for the family use. Poultry business, like any other, can be a success or failure if managed on a city lot or a farm. King Solomon, the wisest of all men, said: "He also that is slothful in his work is brother to him that is a great waster." There is no failure for the man or woman who is willing to work with hands and head. I do not mean that you should rush into the fancy at a jump or a dozen hens to supply the family table with fresh eggs, fried chicken and roasts, and the same twelve to be prize winners at every poultry show, with a handful of grain whenever you happen to think about them or a house 2x4 for a laying room, scratch shed and roosting room, and if they happen to scratch up a favorite flower bed in search of insects or worms, "Chickens are more bother than they are worth." The houses need not be expensive, neither is it necessary to give chickens full possession of the lawn. A few hens can be confined in a small yard. Why do I say a "few hens?" Because an overcrowded poultry yard is not the way to success, and don't try it. From a dozen to thirty, according to space, can be kept very reasonable. The table scraps can be used to a good advantage. Have a receptacle convenient, graves, meat scraps or left-overs, I call them, that can be stirred, thicken with meal and shorts, for half their breakfast, leaving the fowls a little hungry to scratch in the little for grain previously thrown there. Such as leaves, tops, rinds, peelings, can be used and much relished by the fowls as a green food, fed at noon, or for a change boil all together, thicken

with meal for a warm, not hot, mash for morning; for the evening meal feed grain, corn, wheat and oats, more corn in the winter to keep them warm. Don't feed exclusively of any one grain, for fowls, like persons, get tired of one bill of fare. These, with clean fresh water, clean quarters and grit, cannot fail to bring success. Try letting your fowls out every day after four o'clock. They will not destroy the lawn or flower beds, but scratch for bugs and get green food, too, and the lawn clippings can be saved, hung up in sacks out of the way, and used in the warm mash for winter as a green food. Every one knows, in Nebraska at least, how destructive the grasshoppers have been. I have saved my garden by letting in, during the day, a few of my Buff Cochins

I should keep the breed I liked best, but by all means thoroughbreds. Then if you have a few extra eggs they may be sold to some one for hatching, and perhaps a few pullets and cockerels more than can be kept over. These will sell for a much larger sum than mongrels, thereby helping to pay some of the hens's expenses. Many times I have kept account of feed consumed when the breeding pens were yarded, the eggs and chicks sold, and always came out with profit, money to be used for the many little things so dear to the feminine heart. Try keeping a few hens this season, and you will not only see the profit side, but the satisfaction of having eggs and chicks to fry when wanted.

IDA E. BARD.

White Rock fowls and chicks on Sure Hatch Poultry Co. farm.

chickens. The only damage they did was to eat the lettuce I purposely planted for my ducklings. Is the "bill of fare" I have given expensive and requiring much labor? How often do we send to the grocer for eggs, especially in a small town, and no eggs is invariably the reply, and when we do get them they are not always fresh. I would urge, keep a few hens. 'Tis the little things saved that often leads to success. As the little tot said when asked by her sister if she bounced too hard when riding the horse on a trot, "No, sisser, I's don't bounce hardly any. I's jist up all the time." So must we to be successful in any occupation be up all the time and ever watchful to make the most of our opportunities.

Which breed is best to keep?

That would be a matter of preference. Any of the large breeds bear confinement, and with care there is not much difference as far as utility. There are but few exceptions. We all have an eye for the beautiful, and

If your neighbor's hens are troublesome

And steal across the way,
Don't let your angry passions rise,
But fix a place for them to lay.

FOLDING EXHIBITION COOPS.

It is now time to look out for your exhibition coops and I would call your attention to the ad of Wm. Miller, of North Bend, Nebr. Mr. Miller makes a No. 1 coop and makes them upon honor and is just what you want. He makes them to fold and to be stationary. Any one needing coops will do well to correspond with him at once.

Eli-Fli Chaser...

The Man's money saver. The animal's friend. Try it once—Have it always. Guaranteed. Your stables and stock freed from the summer pests at a cost of less than 5 cts. per month. Cheap, Safe, Effective is Eli-Fli Chaser. For \$1.00 enough liquid for 10 cows 15 days and a Sprayer, or 25 cents per quart for liquid alone. Address.

The Vall Seed Co., 150 N. Delaware St., Indianapolis.

Special price on 5 gallon cans.

Poultry Investigator

is published the first of each month at
Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.00 per inch each insertion. One inch one year \$10.00. These are our only rates for advertising and will be strictly adhered to. We treat all alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of POULTRY INVESTIGATOR is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in THE POULTRY INVESTIGATOR.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

ERROR IN AWARDS.

In the list of awards at the State fair published last month an error occurred in the Black Langshan list for first pen of chicks, first and second pullet, first cockerel and first cock, was credited to J. Cook Johnson, and should have been credited to J. A. Johnson of Holdrege, Neb., one of the best breeders of Langshans in the state. We are sorry this error occurred, but mistakes will happen in the best regulated families.

Comments on October Issue

It is seldom one issue of a journal is as full of good things as the October number of the Investigator. I thought I would decide in my own mind which was the best article in it, but when I had read them all I felt so thankful I was not a judge for a prize paper. If the editor had offered a prize for best article in the October issue and I had been one of the judges I should certainly have confessed my inability to decide between the many good ones which is the best. I am so interested in sod buildings spoken of by Hattie Byfield, though we never build them in Missouri, at least not the part in which I live. But like her, I have this season had to contend with rats, minks, dogs, cats and hogs. The dog has been taught to let fowls alone and but for him the polecats and minks would have devoured my chickens in daytime. I have also taught him to run the hogs. The cats are disposed of as quickly as they are known to be guilty. I believe in giving every cat a fair trial.

I am surprised that no turkeys were shown at the Nebraska State fair. I am sure it was not because the state does not have fine turkeys. I happen to know she can boast of prize-winning bronze turkeys. I think one reason turkeys are not shown in larger numbers is the heavy expense in shipping. And turkeys lost so much in weight by shipping that one some distance from shows stands a very poor chance to win. But it does seem that nearby turkey fanciers should exhibit. Again it is very hard on turkeys to be cooped in show rooms. I believe that there should be an apartment especially for turkeys without any fire in it even in coldest weather. Those visiting the show would only be in this department a little while at a time, so it would not hurt visitors. There should be a good light that could shine directly on them. The best judge in the world could not correctly judge turkeys without a good light. Another reason, I think, why there are not larger exhibits at the winter poultry shows is that generally speaking there have not been very great inducements in the way of prizes for turkeys, compared with those for chickens.

I know that there is a great deal said and written against offering valuable prizes, and it is a forcible argument with some that prizes cause the eager seeker to practice fraud in order to secure the prize. The person who would practice fraud to secure a prize would practice it to secure the

honor, since it is the advertisement the fancier is working for principally.

I have no argument or fight to make either for or against prizes. I would exhibit as readily for a blue ribbon as for an expensive prize, but I think that all the valuable specials should be more evenly distributed than they generally are. Yet I know it is hard to decide just how they should be placed and those interested most in turkeys should take part in getting up specials for turkeys.

I am becoming so interested in ducks that Mr. Mills' article on Indian Runner ducks fires me with a desire to get some eggs next spring. You see I am close to St. Louis and I want to raise ducks for the World's Fair market. I tried to get a start this year, but the dog killed them until only three are left. He will not kill any more, as good whippings taught him better manners. I am convinced there is money in ducks. I want to ask if the eggs are as salable as chicken eggs? I am not posted on this point. You see I have only this year decided to try duck culture.

I do not think Mr. Blanchard's incubator talk out of place, as even at this season many are setting incubators. Already I am getting inquiries for incubator eggs. And certainly her talk is very sensible. Incubators are a necessity with the increased demand for poultry. We could not afford to do without them, and farmers' wives are finding them necessary. I am sure the time is not far distant when incubators will be kept in stores just as washing machines are now. To me it is much easier to hatch with an incubator than with hens. I keep one incubator in my dining room, the other in a bed room, and an incubator some years old did better hatching last spring than since I had it, simply because I managed the moisture better. I followed directions at first to keep moisture pans filled from start to finish. Last spring I decided to keep just a little moisture from start to finish and keep the heat a little higher, and the hatch was good.

Mr. French's talk on Leghorns gives me a desire to return to my first love, the Leghorns.

I am so glad that Mrs. Webster gives her talk on grading up the flock. I think such practical advice is what the amateur needs. They are not always able to buy the best and the advice of so many writers to start with the best or none deters them from trying to become fanciers. I think the better advice is that which Mrs. Webster gives—buy the very best you can.

afford and grade up as fast as possible.

I had intended reviewing the especially good points in each paper in order to fully impress them upon the minds of those just entering or contemplating entering the poultry business. I find that space will be too limited for that. Yet I must refer to the excellent article of Rev. G. A. Chamblin, in which he says: "If the breeder has a hankering after the big breeds he will do better with them." In short, the breed you fancy most is the one for you to start with. I have no axe to grind in advising the amateur to consider the B. P. Rock before he makes a final decision of which breed he will start with. I am not personally partial to this breed over two others, and I have no more of this breed to sell than I have of two others. But I do recognize the fact that the majority of people are decidedly partial to the B. P. Rock. I also know that market buyers encourage farmers to cross with the B. P. Rock cockerels. Knowing this, I know that if one has only a small sum to invest he will receive returns from this breed quicker than from any other. If he can only buy a dozen hens and a cockerel, I am presuming that he is just setting up in the business and has no chickens to start with. He can get a dozen B. P. Rock pullets and a hen and a cockerel, starting with just good thoroughbred stock. If he will take a poultry journal and buy the Standard of Perfection and attend one good poultry show, he can raise and learn how to cull his flock after the first season. He can sell his culls on the market at a higher price than the mongrel would bring. Taking his best females and buying as good cockerel as he can afford, never be afraid to pay a good price for a cockerel. If he proves desirable keep him two years. I have learned that a male should be kept two years if he is satisfactory. The inbreeding does give a more even flock. Now the amateur has an even, nice appearing flock, and if they are not prize birds, as only a small percent of the B. P. Rocks are prize winners, still they are salable, and if you will let people know you have them you can sell all your cockerels as breeders. You many not get the high prices of the fancier, for your stock does not merit them, but if you sell your cockerels to your neighbors at from one dollar to two dollars each you are doing well. In some localities if you only get fifty cents each you will do well. But don't be satisfied with these prices. Work for higher prices by improving your stock.

I am candid when I say that I think B. P. Rocks are the hardest breed to get right I ever bred, except perhaps the Wyandottes (Silver). But as it has been an old adage always, "There is more pleasure in pursuit than in possession," I certainly have had a great deal of pleasure in pursuing perfection in B. P. Rocks. The pleasure or possession is still reserved in the vault of the future. But of one thing I am always certain, that I will never have a surplus of B. P. Rocks. All grades can be sold at a price that will pay, and I have never raised any other breed of which I could say this. There need be no misrepresenting stock to sell it. All that is necessary is to have good blood and tell the truth. If you haven't prize birds and your customer wants prize winners, tell him you haven't what he wants. There will be plenty of opportunities to sell what you have. If people could be made to believe it, there are other breeds as good as the Plymouth Rock, but this breed has the right of way now and we had just as well put our personal preferences aside and raise this truly American breed if we want the most popular.

"Does a Poultry Paper Pay?" by Mrs. Belle Utly, shows very conclusively that it paid her. I have sometimes wondered at the positive ignorance on the part of farmers in regard to poultry. They come miles to ask me questions that are answered in almost every poultry paper one takes up, and if I suggest that twenty-five cents a year will keep them supplied with useful information a whole year they say, "Oh, well, I don't have time to read and I will just get you to tell me what to do." Often they could read the journal in the time it takes to come to my house. They also forget that the time of the fancier is as precious as their own. Others expect information for a two-cent stamp for which poultry journals pay a good price. It is often amusing to read the patronizing letters of inquiry. They begin by hattering the fancier and end with the demand for information in a manner which clearly says, "Now I have paid you the compliment of asking your advice; send it by return mail, as I may lose my chickens or turkeys," as the case may be. I do not feel under any obligations to answer letters of this character at all, as they never come from customers. A person who spends money to buy good stock always asks for information in the most kindly manner, and it is always cheerfully given. I often receive postal cards demanding of me an immediate reply, telling the writer what to do for certain diseases. If

A first prize Buff Wyandotte pullet at Lincoln, Nebr., and St. Joseph, Mo. Began laying at 5 months old. Owned and bred by Mrs. E. W. Orr, Clay Center, Nebr.

only once in a long time we had these demands we could afford to sacrifice our time for the good of others, but every fancier knows that the demand is often made. I am always glad to answer through the journals for which I write any question I am capable of answering. Only yesterday an inquiry to know what is the trouble with turkeys. No journal is mentioned, so I send answer through the Investigator. Symptoms, running at the nose, eyes and head swelled. Disease, roup. Remedy, Mexican Mustang Liniment, used as directed on bottle; or bath in hot salted water by putting the water in a vessel and plunging the head entirely under the water; wipe with dry cloth, pressing all the fetid matter out of sores; rub with Hall's Roup Cure. Give Cushman's Roup Cure in drinking water. Bathe in strong alcohol camphor. Mix carbolic acid, tincture of iodine, equal parts, in lard sufficient to make a salve, rub head and put in nostrils. Also grease the back where they put the head under wing. Do not use all these remedies at same time, but if one is not convenient get one of the others. There are many good roup cures. Mrs. May Taylor advertises one. By the way, Mrs. Taylor, you sent me a box of envelopes instead of sample box.

MRS. BETTIE GLOVER MACKEY.
Clarksville, Mo.

Second annual exhibition at Butler, Mo. December 31st, 1901, to January 3d, 1902. Thomas W. Southard, judge of poultry; Reed Storms, judge of Belgian hares. Our premium list, now in the hands of the printer, will offer more cash and special premiums than any association in the west outside of the large cities.

W. W. GRAVES, President.
C. A. ALLEN, Secretary.

The Golden Wyandottes . . .

. . . By J. C. Kapsner

There are a great many poultry raisers who desire to learn about the Golden Wyandotte chicken. So I will attempt to give some light on the subject of their usefulness as an all-purpose fowl.

It is generally conceded that the Wyandotte fowl is one of the most prominent of all American classes, more especially as an all-purpose fowl. Their seize is of an average medium; cock, 8½ pounds; hen 6½ pounds. Now this means when bred up to the standard. This is a point of the greatest importance, and above all other points one can mention.

Their build is of rather a blocky order, full in breast, a short back, good strong bone, with clean yellow legs, and skin yellow, a well curved neck with a bay eye and rose comb on top of head, not too meaty (as meat is of little use there).

Our aim in breeding the Golden Wyandotte should be to get them as perfect as possible and up to the Standard of Perfection, and when one begins breeding them they should get as correct a type formed in their mind, observe when a mistake is made, remedy it, try again, go to a poultry show, bother the judge just enough to point out your weak points and be quite inquisitive on the subject. You will find if persistent that your reward will come. The G. W. as an egg producer does not take a back seat, but is rather at the head of the class among all varieties of similar weight, and better than the smaller varieties when the question arises which are the best winter layers. I must stop right here and explain one incident which really caused me to choose the Wyandotte. On one cold frosty morning in midwinter I called on the doctor. He invited me in his house and I there happened to see a basketful of eggs he had just gathered. I was interested, as I then had the Leghorns, but eggs were scarce in winter time with us, so I asked him what kind of chicken he had. The Wyandottes was his answer. I needed but little further inducement.

As for beauty, their plumage is bay and black. The center of each feather should be a rich golden color, while the outside is jet black. This gives a contrast not so abrupt, but a mild and very pleasing appearance to the mind and eye.

When the chick first makes its appearance you have the color. You

watch them day by day and finally you become somewhat discouraged with regard to their beauty, but when after about three months' growth the full feathering begins you will notice a marked difference day after day. Then you begin to speculate, admire and choose which of them will be the best. You will then also notice their shape as well as the clear lacing and compare, and now if you find those among your flock having size, shape and color, you feel contented and pleased that your year's efforts have not been in vain. You may depend that it matters not how many good ones you will raise. There is always a demand for them at a profitable price. (Also here is a serious problem to solve. You must let yourself be made known through the various poultry mediums, as would-be purchasers cannot through imagination tell where you are)). Now it is not a mere profit to raise Golden Laced Wyandottes, but a pleasure and recreation not obtainable with any other

breed of chicken. (That is my way of seeing it.) Their habits are of a docile nature, although very good foragers and nine times out of ten will steal their nest if given a chance. In hardness they are second to none, are good sitters, but not persistent in being broody as some of the larger breeds. This is one of the points one should not overlook, as with the excellent success we nowadays hatch chickens with incubators we should keep hens laying eggs and cackle rather than sit and cluck. The former is more profitable as well as pleasing to any one. In conclusion the Golden Wyandottes for beauty and utility combined are unexcelled.

J. C. KAPSNER.

POULTRY CHATS.

By Mrs. C. A. Blanchard.

I went to talk of several things this month. The cold, rainy weather of this fall is likely to give us trouble if our birds are not properly cared for. Some people think that birds in the

A sample of Black Langshan bred by Ben S. Myers, of Crawfordsville, Ind. Winner in the great Chicago Score-card show.

trees are all right until real cold weather, but we have come to the conclusion that birds are better in houses. It is no small task to teach a brood of chicks to roost in the house after they have become accustomed to the tree tops. It is much easier to move the brood coop a little at a time towards the house, then finally set it inside the house. After they are accustomed to it there it can be taken away and they will go on the roost. The brood coops must be watched and moved before the chicks outgrow them. Where a brood of chicks do well they are not long outgrowing their coops, and sometimes their houses. If they are crowded at night or shut up too closely they become heated and when let out they take cold.

shape, houses banked up where it is needed, hinges put on the doors and, in fact, all those little things done that put houses in shape for winter weather.

Have we all been looking after lice as closely as we ought? Our chicks cannot fit themselves for laying or show birds if there is a hoard of insects living on them; they must be gotten rid of in some way. Kerosene is sure and is always at hand, but be careful in using it, as it blisters wherever it touches the flesh. Lard can be mixed with it and makes it safer to use, but it makes such grimy looking birds.

In planning the winter quarters have some place to put sick birds by themselves, where they can have prop-

yet successfully edit a farm journal. I know of a successful poultry judge who does not own a chicken. I also know of a fellow who is one of the worst sinners on earth, yet he can edit the Christian page of a great daily paper, and say such beautiful things, and can paint a picture of the happiness of a Christian life, so that one can hardly doubt his sincerity. It is possible for a man who knows very little about poultry to successfully put out a mighty fine poultry paper, yet when a poultry paper is managed and edited by a man who has had years of experience in the poultry yard and show room, and is acquainted with all the minute details of the chicken man's needs and requirements, you can look for some-

White Plymouth Rocks at feed time in the yards of Mrs. C. A. Blanchard, Friend, Nebr.

Brooders and coops must be cleaned often and sprayed with lice killer or kerosene. One of our handiest implements around the poultry house and brooders is a hoe with the handle sawed off to about six inches. It can get into nest boxes and brooder floors much easier than one with a longer handle. That is one thing I can always find, as it is no use anywhere else about the farm.

Supposing by this time that our chicks are all in their houses, where we can keep them protected from cold rains and chilly nights we must not close the houses too tightly, but must see to it that they are in shape for winter. Knot holes, cracks and broken lights of glass must all be got in

er care and not be tramped on by the well ones. It is much the safer way. If any contagious disease gets among them and the sick ones are removed it keeps it from spreading, thus keeping the well ones in better shape and giving the sick ones the comfort that sick fowls need. Being by itself would often save the life of bird, while if it was left with the flock it would be starved and tramped to death.

Friend, Neb.

THE BACK YARD FANCIER.

By C. H. Icken.

It is possible for a man to live in a city of many thousand inhabitants, have an office in the sixth story of a sky scraper, hardly ever seen a farm,

thing pretty good in the way of a poultry paper, and such I believe is The Poultry Investigator. Its going to be a pretty good paper to read, and in which to advertise your business.

First, I wish to say a word in behalf of those whom some people sneeringly and persistently are wont to call "The Back Yard Fancier," having reference, of course, to those who are limited as to the size of their quarters and the number of fowls on hand, and which necessitates the carrying on of their operations, in a small way, usually in the back yard, or on an adjacent lot. This "backyard" business is an acknowledged drawback, when it comes to the breeding of fowls in large numbers, yet it is of great benefit

In more ways than one. The "backyard" man, having only a few fowls, learns to know each individual fowl. He can tell you the sire and the dam of a certain choice specimen, for generations back. He can also tell you the number of eggs she has laid, how many broods of young she has mothered, and can tell you the score and cuts of each section, and in fact has the history of each fowl that he owns, right at his tongue's end. Now don't you think this is of some advantage? Don't you think that a man, so informed, could breed more intelligently for a higher yearly average of eggs laid? Don't you think that such a breeder, knowing his fowls so thoroughly, and knowing the standard requirements, could mate up a pen of his fowls more intelligently and with more satisfaction who owns hundreds and is not so tory results at culling time, than one thoroughly posted as to the quality of his birds? This same reason is the one which has brought out the so-called specialists. The much advertised specialist is in most cases a "backyard" fancier, and having only room for a few fowls, he cannot help being a specialist, and so advertises to that effect. The best cockerel I ever owned in my life I bought from a fellow who bred fifteen varieties, yet he had them on separate farms, and each farm had its own man to look after that variety. Virtually a "backyard" on a little larger scale. But, if you have that despised feeling in your heart for a fancier who is handicapped for want of room, and facilities otherwise, take it out! He's a dangerous man to compete with in the show room. He's a dangerous man to dispute with when it comes to quoting the standard requirements of, or the merits of his variety, and, taking it all in all, just as worthy of consideration and respect as the great Mr. So and So. Long live the "Backyard Fancier"! Nine times out of ten he grows into a mammoth plant on a 160 acre farm, before you know it, and if he sticks faithfully to his chickens, he will surely make a success of the business, sooner or later. The backyard is the kindergarten of the fancy poultry business. Its the primary department, so to speak, where you and I have been taught, by rough experience, our first lessons in this so-called art. And by the way few of us have as yet graduated or received our diplomas. You can stay in the business all your life, and rest assured, brother, that you will never know it all. I used to sing that good old song, "The Half Has Never Been Told," and if it does not seem sacrilegious, the one who wrote it must

have at one time raised chickens. So in going down the poultryman's path of life, do not despise or speak ill of the "Backyard Fancier." He'll grow, undoubtedly, and some day rise up and call you blessed.

PERFECT CHICK FEED.

Armington, Ill., June 15, 1901.

Mr. W. F. Chamberlain, Kirkwood, Mo.:

Dear Sir—Enclosed you will find another order for your "Perfect Chick Feed," and again I will have to ask you to rush this order, as some of the parties are wanting it on account of their turkeys, as it has proved to be an excellent feed for little turkeys as well as chickens. I have never had a single complaint, but instead they all praise it highly, and I think in another year that the people will learn, as I have learned, that Chamberlain's "Perfect Chick Feed" means perfect success in raising little chicks, and no successful poultry raiser can afford to do without it. If you could only visit my poultry yards and see the big, healthy fellows, and then visit a yard where it is not fed and note the difference, you would not wonder at me expressing so much gratitude over being able to procure such excellent feed. Yours truly,

C. F. LIPSEY.

BARGAINS IN BREEDING STOCK

At Golden Rule Poultry Yards. I have a few birds that I used in my breeding pens this season that I will sell at a bargain. They are hens and two cocks, White Plymouth Rocks, Empire strain. Write for prices.

Young stock, White Plymouth Rock and pure Dustons. White Wyandottes for sale this fall.

MRS. MATTIE WEBSTER,
BELMONT, WIS.

200 EGGS TO ONE HEN

This is THE AVERAGE your flock should produce: and it is only made possible by the use of

Midland Feed Meal..

We make Ten Brands, as shown above, and each one is a specific for its purpose. They are a

A Combination of Grains and Brains.

Complete and ready to feed. Needs no green bone or other accessories. There is not, and never has been anything on the market to compare to it. Thousands of poultrymen are using it and it is an acknowledged standard today. Random or haphazard feeding is no longer profitable, and the man who persists in it must have FEED TO BUY. Profit is only assured where every pound of feed is made to show returns. Our balanced feed will do it as nothing else can. It costs but very little to try it and be convinced. Manufactured by the MIDLAND POULTRY FEED CO., Kansas City, Mo., and sold by

Your Nearest Feed and Grain Dealer.

Boston, Mass., Jos. Brock & Sons, 31 N. Market St., New York City, Excelsior Wire & Poultry Supply Co., 25 Vesey St., Philadelphia, Pa., Johnson & Stokes, 217 Market St., Midland Poultry Food Co., N. E. Cor. 2nd and Main Sts., Kansas City, Mo., Petaluma Incubator Co., Petaluma, Calif., C. E. White, Chestnut Hill, Pa., The Vail Seed Co., Indianapolis, Ind., A. C. Wooley & Co., Atlanta, Ga., Rochester Poultry Supply and Seed Co., Rochester, N. Y.

BUFF COCHINS

Exclusively.

Just What You Are

Looking For . . .

The Pure Golden Buff. Winners in any company. Elegant in shape, profusely feathered, as good as the best. Prices low, write me.

B. H. DUNN, Clay Center, Neb.

POULTRY CUTS at CUT PRICES. CATALOGUE FREE. Harper Eng. Co., Columbus, O.

Flemish Giants

We have strictly A No. 1 Giants, headed by W. L. DORR, imported Sept. 1900. One of the largest and best Giant bucks of his age in America. His ancestors present an unbroken line of England's best champions. 8 weeks old Giants \$5 to \$10 per head. You cannot get better ones at any price. Dr. I. C. Stephens & Co., Carleton, Neb.

300 Buff and Black Wyandotte Chicks.

For sale now. Breeders or fine exhibition stock. Give me a chance to please you.

HENRY HESS, Winona, Minn.

White P. Rocks Exclusively....

My Rocks are of the best strains to be found and I have a fine lot of chicks to sell reasonable. Write,

MRS. NANCY WATSON,
Lincoln, Nebr.

David Larson,

Wahoo, Nebraska.

Expert Poultry Judge

I have had years of experience in breeding, mating and judging. For reference to qualification, write POULTRY INVESTIGATOR, Clay Center, Neb. I am open for engagements.

Midland Formulas...

Ready Mixed.

1. Nursery Chick Food.
2. Growing Chick Food.
3. Fattening Chick Food.
4. Egg and Feather Producing Food.
5. Nursery Duckling Food.
6. Growing Duckling Food.
7. Fattening Duckling and Gosling Food.
8. Layer Duck Food.
9. Stock Ducks' Summer Food.
10. Growing Gosling Food.

THE TRUTH ABOUT BUFF ORPINGTONS.

Statements with reference to newly introduced breeds are almost invariably more or less overdrawn. While the subject of our remarks is by no means a newly-made breed, yet to the American fancy it is at present only known and bred by the few, and much is to be learned of its breeding, tendencies and real worth by a large majority of our fanciers. I have gone to no little trouble to ascertain the plain, solid facts regarding this breed, and my investigations put the breed in no unfavorable light. What I have to say as regards this breed is based on no selfish or personal interests, as I never owned a Buff Orpington, but have been favorably located in close proximity to those who do. And in my trips over the country, mating and scoring, I have met them at several places, and only the highest praise of their real utility and value has ever come to my ears. I have made it a point to question each breeder very closely regarding the breed, and the following is what I have been able to learn or saw with my own eyes. Perhaps we may best start with the egg. Buff Orpingtons lay a rather medium-sized egg, in most cases about the size of a medium-sized Leghorn egg. I believe a fair statement would be that they lay a small egg, taking into consideration the size of the fowl. As long as eggs are sold by the dozen this does not materially affect their utility value. They are pronounced, without exception, by every breeder I have met, to be as prolific egg producers as the average Leghorn, laying their eggs more evenly through the season, especially in the fall, winter and spring months, when eggs command the higher prices. Every breeder of Orpingtons has called my special attention to the fact that Orpington eggs hatch well, are wonderfully fertile and the chick very active and strong. Once hatched, the per cent of loss is small. The feather evenly and rapidly, are great foragers, in fact

range out further than any breed to my knowledge, not excepting the White Minorca and Leghorn families.

Just yesterday I visited a breeder of White Leghorn, Barred P. Rocks and Buff Orpingtons. As I saw none of the latter in sight I inquired where he kept them, and he replied "Right here." Asking where they were, he remarked: "That's hard to tell; they may be half a mile away," and they were nearly. We started out to hunt them up. Passing down the farm lane, we soon were beyond the range limit of the B. P. Rocks. A little later the last straggling White Leghorn was left behind. And away over on the opposite side of a large corn lot which had just been cut we came in sight of a half a hundred golden balls moving actively about in search of stray kernels, bugs and worms. This bunch of chicks were four months and sixteen days of age, raised in a brooder, and at that age were nearly half a mile from the brooder and house. This is no overdrawn statement. At other places my attention has been called to their wonderful, active, independent disposition and habits. Now perhaps a little comparison of weights at three months of age may be of interest. As I am a breeder of Barred P. Rocks and S. C. Brown Leghorns exclusively, I have no motive to overdraw the facts in the case. A friend of mine purchased thirty Buff Orpington eggs of a good reliable party and set them. Within a day or two of the same date I set fifty or sixty Barred P. Rock eggs. At three months of age he came over to my place with a Buff Orpington cockerel under his arm and challenged me to pick out a Barred Rock cockerel that would outweigh him. I looked incredulous, as I thought I had him beat easily. Upon a trial I had to pick three times to find one that would tie him in weight.

Now, looking at the breed from a fancy point of view, I find they breed very true to color, fully as much so as the Buff Plymouth Rock. The surface color on the best birds I have

handled is a very clear true buff, with much better undercolor than we generally meet in Buff Rocks. Their heavy, square-set legs, deep bodies and broad, short backs give them a solid, business-like appearance, which is unmistakable evidence of a strong, robust constitution. In fact, in the several hundred I have examined I have yet to recall a roudy, deformed or ill-developed chick or fowl.

Combs run about as even as do the Buff or Barred Rocks. Beaks and shanks, except in one single instance, were correct in color to a bird. The majority of both sexes have more or less of white or black in tail or wings, but not more than is found in Buff Rocks at the present time. I have handled within a week at least ten or twelve which showed no black or white in wing or tail, only a little gray in secondaries of wings and just a trace of foreign color in tail. It is my opinion that they may be bred more easily and quickly to a pure uniform light buff, with stronger undercolor than the Buff Rock or Wyandotte. While in shape they hold a position distinctly their own. It occurs to me the breed has a bright

11—Jessup . . . one, ub -t, ul n wwl future before it. If it can be kept out of the hands of dishonest or unscrupulous breeders. What statements are made here can be depended upon as being as nearly correct as is possible at this early date in their history among American fanciers. Yours,

J. W. WHITNEY.

Chatham, Ohio.

Mammoth Light Brahmas

M. B TURKEYS

Cockerels \$2 each; trio \$5; young toms \$3 each after Nov. 1st.

E. W. MATHENY, Clay Center, Nebr.

Finer and Cheaper

than ever. Buy early. Games. Heathwoods, Irish and Mexican Grays, Irish Blk Recs, Tornadoes, and Cornish Indians. Free illustrated circular.

C. D. SMITH, - Ft. Plain, N. Y.

..WORLD'S CHICK FEED..

..Beyond comparison..

Chamberlain's Perfect Chick Feed 100 lbs. \$2.50; 50 lbs. \$1.50; 30 lbs. \$1.00.

Chamberlain's Perfect Hen Food will make your hens lay. 100 lbs \$1.75. Goods shipped from St. Louis.

Manufactured by **W. F. CHAMBERLAIN, Kirkwood, Mo.**

The White Wonder

Editor Poultry Investigator:

As your motto is "More and better poultry," if you will allow me space in the Investigator I will present to your many readers a brief account of the origin and good qualities of the White Wonders.

They were originated by William N. French of New Haven, Vt. Mr. French was quite well known in his section of country as a breeder of fine stock, especially of high grade sheep and poultry, and in 1886 began the origination of the White Wonders from six large pure white pullets bred in his yards, the results of either accidental crossing, or sports, for although he had several breeds of thoroughbred fowls, he did not have a white breed on his farm at that time. These six white pullets proved to be remarkably good layers, so much so that they attracted Mr. French's attention, and he called them "The White Wonders," and began the building up of a distinctive breed by crossing them with the best strains of standard bred fowls, his object being to produce a large, practical utility farmer's fowl. It has often been stated to me that White Wonders were simply a cross of White Wyandottes on Light Brahmas, and I believe that is the generally accepted opinion. But it is not the case. I think White Wyandottes and Light Brahmas were used, and likely Dorkings, but the breeding of the original six large pure white pullets is unknown. Mr. French died some three or four years ago, and the record he had kept of the standard bred fowls used and the crosses made in originating his ideal utility fowl was about two years ago accidentally destroyed, so that part of the process will never be definitely known. Their general characteristics as a distinctive breed is, I believe, as well fixed as that of any other thoroughbred fowl, and any one attempting to produce White Wonders by crossing White Wyandottes on Light Brahmas will be disappointed. They were not produced that way.

As a practical, general purpose utility fowl, I believe they are as good as the very best. They are not a fancier's fowl. They were not intended as such, but as hard workers I doubt if they have a superior. Under date of April 9th, 1901, I. K. Felch of Natick, Mass., wrote me regarding White Wonders, "They are simply working oxen, just hard working horses for utility uses. As such they surely have my praise as money earners in our poultry yards for practical

F. R. Mitchell, 505 Wellington St., Montreal, Canada.

The above photo is one of nearly 250 that are in the new Sure Hatch Incubator Catalogue. The book is now ready for mailing and is free to any address, contains 166 big pages and chuck full of applicable and practical poultry information; plans for good and cheap poultry-houses; about broiler raising and egg farming, how the hens hold down the homestead when crops fail, etc., etc.; winter care of poultry and how to make a living with a small investment. Address nearest office.

Sure Hatch Incubator Co.,

Clay Center, Nebraska.

Columbus, Ohio.

purposes." That tells the story of White Wonders. It is what they were intended for, hard working money earners in our poultry yards for practical purposes. We ask no greater encomiums for them, nor do we ask any better authority for its statement than that of I. K. Felch.

They are not a bad looking fowl by any means. They are a large white fowl with rose comb, slightly feathered legs, and deep rich golden yellow skin. The shaft of feathers has a yellow hue which gives the undercolor a creamy white appearance. This feature is objected to by the fanciers. They want a chalk-white plumage on a yellow skin, simply because it is so difficult to obtain, but we want the creamy white undercolor because it makes it so easy to get the rich golden yellow skin in its perfection. Whether there is anything in the superiority of the yellow-skinned fowl is not the question, for it is a well established fact that the average American customer will pick up the yellow-skinned chicken every time. The only objections to them from the fancier's view, so far as I know, is the creamy undercolor mentioned and their slightly feathered shanks. The

Poultry Investigator

Is edited by a practical poultryman of 30 years experience and is full of plain, common sense articles by those that breed poultry and work instead of theorizing. It is just what you want. Send us the names and addresses of 15 persons interested in breeding good poultry and we will send you the **POULTRY INVESTIGATOR** one year for your trouble. Subscription price 25c. Address,

Poultry Investigator Co.,

Clay Center, : : Nebraska

Blue Barred Plymouth Rocks

Our stock is first class. We have some yearling stock and young stock for sale. Prices reasonable.

P. J. SCHWAB, Clay Center, Nebr.

fancier shakes his head and says, "There should be more feathers on their shanks or none at all." Just why a chicken should have feathered shanks I do not know, and so far as looks are concerned I prefer them without. But White Wonders have slightly feathered shanks. They have been bred that way, and they breed quite true to type.

As winter layers I do not think they can be beat. In January, 1899, when the weather was extremely and unusually cold, I had four White Wonder pullets that layed fifty-three eggs during the first fifteen days of that month. It was an egg every twenty-seven hours and ten minutes per pullet. Their house consisted of one thickness of seven-eighths inch boards with tarred paper on the outside. The house was entirely unsheltered and so cold that a pan of water would freeze solid in twenty minutes' time. I have not kept just that kind of a record since, but have had plenty of White Wonders that were equally good layers. Their eggs are of good size and a nice brown color. Their standard weight is: Cock, $2\frac{1}{2}$ pounds; hen, 8 pounds; cockerel, 8 pounds; pullet, $6\frac{1}{2}$ pounds. I have had cocks weighing eleven pounds and hens nine and one-half pounds, and although they are large they are not a lazy fowl, but active rustlers. I believe they combine as many good qualities for the farmer and poultry man as any breed in existence.

I know this article is already too long, but I have abbreviated all I could, and if not turned down this time I may come again.

I. C. STEPHENS.

Carleton, Neb.

NEBRASKA STATE POULTRY SHOWS.

Now is the time you should make preparation to exhibit at some of the best shows of the country, and we would like to call your attention to the Nebraska State Poultry show, to be held at Lincoln, Neb., in the new Auditorium, January 20 to 28, 1902. The Nebraska State Poultry association is the oldest poultry association west of the Mississippi and does pay out more money annually in premiums than any association in the United States. It is incorporated under the laws of the state and receives \$1,000 a year from the state to be used in paying premiums at its annual show. Every officer in the association is an old reliable breeder, a man of long and tried experience. Our judges are experienced judges and perfectly familiar with the breeds they

Ducks from Door-knobs.
Some incubators promise everything to sight, either ducks from door-knobs, or chicks from china nest eggs, and a full grown bird in a week or two. The

PETALUMA INCUBATOR
won't do that. It's just a good incubator—made for hatching eggs in the best possible way. It is made on the same principle of good honest material, by honest workmen. Consequently it will do all that a good incubator ought to do. We think our construction is a little better than any other's; we are sure we take pains; we know we please the people. If you are looking for a machine that will hatch all the fertile eggs, you'll be interested in **THE PETALUMA**. Our large illustrated catalogue is sent free upon request.

We pay freight anywhere in the United States
We make a good brooder too.
Petaluma Incubator Co., Box 510, Petaluma, Cal.

Why Not Buy the Best?

It costs no more than inferior styles. We claim that **Adam's Green Bone Cutter** is the best because it is the only Ball Bearing machine on the market. It works on the shear principle, turns easier, cuts faster and cleaner, and prepares the bone in better shape than any other. Write at once.

Catalogue No. 6 is Free. **W. J. ADAM, JOLIET, ILL.**

Poultry Supplies

The Best and Cheapest.

Lice Killers, Markers, Remedies, Incubators, Exhibition Coops, Egg Cases, shipping Coops and Boxes and everything to make poultry raising pleasant and profitable. Best seeds that grow. Nearly 20 years' experience. Send for free Catalogue.

First Premium at State Fair 1901.

Archias' Seed Store,

Pure crushed shell.....	per 100 lbs \$.75
500 pounds for.....	3.50
Raw bone meal fine or coarse per 100 lbs	2.00
Mica crystal grit.....	..80
Blood meal.....	3.00
Meat meal.....	2.25
Meat scraps.....	2.25
Chick feed.....	1.75
Sunflower seed.....	2.25
Bird seed 8c lb; 10 lbs 75c. Flood's and Conkey's rump cure, 50c. Leg pants 90c per 100.	

Sedalia, Missouri.

will handle. We have engaged six judges that the awards may be up at noon of the second day. Our entry fees will be the same popular ones maintained before and our premiums will be on pens: First, \$6.00; second, \$4.00; third, \$2.00; fourth, ribbon and special; fifth, ribbon. On single birds: First, \$3.00; second, \$2.00; third, \$1.00; fourth, special and ribbon; fifth, ribbon, and every premium will be paid in full the last day of the show. Remember our doors are open to every fancier in the United States, and we would like to say to you no favors will be shown to any one. Every exhibitor will be treated like his brother exhibitor, whether he is present or at home. Every bird will be cared for in the best possible manner. We shall be glad to see you with your birds and we promise you fair and honorable treatment in every instance. Our premium list is now ready to mail and it is a beauty. Send to L. W. GARROUT, Lincoln, Neb., for one.

OUR EXPERIENCE POOL.

Experience is the best teacher. This experience pool will be a monthly poultry raisers' institute for the exchange of practical ideas by practical poultry men and women. We want them to give their experience on the following topics, as well as to suggest topics for future discussion. Let all contribute. It will be a ben-

efit to yourself as well as to others. We will award the premiums each month for best and most practical article—\$2.00, \$1.50 and 50 cents. The only condition is that you are a subscriber to the paper. Write one side of the paper only. Be sure to give the number of the topic you are writing on. All articles must be in this office by the 20th of the month. Do not forget to suggest a head for topics for discussion. Address all communications to

POULTRY INVESTIGATOR,
Clay Center, Neb.

TOPICS FOR DECEMBER.

- Topic No. 1—What has been your experience in feeding for eggs in winter?
- Topic No. 2—What has been your experience in feeding clover or alfalfa to fowls in winter?
- Topic No. 3—What has been your experience in the different varieties as to the best all-purpose fowl?
- Topic No. 4—What is your experience in shipping fancy fowls in winter?
- Topic No. 5—What is your experience in showing fancy poultry?

Buff ORPINGTONS and Brown Leghorns

Young or old stock, first class birds cheap. Hundreds to select from. Eggs all the time.
M & F. HERMAN,
Box 178, Hinsdale, Ill.

SCRATCHING SHEDS...

By M. M. JOHNSON

When we talk of warm, comfortable poultry houses and overlook the scratching shed, we have left out the best part of the arrangements. I hold to the theory that it is tom-foolishness to build warm poultry houses and let the fowls run out in the cold as they wish. It is also nonsense to pen them up in a warm poultry house and allow them no room to exercise. We can figure and theorize as much as we feel like, but the scratching shed has come to stay. It don't need to be expensive nor elaborate, just a plain, cheap shed that has a tight roof and sides. Instead of windows in the south, 5-cent muslin soaked in linseed oil will do. After it has been oiled hang it out a day or two to dry, then stretch it on the front of the shed. I don't like the open shed, it's all right when the wind is in the north, but unfortunately we have lots of uncomfortable south winds, and an open shed is almost equivalent to out of doors.

Don't be stingy with room in the scratching shed, they can get along with limited room in their roosting department better than they can in their exercising place; it costs but little more to build a shed 16x16 than it does 12x12. A shed 16x16 contains 256 square feet of floor room, with a very little additional expense the floor space can be nearly double. This is on the same principle that a two inch pipe will hold four times as much water as a one inch pipe. Too many of us want to make \$2 out of a hen at 10 cents' worth of expense. It's no go, and we should be satisfied with a \$2 hen and a 50 cent expense. It don't make any difference what kind of paint you use nor how elegant stripes you adorn the house with, you will find the hens are color blind; they seem to have a selfish disposition in wanting to feel comfortable, regardless of all adornments. A whole lot of us theoretical humbugs build poultry houses to suit us, the hens be d-d, and what are you going to do about it, etc. If we study the hens more and ourselves less it would be more appreciated by said hens. They don't care a continental what we may know about science and mechanics, all they want or care about is comfortable and cheerful quarters and plenty of grub mixed in. When it comes right down to good hard sense, the common every-day hen can stand any of us off. Not long since we saw

a chap figuring out the room for 100 hens. "Yes," he says, "a hen is about six inches wide and ten inches long, that will do for perch room and about twice that room will be ample for floor space, or room to exercise." The writer is getting along in years and has discovered that mortal man is a curiosity anyhow, and I made no attempt to spoil the man's mental calculations.

You know there is an old gag about the Missourians need to be showed, but it don't apply to the chicken man who is good at figures; he just won't be showed and that is all there is to it; figures won't lie—neither will he, but your Uncle Jack will bet a 'coon skin that he fizzles in the poultry business. It takes more than figures to win out in the poultry business—it takes some good judgment and some common every-day hen sense.

I have always had a curiosity in finding out just why people theorize so much in the poultry business when they would not think of it in other occupations. Does poultry pay? Well, yes; it pays something like five hundred per cent, but you can't figure it out; somehow or other we have got to work it out. M. M. JOHNSON.

FACTS.

By P. W. Shepard.

It is a fact—

That it does not pay to allow the fowls to contract colds. Colds are rarely caused by any other ways than exposure. Never expose the fowls to any draughts of air and colds will not occur so often.

That a cold may develop into a severe case of roup, which is a serious disease to a poultryman's birds. However, a little work on the part of the breeder will save all colds and cases of roup from occurring.

That a sick fowl, one that has a very bad case of any disease, never amounts to as much as it did before becoming

Buff ORPINGTONS and COCHINS.

Bred from my own Importations.

I won more premiums than any two other exhibitors at the Nebraska State Show, 1901. Before buying anything write me—it will be a pleasure to give you prices.

IDA J. BUEHLER, Kenesaw, Neb.

BUFF WYANDOTTES,

EXCLUSIVELY. Our Buff Wyandottes are bred from best strain obtainable and in line. We breed the pure golden Buff, not the dark red. They're prize winners.

E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

OLENTANGY ..POULTRY..YARDS.....

CHAS. C. REID, Manager.

DELEWARE, OHIO

**Barred Plymouth Rocks
Ruff Cochins Bantams
Cornish Indian Games**

Stock in breeding pens score from 91 to 95 1/2.
Send for circular.

Barred P. Rocks and Cornish Indian Games.

8 years as breeders, 8 years as winners in every exhibit where we exhibited winning highest awards.

Stock for sale reasonable. Write,
COTTELL BROS., Edgar, Nebraska.

POULTRYMEN Your stationery won't look well unless **PRINTED** neatly. I do it it is well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

Cornish and White Indian Games.

Stock for Sale.

J. C. NAUMAN, Clay Center, Nebr.

THE HUMPHREY

The Best Bone Cutter
is the one you like best.

The Humphrey is sold on a positive guarantee to cut more bone, in better condition, in less time and with less labor than any other bone cutter made. If it doesn't do it, you get your money back. Try it for yourself and judge which machine you like the best. That's the only way. It beats the world as a vegetable or kraut cutter. It will pay for itself in six months.

Why the Humphrey
is Displacing others.

It has an open hopper—you don't have to chop the bone to pieces with an axe. You turn it with one hand and regulate the feed with the other. It has only three working parts—nothing to get out of order. It turns easier and is easier to keep clean. It produces bone in better shape for the fowls. Send for free book and egg record blanks for a year—the handsomest book of the season.

Humphrey & Sons,
Box 70,
Joliet, Ills.

SALES AGENTS, JOSEPH BRECK & SONS, Boston. JOHNSON & STOKES, Philadelphia. GRIFFITH & TURNER CO., Baltimore. NICHOLS BATHING CO., Clay Center, Neb. E. J. BOWEN, Portland, Oregon, Seattle, Wash. and San Francisco. DES MOINES INCUBATOR CO., Buffalo, N. Y.

Mrs. E. W. Orr, Clay Center, Nebr.

sick. A case of cholera, roup or such had better be cured with an axe.

That time is required to accomplish anything in this world. No fortune has been earned in a day. Fowls have not been brought up to the present high standard in a single day. So your success will not come to you in one day.

That there is pleasure as well as profit in breeding fowls. The true fancier finds much enjoyment in breeding fowls. He loves to see them grow and develop. He loves to watch the eggs as they are kept warm for three weeks and then he is happy when the little ones pop out.

That many people breed fowls just for the pleasure there is in it. It is a change from a literary work or clerkship or such work, to care for a flock of beautiful birds. It rests the body and mind in such cases.

That it requires study and thinking to fathom the depths of poultrydom. There are great lessons to be learned from poultry. How to further develop them and increase their usefulness, occupies the minds of hundreds of men and women a large part of the time.

That there is no best breed, and that it is only a matter of taste that makes one breed selected in preference to another. One person will claim a certain breed to be the most profitable, while at the same time another breeder will condemn them as worthless.

Poultry Investigator, Clay Center, Neb.

I have read with much pleasure and satisfaction a copy of your October issue, and I have nothing but praise for it. I avail myself of your offer and enclose herewith 15 cents and coupon for a year's subscription.

In reading an article by Rev. G. A. Chamblin, I was rather surprised at the argument of the reverend gentle-

men in claiming that the smaller breeds were so much more profitable than the large breeds. I have been breeding the L. Brahma, Felch strain, for eleven years, and have had W. and B. Leghorns, B. Spanish, P. Rocks, B. Javas, Polish, etc., etc., but none of the breeds mentioned have ever equalled the laying of my L. Brahmas. It is true that the Leghorn commences to lay at an earlier age. I have had them to lay at five months old. It is also true that they eat less, but I have had Brahmas (and have them this year) to lay at six months old. This strain hardly ever wants to sit, so that I was compelled to buy an incubator. The Brahmas have laid for me all winter, with the thermometer way below zero, while the Leghorns would not dare to go out of the pens.

A Brahma egg is much larger than a Leghorn and still larger than a Hamburg. It is a far richer egg. My wife claims that two Brahmas eggs go farther in hatching than three Leghorns.

Then the capons! I sold 22 capons weighing 10 pounds dressed at 18 cents per pound, or \$1.80 each. How many dozen Leghorn cockerels would it take to bring that money?

Then the extra expense it takes to fence for Leghorns or all the smaller breeds. My Brahmas are confined in a four-foot fence, while a six-foot fence will not turn a Leghorn, and they will crawl through any paling.

This is my side of the case. The trouble is with most people, they don't know how to feed a Brahma or any Asiatic fowl right. The chicks are so much harder, and they can stand more cold than any other breed. There now! Respectfully,

A. S. MULLER.

ALWAYS READY.

The ADAM Green Bone CUTTER

is always clean and ready for work. Impossible to choke it up. Cleans itself. **The Only Bone Cutter** with all ball bearings. Works quickly and easily. No choking or injuring of fowls by slivers or sharp pieces. Cuts a clean light shave that is easily digested by smallest chicks. Send for Catalog No. 6. Contains much valuable information on the cut bone question. You will be pleased with it. Sent free upon request.

W. J. ADAM, JOLIET, ILLS.

Rather Risky Business,

this buying untried incubators in these days of the perfectly working and surprisingly simple

Reliable Incubators and Brooders,

where every fertile egg means a strong healthy chick. Guaranteed to do the work and do it as it has never been done before. The 20th Century Poultry Book ought to be in every chickenman's house. You will not part with it for many times its cost. Discusses the poultry business from your viewpoint. Sent anywhere for 10c. Reliable Incub. & Brood. Co., Box A-26, Quincy, Ill.

MY....

Buff Orpingtons

...Have no equal

B. Plymouth Rocks

(Thompson Ringlets.)
AND

White Wyandottes

If you want good stock I have it

John A. Ling,

HARVARD, : NEBRASKA.

Grow Fruit..

Poultry helps Fruit; Fruit helps Poultry; great combination. If you want the best fruit paper, at 50c per year, send for

"Western Fruit Grower" - St. Joe, Mo.

Single Comb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

Cora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS,
Ogden, Utah.

Barred Plymouth Rocks.

We have Quality and Quantity.

Farm raised prize winning stock, cheap for quality. If you want Rocks write us.

H. B. LOUDEN, Clay Center, Nebr.

Buff Orpingtons
AND
White Wyandottes

No better Stock Raised.

I never have failed to win in largest shows. Birds score from 90 to 95%.

C. ROCKHILL,
Harvard, Nebraska.

Clubbing List

By taking the advantage of the following combinations you can get two papers often at the price of one. Look at these offers:

	Price with Poultry Regular price.	Investi- gator.
Reliable Poultry Journal	50c	50c
Poultry Tribune	50c	50c
Poultry Herald	50c	50c
Poultry Gem	25c	35c
Commercial Poultry	50c	50c
Western Poultry News	25c	25c
Poultry Success	50c	40c
Poultry Topics	25c	25c
Poultry Gazette	25c	25c
Nat'l Poultry Journal	50c	50c
Golden Egg	50c	40c
Farm Poultry	\$1.00	\$1.00
American Poultry Journal	50c	50c
Feather	50c	50c
Nebraska Farmer	\$1.00	\$1.00

..Just Think of It..

Farmer and Breeder, price	\$1.00
Any 50c paper you choose above	.50
The Poultry Investigator	.25

Total \$1.75
We will send the three to you for \$1.00.

Address,
POULTRY INVESTIGATOR.

NOTICE—We do not send samples of other papers.

1892.

1901.

Mammoth Strain

Light B's and Bronze Turkeys. Winners in America's leading shows of hundreds of prizes in my own and customers' hands. The "Common Sense" remedies for poultry are "perfection" when properly used. Cholera Cure kills all disease germs and makes blood, bone and feather. Hundreds of poultrymen claim they are making poultry breeding easy and practical by their use. A sample of either for a dime. 1 lb can post paid for 50c. Yours for success,

MRS. ELLA THOMAS, Quarles, Mo.

**The SMITH SEALED
LEG BANDS.**

Adopted as official
bands at

PAN AMERICAN

and other leading shows. Ten for 25 cents. Sixty for \$1.00. 100 for \$1.50. 100 bands and plain sealing tool \$1.75. Illustrated circular free. Sample for stamp.

W. H. SMITH & CO., Blythedale, Mo.

Partridge Cochins Golden Sebright Bantams Fancy Pigeons

I have no more Partridge Cochins females for sale. I have a fine lot of fancy Pigeons at 50 cents a pair. 3 pairs of Golden Sebright Bantams at \$2 a pair. Cockerels at \$1 each. Partridge Cochins Cockerels from \$1 to \$1 each.

W. F. HOLCUM, Clay Center, Neb.

A "SUCCESSFUL" SUCCESS. (Deacon Lane's Story.)

"I s'pose you've often set a hen.
Over an' over, time an' again?
So have I, but never yet
Known a time when I could bet
How long that hen was goin' to set.
Set a hen on a peck o' cobs,
Brickbats, pebbles, ol' door knobs,
An' she'll set an' set in spite o' you—
Can't break her up, whatever you do.

"But set a hen on some high-priced eggs,
Soon's she feels 'em 'tween her legs,
Suthin' makes her feel like scratchin'.
An' that ends all her hopes o' hatchin'.
When that happens, I declare
I sometimes feel that I must swear.
I'll say right here, or any place,
A hen's no instrument of grace.

"But s'posin' by some accident,
After three weeks she has spent
A-settin', you do get some chicks;
That hen knows some other tricks.
She will just take all kinds o' pains
To get ketchin' out in pourin' rains,
Till all her chicks are drowned dead,
All but one—an', as I said,
Sometimes I've been so mad I vum
I was jest on the p'int o' sayin' dum'.
When settin' hens is on the place,
'Tis hard to hold to savin' grace.

"'long las' spring—some-time in May—
I met a man from Ioway,
An' he was tellin' as how he'd seen
Chickens hatched in a machine.
He says 'twas made o' glass an' wood,
An' had four legs so't could be stood
In a corner anywhere,
An' would do its hatchin' there.
He said the cost warn't very much,
An' 'twould hatch to beat the Dutch.
He said the makers give away
A book 'twould make it plain as day
How to make our profits greater
If we'd use an incubator.

"So my pen in hand I took,
Writ an' got a pictur' book;
Read it through from front to back—
'Twas convincin', for a fac'.
An' at last I sent and got
A "Successful." Tell you what,
When I got it I was proud,
But the neighbors all allowed
'Twas a sin an' ag'in natur'
Hatchin' with an incubator.

"I read the rules an' set her goin',
Folks aroun' done lots o' blowin',
Seemed to think it mighty funny
Watchin' a fool get shet o' money.
I just kep' on a sawin' wood,
Follered d'rections near's I could,
Watched the lamp an' regulator,
Kep' a-watchin' that incubator.
I warn't talkin'—I kep' still,
Watched things purty close, untill
One day as I was a-peepin'
At them eggs I heerd a cheepin':
Then I watched a little spell
An'—a chicken broke the shell,
An' afore the day was done,
Them eggs hatched out—all but one;
Had a drawer crowdin' full
Of fuzzy chickens, soft as wool.
I know it warn't the proper thing,
But I couldn't help cuttin' a pigeon wing.
An' then I called the neighbors in.
'Specially them that talked ag'in
Hatchin' chickens in machines;
Proved to them they didn't know beans,

Made 'em look like small pertaters,
Runnin' down them incubators.

"Waal, I kep' the thing a-goin';
Every hatch made a good showin',
An' the neighbors 'round about
Kep' on findin' some things out.
When they see my chickens grow
Like ill weeds, they wanted to know
Ef I could do much better when
I used machines instid o' hens.
When a 'Successful' was put to hatchin'.
I told 'em hens was not a hatchin'

"'Is the "Successful" a success?
Waal, I certainly should say yes;
An' more than that, one on the place
May keep a man from fallin' from grace."

THE HEN AS A TAXPAYER.

A few years ago, with many people, the hen was an unknown quantity, as far as the profit was concerned. We raised her for an occasional fry in summer or roast in winter, when someone came visiting, or at picnic times. She laid some eggs in summer, when eggs were so cheap that we preferred to eat them to bothering taking them to town and that was about her status with us as well as the country around. But that is all changed now. She has found herself, or rather, we have found her capabilities. "The Lay of the Kansas Hen," who feeds the family, pays off the mortgage and the taxes; sends the son to college and provides the piano for the daughter, is not so much of a joke as you might think; for I know of dozens of farmers around me now who have fried chicken every day if they want it, and hens enough left all of the time, to pay not only the grocery bill, but provide luxuries for the house. And I know others who do pay their taxes with the egg and chicken money; and I know a girl who raised enough Brown Leghorns, along with the eggs they laid last year, to buy herself an organ and a Jersey cow. And now the mortgage and the college is all that, so far, we must hear from, and they will shortly be forthcoming.

But to make the chickens pay, we found that we must not only get good breeds for our purpose, but expend some care and time upon them. If we wanted eggs in winter, we must provide good quarters, dry and warm, for our chickens, though we kept none but the non-sitting, almost daily lifetime layers, as the Minorcas or Leghorns. The best brood of these will not lay to the best of their ability in winter, if not given warm quarters and some stimulating feed, although it is claimed they need but half to that which the larger breeds require.

If we would raise chickens for the early market and for profit by weight, then we quickly learned that we must

keep the Brahmas, Cochins and Langshans; although some of our neighbors prefer the Plymouth Rock for an all around chicken, not only for coming steadily up to its prime average in weight, but also for a good layer.

We have tried all kinds, and all have their good points, and while the Plymouth Rock cannot come up to the Buff Cochin and Brahma in some few points, really after all, it has the fewest faults of any.

It is best to keep just one breed (and that a pure one) at a time. They mix so badly, and we found mixed chickens so slow of growth, and sometimes they take all of the scratching, lazy faults of the parent stock, and little of the good. Of course, there are exceptions. We like the half-breeds of the Buff Cochin and Light Brahma.

In the old days, when the barnyard fowl reigned supreme, with one exception, we expected her to quit her desultory laying in August, and not begin again until next April, and not then, if she took a notion.

The exception came at hog killing time. Then, from gluttening themselves with the offal, the lights, etc., we would get a surplus of eggs for awhile. This, finally, taught us, if we would have eggs in winter, we must feed meat or some other heat and egg producing food. And this is why green bone food and linseed oil meal cakes keep the chickens, even the barnyard breed, hunting nests all of the winter. The Leghorns really do not need so much stimulation, as it is their business to lay in winter as well as summer. But it is just as well, for the Leghorn as the other breeds, to save all the skim milk you can spare for them. Skim milk, helped out with corn, is an excellent egg producer.

The first one of our neighbors who set us the example of raising chickens upon a scientific basis for profit had the dark Brahmas. They sold a sitting of eggs from these for, I believe, 50 cents. And the rest were sold to the huxter or grocery at the regular market price at the time. But, for fear we would buy them from these parties, each egg was perforated with a needle before it was sold in market. There was considerable questioning among the neighbors as to the right or wrong of this. But, whichever it was, it certainly proved stimulating to the pure bred chicken trade, as for spite many of the neighbors invested in different fancy breeds of their own, and now the country is full of mixed chickens, mixed down to the twentieth generation.

ANNA BELL.

HAMBURG BREEDERS, ATTENTION.

The second annual meeting of the American Hamburg club will take place at Topeka, Kan., January 1st to 6th, 1902. We have been highly successful in securing the services of one of the popular judges of the west. Judge L. P. Harris, Clay Center, Neb., is the man who will score our hrls, and every one who knows him will agree that it means a fair shake for everybody.

Arrangements that are quite satisfactory to all concerned have been made by which we will meet in connection with the Kansas State Poultry association in their annual show, thus giving every breeder an opportunity of meeting the leading poultry people of the west. Our premium list is growing nicely and we expect a nice string of prizes by show time.

Here it is to date:

G. A. Chamblin, S. S. Hamburgs, Moran, Kan., \$5.00.

L. Cook & Bro., S. S. Hamburgs, Oakville, Ia., \$5.00.

Good Bros., S. S. Hamburgs. Cimarron, Kan., \$2.50 cash, or \$5.00 in stock.

M. M. Johnson, Sure Hatch Poultry Co., Clay Center, Neb., one Sure Hatch brooder, 200 chick size, \$5.75.

Now is the time to whoop it up. Enthusiasm is growing and interest in Hamburgs is rapidly increasing. Have you done anything to help us? Are you going to help now? Get a hustle on and send in your contribution, whether large or small. It will help. Yours for success,

G. W. CHAMBLIN,
Secretary Pro Tem.

Moran, Kan.

Mr. and Mrs. A. Upton, Fairbury, Neb., have an extra fine lot of Barred Plymouth Rocks and must sell soon to make room for winter. Their stock this fall is much better than before, and those wishing to buy will get full value for money paid.

The cut we use on our first page this month was made from a photo of a flock of Pekin ducks and Toulouse geese, owned by Mrs. Flora Shroyer, Clay Center, Nebr.

P. Hostetler,

EAST LYNNE, MISSOURI.
Breeder of a good laying strain of gilt edge....

Barred Plymouth Rocks.

and best laying strain of

..S. C. White Leghorns..

At low down prices.

Pride of the West....

Is Mackey's own Strain of Bronze Turkeys, bred in line for 15 years. Show record on open book. They are in the yards of many of the best fanciers in the U. S. and Canada. B. P. Rocks, Conger & Felch; Black Langshans, Emry Felch & Robinson. Felch Lt. Brahmas, eggs at all seasons from hens. Young stock now ready to ship. Write for prices. Mackey's Magic Cholera Cure is a sure cure.

HILLSIDE POULTRY YARDS,

Mrs. B. G. Mackey, Proprietor.

CLARKSVILLE, : : : MISSOURI.

..... The New

Standard of Perfection

Revised Edition, 1900.

This work is issued by the American Poultry Association. It is a book of over 250 pages, cloth cover, and contains the only official descriptions of the several varieties of fowls. It is on this Standard that all poultry judges base their awards. Every experienced fancier has a copy of this book and every poultryman needs it to learn the requirements to which his stock must be bred.

The Standard of Perfection

—AND—

The Poultry Investigator

One Year, for.....\$1.00

Address,

POULTRY INVESTIGATOR,

CLAY CENTER, : : : NEBRASKA.

Certificate of Sale.

October 16, 1901.

THIS IS TO CERTIFY that I have this day sold and shipped my first prize winning Light Brahmas to Mr. J. P. Newman, Bloomfield, Iowa, consisting of 1st cockerel at Nebraska State Show at Lincoln, 1901, also 1st and 2nd prize pullets at Kansas State Show, Topeka 1901, and good will thrown in. Anyone wanting eggs from first class Light Brahmas in the spring will do well to correspond with Mr. Newman. I will hereafter devote my time to raising Chalk White Wyandottes and Buff Orpingtons.

Respectfully Submitted,

G. B. CLARY,
Fairbury, Neb.

Route No. 1.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

THE GOOD THINGS OTHERS SAY OF US.

Buffalo, N. Y.—Poultry Investigator—Gentlemen: I thank you for sample copy: it was very interesting. I know some of your correspondents; they are reliable people. Enclosed find stamp for one year's subscription. Respectfully, J. H. R.

Philadelphia, Pa.—Poultry Investigator—Gentlemen: If your paper follows the plan adopted it will be one of the best poultry papers published. Yours truly, T. B. S.

Kansas City, Mo., Oct. 10, 1901.—Poultry Investigator—Dear Sir: Your paper is surely covering a large territory, and effectively, as we hear from our ad in it from all sections. Yours,

H. E. MOSS.

Midland Poultry Food Co.

Clay Center, Neb.—Poultry Investigator—Gentlemen: We have had better results from our ad in the Investigator than any other poultry paper we ever used two to one. Success to you. Yours, A. J. W.

Jacksonville, Ill., Aug. 23, 1901.—L. P. Harris, Editor Poultry Investigator—Dear Sir: Allow me first to congratulate you on the style and makeup of your initial number. It surely is a live chick and has been well incubated and is predestined to become a prize winner in its class. May it continue to scratch out the golden grain from the chaff and thrive until it is known and heard from in every state in the union. I have already several inquiries from its influence. Respectfully, M. L. EDSON.

Allegheny, Pa.—The Investigator—Gentlemen: Enclosed you will find stamp for paper. It is a gem. I fell in love with it on sight of first copy. Yours truly, M. E. VOGEL.

La Jara, Colo.—Poultry Investigator—Dear Sirs: Sample copy of paper received and have read it through and I like it very much. We all want a western paper. The eastern papers are not in touch with the poultry business out here. We have good poultry raised in Colorado if one could find it, but very few advertise so we can find them out. Very respectfully, C. A. L.

Buel, Kan.—Poultry Investigator—Dear Sirs: After reading Esq. De Puy's "Editorial Reception" I determined to let "my editor" know that "Poultry Success" is not nearly the only one "Well Wisher" for you. To the Investigator, long may her pennant wave and may she receive the immediate support of deserved thousands, and hope her investigatory scratchings may result in good picking for all concerned. Yours truly,

D. Z. H.

Cottage Grove, Ore.—Poultry Investigator—Gentlemen: I received sample copy of your paper and like it fine. Enclose stamp for one year's subscription. Yours truly, A. J. B.

Redlands, Cal., Oct. 20, 1901.—L. P. Harris, Editor Poultry Investigator—Dear Sir: I write you for the purpose of notifying the readers of the Poultry Investigator that my stock is all sold out and

for you to drop my ad. I have been swamped with letters for the last two months from my ad in your paper. I had letters from nearly every state and made ready sales. Your paper was worth more to me than any paper I ever advertised in. As soon as I can raise more stock I will send money for ad again. Yours very truly,

L. D. GREEN.

Redlands, Cal.

Formerly of Red Oak, Ia.

Chatham, O., Aug. 28, 1901.—L. P. Harris, Clay Center, Neb.—Dear Sir: The first number of the Investigator is a good one and I have received several inquiries already from it. Yours, J. W. W.

LIST OF SPECIALTY CLUBS.

For the convenience of those breeders who would like to become members of the specialty club devoted to their favorites, we publish the following list of specialty clubs and the names and postoffice addresses of the secretaries. We believe the list is correct and complete, but if any of our readers know of any omissions or corrections we would be under obligations to them if they will inform us of the fact.

American Plymouth Rock Club—H. P. Schwab, secretary-treasurer, Rochester, N. Y.

American White Plymouth Rock Club—Frank Heck, secretary-treasurer, 325 Dearborn street, Chicago, Ill.

New England Barred and White Plymouth Rock Club—W. B. Atherton, secretary-treasurer, 30 Broad street, Boston, Mass.

American Buff Plymouth Rock Club—W. C. Denny, secretary-treasurer, Rochester, N. Y.

National White Wyandotte Club—George C. Rose, secretary-treasurer, Shawneetown, Ill.

New England White Wyandotte Club—G. A. Newhall, acting secretary, Perryville, Mass.

Eastern White Wyandotte Club—C. A. Briggs, secretary, Taunton, Mass.

Western Wyandotte Club—J. D. W. Hall, secretary-treasurer, Des Moines, Ia. National Wyandotte Club—C. S. Mattison, secretary-treasurer, South Shaftsbury, Vt.

Silver Wyandotte Club of America—E. S. Tarbox, secretary-treasurer, Yorkville, Ill.

American Golden Wyandotte Club—A. L. Ringo, secretary-treasurer, 333 Rookery building, Chicago, Ill.

The Partridge Wyandotte Club of America—Theo. Haight, secretary-treasurer, Astoria, L. I., N. Y.

American Buff Wyandotte Club—W. R. Wooden, secretary-treasurer, Battle Creek, Mich.

New England Light Brahma Club—George W. Cromack, secretary, Stoneham, Mass.

Western Light Brahma Club—W. S. Gregory, secretary-treasurer, Keota, Ia. Gen's: I not only found your paper an

American Dark Brahma Club—Clark E. Adams, secretary, Racine, Wis.

American Langshan Club—A. H. Asche, secretary-treasurer, Princeton, Ill.

American Cochlin Club—Arthur R. Sharp, secretary, Taunton, Mass.

American Leghorn Club—George H. Burgott, secretary, Lawton Station, N. Y.

American Single Comb Brown Leghorn

The Michigan Poultryman...

Only Exclusive Poultry Paper in Michigan.....

All the practical poultrymen contribute to its pages. Expert poultrymen will give its readers free such information as they may ask for.

All the news of the poultry world. Well illustrated.

For a short time you can get this paper one year for 15c.—Send postal for sample.

Michigan Poultryman,
Ithaca, Mich

Bonnie Dale Poultry Farm!

S. 'DOTTIES, Barred Rocks, Light Brahmas, Golden Doves, S. C. B. Leghorns, C. I. Games, B. Minorca Cockerels \$2 each. \$5 per 3. M. B. Turkeys \$3 each. Toulouse Geese \$2 per pair.

LT. BRAHMA, S. C. B. Leghorns \$1 each; \$2 per trio.

ROUP CURE. Our make. Cures when eyes are swollen shut. Powder for half pint. Small syringe and full instructions 50 cents postpaid.

SCORE CARDS. U. S. Postal card stock 50 cents per 100, \$3 per 1000. Water fountain galvanized iron, bags on rail, 1 gallon size 50 cents.

REAMOLINE. Tablesoonful to quart of water paints your hen roost. Trial bottle 25 cents postpaid. Circular free.

MRS. MAY TAYLOR, HALE, MO.
LOCK BOX 176.

Poultry Supplies

Ideal Leg Bands 15c per dozen, \$1 per 100.

Smith Seal Bands 25c per dozen, \$1 per 60.

Standard of Perfection each \$1.

Spray Pumps each 75c.

Liquid Lice Killer, gallon can 75c.

Conkey's Roup Cure 25c and 50c a box.

Chamberlain's Chick Food \$2.50 per 100 pounds.

J. D. W. Hall's Guaranteed Roup Cure 50c and \$1 a box.

Reliable Spring Punches each 25c.

Midland Poultry Food at factory prices.

Humphrey Bone Cutter F. O. B. Clay Center, \$12.

Oyster Shells F. O. B. Lincoln, Neb., per 100 pounds 75c.

Lime Stone Grit and Mica Grit F. O. B. Lincoln, per 100 lbs 75c.

Bone Meal, Raw Bone, Beef Chops, Blood Meal, as cheap as the cheapest.

Sure Hatch Poultry Co.,
Clay Center, Nebr.

The best Folding Exhibition Coop..

Jas. A. Rudge, Palmyra, Neb.

Manufactures and sells the best Exhibition Folding Coop on the market. Prices within the reach of all. He also has 50 S. C. B. LEGHORN COCKERELS for sale from 75c to \$2.00 each. Write your wants.

Club—C. M. Davison, secretary, Chicago Lawn, Ill.

American Buff Leghorn Club—George S. Barnes, secretary-treasurer, Battle Creek, Mich.

American Rose Comb Brown Leghorn Club—C. R. Milhous, secretary-treasurer, Spencer Ind.

American Houdan Club—Thomas F. Rigg, secretary-treasurer, Iowa Falls, Ia.

Blue Andalusian Club of America—Robert W. Lovett, secretary, 234 Marlborough street, Boston, Mass.

American Black Minorca Club—Charles L. Blanton, secretary, Falls Church, Va.

American White Minorca Club—William Sapper, secretary, Erie, Pa.

American Indian Game Club—C. S. Whiting, secretary-treasurer, Darien, N. Y.

American Polish Club—M. V. Caldwell, secretary-treasurer, Leetonia, O.

National Exhibition Game and Game Bantam Club—W. W. Withee, secretary-treasurer, La Crosse, Wis.

American Dorking Club—Frank H. Prentice, secretary, North Grafton, Mass.

American White Wonder Club—A. L. Merrill, secretary, Auburn, Me.

American Rhode Island Red Club—John Crowther, secretary-treasurer, Fall River, Mass.

National Bantam Association—E. Latham, secretary, Flat Bush, L. I., N. Y.

National Bronze Turkey Club—Mrs. B. F. Hislop, secretary, Milford, Ill.

Western Turkey Club—Mrs. F. A. Hargrave, secretary-treasurer, Richmond, Kan.

Water Fowl Club of America—Theo. F. Jager, secretary, Pingrove, Pa.

The Osceola Poultry association will hold their next show at Osceola, Ia., December 3 to 6. President, M. L. Parr, Weldon, Ia.; vice president, W. S. Luther, Osceola; secretary and treasurer, Mrs. J. A. Lash, Osceola; superintendent, J. M. Beard, Osceola, Ia.; L. P. Harris, judge. Catalogue out November 1. Send for one; it is free.

The Ogden Poultry and Pet Stock association will hold its annual show at Ogden, Utah, December 11, 12, 13 and 14. M. J. Hewitt, secretary. Judge Browning will place the awards. Premium list will be out November 4. Be sure to send for one.

Best Bargains in Belgians Ever Offered.

I personally selected, while at Los Angeles recently, the cream of the finest stock from several rabbitries, including a variety of the popular champion strains. By purchasing them in herds I got rare bargains, which I offer to my customers at prices ranging

From \$3 to \$6 Each, Express Paid to Any Point

None of these animals score less than 94, and a few run as high as 96. I ship either from Los Angeles or Houston.

300 ANIMALS TO SELECT FROM

Authorized Judge of American Belgian Hare Registry Association of Kansas City, Mo.

Dixie Rabbitry, S. J. MITCHELL, Prop., (Main Ranch), Houston, Texas.

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one piece. Nothing to tie astray. The neatest and strongest coop on the market.

Wm. MILLER, North Bend, Neb

Barred Plymouth Rocks.

**Some fine Cockerels
..FOR SALE..**

From Prize Winning Stock and fashionable strains at bargain prices. Also litter of

Scotch Collie Pups

Pure bred, Gold dust strain, eligible to register. From imported Bench Winning St. ck.

H. R. McLean,

Red Oak, : : : : : Iowa.

Barred P. Rocks EXCLUSIVELY.

I have a number of early hatched cockerels that are good in all sections, and really poor in none, that I am offering for a short time only at \$5 and \$3 each. A few pullets to spare at \$4 to \$5 each. All farm raised.

W. S. RUSSELL,

Box I, Ottumwa, Iowa.

May I "SHOW YOU"

That we raise as good Barred Rocks in Iowa as are sold by eastern breeders. Eastern price \$10, will sell his equal for \$5, or money back. If you buy a \$5 eastern bird I will beat him for \$3. Try me. **CORWIN JONES,** Sidney, Iowa.

Mrs. J. B. Jones, : : : : : Breeder of

**Barred Plymouth Rocks
and Mammoth Bronze
Turkeys**

STOCK FOR SALE. EGGS IN SEASON.

ABILENE, : : : : : KANSAS.

Please mention the **INVESTIGATOR** when answering advertisements. It will accommodate both the advertiser and us.

Catch The....

...Early Trade

by

ADVERTISING

..NOW..

The Poultry Investigator's Rate on Application.

There were but few chicks raised this year and the **Early Advertiser** is the one that will **Reap the Harvest**. Send copy at once and get your share of the trade.

**Neglecting Advertising is neglecting
...business...**

Brief Business Catchers.

30 WORDS
SINGLE INSERTION
50 CENTS

Under these headings cards of **THIRTY WORDS** or less will be inserted for **FIFTY CENTS** a single insertion, or twelve insertions for **THREE DOLLARS**. No display can be allowed and all cards must be uniform in size and style. A change in makeup allowed each quarter.

30 WORDS
WITH INVESTIGATOR
1 YEAR \$3.00

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert R. Swett, 364 Mosley St., Elgin, Ill.

BLACK LANGSHAN. W. P. Rockall old stock for sale at \$1.00 each, young white Pekins ducks 6 for \$4.00 all from high scoring stock. Mrs. Henry Shrader, Berlin, Nebraska.

BUFF COCHINS and Rose Comb White Leghorns bred from the best of stock. Price winners. For sale. John A. Johnson, Pilot Mound, Iowa.

J. W. WHITNEY. Chatham, Ohio. Poultry Judge. All Varieties. Private scoring and expert mating a specialty.

SILVER LACED WYANDOTTES. White Wyandottes, Buff Leghorns. Black Leghorns and White Pekin Ducks. First class birds for sale. Mrs. W. E. Tibbitts, Imperial, Neb.

FINER AND CHEAPER than ever. Buy early. Games, Heathwoods. Irish and Mexican Grays, Blk. Reds, Tornadoes and Cornish Indians. Free illustrated circular. C. D. Smith, Fort Plain, N. Y.

100 S. S. HAMBURGS. Stock for sale. Eggs at prices to suit the season. Stock in good condition fashionably bred and artistically marked. Rev. G. A. Chamblin, Moran, Kansas.

IF YOU WANT the blood of Boston and New York winners in Barred Rocks, S. C. Brown and White Leghorns, I have it and can please you in stock at low prices. Eggs in season. Elm Lodge Poultry Farms, Centerville, Md.

SEE HERE. Fine Light Brahma Cockerels \$1.25 each. Pullets \$1.00. Pairs \$2.00. Trios \$3.00. Also fine Barred Plymouth Rock Cockerels \$1 each. Order now. Richard J. Holt, Utica, Minn.

FOR SALE. Two last year's cockerels, score 90% and 89%; \$3.50 and \$2.00 respectively; also about ten cockerels at \$1.50 each. Write soon. Harry Fleming, Hastings, Neb.

BUFF ROCKS. Breeding and exhibition stock for sale. Write once for description and prices. Satisfaction guaranteed or money refunded. Tell us what you want. F. Whaley, Appleton City, Mo.

SPECIAL BARGAINS in Buff Wyandottes, pure Buffs. Winners at Chicago and Cedar Rapids, Iowa. Also a fine line of Bantams such as Game Cochins, Sebrights and Japanese. Write for prices. M. F. Yegge, De Witt, Iowa. Box 26.

PARTRIDGE COCHINS a specialty. The cream at Chicago and Cedar Rapids, 1901. 150 youngsters for sale after October 1, finer than ever, superior feathering, shape and color. Always satisfaction guaranteed. C. J. Shanklin, Wanbeck, Iowa.

BARGAINS in Buff Wyandottes, line bred (Brey's strain) $\frac{1}{2}$ and $\frac{1}{4}$ grown. Extra selected for exhibition and breeding. 4 pullets and 1 cockerel only \$10. John Brey, Specialist, Neola, Iowa.

FOR EXCHANGE. A 60-egg Sure Hatch Incubator, for Exhibition B. B. R. Games. Must be first class stock. A. J. Williams, Clay Center, Neb.

ROSE COMB WHITE LEGHORNS for sale 1st cockerel St. Paul, February 1901 and nine one year old hens, score 92% to 94%, by Russell, for \$15. T. F. Reineit, Tripp, S. D.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough leather. Contains all the pit rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Breeds, Handling, Nursing and everything relative to the royal sport of cocking.

By Dr. H. P. CLARKE, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator one year

For 25 Cents.

Address, THE INVESTIGATOR, Clay Center, Nebraska.

Morning View Poultry Yards.

...HAVE...

..Barred Plymouth Rocks...

Extra large heavy bone, finely barred, full above the eyes.

Eggs in Season. \$1.50 per Setting

James M. Perkins,

RAVENWOOD, : : : MISSOURI.

TAKE THE

Kansas City & Omaha Line

For all points east, south or west. Close connections made on all junction points.

For rates and information call on or address, S. M. ADSIT, G. P. A. St. Joe, Mo. S. M. WALLACE, Agent, Clay Center, Nebraska.

200 Mammoth Pekin Ducks - 100 White Wyandotte Cockerels

If you need big drakes or cockerels get my prices. Look up my record. Get my circular its free.

Lincoln, Neb., Box 456 - E. E. SMITH.

Conkey's Roup Cure

Cure Guaranteed!

THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, especially in pigeons, this cure excels

all others. One 50 cent package makes 25 fullons of medicine. Directions with every package. If it fails to cure money refund. Postpaid, small size 50c, large \$1. Conkey's Louse Killer never fails to kill. Try it, 25 cents per package, and 15 cents extra for postage.

Conkey's Egg Food and Poultry Tonic will keep your fowls in perfect health, and prove more efficacious than any similar preparation. 25 cents per package and 15 cents extra for postage.

C. E. CONKEY & CO., Cleveland, O. Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal. Eastern wholesale office: No. 8 Park Place, New York City and S. H. I. Co., New York City. For sale by all poultry supply houses. Agents wanted.

Barred Plymouth Rocks

EXCLUSIVELY.

If you want winners bred from winners that will win for you, write me.

FRED TOWNSEND, Clay Center, Nebr.

Does Your Lamp Smoke?
That means more heat and danger of explosion.
Don't run any risk. Put a
Hydro-Safety Lamp
on your Incubator and Brooder and save oil,
attention and avoid all danger. Water jacket
keeps burner cool. Price, 75c. to \$2.75. Catalogue
of all new-type supplies. **JP 24 25 26**
L. R. OAKES, Mfr. No 12 6th St., Bloomington, Ind.

F. A. CROWELL,

GRANGER, MINN.

Breeder of Strictly High Class Buff Orpingtons, Leghorns, and Cochins; Light Brahmas, Indian Runner and Pekin Ducks. Stock for sale that will please you. Circular free.

Golden Wyandottes.

Our Wyandottes never have failed to win in the best company. Young stock for sale.

J. C. KAPSER, Clay Center, Neb

F. H. SHELLABARGER, WEST LIBERTY, IOWA.

Has bred

Barred Plymouth Rocks

for 20 years. We have them that are up to date in size, shape and color. Write me if you need any. 20th annual circular which fully describes our Breeding stock is free. Mention this Journal and address as above.

O. MO. HUN. DRO.

Breeder of Prize-Winning
IMPERIAL WHITE P. ROCKS.
Stock for sale at all times. Eggs in season.
E. B. OMOHUNDRO, Bowling Green, Mo.

G. B. CLARY, Fairbury, Nebraska.

Breeder of { Chalk White Wyandottes,
Mammoth Light Brahmas
Buff Orpingtons.

Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

Still 10 Cents a Year.

Until further notice you can still get the **POULTRY, BEE AND FRUIT JOURNAL** for 10c per year. Or by getting four of your friends to send with you, we will either extend your subscription one year or make you a gift of a good poultry book. Send today—now—before it is too late, as this offer may be withdrawn at any time. Send your dime and get the neatest, boiled down, right-to-the-point, stop-when-you've-said-it, monthly journal an entire year. Thirty words in Breeders' Column for 25c. Display advertising 75c per inch, net. No discounts for time or space. A guarantee of satisfaction written in every contract.

POULTRY, BEE & FRUIT CO., Davenport, Iowa.

Glen Raven is Covered with CHICKENS : AND : TURKEYS

Bred to standard requirements and of high quality. From Exhibition scored parents Brown and White Leghorns, Barred and White Plymouth Rocks, Black Minorcas and Bronze Turkeys. Prices reasonable. Circular free. Mention INVESTIGATOR. Write for description.

E. W. GEER, Farmington, Missouri.

Poultry Supplies. For the next 60 days I will sell Grit and Shell in lots of 500 pounds or over at greatly reduced figures. It will pay you to lay in your winter supply now. Agent for Cyphers Incubators and Brooders, and Humphrey's Bone Cutters. Write for anything you need in poultry supplies.
E. A. PEGLER, 241 S 11 St., Lincoln, Neb. Box 463.

THE IDEAL
Aluminum
LEG BAND.

Is the acknowledged leader. It losing off is impossible as it is made with a double clench and is guaranteed to stay on. It is light, neat, strong and durable, easily and quickly put on. It is absolutely the best band on the market today. Read what others say:

Yermouth, Me.—Mr. Frank Meyers. Dear Sir: I have been thoroughly testing your leg band also others of the latest make. The Ideal Aluminum Leg Band is certainly the best one that I have ever used and I believe I have used about all of them. Please ship me 1000 as follows: 200 No. 6, 50 No. 7, 400 No. 8, 100 No. 9, 200 No. 10, 50 No. 11.

Prices of bands, post paid, 12 for 20c, 25 for 35c, 50 for 65c, 100 for \$1. 500 for \$4, 1000 for \$7. Send 4c in postage for circular of Barred Plymouth Rocks and sample bands.

FRANK MYERS, Box 14, Free Port, Ill.

Barred Plymouth Rocks

..200 QUICK SALE 200..

We have more young stock than we can handle in cold weather hence make the following prices to reduce our stock. First comes first served.

35 Cockerels, well developed and very large.....\$3.00 each.
35 Cockerels extra good breeders.....1.50 each.
50 Pullets, well developed and fine.....1.50 each.
50 Pullets, good breeders.....1.00 each.
25 Hens, one and two years old. Good ones.....1.50 each.
5 Cock Birds. Masses of correspondence. Write us what you want and can do you good circular free. Your Truly,

MR. and MRS. A. UPTON & SON, Fairbury, Neb.

Buff Orpingtons

THE COMING BREED

W. H. BUSHELL, IMPORTER AND BREEDER, DAVID CITY NEBRASKA.

White Leghorns.

Layers and winners. An inducement to buy at once and of us—tested breeders, hens \$8, \$10 and \$12 per dozen. Cocks \$1.50 to \$2.50 each. Scottish Terrier puppies \$5.

PRACTICAL POULTRY FARM,

R. R. Fr. uch, Mgr. Box 47, Ford City, Mo.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

BUFF P. ROCKS Exclusively. Pure Bardick Gold Nuggets. My Buff Rocks are as good as can be found, and are up-to-date in every respect. Some fine specimens for sale; reasonable prices on application. Address

MRS. ELLA PATRICK, Clay Center, Nebr.

BUFF ORPINGTONS—WYANDOTTES. R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock. fit to breed and exhibit for sale. Thos. H. Mills, Poultry Judge, Port Huron, Michigan.

Imported Buff Orpingtons.

Are winners at B. P. R., Madison Square Wash., N. J., Keota, Iowa City Iowa State Shows. Orpington \$7 to \$30 per trio. Will close out all the Rocks, Bradley Bus, and Lathians Straus. One pair of 1 yr old show birds for sale cheap. \$2 to \$2½. A fine lot of young show birds in both varieties. Always win; sure to please. Better get in the push.

A. L. HOUSTON, Keota, Ia.

SHOW BIRDS FOR SALE.

8 Grand Breeders for sale at a bargain. Also 300 selected Langshan chicks. Address,

BEN S. MYERS, Crawfordsville, Ind.

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free.

H. SHIVERS, Knoxville, Ia.

Lock box 500.

Barred P. Rocks..

Extra blue, Extra large, Extra color

In the show room they have shown their excellence, have scored from 90 to 94 by prominent judges. Write wants.

C. F. HINMAN, Friend, Nebraska.

Sure Hatch Poultry Company

as the largest aggregation of thoroughbred poultry in the west.

We import, breed, buy and sell **All Varieties.**

Each variety is bred separately on a farm. No chance for mixing up. Prices reasonable. Stock the best. Write your wants. Address,

Sure Hatch Poultry Co.
Clay Center, Neb.

Tiffany's paragon Lice Killer.

Kills lice and mites on poultry, hogs and animals, is the strongest and best lice killer made. With our double tube sprayer you can save one half the liquid and penetrate all cracks and spray the bottom of the house where you find the mites or spider lice. It gets there every time. Every can is guaranteed or money refunded. Write and learn how to get a sprayer and can of Lice Killer FREE.

Tiffany's Paragon Poultry Powder.

Kills lice on heads of baby chicks and turkeys, fleas on dogs, ticks on sheep and lice on cattle and horses, is a powerful disinfectant, keeps moths from your clothing and carpets. A large, free sample for 10 cents to pay postage. We give liberal terms to agents. We want one in every town.

Always use the powder before setting the hen.

THE TIFFANY COMPANY, - - - Lincoln, Nebraska.

A START IN BUSINESS.

which requires only a few moments time to attend, pleasant recreation, with profit greater than can be had from any similar outlay of cash. **Your Wife or Daughter** would be surprised to find how easily they could help pay the household expenses by using a **good incubator and brooder.** We manufacture the

Successful, Eclipse and Crescent Incubators.

There are none more scientifically correct. Perfect regulation of heat and ventilation. Made of best material. Double and pocketed walls. Non-Explosive Safety Lamps. Prices most reasonable, \$9. up.

We are the only incubator firm who publish catalogues in English, German, Swedish, French and Spanish. Send 4 cents for English edition, others free. Eastern correspondence and orders will be attended to at the Buffalo house. Address nearest office.

DES MOINES INCUBATOR CO.,
Box 601, Des Moines, Iowa, or Box 601, Buffalo, N. Y.

Mrs. O. M. Scott of Mt. Zion, Ill. has this to say:
"We never invested \$25.00 that brought us half the returns of our purchase of a Successful Incubator."
We have hundreds of similar reports.

VOL. 3.

DECEMBER, 1901.

NO. 10.

Poultry Investigator

LIBRARY OF CONGRESS
RECEIVED
DEC 11 1901
PERIODICAL DEPT.

ADVANCE TO SUCCESS

25 ¢ a year

Nothing but direct external and internal treatment will kill roup & flms. Buy the best; don't be deceived. Send for testimonials. Price 50c and \$1.00 per box, postpaid. Agents wanted. J. D. W. HALL, Box 60 Des Moines, Iowa.

Choice Cockerels & Stock Eggs for Hatching.

The Result of 25
Year's Breeding.
Line Bred at the
American Po ultry
Farm.

From Barred and White Plymouth Rocks
White and Silver Wyandottes, White and
Brown Leghorns, Golden Sebright Bantams,
Bronze Turkeys, and Pearl Guineas.

Belgian Hares, Jersey Sables.
Valuable Circular.

F. M. MUNGER & SONS, DeKalb, Ill

BARGAINS IN BARRED P. ROCKS.

Edson's Registered Strain, from a long line
of prize-winning ancestors; have made them
a specialty for 10 years. Now offering fine
exhibition and grand breeding stock of both
1900 and 1901 hatch at moving price if taken
soon. Send for illustrated circular with
half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Buff P. Rocks Exclusively...

We have Judge Harris' entire stock.
These, together with our own prize
winners, gives us the best flock of
Buff Rocks in the country. We can
please you both in quality and prices.
Write us if you want winners bred
from winners. Pekin ducks, Toulouse
Geese for sale.

MRS. FLORA SHROYER,
Clay Center, Neb.

WANTED!

250 White Wyandotte Hens
and Pullets.
250 White Leghorn Hens
and Pullets.
100 White Rock Hens and
Pullets.
100 Buff Orpington Fe-
males.
Will pay cash. Address,
Box 421, Clay Center, Neb.

200-Egg Incubator for \$12.⁸⁰

The simplicity of the Stahl Incubators created a demand that forced the produc-
tion to such great proportions it is now possible to offer a first-class 200-egg Incu-
bator for \$12.⁸⁰. This new Incubator is an enlargement of the famous

WOODEN HEN

recognized the most perfect small hatcher. This new Incu-
bator is thoroughly well made; is a marvel of simplicity, and
so perfect in its working that it hatches every fertile egg.
Write for anything you want to know about incubators. Send
for the new free illustrated catalogue.

GEO. H. STAHL, Quincy, Ill.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS.

Are better than ever as they have farm range. Have 280 young and
30 old ones to draft from the coming sale season. Was winners of all
firsts and part second in state show the last two years, also have been
winning for customers in strong competition. Satisfaction guaranteed.
Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

ARE YOU LOOKING FOR EXHIBITION BIRDS?

BARRED PLYMOUTH ROCKS. With that nice even ring barring to the skin as blue
as the sky, and with elegant combs, golden beaks and shanks. Or heavy weight **SIN-
GLE COMB BROWN LEGHORNS.** Elegant combs, fine striping to Hackett and Sad-
dle, and shape to burp. Pullets with that soft even brown color, fine striped hackles
and elegant combs. In fact birds that give the other fellow that tired feeling in the
show room. If so, address.

J. W. WHITNEY, Chatham, G., P. O. Box 1.

**We
Have
Those
That
Win...**

Barred Rocks - - White Wyandottes

**WE HAVE
Some - Choice - Exhibition
AND
Fine Breeding Birds
For Sale!**

We have always won at State Fairs and State
Shows more prizes than all other exhibits.

T. L. NORVAL, Seward, Nebraska.

Mr. and Mrs. C. A. Blanchard, : : : Friend, Nebraska

BREEDERS OF

White Plymouth Rocks, White Holland
Turkeys and Pekin Ducks. At Nebraska
State Poultry show 1901 we won 1st pen, 1st
hen, 1st cock, 3d cockrel, which was a prize
on every bird entered. At the Nebraska
State Fair, 2d to 6th of Sept., 1901, we won
1st pen chicks, 1st hen, 1st pullet, 1st cock-
erel—a first prize on every bird entered.
We have a fine lot of young stock for sale.

5⁰⁰

**Buy 5 Brown Leghorn Roosters
100 fine Birds must go soon**

For illustrated circular and particulars, write.....

E. W. GREER,

Prop. Glen Raven Egg Farm.

Farmington, Mo.

THE
GOLDEN

POULTRY

EGG

INVESTIGATOR

The title page is framed in a decorative border. The word 'POULTRY' is in a large, ornate, blackletter-style font. Below it, 'INVESTIGATOR' is in a similar but slightly smaller font. To the left of 'POULTRY' is a large, stylized letter 'P' that incorporates a detailed illustration of a rooster's head. To the right of 'POULTRY' is a large, stylized letter 'Q' that incorporates a detailed illustration of a rabbit. Below 'POULTRY' is a small illustration of an egg. The words 'THE' and 'GOLDEN' are in a simple sans-serif font above 'POULTRY', and 'EGG' is in a simple sans-serif font below the 'P'.

Vol. 3

Clay Center, Nebraska, December, 1901.

No. 10

Glimpses of Cedar Lawn Poultry Farm, Judge T. L. Norval, proprietor, Seward, Nebraska.

L. P. Harris, Clay Center, Nebr., President of the Nebraska State Poultry Association, Editor *POULTRY INVESTIGATOR*, poultry judge, and manager Sure Hatch Poultry Co. He has been a breeder for 24 years and has exhibited in all the largest shows in the east and west. Has belonged to the Nebraska State Poultry Association since first organized, and has always been an exhibitor and won his share of premiums.

Shipping Fancy Poultry

Our business calls us to the express office very often. Having an interest in every chicken we see, we will stop to look at fowls that are shipped. We noticed a coop that had three floors. There were Brahma, Buff Cochin and Langshan fowls in the coop, each kind separate, neither apartment being high enough for the birds to stand erect, and from the heavy weight of the birds and the large size of the coop it had to be made of extra heavy material. Altogether it was a poor contrivance, and the man who bought the fowls, even though he got them cheap, was beat when paying express on such a coop.

We have noticed fowls shipped in cracker boxes. Another extreme was a muslin coop, with hardly breathing space for the fowl, as the muslin covered the coop in all but one little place, and if something happened to sit against that in the express car the bird no doubt could have been nearly smothered.

When selling a bird it is due the customer to ship the bird and have it arrive in as good condition as possible, with as little express charges. It is not only due the customer, but really necessary if a breeder wishes to do good advertising.

A bird in an attractive, convenient coop standing on the platform, a gentleman examines coop and bird care-

fully, takes out his note book and puts down name and address of the breeder, remarking that when he was ready he would send to this breeder for stock.

Poultry is a business that should be advertised all along the line. The shipping of one good bird, sent out properly, usually sells another.

It is a sad fact that some chickens are sent out without food and water and from this very cause the writer have known of several instances where birds have died. Again fowls has known of several instances causes and some express agents are not careful about feeding and watering the birds.

When shipping birds we take care that name and address is written plainly and put on in two places.

W. A. Irving, Tecumseh, Nebr., Vice-president of the Nebraska State Poultry Association. Mr. Irving is one of the oldest members, and doubtless has shown more birds at its annual shows than any other, and has won more premiums than any other. He has bred several varieties but now has best Barred Plymouth Rocks and White Wyandottes. Mr. Irving may be counted as one of the "Faithfuls," and will be at Lincoln January 21 to 24, 1902.

Then if birds are going a long distance a sack like a salt sack is tacked on, having wheat in it, and call attention of express messenger to this fact and ask on a card that is tacked on if he will please feed and water the fowls. Such a notice is seen by some of the men and the fowls usually receive attention. When we send out birds the greatest danger is in their being overfed, which we prefer to running the risk of starving or hunger and thirst on the road.

When a bird arrives after a long journey it should be put in a nice roomy place where it can take a dust bath, grit put before it and soaked bread and milk. The last has the effect of helping the bird in case too

much grain has clogged the crop. If there is much grain in the crop of a bird on its arrival the best thing to give it is sweet scalded milk and nothing else for a day or two. We have known one instance where a bird's crop was packed for several days after its arrival, and if our friend had not handled the bird right he would have lost it, and it was a cockerel that cost him \$15. We describe extreme cases that the reader, if not experienced, can avoid any loss, but in most cases only the usual care is necessary. If only a \$2 bird is sent for, parties want the value of their money and should be willing to give a little extra attention to the bird and not put it out with a lot of hens at once. Again a bird sometimes contracts disease, as one don't always know about the stock they are buying. We do not mention this to cause fear, for hundreds of birds are shipped every day and everything satisfactory.

While some shipping coops are too heavy, other may be reduced to trap sticks by being so light as to shake apart by the nails getting loose. The express rate on a muslin coop is too expensive. The lath coop lined with cheap muslin is the most satisfactory. Sometimes a load of orange boxes can be picked up around town cheap. These, taken apart and the lumber used for coops, if well made, are a satisfactory coop.

We buy lumber direct from the lumber yard, using for floors the thin stuff such as is used for backs of picture frames, with one-inch pieces for corner posts. We have usually em-

L. W. Garrouette, Lincoln, Nebr., Secretary of the Nebraska State Poultry Association. Mr. Garrouette is a hustler, and he is certain sure the show at Lincoln January 21 to 24, 1902, will be the largest ever held and that the Auditorium will be filled completely with fine poultry, pigeons and bantams. Mr. G. thinks there are no other chickens on earth but B. P. Rocks, and breeds good ones.

E. O. Spencer, Courtland, Nebr., handles the cash for the Nebraska State Poultry Association. Mr. Spencer has long been a member, and has held some office every season, and has an eye open for the good of the Association. He is an expert breeder of W. P. Rocks and can show you a big string of blues. Mr. Spencer can be counted as being on hand to take the cash January 21 to 24, 1902, at Lincoln, Nebr.

ployed a man to make our shipping coops by the dozen. For a Leghorn or Plymouth Rock cockerel a coop is made as follows: One inch stuff for corner posts twenty-four inches high. These are for two sides. Thin muslin is put on to within three inches of the top; then laths are cut in three equal parts, placing six pieces on each side and ends, fitting and cutting laths to put inside of top and bottom so as to have double thickness to nail the top laths to, and double thickness to nail the floor on. The laths are put so close on top as not to allow a cockerel to get its head out. If laths are too far apart and one gets broken the bird might get out. If the cotton is not put on the sides the laths are put on as close together as they are on top. The coop should be high enough to allow a cockerel to stretch its neck and crow. For some of our birds we have had coopes higher than those above mentioned, which were for young cockerels. The comb and plumage of tail may be hurt if sufficient room is not given.

A drinking cup is nailed inside to one of the corner posts, and alfalfa leaves and chaff put on the bottom of the coops. The bird is kept in a larger, roomy coop with grit feed, water and all conveniences until as near train time as it will do to take it to the depot, when it is placed in its shipping coop ready to start, with food, water and all comforts it needs.

The lath cut in half makes just the right size for a trio. The ends are then cut the same length for cockerel coop. Our man, when he makes coops

for us, cuts the laths in half for a dozen coops used for trios, then the lath in three parts for the ends. Some coops are made the length of the lath if hens or pullets are sold instead of cockerels. The coops need not be as high as for cockerels. Always give plenty of room for a fowl to stretch its neck and floor space so it can turn around.

The coops are the easiest made and most satisfactory of any we have ever made, and we have made several kinds. Our carpenter said he was surprised when the writer showed him how to make the coops, and said he did not suppose a lady took an interest in such work. We can learn how such work is done as well as to do embroidery. The embroidery is more to our fancy, yet it is profitable to be able to look after the carpenter and show him what we want as well as the man who cleans the houses.

CORA A. RICKARDS.

Ogden, Utah.

Hon. T. L. Norval, Seward, Nebr., Chief Justice of the Supreme Court of Nebraska, chairman Board of Managers of the Nebraska State Poultry Association annual show at Lincoln January 21 to 24, 1902. Mr. Norval is one of the foremost breeders of B. P. Rocks and W. Wyandottes in the state, always winning the lion's share of premiums. Mr. Norval attends every board meeting and is a worker in the cause, having the good of the Association at heart.

Poultry Business.

Poultry, Bee and Fruit Journal: Poultry keeping is naturally adapted to making waste places profitable. It is a business that stimulates the faculties, gets people in touch with nature, makes them observant, quick-witted and careful in the methods of doing things. It is adapted to while away the cares of the over-burdened business man, charm the woman away from the dreary and endless round of housework, absorb the en-

ergy of the boy who otherwise might find some of that mischief that it is said a certain well known character finds for idle hands to do. It is the business of turning waste material into money, and adding to the wealth of nations by the exercise of patience and skill which otherwise would be lost to the world. While it is all these, there is so much room for it that men who are capable of managing the larger affairs of life take it up and make it worth their while to give it their attention. No business under the sun is so suitable for every age and condition in life as keeping poultry. The boy of 12 or the patriarch of 80 finds in it profit or amusement according to his needs. It is not play to keep poultry, but it is light work suitable for weak but willing hands, and the strongest man will not feel as if he were wasting his strength if he devotes his time to it. It is one of the oldest industries of man; it has always been profitable; it is getting to be one of the largest industries and it always will be profitable.

Hutch Record Cards to all Breeders, Free.

The Belgian Hare Co. of Lyndonville are supplying all rabbit and Belgian hare breeders with Hutch record cards FREE. All breeders should avail themselves of this liberal offer. After the first order they will keep you supplied with Hutch cards for the future. Send stamp: remember it is free for the asking.

Rev. L. P. Ludden, Lincoln, Nebr., is a member of the Board of managers of the Nebraska State Poultry Association annual show to be held at Lincoln January 21 to 24, 1902. Mr. Ludden is a fancier at heart though he has never exhibited, but no man in the state of Nebraska has ever evinced more interest in this state association than Mr. Ludden, and he was instrumental in getting the appropriation from the state for its maintenance. Mr. Ludden is an expert at book-keeping and will doubtless handle the books at the show.

E. E. Greer, Cambridge, Nebr., is a member of the Board of Managers of the Nebraska State Poultry Association, annual show at Lincoln January 21 to 24, 1902. Mr. Greer was one of the first to join the Association and has nearly every year since held some important office. He breeds White and Black Leghorns, and is an enthusiastic worker for the Association.

Hints About Management

By Mrs. J. W. HINES.

The poultry that everybody keeps is technically designated "fowls," or "barn door fowls." As a rule they are kept in small flocks, fed chiefly upon what no one misses. On most farms a flock of forty or sixty will pick up a living without receiving a particle of grain from May to October. What wonder it is that flocks thus kept are demonstrable more profitable than any other class of stock, or any crop on the farm? If fowls can roost in the trees, lay all over the farm, and dust themselves in the road, they will almost surely be healthy, lay a great many eggs, and keep in good condition. Besides, every now and then they will unexpectedly appear with a brood of chicks, hatched under some brush where she had stole her nest.

Many farmers fail to provide nests for their hens, and then grumble because they seek their nests about under the farm buildings, in fence corners and various out of the way places. As a rule it is better to have all the setting hens completely under our control. With a well arranged poultry house it takes but little time daily to have the hens come off for food and exercise. If they can be made to keep the same nest three or four days there will be little danger that they will make any mistake about it for the remainder of the time and will save us the trouble of mov-

ing them, but not the impossibility of seeing that they return promptly to their nests after feeding. When all is right, darken the setting room again and leave them until the next day at feeding time. If not done before this the poultry house should be gone over before winter begins and all cracks and crevices covered. If cracks are left uncovered there will be drafts through the house and consequently disease, especially roup, will follow. A teaspoon of coal oil to the gallon of drinking water will be a great help in breaking up colds and preventing roup. I think it is with poultry the same as with a person—a cold does not amount to much when quickly cured, but when allowed to run on and another is taken it will develop in roup and catarrh. If cared for and they have clean, wholesome quarters, and not crowded, poultry will always be healthy. If a fowl merely acts a little "cranky" do not imagine that it is sick and commence stuffing it with drugs. In looking over the average poultry house in winter, I find the most common defects are as follows: bare, damp floors, upon which the fowls stand and mope, broken windows, letting cold air blow upon the roosts, damp droppings left for weeks to heap up under the roosts; lack of a supply of warm water, obliging the hens to eat snow, lack of plenty of good sharp grit, which alone is sufficient cause of failure, over-feeding on corn, overcrowding and no inducement to scratch for a living. These are the most common and important mistakes, and those who wonder why their hens do not lay will do well to go over the list. Now, if you will study their natures and wants and learn to care for them right, like I have you will be successful. When the ground is bare of snow during the winter, give the fowl a chance to run after their first meal in the morning.

A good winter feed for laying hens is equal parts of corn meal and shorts or any fine feed; add to this some beef scraps and boiled potatoes; mix with hot water and feed every morning. Give corn, oats and wheat in equal parts, all they will eat, at night. When snow covers the ground keep them confined in the scratching shed and feed the whole grain in the shed, in which you can put leaves, cut hay or straw, so they will have to scratch for the grain. I find the great secret of eggs in winter is to make the hens work for their food. Don't over-crowd, don't over-feed, but try to over-exercise. I provide a generous box of dry dust by a sunny window. Add half a pound each of lime and

sulphur to each bushel of dust used. These greatly assist in killing lice. Fine sifted coal ashes are excellent. If wood ashes are used they should make up but one-fourth of the dust, as their potash is too strong when used alone. I always lay in stock some cheap vegetables and apples for winter use. To prevent packing of the crop, irregularity of the bowels, etc., give a little sulphur and venetian red, mixed with soft feed, once a week and provide of gravel and lime. Hens should be provided with fresh meat and bone in winter. But do not do like Mr. Wise Man who hung some rabbit just out of their reach in the hen house and gave them the jaw bones of a mule, and thought they were all right. Not long ago I asked a grocery merchant what effect the poultry question had on his business. He replied that the farmers who raise poultry very seldom run grocery bills, and those who do not nearly always have to run a grocery bill and are almost helpless when a drouth or other failure comes along, like it was this year. He also named a few cases where the farmers' wives paid the entire living of their family with poultry and eggs. As a usual thing the farm poultry is the property of the wives. The farmer pays very little if any attention to it, except to scold when we feed their grain. If this same farmer would keep an account of the feed, care, and the amount of products sold, he would not scold and complain to us and say that after all our fussing a chicken is but a chicken, and call us women poultry

Frank Patton, Surprise, Nebr., one of the Board of Managers of the Nebraska State Poultry Association, annual show at Lincoln January 21 to 24. He is a breeder of Buff Rocks. Mr. Patton has been a member of the state association for several years and has exhibited at nearly every show, winning every time in his class the best part of premiums offered. Mr. Patton is a good judge and we commend him to any association as perfectly competent and honest.

Ben S. Myers, Crawfordsville, Ind., is one of the judges at the Nebraska state show to be held at Lincoln, Nebr., January 21 to 24, 1902. Mr. Myers is known in the country over as an old experienced poultryman and judge. He judges the Denver show the week before the Nebraska state show, and has a large list this season. He is an expert at breeding Langshans, and his stock wins wherever shown.

cranks. But does it not take a crank to make the wheel go round? So many people enter the poultry business under the impression that all they have to do is to gather eggs and set a hen and she will do the rest. Many a man would take it as an insult if told that he had not sense enough to set a hen, and yet when tried by the straight edge of success, he finds more truth than poetry in the charge. There is millions in it if properly pursued and it is just as easy when you know how.

Some may say chicken fever is contagious and tell us chicken cranks we need a preventive prescribed. I will devise some kind of a tonic, such as holding on to part of a good job. I find it with the poultry business like everything else—the more we learn from experience the better we will be prepared for success. We will find a screw loose occasionally, but always carry a screw driver and never give up, as I know there is a reputation for us if we press on to get it, and will be found in the business for many years, instead of one and then in something else. There is many a delicate girl who should raise poultry instead of taking a trip to the mountains or to Colorado. I have poor health and know Kansas sun and air are as good as any, if we could only get out and stay in it. Taking care of poultry is not always pleasant or clean work and there are some young ladies who are afraid of making their hands rough and black, and so it is left for the men to do. I find not all

men like poultry, but you bet they all like fried chicken. Some men who look wise have asked me, "Is there really any money or pleasure, in fact anything at all in the way of recompense, sentimental or financial, in being a poultry crank?" There is only one recipe for a sure cure; it consists in trying it yourself and prove it for yourself. MRS. J. W. HINES.

Walnut, Kan.

How to Succeed.

I noticed in a daily paper of recent date that the four qualities needed and absolutely required for a first class business men are these: Punctuality, accuracy, steadiness and despatch. We can well apply this to the poultryman of today who is running his business in a good way. He is punctual;

C. H. Rhodes, Topeka, Kas. Poultry judge at Lincoln January 21 to 24, 1902. If any one doubts Mr. Rhodes' popularity as a judge they have only to read his list of shows in Kansas, Missouri and Nebraska this season. He has long been known as an expert breeder of Black Cochins and his stock has won in all the best shows in the United States.

that is, he is on time in everything. He has all the buildings and fixtures completed and ready for use before needed. He does all his work in time. He selects and mates his fowl at an early date. He provides for winter feed in ample time. He buys all necessities before actually needed. And when dealing with any one he meets all appointments, never late and answers all letters at once. He ships fowls immediately on receipt of the order, unless for some good reason it is unwise to do so.

He is accurate. Now we find that nearly every poultryman intends to be accurate in all his work, not only that which is his own personal interest, but in all his transactions with

other people he aims to be accurate. It is wrong to be any other way. Yet we do often find those who are not so accurate. First, it is right for a man to be accurate when considering those things which would make a loss or gain to himself alone. He should keep an accurate account of all receipts and expenditures of his work among the fowl, charge them with feed and all that is purchased for their use, etc., and credit them with all returns, eggs and fowl. Thus he will know his profit. But accuracy is most needed when corresponding with and selling fowl to some one. Accuracy is surely necessary at these times. It is the only aid to the building up of a reputation and paying business.

Then comes steadiness. Who can expect to make poultry pay if he is unsteady and fails to keep the work done as fast as it needs be finished? There is always work for the poultryman every day in the year. So he must necessarily be of steady habits. He can't leave his work and go away when he is needed there without making a loss. No, he cannot neglect his work. There is work to be done and it must be done.

Last but not least is despatch. Despatch all business with punctuality, accuracy and steadiness. Combining the four qualities you have an abundant opportunity for great success. With one of these lacking, none of the others can be complete. Within all these four qualities are included all hope of success.

David Larson, Wahoo, Nebr., is one of the judges who will place the awards at the Nebraska state show held at Lincoln in the new auditorium, January 21 to 24, 1902. Mr. Larson is a well known breeder of Leghorns and an expert judge in this class. He also judges other classes, and is secretary of the Western Pigeon Club. Address him for entry blanks, etc.

A. R. Carrutte, Lincoln, Nebr., will judge at state show at Lincoln, all water fowls and was recommended by the Water Fowl Club. He understands well what he is doing.

It is success that we are all looking and seeking for. Someone has said that success comes to him who waits. This is true in one way, for we cannot get success until we have time to obtain it. But we cannot idly wait for it. We must go out to seek it. So let every breeder be punctual, accurate, steady and prompt in all work.

PERCY. W. SHEPARD.

I wish to answer topic No. 3. My experience with thoroughbred poultry dates back about twenty-five years. When a boy of 15 I attended a poultry show in Hartford, Conn., and caught the fever, which has never left me. A brother of H. H. Stoddard, who edited Poultry World, the paper at that time, had three pairs of B. P. Rocks, so-called, on exhibition. These seemed to strike me and I bought one pair for \$10, which caused some of my friends to hesitate when asked about my business ability. However, those same friends and neighbors were glad enough to exchange common eggs with me, of course. These were the first B. P. R. chickens any one in our town had ever seen. This pair weighed nineteen pounds, so were not cut on weight, but as I remember them, could have been cut several points without referring to size. Legs were willow, with black striping. Barring, where there was any, quite splashy and muddy. I also invested \$3 in a setting of eggs about the same time, getting one or two weaklings. But to come down to the past, since 1897 is what I purposed to relate of my experience. July 10th, 1897, my first White Wyandottes were hatched—seven, and all raised to maturity. One cockerel, the best of the three, weighed September 10th two pounds; October 10th, three pounds; January 10th, 1898, at six months, seven pounds. This is one reason I bred them exclusively. No other birds I have ever bred mature as quickly. If you wish

to dress a broiler it must be white or buff or you will be tempted to strong thoughts, if not exclamations, before all the little pin feathers are out. And when out, what are you going to do with the little black spots where they grew? I have bred five or six varieties, but none can fill the White Wyandottes' place for me. Have had them in competition with Brown Leghorns and they won in egg production. The best of setters and mothers. Easily broken up, if you wish, and always ready to eat after eight weeks old. It is only necessary to look at the Boston show to prove their popularity, where they were the largest class last January. It is fast moving westward. Only two or three years ago advertisers were mostly

H. J. Smith, Lincoln, Nebr., Superintendent of the Nebraska State Fair, held in the New Auditorium at Lincoln, Nebr., January 21 to 24, 1902. Mr. Smith is one of our most energetic members, and is a breeder of White Leghorns and Barred P. Rocks. Mr. Smith is also a first class judge and has officiated in several shows in Iowa and Nebraska.

eastern breeders. They are now fast crowding their older rivals, the B. P. Rock, east and west.

I wish to speak also on topic No. 5. My experience in showing fancy poultry has been entirely confined to my one favorite variety. Of the seven hatched July 10th, 1897, I exhibited one breeding pen at the National Fanciers' association show in Chicago, in January, 1898, my first exhibit. To those of my readers who have been there for the first time, it is not necessary to explain my feelings. There is some little anxiety the first time. Judge Bridge scored them and I learned some things, as I handled nearly all the birds, having charge of placing the identification cards on coops. My birds scored from 91 to 93½, but did not get a place, as they were in too warm company. But when they got home they laid in February 67 eggs, March 66, April 76, May 74, June 50 (one setting the 13th), July 43, August 28 (from two birds only),

or 404 eggs in seven months, from which I raised 100 chicks in the season of 1898. Have exhibited since, at Omaha, December, 1898, first pen, first cockerel, first, second and third pullets, under Judge Harris. At Jefferson, Iowa, January, 1901, entered five birds and won first pen, 187 (\$10 cash); first cockerel, 93½; first pullets, 95½ (highest score in show); third pullets, 94½. My experience showing fancy fowls has been pleasant, profitable and instructive. To any one that reads this who has never exhibited, I wish to say this: Take your best birds to a good show. Compare live models, meet brother fanciers and learn a few things. You will never regret it, I am sure. If you don't win, try again. Perhaps you will learn why you don't, if you do not.

I wish you great success as a Poultry Investigator, which you are making true to name. W. A. GODDARD.
Woodbine, Iowa.

The Wichita Poultry association will hold their eleventh annual show at Wichita, Kan., January 6th to 11th, 1902. A. J. Waddell, president; H. W. Schoff, secretary. H. B. Savage, judge. Send for list at once and come and show with us. H. W. SCHOFF.

F. C. Hindman, Friend, Neb., writes that he has purchased one of the Pan-American winners in the Barred Rock class and says he is a big fine fellow weighing ten pounds and not fully developed. He says "he has a May 1st hatched cockerel that weighs eleven pounds and others weighing 9, 8 and 10 pounds. If you want size and quality, Mr. Hinman can supply you sure.

John Haman, Topeka, Kas. Judge at the Nebraska State Poultry Association January 21 to 24, 1902. Mr. Haman has long been a breeder of pigeons and has officiated as judge in many of the best shows in the United States. Pigeon men will get fair treatment at Lincoln this winter, and will receive liberal premiums.

It gives us pleasure to present to our readers this month a halftone of THE PERFECTION EXHIBITION COOP, manufactured by Wm. Miller, North, Bend, Nebr. His goods are first-class, and can be relied upon as such.

FACTS VS. FIGURES . . .

By M. M. JOHNSON

Figures will make a man rich mighty quick in the poultry business—the Klondike country is not in it. Yes, a hen will lay 200 eggs in one year (you see figures always take the highest probable possibilities). At 24 cents per dozen this makes \$4 for said hen, or we can let her lay, say, 175 eggs and hatch out 16 chickens. Yes, broilers often bring \$1; that would make \$16 for the broilers alone, not saying anything about the \$3.50 for the surplus eggs. But who would fool along with one hen? Why not have 10,000 hens and make \$195,000, just as easy as rolling off a log if you have your pencil in order. But for goodness sake don't monkey with the expense account. It would spoil the dream. — would fog the trial balance, and what's the use anyhow? When a man starts out to raise poultry with a lead pencil, a barbed wire fence wouldn't stop him. No sir, and more than this he would fall out with his best friend if he dropped the least hint that he doubted the figures. It's one of the peculiarities of these men of figures to like the people who encourage him to bust, better than any man that dared to go back on Ray's Arithmetic. But it remains a cold stern fact that they always bust. It is also a fact that it goes on record (regardless of the circumstances) against the poultry

business. It is referred to far and wide and for years as a positive proof that poultry don't pay.

Yes, poultry raising pays, but a sharp pencil don't help it pay, better than it makes other occupations pay. It is all right to keep account, especially so on the expense side, but the more we monkey with figures otherwise, the more we invite disappointments. When it comes to raising poultry and really making it pay, the dear women folks are the chaps—please excuse me. Right here I want to explain that I am a married man and my wife gives every indication that she is going to outlive me, therefore I can't be accused of courting in this article. No, the women folks don't raise all the poultry, and that's a fact, but they come so near raising all of it that the men folks would get mighty hungry for chickens if they only got what they raised, and that's no lie either.

To the best of my knowledge, this court has never caught a woman poultry raiser mixed up with figures, except when she was figuring on how much groceries and dry goods and Battle Ax plug (for her husband) that she can get for her poultry and eggs.

It would be falling from grace to mention several truths about poultry raising; for instance, it would not

be good taste to mention that thousands have been able to hold down their homesteads on the plains on account of their cows and hens, but it remains a fact that can't be wiped out by the land boomer (who wants to raise corn 16 feet high over the beautiful cut and dried desert). It is also a sober fact that thousands on the worn-out hills in the eastern states appreciate the help of the hens. Even in the rich corn and wheat producing states the hens pay over 50 per cent of the grocery and dry goods bills. Yes sir, the hens have demonstrated and proven their ability to pay for their feed and our feed, drouth or no drouth. They are equal to the occasion, and the queer part of the whole business is that no particular locality or person does it all. Every state and every nook of this country does some of it, and nearly every country on earth helps do it. To do away with the hens in this country, the government and its people would go broke, and "that's not another lie, either."

Pass the chicken, please. Yes, thank you. Yours truly,

M. M. JOHNSON.

The Western Poultry Fanciers' association of Cedar Rapids, Ia., which holds its seventh annual exhibition at Cedar Rapids on January 13th to 18th, 1902, wish to call the attention of the poultry fanciers to a few of the special attractions of their show. The American Buff Rock club and the American Black Langshan will be two of the special features.

Theo. Hewes of Treton, Mo., and J. A. Tucker of Concord, Mich., will judge the poultry; R. J. Finley of Macon, Mo., will judge the hares, and Henry Tieman of Baltimore, Md., will judge the pigeons.

Write for premium lists December 1, 1901.

Entries close January 4 at midnight.

E. E. RICHARDS,

Secretary.

When chicks are hatched we often find some are unable to walk and soon their knees are sore and swollen, and if they try to follow a hen they soon die, or kept in a brooder they are overrun and have a discouraging short trip of life. Take coarse yarn, tie a loop around one leg, then pass to the other, leaving only about one inch of yarn between, and pass another loop knot around the other leg. If done as soon as you find one so afflicted, in one week to ten days you can take off the yarn and they spring around and walk all right, as lively as any of them.

R. AGNES CLARK,

Greenwood, Nebraska.

Does Advertising Pay?

MRS. BETTIE GLOVER MACKEY.

If the question were not so often asked by intelligent people, the title of this article would seem to be a foolish one. For one only has to take up any paper, it matters not in what line of thought it is published, to be convinced that either one of two things must be true. It either pays to advertise or there are thousands of people deceived into believing that it pays. Nor does it matter whether the article advertised has genuine merit when it comes to advertising in general. It seems that people will answer the catchpenny advertisement as often as those with genuine guarantees. The writer would not like to tell of the many times she has been the victim of fraudulent advertisements, and I am convinced by these experiences that I am not a fool, for it is said that fools profit by experience, and I do not. Every little while I am caught by some wily advertisement. When we consider that many of these advertisements cost from 75 cents to \$1.25 per line, we know they must pay, for these appear in from one to two dozen publications each month, and many of them in a much greater number. But my purpose is to give my views as to whether advertising pays the poultry fancier. I say most emphatically that it does pay. And I believe there will not be a dissenting voice among experienced fanciers.

That some receive better pay for money invested than others is also true. And for this there is a reason, sometimes more than one reason. First, if you are an amateur and have good birds which you would like to sell, it will be necessary for you to make a choice as to what medium you will choose to advertise your stock. And much depends upon this choice. Always remember that a respect for the fitness of things is a great assistance in any line of business. If you have fowls to sell, there is no other medium of advertisement as good as a poultry journal, and next to this is a good agricultural journal. Do not put a poultry advertisement in a purely literary paper unless you have come to the place in your business where you take the whole realm of the advertising world as your field in which to advertise. I see a few fanciers have arrived at that place, but the beginner must, like "Little fishes, keep close to the shore, While larger ones may venture more."

Not even a religious paper is a good advertising medium for poultry fanciers. Why? Simply for the reason that the people, as a class, who read the religious and literary journals, though they may be much interested in poultry, do not look upon advertisements seen only in these journals with as much favor as they do upon those found in agricultural and poultry journals.

An amateur might possibly start by advertising in his local town or county paper. I have known a few persons to start in this way. But my experience along this line of advertisement was not at all satisfactory. True I can sell stock, but the people this class of advertising brings to me are a class that want stock only a little above market price. They usually come in a two-horse wagon to stay all night or take dinner. The horses must be fed. They say: "I think as we came to the house and you don't have to take stock to depot, you ought to let me have these birds cheap." In one instance a family of five came with two horses for dinner and bought one tom for \$3.50. The poultry journal is the natural advertising medium.

After you have decided that it shall be a poultry journal, you will have to decide what journal or journals you will use. In order to do this you must take into consideration the class of readers you wish to reach, what territory will be the best for your advertisement to cover. Then select the journal which in your judgment will best meet your desires. Now, much will depend upon the wording of your advertisement whether it attracts or drives. I often read advertisements that make me think the advertiser either has no knowledge of the power of attraction or wants to drive customers from him or her, as the case may be. One of the most obnoxious forms of advertising is that of giving thrusts at other advertisers in the same line of business. Always advertise your own business and let other people do their own, is a good motto. Very frequently the thrust arouses a spirit of inquiry which throws the trade to the other party. Never under any circumstances make the claim to all the best poultry in class advertised, for should this be true when copy is written, before it could go to press the probabilities are some one else has secured stock as good or better. This is a

progressive age and the man or woman who claims all of the best is under suspicion for lack of veracity. I think the best way for an amateur to advertise is to give the pedigree of his stock, at least tell whose stock he has. I see in this one objection, and have sometimes advised my own customers to build on their own merits rather than advertise Mackey stock. The reason for this was that those parties were not very far from me and I felt that persons who wished my stock would send to me instead of my customers if I were as near as the customer, and he would simply be paying to advertise my stock.

But if you are a great distance from the party from whom you purchase stock, you can use his name to advantage. To make clear my meaning: I. K. Felch is the king of the Brahma domain, and if you are a western fancier and advertise Felch Brahmas you may be sure of a good share of the trade from an advertisement in a journal circulating in the west and middle west.

Make your headlines catchy. Last season I headed an advertisement of eggs as follows: "Mrs. Nation's Hatchet Can't Smash Eggs Packed by Mrs. G. G. Mackey." In the nineteen years I have been in business no ad. ever brought as many inquiries in the same length of time. Of course that will be out of date next season, and I must hunt up another. I believe it a great mistake to keep the same wording year after year. I know some of our best known fanciers do this, but they can afford it. We lesser lights must shine from different points of view. Remember that the best written advertisement in the best advertising journal will only give you an opportunity to do a paying business, and that your success depends on the use you make of the opportunity. In order to make your advertisement pay to the fullest extent, you must observe certain rules. Make it a rule to reply to every inquiry received concerning your stock, and do so promptly. The day letter or postal is received has always been the rule I have observed as nearly as possible. Sunday, as a matter of course, I make the exception. And of course there are times when every business man and woman is compelled by circumstances beyond their control to postpone business. But promptness should be practiced by all business people, especially those whose business comes mainly by correspondence. Answer your letters promptly and in a business-like manner. Tell the whole truth about the stock and try always to give description little

below what you believe you can make the bird if you receive order. And when you receive the order do your best to please your customer, for the very best advertisement you can have is a well pleased customer, while a dissatisfied one is the most detrimental advertisement. This is true even if you are not to blame for the dissatisfaction. In order to secure best results, an advertisement should be kept running continually. We become familiar with names we see in our journals every month year after year and we think they are reliable or they could not remain so long in business. If you cannot afford much space, take just what you can afford and as your business increases better enlarge space in one journal than take small space in another. Advertise what you have and be sure you have what you advertise. Give prompt attention to prospective and actual customers, and my word for it, you will find that advertising will pay ten, twenty, sixty and one hundred fold. Answer postal cards. It pays to answer all, stamp or no stamp.

MRS BETTIE GLOVER MACKEY.
Clarksville, Missouri.

CARE OF DUCKS.

Because ducks can be neglected without killing them, they are often left to take care of themselves the best way they can. To use a western slang expression, "Ducks are good rustlers, but it is doubtful if it is well to let them sleep and eat where they please. Ducks will not lay in January if housed in a damp, draughty place, nor will they lay so early if fed grain alone. It is not necessary to have a house where water will not freeze for ducks. Any place where the wind and water cannot enter is good enough. Mashies of scalded bran and cooked vegetables ought to be the morning meal for the ducks. On the farm we never troubled ourselves about any other meal. The ducks are greedy for alfalfa, cane and corn fodder. After years of experience we have come to the conclusion that ducks are not much of grain eaters if other food is to be had. Raw carrots and sugar beets are fine feed for ducks, as they are for all poultry. Cooked they are also valuable for the morning meal.

We would recommend the sugar beet above all vegetables for poultry. If one has the opportunity to raise them, a small patch will give lots of beets. If they are purchased, they are cheap at the price the factory pays the farmers. They are easily kept, which is more than one can say for carrots. We do like carrots, but it is almost im-

possible for us to keep them longer than for the fall.

The feeding of the ducks is an important matter if one wishes the first eggs to hatch. In duck raising we have found the feathers quite a profitable part of the business. The early ducks may be plucked several times before they are sent to market. If breeding stock is desired, the early birds are generally the prize winners.

It seems to me a great mistake not to have the duck house open into a small yard where the ducks may be confined until they lay in the morning. Ducks rarely lay after 9 a. m. We have often heard people complain that they got no duck eggs. The reason was evident to me, for I knew the ducks were not confined. When the season arrives for ducks to lay they can be depended upon to lay, and the season will begin very early if a little care is given to feeding and housing.

I wonder if there ever was a flock of ducks that would go into a house without being driven there? But how easy to drive. Our ducks lay out on a snow drift in the depth of winter until we shout and give them a start toward their house. We always keep the duck trough in the yard, otherwise the ducks would not be so much at home there. The duck trough we find is a convenience not enjoyed by a great many who only keep a few ducks. If the ducks are furnished a low trough in a convenient place they do not pollute horse troughs and become general nuisances. At the old home we had a water pipe and hydrant in our duck yard. We have not as yet a pipe of our own in this house, but we have a pipe running through the fence and into a large bucket, so that we have no gate to open when we fill the trough. As it is only a few steps to the hydrant, the children can easily fill the trough. We give this as a suggestion to others whose yards are a little distant from a hydrant.

The cost of piping water to the duck yard is saved in labor, fertility of eggs, and, above all, in keeping the ducks in their own house and thus avoiding having filthy mudholes where we least wish them.

HATTIE BYFIELD.

THE WESTERN PLYMOUTH ROCK CLUB.

Editor Poultry Investigator: The Western Plymouth Rock club has been organized and this is a call for all breeders of this grand breed to come into our ranks and help make the club a success.

It seems that a western club would be a great assistance to the breeders and it shall be the aim of the officers of this club to make it as beneficially as it is possible to make such a club, and we kindly ask all breeders to join us at once and help us to make a success of our efforts, for remember "in union there is strength," and to succeed we must work together.

Lady breeders will be admitted without the payment of the membership fee or the annual dues. We earnestly invite all lady breeders to send in their names at once and become members.

The officers for the first year shall consist of as follows: President, Sid Conger, Shelbyville, Ind.; vice president, Mrs. J. W. Randolph, Kenny, Ills.; secretary-treasurer, C. A. Penny, Des Moines, Ia.; executive committee, Sid Conger, Shelbyville, Ind.; C. A. Penny, Des Moines, Ia.; L. P. Harris, Clay Center, Neb.; A. L. King, Walnut Grove, Ills.; J. W. Headlee, Ottumwa, Ia.

The membership fee is fifty cents and the annual dues twenty-five cents. Send in your name, membership fee and first annual dues to the secretary at once and become a member and give the ball a good start.

Constitution, by-laws and application blanks may be had upon application to the secretary.

CHAS. A. PENNY,

Sec'y-Treas.

U. P. Station, Des Moines, Ia, U. S. A.

SUMMER CHICKS.

Bunker Hill, Ill., Sept. 16, 1901.

Mr. Will Chamberlain, Kirkwood, Mo.: Gentlemen—While I am not in the habit of "tooting my horn" or lauding my praises, but in justice to yourself as the manufacturer of "Chamberlain's Chick Food," I must relate to you my experience with your feed.

While I have used your feed for the past three years, I have never had a single case of bowel trouble. This season I had a lot of Buff Rocks hatch in July, and until they were six months old I used nothing but your chick food, and a healthier lot of chicks one could not wish for, and I have raised every one of them.

Summing up poultry raising in a nutshell, any one that will furnish the necessary labor, "Chamberlain's Chick Feed" will do the rest. Yours very truly,

THEODORE BENNER.

"To keep pace with the procession
As it moves along, you know,
You must grasp new notions quickly.
Then as quickly let them go."
VELMA CALDWELL-MELVILLE.

A view of B. P. Rocks and Pekin Ducks owned by H. B. Loudon, Clay Center, Nebr. Mr. Loudon also breeds Duroc Jersey swine. He says the best is none too good for him.

♣ BUFF LEGHORNS. ♣

By Charles L. Thayer, Chicago, in Commercial Poultry: About five years ago, in the spring of 1896, hearing my neighbors tell of the number of eggs they were getting from their hens, I decided I would have some, too.

I had only a city lot, 50x125 feet, and of course the house and barn take up a portion of it, so I couldn't have a very extensive poultry farm, but found I would have plenty of room for a poultry house and yard and have some space left. I had the house built with a double wall, with a four-inch space between, and lined it with tar paper.

I started by buying some hens of the butcher—mixed stock, in which the Plymouth Rock blood predominated. They laid awhile and then wanted to set. I got a poultry catalogue from a man who raised nearly every breed in the Standard, and as all were praised very highly, I hardly knew which to select.

I wanted layers instead of a large meat fowl, so determined to try the Plymouth Rocks or the Leghorns. I bought eggs of three varieties—Barded Plymouth Rocks, Brown Leghorns and Buff Leghorns. At that time I had never seen a Buff Leghorn, but thought from the description I might like them. Having had some experience in raising chickens when a boy, I had very good success, and raised about sixty. I gradually killed and ate them until in the fall I had thinned them down to sixteen—eight Plymouth Rocks, five Brown Leghorns and three Buff Leghorn pullets. I then kept a record to see which were

the best layers. The Leghorns began laying six weeks earlier than the Plymouth Rocks; they often lay before they are five months old, and mine beat the Rocks every month till March; during that month the Plymouth Rocks laid as many eggs as the Leghorns, but in the latter part of the month the Plymouth Rocks want to set, so that stopped their good laying record, while the Leghorns kept right on.

I decided that the Leghorns were the fowls I wanted for laying, and that the Buff Leghorns were better than the Brown Leghorns in many ways: First, they lay fully as well if not better than the Brown; second, they lay a much larger egg, as large or larger than a Plymouth Rock. I have frequently weighed them when seven eggs would weigh a pound, while it took ten or twelve Brown Leghorn eggs, an advantage of 50 per cent in weight, which if eggs were sold by the pound means 50 per cent more per dozen; third, the Buff Leghorns are larger than the Brown, making a better table fowl, and more popular with people who prefer a larger fowl than the Brown Leghorn.

To my mind the Buff Leghorn is the most beautiful fowl bred when perfected as we have them now, of an even buff surface color from head to tip of tail, especially the females, bright yellow legs, white ear lobes, and bright red comb and wattles. When seen on a green lawn, or scratching in yellow straw, almost the color of the fowl, they are admired by all, and certainly present a

very fine appearance.

function of speed is accompanied

Well, I sold the Brown Leghorns, bought a Buff Leghorn cockerel and another pullet; since then I have raised nothing but Buff Leghorns, and am more in love with them every year.

I find that most Buff Leghorn breeders are increasing the weight somewhat, as we think it an advantage so long as they keep their non-setting qualities. They rarely want to set, but will sometimes when they grow older; if allowed to set when they get old, in the only one I ever tried, I found her an excellent setter and a fine mother, fighting anything that came near her chicks.

The last few years has seen a great improvement in color of plumage and color of legs. Where formerly there was more or less black or white in plumage, especially in wing or tail, and the legs of a greenish cast, we now get many specimens of a solid buff color throughout, and with bright yellow legs; of course we have culls, the same as with all other breeds, but I have never had to sell a pullet for less than \$1, even if she is off color, as she is worth that for her laying qualities.

The first three years I raised the chicks at home, but since that I have used all my space for breeders, and had the chicks raised on a farm. I send out the eggs in the spring and bring back the chicks in the fall.

I find no trouble in selling all the

Please send more rats over to Wm. Delahaunty's place, I am hungry. Oh, I love to catch 'em and crush their bones!

White Wyandotte hen, score 96 by Russell, 1st at Nebraska state fair of 1900, 1st state show of 1901; bred and owned by Judge T. L. Norval, Seward, Nebr.

eggs and chicks I can spare, and while it is a side issue with me, I make it pay and get a great deal of pleasure out of it.

Some of the large broiler plants are using Buff Leghorns extensively now, as they feather out so quickly, and the yellow pin feathers do not show.

If there was as much written about the Buff Leghorns as some of the other breeds they would be even more popular than at present, and I find that the noted Buff Leghorn breeders have sold every Buff Leghorn they could spare from their breeding pens. I think they stand at the head for beauty and utility.

The American Buff Leghorn club, of which George S. Barnes of Battle Creek, Mich., is secretary, is bringing the breed before the public, and doing more active work for the Buff Leghorn interests than ever before. The club solicits the membership of every reputable Buff Leghorn breeder and fancier.

NOTICE.

All Incubator Co. advertising in our paper get out a very handsome catalogue. It would be well if all persons intending to buy incubators this season would send for catalogues of each company and then make their choice.

Mrs. Ida E. Bard of Imperial, Neb., sends the editor a sample feather from a Buff Cochise pullet, and writes as follows of it: "This pullet was hatched 22nd, 1901, and is laying. October 11th was the first I know of her laying. She is a pet and kept coming to the door singing. I placed a letter box on a bench by the door, in which I placed a nest egg, then placed the pullet in and in a half hour she had laid. I am quite sure she has been laying two weeks prior to this time. I think that quite good for a Cochise pullet."

Editor Investigator:: :

We are surely going to have a big and good show at King City, Mo., December 9-14, 1901. John Preston of that place has consented to act as superintendent, which insures that that portion of the work will be attended to in the very best manner.

Many breeders have already written signifying their intention of exhibiting with us.

Our association has more than doubled its membership since our last show and is still growing.

We have a fine list of specials and premium list will be sent free on request. Yours truly,

R. R. FRENCH, Secretary.

Subscriptions Donated.

The following poultry papers have made donations of yearly subscriptions as follows, to be used as 4th premiums at the Nebraska State Poultry Association show at Lincoln, Nebr., Jan. 21 to 24, 1902.

American Poultry Journal, Chicago, 10.
The Feather, Washington, D. C. 2.
Farmer & Breeder, Sioux City, Ia. 100.
Poultry Gazette, Topeka, Kas. 10.
Oregon Poultry Journal, Salem, Ore. 5.
Georgia Poultry Herald, Jackson, Ga. 12.
Poultry Farmer, Des Moines, Ia. 16.
Mich Poultry Breeder, Ithaca, Mich. 10.
Poultry Gem, Siloam Springs, Ark. 10.
Poultry Success, Des Moines, Ia. 5.
Western Poultry Breeder, Topeka, Kas. 12.
Fruit Grower, St. Joseph, Mo. 10.
Poultry Topics, St. Joseph, Mo. 12.
W'n P'try Journal, Cedar Rapids, Ia. 10.
Poultry Monthly, Albany, N. Y. 4.
Poultry Keeper, Quincy, Ill. 4.
W'n Poultry News, Lincoln, Nebr. 15.
P'try Investigator, Clay Center, Neb. 20.

We extend our thanks to the proprietors and editors of the above poultry journals for their liberal offers, and, wishing success to all, we are

Yours truly,

L. P. HARRIS.

Pres. Nebr. State Poultry Assn.

The Osceola Poultry association will hold their next show at Osceola, Ia., December 3 to 6. President, M. L. Parr, Weldon, Ia.; vice president, W. S. Luther, Osceola; secretary and treasurer, Mrs. J. A. Lash, Osceola; superintendent, J. M. Beard, Osceola, Ia.; L. P. Harris, judge. Catalogue out November 1. Send for one; it is free.

The Ogden Poultry and Pet Stock association will hold its annual show at Ogden, Utah, December 11, 12, 13 and 14. M. J. Hewitt, secretary. Judge Browning will place the awards. Premium list will be out November 4. Be sure to send for one.

"Highland Queen," from life; score 96% by Tucker. A first prize winner in the largest shows in the United States. Owned and bred by Highland Poultry Farm, Des Moines, Ia.

Cornish Indian Games as bred by C. D. Smith, Fort Plain, N. Y.

Shipping Coops

I wrote some time ago about shipping coops, and asked why some firm could not put them on the market in much the same way that berry boxes and crates are sent out. I have not seen nor heard anything of the kind being done yet, but have accidentally "stumbled" onto the nearest thing to it, and as usual when I have a good idea (in my own estimation) am in a hurry to tell it. Sometimes, though, even I think my ideas are not worth much, because they won't keep. If I don't put them on paper while they are fresh, I am very apt to forget it. I am suspecting that the poultry world is giving one great sigh of relief at the escape of many of my ideas that have grown stale and forgotten because of lack of time to put them down when first thought of. But please don't congratulate yourselves too much or they may reappear by way of punishment.

But about those coops. We have on hand a quantity of tree wrappers that were never used. They were left out of some 2,000 bought a couple of years ago, and as the wrappers from

the first winter's use stood the storm so well, many of them were taken off in a damp time, piled evenly and a weight put on them, and being "as good as new," were used the second winter, and the next winter the trees are too old, many of them, to need wrapping, and now I am going to use some of those out of the original packages for the construction of hen coops for shipment. They are made of a tough white wood and are very thin, like berry boxes. I suppose the thickness is meant for one sixteenth of an inch. Each wrapper is ten inches wide and twenty inches long (they can be had in different sizes—12x24 is the largest), but twenty inches high is the kind we have and are plenty high for an ordinary shipping coop; and the way we intend to make the coop is to cut laths the length we want them for the sides and ends of the coop, lay them on a flat surface, one for the top, one for the bottom, and one through the middle, for large coops; then lay the wrappers over them, then another lath on top exactly over the under lath, and nail them with small nails, clinching on the under side. Each side and end

will be made in separate sections, and for small coops they will be nailed around the floor of coop and together at the top corners, also at the middle; but for large coops a corner post will be needed, the top will be sealed over with lath and a couple of cans for feed and water, in small coops, corn, wheat and oyster shells for feed, put in after weighing at the depot. We put four cans in large coops. Speaking of cans, we have them this year without going to the hotel or restaurant for them. We have always bought more or less "canned goods" when we would get tired of the home-grown put up, and relished it; and we always thought it sort of a part of speech or a myth with the town folks who used to make faces when you mentioned canned goods to them. It will be canned goods or nothing with a good many of us this winter, and already we are on the verge of "making faces." We have the usual amount of fruit put up, but not a tomato nor a grain of sweet corn dried, and will have to buy nearly all winter vegetables.

Fraternally yours,
MRS. MAY TAYLOR.

Practical and Profitable Poultry Culture.

By L. E. KEYSER.
Sayre, Pa.

THE FOOD PROBLEM.

To intelligently feed fowls, either for eggs, growth or fattening, we must understand their various requirements and the constituency of the food. It stands to reason that if we furnish those elements which go to make up the fowl and the egg and supply them in the right proportion and sufficient quantity the fowl must lay, or if a young fowl, it must grow. We find in the composition of the hen a large number of different substances which may for our purpose be grouped under four heads—water, ash or mineral matter, protein, and fat.

Water is the principal ingredient and amounts to from 40 to 60 per cent of the weight of the live fowl.

Ash or mineral matters amount to from 2 to 5 per cent, their presence being most evident in the bones, but they exist in small proportions in all parts of the body and are as essential as any other ingredient.

Protein is a name given to an important group of substances, all of which contain about 16 per cent of the elements of nitrogen, and of which washed lean meat and the white of an egg may be taken as a type. They form the organic parts of the bones, the skin, the internal organs, the brain and nerves, in short all the working machinery of the body are composed largely of protein. Consequently this group of substances is of great importance.

Fat varies greatly in the body of the hen, but seldom falls below 3 or rises above 30 per cent.

The feeding stuffs supplied poultry contain all four of these ingredients, and in addition another group of substances not found to any considerable extent in the body of the fowl, known as carbohydrates. The most familiar substances belonging to this group are starch, the various kinds of sugar and woody fiber, starch being more abundant in most foods, so they are sometimes spoken of as starchy substances. Carbohydrates have substantially the same use in the body as fat, but a given weight of fat is worth for this purpose two and one-fourth times as much as the same weight of carbohydrates, so when they are grouped together, as is usually the case when considering the value of a ration, the fat is multiplied by two and one-fourth and added to the carbohydrates. Carbohydrates and fat serve three pur-

poses in the economy of the fowl. They are burned to create heat to keep the fowl warm; they produce the force exerted in the motions of the fowl, and if the supply is greater than is needed for the production of heat and force, the excess gives rise to the production and laying up of fat in the body.

The protein of the food is used to build up and keep in repair the working tissues of the body, which we have shown consist largely of protein. That is, it supplies the material for the growth of tissue, which may be an actual increase in bulk, as in the case of the growing chick; it may simply be the making good of waste, as in the mature fowl, or it may take the form of egg production, which is really the growth and breaking down of the tissues of the ovaries and oviduct. For all these purposes protein is indispensable, and its place cannot be taken by either carbohydrates or fat. If, however, more protein is given the fowl than it needs for these various forms of tissue growth, the excess is burned up, like fat and carbohydrates, or perhaps furnishes material for the production of fat.

The mineral matter in food consists of lime, soda potash, magnesia, sulphur, etc., but to ascertain the amount it is reduced to ash, which is the term generally given to this group of substances. This ash or mineral matter in the food serves as a source of supply for the mineral ingredients of the body and for the formation of the shell of the egg, in the case of laying hens. Most food products contain sufficient ash for all practical purposes, especially when the fowls are given meat, bones, oyster shells and grit. Grain contains very little ash, while clover, grass and most of the green foods have a liberal supply. When a ration is otherwise fairly proportioned there is generally mineral matter sufficient for all needs.

As we do not feed to supply water, this portion of the constituency of the diet need not concern us, but we should always have a sufficient supply constantly at hand so that the fowls may take it as required.

THE EGG.

The egg, exclusive of the shell, contains about 68.25 per cent of water; albumen or protein, 13.8 per cent; mineral matter, 1 per cent; fat and oil, 16.8 per cent. The average egg

is divided about as follows: Shell, 11 per cent; white, 56.5 per cent; yolk, 32.5 per cent. The shell consists of about 90 per cent of the salts of lime, or about 20 per cent of the pure uncombined lime, which is calcium oxide, and the remainder carbonic acid, water in a crystalized shape, etc.

We have now considered both the fowl and the egg and know the elements we wish to supply, and as ash will be taken in sufficient quantities if we feed meat, clover, oyster shells and grit, and the water supply can be regulated by the fowls, we find we have only to furnish the proper proportion of protein and carbohydrates and fat to produce a ration to meet any requirement. If there is not sufficient carbohydrates and fat the hens will not be able to keep warm, and as too much they will become fat and unproductive, while if the protein be lacking there will be nothing from which to form the egg.

For the purpose of determining the relative proportion of protein and carbohydrates and fat contained in a substance, and for better comparing one feeding stuff with another, the term "nutritive ratio" is used, which means the ratio of digestible protein to digestible carbohydrates plus fat. Before making this comparison, however, we will explain that the fat is multiplied by two and one-fourth, because one pound of fat is two and one-fourth times as valuable as a pound of carbohydrates. The term of the ratio is taken as a unity; for instance, if there should be five pounds of protein and thirty pounds of carbohydrates and fat in a ration, we would express it as 1:6—there being one part of protein to six of carbohydrates and fat; but should there be more protein than carbohydrates and fat the ratio of the latter would be expressed in decimals. For example, should a substance contain twice as much protein as carbohydrates and fat we would express it, 1:0.5, but as nearly all feeding stuffs contain a far larger portion of carbohydrates and fat than protein this seldom, if ever, occurs.

The nutritive ratio is referred to as being "wide" or "narrow." A feeding stuff with a wide nutritive ratio is one which contains a large proportion of carbohydrates and fat as compared with protein. One with a narrow nutritive ratio contains a small proportion of carbohydrates and fat as compared with protein. Corn has a wide nutritive ratio, 1:12, while cottonseed meal has a comparatively narrow nutritive ratio, 1:1.2. If we are feeding to produce growth or eggs we

should use a comparatively narrow ratio, but for fattening for market, a wide one. It is impossible to lay down set rules for feeding, as every person must be governed by conditions, the availability of the material, price, etc., but we will say that for egg production in winter and for growing chicks in the early spring, a ration with a nutritive ratio of from 1:5 to 1:7 has been found to be the most productive, while one slightly narrower is better in hot weather. For fattening matured fowls a ration with a nutritive ratio of 1:10 or 1:12 is about right.

For the purpose of aiding those who wish to compound a ration of a fixed nutritive value we append a table showing the composition of the digestible parts of the feeding stuffs usually used by poultrymen. While it may not be absolutely correct, it is sufficiently so for all practical purposes.

Table showing mineral and digestible matter in feeding stuffs:

Per Cent of Digestible Matter.....		
Protein.....		
Carbohydrates and Fat.....		
Nutritive Ratio.....		
Wheat	1.877.6	7.170.51:9.9
Corn	1.579.7	6.073.11:12.3
Buckwheat	2.062.6	7.854.81:17.1
Oats	3.492.1	9.253.21:5.3
Barley	2.477.9	8.769.21:18
Rye	1.976.7	6.470.31:11
Peas	2.772.3	8.553.51:12.3
Rice	0.487.5	7.430.11:10.8
Sunflower seed	2.152.7	7.024.51:11.2
Wheat bran	5.857.2	10.454.11:3.3
Wheat shorts	4.670.8	12.258.61:4.8
Wheat middlings.....	3.373.7	12.840.91:4.8
Corn and cob meal.....	1.570.5	4.466.51:15.1
Cottonseed meal.....	7.230.9	37.487.11:1.2
Linseed meal, n. p.....	5.873.8	28.944.91:1.6
Linseed oil, n. p.....	5.777.8	33.485.51:1.7
Hominy chop	2.556.6	7.173.51:11.2
Gluten feed	1.932.7	7.043.31:13.3
Chicago gluten meal.....	1.134.6	27.756.91:2.1
Cut clover hay	6.244.9	6.438.51:1.6
Alfalfa hay	7.453.4	10.443.01:4.1
Sorghum seed	2.172.2	5.466.81:13.3
Buckwheat midd'gs.....	4.874.2	23.750.51:2.1
Beef scraps	3.382.2	37.744.51:1.1
Dried blood	4.161.4	32.728.71:0.8
Mangel wurzel	1.165.1	1.16.41:4.9
Patatoes	1.016.6	9.915.71:17.4
Sugar beets	0.912.5	1.610.91:18.8
Rutabagas	1.29.5	1.08.51:5.5
Skim milk	0.89.2	3.55.71:11.6
Buttermilk	0.87.8	2.85.01:14.8

The fat reduced to its starch equivalent.

By referring to the above table any intelligent poultryman can prepare a ration that will meet his requirements with such food as he can secure. Green cut bone, a most important food for hens, is not given in the table because it varies so greatly, owing to the amount and kind of meat adhering to it, that an analysis of one sample would be of little value as showing the general average. It is usually considered by poultrymen to be a little better than beef scraps.

While we can compound a ration wholly of grain and its by-products of the proper nutritive ratio, we find for some reason not shown by the analysis that a mixed ration—one compos-

ed in part of meat and green food, hay, grass, or roots—will produce far better results. In order to narrow the ration a mash is often fed, especially in winter, and we have had better results by this method than any other, yet it greatly increases the labor. We compound a mash mixture of one part by weight of wheat bran, one part wheat middlings, two parts No. 1 mill feed (equal parts by weight of oats and corn ground together), two parts buckwheat middlings, one part ground beef scraps. Where buckwheat middlings cannot be obtained, Chicago gluten meal may be substituted, or half the weight of linseed or cottonseed meal may be used. When making our mash we take one part of cut clover hay, steam it well, and add two parts of this mash mixture, making it as thick as possible. It is then allowed to stand before feeding until it is just lukewarm. This gives us a ration the nutritive value of which is about 1:3.4, which would be too narrow, but as we only feed a small quantity of mash, the other feed being composed of grain, usually wheat, corn, buckwheat or oats, it makes the day's ration about evenly balanced. We do not feed all of these grains, but alternate each day as many as we have, using most largely of such as can be bought on our market at the lowest price. Corn and oats are the staples, and these are grains which we feel we cannot well do without. When supplemented by a mash with a narrow nutritive ration corn is undoubtedly the best whole grain to feed, as it is more easily digested and produces a better quality of eggs than any other. Wheat and rye are as good as corn, their nutritive ratio being slightly narrower, but they usually cost more, and when fed in connection with a mash the slight gain in protein is more than overbalanced by the additional cost.

A ration can be made up of grain, roots and hay, green cut bone or beef scraps which will give very good results, without the trouble of mixing a mash. Such would be an ideal diet if we could make it fully as productive. Nature did not intend the hen to eat soft food, giving her a gizzard wherein to grind it; but nature did not intend the hen to lay in winter or to produce more than forty to sixty eggs in a year. If we change her natural tendencies we must also change her diet.

The amount to feed is sometimes hard to determine and can only be told by experimenting. The standard given is sixty-five to seventy pounds of food for each 1,000 pounds of fowls

weighing from three to four pounds average weight. We have kept a careful record for several years and find that our Plymouth Rocks consumed an average of fifty-eight pounds of whole and ground grain, ten pounds clover, fifteen pounds meat and ten pounds roots each in a year when confined in small yards. This would allow each fowl a trifle over one-fourth pound of food per day. Where fowls have free range for six or eight months in the year this amount will be materially lessened. When fowls are on a range it is a good plan to give them one scant feed a day or a highly nitrogenous food, such as cut bone or beef scraps. A self-feeding box of wheat bran placed where they can help themselves to it will aid in egg production. The fowls will not eat a great deal of the bran after the first day or so, but will use it to balance their ration and supply any deficiency in the food supply found on the range.

In feeding for eggs we should endeavor to give all the exercise possible, especially if our food is of a carbonaceous nature, as the carbon is thus converted into heat and thrown off from the body, while the quick breathing throws off the carbonic acid gas. All grain should therefore be fed in deep litter and the hens be forced to scratch and hunt it out.

American Incubators Abroad.

A great deal is said these days about the expansion of American trade, and everyone who has studied the figures showing the growth in American exports, has been astonished at its magnitude.

American incubator manufacturers have not been behind other lines in this respect. This is especially true of the Prairie State Incubator Co. of Homer City, Pennsylvania, which has extended its trade to all parts of the world, sending shipment after shipment to distributing points in Europe, Australia, South America and South Africa, besides sending many smaller lots of one or two machines to individual poultrymen in the same countries. Since the 1st of August, of this year, their foreign demand has been especially heavy, and many car-load shipments have been made from Homer City.

The new catalogue of the Prairie State Incubator Co. is now on the press and, by the way, we understand it to be the handsomest book ever printed by an incubator company. It will contain good illustrations showing some of these shipments. These, however, are only a few of the hundreds of fine pictures in this handsome book, which will be sent free to all who request it. Ask for the 1902 catalogue, and copy will be sent as soon as it is off the press. We advise your sending in your name at once. Address THE PRAIRIE STATE INCUBATOR CO'Y., Homer City, Pa.

Making Prize Winners

Did you ever stop to think when you were looking at and admiring the first-prize bird at a poultry show that it was not through an accident that it was carrying off the first prize? Did you realize the amount of labor and the time spent in order to get that bird to such a high state of perfection? The time spent to produce that bird was not the one year or less than it actually took to raise him. The work to produce him began perhaps a dozen years ago by some other breeder. He kept improving his birds and selling some to another. The improvement was continued until the bird here mentioned was produced. But then the time and labor spent to produce the parents of this bird was not quite all. The parent birds had to be properly mated and cared for to produce fertile eggs. Then proper incubation to hatch him strong and well developed. Then came the tug of life. While he was growing, perhaps several of his mates failed to survive. He had to be fed well and not too much, given plenty of exercise, kept warm, and kept from exposure. So we see there is a vast amount of work and time spent to produce the prize bird. He was not raised alone, perhaps, but we may know that along with him grew a hundred or more, and not one of them near him in perfection. Do not imagine that the high class breeders produce all prize birds. There is always a large number of birds raised that are not in any way fit for breeding, but are fit only for market. So you see that even the best breeders must sell part of their birds in the market. If you start out with a flock of birds that cost a long price do not expect to raise all as good as the parent birds. If you get a fair number of good ones be satisfied, even if you do not get some that are very good and fit to win in hot competition.

Well, you say, it is easy enough to raise "scrubs," but to raise prize winners is work. That is true; yet some people can raise scarcely any on account of disease. You have got to be very careful to avoid disease.

Now to raise the prize bird you must have good stock scoring up well and been bred from extra stock. You must have them mated so as to produce best results. I can not tell you here how to mate your birds because I do not know what kind of birds you have to mate. Keep them strong and vigorous and healthy. Do not allow any exposure, and feed properly. You may ask, How do you feed properly? The proper way to feed is to keep

The Wooden Hen

The illustration shown here is of the famous New Wooden Hen now known the world over as the most successful of all small hatchers.

It is now six years since the Wooden Hen put in its appearance, and each season it has come forward with improvements that increased its popularity until the sales are nearing 40,000. For the coming season long legs have been added to make it more convenient; also a moisture diffuser, which overcomes the question of how much artificial moisture should be supplied.

A few minor changes have been made in the general construction, and with the above improvements, it is a most perfect little hatcher. Three sizes are offered for the coming season—50, 100 and 200-egg capacity, and the prices are surprisingly low.

Send at once to Geo. H. Stahl, Quincy, Ill., for his beautifully illustrated Catalogue, which also contains a most interesting chart showing the "Development of the Chick" in natural colors, also 16 other colored views. Free if you mention **POULTRY INVESTIGATOR**.

them busy and feed a variety; make it a balanced ration, feed green food, animal food, grit and all such things as they get in a natural state. There are no hard and fast rules for feeding. One breed requires a somewhat different feed and management. If you want to get the prize bird, you must know your breed, know how to feed it to produce best results and know how to mate and manage. The secret is in knowing how. After you have raised him you have got to get him so that he will look the best in the show. If he does not carry himself in the proper way, you need to train him to pose when desired to be judged, etc.

J. W. SHEPARD.

VALUE OF CLOVER FOR POULTRY

Clover hay contains about twenty times as much lime as corn. This makes it a very valuable feed for poultry in fall or winter. It may be chopped in a feed cutter one-fourth of an inch long, placed in a pail, then pour hot water on and let it stand for one hour; then thicken or stir in shorts and corn meal and you have a splendid feed, a balanced ration, hard to beat, and you will find that the egg

basket will soon be full, where there are none in it now. The second crop of clover is counted best, although the first is good. It ought to be cut before it is in bloom. Alfalfa is also equally as good, treated in like manner. Young oats that is cut before the head starts to grow, cut and nicely cured, is also good fed as above.

L. P. HARRIS.

MICHIGAN STATE SHOW.

As the show season approaches it becomes apparent that there is going to be a general interest taken in the coming exhibition of the Michigan State Poultry, Pigeon and Pet Stock association to be held in Battle Creek, Mich., January 7-10, 1902. The past two shows have been held at somewhat disadvantage on account of not knowing just how we would come out financially, but after holding two shows and paying every dollar earned in premiums and specials, this year we promise in addition to a good time to pay every dollar won at show. Arrangements will be made to accommodate the large number of exhibitors and their birds in a manner both suitable and satisfactory. For further information address L. G. Nichols, secretary, Battle Creek, Mich.

Poultry Investigator

Is published the first of each month at
Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.00 per inch each insertion. One inch one year \$10.00. These are our only rates for advertising and will be strictly adhered to. We treat all alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of POULTRY INVESTIGATOR is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in THE POULTRY INVESTIGATOR.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

Golden Egg.

Since our last issue we have purchased the GOLDEN EGG of St. Louis, of Miss E. Mercet. She, being in very poor health, was obliged to dispose of the paper and we took this chance to increase our present circulation. This and other improvements we anticipate making soon will make

the POULTRY INVESTIGATOR one of the foremost poultry papers published. The POULTRY INVESTIGATOR will be sent to all subscribers of the Golden Egg to fill out the unexpired term of their subscriptions, and all contracts for advertising will be filled in accordance with contract made by Miss Mercet. We welcome you all to our columns and hope we may be able to serve you well and to bring you an increased amount of business, which we are sure we can do, as advertisers of the Golden Egg will get the benefit of the POULTRY INVESTIGATOR's circulation, which was several times larger than that of the Golden Egg.

On the first of January, 1902, we will raise our advertising rates from \$1.00 per inch to \$1.25 per inch for each insertion; one inch one year, \$12.00, and larger space same rates. All contracts for space received before January 1st, 1902, will be accepted at the old rate of \$1.00 per inch, \$10.00 per one inch for one year and larger space same rate.

All advertisers will be entitled to have half-tones of their flocks, yards, birds, or themselves inserted in the INVESTIGATOR free by furnishing photos suitable to make half-tones of, and to have published their winnings at the shows. We are willing at all times to do all in our power to help you make your ad pay.

Thanking all for past favors, we are
Yours for success,
L. P. HARRIS.

Some time past the editor visited Cedar Lawn Poultry Farm and was surprised at the interest shown by the proprietor in thoroughbred poultry, the substantial way the houses and yards were built, the quality of the stock seen in the yards, the extent of the farm and the thorough manner in which it was kept. Cedar Lawn Poultry Farm consists of ten acres devoted wholly to the breeding of Barred P. Rocks and White Wyandottes. The farm adjoins the city of Seward. This is Judge Norval's home, a slightly place in the north part of the city. It is a beautiful home with a beautiful yard full of trees and shrubbery. The one thing that struck me forcibly was the large roomy yards; the houses were all shingled, painted and plastered and built as good as many dwelling houses are. The best are none too good for the Judge, and his birds prove it in the show room. The "poultry fever" has no respect of person and it got the best of T. L. Norval, if he was Chief Justice of the Supreme Court of Nebraska, and we wish there were more like him.

Killed By Lightning.

We are sorry to chronicle, this month, the death by lightning of H. W. Belville of Hebron, Nebr. Mr. Belville was a breeder and exhibitor of B. P. Rocks. He leaves a wife, Edith Belville, and two children, a girl two years old and a baby boy of two months, to mourn his loss. We extend our deepest sympathies to Mrs. Belville in her bereavement. In a letter to Mr. M. M. Johnson of this place recently she stated that she had his business well straightened up, except the funeral expenses and expressed a wish that she had money to pay this expense. The editor is willing to help this worthy lady and wishes to know how many of the readers of the INVESTIGATOR will send the editor what they can spare and not inconvenience them to help the lady out of this embarrassment. Any donation will be greatly appreciated and promptly forwarded to Mrs. Belville in due time.

L. P. HARRIS,
Clay Center, Nebr.

The Clay Co. Poultry Association will hold their fifth annual show at Clay Center from December 10 to 13 inclusive. This association is made up of real live, progressive, reliable breeders. Some of them have blue ribbons secured at some of the largest shows in the west. They are striving to make this, their fifth annual show, second to none in the state except the state show; have engaged two experienced judges, and the awards will be made as promptly as possible. The association guarantees \$200 in cash premiums, besides a long list of specials headed with an incubator. The co-operation of the fanciers in adjoining counties is desired. If you cannot come, send your birds: we will care for them as our own. Send for premium list and list of specials.

B. H. DUNN, President,
FLORA T. SHROYER, Secretary.

The Black Red Game Bantam.

"A 'Black Red Game,' do gaze at me;
Longest of legs have I," said he:
"A body small,
A reach quite tall,
Head like a snake, a bright, keen eye,
A close, hard plumage, and I try
Stylish to be in all my moves,
And not to tread in time-worn grooves.
Do I succeed? Well, don't they sing
Praises to me and crown me King?
No other Bantams such prices bring,
Nor can they ever while 'I'm in the ring.'"

Poultry Chats

MRS.

C. A. BLANCHARD

If persons asking questions or prices of stock would write their name and address with a little more care, it would save much worry and their letters would go more direct. People become careless in signing their names and some of the letters are made very poor, so it is hard to make out the right name.

All we can do is to copy as near as possible the same scrawl and trust to the letter going right. Now, for example, a letter has recently came to our desk in which the first name was either Ernie or Enie, one can easily see what a difference it would make in the name not having the letters plain. However, in that case the last name and the name of the postoffice were written very nicely, so we hope our letter reached the right person.

Again, if a few more words were used in describing the kind of stock wanted, we could answer with much more ease to ourselves and satisfaction to our customers.

Many of our letters are something like this: "Please give me prices on White, P. Rocks. Yours respectfully." Most of those people have a good idea of what kind of a bird or birds they want and it would make it so much easier if they would only say what they want.

Any one who understands poultry breeding knows that all the chicks raised will not develop into prize winners, while sometimes a good many of them will even come under the disqualified class.

A couple of years ago there was a person who called round occasionally and talked poultry with our girl as she gave "biddies" their supper. In his wise judgment things were being run on a very disreputable plan. If those chickens were pure bred as Mrs. Blanchard, or Ida, as he termed her, claimed they were, every comb should be straight, with just the desired number of cerations. Every leg should be just the right color, and if that cream on some of their backs was not the right thing, why was it there? It all went to show in his wise mind that things were not as they had ought to be, and people were "well, you know, to come right down to the plain truth, dishonest." Thank goodness he did not know anything about typical carriage, shape of back, wings, fluff or tail. When it came to

poultry breeding he knew nothing, and was too wise to learn. What more could he learn about a chicken? He knew when they were baked, fried or boiled to perfection. Pure breed was no better on the table than any other kind, only if we were to call them pure bred he could not see why they were not all just as we wanted them. I think we all find such people, and we can only hope that the day will come when they are better educated.

Anyone who tries to know anything about poultry can easily understand that they must be priced according to quality, and in asking for prices should state whether they want birds for show purposes, or just good breeding stock.

In sending out anything under the name of good breeding stock it should be considered dishonest to send any bird that would be disqualified. In our state poultry show room last winter we know of one cockerel being disqualified whose owner had paid ten dollars for him.

The bird had come from the yards of an eastern breeder, who certainly knew better than to send such a bird out. There is no fair play about such work as that. If we are going to raise pure bred birds, even for the improvement of our farm poultry, one of the first things we should do is study up the disqualifying points. Learn to know which are our good birds and which are our poor ones; the poor ones can be used on the table and not kept as breeders. Again, if we intend taking birds to a show room we should know what disqualifies and leave all such birds at home, no matter how good they are in other ways.

I presume many of the older breeders will commence to read this article, and then throw it aside in disgust. But the time has not become so very dim in the distance when we had all this to learn ourselves, and we know there is always new members in our circle who are seeking after the same knowledge we have gained.

A few words on preparing birds for the show room may be of use to some who are going to make entries for the first time. First, we should have our birds in good condition. The "Standard" reads "In all the breeds of fowls having weight clauses, except bantams, deduct two points per pound for any deficit from the stand-

ard weights, or in that proportion for any fractional part of a pound." So you see if a bird is one pound under weight and is cut two points on weight it is pretty hard for him to gain over one that is up in weight. Again the Standard says: "They should be exhibited in their natural condition." That does not mean that they should be dirty. If our birds are white they should be washed. It takes a good strong soap suds to cut the dirt from feathers and give them their natural whiteness. Then a good tub of rinse water and plenty of towels to wipe them as dry as possible. If there is no cold wind and you have a south corner that is sunny and warm, they can be put out of doors to dry; but most times the coops have to be brought in by the stove, or the birds would chill. Their feet and legs must be cleaned well. When they are dry comb wattles, earlobes and legs can be rubbed with sweet oil. It makes them smooth and clean, and is all right, for I once heard a judge make this remark to an exhibitor: "I could have given that bird a better score had you washed and oiled his legs. They are good but they are in such miserable condition." The exhibitor said, "Well, the book said they must be in their natural condition." The judge said, "When you go to church you wash your face and hands, so when we go to the show room we should wash our face and hands."

MRS. C. A. BLANCHARD.

Friend, Neb.

THE POULTRY INDUSTRY.

Editor Poultry Investigator:

You ask me to tell you how I came in the poultry business. It is short. I wanted a good table bird. I wanted a good egg-producer. I wanted a good rich, fine flavored egg for my own consumption. I wanted eggs in the winter when they were highest and best, so I selected the "L. B." and have worked for that purpose, and I have just what I wanted. I like the "L. B." They are to the chicken family what sugar and coffee is to the groceries, muslin and prints to the dry goods, the gold dollars to the financiers, etc.

I have bred the "L. B." off and on since '76. I have had no failures for the reason that I commenced at the bottom of the ladder and went up step by step. Have never tried to overcome but one fault at one mating. Have never thought that I was smart enough to handle all of the different varieties, and have been contented with the breed I like best.

C. E. BARNEY,
Kearney, Neb.

A breeding pen at Cedar Lawn.

MOULTING TIME AND WINTER CARE OF FOWLS.

The moulting time is here for the fowls, and will not be over for some time for the older hens or those who have almost worn themselves out in laying all summer, and if they are non-sitters, last winter also.

So many poultry raisers, especially among the farmer's wives, do not seem to know this is really a critical time for the hen. Instead of coddling her up a little and stuffing her with nourishing food, she is let run around any old way to pick up her living. No wonder so many of our finest hens die during the fall months for no reason we can see. And yet there is reason enough. Weakened by laying and perhaps starving herself to feed an August brood of chickens, she is in no condition to cope with the extra strain upon the blood to produce new feathers, unless we help her along with plenty of food.

The moulting hen must not be left to struggle with the others for the moiety, often of grain thrown to them, if you expect to make a success of

poultry raising.

There is quite a difference in the way fowls moult. Some begin very early and merely shed a feather or two at a time, the new feathers coming in as soon as the others are dropped, the fowl is not weakened, and always is well covered, thus giving rise to the idea that some fowls never moult. Again there are other fowls of the same breed that with little warning lose all or almost all of their feathers, remaining naked a long time. These are generally the older fowls, and the frosty nights and mornings will chill them to death if not well housed, as well as fed.

The Rouen duck moults in a peculiar way. The male moults twice in the season. In the early summer he loses all of his gay feathers and comes out in a suit so near like the female that he is mistaken for her. But, later on, he moults again, and this time he gets back his gay clothes and pride. No other fowl that I know of does this way, although a few

species of birds moult in this style.

The time has come when the winter comfort of the fowls must be taken into consideration. Get rid of all the surplus young cockerels as well as the old ones. The young ones, for a real profit, should be or have been caponized. But so few of the numerous poultry raisers, the farmer and his wife, have ever learned to caponize a fowl. And yet, it is not a difficult task after one lesson or two. We never allow our young cockerels to go over four pounds in weight. To do so, is to merely get 10 or 15 cents for them. Too much of a loss.

In separating those you would get rid of now and those to keep over, be sure to keep over your largest and finest two year old hens. No use to talk, but maturity, I find, counts in this line as in all other lines of life. Mark your oldest hens, so that you will know them next spring, save their eggs for hatching purposes and note if these are not the most fertile eggs as well as producing, upon a big average, the hardest chicks.

Of course, if you are in the chicken business to succeed, you must provide a warm, roomy chicken house, with a closed shed near by, into which they can run from the chicken house and get some exercise the coldest days, scratching in chaff or straw. And here should be ranged the dust boxes. Dry dust gathered from the road or anywhere handy to get it should be kept in sacks or barrels near by. This is one of the necessary appliances for the hen's body. It is her bath and she is healthier for having it. If there are little children in the family, nothing would suit them better than filling these barrels or sacks by hauling the dust to them in the little wagon.

All roosts should be scalded or saturated with coal oil, as you prefer;

Barred Plymouth Rock cockerel, s'ore 93%, by Russell, in first prize pen at Nebraska state show, January, 1901. Bred and owned by Judge T. L. Norval, Seward, Neb.

the floor well cleaned and scalded and the walls whitewashed with very thick whitewash into which a little salt has been stirred.

There are two reasons for this last, three in fact; the whitewash helps kill the mites, if any are lurking around; the chickens dearly love light and white quarters, and the thick whitewash will get flaky and the hens will greedily pick it from off the wall and thus get a good supply of lime for their egg shell formation. Many hens, even of the winter laying breeds, do not lay well in winter because not enough lime is kept for them to make the egg shells. Grit does not always contain enough lime for them. The main good that broken dishes, pounded fine, bring for them, is because dishes are formed from oolite, which is simply lime after all.

If the chickens must produce eggs for the winter market, then a variety of food must be given them, warm, soft feeds and mashers as well as whole grain. I have known hens to lay eggs all winter upon a diet of shelled corn mainly, but it is not best for them, unless you intend selling many of them when the high spring prices set in, as corn makes them very fat, and some think diseases them, and it is my experience that it does to some extent. It is always a temptation to me to feed exclusively upon the whole grain, especially shelled corn, as it satisfies the fowls so well. They fill their craws and go off to not bother you for hours. But it is just the other way with soft or ground feeds; either they like it so well or it digests so soon, leaving them as hungry as ever, for they are always squalling after you when fed this last.

Fowls do not drink much in winter, but it should be put where they can get at it at all times, and in very cold weather should be given luke warm.

ANNA BELL.

Barred P. Rock pullet, scored 93½ by Russell, in first prize pen, Nebraska state show, 1901. Bred and owned by Judge T. L. Norval, Seward, Nebr.

Poultry Experience

By Mrs. Ella Dawson

My experience with different varieties: Well, that would be a long story, as I have tended the chicken since a child of ten—at that time for mother or grandma—because I loved to watch them scratch and throw the litter over one another. You know at that time we had chickens and chickens of all shapes, color, and size; the great big Shanghai, as we called a gangling red mother used to have, the little dunghill, the beautiful Buff Cochins, stately Black Spanish and Malay, a half dozen little bantams, pets of the children; speckled hens, Domaneks, and every other color imaginable, all in one flock; the more kinds and colors the nicer they considered their flocks. But how changed these times from the present. I have tried to have only one variety or kind and have that the best I could get, since I have had a home of my own. My first thoroughbreds were the dark Brahmas. We bought them when we went to housekeeping on the farm. Oh, such a time I had with those Brahmas. They would get in the barnyard and could not get them out, unless I lifted them over the fence or opened the horse lot gate and drove them through like sheep. The hogs just loved those Brahmas. As they would creep through the fence they would forget the place they got in at and the hogs would get after them. It makes me tired yet to think how I ran after those Brahmas, twenty-two years ago. I sold or killed them and said they were not the fowl the farmer wants. Then we got a flock of Partridge Cochins; then how the egg basket filled; what beautiful plumage. I said surely this is the kind I have long sought for; it is an ideal fowl for the farmer. I would have had descendants from that flock yet if we had not sold out in Illinois and came west. When I started here in Nebraska I bought the Barred Plymouth Rocks. That was thirteen years ago, and I have B. P. Rocks yet, but not the same, as I sell off the old stock every year; never keep them older than two years. I send every season to get new stock of some reliable poultryman. I keep only the best for my own yard.

The Barred Plymouth Rock is the farmer's bird; it is of good size, makes quick growth, good layers, good color, and the color is just suited to people that neglect cleaning the poultry house and sheds. The white fowls soon show how they are cared for. If

First White Wyandotte pullet at Nebraska state show, 1901; score 90, by Russell. Bred and owned by Judge T. L. Norval, Seward, Nebr.

they are allowed to roost in or kept in dirty quarters they soon show fit by their plumage. I always admire a white bird of any size or shape if they are clean. I have had the Wyandottes, the Silver Laced and have a pen of white now. They are beautiful fowls. The best layers I ever owned was a pen of hens I had from a cross with Silver Laced Wyandotte hens and Barred Plymouth Rock cockerel. Those hens layed when all others were on strike. The Wyandottes make the best of mothers, so kind, and will mother all of the chicks on the place if they have a chance. There is almost a tie between them and the Rocks as to which should have the banner. They are both as good as the best. Then we have our big pets, the Light Brahmas. I like them because they are so gentle, can pick them up anywhere, and such nice large eggs, so nice in color, both shell and egg. They are surely worth having.

Then there is the pen of shining B. Langshans. How pretty they look with their coal black eyes and shining green plumage; their big round white eggs look so nice when we have a basketful all together. I sometimes think I prefer one breed, then another, but I think the kind we have, if well cared for (I mean pure breed of the best all round fowl, the one best suited for the people and place) is the one to stand by; but I don't let them mix. If you have different varieties, have pens to keep them apart, shut the cracks up, give the hens range if you are through setting, and then there is no chance of getting them crossed with one another.

Farmers should have all kinds they can handle. Turkeys have the range of stubble fields, the meadows, and ranges of so much farther from the

house than chickens that they utilize what would go to waste. Then the duck will warm the cabbage and not eat it if kept out until the head is formed. And do you know baked duck is very nice and a change from chicken; so any fowl, well cared for, will more than pay for itself.

MRS. ELLA DAWSON.

Cozad, Neb.

"HEN AND CHICKS."

A Great Picture on a Great Book About a Great Machine.

We reproduce in half-tone herewith an oil painting which many competent judges pronounce the greatest poultry painting which has appeared in the past decade. It is Mr. Ben Austrian's \$2,500 "Hen and Chicks" picture, secured by Humphrey & Sons for reproduction on the cover of their new bone cutter catalogue. This picture, when exhibited in the east, attracted universal attention, and is now on the way to Berlin, where it will be shown this winter in the German exhibitions. Humphrey & Sons may well consider themselves extremely fortunate in securing so valuable and so attractive a painting for their book. It is reproduced in the exact colors of the original and is a fitting setting for an extremely interesting catalogue.

Like the Humphrey book of last year, it contains in addition to much valuable matter on the care and treatment of fowls, for money-bringing results, a set of blanks for keeping a record for a year of every transaction in the poultry yard. Of course considerable space is devoted to the open hopper Green Bone and Vegetable Cutter, the machine which in so short a time has leaped to such great popularity among poultry keepers all over the country. We attribute the success of the Humphrey largely to its extreme simplicity. It has practically only three working parts—the cutter head, which carries the knives; the pivot wing, which holds the bone in position, and the open hopper, in which the bone is placed for cutting. This hopper is really an "open hopper" (a term originated by Mr. Humphrey). There are no partitions nor screws nor apartments in it; consequently you don't have to chop the bone into little pieces before you begin cutting. The machine is ready to cut when you are ready, and as the operator controls the feed, she can cut as fast or as slow as she likes. We say "she" because the Humphrey turns so easily that in a majority of cases it is used by the women of the family. It is backed by a guarantee

to cut more bone in better condition, in less time and with less labor, than any other bone cutter, or the purchaser's money is refunded. Isn't that a fair proposition?

We know that every one will be interested in this catalogue, and we know it means money if you buy a Humphrey. Send for the book. Address Humphrey & Sons, Joliet, Ill.

Editor Poultry Investigator:

You have asked me to give you an article on the poultry industry here in Arizona. Let me preface my article with a description of the country.

To most people Arizona is a barren desert, and most of it is so, but she has valleys that are fertile and rank with that of the Nile, such as the Salt River valley, on which Phoenix is situated. We have a grand climate, and a fine, pure air. Stock is grown in large numbers, and is an important industry. The poultry industry is not to be despised. There is much chance for growth, as we can't produce enough to glut the market. We have within one hundred miles or so, mining camps calling for our surplus. In winter, Phoenix has thousands of invalids, enjoying a healthful climate here, and the hotels pay large prices for fresh eggs and poultry. Fat hens sold for a dollar, dressed, and few to be had. Eggs sold from 15 to 40 cents per dozen. We hatch the chicks from January to April, inclusive, to get our stock pretty well grown by the hot weather of July. Some hatch in Sep-

tember and October. I have never done so, but eggs naturally hatch well in those months; shall try it in the fall, myself. We have roup to look out for; it is very bad in this country, and I know of several who have lost hundreds. Lice are always in evidence, and must be fought hard. And since coming to this place a year ago I have had a hard battle with the great black ticks. I have fought them hard and am not yet a conqueror, but have them on the run. I have never lost birds from them. These things are, of course, to a great extent, under the control of the poultrymen, hence hens are kept under favorable conditions and do well. Broilers bring good prices, 40 to 60 cents each. There is a good opening in this line. We have several large egg ranches here and there is a good market and plenty more room for the poultry raiser.

Let me say one word to you who have good birds to sell. Cultivate the trade of the valleys of Arizona. We want good stock and already have too many mongrels.

W. W. GERARD.

Mesa, Arizona.

If you want . . .

Belgian Hares

Call on or write to

OLD ORCHARD RABBITRY,
Old Orchard, Mo.

Or 2003 Clark, Ave., St. Louis, Mo.,

WM. G. STEINICKE, Mngr.
100 Hares to choose from.

Profit in Duck Raising

Mr. Editor:—I thought perhaps my experience in duck raising might help some hesitating one to make a start in the right direction, so I will jot it down. I am a strong believer in small beginnings, for I think we should learn as we go, and we have more time to study the wants and peculiarities of our fowls with few than many. You know vessels large may venture more, etc. When I decided to raise ducks I had very little capital but much determination, and being a poor lone widow, with one husband and seven small children to work for, there didn't seem very bright prospects of a surplus, but fortune favors the courageous, so finally it favored me. I had the opportunity of picking strawberries for one cent a quart and so earned \$2.00 to buy a sitting of eggs. Now if any one thinks it is fun picking strawberries with the temperature 100 degrees in the shade, they are welcome to the delusion. Well I bought the eggs of a breeder of prize winning Pekin ducks. When the eggs arrived I let them stand thirty-six hours and then tucked them into a nice clean nest of oat straw, nicely sprinkled with a powder which I make by mixing one pint of crude carbolic acid into one peck of road dust. I cleaned a box of sufficient size by washing all corners and crevices with a strong solution of oxalic acid and then put a shovel full of clean earth in the bottom under the straw; then dust biddle well with the powder and set her with care on the eggs. I have a room for sitting hens alone and keep a good dust bath, plenty of gravel and water before them and leave them at liberty to come off when they please. But they cannot leave the room, so I have no trouble with chilled eggs. Well, in due time, nine lovely, lively "boxers" came hatching out and I raised eight of them, one being carried away by a disreputable hawk. I fed the ducks ground corn and oats, beef scraps and sour milk, cheese mixed with coarse sand and gave them all the water they want to drink, but none to swim in. I have often read that ducks have no crops, but mine are not built that way; mine have both crops and gizzards, and when dressing them I find small stones in their gizzards that I never gave them, thus doing away with the theory so often advanced that a duck don't know enough to hunt such things and will surely die unless it be fed to it. Well, those ducks grew and waxed strong, and being two ducks and six drakes, I kept

Factory and Home Offices of the Cyphers Incubator Company.

On October 1 the factory and home offices of the Cyphers Incubator Company were removed from Wayland, N. Y., to Buffalo, N. Y., where the company now has ample space and every modern facility for manufacturing their popular line of goods and conducting a large business. The new factory and home offices are located at the Corner of Court and Wilkeson Sts., within half a mile of the city hall. The Buffalo Belt Line and Erie Canal parallel their ware house and shipping rooms on opposite sides. Their lumber is brought from the Michigan, Wisconsin and Canadian saw mills direct to the factory by boat, thus placing them in a position to buy the principal material used in their product at the lowest market prices. In this new location they have unlimited power and their equipment of machinery has been added to until their plant is a model one. Herewith is shown a view of the building now occupied by this company.

Buffalo is an ideal location for the

manufacture of incubators, brooders and other poultry appliances. This city has unexcelled shipping facilities both by rail and by water. Buffalo is the natural gate way between the East and the West, as much so as though an arch were built and people traveling east and west passed through it. The Southwest and Southeast are reached from Buffalo by direct trunk lines, while across Lake Erie and Lake Ontario lies the garden spot of Canada. Buffalo is the principal eastern lumber market and one of the leading wood-working cities of the Union. Skilled labor is available in all departments.

The progress made by the Cyphers Company has been rapid, and it is believed that this removal to Buffalo will prove highly beneficial to the company and its many customers. With its factory and home offices at Buffalo and branch offices and salesrooms at New York City, Boston and Chicago, the Cyphers Company is in position to fill all orders entrusted to it at an important saving to customers in both time and money.

a trio of the best ones for the next season's breeders; sold four for one dollar apiece and roasted one. I then had my eggs more than paid for and had a trio of fine breeders besides. The next season those two ducks began laying in March and laid two eggs every morning until the middle of July. I raised eighty young ducks, sold eleven at ten weeks' old for \$6.75, the hawks got one of them, the hogs eat some, but I still have a nice flock and have roasted a number; and let me say if you want something fine, try a duck roast, sisters. I have feathers enough for two large pillows from one season's picking of young ducks. I read an article lately where a lady was counting the profits of a flock of ducks and she estimated a pair of

Pride of the West....

Is Mackey's own Strain of Bronze Turkeys, bred in line for 15 years. Show record on open book. They are in the yards of many of the best fanciers in the U. S. and Canada. B. P. Rocks, Conger & Felch; Black Langshans, Emry Felch & Robinson. Felch Lt. Brahmas, eggs at all seasons from hens. Young stock now ready to ship. Write for prices. Mackey's Magic Cholera Cure is a sure cure.

HILLSIDE POULTRY YARDS,

Mrs. B. G. Mackey, Proprietor.

CLARKSVILLE, : : : MISSOURI.

Poultry Investigator

Is edited by a practical poultryman of 30 years experience and is full of plain, common sense articles by those that breed poultry and work instead of theorizing. It is just what you want. Send us the names and addresses of 15 persons interested in breeding good poultry and we will send you the **POULTRY INVESTIGATOR** one year for your trouble. Subscription price 25c. Address,

Poultry Investigator Co.,
Clay Center, : : Nebraska

... The New ...

Standard of Perfection

Revised Edition, 1900.

This work is issued by the American Poultry Association. It is a book of over 250 pages, cloth cover, and contains the only official descriptions of the several varieties of fowls. It is on this Standard that all poultry judges base their awards. Every experienced fancier has a copy of this book and every poultryman needs it to learn the requirements to which his stock must be bred.

The Standard of Perfection

—AND—

The Poultry Investigator

One Year, for..... \$1.00
Address,

POULTRY INVESTIGATOR,
CLAY CENTER, : : : : NEBRASKA

POULTRYMEN Your stationery won't look well unless **PRINTED** neatly. I do it is well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

Buff ORPINGTONS and Brown Leghorns

Young or old stock, first class birds cheap. Hundreds to select from. Eggs all the time.
M. & F. HEKMAN,
Box 178, Hinsdale, Ill.

BUFF ORPINGTONS—WYANDOTTES. R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock, fit to breed and exhibit for sale. Thos. H. Mills, Poultry Judge, Port Huron, Michigan.

pillows at at least \$5. I thought, My, what large pillows she must make! Anyhow I am satisfied it pays to raise ducks and am in hopes to soon own an incubator and go it on a much larger scale. And, sisters, if you have a growing desire to try duck culture, don't quench it, but take my advice and go in and win. Ducks are great big eaters. I believe for that reason they should have a free range, though they are easily confined, as three feet of poultry netting is all sufficient for their yards. But don't attempt to keep them in the vegetable garden; if you do you will surely be

Like the young lady of Nigre,
Who went out for a ride with a tiger;
They returned from the ride
With the lady inside
But a smile on the face of that tiger.
Ducks are very fond of "garden sass." I know of no fowl easier to raise. I have never lost one from sickness. **MATTIE MATTHEWS.**
Morning Sun, Iowa.

Mating Barred Plymouth Rocks

To produce both sexes of "Standard" color from the same mating has been the study of thousands of breeders for over thirty years. That some fine specimens have been produced by the "single mating" system, is true, but undoubtedly more than 90 per cent of the winning Barred Plymouth Rocks in the country have been the product of the special mating system, which is unquestionably the surest, quickest and safest method that the tyro can employ to secure the highest scoring specimens of the breed. To produce standard colored females, use in the breeding pen only females of the highest type of the color and form with the qualities desired in the female progeny, or in other words, the very highest scoring specimens. To these females, mate a male of medium light color (not a washed out, barrless bird) and evenly barred all over, including wings and tail, and if possible one whose dam and sire's dam were of the same high form and color desired in the female progeny. He should have a deep, full breast, broad concave back, small, well serrated comb, orange yellow legs; all important and desirable qualities in his produce. From such a mating you can depend on 95 per cent of first class breeding and exhibition females. The males from this mating will be of about the same color as their sire, not exhibition birds, but useful for breeding choice females the following season. Pullets of even color all over, and distinctly "barred

"CHICKEN"

A Christmas Present That Will Please

CHICKEN is the name of a new game—consisting of a pack of handsomely printed cards (poultry subjects). Is

20c amusing, entertaining, instructive. Fun for all, any number of persons can play the game. Send 20c in stamps or silver for a pack—postage paid.

"The game is a good one. The whole family can play; teaches the children to think quick."—Geo. A. Allen, Clerk of the District Court.

"The Sun Printing House is reliable. The game is a dandy. If you want an amusing game for the kids and one that the whole family will enjoy, cheap, get a pack of "Chicken" cards."—M. M. Johnson, Manager Sure Hatch Incubator Co.

SEND 20C STAMPS OR SILVER TO

SUN PRINTING HOUSE

CLAY CENTER, NEB.

FUN FUN FUN

Clubbing List

By taking the advantage of the following combinations you can get two papers often at the price of one. Look at these offers:

	Price with Poultry Regular price	Investigator.
Poultry Tribune	50c	50c
Poultry Herald	50c	50c
Poultry Gem	25c	35c
Commercial Poultry	50c	50c
Western Poultry News	25c	25c
Poultry Success	50c	40c
Poultry Topics	25c	25c
Poultry Gazette	25c	25c
Nat'l Poultry Journal	50c	50c
Farm Poultry	\$1.00	\$1.00
American Poultry Journal	50c	50c
Feather	50c	50c
Nebraska Farmer	\$1.00	\$1.00

..Just Think of It..

Farmer and Breeder, price..... \$1.00
Any 50c paper you choose above.. .50
The Poultry Investigator..... .25

Total

We will send the three to you for \$1.00.
Address,

POULTRY INVESTIGATOR.

NOTICE—We do not send samples of other papers.

Buff Orpingtons, Barred Rocks, S.
C. W. Leghorns, White
Wyandottes.

Stock from high scoring birds and winners wherever shown. Prices right. Send your wants.

KING & KING, Fairbury, Neb.

Notice!

I have a few Partridge Cochins, at a bargain if taken soon. Also Golden Seabright Bantams from \$1 to \$2 each. Will exchange fancy pigeons for any kind of standard bred poultry.

W. F. HOLCOMB, Clay Center, Neb.

Mammoth Bronze Turkeys

Young stock for sale. Gobs weigh from 20 to 27 pounds. Price, \$3.50 each. My stock is as good as the best.

J. P. Schroeder, Clay Center, Nebraska.

It is next to impossible to raise poultry, even a small flock on a city lot to say nothing of a large flock on a poultry farm or plant, without the aid of a trained

Fox Terrier Dog.

Our dogs are taught to parole the place night and day. Write, Nevada Foxterrier Kennels, Nevada, Mo.

You Can Buy Eggs

From my Prize Winning White Wyandottes balance of this season at \$1.50 per 15. See April GOLDEN EGG, p. 21.

GRANT MOTT,

Box A-29.

Austin, Minn.

My Buff Rocks

Won at Madison Square Garden this season; at Boston and other great shows past seasons. Stock and Eggs for sale. Write for Circular and Show record.

MILES H. LOUER,

Box M.

East Onondaga, N. Y.

Dogs! : : : Dogs!

I have a litter of fine Pups from a large Bitch, $\frac{1}{2}$ St. Bernard and $\frac{1}{2}$ Newfoundland, bred to a great Dane.

These pups make the best of watch dogs for farm or poultry plant. Male pups \$5 each.

D. W. GRANT,

Almena, Kans.

Now Ready..

Young stock for sale at the Golden Rule Poultry Yards. Pullets and Cockerels of pure Empire White Plymouth Rocks, that are white. White Wyandotte Cockerels, sired by male direct from Duston, and hatched from a pen of "Duston" hens. Also a few W. P. R. hens and one male yet for sale, at a bargain. Write for price and description of stock.

MRS. MATTIE WEBSTER, BELMONT, WIS.

arrow parallel lines of a dark blue at stop short of a positive black," is what we desire, and with judicious and careful selection in the breeding stock it is not difficult to get the rich blue barred pullets that attract the eye and win the blue ribbon.

To produce the medium dark blue males called for in the standard, put at the head of the breeding pen the very finest exhibition male that you can afford to buy, of standard color, evenly serrated comb, broad, concave back; full, deep breast; small, spreading tail; orange yellow legs, bright bay eye, and evenly barred all over, and to the skin. Do not use a male with any serious defect, even if he scores high. With this male, mate females of the same line of breeding as himself; females whose sire and dam's sire were high scoring, standard colored birds. These females should be medium dark in color, not smutty, but evenly barred all over and to the skin, with good form and legs. From such a mating you can produce about 90 per cent finely colored males, suitable for breeding and exhibition. The females will be too dark for exhibition, but useful the following season for breeding choice males.

When you start, buy the best to be had; if you can't afford to buy the best stock, buy some eggs from the best. Do not expect to breed prize winners from cheap stock. You simply cannot do it. It requires skill and study to produce prize winners, and life is too short to breed them up from poorly bred stock.

Yours for more and better Barred Plymouth Rocks. **J. E. HAGE,**
Goldsboro, N. C.

DEACON'S WARNING.
If I haven't provided a place where you'll be warm and comfortable next winter, we think the following "poem," which we find in an exchange, will point a moral:

"I dreamt I was a chicken,"
Said good old Deacon Black,
"With a comb upon my head
And feathers on my back.

"I thought I was roostin'
In the top of an oak tree,
My comb wuz as hard as a brick
And I could hardly see.

"The cold north wind went whistling by
As I gripped an icy limb,
And the farmer said, as he passed by,
'Fresh air is good fur him.'

"I flew down in the morning
And was searching fur something to eat.

The farmer said, 'He's a rustler,
'But I think he'll lose his feet!'

"I done without my breakfast—
Didn't get a bit that day:
'My chickens are gainin' their heads off,'
I heard the farmer say.

"I peeped into a hoss trough,
The corn looked good and sweet,
But they pelted me with cobs and stones
And hastened to retreat.

"Then I woke up and you bet I was glad
To find it was a dream,
And now I've got me a new hen house—
The result of that 'ar dream."

For Sale..

High class fancy pigeons, as follows: Fantails, Carriers, Magpies, Owls, Archangles, Barbs, Homers, Swallows, Dragoons, Nuns, Turbitts, Jacobins, Pouters, Trumpeters, Runts, Starlings, Tumblers, outside and inside. Also ten kinds of poultry: White Holland Turkeys, Toulouse Geese, Rouen Ducks. Write for price list.

D. L. BRUEN, - Oldenbusch, Neb.

Watch Houston's Show Record this Winter.

He will make some of the boys smile, and girls too. His stock has always won wherever shown.

B. P. R. and Buff Orpingtons.

I have 3 Trios left to sell of Buff Orpingtons. \$5, \$7 and \$10, and one pair \$12. Have been booking orders for eggs for some time. Rocks all sold.

A. L. HOUSTON, Keota, Ia.

EGG FOOD.. Make It Yourself.

Eggs are high at this time of year. Fill your egg basket and reap the benefit of the high prices. Guaranteed recipe for making the best egg food known. Easily and quickly made. Recipe price only 50c; Death To Lice, 15c; Essex Cholera and Condition Powder, best on earth, 60c. The 3 for \$1.00.

John J. Kautzmann,
590 Bergen St. Newark, N. J.

Buff Cochins. Rose Comb Brown Leghorns

My birds score from 90 to 95 by Frank Hitchcock and have won for two years in the show room. Prices reasonable. Write your wants.

Mrs. Ida Bard, Imperial, Nebraska.

Barred Plymouth Rocks. Some fine Cockerels ..FOR SALE..

From Prize Winning Stock and fashionable strains at bargain prices. Also litter of

Scotch Collie Pups

Pure bred. Goldilust strain, eligible to register. From Imported Bench Winning Stock.

H. R. McLean,

Red Oak, : : : : Iowa.

We Sell..

Hall's Guaranteed Roup Cure. Absolute sure cure; price 50c and \$1.00. Hall's guaranteed Cholera Cure, a prevention for all diseases; price 50 cents and \$1.00.

Hall's Egg Model

an absolute necessity in operating incubators. Price 50c. Address,

Poultry Investigator,
Clay Center, Neb.

Hints on Raising Turkeys

Dear Editor: People ask me if I think it pays to raise turkeys and would I advise them to try raising them, to which I reply it pays me to raise them, but whether it would pay them depends on whether it would or not. When I began turkey culture I decided to raise turkeys and I raised them. Had I listened to "advice," I would never have undertaken the business. Why, the theory was advanced that turkeys were "unraisable," that in fact there was nothing a turkey enjoyed so much as death. But by being something of a reasonable being, I wondered why a well-bred, thrifty turkey in its right mind and pleasantly situated, surrounded as it were with the comforts of life should court death, and I made up my mind there was a screw loose somewhere. We often hear of some persons' turkeys dying with cholera, when if you visit their yards you will find them cooped up in a filthy run with a "borrowed" hen, inhabited with a million lice and mites to the inch, depending of course on the number you allow to the million. I say borrowed hen because no other breed has lice, not on paper at least. Well that poor old hen looks as though she thought "life am not worf de libbin' fur," and the turkeys look pale and poor, with wings drooping, etc. You may suggest the possibility of their being lousy, when their owner will rise up in his or her dignity and inform you that they have no lice about their poultry; they did have a few years back but they cleaned their poultry house once and there has never been lice about since, so they continue to dope and the turkeys continue to die with lice cholera. And their owner will proclaim that it can't pay to bother with turkeys; you can't raise them; they will just lay down and die anyhow.

While my experience has been so very flattering, still I am led to believe there is a good profit for time and money expended in raising thoroughbred turkeys. My beginning in turkeys was small. I first bought a sitting of eggs from which three turkeys hatched, two of which met an untimely death by being stepped on; the other one lived and obtained a fine form and plumage. As it was a hen and a fine one, I sent to a reliable breeder for a \$5 tom and I then had a pair of Mammoth Bronze at a cost of \$7.05. The first season I raised thirteen turkeys, the majority of them being toms, and selling for two or three dollars, netted me a neat little sum.

Well, I figured if one turkey hen will raise thirteen young turkeys, four turkey hens will raise four times thirteen turkeys or fifty-two turkeys. Now that seems dead easy. So it is—on paper. I kept four hens and raised just thirteen turkeys. You see I made the fatal mistake of mating my young hens with my forty pound tom; so I raised no turkeys from my young hens. It was a dear lesson, but I learned it well. I will never repeat it; it will not do, I care not how large the young pullets are, he will crush and bruise them until their eggs will be infertile.

I had a good feed for young turkeys is ground corn and oats mixed and wet with sweet milk or mixed with sour milk and soda and baked, boiled eggs crushed with shell and mixed with wheat bread, sour milk cheese with all the coarse sand and broken crockery they will eat, and about twice a week ground green bone. When they are two weeks old they will do to search for their own feed and they will do it, too, "asking no odds of nobody." I believe they grow faster and larger and healthier when allowed to follow their own sweet wills and seek their bugs where they will, though mine don't wander far. I keep them tame and gentle by treating them kindly and not allowing them to be frightened or chased. They will eat from my hand and answer when I call, if they are in hearing distance. Some people seem to think the correct way to tame turkeys is with a dog and gun, but I know there is no lower easier won by kindness than they are. I have no trouble with my turkey hens stealing their nests; it pays me to keep them tame and have them lay in nests I prepare for them, rather than chase and frighten them away and then spend "golden hours" hunting their nests. Verily, I say, treat your turkeys with kindness and they will reward you greatly. I am not endeavoring to instruct any but beginners. I have learned something, but not everything. Why, what I don't know would make quite a large volume. I would raise none but thoroughbred Bronze, even if I raised them for market. It costs no more to raise a large turkey than it does to raise a small one. I can't understand why so many will persist in raising the measly old mongrels unless they figure like the merchant who claimed to be selling goods below cost, on being asked how he could afford to do it said he could by selling so much more.

MATTIE MATTHEWS.

Morning Sun, Iowa.

Chick Feed Extra Quality

We are putting up the best dry feed on the market to-day. It is especially prepared for the rearing of young chicks from the time they were hatched until eight weeks old.

We want reliable agents in all parts of the United States. The feed is all right and when once tried is always used. Sample by mail 4c. Circulars free.

STEINMESCH & Co.,
St. Louis, Mo.

Reference: Editor this paper.

Utility Poultry Farm

Are you looking for something fine in the way of White and Barred Plymouth Rocks, Black Minorcas & White Wyandottes. If so we have them. Also Game and Leghorns.

H. S. FULTON & CO.,
Lock Box 24 Stewartstown, Pa.

High Scoring Pen of WHITE PLYMOUTH ROCKS

One Cockerel, score 90½, weight 9 lbs.; two pullets, score 97, weight 7 lbs.; three pullets, score 96½, weight 6½ lbs.; four pullets, score 96¼, weight 6½, 7, 7, 7 lbs.; two pullets, score 96, weight 6½, 7 pounds.

Eggs from the above pen, \$3.10 per 15. Other breeding stock for sale. Judge J. W. Wall says, this is the best lot of White Plymouth Rocks he has scored this year.

REUBEN HIATT, Lees Summit, Mo.

MAMMOTH STRAIN LIGHT BRAHMAS

...as bred by...

H. T. RODGERS, Calaisville, Mo.

Are great prize
winners again

At the recent Calaisville, Mo. Show, against birds that have won once at St. Louis and other large shows, we made a remarkable record which proves the MAMMOTH STRAIN is as good as the best.

1st on Cock, 1st on Hen, 1st, 2d and 3d on Pullets, Cockerels and pens; also every special including the grand prize over all.

Blue Barred Plymouth Rocks

Our stock is first class. We have some yearling stock and young stock for sale. Prices reasonable.

P. J. SCHWAB, Clay Center, Nebr.

A. J. WILLIAMS,

...Breeder of...

Silver & Golden Sebright,
White & Buff Pekin, B. B. Red
Game BANTAMS; Belgian
Hares, White Rats, Cavies.

Write for Prices.

CLAY CENTER, NEB.

Glen Raven Egg Farm Notes.

(Written for Poultry Investigator.)

Two copies of this new-born paper have been read by me. I have given it special attention, from the fact that its originators are good friends of mine. I like the cut of it, also the tone. It is of good size and fine appearance, being in its babyhood as it is, but we must "never despise the day of small things." We were all small at one time.

I was very small in the chicken business once. Am not full grown yet. But I am doing something every day to build up. Also learning something each day all along the line. I am not in the business for glory's sake. I am in it to earn my bread and butter. My fowls are all fancy. My houses are built after the best plans known to me to be the most serviceable in all seasons after seventeen years practice with keeping fowls for profit. I have built up three plans before this one. Used all kinds of houses from a straw pile to a stone and concrete house, the latter are what I have now. My winter house for laying stock is 10x74 feet, solid concrete. The rooms, six of them 10x10 and one 10x14 feet. Some of the partitions are made tight from ground to roof, others are made tight above the heads of fighting cocks, and wire the balance of the way up. The doors are made the same as these last named partitions, with good latches that will not allow them to come open. There is no hallway in this house, and some of the partitions are made tight from floor to ceiling to prevent a draught through the house. The roosting perches (three to each room), eight feet long, rest on trucks so that all can be taken down and out on short notice. In fact, all the fixtures in this house are movable, as all such in chicken houses should be. The house, of course, faces south. There are wire runs to each room in front, 10x20 feet, a windbreak of solid plank 8x20 feet is at the west end of the yards, with a solid door through it next to the house. All the partitions to these yards and around the outside of the yards are the same as those in the house two and one-half feet solid and four feet wire, making the yard fences six and one-half feet high. The house is eight feet high in front by four feet at back.

The gates and yards are made of lat frames, covered with wire netting. They are solid at the bottom, but made of light material, as they slide on wires at the top, instead of

being hung on hinges. They are easily opened by the attendant and never blow open by the wind.

Each of the rooms 10x10 and yards 10x20 feet will accommodate twenty-four hens and one cock during the winter season, and can be made to lay to be profitable.

The eggs hatch to my satisfaction. I had a hen to hatch eleven chickens from thirteen eggs in February in one of these rooms, and the mercury 29 below zero, and there was one chick died in the shell.

Eggs were laid, set and hatched in the same house in midwinter. My old breeding stock are mated the whole year. I am putting in this house now (November 1st) 100 Brown Leghorn pullets hatched from January 1st to May 21st, and four two-year-old cocks. Most of the eggs from this mating will be set in incubators about December 10th, and from that time on every three weeks until the last of May. I find these early hatched chicks pay me well for my time. I usually have more time to devote to mothering orphan chicks in winter than any other season. One thing I learned well before I invested in an incubator was to raise the chicks without a hen. Right here is the stumbling block with most purchasers of machines. They get out the chicks all right and then fail to raise them. When I get to that part of my business I will tell how it is done. E. W. GEER.

Farmington, Missouri.

Buff P. Rocks.

Motto:—"Good stock at moderate price." Stock for sale after Sept. 15.

W. D. SWAIN, Pauora, Ia.

Buff Orpingtons

The Coming Breed.

W. H. BUSHILL, Importer and Breeder.

DAVID CITY, : : : NEBRASKA.

Shaves the Bone.

The ADAM GREEN BONE CUTTER

prepares the bone in the best possible way for the chick or fowl. Works on the shear principle—no splinters or pieces. Ball Bearing—runs easily. Cleans itself—you cannot choke it. Large Capacity—feeds at will of operator. Strongly made. Write for illustrated catalogue No. 6

We send it free.

W. J. ADAM, JOLIET, ILL.

Single Comb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

Cora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS,
Ogden, Utah.

Barred Plymouth Rocks.

We have Quality and Quantity.

Farm raised prize winning stock, cheap for quality. If you want Rocks write us.

H. B. LOUDEN, Clay Center, Nebr.

Buff Orpingtons AND White Wyandottes

No better Stock
Raised.

I never have failed to win in largest shows. Birds score from 90 to 95%.

C. ROCKHILL,
Harvard, Nebraska.

Mammoth Light Brahmas M. B. TURKEYS

Cockerels \$2 each; trio \$5; young toms \$3 each after Nov. 1st.

E. W. MATHENY, Clay Center, Nebr.

Winnings at the Nebraska State Fair, Sept. 1-7, 1901. Entered 13 birds, won 1-2 on Cock, 1-2 on Hen, 1-2 on Cockerels, 1-2 on Pullets, 1st on pen of chicks. Every bird a prize winner. Also winners at Ill. State Poultry Show of four first premiums 1899, and Nebr. State Poultry Show four first premiums. Young stock for sale in pairs, trios and pens only. Single Ckls. for sale.

Selecting Birds for the Breeding Pen

By Mattie Webster

Our veteran breeders have selected their breeding birds for the season so near at hand, and are even now working and planning for the flock of chicks that are to be hatched in the dawning of the new year. These old-time breeders do not need hints and suggestions to enable them to wisely make up their breeding pens; experience and acquired poultry wisdom have made them "sufficient unto themselves." But there are others not so long time "in the way," and also beginners who are ready to select the birds that are to compose their breeding pens, who will appreciate a few suggestions on the subject, so it is to this class I write.

As everything—the whole year's success or failure—depends upon the fowls in the breeding pens, should it not be a work requiring one's most careful and critical attention in making selections? Our breeding birds are the foundation and the young stock that will later fill our yards the superstructure, and we all know how very important it is to have a good foundation upon which to build, even in poultry culture. We are all working for and coveting success in poultry raising. Then, as the fowls in the breeding pen are the prime factors in this problem we are striving to solve, we should subject them, each and everyone to such a critical examination, making the test so trying that it will be the few and not the many that will prove eligible to such an exalted place. The following are a few questions that should be found in the list of examination questions, according to my opinion and the light I have on the work:

First: Is the fowl under consideration in perfect health now, as proved by red comb, bright eyes, good appetite and active movements, and has she always been healthy from chickhood up.

Second: If the applicant for position in breeding pen has answered the first question satisfactory, we ask another question similar to it—Is she industrious and alert, or lazy and slothful? The busy, active hen or pullet is the profitable breeder; her very energy promises eggs in goodly number for hatching and she will keep her promise faithfully if we make right conditions for the fulfillment of it.

Now we are ready for propounding questions the answering of which will

be much accelerated by a careful comparison of bird with our "Standard of Perfection." We have demanded that Mrs. Biddy be healthy and energetic; now, we demand that she possess as nearly as possible qualities of excellence as described, as belonging to our especial breed or variety in the above mentioned book.

Third question: Is there anything in plumage, comb, wattles, shape—shape should have been mentioned first—legs or any other part that according to our "adviser" is a disqualification? If so, she is ineligible to a place in the breeding pen. Each hen or pullet must be separately and critically examined, and perhaps more than once, if one is to make sure to have only the best, and those best of undisputed excellence in this pen that is to decide the qualities and characteristics of the season's flocks. Rather have only three or four hens or pullets for breeders in the best pen than, in order to make the number desired, allow others of inferior points to be admitted. Now, having a fine pen of females, we know it is to our interest and profit to select a "head" for the pen that will be worthy of the honor. If the pen is of pullets, better results will be obtained if a cock bird is selected as "lord of the harem." I prefer the sire of the pullets if he can answer all our requirements of the head of our pen. He must be now, and always have been healthy, vigorous, energetic and well able to defend his rights against other trespassing birds. I do not like to have a battle between my males, but I have always noticed that the "always conqueror was the always good breeder." With hens mate a young male whose breeding is known, and whose qualifications are such that we will be pleased to see them reproduced in the offspring. If it is necessary to purchase a male to head the pen, do not decide hastily of whom you will purchase; consider the question of "where to send" well.

F. A. CROWELL, Granger, : : : Minnesota.

Has some fine Breeding and Exhibition Buff Orpingtons yet for sale, also Indian Runner Ducks at \$5 a trio. Circular free.

BIG MONEY MAKER for great profits. Contains dollars of information. Handsomely illustrated. A famous guide, based on practical experience. 28 varieties land and water fowls, diseases and more, names, how to feed high quality stock, low prices. Best and poorest references. Absolutely reliable.
IOWA POULTRY DO.
Box 39 Georgetown Des Moines Ia

MAMMOTH BRONZE TURKEYS.

That score from 94 to 97½; Barred Rocks score from 87 to 90; Buff Cochins, score from 87 to 93½; Pekin Ducks that have won hundreds of premiums, have been sold to all parts of America and Europe. Chester White Swine.....

Mrs. Chas. Jones, PAWPAW, ILL.

Silver Lace Wyandottes
White Wyandottes : : :
Buff Leghorns
Pekin Ducks...

All first class stock. Prices reasonable.
MRS. W. E. TIBBITS,
Imperial, Neb.

They Are Going...

Prize winners and reliable breeders at half price to make room.

Partridge Cochins, B. B. R.
Game Bantams, Buff
Plymouth Rocks.

Send for Catalogue.....

L. A. NOFTZGER,
Oaklyn Place. N. Manchester, Ind.

Olentangy : : : Poultry Yards

Delaware, : : : Ohio.
Barred Plymouth Rocks, Cornish
Indian Games, Buff Cochins Bantams and Golden Wyandottes Eggs
\$2 00 per 15. Send for circular....

Cremoline is the best, surest and cheapest lice and mite killer on fowls, nests or roosts. Never fails. 25c at all dealers. Circulars free. Baker-Eidson Chemical Co., St. Louis.

White Poultry

Holland Turkeys, Embden Geese Indian Geese, Rose Comb Leghorns, Plymouth Rocks, Wyandottes and Langshans. Colored Houdan and Tumbler Pigeons. All stock winners or bred from winners and as represented. Southdown Sheep, Berkshire Swine.
J. A. LELAND,
Woodside Farm. Springfield, Ill.

White Wyandottes---TRIUMPH STRAIN...

Fifteen years of careful breeding has produced a strain of fowls unequalled in practical qualities and winners of the highest honors in the show room with only four birds in the Boston show, January, 1901; I won 2nd on Cockerel; 3rd on Hen, commended on Cock and two specials for Best Single Cockerel. This is a class of our 40 White Wyandottes and after selling out two best males, I breed, raise and own my show birds. Stock and eggs for sale.

W.E. Mack, West Woodstock, Vermont.

and let it be to some one whose stock has proved worthy in show room and breeding pen. There are many reliable breeders, but, my beginner, a breeding bird from such breeders' yards can not be bought for a dollar and a half or two dollars. Nor should it be the bird you would buy is not merely a "chicken," but represents the breeder's time, money and days and nights of brain work necessary to bring the qualities possessed by the bird to such a degree of perfection, and if you buy the male he is the head of your breeding pen, the half of your young flock you are planning for. Then, careful, critical, studied examination of the many birds in the flock before making a selection of breeders is the secret, primarily, of success.

MATTIE WEBSTER.

Belmont, Wis.

FREE ADVERTISING.

Another show season is upon us and reports from the different poultry shows will appear in the various poultry journals, which will include the winnings and scores of the exhibitors, and this is just as it should be; but I would like to ask some fancier who has not only the degree but also a "post graduate" degree in breeding fancy stock, exhibited and advertised the same: Is it just to publish the winnings of a man who does not patronize a poultry paper with an advertisement of his stock?

Although the poultry press is, and should be, liberal toward the fancier, and breeder, it is not, by any means, to be classed as a charitable institution. Only to the worthy belong the favors, while the "smart guy," who never spends a dollar to further our cause or sustain the press, reaps the unmerited reward.

Only the awards and scores of advertisers should be published.

HENRY HESS.

Winona, Minn.

KANSAS STATE SHOW.

Breeders who are desirous of exhibiting their birds in a show that will sell stock for them should not fail to send for a Premium List of the Kansas state poultry show, Topeka, January 6-11, 1902. Judges C. H. Rhodes and L. P. Harris are drawing cards and the association has a well-earned reputation for doing things "right" and paying all premiums promptly. Last year's exhibit was one of the largest west of Chicago and this year it will undoubtedly be much larger. Address Geo. H. Gillies, Secretary, Topeka, for all information.

EVERY CHICKEN
on the place will be glad and you'll be glad, too, if you buy a

HUMPHREY
Green Bone and Vegetable Cutter.

Open hopper; only three working parts, no trouble to keep clean; no trouble to turn; no packing bones in cylinder.

Your money back if it does not cut more bone, in better condition, in less time and with less labor than any other cutter.

The Humphrey will save enough in your grain bills to pay for itself. You can't afford to buy an old style man-killer. Get a Humphrey and if you don't like it, send it back. **Our Book** full of poultry pointers and blanks for a year's egg records, sent free.

Humphrey & Sons, Box 70, Joliet, Ills.

SALES AGENTS.
JOSEPH BRECK & SONS, Boston, Mass.
JOHNSON & STOKES, Philadelphia.
GRIFFITH & TRISER CO., Baltimore.
DES MOINES INCUBATOR CO., Buffalo, N. Y.
SHEPARD HATH INCUB. CO., Clay Center, Neb.
E. J. BOWEN, Portland, Oregon; Seattle, Wash.
and San Francisco, Cal.

30 DAYS TRIAL **50 EGG \$5**
Hatch Every Good Egg **SIZE \$5**
Or Don't Keep It. **100 EGG \$9.50**
Send 2 cents for Number 102 Catalogue **SIZE \$9.50**
SELF-REGULATING BUCKEYE INCUBATOR CO. SPRINGFIELD **200 EGG \$15**
SIZE \$15

Belgian Hares

Best in America, very cheap during special sale. We guarantee satisfaction or no pay. Might exchange for fine clock, piano, gun or music box. What have you? Book free.

E. J. WHITE HARE CO., Brighton, 7, Col.

WHITE WYANDOTTES

WINNINGS: At the St. Louis Show January, 1901; 1st Cock; 1st and 3rd, Hen; 2d Cockerel; 1st and 2d Pullet and pen. Two specials: At the Chicago Show, January, 1901, 1st Cock; one special. Eggs from best pens, \$3.00 per 13, \$5.00 per 26.

ROSS C. H. HALLOCK,

6313 Clifton Av.

ST. LOUIS, MO.

Ducks from Door-knobs.
Some incubators promise everything in sight; either ducks from door-knobs, or chicks from china nest eggs, and a full grown bird in a week or two. The

PETALUMA INCUBATOR
won't do that. It's just a good incubator—made for hatching eggs in the best possible way. It is made on scientific principles, of good honest material, by honest workmen. Consequently it will do all that a good incubator ought to do. We think our construction is a little better than any others; we are sure we take pains; we know we please the people. If you are looking for a machine that will hatch all the fertile eggs, you'll be interested in **THE PETALUMA**. Our large illustrated catalogue is sent free upon request.

We pay freight anywhere in the United States
We make a good brooder too.
Petaluma Incubator Co., Box 510, Petaluma, Cal.

F.B.W. Co.

The Michigan Poultryman...

Only Exclusive Poultry Paper in Michigan.....

All the practical poultrymen contribute to its pages. Expert poultrymen will give its readers free such information as they may ask for.

All the news of the poultry world. Will illustrated.

For a short time you can get this paper one year for 15c. Send postal for sample.

Michigan Poultryman,
Ithaca, Mich.

Bonniedale Poultry Farm!

S. DOTTES, Barred Rocks, Light Brahmas, Golden Doves, S. C. B. Leghorns, C. I. Games, B. Minorca Cockerels \$2 each, \$5 per 3, M. B. Turkeys \$3 each. Toulouse Geese \$3 per pair.

L.T. BRAHMA, S. C. B. Leghorns \$1 each; E per trio.

ROUP CURE. Our make. Cures when eyes are swollen shut. Powder for half pint, small syring and full instructions 50 cents postpaid.

SCORE CARDS. U. S. Postal card stock 50 cents per 100, \$3 per 1000. Water fountain galvanized iron, hangs on nail, 1 gallon size 50 cents.

OREANOILINE. Tablespoonful to quart of water paints your hen roost. Trial bottle 25 cents postpaid. Circulars free.

MRS. MAY TAYLOR, HALE, MO.
LOCK BOX 176.

Poultry Supplies

Ideal Leg Bands 15c per dozen, \$1 per 100.

Smith Seal Bands 25c per dozen, \$1 per 60.

Standard of Perfection each \$1.

Spray Pumps each 75c.

Liquid Lice Killer, gallon can 75c.

Conkey's Roup Cure 25c and 50c a box.

Chamberlain's Chick Food \$2.50 per 100 pounds.

J. D. W. Hall's Guaranteed Roup Cure 50c and \$1 a box.

Reliable Spring Punches each 25c.

Midland Poultry Food at factory prices

Humphrey Bone Cutter F. O. B. Clay Center, \$12.

Oyster Shells F. O. B. Lincoln, Neb., per 100 pounds 75c.

Lime Stone Grit and Mica Grit F. O. B. Lincoln, per 100 lbs 75c.

Bone Meal, Raw Bone, Beef Chops, Blood Meal, as cheap as the cheapest.

Sure Hatch Poultry Co.,
Clay Center, Nebr.

The best Folding Exhibition Coop..

Jas. A. Rudge, Palmyra, Neb.

Manufactures and sells the best Exhibition Folding Coop on the market. Prices within the reach of all. He also has 50 S. C. B. LEHIGH HORNS COCKERELS for sale from 75c to \$2.00 each. Write your wants.

CLEANLINESS

Mr. Editor: In the raising of poultry we recognize cleanliness as the first step toward success. We have a frame house, built of native lumber, 10 feet wide, 7 feet high inside and 16 feet long. On the west end we cut off a six foot room for laying and setting. On the east end we built a shed 7x10 feet, which we use for young chickens in the summer and as a scratching shed in winter. We make it a rule to gather up the droppings once a week and often when we can. These we scatter over our garden or in our vineyard and hoe them in. The oftener they are collected the better. If those who think it too much trouble to clean out their houses will try gathering them and apply them to their gardens or vineyards they will be highly rewarded for their labor.

After the droppings have been gathered up we scatter air slaked lime over the roost and on the floor or ground where they fall. Where the chickens scratch, lime and ashes should be kept.

A whitewash composed of lime, sulphur and carbolic acid has proven valuable to us as a preventive of insects.

We have found that a single box large enough for one hen to sit in is better than several nests made in one box. As soon as a hen is through setting we burn the old nest and clean the box thoroughly before letting another hen use it.

Tobacco leaves placed in the bottom of your boxes is a good preventive for insects.

Around our shed we have a yard fenced with wire to keep the mother hens from wandering off with their little ones when the weather is bad.

Our hen house is surrounded by our orchard, where they can always find plenty of green grass. We allow our chickens the whole farm for range except our yard, garden and vineyard, when the weather will admit. I planted several of my plum trees near the hen house and find that I have better success with them. The chickens are good to destroy insects.

During the warm season of the year we spray pretty often with a strong solution of cold water and carbolic acid. Try it if you have mites. When we find a sick chicken it is put to sleep for a day or two and if then with proper treatment it seems no better a sharp ax is applied just behind the ears and the remains so disposed of as not to convey it to the others.

Where chickens have a large range they do not require as great a variety of food or as much, but we feed at regular intervals a small amount. About once a week we give ours a feed of meal, scraps of meat and red pepper. They like pepper and I believe it is good for them.

A box with sand and charcoal is very beneficial during the winter season.

The next thing to watch carefully is their drinking water. It should be kept clean and pure. Don't allow filthy water to stand around your chicken yard; it will cause disease. Warm their water a little during cold weather.

Last spring I sent for some poultry fountains made of pottery and never had better luck than we have had since. They keep the water clean, prevent the drowning of little chicks and are easy kept clean. Sometimes our chickens seem to drink too much, then we put walnut hulls, leaves or bark in their water for a few days and give them no other water. I believe it is a good preventive of cholera.

We work upon the theory that a "preventive is better than a cure." Your chickens must be kept healthy if you expect them to be profitable. Some of the things which I have spoken of in this article may sound very common to many of your readers, but they have proven practical with us and I hope may with some one else.

R. E. L. BLACK.

Chillicothe, Mo.

A PLEA FOR BETTER POULTRY.

Abilene, Kan., Oct. 19, '01.

Editor Poultry Investigator: Having received a sample copy of your paper and find so many nice letters, but none from this part of the country, I thought I would write a few notes. Perhaps they will be interesting to some of your many readers. While there are a great many persons interested in good poultry, there should be many more. There is no stock on the farm gives quicker or more sure returns for the amount invested than a few chickens. It is true the common mixed chickens pay their way, but how any one can be content to raise chickens just to lay eggs for the market and have a few young ones to fry, I cannot well see. Take a flock of mixed chickens, some one breed, some another; they do not lay well; one reason is they are not alive to their own interests. Such poultry to their own interests as poultry. You will hear their owners say there is no use feeding chickens; they don't

pay; they don't cost much and don't bring in much money; so they are left to themselves to rustle for a living, and consequently only in spring and early summer do they lay. When eggs are up in the twenties they have struck, for it takes all their time to rustle a living. Such poultry do not pay. It is where one pays a good price for their stock that poultry pays. Then it is we begin to think like this: Now I have paid out so much for these few chickens; we must get some returns; they cannot nest in the trees and rustle over the farm for feed, seed and a chance grasshopper. No, we will give them a nice warm house of their own; in the morning when we go to feed we think of the new chickens, and when we carry them a choice breakfast and a nice fresh drink, while they are busy eating we stare and look at them, all of one color, all so near alike. The moments fly, but we are enjoying the beautiful. Then it is we begin to see why these "poultry cranks," as we have called them, do waste so much time over a few chickens. Often during the day we take a look at our chickens, and each time they seem more beautiful; so we fall in love with them and of course they get good care. Then we begin to talk chicken and get interested in poultry journals. We read and compare our chickens with others. The work we must do seems half a pleasure, for are not these nice tame hens going on their nests daily and at the end of the month the eggs bring as much or more money than their feed has cost, and this on the market, and when we can sell for hatching at good prices, and all our surplus stock, then we are truly interested. The thoroughbred chickens take no more feed than the common stock should have and pays so much better, larger fowls, more eggs and all alike, makes them truly desirable. If farmers would pay more attention to poultry there need not be a cry of hard times even in drouth years like this. Feed is high but they will repay for every kindness given them. Give them a cozy house; it need not be costly; feed them regularly; in fact, treat them as well as your other stock and they will keep the grocery bill paid.

For fear my letter is getting too long, will close.

MRS. J. B. JONES.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

BEST FRUIT PAPER

Western Fruit-Grower is the best paper treating of all kinds of fruit, and nothing but fruit: monthly; illustrated; 16 to 48 pages; 50 cts. a year. 10c for three months' trial subscription.

THE WESTERN FRUIT GROWER.
Box 13, St. Joseph, Mo.

Fine Warr. White Holland Turkeys - - \$1.75
Pure Bred Red Belgians - - - \$1.00
Pure White Rock Cocks - - - \$1.00
Pure White Wyandots - - - \$1.00
New Strain White-Breasted Geese - \$0.75
All above from prize-winning stock and line bred. Catalogue sent.

J. C. BAKER, Proprietor,
White Plume Farm, Richfield, Ill.

CAPITOL RABBITRY, Augusta, Me.

I am closing out my whole stock of Belgians, over one hundred, 24 prize-winners included. There are 1 Hares, 4 Gold Medal Winners, 1 choice Doe of the State Winner of Sweepstakes, prize for highest scoring animal in show; a silver cup goes with her.

Now is the time to gather in prize winners for winter shows. These prices are reasonable and animals way up. Will send copy of Pedigrees and Prices.

H. F. ADAMS,
Augusta, - - - Maine.

QUEEN CITY BUSINESS COLLEGE, Hastings, Neb.

A live, wide-awake school of business. Thorough in all departments. Courses: Business, Shorthand, Typewriting, Penmanship, Correspondence, Normal and Preparatory. Well equipped. Expenses reasonable. Our graduates are in demand. More calls for them than we can supply. Students can enter at any time. Enter now and pay afterward.

Write for particulars. Reference, Sure Hatch Incubator Co.

ROSE COMB WHITE LEGHORNS

If in need of a good cockerel to improve your present stock, write me. As I have twenty fine cockerels bred from St. Paul and Mitchell winners that must be disposed of.

J. F. Reinekt, - - - Tripp, S. Dakota

DON'T SET HENS

the same old way when our new plan starts it 10 times faster. 100 Egg Hatches: Only \$2.25, over \$4.00 in one 100-day cycle. 2000 nests wanted for 1907. Other sets. Pleasant work. Big profits. Catalog and the Egg Formula FREE from write today. Natural Hen Incubator Co., 211 Columbus, Neb.

CALVIN E. BARNEY, - - Kearney, Neb
Breeder of Light Brahmas Exclusively.

My birds are heavy weight fine markings, close feathered. Eggs, \$2.00 for 15; \$3.50 for 30. Choice birds, old and young, for sale. Write your wants. No circulars.

STAR ☆☆☆☆

IncubatorsAnd Brooders.

A large free Catalogue tells you all about them.

Our New No. 2 Double Walled
Dead Air Space Self-
Regulating

BROODERS

are without an equal. See cut.

Price \$12.00.

Our New A-1 just the same, only with single walls at **\$10.00** is the real thing. **GOOD Brooders for \$5.00.**

Send for Circulars and Price List

Dead Chicks Don't Pay.

Chicks thrive best on a balanced feed of meaty, cereal and grain element. That's

STAR SPECIFIC NO. 7.

It isn't a medicine, but a health and strength builder. It prevents most of the diseases that kill chicks. Carefully compounded from results of expert experimenting and study.

Price, at Dealers:

1 lb. pkg. . . . 10c. 50 lb. bag. . \$2.25
5 lb. pkg. . . . 35c. 100 lb. bag. . \$3.50

Star Incubator Co.,

12 Church St. Bound Brook, N. J.

Star Specifics

Is guaranteed to cure.

No 1. Cholera in old Fowls.	No 5. For Inactive Males.
No 2 Same for chicks	No 6. For indigestion
No 3. Egg Food and Tonic.	No 7. Food for Small Chicks.
No 4. For Cold and Croup.	No 8. Disinfect Insect Powder.

Cockerels

A FEW

White

Wyandottes,

Buff Plymouth

Rocks,

Barred

Plymouth Rocks,

Single Comb

Brown Leghorns,

Light Brahmas

and Partridge

Cochins

at \$1.50 each.

PEKIN DUCKS,

Choice Pekin

breeding ducks

at \$1.00 each or

5 for \$4.00.

PLACE YOUR OR-
DERS EARLY.

Wildwood

Poultry

Farm.

815 Chestnut St., St Louis, Mo.

Morning View
Poultry Yards.

...HAVE...

..Barred Plymouth Rocks..

Extra large heavy bone, finely bar-
red, full above the eyes.

Eggs in Season. \$1.50 per Setting.

James M. Perkins,

RAVENWOOD. : : MISSOURI.

Mrs. J. B. Jones, 3 3 3
Breeder of
Barred Plymouth Rocks
and Mammoth Bronze

Turkeys.

STOCK FOR SALE. EGGS IN SEA-
SON.

ABILENE, : : : KANSAS.

BUFF WYANDOTTES,

EXCLUSIVELY. Our Buff
Wyandottes are bred from
best strain obtainable and
in line. We breed the pure
golden Buff, not the dark
red. They're prize winners.

E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

W. J. CHENEY,

Breeder of
Thoroughbred Fancy Poultry,
BOX 68.-CUBA, MO.

500 young birds, \$1 each. 100 yearling hens, \$1
each. This stock I have bred for my own use,
and is first class; have more than I will require
for my breeding pens. VARIETIES—B. P. Rocks
Light Brahmas, Partridge Cochins, White Wy-
andottes, S. C. W. Leghorns, S. C. B. Minorcas.
Write for particulars. Circulars Free.

W. J. CHENEY,

BOX 68.-Crawford Co. -CUBA, MO

For Sale! SUNNY SLOPE POULTRY FARM ½ mile east
of Clay Center; a good 8 room house with cellar,
a never failing well with windmill, 2 cisterns, fine Russian cave, good barn,
corncribs, hog houses, granary, poultry houses and runs. 500 young, peach,
plum, cherry and apple trees just come into bearing.

Two acre hog lot, cherry and plum orchard fenced in for ducks and geese.

Address,

A. B. SHROYER,

Clay Center, Neb.

FRANK MYERS,

Free Port, Ill., U. S. A.

Box 20.

Breeder of—

Barred Plymouth Rocks

They are Barred Right and good
size. No Culls for sale. Choice
breeding Ckls. \$2 to \$5 each.

IDEAL
ALUMINUM

LEG
BAND.

Also manufacturer of

Ideal Aluminum Leg

Band : : : : :

The acknowledged leader. 12 for
15c, 25 for 30c, 50 for 50c, 100 for
75c. Samples and circular of
Barred Rocks mailed
for stamps.

TAKE THE

Kansas City & Omaha Line

For all points east, south or west. Close con-
nections made on all junction points.

For rates and information call on or address, S. M. ADSIT, G. P. A.
St. Joe, Mo. S. M. WALLACE, Agent, Clay Center, Nebraska.

Imported Buff Orpingtons.

Are winners at B. P. R., Madison Square Wash., N. J., Keota, Iowa City Iowa State Shows. Orpington \$7 to \$30 per trio. Will close out all the Roe's, Bradley Bus, and Lathams Strains. One pair of 1 yr old show birds for sale cheap, \$2 to \$2.50. A fine lot of young show birds in both varieties. Always win; sure to please. Better get in the push.

SHOW BIRDS FOR SALE.

8 Grand Breeders for sale at a bargain. Also 300 selected Langshan chicks. Address.

BEN S. MYERS, Crawfordsville, Ind.

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free.

H. SHIVVERS, Knoxville, Ia.

Lock box 500.

Barred P. Rocks...

Extra fine, Extra large, Extra color

In the show room they have shown their excellence, have scored from 90 to 94 by prominent judges. Write wants. C. F. HINMAN, Friend, Nebraska.

SHORT HAND and BOOKKEEPING.

Study at home and take a higher salary. Investing a little time and a little money in a business course with us and the dividend will never cease. All subjects TAUGHT BY MAIL.

Complete course also in Engineering, Journalism, Science and Languages, etc. Write for free booklet. NATIONAL CORRESPONDENCE INSTITUTE, 1460 Second Nat'l. Bank Bldg., Washington, D. C.

Send Stamp for catalogue of

...WM. H. WIGMORE'S...

POULTRY AND CATTLE

-SPECIALTIES-

PHILADELPHIA, PA.

Catches Them Coming and Going,

The Greatest Boon to Poultrymen. Practical, Curable, Cheap, Convenient. A permanent fixture for all times. The Spider or Midge Louse can not exist where this system is in use. Do not put it off, but send for circular or send \$2.50 for trial dose and be convinced.

SHRADER & BUCK,
BUCYRUS OHIO.

May I "SHOW YOU"

That we raise as good Barred Rocks in Iowa as are sold by eastern breeders. Eastern price \$10, will sell his equal for \$5, or money back. If you buy a \$5 eastern bird I will beat him for \$3. Try me **CORWIN JONES,** Sidney, Iowa.

P. Hostetler,

EAST LYNN, MISSOURI.

Breeder of a good laying strain of gilt edge....

Barred Plymouth Rocks.

and best laying strain of

..S. C. White Leghorns..

At low down prices.

A Boon for Poultry Keepers. BETTER than a GOLD MINE. We will tell you how we made our hens pay over 40 per cent profit. Merely send your name and address to **Wigmore Poultry Co.,** Clatskanie, Ore.

Tiffany's paragon Lice Killer.

Kills lice and mites on poultry, hogs and animals, is the strongest and best lice killer made. With our double tube sprayer you can save one half the liquid and penetrate all cracks and spray the bottom of the house where you find the mites or spider lice. It gets there every time. Every can is guaranteed or money refunded. Write and learn how to get a sprayer and can of Lice Killer FREE.

Tiffany's Paragon Poultry Powder.

Kills lice on heads of baby chicks and turkeys, fleas on dogs, ticks on sheep and lice on cattle and horses, is a powerful disinfectant, keeps moths from your clothing and carpets. A large free sample for 10 cents to pay postage. We give liberal terms to agents. We want one in every town.

Always use the powder before setting the hen.

THE TIFFANY COMPANY, - - - Lincoln, Nebraska.

BONANZA RABBITRY, ESTABLISHED IN 1885

Founders of the first herd of pedigreed Belgian Hares in the world. The first to establish a system of registration for Belgians. The first to produce hares exceeding the standard weight and develop superior colors. Holder of the world's record for prize winnings.

Our sales for 1900 were over 5,000 head. Send 10 cents for the most complete and most beautiful 56-page catalog ever published.

Bonanza Rabbitry Manual, 4th edition, just coming from the press, \$1.00, written by Dr. B. C. Platt, the foremost authority on the subject, president of the National Association of Belgian Hare Judges; professional instructor of Belgian Hare Institutes; originator of the Decimal System of Judging and score card adapted to this system; inventor of Bonanza Tattooing Marker for Belgians; inventor of the Perfect Belgian moulded in metal, presenting the ideal colors, also featuring in quality shape and size.

Address **DR. B. C. PLATT,** 2741 N. Broad St., PHILADELPHIA
Permanent Eastern Office and Salesrooms.

Barred P. Rocks

EXCLUSIVELY.

I have a number of early hatched cockerets that are good in all sections, and really poor in none, that I am offering for a short time only at \$2 and \$3 each. A few pullets to spare at \$1 to \$3 each. All farm raised.

W. S. RUSSEL,

Box I, Ottumwa, Iowa.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

SHORT STORIES

Bring high prices. Thousands of good stories which might easily be made salable make up the great mass of rejected manuscripts. Our School of Journalism, in charge of successful authors, critics, correctors and revisers, as well as teaches how to write. Write for booklet.

NAT'L CORRESPONDENCE INSTITUTE
24 Nat'l Bank Bldg. Washington, D. C.

Sure Hatch Poultry Company

as the largest aggregation of thoroughbred poultry in the west.

We import, breed, buy and sell All Varieties.

Each variety is bred separately on a farm. No chance for mixing up. Prices reasonable. Stock the best. Write your wants. Address,

Sure Hatch Poultry Co.

Clay Center, Neb.

High class stock for sale!

Barred and Buff Plymouth Rocks and S. C. W. Leghorns. Can furnish show birds for fall fairs. Drouth prices. **EDW. C. WEEKS, Eldon, Mo.**

Does Your Lamp Smoke?
That means a fire and danger of explosion.
Don't run any risk. Put a
Hydro-Safety Lamp
on your lamp and burner and save oil,
attention and avoid all danger. Water jacket
keeps burner cool. Prices, 75c. to \$2.50. Catalogue
of all lamp and burner supplies. **FREE**
L. R. OAKES, Mfr. No. 12 6th St., Bloomington, Ind.

Golden Wyandottes.

Our Wyandottes never have failed to win in the best company. Young stock for sale.

J.C. KAPSER, Clay Center, Neb.

BUFF P. ROCKS Exclusively. Pure Burdick Gold Nuggets. My Buff Rocks are as good as can be found, and are up-to-date in every respect. Some fine specimens for sale; reasonable prices on application. Address

MRS. ELLA PATRICK, Clay Center, Nebr.

White Leghorns.

Layers and winners. An inducement to buy at once and of us—tested breeders, hens \$8, \$10 and \$12 per dozen. Cocks \$1.50 to \$2.50 each. Scottish Terrier puppies \$5.

PRACTICAL POULTRY FARM,

R. R. French, Mgr. Box 47, Ford City, Mo.

GOVERNMENT POSITIONS.
Nearly 10,000 appointments made last year. Chances better for 1902. Hundreds of those who have been appointed were prepared by us by mail. Established 1893. Full particulars free concerning government positions, salaries and examinations, when and where held, our methods, etc. Write to-day
NATIONAL CORRESPONDENCE INSTITUTE, 14-12 Second Nat'l. Bank Bldg., Washington, D. C.

Still 10 Cents a Year.

Until further notice you can still get the **POULTRY, BEE AND FRUIT JOURNAL** for 10c per year. Or by getting four of your friends to send with you, we will either extend your subscription one year or make you a gift of a good poultry book. Send today—NOW—before it is too late, as this offer may be withdrawn at any time. Send your dime and get the neatest, boiled down, right-to-the-point, stop-when-you've-said-it, monthly journal an entire year. Thirty words in Breeders' Column for 25c. Display advertising 75c per inch, net. No discounts for time or space. A guarantee of satisfaction written in every contract.

POULTRY, BEE & FRUIT CO., Davenport, Iowa

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

Glen Raven is Covered with CHICKENS : AND : TURKEYS

Bred to standard requirements and of high quality. From Exhibition scored parents Brown and White Leghorns, Barred and White Plymouth Rocks, Black Minorcas and Bronze Turkeys. Prices reasonable. Circular free. Mention INVESTIGATOR. Write for description.

E. W. GEER, Farmington, Missouri.

Barred Plymouth Rocks

..200 QUICK SALE 200..

We have more young stock than we can handle in cold weather hence make the following prices to reduce our stock. First comes first served.

35 Cockerels, well developed and very large.....\$3.00 each.
35 Cockerels extra good breeders.....1.50 each.
50 Pullets, well developed and fine.....1.50 each.
50 Pullets, good breeders.....1.00 each.
25 Hens, one and two years old. Good ones.....1.50 each.
5 Cock Birds. Masses of correspondence. Write us what you want and can do you good circular free. Your Truly,

MR. and MRS. A. UPTON & SON, Fairbury, Neb.

Buff Orpingtons

THE COMING BREED

W. H. BUSHELL, IMPORTER AND BREEDER, DAVID CITY, NEBRASKA.

No Eggs for Sale! A nice lot of young chicks for sale in pairs and trios. Bred from the best matings of imported stock. I have hundreds of February and March hatched chicks for sale. Mention this Journal.

Conkey's Roup Cure

Cure Guaranteed!

THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, especially in pigeons, this cure excels

all others. One 50 cent package makes 25 gallons of medicine. Directions with every package. If it fails to cure money refund. Postpaid, small size 50c, large \$1. **Conkey's Loose Killer** never fails to kill. Try it. 25 cents per package, and 15 cents extra for postage.

Conkey's Egg Food and Poultry Tonic will keep your fowls in perfect health, and produce more eggs than any similar preparation. 25 cents per package and 15 cents extra for postage. **C. E. CONKEY & CO., Cleveland, O.** Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal. Eastern wholesale office: No. 8 Park Place, New York City and S. H. I. Co., Clay Center, Nebr. For sale by all poultry supply houses. Agents wanted.

200 Mammoth Pekin Ducks - 100 White Wyandotte Cockerels

If you need big drakes or cockerels get my prices. Look up my record. Get my circular its free.

Lincoln, Neb., Box 456 - - - - - E. E. SMITH.

Best Bargains in Belgians Ever Offered.

I personally selected, while at Los Angeles recently, the cream of the finest stock from several rabbitries, including a variety of the popular champion strains. By purchasing them in herds I got rare bargains, which I offer to my customers at prices ranging

None of these animals score less than 93, and a few run as high as 96. I ship either from Los Angeles or Houston.

300 ANIMALS TO SELECT FROM

Authorized Judge of American Belgian Hare Registry Association of Kansas City, Mo.

Dixie Rabbitry, S. J. MITCHELL, Prop., (Main Ranch), Houston, Texas

Brief Business Catchers.

30 WORDS
SINGLE INSERTION
50 CENTS

Under these headings cards of **THIRTY WORDS** or less will be inserted for **FIFTY CENTS** a single insertion, or twelve insertions for **THREE DOLLARS**. No display can be allowed and all cards must be uniform in size and style. A change in makeup allowed each quarter.

30 WORDS
WITH INVESTIGATOR
1 YEAR \$3.00

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert R. Swett, 364 Mosley St., Elgin, Ill.

BLACK LANGSHAN, W. P. Rockall old stock for sale at \$1.00 each, young white Pekins ducks 6 for \$4.00 all from high scoring stock. Mrs. Henry Shrader, Berlin, Nebraska.

J. W. WHITNEY, Chatham, Ohio, Poultry Judge. All Varieties Private scoring and expert mating a specialty.

FINER AND CHEAPER than ever. Buy early. Games, Heathwoods, Irish and Mexican Grays, Blk. Reds, Tornadoes and Cornish Indians. Free illustrated circular. C. D. Smith, Fort Plain, N. Y.

ROSE COMB White and Rose Comb Brown Leghorns, White and Silver Laced Wyandottes, also Rouen Ducks. Eggs in season. 15, 18; 39, 32. Duck eggs \$1 per H. J. W. Cook, Poneto, Ind.

BUFF and BARRED Rocks, Buff Leghorns, B. B. Red Games, Pekin Ducks. Fancy Pigeons, very fine lot for sale. For prices write, Utz Poultry Yards, Estherville, Iowa.

BUFF TURKEYS: Pure buff throughout No white wings and tails. Large birds and ready to ship. Mrs. T. G. Smith, Polo, Ill.

J. W. EASTES, Galesburg, Ill. Buff Oringtons. R. O. W. Leghorns, Barred—White Rocks, W. C. P. Bantams, Belgian's Eggs. Stock in season. Agents wanted. Thirty Prizes; silver cup last year.

PARTRIDGE COCHINS a specialty. The cream at Chicago and Cedar Rapids, 1901. 150 youngsters for sale after October 1, finer than ever, superior feathering, shape and color. Always satisfaction guaranteed. U. J. Shanklin, Wanbeck, Iowa.

BUFF ROCKS. Breeding and exhibition stock for sale. Write at once for description and prices. Satisfaction guaranteed or money refunded. Tell us what you want. F. Whaley, Appleton City, Mo.

C. E. DUNLAP, breeder and buyer of thoroughbred chickens. Can fill your order for any breed or strain, from the yards of reliable specialists. Prices reasonable. Correspondence solicited. Yours Truly, C. E. Dunlap, Liberal, Kans.

BLACK LANGSHANS, best winter layers, best rustlers, best all purpose fowl, also handsome. I take great pains to have the best and largest stock. Large fine Ckls. \$1 each. Oscar Jenne, Liberty, Nebr.

FOR EXCHANGE. A 60-egg Sure Hatch Incubator, for Exhibition B. B. R. Games. Must be first class stock. A. J. Williams, Clay Center, Nebr.

40 GOOD WHITE WYANDOTCHICKENS for sale if taken soon. The Stay White Kind G. E. Enoways, Aurora, Nebr.

BARRED P ROCKS: Thoroughbred, farm raised. Good birds, good scores, give good satisfaction and good results. Eggs that hatch, \$1.00 per 15. Prices for birds as reasonable. If convenient please enclose stamp when writing for particulars. Miss A. Lyent, LaCrosse, Mo. Box 87.

100 S. S. HAMBURGS, Stock for sale. Eggs at prices to suit the season. Stock in good condition fashionably bred and artistically marked. Rev. G. A. Olambian, Moran, Kansas.

MEADOW BROOK farm has for sale Pekin Ducks, Light Brahma and R. Plymouth Rock Cockerels at \$1 each, Toulouse Ganders, and M. Broeze Toms, at \$2 each. Poland China hogs a matter of correspondence. J. D. Grimes, Chambers, Neb.

WHITE PLYMOUTH ROCKS a specialty. 1 yr old hens and this year's pullets and cockerels for sale. Old stock score 92 points and up to 95.4. Write for prices, Geo. N. Wood, Weldon, Ia.

FOR SALE! Rose Comb Black Minorcas. In singles or trios also Buff Leghorns and Buff Rock Ckls., the best of stock for \$1.25 each, or \$3 for 3. Write us at once, C. E. Olson, Colton, Nebr.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough tape-board. Contains all the pit rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Hens, Handling, Nursing and everything relative to the royal sport of cocking.

By Dr. H. P. CLARK, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry In estigator one year

For 25 Cents.

Address, THE INVESTIGATOR, Clay Center, Nebraska.

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one place. Nothing to stray. The neatest and strongest coop on the market.

Wm. MILLER, North Bend, Neb

GET MORE HEN MONEY

Feed cut raw bone and double your profits; get more eggs, more fertile eggs; more vigorous and healthy fowls.

MANN'S 1902 MODEL BONE CUTTER

New design, open hopper, enlarged table, new device to control feed; you can set it to suit any strength of your flocks. Sent on

10 DAYS FREE TRIAL. No money asked for until you prove our

New Model will cut any kind of bone, with all adhering meat and gristle, faster and easier and in better shape than any other type of bone cutter. If you don't like it send it back at our expense.

Free cat'g. explains all. F. W. MANN COMPANY, Box 1, Milford, Mass.

..WORLD'S CHICK FEED..

..Beyond comparison..

Chamberlain's Perfect Chick Feed 100 lbs. \$2.50; 50 lbs. \$1.50; 30 lbs. \$1.00.

Chamberlain's Perfect Hen Food will make your hens lay. 100 lbs \$1.75. Goods shipped from St. Louis.

Manufactured by W. F. CHAMBERLAIN, Kirkwood, Mo.

Were Your Crops Injured

by the drought? Well, even so, you needn't starve to death. A good flock of chickens will pay your taxes, buy your groceries, and leave a surplus besides. The

Hawkeye Incubators

will hatch them for you, with less bother and greater certainty than any other incubator sold to-day. Perfect regulation of temperature, ventilation and moisture. In actual results the Hawkeye takes a back seat for nobody. Three sizes—60, 100 and 200 eggs, at prices that are right. We make brooders, that really take care of the chicks after they are hatched. Our motto is "The Hawkeye Incubators are Good Incubators," and it means exactly what it says. Better send for our catalogue. See our special offers and guarantee. Book free, or send the ad and get also a subscription to a leading poultry paper.

Hawkeye Incubator Co.,
Department 108. Newton, Iowa.

BUFF COCHINS

Exclusively.

Just What You Are

Looking For . . .

The Pure Golden Buff. Winners in any company. Elegant in shape, profusely feathered, as good as the best. Prices low, write me.

B. H. DUNN, Clay Center, Neb.

Flemish Giants

We have strictly A No. 1 Giants, headed by WINDSOR, imported Sept. 1900. One of the largest and best Giant bucks of his age in America. His ancestors present an unbroken line of England's best champions. A weeks old Giants \$5 to \$10 per head. You cannot get better ones at any price. Dr. I. C. Stephens & Co., Carleton, Neb.

300 Buff and Black Wyandotte Chicks.

For sale now. Breeders or fine exhibition stock. Give me a chance to please you.

HENRY HESS, Winona, Minn.

White P. Rocks Exclusively...

My Rocks are of the best strains to be found and I have a fine lot of chicks to sell reasonable. Write,

MRS. NANCY WATSON,
Lincoln, Nebr.

David Larson,

Wahoo, Nebraska,

Expert Poultry Judge

I have had years of experience in breeding, mating and judging. For reference to qualification, write **POULTRY INVESTIGATOR**, Clay Center, Neb. I am open for engagements.

The Fertile Egg

In a Victor Incubator always yields a vigorous chick. Simplest, most reliable, cheapest, first-class hatcher is the **VICTOR INCUBATOR**

Thousands in use; we pay freight, catalogue & etc.

GEO. ERTL CO., Quincy, Ill.

A Combination

of brains, experience and high grade material has made this **RELIABLE INCUBATOR** known throughout the civilized world. If you are after results represented in dollars and cents, you want one of our popular 24th Century Poultry Books. Bright, instructive and worth ten times the price asked. Send for 10c. As full of meat as eggs.

Reliable Incubator & Brooder Co., Box A 25 Quincy, Ills.

My **Buff Orpingtons** ... Have no equal
B. Plymouth Rocks
(Thompson Riegels.)
If you want good stock I have it

JOHN A. LING,
Harvard - - Nebraska

A Really Good Feed Cooker.

We are not the only people in the world that manufacture a feed cooker but we do make a strictly high class one.

RELIABLE STOCK FOOD COOKER

and Water Heater Combined.

The material used in this cooker is the best that can be bought, and brains and skill have been combined to produce the best. The levers are cut separately, thus insuring perfect safety in shipment. This is the year to buy a feed cooker, in order that you may get every dollar's worth out of the feed. Write for catalogue and full information. If you want a cooker we can interest you.

Reliable Incubator and Brooder Co., Box 25 Quincy, Illinois.

PRICES.	
20 gallons,	\$ 5.00
35 gallons,	9 00
50 gallons,	12 00
100 gallons,	16 00

Poultry Supplies

The Best and Cheapest.

Lice Killers, Markers, Remedies, Incubators, Exhibition Coops, Egg Cases, shipping Coops and Boxes and everything to make poultry raising pleasant and profitable. Best seeds that grow. Nearly 20 years' experience. Send for free Catalogue.

First Premium at State Fair 1901.

Archias' Seed Store,

Sedalia, Missouri.

200 EGGS TO ONE HEN

This is THE AVERAGE your flock should produce; and it is only made possible by the use of

Midland Feed Meal..

We make Ten Brands, as shown above, and each one is a specific for its purpose. They are a

A Combination of Grains and Brains.

Complete and ready to feed. Needs no green bone or other accessories. There is not, and never has been anything on the market to compare to it. Thousands of poultrymen are using it and it is an acknowledged standard today. Random or haphazard feeding is no longer profitable, and the man who persists in it must have FRED TO BURN. Profit is only assured where every pound of feed is made to show returns. Our balanced feed will do it as nothing else can. It costs but very little to try it and be convinced. Manufactured by the **MIDLAND POULTRY FOOD CO., Kansas City, Mo.**, and sold by

Your Nearest Feed and Grain Dealer.

Roston, Mass., Jos. Breck & Sons, 51 N. Market St., New York City, Excelsior Wire & Poultry Supply Co., 28 Vesey St., Philadelphia, Pa., Johnson & Stokes, 217 Market St., Midland Poultry Food Co., N. E. Cor. 2nd and Main Sts. Kansas City, Mo., Petaluma Incubator Co., Petaluma, Calif., E. E. White, Chestnut Hill, Pa., The Vail Seed Co., Indianapolis, Ind., A. C. Wooley & Co., Atlanta, Ga., Rochester Poultry Supply and Seed Co., Rochester, N. Y.

Midland Formulas...

- Ready Mixed.
1. Nursery Chick Food.
 2. Growing Chick Food.
 3. Fattening Chick Food.
 4. Egg and Feather Producing Food.
 5. Nursery Duckling Food
 6. Growing Duckling Food
 7. Fattening Duckling and Gosling Food.
 8. Laying Duck Food.
 9. Stock Ducks' Summer Food.
 10. Growing Gosling Food

Alsop & Farmer, Cave Springs, Mo. The above photo is a sample of over 200 that are in the Sure Hatch Fifth Annual catalogue. It is a book of 166 big pages; contains page after page of applicable and practical poultry information. It is free to any address and should be in the hands of every poultry raiser. Tells how to save money as well as how to make it. SURE HATCH INCUBATOR CO., Clay Center, Neb., or Columbus, O.

Golden Wyandottes

Highest Grade, Healthy, Vigorous Stock from Careful Matings.

S. P. VAN NORT, OLD ORCHARD, MISSOURI.....

1st, 2d and 3d Pullet and 3d Cockerel at St. Louis Shaw, January, 1901. No old birds exhibited; 3 seconds at same show 1900. 1st and 2d on pair at St. Louis Fair. Eggs for hatching, \$2 per 13. Stock for sale. Write for full information.....

FINE STANDARD BRED BIRDS.

For sale after September 1st of following breeds:

Barred Plymouth Rocks, \$1 to \$3 each. Light Brahmas, \$1.50 to \$3 each. Buff Cochins Bantams, \$1.50 to \$3 each. A few large 2-yr. old Toulouse ganders at \$3 each. Pekin ducks of standard weight at \$2 each.

MRS. EUGENE HOLLARD, Highland, Ill.

Silver Wyandottes

I have 100 Silver Wyandotte females for sale at \$1 to \$1.50 each; my last season breeders. Want to get them out of the way of the young birds; these are bargains.

R. S. TRIMBLE, Somerset, Ky.

SURE SEE THE 1902

Noxall Incubator

IT HAS many new features, the Regulating, Ventilating and Moisture system is perfect. I want price, find out how to get one FREE. Our catalogue gives a remedy for every known poultry disease, 4c, for postage circular and price list free. Noxall Incubator Co., Quincy, Ill.

BE SURE YOU GET A DANDY

and then you will be sure of more money from your hens. Nothing equals green bone as an egg producer and health promoter. No machine equals the

Dandy Green Bone Cutter

for reducing bone (either dry or fresh) to poultry food. It is the most substantial cutter, the easiest running, the most durable. Automatic feed; easily adjusted to cut coarse or fine.

We Sell Direct to Poultrymen

at wholesale prices, saving you all agents' and dealers' profits. GET A DANDY, try it 30 days and if you don't like it in every way, send it back. Isn't that a fair offer? Price from only \$5 up. Our new book, "More money from your Hens," will interest every poultry-keeper. It's yours for the asking.

Stratton Manfg. Co.,
Box 48, Erie, Pa.

Fall Fair Show Birds

Great big, early hatched, sure winners. Silver, Golden and White Wyandottes and a fine lot of midget G. S. and S. S. Bantams. 100 head this season's breeders at a great sacrifice. Fine litter of Scotch Collies for sale, bred in the purple

R. E. JONES, Flat Rock, Indiana.

UNION LOCK POULTRY FENCE.

For Poultry, Rabbits, Orchards, Gardens, etc.

All main strands are two wires twisted together.

Patented July 12, 1898

and April 15, 1899.

Pickets 3 in. apart. Cables 1 1/2 in. apart at bottom.

Stronger and closer spacing than any other make. Our Union Lock Hog, Field and Cattle Fence, Union Lawn Fence Gates, etc., guaranteed first class.

Your dealer should handle this line—if not, write us for prices. Catalogue free.

UNION FENCE CO., DE KALB, ILL., U. S. A.

B B. Red Game Bants,
Buff Pekin Bants,
Buff Wyandottes,
Buff Leghorns,
Buff Rocks,

My stock is as good as can be had any where and have won in all principal shows in Illinois and Iowa, and score equal to the best.

D. LINDBECK,
Bishop Hill, : : Illinois.

GINSENG...

The great Chinese Root. Immensely profitable, \$6 to \$12 a pound. Illustrated circular, fullest instructions, best published, with prices for plants and seeds, 10c. Buy direct and save 50 to 100 per cent in prices. Our own farms in California. Mention paper.....

Harlan P. Kelsy,
Tremont Bldg. Boston, Mass.

DAR'S GWINE TO BE SUMT'IN DOIN' HEAH!

There is always something doing on the place that operates one of the

MARILLA Incubators and Brooders.

They hatch more chicks out of less eggs than any incubator you ever saw; in fact they come mighty near hatching them all. They are built that way. If you don't find them all we say they are, you can get back your money. The best system of regulating temperature, moisture and ventilation yet invented. Both Hot Water and Hot Air. Double walls, double floors, double top. Thirteen years experience makes them perfect, and we are proud of them.

The Brooder is as good as the Incubator, and is the only one on the market that prevents trampling and overcrowding.

You must let us send you one of our catalogs, telling all about these things. Two 2c stamps for partial postage.

Marilla Incubator Co., Box 97, Rose Hill, N. Y.

Incubators..

Built on entirely new principles and the only machine made that will allow the chicks when hatching to come out of the machine in the pure, fresh outside air at their own will, just exactly the same as they do when hatching under the hen. Guaranteed to imitate nature closer and to hatch equal to any machine on the market. For further particulars address with stamp.

L. P. MEISTES, Troy, Mo.

Cornish and White Indian Games.

Stock for Sale.

J. C. NAUMAN, Clay Center, Nebr.

Poultry Cuts

We have always on hand a supply of poultry cuts suitable for catalogs, circulars, or advertising. These are not "stock cuts" but in the majority of all cases are reproductions from life, photographs, painting, etc. They represent every variety and strain of fowls and all sizes, from those here shown upward. Write us for sample sheet of proofs, prices, etc.

Reliable
Incubator and
Brooder Co.,

Box A 25, Quincy, Ill.

WO
RACKS
O
EXAS

Effective March 10th, 1901,
the

FRISCO LINE

Announces the Opening of its

Red River Division

...To...

Denison and Sherman,
Texas.

Through Train Service will shortly
be established from St. Louis and Kansas
City over the

Shortest Line to Texas

Buff Wyandotte Sale!

I offer my entire sale of Buff Wyandottes, breeding stock and the cream of 300 chicks for sale cheap, in numbers to suit purchasers. If you want a male bird for next year buy it now, a half value. Write me.

R. F. D. No. 4.

ARTHUR SYKES, Madison, Wis.

Jackson Boulevard Rabbitry

Royal Blood English Belgian Hares.

All animals English prize winners and from imported English parents. The renowned Golden Ball (doe) and Lord Salisbury at the head of the herd. Angora Cavies (Our Specialty), Abyssinian Cavies, For Pleasure and Profit. Peruvian Cavies, English Cavies, Both Imported and Domestic. The Angoras with their long, silky tresses and musical little voices have not their equal. Write for special descriptions and prices.

MRS. GEO. D. HAWLEY,
2166 Jackson Bvd. Chicago, Ill.

The Cyphers Incubators

Self-Supplied
Moisture.

Are the world's standard hatching machines. They are in use in twenty Agricultural Colleges and Schools in the United States and Canada.

They are self-regulating, self-ventilating and need no added moisture.

We are shipping them to every country where poultry is grown.

For proof of their good qualities send ten cents in stamps for our 224 page book, No 122 entitled "Profitable Poultry Keeping in All Its Branches."

A Poultry Supply Catalogue free to any address.

THE CYPHERS INCUBATOR CO..

Chicago, Ill.,
325 Dearborn St.

Buffalo, N. Y.,
Factory and Home Office,
Cor. Court and Wilkeson Sts.

Boston, Mass.,
34 Merchants Row.

New York City,
8 Park Place.

1st Pullet, N. W. Missouri, 1899; 1st Hen, N. E. Missouri, 1900. Score, 95.

At the Big ..St. Louis Show..

January, 1901—1st Cock; 1st, 2d and 3d Hens; 1st and 3d Cockerel; 2d and 3d Pullets and 1st Exhibition Yard, and N. W. Missouri and N. E. Missouri, 1899-1900, more prizes than all other Langshan exhibitors combined—all my own breeding. If you want the very best at a low price write me.

L. E. MEYER,
Bowling Green, : Missouri.

SECOND PULET, BOSTON, 1900, FIRST
HEN AND CHAMPION AT PHIL-
ADELPHIA, 1900.

Latham's Victory at Philadelphia Show, 1900.

1st, 2d, 3d and 4th Hens—2d Pullet.
1st and 3rd—Exhibition Yards—Eight
Special Prizes, including the

**They Won
on
Their Merits**

Champion Barred P. Rock Female.

In quality of stock shown the Philadel-
phia show stands one of the hottest ever
held. I made my GRAND RECORD ON
BIRDS BRED AND RAISED ON MY
FARM. Send for Illustrated Circular and
descriptions of Matings.

Eggs

I will sell a LIMIT-
ED NUMBER of
Eggs at \$5.00
per 15.

**Choice Breeding Stock
for Sale!**

**Beauty and Utility Strain Barred
Plymouth Rocks.**

**Satisfaction Guar-
anteed.**

Address **C. H. LATHAM,** BOX 6, LANCASTER, MASS.

Our Motto, "Virtute non Astutia"

HARES BY THE HUNDREDS

IMPORTED - AND - DOMESTIC.

From such Fashionable Strains as the following Champions:

Fashoda, Edinboro, Guinea Gold, Nonpareil, Unicorn, Dash,
Climax, Grimsby's Star, Priory Prince, Malten Mystery, Pal-
ace Queen, Lord Britain, Etc.

Our Stud Bucks are:

Fashoda Star
Score 96 by Judge Almond, im-
ported, son of Ch. Fashoda.

Viscount
Score 95 by Judge Finley, im-
ported.

Lythedale
Score 94 by Judge Finley, im-
ported.

Sir Crabtree
Score 93½ by Judge Crabtree,
and other domestic bucks
that will score 94 to 96.

RUFUS RED BELGIAN HARES

At prices ranging from \$5 to
\$75 per head, pedigree and
score card with each animal.
Unpedigreed market stock,
good color and size, \$2.50 to
\$5 per pair. Hardy Black
Belgians (good to use as nurse
does) at \$10 per pair. Cor-
respondence solicited for spe-
cial price list which may not
be in effect long. Will re-
fund money and pay return
express charges if Hares pur-
chased are not as represent-
ed. Rabbitries at Maplewood
and Fayette.

MISSISSIPPI VALLEY BELGIAN HARE COMPANY,

304 CHEMICAL BUILDING, : : : ST. LOUIS, MISSOURI.

Give Fowls a Chance

To make money for you, by ridding them of lice,
mites, etc., and keep them and their roosts and
nests free of all vermin and prevent diseases.

Use Cremoline
Price only 25 cents. Guaranteed. For sale by all
Dealers. Circulars Free by return mail.
BAKER-EIDSON CHEMICAL CO., St. Louis.

POULTRY CUTS at CUT PRICES
CATALOGUE FREE
Harper Eng. Co., Columbus, O.

Stephani Poultry Company,

Incorporated 1901.

BREEDER OF

The most complete Plant
in the Mississippi valley.

STANDARD BRED POULTRY AND THOROUGHBRED BELGIAN HARES
Farm at Swansea..... BELLEVILLE, ILL.

VOL. 3.

JANUARY, 1902.

NO. 11.

Poultry Investigator

ADVANCE TO SUCCESS

25 ¢ a year

BAD EGGS

That's about all you have left when
you depend on a fussy old hen.

What You Want Is

an Incubator on the place. A good Incubator. A money maker.

A MARILLA

We make the **Marilla Incubators and Brooders**, both hot water and hot air. Not a fairly good machine, but the very best there is. We have been at it thirteen years, and every **Marilla** is the best we know how to make. To do this, we buy the best material, and only the best. Our methods and workmen are the results of years of selection. The survival of the fittest.

If these machines are not all we claim when you get them, send them back. We won't keep your money.

The system of regulating temperature, moisture and ventilation is the best that has yet been devised.

No need of watching or worrying over the **Marilla**. It will take care of itself, and bring off whopping big hatches.

The Brooder is built with the same careful attention to details that have made them so successful in the past. The only Brooder that prevents overcrowding and trampling.

Our catalogue, a book of practical suggestions for the poultry man, sent for four one cent stamps.

Marilla Incubator Co., Box 97
Rose Hill, N. Y.

F.B.W. Co.

**Choice
Cockerels
&
Stock Eggs
for
Hatching.**

The Result of 25
Year's Breeding.
Line Bred at the
American Poultry
Farm.

From Barred and White Plymouth Rocks
White and Silver Wyandottes, White and
Brown Leghorns, Golden Sebright Bantams,
Bronze Turkeys, and Pearl Guineas.
Belgian Hares, Jersey Cattle.

Valuable Circular.

F. M. MUNGER & SONS, DeKalb, Ill.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered Strain, from a long line
of prize-winning ancestors; have made them
a specialty for 19 years. Now offering fine
exhibition and grand breeding stock of both
1900 and 1901 hatch at moving price if taken
soon. Send for illustrated circular with
half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

**Buff P. Rocks
Exclusively...**

We have Judge Harris' entire stock.
These, together with our own prize
winners, gives us the best flock of
Buff Rocks in the country. We can
please you both in quality and prices.
Write us if you want winners bred
from winners. Pekin ducks, Toul-
ouse Geese for sale.

**MRS. FLORA SHROYER,
Clay Center, Neb.**

WANTED!

250 White Wyandotte Hens
and Pullets.
250 White Leghorn Hens
and Pullets.
100 White Rock Hens and
Pullets.
100 Buff Orpington Fe-
males.
Will pay cash. Address,
Box 421, Clay Center, Neb.

**We
Have
Those
That
Win...**

Barred Rocks - - White Wyandottes

**WE HAVE
Some'- Choice - Exhibition
AND
Fine Breeding Birds
For Sale!**

We have always won at State Fairs and State
Shows more prizes than all other exhibits.

T. L. NORVAL, Seward, Nebraska.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS.

Are better than ever as they have farm range. Have 280 young and
30 old ones to draft from the coming sale season. Was winners of all
firsts and part second in state show the last two years, also have been
winning for customers in strong competition. Satisfaction guaranteed.
Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

ARE YOU LOOKING FOR EXHIBITION BIRDS?

BARRED PLYMOUTH ROCKS. With that nice even ring barring to the skin as blue
as the sky, and with elegant combs, golden beaks and shanks. Or heavy weight **SIN-
GLE COMB BROWN LEGHORNS.** Elegant combs, fine striping to Hackett and Sad-
dle, and shape to burn. Pullets with that soft even brown color, fine striped hackles
and elegant combs. In fact birds that give the other fellow that tired feeling in the
show room. If so, address.

J. W. WHITNEY, Chatham, O., P. O. Box 1.

Belgian Hares

Best in America, very cheap during
special sale. We guarantee satisfac-
tion or no pay. Might exchange for fine clock, piano, gun or music box. What
have you? Book free.

E. J. WHITE HARE CO., Brighton, Colo.

Barred Plymouth Rocks

..200 QUICK SALE 200..

We have more young stock than we can handle in cold weather hence
make the following prices to reduce our stock. First comes first served.

35 Cockerels, well developed and very large.....\$3.00 each.
35 Cockerels xtra good breeders.....1.50 each.
50 Pullets, well developed and fine.....1.50 each.
50 Pullets, good breeders.....1.00 each.
25 Hens, one and two years old. Good ones.....1.50 each.
5 Cock Birds. Masses of correspondence. Write us what you want
an can do you good circular free. Your Truly,

MR. and MRS. A. UPTON & SON, Fairbury, Neb.

MR. and MRS. C. A. BLANCHARD,

BREEDERS OF

**White Plymouth Rocks, White Holland Turkeys and
Pekin Ducks.**

At Nebraska State Poultry show 1901 we won 1st pen, 1st hen, 1st cock, 3d
cockerel, which was a prize on every bird entered. At the Ne-
braska State Fair, 2d to 6th of Sept., 1901, we won 1st
pen chicks, 1st hen, 1st pullet, 1st cockerel--
a first prize on every bird entered.

We have a fine lot of young stock for sale.

FRIEND, - - - NEBRASKA.

Vol. 3

Clay Center, Nebraska, January, 1902.

No. 11

Nebraska State Poultry Show

January 21st to 24th, 1902.

Do not neglect to show your birds. Do not fail to come and see the largest collection of thoroughbred fowls ever shown in the West. Write L. W. Garrouette for list and entry blanks.

LINCOLN AUDITORIUM

Where the Nebraska State Poultry Show will be held January 21st to 24th, 1902.

Life In the Egg

By L. E. Keyser

INTRODUCTION.

In this series of articles it is the design to treat of "Life in the Egg" from its very formation through all its stages of normal development until it bursts the shell—a living chick. We do not lay claim to absolute originality in the treatment of this subject, as we have been aided in our efforts by a number of works on zoology and embryology, but all facts here presented have been substantiated by individual research, observation and experience, and we do not give as facts old views or speculative theories which have passed current and been accepted for want of more perfect knowledge. Many a pet theory has been exploded because in the light of experience it was found to be incorrect. To obtain the knowledge here imparted, or rather to substantiate what we have read relative to it, we have examined, broken and dissected hundreds of fertile eggs in all stages of development, and sacrificed hens in all stages of laying condition, and now place our deductions before the readers of *The Investigator* in the hope that they may prove of interest and perhaps profit.

THE EGG AND ITS FORMATION.

In the ovary of the hen is formed the essential part of the egg—the yolk and germ. These are very small at first, but they increase rapidly in size and number until near or during the laying period, when the hen's ovary much resembles a bunch of grapes, and is accurately shown in fig. 1. There are two or three organs in every bird, but one usually remains undeveloped, the fertile one nearly always being on the left side of the spine and attached to it by means of the peritoneal membrane. These rudimentary eggs when united to the ovary are composed of a white yolk, yellow yolk, yolk membrane and germ bed, all enclosed within a thin, transparent ovicel. The white yolk is formed first and on the end of this yolk the yellow or food yolk develops and envelops the white yolk, with the exception of one small place where is formed the germ disc. As these egg cells ripen or mature, which during the period of laying they are constantly doing in regular succession, the enclosing membrane becomes gradually thinner and finally the sac ruptures at the stigma and the yolk and germ, now surrounded by a very thin and delicate membrane, are received by

the funnel shaped opening of the oviduct or egg-passage and carried on its way to the outer world.

In its passage it is enveloped in the white or albumen, this being in three layers of different consistency. The outside albumen is thin and watery, the middle albumen thicker, and the inside layer almost as thin as the outside one. The yolk and the layer of thin albumen next to it are surrounded by a membrane of dense albumen which forms a twisted cord at each end of the yolk termed the chalazae, which hold the yoke in shape (see Fig. 3). They do not attach to the shell, but to the denser or middle layer of albumen, and being slightly below the center, act as balance weights to keep the side of the yolk holding the germ always uppermost. So if the egg is turned around the yolk itself does not turn with it, but retains its position with the germ on the upper side. The yolk being slightly lighter than the albumen and supported by the chalazae, floats germ uppermost in the albumen near the upper shell, but always separated from it by a layer of albumen and oscillating gently away from the shell on the slightest motion. In some cases it floats nearer to the shell, and these are generally the cases in which adherence takes place, or the yolk is ruptured during incubation. The delicate germ is thus protected by the albumen, which is a very poor conductor of heat and thus guards it against fatal chills during incubation and preserves it from concussion or other fatal injury.

By the time the egg is half way down the oviductum the whole quantity of albumen is formed and it is then enveloped in a parchment-like skin. This skin consists of two layers, which separate at the large end of the egg forming the air cell. This cell is small at first, but as the egg becomes older it increases in size by the evaporation of water and carbon dioxide. In the last portion of the oviduct the egg becomes coated with a calcareous deposit of different layers which form the shell, after which it passes into the colaca and is ready for expulsion. The different layers of the shell and also of the membrane lining are porous, and when the egg is deposited in the nest a chemical and mechanical change takes place and the so-called respiratory stage sets in.

That is, the egg absorbs oxygen through the pores of the shell and deposits it in the air cell containing a greater per cent of oxygen (23.5 per cent) than the outside air (20.8 per cent).

Fig. 2 shows the oviductum, slightly modified for the purpose of illustration, which in an ordinary hen is about two feet in length and in traversing this distance the egg takes on all the changes described. Should two yolks or egg-cells become mature and detached at the same time they are likely to become enveloped in the same albumen and shell and thus form a double-yolked egg.

The temperature of the oviduct is about 106 or 107 degrees, and if the egg is a fertile one incubation has already set in, the blastoderm being nourished and warmed into life, but on being deposited in the nest the

FIG. 1.

process is suspended, to be again resumed when the opportunity affords. This process of incubation varies according to the time the egg is retained in the oviductum, but is usually sufficient to give the germ a fair start. If the germ does not receive a sufficient start in the oviduct to enable it to resist the shock of the colder atmosphere into which it is expelled, and to sustain itself during the time incubation is suspended, it will prove a weak germ or addled egg. This accounts for the fact that the eggs from some of our best laying hens often do not hatch well. It is not due to a lack of attention on the part of the male, or to the sterility of his seed, but to the fact that the eggs are hurried so rapidly through the oviductum that the blastoderms do not have time to mature before the first real stage of incubation is suspended, and then we have weak or dead germs.

First prize Buff Rocks owned by Flora Shroyer, Clay Center, Neb.

Clear or unfertile eggs, of course, are not due to this cause.

Eggs that are retained too long in the oviductum may become too far developed and fail to hatch, but this is seldom the case. One writer claims that an egg that is developed at night and remains in the oviductum until the next day will not hatch well, as it is apt to dislocate the blastoderm. This is certainly fudge, for a large portion of the hens retain their eggs in the oviduct from eighteen to twenty hours, although perhaps not fully developed. When an egg has received its shell and passed into the cloaca it is seldom retained more than twelve hours, and this will certainly not injure it for hatching, as we have repeatedly demonstrated.

Here we will break off from the real subject in hand to advance a theory of our own, which we have nearly demonstrated as a fact. If the eggs from our heavy-laying hens, which only seem to produce weak or dead germs, are placed in the incubator before they are allowed to become cold a large proportion of them will hatch. The germ is not sufficiently developed to stand a suspension of incubation, but if incubation can be uninterruptedly continued it will produce fully as strong a chick as a germ that has developed sufficiently to stand suspension for several days or even weeks. The fact that a hen produces weak-germed eggs does not necessarily show a weakness in the parent stock, as many are led to suppose, but an unnatural condition in the first process of incubation. The blastoderm becomes weak at either too high or too low a temperature, unless it is subjected to a heat analogous to that of the body of the hen.

HOW THE EGG IS FERTILIZED.

When copulation takes place the spermal fluid of the male is injected

into the oviductum. This sperm is filled with minute living organisms which travel steadily forward, always in the direction they are started. The temperature of the oviductum being the same as that of the spermal sac of the male, these organisms will retain life for a long time, and by their active nature distribute themselves along the walls of the passage, and some believe they reach the ovary and deposit themselves on the germinal discs of the egg-cells, but this is hardly probable, as the blastoderm cannot well become fertilized before the egg-cell has matured. However, after copulation has taken place and an egg cell has passed into the oviductum they attach themselves to the blastoderm, and from that moment there is life in the egg. The number of eggs that can be fertilized by one sexual intercourse is variously estimated, authorities placing it at from fifteen to twenty-five. This, of course, would depend much upon the time copulation took place. If it should occur within a short time previous to the hen's laying the first egg of a clutch quite a number might be fertilized. Should it occur when a fully developed egg is in the oviductum the probabilities are that most of the sperm will be forced out when the egg is expelled. Then again, even when there is a full supply of sperm in the passage an egg-cell may pass down without any of these little organisms becoming attached to the germinal disc. So we see there are a number of causes for unfertile eggs, and causes which man cannot alleviate.

In a fertile egg the blastoderm will show an outer white rim and within this a clear area, in the center of which is a spot of less clearness, sometimes dotted and sometimes quite uniform. In the unfertile egg the white disc is simply marked with irregular clear spaces. These conditions cannot be detected through the shell, nor readily by the unpracticed eye even when the shell is broken, without the aid of a microscope.

A fertile egg contains all the elements necessary for the perpetuation of life-protection by the shell and albumen, albumen and yolk for nutrition, and the vital germ. The white of the egg has manifold uses. It forms the chief nourishment of the chick during its growth in the shell, and as it forms the largest portion of the egg it gives the growing chick the needed increase of room as it is absorbed or evaporated. In the first stages, however, its use is principally to protect the vital germ and delicate yolk. The use of the greater portion of the yolk, or that portion known as

FIG. 2

the food yolk, is to supply nutrition after the chick leaves the shell and until it is able to hunt and assimilate food.

This power to keep the development already begun suspended for so long a period as several weeks is, perhaps, the most wonderful thing about an egg, and when we think of it we are surprised that as many hatch as do. Every new laid egg, if fertile, is an organism which has attained a certain stage of development, and it is subject to disease, weakness and accident the same as any other organism. The germ may begin to develop, yet perish at any stage of growth, such deaths occurring within the shell being in no essential respect different from deaths of weakly chicks at various early stages after leaving the shell. Is it any wonder then that so many eggs fail to hatch when they are subjected to all these adverse conditions?

It is important that eggs intended for hatching should be carefully handled and incubated at the earliest possible moment. While occasionally good hatches may be had when eggs are kept even as long as three or four weeks, such cases are the exception and not the rule. If kept at an even temperature between 50 and 60 degrees the blastoderm will remain inactive for a longer period than if kept either warmer or colder. If eggs are laid on their side they should be turned or their position changed at least every two days, but if set on the small end no turning will be necessary. A glance at Fig. 3 will show the reason for this better than we can explain it.

The type of Buff Cochins owned by B. H. Dunn, of Clay Center, Nebr. He always wins wherever he has shown.

POULTRY SHOWS.

Their Advantages and Disadvantages.

Many of the poultry breeders have won the blue ribbon e'er this article is printed, others are preparing their best breeds for the ribbons, while others have met with disappointment. "Poultry shows." How much does those two words signify to me. I look forward days, yes, months, for our little show, for there I can gather ideas, visit with sisters and brother financiers, and get renewed courage for another year's work. But I am wandering from my subject. First, disadvantages, the expense of exhibiting. There are entrance fees to be paid, express charges to be paid, coops to be made, bought or rented. These are but a small part of the expenses, because to win we must prepare to exhibit good fowls, but those that are in good condition, good shape, and plumage, and this requires time, patience and extra feed.

The winning specimens are usually carefully prepared for exhibition before they are presentable for public inspection. They are fed to get them up in weight, cooped so they can be handled often to make them tame or

their feathers will be awry and some broken. A tame bird will always show to the best advantage, and I have learned by experience that meat scraps or chopped bone will tame them easier than any other way, even the flighty Leghorns will soon eat from my hands. This all requires time and patience as well as labor.

A much more serious disadvantage is presented from exposure, the extreme temperature of the exhibition halls to the temperature of the open air or express cars. This change often causes sickness or death.

The advantages outweigh disadvantages many times.

There are the prizes to be considered. These some times pay in a pecuniary sense, and are worth much more than the expense to which one is put to to win them.

Not only must we consider the prizes as the only value. The advertising that exhibiting gives is a great value, for the quality of his stock has been proven by a competent judge, thereby making a reputation for his fowls, and the reputation of prize winning stock or even scored ones will make sales either for stock or eggs.

Another advantage is the educational part. One may know the value of his fowls. If he has not won his share of the premiums he can learn the cause and remedy that cause perhaps for another year, for, after all, the mating of the breeding pens judiciously helps to make the prize winners.

Specially is the show room an educator to the beginner, for he may learn in one day what it has taken years for the experienced to learn, step by step. The show room is open to the public. Here we may meet many breeders of experience who will cheerfully answer questions about their favorites, the competition leads to comparison, and much may be learned in a short time, and time is money. By all means, beginner, take your best birds to a poultry show.

IDA E. BARD.

The American S. C. Brown Leghorn club emerges from infancy this month with the vigor of youth, and will graduate at the Chicago show during the week of January 20 as a full fledged specialty club, fit to solicit the confidence and respect of breeders the world over. Preparations for the graduating exercises are completed, to which every member is expected along with a string of his best birds. To bring about such results, and to make the exercises doubly interesting, the following list of club prizes will be hung up: \$50 challenge cup on best cock, cockerel, two hens and two pullets, to be won three times; \$25 challenge cup on best five cockerels, to be won twice; \$10 trophy cup on best pen; \$10 trophy cup on best cockerel; club ribbon on best male head; club ribbon on best colored male; club ribbon on best shaped male; club ribbon on best female head; club ribbon on best colored female; club ribbon on best shaped female. In the open class the club officials have succeeded in placing a \$35 trophy cup on the largest and best display given by the association, together with other valuable specials, fully described in premium list. Every breeder interested should identify himself with this club, and take a hand in pushing the interests of the popular Brownies. Send \$1 to the secretary for membership and further particulars.

C. M. DAVIDSON,

Judge W. S. Russell of Ottumwa, Ia., is offering Barred P. Rock cockerels at \$2, \$3 and \$5 each; pullets \$1, \$2 and \$3. Above prices for January only; add \$1 to each bird in ordering after February. A few fancy exhibition cockerels for sale; no pullets. Write him today.

View of the Stephani Poultry Plant, Belleville, Ill., showing Duck House, Mill, Rabbitry, Hen House, Store Rooms, etc. Look up their ad in this issue.

Things as I Find Them in the Poultry Business.

By Mrs. J. Hughes, Jr.

Judgment, reason, perseverance and economy are four things essential to success. We see so many theories advanced in the poultry journals that will materialize all right on paper that will not materialize in the poultry yard. What we want is to advocate those things that will materialize any place you put them to the test in the poultry yard. This is the place we go at the end of the year to figure up the profit and loss. We see so many things in print on the raising and managing of poultry that are actually too shallow to give consideration. Some one just happened to have an "idea" and never waiting to test their "idea" to see if there was anything in it, go put it in print and it is read perhaps by thousands and many times to the reader's sorrow.

"Feeding for eggs." This one subject at this time of the year seems never to be exhausted. Every one has the best, and if we were to follow the instructions that some give, where would be our profit?

My method of feeding for eggs is simply this. Corn night and morning, either whole or cracked, plenty of clean straw for them to scratch in, a

little screenings thrown in the straw twice a day, half gallon each time; this is enough for forty fowls, to keep them in good condition for eggs. I always see that they have nice clean water to drink and coarse sand for grit, with chacoal mixed with it. By keeping my poultry house clean and well ventilated I have no trouble to keep my White Langshams, laying right along, cold or warm, with this method of feeding, my egg average has never got above eleven with the exception of two or three days I got twelve; nor has it ever fell below seven since the first of November.

The Tabor Exhibition.

The first annual exhibition given by the above association proved to be a success in every particular, when the earliness of the season and the fact that there were to be shows in two other nearby towns are taken into consideration. The quality of the winning birds was generally good, of some of them particularly so. U. S. Russell gave great satisfaction as judge. The sweepstakes silver cup offered for ten highest scoring birds, all varieties competing was won by E. H. Harrison's Light Brahmas.

Barred Rocks—1st cock, Geo. Green-

lee, Tabor; 1st hen, 3d pen, W. A. Cole, Clarinda; 1st cockerel, 1st, 2d, 3d pullets, 1st pen, O. J. Easton, Whiting; 2d, 3d hens, 2d pen, Elmer Johnson, Malvern; 2d cockerel, J. N. Colby, Tabor.

White Rocks—1st, 2d, 3d cockerels, 1st, 2d, 3d pullets, 1st pen, W. H. Utterback, Tabor; 1st, 2d hens, 1st cock, N. A. Prince, Tabor.

Buff Rocks—1st cockerel, 1st, 2d, 3d pullets, 1st pen, R. Williams, Tabor.

Silver Laced Wyandottes—1st cock, 1st, 2d, 3d cockerels, st, 2d, 3d pullets, 1st pen, J. H. Todd, Tabor.

White Wyandottes—2d cockerel, J. M. Scott, Red Oak; 1st, 2d, 3d pullets, 1st, 3d cockerels, 1st pen, Miss Elsie Russell, Tabor.

Light Brahmas—1st, 2d cocks, 1st cockerel, 1st, 2d, 3d hens, 1st, 2d, 3d pullets, 1st pen, E. H. Harrison, Tabor; 3d cock, A. A. Timson, Tabor.

Partridge Cochins—1st, 2d 3d pullets, 1st, 2d, 3d cockerels, 1st pen, S. M. Greenlee, Tabor; 1st, 2d, 3d hens, A. A. Timson; 1st cock, E. J. Wilson, Tabor.

Brown Leghorns—1st, 2d, 3d cockerels, A. A. Timmons.

Toulouse Geese—1st pair, Mrs. L. Carson, Tabor; 2d pair, Mrs. Swartz, Tabor.

Mrs. B. G. Mackey, Clarksville, Mo. Mrs. Mackey writes for the *POULTRY INVESTIGATOR* breeds elegant M. B. Turkeys, Brahmas, Langshans and Barred Rocks, and is reliable.

Buff Orpingtons for Eggs and Meat.

After three years' careful breeding of this splendid variety of poultry, along with the Leghorns, B. Rocks and Light Brahmas, I must say that I have no desire to keep any of the other breeds any longer. I get more eggs from the Buff Orpingtons through the fall and winter months by far than from either the Leghorns, B. Rocks or Brahmas, and they will hold the Leghorns even all through the summer.

Last year my pullets commenced laying November 3, in good earnest, and laid on an average of twenty-one eggs, and for December twenty-three eggs, for January, twenty-four; for February, nineteen; March, twenty-six. In March the yearling hens were counted in with the pullets, as the breeding yards were mated on March 1. Although my hens laid good all through the breeding season, yet the demand for eggs far exceeded the supply and I was obliged to turn back several orders for Buff Orpington eggs. I have never been able to supply the demand for eggs or stock in their season.

They have characteristics of their own and as many good qualities as other breeds, which, I think, places them in the foremost ranks as a general-purpose fowl. I had cockerels this season that tipped the scales at eight pounds when five months old. I find in three years' breeding that they breed almost as true to color as the older Buff breeds do, and I believe they are the coming Buff breed, for all who see them take a fancy to them at once.

I sold a farmer's wife two sittings of eggs this season just at the close of the breeding season, and just the

other day she came and told me about the nice chickens she had raised from those eggs she had bought. She said, "I never saw chickens grow like them; some of the cockerels weigh seven pounds now and they were the last chickens I had to hatch. I want you to come up and see them."

I have written this to show that the Buff Orpingtons are rapid growers, even in the hands of the farmer's wife. To be sure there is no better place than on the farm to raise fine poultry, nor can they be produced as cheap anywhere else, and yet it is very seldom that we see a nice flock of pure bred poultry on the farm. While it is a fact that farmers are slow to take up the breeding of pure bred poultry, yet I believe the main cause for their not being more interested in pure bred poultry is that they buy too many cheap birds and eggs, for it is also a fact that when they do get good stock they are just as proud of them as any one, and my advice is to the farmer and to all, not to buy cheap, inferior stock just because it is cheap in price, for it is dear even though it did not cost much. Get a good stock of some good reliable breeder that will not sell culls at any price, and once you get good stock you will never be satisfied to go back to the common scrub fowl.

Dec. 6, 1901. F. A. CROWELL.

Prize Winners at Red Oak, Iowa.

It sounds like exaggeration to say that the fifth annual exhibition of the United Fanciers' Poultry and Pet Stock association held in Red Oak, November 26 to 30, was the greatest poultry show ever held in the state, but it is really a fact. There were more fowls on exhibition than were ever shown at a poultry show in Iowa before, not exempting the exhibit of the state association. In all there were 1,420 fowls shown at the recent exhibit in Red Oak. At last year's exhibit here there were about 800.

It was thought by the officers of the association that perhaps the show would be as large as last year, when nearly 800 birds were on exhibition, and a show room which was considered large enough on that basis was secured, but when not only the 800 mark was reached but the 1,000 mark also reached and passed, and still the birds kept coming, it began to look as though it would be necessary to endeavor to secure the Armory or the Sanitarium, in order to have the birds properly housed. When, however, the 1,500 mark was nearly reached, the entries closed, and there was not room to put another bird. They were piled coop on coop from floor to cell-

ing in many cases, and yet so skillfully arranged that the 500 people who came to see the show during the five days got full benefit of the display. There were sixty exhibitors in all.

The judging was done by Mrs. J. J. Buchan of Pierson, Iowa; J. E. Thompson of Malvern, and Curtis Greene of Eldora. Above is the list of premium winners:

A new breed, Buff Orpington, was shown. A. L. Houston of Keota got first awards on single comb cockerel, hen, pullet and pen. Mrs. J. A. Lash of Osceola got first on rose comb cockerel, pullet and pen.

D. B. Butler, S. Heflin and J. H. Fisher of Red Oak, had good Black Plymouth Rocks on exhibition. E. Kretschmer of Red Oak had a fine display of Black Plymouth Rocks shown in exhibition coops. Mr. Kretschmer is manufacturing a new incubator that is a success.

L. Nazarenus of Red Oak and Royal F. Tyler of Villisca each had a pen of good White Wyandottes on exhibition.

Mrs. J. A. Lash of Osceola tied Roberts Bros. of Farragut for third premium on Black Langshan hen.

J. S. Ressler of Red Oak exhibited a fine coop of Buff Cochins.

Levi Barnett, John S. Pritchard and Harry Logan of Red Oak had good Creston Indian Games on exhibition.

J. G. Lembke of Griswold won first premium on Toulouse geese and Pearl guineas. He also took second premium on pigeon display.

Marion Hite and Earl Robinson of Red Oak exhibited some very nice Black Minorcas.

J. W. Haglund of Red Oak took first prize on pigeon display. His exhibit included some of the most beautiful Ruffle Necks, Pouters and Carriers that were ever shown.

The officers of the association are

W. F. Holcomb's Buff Orpington, prize winner at Clay Center, Neb.

View of the Stephani Poultry Plant, Belleville, Ill., showing Mill, Broiler House, Brooder House, Office, Storeroom and Rabbitry.

C. L. Stratton of Red Oak, president; J. Q. Swallow of Villisca, vice president; J. M. Scott of Red Oak, secretary; H. R. McLean of Red Oak, assistant secretary; A. W. Harding of Red Oak, treasurer; D. B. Butler of Red Oak, superintendent.

The location for next year's show has not been determined yet. Osceola and Council Bluffs are candidates for it.

Barred Plymouth Rocks: Cock first, cockerel second and third, hen first and second, pullet second and third, pen first; H. R. McLean, Red Oak, Ia. Cockerel first, pullet first and third, pen second; O. J. Easton, Whiting. Cockerel third, hen third; A. H. Johnson, Essex. Cock second; F. J. Draper, Red Oak, Ia.

White Plymouth Rocks: Hen first, pen third; Willard Hanna, Red Oak, Ia. Hen second and third; Jos. Robson, Red Oak, Ia. Cock first, pullet first; C. E. Taylor, Nebraska City, Neb. Cockerel first, pullet second, pen second; A. R. Ellet, Red Oak, Ia. Cockerel second, pullet second, pen first; J. J. Elliott, Onawa, Ia. Cockerel third; Mrs. C. Simpson, Hawthorne, Ia.

Buff Rocks: Cock first, hen second and third; J. J. Elliott, Onawa, Ia. Cockerel first and second, pullet first and second; Ed Anderson, Red Oak,

Ia. Hen first, pullet third; Ewing Bros., Hawthorne, Ia.

White Wyandottes: Cock first, cockerel second and third, hen first, second and third, pullet first and second, pens first and second; J. E. Thompson, Malvern. Cock second and third, pullet third; John Haglund, Essex, Ia. Cockerel; Thos. Harp, Red Oak, Ia.

S. L. Wyandottes: Cockerel second, hen first, second and third, pullet first, second and third, pen first; J. E. Thompson, Malvern, Ia. Cock second, pen second; A. Hillman, Red Oak.

Black Langshans: Cockerel first, hen first, second and third, pullet first, second and third, pens first and second; Roberts Bros., Farragut. Cockerel second; A. R. Ellett, Red Oak, Ia. Cockerel third; Geo. O. Still, Farragut, Ia.

Light Brahmas: Pullet third; Forrest Taylor, Red Oak. Cockerel first and third; Mattie Weiland, Red Oak. Cock second and third, hen second and third, pullet second, pen second; J. Q. Swallow, Villisca, Ia. Hen first and third; F. J. Draper, Red Oak. Cock first, cockerel second, pullet first, pen first; J. G. Lembke, Griswold.

Buff Cochins: Cock first, cockerel first and second, pullet first and third, pens first, second and third; A. W. Harding, Red Oak. Hen first and

third, pullet second; W. R. Gordon, Red Oak. Cockerel third; Chas. McCauley, Red Oak.

Partridge Cochins: Cockerel first and second; J. H. Bain, Red Oak. Hen second; E. G. Godden, Red Oak.

C. T. Game: Cockerel first, second and third, hen first, second and third, pullet first, second and third, pen first, second and third; J. W. Dodd, Red Oak, Ia. Cock first; T. C. Penry, Red Oak.

R. C. B. Leghorns: Cockerel second; Max Sheffer, Red Oak, Ia. Cockerel first, pullet first, second and third, pen first; J. W. Dodd, Red Oak, Ia.

S. C. B. Leghorn: Cock first, cockerel second and third, hens first, second and third, pens first and second; J. S. Stahlnecker, Cromwell. Cockerel first, pullet first; Mattie Weiland, Red Oak.

Houdans: Cockerel second, hens first, second and third, pullet first, pen first; E. L. Young, Red Oak.

G. S. Bantams: Cockerel first, pullet first, second and third, pen first; J. G. Lembke, Griswold, Ia.

S. S. Bantam: Cockerel first, hen first and second; J. H. Warren, Red Oak.

S. S. Hamburgs: Cock first, cockerel first, hen first, second and third; L. D. Aashby, Red Oak, Ia.

W. H. Turkeys: Cock first, hen first; J. Q. Swallow, Villisca.

Poultry Advertising . .

By C. H. ICKEN.

I have always been a strong and firm believer in good and continuous advertising, and am of the belief that the man who keeps at it all the time, and pushing his business to the best of his ability, need not doubt that he will be at the top of the ladder in the near future. Poultry advertising is just as essential to the breeder as good stock, for without either one you cannot do business. Advertising one's stock can be accomplished in a number of ways. Some use nothing but circulars, others depend upon their winnings at the winter shows for publicity, but the most of those who have been successful in the fancy have been those who have used the poultry press, not once, but all the time. Just try to name the breeders who in your memory are at the top of the ladder, and you will find that they are all heavy advertisers. As to what constitutes good advertising is as yet a matter to be determined, for what will sell goods today will not bring an inquiry next time. The fellow who thinks he can write a good advertisement is the fellow who has never sat down and tried hard. The essential points of an advertisement are to state, in the first place, what you have for sale. The next is why you think your stock is worthy of purchase, what qualifications it possesses that would be an inducement to purchase, and the price you will sell it for. A mere statement of facts is all that is necessary, and trying to be funny, or to write a freak advertisement, never gets you a thing. A good illustration of your stock or your own face in your advertisement is considered helpful to the attractiveness of an ad, and goes a long way towards pushing it out before the eyes of the reader.

Most of the poultry papers now published have competent men who thoroughly understand their business in the composing room, and will set your announcement in an attractive way and in the best position possible. Another thing, it would hardly pay a manufacturer of codlins to advertise his goods in a farm implement journal, and it is therefore about as unprofitable for a poultryman to advertise in any other paper than a poultry paper. If you have iron for sale advertise it in a paper devoted to that article, and which is read by people

interested in that subject. Nothing will bring you the returns as well as a paper devoted to poultry. Now as to circulation. If a fellow is out hunting, and has only one quail to shoot at, his chances are slim for quail on toast, but if he has twenty to shoot at, there is a possibility of his securing some of those birds. That's the whole circulation business in a nutshell. You want to pick out a journal in which to place your advertisement with a guaranteed circulation, and one that reaches those interested in that which you have for sale. Those journals which are always blowing so hard as to the millions of copies they are printing each month are not always the best business bringers. A journal with 5,000 subscribers, who pay for their paper and read it after they get it, and also interested in its contents, will always bring more returns to the advertiser than the big blow-hard paper, which sends its copies to hodcarriers and bootblacks, irrespective of their knowledge of the poultry business, and which are not read or even opened by those receiving them. Investigate the journals' claims when they talk about the wonderful results obtained by those using their columns, and don't always believe the smooth talking agent. Again, too many people think that last season's advertising will sell this season's goods, some one has said, but this is all right too. Good advertising will live almost forever. Mr. F. J. Marshall, a prominent breeder of the south, told me not long ago "that he had just sold a pen of fowls from an inquiry that he had received that week, which was the result of an old advertisement seen in a paper twelve years ago, and from a paper now out of existence." He said "that he keyed all his advertisements, and knew exactly where this inquiry had come from," so that there was no doubt about it. I have sold stock myself from advertisements that appeared three years ago, so that I am firmly of the belief that a good advertisement will live as long as it is readable, and will pay up to that time. The only way to advertise is all the time, then you are sure of it. If your business is of such a size or nature that you cannot carry a large advertisement, take a smaller one and run it continuously rather than a larger

one only occasionally. The breeders' cards in most journals are cheap and pay good returns. In fact, I heard one old breeder say "that his small card in breeders' columns paid better than a large advertisement which he had previously carried, and that the beginner or amateur buyer usually thought that the big advertisers usually asked so much for stock, and took it for granted that the little advertiser could sell cheaper, and give his just as good stock, minus the extra which he must surely put on to pay for the advertisement." This I am not sure of, but the text is, "Advertise continuously." With the great field opened up before you, you of the west have wonderful chances to make a name and to secure financial gain in the poultry business. With your vast farms, your cheap lands, your abundant crops, you surely ought to be heard from, even more than you now are, and I hope that the day is not far distant when the so-called leaders of the east will take their hats off to the mighty west. And, if you please, keep them off. You have in the Poultry Investigator a wonderful medium through which to sell your goods. There is no question about the fact that it will do so. With the men at the head, IT HAS TO PAY. The paper shows that those connected with it know the needs and requirements of the poultry man, and one of the essential things to the poultry man is the disposition of his goods at a good price and at the proper time. Think it over, brother, and I am sure the Investigator will do you good, from an advertising standpoint as well as from an educational and other ways. Cards are all right, circulars are all right, exhibiting stock is all right, but for actual and satisfactory results, get in the advertising columns of a good poultry journal, and stay there.

SONG OF THE GOLDEN SEBRIGHT BANTAM.

I'm a golden yellow beauty,
Every feather laced with black,
And consider it my duty
That for pride I do not lack.
For my movements I try strutting,
Every step I take with care,
While my pencilled body and my wing
I've a notion that the shaping
Of my tail is most unique,
Being the only rooster in the ring.
With a "hen tail" all complete,
All the sickle feathers lacking,
No broad bars across my wing,
And my head looks as though backing
T'ward my tail to form a ring.
I've a rose comb that is perfect,
Brightest eyes and crimson face,
And with safety you'll elect me
As the "champion" of my race.

POULTRY IN THE NORTHWEST

By F. DANDO.

I have been asked to give an article on the poultry industry in this part of Uncle Sam's country to the readers of your valuable paper, the Investigator, which paper I think is one of the neatest up-to-date poultry journals that has ever reached me in my nine years of "hen study." To begin with my article, I will say that I am situated in a part of the country that is an ideal place for this business, for profit as well as pleasure, and this is the main point in the business; the next is market. Our market is situated 175 miles each side of this town, that is Seattle 175 west and Spokane 175 east. Eggs are the most profitable to supply, as the market never gets below 10 cents and have seen it as high as 50 cents per dozen. At present eggs are worth 35 cents in the cities mentioned and the home market is 30 cents per dozen.

Do not suppose from this that you cannot dispose of broilers or roosters at a paying figure, as broilers, two to two and one-half pounds, sell at 14 to 16 cents per pound almost the whole season, and roasters from 12 to 15 cents per pound, according to the market changes and seasons of the year, for chickens weighing from three and one-half to five pounds or a little better, as long as they are not full grown. Hens are worth from 9 to 11 cents per pound. The reason that we go mostly in for eggs is on account of the high express rates, which are \$1.35 per hundred, and when the coop is counted in both ways you can reckon on taking off 2 cents per pound on expenses and 1 cent per pound for commission.

So much for the location and prices. Now for my buildings and surroundings. My main laying house is 8x60 feet, four feet at back and six feet in front. The roosting room is 8x10, also scratching shed 8x10 in connection. This makes three pens capable in this climate of holding twenty laying hens of the small breeds each and give ample room. I have other individual pens without scratching sheds, which I do not like as well as the one with sheds, as it is necessary to have the sheds of some kind, and my roosting rooms are lined with building paper inside and out, with rustic on outside of building and ship-lap on inside, with four-inch matched flooring. There is nothing like a good warm roosting room.

Now as to my success with poultry, will say that I have had better suc-

cess than I expected when I started in. Although I am a bachelor and trying to handle eighty acres of the best fruit land in the United States, I do my own housework, look after my stock, besides raising over 300 chickens this season, fattened and shipped almost 175 of these at two to five pounds at the stated market prices. Have over 100 pullets for winter laying, mostly Barred Plymouth Rocks, and disposed of some to individuals around here for breeding purposes. I did not keep an account of poultry sold, as I had too much other work to do. There is one thing that I wish to state; here is a location for poultry house, to any of the readers of this journal that have an apple orchard, or any kind of an orchard in fact. Place your poultry house in the center of it, facing south if possible, and if your apples are infested with what is called codling moth (wormy apples), your chickens will be worth 50 cents a piece to you just to clean up the moth. I could give the readers some good articles on the value of poultry to destroy this insect pest, which would be the means of making a double profit to those that wish to combine the fruit industry with that of poultry, as I am placed in such a position that I know, living in a county of this state that derives four-fifths of its revenue from fruit, and such fruit that took the gold medal at the Pan-American exposition at Buffalo recently. It wasn't wormy fruit either. My poultry yards are situated in the center of my orchard, and I can truthfully say that I have never

Brook Incubator Cellar of W. H. Bushell, David City, Nebr. Also shows his brooder house 60 feet long built of wood and brick. Mr. Bushell breeds nothing but the best Buff Orpingtons, and imports nearly all his breeders from the best yards in England.

yet found a wormy apple in the orchard, and I can sell all my apples for from 2 to 3 cents per pound, and late keeping varieties bring 5 cents per pound and are put up in 50-pound boxes. As I am steering away from the subject that I started on and making this article too long, I will close by saying if any of the readers of this journal (P. I.) wish to know any more about this part of the country in regards to poultry or fruit, I will be pleased to inform them personally or through the P. I. Yours for success,

F. DANDO.

Wenatchee, Washington.

SOLILOQUY OF A THOROUGHbred AFTER DEATH.

As I died at the tender age of one,
My life was scarcely yet begun;
Though I lived quite long enough to find,
There's nothing much to leave behind.
I found that life was but a show,
Where creatures live, as I—to crow,
In pretense apeing majesty,
Ere downing truth by mockery.
I've flapped my wings and crowed
enough
To keep up custom's standard bluff;
The world called me a thoroughbred,
And tenderly (?) cut off my head.
For once, beneath the plumage grand,
The carcass was the world's demand;
And since 'twas so, I'll say to you,
And swear a chicken oath 'tis true,
My carcass is in every way,
From ancient time to present day,
Possessed of good or depth as much
As anything that man could touch.
So eat and drink and jolly be,
For in eating up what's left of me,
Your time will be as worthy spent
As in any other, earthly bent.

W. B. R.

Lincoln County, Mo., Poultry Show. Dec. 3 to 5.

Third Annual Exhibition of the County Association.

Dec. 3-5, 1901, at Troy, Mo.

President, W. A. Ellis.

Secretary, Stuart L. Penn.

Judge, J. M. Rapp, LaMoille, Ill.

Although the Lincoln County Poultry association had an ugly spell of weather during their show last week, the entry list was larger and the fowls were of higher grade than in former years. This in spite of the drought, which was hard on chickens as well as other crops, especially affecting weights. The premiums awarded (cash and specials were of the value of about \$175, and were distributed as follows:

Barred Plymouth Rocks: First cock, hen, pullet and pen, Shaffer & Welch, Troy, Mo.; first cockerel, R. T. Canterbury, Truxton, Mo.; second hen, pullet, Shafer & Welch; second cock, pen, R. T. Canterbury; second cockerel, J. C. Ellis, Troy, Mo.; third hen, Shafer & Welch; third cockerel, pullet, pen, Ham Grigg, Prices Branch, Mo.

White Plymouth Rock: First cock, hen, pullet, cockerel, pen, W. A. Ellis, Troy, Mo.; second cockerel, pullet, pen, J. H. Ingram, Truxton, Mo.; second hen, W. A. Ellis; third cockerel, pen, J. H. Ingram; third pullet, W. E. Ellis; third hen, Jno. Kemper, Troy, Mo.

Buff Plymouth Rocks: First cock, hen, cockerel, pullet, pen, Ham Grigg; second pullet, R. T. Canterbury; third cockerel, pen, Stuart L. Penn, Troy, Mo.; third pullet, R. T. Canterbury.

Silver Laced Wyandottes: First cockerel, pullet, pen, L. W. Davis, Troy, Mo.; second pullet, L. W. Davis; second cockerel, J. A. Welch, Moscow Mills, Mo.; third cockerel, pullet, L. W. Davis.

Golden Laced Wyandottes: First cock, pullet, hen, pen, W. A. Ellis; first cockerel, J. C. Ellis, Troy, Mo.; second pullet, hen, W. A. Ellis; second cockerel, pen, J. C. Ellis; third hen, W. A. Ellis; third pullet, pen, J. C. Ellis.

Black Langshans: First cockerel, pullet, pen, Syd Penn; second and third pullet, Syd Penn.

Black Javas: First cockerel, hen, pullet, pen, Henry Muck, Troy; second cockerel, pullet, hen, Henry Muck; third pullet, Henry Muck.

Buff Wyandotte: First cockerel, Syd Penn, Troy, Mo.

Light Brahmas: First cock, cockerel, hen, pullet, pen, J. J. Taylor, Auburn, Mo.; second and third hen

A collection of Silver Laced Wyandottes, winners at Lincoln, Neb., and Cedar Rapids, Iowa, 1901, bred, owned and exhibited by J. and N. M. Connors, Ponca, Neb.

and dark pullet, J. J. Taylor.

Dark Brahmas: First and second hen, Henry Muck.

Partridge Cochins: First cock, cockerel, hen, pullet, pen, D. M. Ellis, Troy, Mo.; second cockerel, hen, D. M. Ellis; second pullet, pen, Eugene Moxley, Troy, Mo.; second cock, M. W. Sitton, Troy, Mo.; third hen, D. M. Ellis; third cockerel, Eugene Moxley; third pullet, pen, M. W. Sitton.

Buff Cochins: First cockerel, pullet, H. S. Owings, Truxton, Mo.

Rose Comb White Leghorns: First cock, pullet; second pullet; third pullet, J. H. Ingram.

Rose Comb Brown Leghorns: First hen, John F. Merriwether, Troy, Mo.

Buff Leghorns: First cock, hen, pullet, pen; second hen, pullet; third hen, pullet, R. T. Canterbury.

Single Comb Brown Leghorns: First cock, hen, cockerel, pullet, pen; second cockerel, hen, pullet, pen; third cockerel, hen, pullet, Ham Grigg.

Black Minorcas: First, second, third pullet, R. T. Canterbury.

White Minorcas: First cockerel, hen, pullet, pen, second pullet, W. S. Cottle, Troy, Mo.; third pullet, Frank Howell, Troy, Mo.

Anconas: First cockerel, pullet, Syd Penn.

Silver, Spangled Hamburgs: First cockerel, pullet, second pullet, J. J. Taylor.

Buff Orpingtons: First cock, cockerel, hen, pullet, pen, Geo. S. Townsend, Troy, Mo.; second and third hen and pullet, Geo. S. Townsend.

Golden Polish: First pullet, Syd Penn.

Golden Sebright Bantam: First cockerel Syd Penn.

Buff Cochins Bantam: First cock, hen, second hen, Frank Brackett, Troy, Mo.

Pekin Ducks: First cock, hen, J. H. Ingram.

Indian Runner Ducks: First cock, hen, J. J. Taylor; first pullet, Syd Penn.

Toulouse Geese: First cock, hen, J. J. Taylor.

Mammoth Bronze Turkeys: First cock, Henry Muck.

Belgian Hares: First buck, Roy Ellis, Troy, Mo.; first doe, Grover Huston, Troy, Mo.

The high-scoring birds in the American class, a White Plymouth Rock pullet, was owned by W. A. Ellis, 93½. Mr. Ellis also had a hen which scored 92½ in the Asiatic class, Partridge Cochín cockerel owned by D. M. Ellis, 91¼; in the Mediterranean class, Ancona pullet owned by Syd Penn, 93½. The highest scoring chicken was a buff owned by Frank Brackett, 94½.

There were about 250 birds on exhibition.

In Barred Plymouth Rocks there were 26 entries; White Plymouth Rocks, 27; Buff Plymouth Rocks, 26; Golden Wyandottes, 16; Silver Wyandottes, 15; Black Javas, 15; Buff Leghorns, 10; S. C. Brown Leghorns, 19; Partridge Cochins, 21; White Minorcas, 10.

ADVANTAGES OF A FARMER.

The farmer has all the advantages of anyone for breeding fowls, except in many cases the facilities for disposing of his stock. Some one near or in a town or city has better opportunity for supplying the market with freshest products. The farmer in a remote place has a little difficulty in reaching a special market for his fowls and eggs. The country dealers usually pay very nearly as much as the city dealers, after taking out the express charges, so the farmer here will get a fair price for his produce. He may ship his eggs himself, and if they are first class products he will get highest prices. Now, many farmers do not want to bother to ship for themselves, so they sell to the dealers and store keepers. This is the best way for them if they do not keep a whole lot of fowls. The one living near a city has a chance to get an extra price for his fowls, yet in many cases the farmer living in a remote place can produce his eggs and fowls cheaper than the one near the city. The farmer has this advantage over the one who breeds his fowls only and has to buy all his feed—he can raise all his grain and green food for them. He can raise the feed for about one-half the cost that the breeder has to pay for his stock. So here is a large gain. The farmer who lives where land is cheap can give his fowls larger yards or even unlimited range, so this will insure a gain and healthier fowls. He can get his buildings in an ideal place and often can build them for about half the cost of one nearer a city. He can let his fowls and chickens pick up about half

of their living in the summer. Thus the cost of the fowls will be much less. The only fault with the farmers nowadays is that they fail to get fowls of good stock and fail to care for them and manage so as to produce eggs. No use of a farmer kicking about the market that he must sell to giving such a low price. A few cents a dozen on eggs is more than made up on the cost of the feed when you look at the way the breeder alone has to pay for his feed. The farmer really gets a much larger profit than the breeder who raises no feed.

Look at the poultry question in most any way and you will see him ahead. Where he loses in one way he makes up twice over in another. So the farmer comes out on top every time.

PERCY W. SHEPARD.

Morgan Park, Ill., Nov. 12, 1901.

Mr. Show, Secretary and Exhibitor; It may interest you to know that the American S. C. Brown Leghorn club

will offer a special club ribbon for best cockerel exhibited by a club member at any show where two or more members are in competition. Secretaries are at liberty to include this in their list of specials.

Our annual meeting will be held the week of January 21st, or in connection with the big Chicago show, and it is earnestly hoped every prospective exhibitor will join us and compete for the club honors.

The object of this club is to increase the interest in and demand for high class S. C. Brown Leghorns, to obtain for them better recognition by the poultry shows and poultry press, to offer club prizes that not only attract general interest, but encourage fanciers to renewed efforts to produce extra fine and more nearly perfect specimens, and to use our best efforts to bring about a more uniform understanding of the standard requirements by breeders and judges. Fraternally,
M. D. WILSON, Secretary.

Novel Brooder House of Mrs. Ruth Morris.

The above illustration shows the incubator house made and used by Mrs. Ruth Morris, on her farm near Fairhaven, Kansas. The house is what is known in that part of the country as a "sod house." Large blocks of mud are dried in the sun and then placed on top of one another with a soft mixture between, very much after the manner of erecting an ordinary brick building. Across the top, timbers are placed and covered with sod, then a layer of mud, upon which is placed another covering of sod. After the building is erected it is washed off with water to close all cracks and crevices; then grass and flower seeds are scattered all over it, and in a short time the structure has a beautiful covering of green and gray,

here and there studded with beautiful blossoms. These houses are dry, clean and comfortable. Many farmers use them for dwellings, while the stables and barns are similarly constructed. In the foreground is a 100-chick capacity Hen brooder, and you will observe that the chicks are as lively as those cared for by the mother hen. Mrs. Morris is standing beside a 100-egg capacity Wooden Hen, which she has refilled for the sixth time.

The following letter speaks for itself:
Fairhaven, Kans., July 3rd.
Mr. Geo. H. Stahl, Quincy, Ill.

Dear Sir:—I have just finished my fifth hatch with the Wooden Hen purchased of you last February, averaged 90 per cent of all fertile eggs. Hatched the first setting in a Kansas blizzard, and got 80 per cent of all fertile eggs.
Yours truly, Mrs. Ruth Morris.

Rose Comb Buff Orpingtons, owned by Mrs. J. Lash & Son, of Osceola, Iowa. Winners of 1st, pen, 1st, c'kl, 1st, 2nd, and 3rd pullet at Osceola in December. Also 1st, pen, 1st, c'kl, 1st, 2d, and 3d pullet at Red Oak, Iowa. In color these birds were equal to any set of either variety of the Orpingtons.

♦ ♦ ♦ Rearing Brooder Chicks ♦ ♦ ♦

At this time of the year, when our minds are beginning to again dwell on our spring work, no subject is of such great importance to us as the successful management and rearing of brooder chicks. Most all the various makes of incubators will hatch a reasonable percentage of the fertile eggs with proper care, and we then have given to our charge the frail creatures for successful rearing.

No set of fixed or definite rules can be laid down for the management of the chicks for the reason that no two people follow exactly the same course of feeding, care and management, and yet both meet with about the same success. Again, a method which you have tried one year and has proven to you very successful, may not in another year give you the same degree of success. At this point is one of the instances in poultry raising where good judgment and discretion is called for and upon its use depends success or failure of the laborer.

In attempting to discuss the proper method of raising brooder chicks, I would divide it under the following heads, taking up the discussion of each separately:

First—The proper care of the brooder.

Second—The proper feeding of the chicks.

Assuming that our chicks are hatching in incubators, what method shall we pursue for their care and prepara-

tion of the brooder to receive them; the floor must be covered with some substance suitable for the comfort of the chicks. While various breeders use different articles for floors, I think a thin covering of sand best adapted for their wants; it also acts as a grit for the chicks, which is very essential for their growth. A covering of wheat or clover chaff is very good also and is used by many with good success.

Having the floor of our brooder properly provided for, we must next supply the proper temperature. There is a slight diversity of opinion on the heat question, hardly enough however to justify us in making an error in this regard. For the first week of the chick's existence I use a temperature of 80 degrees as a minimum and 100 degrees as a maximum, inclining more to the lower degree in warm weather and the higher in cold weather. After the first week I gradually reduce the temperature as chicks increase in age and size, having no fixed rule for a certain temperature at a certain age, regulating that by the actions of the chicks, never permitting it, however, to run below 70 degrees.

In the matter of feeding newly hatched chicks, we find a great diversity of opinion among those who are eminently successful in raising brooder chicks. All, however, are agreed upon one fact, viz., do not feed chicks after they are hatched until they are from forty-eight to sixty hours' old, on account of giving ample time for the yolk of the egg to fully digest, so as not to cause indigestion, resulting in the dreaded bowel trouble.

No doubt the first feed is very important for depending to a great extent upon the manner in which the chicks receive their start in life depends the future growth. At the beginning let me caution against over feeding; great care must be exercised in this regard. We must study the habits of the wild fowl in rearing its young and imitate the prudence used by them. They do not overfeed, and use a diversity of feed as well as exercise. Following up this plan after we have omitted our feed for the required time, we begin our feeding. For the first few days I generally use bread crumbs, dry or pin head oat meal, feeding only a small amount each time, and feeding often, about six times per day, when chicks are small. Use great discretion in the amount fed, being careful to feed too little than too much. I do not believe any chicks ever died from not receiving enough feed, where they had any attention given them at all, but countless numbers have been sent to an untimely grave by over-feeding. After they begin to eat well and are about a week old, I change the diet of food as much as possible, using millet seed, wheat and cracked corn. All through the feeding season I use great precaution to require as much exercise as possible, placing their feed in chaff litter or in ground loosely spaded; after a few trials of this the little fellows seem to delight in working for their meal, enjoying the labor in obtaining it more than the feed itself. As soon as they are large enough to

enjoy a run, say about a week or ten days' old, they should be placed in a grassy spot where ample opportunity is afforded for obtaining green food. When this cannot be done green food must be supplied with their other ration. Clean water should be supplied at all times and when possible give them boiled milk. Milk curds are also excellent for them.

The worst enemy we have to contend with in our work is bowel trouble, and if we can eliminate this we have accomplished considerable progress on our road to success. It is likewise very peculiar in its workings. At times a whole brood will be entirely wiped out by its presence, while another lot, with apparently the same care, attention and feed, will scarcely have one afflicted. Various reasons have been assigned for it, and only by a very careful study of these reasons, applying each to our individual case, will we be able to arrive at the correct solution of our own loss. At times it will attack the chicks when scarcely a week old; again it will wait and make its appearance when they are a month old. Reasons for this discrepancy must be ascertained. To me, several reasons may be assigned to cause this evil; first, feeding too soon after chicks are hatched, thus crowding food into the stomach before the yolk of the egg has had time to fully digest, causing indigestion resulting in bowel trouble.

Over-heating or chilling the chicks during the first few weeks of their existence will at once cause an appearance of this evil. As to the correct reason for this, I cannot state, but can speak from experience that it will result in that manner.

Not using proper care for cleanliness in feeding or letting filth accumulate, permitting this to pass into the body of the chick, which can easily be seen, will result injurious. Over-feeding will also cause it, for which the reason can easily be assigned. Whenever an attempt is made to over-crowd the digestive organs of either man or beast, taxing it with more work than it is able to do, it revolts against the attack, refusing to do its work, causing indigestion to arise, which is the precursor of bowel complaint. Right here we should attend strictly to our theory of sufficient exercise. If, perchance, through mistaken kindness or eagerness for rapid growth and quick development, we over feed, the injurious results may be averted by sufficient exercise. Another cause assigned as a reason for bowel trouble is breeding from unhealthy or diseased parent stock. I think, however, this is one of the re-

motest causes of the evil, and if it was the only one we would be troubled with very little of this disease.

Another evil which we must closely guard against is that of lice. It is advocated by some that it is a cause of bowel trouble. It makes its appearance mostly in warm weather and does not seem to be so prevalent in cold. However, when it once obtains a foothold it is very difficult to combat with. We might aptly apply in this instance that old and tried truism that "an ounce of prevention is better than a pound of cure." Seek to prevent is the best way to avoid it. When, however, its appearance is discovered to an alarming degree an effort must be immediately made to exterminate it. For the large head and body lice I use an application of Persian insect powder, dusting the chick thoroughly with it, then place it in a dark place where it will remain quiet for a short time, when numbers of the dead lice will be found where it is standing. For exterminating mites, I always use an application of lard or sweet oil with a few drops of kerosene added, rubbing it well on the heads and under wings of chicks. This application to be replaced every few weeks, depending upon the reappearance of the enemy.

On the whole I have detailed to you my plans and ideas for success in rearing brooder chicks. Not all agree with me in my views, others have different ways and plans and it is practiced by them with great degree of success; thus we will find things all through human nature. We were cre-

ated and born unlike. No two men think in exactly the same channel, work in exactly the same way, or accomplish exactly the same results; ideas differ, results differ; you have your plans outlined before you, the method which you wish to pursue; follow it up carefully and if you do not meet with a good measure of success, change to some other course. Seek if possible the cause of your failure and apply your remedy there. The first and most important duty of a good physician is to correctly diagnose his case and then apply the proper remedy for that malady, remembering that the same line of treatment works differently of different persons. Your neighbor may be accomplishing good results while you are making a failure out of the same plan he is using. Here, again, your good judgment and discretion is called for and upon its proper use depends your future success as a poultry man. It may require only the least thing to throw success your way; you may have almost reached the goal when you surrender. Therefore, persevere, devise means of success from the study of the plans of others who have been and are successful. What others have done we can all in a measure do, and while we may not reach that high pinnacle of fame occupied by some in the line we are pursuing, yet the honest, industrious, ambitious exertion of our efforts and best endeavors in that behalf will enable us to reach a high step in the ladder of fame, even if we fall short of the highest. All things are possible to him who learns to labor and to wait.

— The brick poultry house of W. H. Bushells, of David City, Nebr., where is kept Mr. Bushells' prize-winning Orpingtons. He won 1st and 2nd cock, 1st and 2nd hen, 1st and 2nd cockerel, 1st and 2nd pullet, and 1st pen at Lincoln at state fair.

A first prize Buff Orpington pullet owned by Mrs. A. Rockhill, Harvard, Nebr. She also breeds superior White Wyandottes that win.

JUDGES AND JUDGING AT THE CHICAGO SHOW.

The management of the Chicago show have selected to place the awards at their sixth annual meet the following named gentlemen:

- Mr. W. S. Russell, Ottumwa, Ia.
- Rev. E. W. Rankin, Cedarville, Ill.
- Mr. M. F. Wurst, East Cleveland, O.
- Mr. A. B. Shaner, Lanark, Ill.
- Mr. Thomas E. Rigg, Iowa Falls, Ia.
- Mr. Frank W. McKenzie, Concord, Mich.
- Mr. D. T. Heimlich, Jacksonville, Ill.
- Mr. Charles McClave, New London, O.
- Mr. William E. Knight, Fishkill Landing, N. Y.
- Mr. R. E. Jones, Flatrock, Ind.
- Mr. E. J. W. Dietz, Downer's Grove, Ill.
- Mr. D. A. Stoner, Rensselaer, Ind.
- Mr. L. W. Schimmel, Detroit, Mich.
- Mr. Henry Tiemann, Baltimore, Md.
- Mr. Robert Joss, Peoria, Ill.

Negotiations are now in progress with others and it is probable that there will be additions to this list. Pigeons, dogs, cats and pet stock will be judged by the comparison method.

In the poultry and Belgian hare departments the method of judging will be decided by the exhibitors, as per the following rules, adopted by the board of directors:

"The entry blanks, prepared for exhibitors, shall contain a column, marked 'Method of Judging.'

"Exhibitors shall be requested to indicate, in such column, for each specimen, the method by which the exhibitor desires such specimen shall be judged."

As soon as the entries are closed, the secretary shall examine the entry

sheets and ascertain therefrom the wishes of the exhibitors in each variety; and each variety shall then be judged by the method desired for the largest number of specimens in each variety.

If in any variety there shall be a tie, or if all the exhibitors in the variety shall fail to indicate the method by which they wish the specimen in the variety judged, then the committee on judges shall determine the method by which such variety shall be judged."

To Poultry Investigator: A special meeting of the American Buff Plymouth Rock club was held in connection with the poultry exhibit at the Pen-American exposition, in the Agricultural building, Thursday, October 24, at 2 p. m. Meeting was called to order by the president, Dr. O. P. Bennett, who made some pleasant remarks on taking the chair.

The roll call found twenty-one members present, including the majority of officers and executive committee.

W. C. Denny made a few remarks on the loss we had sustained by the death of the veteran Buff Rock breeder, H. S. Burdick, and moved that a committee, consisting of Messrs. Arnold, Foster, Shepherd and Benedict, be appointed to draft suitable resolutions on the occasion. It was moved that W. C. Denny be added to the committee, and so carried.

An interesting talk was given by F. C. Shepherd on the great improvement

made in color, while H. E. Benedict called attention to the defect in color of eye, which, by so many, must be overcome.

Also interesting remarks by M. F. Delano, C. W. Beman and Eugene Sites.

The members extended a vote of thanks to W. C. Denny for the manner in which he had placed the awards at this exhibit.

It was then announced that our annual meeting would be held in connection with the Boston show.

W. C. DENNY, Secretary.

THIRTY-THIRD ANNIVERSARY OF AMERICAN POULTRY JOURNAL.

The American Poultry Journal of Chicago celebrated its thirty-third anniversary with its January number, containing over one hundred pages. The commencement of its thirty-third volume is announced with a new cover and contains, as frontispiece, Franklane L. Sewell's latest and grandest work—a colored illustration of a pair of Silver Penciled Wyandottes. The American is making an exceptionally strong campaign for subscriptions, and offers prizes of over \$400, including \$200 cash prizes, to the agents who send in the largest list of subscriptions. They will send, upon request, a sample copy, containing the colored illustrations and also will send instructions to agents.

With pleasure we present to our readers an illustration of the Eclipse Bantam. It is the most convenient and successful small Hatcher in use because the Incubator, Brooder, Run and Feed-yard are all combined. They have all the latest improvements, Automatic Egg Tray, and Automatic Ventilation and Moisture supply. Absolutely self-regulating. When the

heat raises above 103, it is taken directly away from the incubator. They are made in three sizes, 50-100 and 200-egg, and are the lowest in price of any on the market. Be sure to send at once to the Noxall Incubator & Brooder Co., Quincy, Ill., for their 1902 catalogue describing their goods, it is sent free if you mention this paper. Their Noxalls are used by the largest poultry raisers.

Clay County, Neb., Poultry Show, December 10 to 13.

The Clay County Poultry association of Clay Center, Neb., held their fifth annual poultry show at Clay Center, December 10-13. The exhibition was a financial success in every respect. The members put up over two hundred dollars in cash and special terms, together with a large list of specialties donated by the fanciers and merchants of Clay Center, and the result was that a very large class of birds were shown, being a larger exhibit than any previous and a much better class of birds. There were nearly four hundred and fifty birds besides pigeons and other pet stock. Notwithstanding the cold weather during the week, the show was well attended, the hall being crowded every day except the last. Many birds changed hands and much interest was manifested during the entire show. The display in Buff fowls was as good as could be seen in any show in the country, especially the Buff Cochins shown by Byron Dunn. There was a large display of Buff Rocks shown by Mrs. Flora Shroyer and Mrs. Ella Patrick, both of Clay Center. There were several specimens that could be justly called solid Buffs and of the right shade. The White Wyandottes shown by Mrs. C. Rockhill of Harvard and Mrs. Detweiler of Clay Center were very fine specimens, scoring as high as 95½ points, and justly deserved the score. The number of Plymouth Rock classes were quite large and contained many good specimens, especially in pullets and hens. The awards were equally divided among the exhibitors. The display in geese, ducks and turkeys was better than we have ever seen in any poultry show, and one Mammoth Bronze gobbler weighed forty pounds, after being cooped for three days at the show.

The annual meeting of the Clay County Poultry association was held on Thursday night of the week of the show in the office of the Sure Hatch company. Mr. Byron Dunn was again elected president; Mr. J. C. Kapser, vice president; Mrs. Flora Shroyer, secretary, and W. T. East, treasurer. Their show will be held at Clay Center next season, the first full week in January, 1903, and the patrons of the show are sure that next season there will be a much larger show and greater interest taken. The poultry interest is becoming immense, and well it should, as there is no station in Nebraska where so many eggs are shipped for fancy poultry hatching as from Clay Center. One firm alone shipped over 47,000 eggs for hatching.

The following is a list of awards as given by David Larson of Wahoo, Neb., and L. P. Harris of Clay Center, Neb.

B. P. ROCKS.

P. J. Schwab, 1 first, 2 seconds, 1 third.

J. W. Sidders, Giltner, 1 first, 1 second, 2 thirds.

H. B. Loudon, 2 seconds, 1 third.

Mr. and Mrs. J. P. Schroeder, 1 first, 1 third.

W. P. ROCKS.

Pete Dickson, 3 firsts, 1 second, 1 third.

H. H. Johnson, 1 first.

BUFF P. ROCKS.

Mr. and Mrs. A. B. Shroyer, 2 firsts, 4 seconds, 3 thirds.

Mrs. Ella Patrick, 1 third.

GOLDEN WYANDOTTES.

J. C. Kapser, 2 firsts, 2 seconds, 3 thirds.

W. J. East, 2 firsts, 3 seconds, 1 third.

C. Reutzel, 1 first, 2 thirds.

BUFF WYANDOTTES.

All to Mrs. E. W. Ott.

WHITE WYANDOTTES.

Mrs. C. Rockhill, Harvard, 4 firsts, 1 second, 1 third.

Mrs. C. S. Detweiler, 2 seconds.

S. L. WYANDOTTES.

Harry Gordon, Harvard, 1 first, 1 second, 2 thirds.

V. E. Shirley, Harvard, 1 first, 2 thirds.

BUFF ORPINGTONS.

Mrs. Lucy Marks, 1 first, 1 second, 2 thirds.

J. A. Ling, Harvard, 2 firsts, 2 seconds.

Mrs. Rockhill, Harvard, 1 second, 1 third.

BUFF COCHINS.

All to B. H. Dunn.

LIGHT BRAHMAS.

All to Mrs. Alice Allen.

B. LANGSHINS.

W. F. Nevins, Fairfield, 2 firsts, 2 seconds.

Mrs. N. W. Johnson, 2 firsts, 2 seconds, 4 thirds.

PARTRIDGE COCHINS.

W. F. Holcomb, 4 firsts, 2 seconds.

Mrs. John Crouse, 2 firsts, 3 seconds, 1 third.

BUFF LEGHORNS.

All to Mrs. G. B. Lobbs.

S. AND R. C. B. LEGHORNS.

All to D. Meyer.

S. C. W. LEGHORNS.

All to Johnson & Dargatz.

W. C. I. GAMES.

All to J. C. Nauman.

C. I. GAMES.

J. C. Nauman, 3 firsts, 2 seconds, 2 thirds.

C. G. Cottle, Edgar, 4 seconds, 2 thirds.

B. MINORCAS.

All to Pete Dickson.

S. S. HAMBURG.

All to H. M. Wolford.

HOUDANS.

All to Reuben Kapser.

G. S. BANTAMS.

All to W. F. Holcomb.

B. B. G. BANTAMS.

All to Judge L. P. Harris.

M. B. TURKEYS, TOULOUSE GESE AND

PEKIN DUCKS.

All to A. B. Shroyer and wife.

W. H. TURKEYS.

All to W. J. East.

MUSCOVA DUCKS.

All to B. H. Dunn.

TEN VARIETIES PIGEONS.

All to W. F. Holcomb.

SWEEPSTAKES.

A. B. Shroyer—Sure Hatch Incubator given by M. M. Johnson for largest and best display, any variety.

B. H. Dunn—chair given by F. C. H. Adams for best display one variety, having entered 41 magnificent Buff Cochins.

Reuben Kapser—lamp given by F. Stanton for highest scoring pen; also poultry powder given by F. A. Thompson for highest scoring hen.

W. F. Nevins, Fairfield—carbolineum given by F. A. Thompson for highest scoring cock.

B. H. Dunn—500 note-heads for highest scoring cockerel: Mrs. C. Rockhill the 500 envelopes for highest scoring pullet: both given by W. L. Palmer & Son.

POLK COUNTY POULTRY SHOW.

During the last week in November the editor visited the little city of Osceola in Nebraska, and found in session in the court house a full fledged poultry show. There were on exhibition some four hundred as fine birds as have been seen in local exhibits. I noticed among this exhibit was the display of Barred Plymouth Rocks, White Plymouth Rocks and Buff Plymouth Rocks. There were birds in this display that were fit to be shown in any show in the United States.

The show room was crowded to its fullest capacity during the week and much interest was evinced.

The enterprise was very satisfactory to all those who had anything to do with its management.

The following is a list of persons whose stock was on exhibition:

White Plymouth Rocks were shown by J. W. Matson of Osceola, Neb.; Roy Roseberry of Shelby; W. W. Gierhart, of Osceola.

Barred Rocks were shown by J. N. Jeffrey, Osceola; Geo. Dunning of Shelby, Neb.; E. J. Brown of Osceola, Neb.; George Dechert of Rising City, Neb.

Buff Orpingtons were shown by B. F. Scott, Rising City, Neb.; D. R. Leard and H. H. Campbell of Osceola, Neb.

E. J. Anderson of Stromsburg showed Golden Scabright Bantams, Whitecapped black Polish, Partridge Cochins, Single Combed Brown Leghorns.

Ralph Peterson of Stromsburg showed Silver Spangled Hamburgs.

Roy Roseberry of Shelby, Neb., showed Buff Wyandottes and Partridge Wyandottes.

Mrs. L. E. West of Shelby showed White Wyandottes, as also did J. A. Inks.

Mrs. W. O. Johnson of Osceola showed Silver Laced Wyandottes, and D. C. Burnes of Osceola showed White Holland Turkeys.

Poultry Investigator

is published the first of each month at

Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.25 per inch each insertion. One inch one year \$12.00. These are our only rates for advertising and will be strictly adhered to. We treat all alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of POULTRY INVESTIGATOR is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in THE POULTRY INVESTIGATOR.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

Regarding the State Show

Secretary Garrouette authorizes the following announcement:

In order to make the January show a record-breaker in point of new members secured for the state poultry association, and also first exhibitors at the annual show to be held in the new Auditorium, Lincoln, from January 21 to 25, the secretary is soliciting settings of eggs from breeders of pure-bred poultry in and out of the state,

the eggs to be used by the board as special premiums to be given to each and every first exhibitor who has never exhibited at the annual mid-winter show. The secretary has also secured from the Sure Hatch Incubator Co. the donation of the free use of enough show coops to accommodate all those who will show for the first time, providing they will notify that company in time to secure them. All breeders of standard-bred poultry are asked to send in their donations without further solicitation, with the name of breed, etc.

If you have not yet received a premium list, write the secretary for one, and if you will name this paper, one will be sent you.

1902 Poultry Raising.

Not long since an extensive poultry buyer told me that he was making more money than ever, although he had to cover twice as much territory as he did a year ago to get a carload. It seems to me there is a whole chapter in his little statement for the poultry raisers; it certainly indicates a shortage on marketable poultry. The cold storage packing houses were swamped with consignments of live poultry during the dry weather and we can not expect any great rise until the packing house goods are used up, unless it might be possible that some long-headed schemers corner the whole business as they seem to have done with the egg supply. For my part I do not take much stock in the egg corner question that we read so much about. I look at it as a battle between the supply and demand. The demand is so much greater than the supply, or output, that prices necessarily had to run up. The output is very light, as the market reports will show. I mean, the supply of fresh eggs is away below a year ago and I think this shortage of fresh eggs is due to the farmers' marketing their hens very closely during the early fall months. Of course the weather affects the egg market to some extent, but not responsible for only its share in booming the egg market. During this winter and spring the storage house poultry will be put on the market; after it is used up, we will have poultry prices that will make the chicken producers look pleasant. We cannot expect the prices to double; such a condition would hardly be a fortunate thing for the producers. If dressed poultry were worth 25 cents on the market and other dressed meats 12 cents, people would figure economy and buy other meats. Poultry prices are not going to double, but an advance of

2 cents per pound would mean millions for the poultry raisers. A five cent advance on eggs would mean several more millions.

No sir, we don't want prices to run wild; we can get along better with a steady market. Just a little improvement each year will suit us very well. The prices can advance considerably and yet poultry will be cheaper as a food product than pork or beef. To keep the demand leading the supply is what we need and it seems to me the poultry raisers are boss of the situation this coming season. Let us raise some poultry: the young roosters will be worth money by the pound, the early pullets will pull our way with fall and winter eggs, later ones will keep the good work going. The question of feed is not a serious one after all. Corn is high, of course, but wheat is yet a moderate price; even though we fed corn exclusively it would not be a serious proposition. Poultry does not melt a corn crib like hogs; a few bushels of cracked corn mixed up with curd cheese, stale bread and sweet milk and a dozen or two other things, will raise a lot of poultry. A little later on when they can run in the weeds and get bugs and hoppers, they will nearly raise themselves and by fall they are ready to raise us. This is no dream either. A good drove of laying hens will buy their own feed and help us buy corn for the hogs.

Yours truly,
M. M. JOHNSON.

The Reliable Poultry Journal, Quincy, Ills., has issued for November, December and January three special color plate editions, containing reproductions of recent oil paintings by the world's greatest poultry artist, Franklane L. Sewell. The November number contains a reproduction of a pair of New York prize-winning White Leghorns; the December number a pair of Chicago prize winning Plymouth Rocks and the January number a pair of Madison Square Garden prize-winning Part-ridge or Golden Penciled Wyandottes.

Readers of this paper are invited to send for a sample copy of the R. P. J., containing one of these color-plate reproductions—your choice. Send soon before the surplus copies are exhausted. Fifty thousand copies of each edition were printed, but the demand for them has been extraordinary and they will not last long. This sample copy is free if you will mention this paper. Address Reliable Poultry Journal Publishing Company, Quincy, Ill.

AMONG OURSELVES

Perhaps there is no "procession" that goes more rapidly, and has moved more rapidly for a dozen years past, than the one involving the progress of the poultry movement.

A regular manifesto of evolution!

He stood gazing over the wires at those white birds, his lower jaw slightly drooping, and a queer, puzzled look in his eyes.

"Naw, I ain't in the poultry business," he said brusquely. "Mother's allers kept chickens, but they don't pay. Allus eatin' their heads off'n'd hardly ever layin' Come Thanksgivin' er Christmas er the sewin' ciety er anything particuler, mother has me racin' all over the destrict to find eggs, 'nd I guess the neighbors are about all in the same boat."

"Well," I said, laughing, "next time you get out come to Rose Lawn, and I guess you won't find the egg basket empty."

"I 'low youn don't lay in winter?"

"Oh, but they do. They have not laid many eggs for six weeks past, because the hens are moulting and the pullets developing into hens. It is always a critical season and a time upon which hinges the winter laying."

His jaw dropped lower.

"I don't know much about chickens," he confessed, "but I don't s'pose these thoroughbreds o' youn are any better only for looks than ourn."

"What kind are yours?"

"Oh, no kind in particuler—just chickens."

"Well," I said, "'just chickens' respond to proper treatment and good care, but of course the thoroughbred in the poultry world has the same advantage that the thoroughbred in the horse world has. 'Blood will tell,' you know."

"What be them things along the fence there?" he inquired, somewhat irrelevantly.

"Those spikes set in that heavy plank are to stick beets on."

"Beets! What fur?"

"Why, you see we raise beets—bushels of them every year—on purpose to feed the hens. When we give the noon feed we stick one on each of those spikes and for an hour or more, after the other food is cleaned up, they busy themselves picking those beets to pieces and eating them. They are good for 'em."

"And here are the hooks we hang the cabbage on. A little high, you see, so the birds will have to jump a little way. And this is the scratching

shed for the pullets, and over there the one for the old hens. At night we scatter oats in the litter so there will be work for them to do as soon as they are off the perches in the morning. Usually a sheaf of oats or a few ears of unshelled corn are within their reach. In this way they never get too fat and they are well and active.

"And this is the box of sand they run to for grit. Over there is a heap of broken plastering and coal ashes. Without these they canot lay.

"Come into the shop and see our new green bone cutter. Cut green boue will make a wooden hen lay."

Of course our laugh belied our words, but the man never smiled. He just went on gazing and looking queer.

"This pile of old dishes we pound into bits and deal out as we have time. It is just the thing for hens and they are ravenous for it.

"At noon we feed boiled oats or make a warm mash of ground feed, table scraps and potato parings.

"At night we use shelled corn that has been in the oven, or at least near the fire all day.

"In summer we use no corn; wheat takes its place."

And so we rattled on, and still the old man was quiet.

When he did speak he said:

"Well, I swan!" and that was all.

We hear rumors, however, that he went home and tiked it over with mother, and that they are going into the poultry business. There is nothing like getting into the procession. And he is only one who literally believes that, if he has a duty toward the chicken yard, it is done when he lets them feed around where the hogs eat and roost in the tree tops.

Winter is fairly here and the fowls should have warm water twice a day. If one wants eggs he must see to it that the hens never chill.

November is a trying time for the pullets and late moulting hens. Extra food should be given, such as wheat—something new and tempting. This is the time when the green cut bones comes in just right. Meat scraps will do as well. Particular attention should be paid to the housing.

Drafts are pernicious to the half clad or half developed birds, inducing colds that may end in something more serious—possibly roup or consumption. Better the fowls roost in the open than in the draft, but warm houses are what they need and must have.

Too much attention can hardly be

paid to details at this time of year, and the successful, experienced fancier is not the one who slights the trifles. There is profit in poultry even if one does not half attend to it, but there is more when properly conducted. There is the egg money, the broiler money and the occasional sale, at fancy prices, of stock. There is the fertilizer, the feathers and the comfort. By the comfort we mean the roast chickens, the chicken pies, the eggs for home consumption and the pleasure one gets out of a handsome range of birds.

Somebody sings:

"I will sing you a song of the vegetable man,

For women may search and women may plan,

And look all day thro' catalogue books,

And choose these seeds that are just for looks;

But when they are cooking three meals a day,

'Tis squashes and peas and beans that pay."

And so it is. There may be beef and pork and all the rest, but—

"When they are cooking three meals a day,

Then the raising of chickens will pay."

But there is a very serious side to this business. Men and women—poor people—are reading the papers and then embarking in the poultry business. It seems to them that a fortune is all but waiting to be grasped. It is not so, my friend. It takes capital, time and hard work to make it any sort of a success beyond one's own table supplies.

We read a letter, printed somewhere, from a young widow to an editor, saying that her husband had just died and left her to earn a living for herself and 7-months-old child, and she wanted to be advised if she could make a living by going into chickens.

Now she may make something worth while after a bit, but it is to be devoutly hoped she has money to live on meanwhile, for it takes a long time to "amount to anything" as a fancier, that is from a money standpoint.

If one has a living insured while the poultry business is building up it is a good thing to go into. Especially is it a good thing for people who have some land and can raise most of the feed, but where it is constant cash outlay and small returns for two or three years, he or she who is in need of "daily bread" better go slow.

"To keep pace with the procession

As it moves along, you know,

You must grasp new notions quickly,

And as quickly let them go."

VELMA CALDWELL-MELVILLE.

Central Missouri Association.

The Central Missouri Poultry association closed its third annual exhibition at Booneville, Mo., November 29, after a most successful four days' show. Nearly 500 birds were in the room, and the quality the finest. Judge D. T. Heimlich scored the birds, and, as usual, gave universal satisfaction. He is a "hard cutter." The election of officers for 1902 resulted as follows: H. A. Jewett, Clark's Fork, president; H. C. Duncan, Lamine first vice president; L. M. Haynie, Nelson, second vice president; Mrs. Charlotte Wilkerson, Fayette, third vice president; H. P. Mason, Fayette, secretary and treasurer. The next show will be held in Fayette, date to be chosen later, with the veteran, J. A. Maxwell, as superintendent. The awards were:

Barred Rocks—Mrs. T. A. Nelson, Bunceton, 1, 2 cock, 1 cockerel, 2, 3 hen, 1 pen. Mrs. W. L. Scott, Blackwater, 3 cockerel. R. A. George, Bunceton, 1 hen, 3 pullet. D. Barnert, Booneville, 1 pullet. Ed G. Thoma, Booneville, 2 pullet, 3 pen. Mrs. B. F. Doran, Bunceton, 3 cock, 2 cockerel, 2 pen.

Buff Rocks—H. P. Mason, Fayette, Mo., 1 cock, 1 hen, 2 cockerel, 1, 3 pullet, 1 pen. Boyd Norris, Fayette, 1 cockerel, 2, 3 hen, 3 pen. L. M. Haynie, Nelson, 3 cockerel, 2 pullet, 2 pen.

White Rocks—R. A. George, 1, 3 cock, 1 hen, 1 pullet, 1 pen. Wm. Johnmeyer, Booneville, 1, 2 cockerel, 2 hen, 2 pullet, 2 pen. G. E. Chambers, Booneville, 3 cockerel, 3 hen, 3 pen. R. C. Barred and R. C. White Rocks—all to R. A. George.

Black Langshans—C. G. Miller & Son, Booneville, 1, 2 hen, 1 cockerel, 1 (tie), 2, 3 pullet, 1 pen. H. C. Duncan, Lamine, 3 hen, 2, 3 cockerel, 1 (tie) pullet, 2 pen.

White Langshans—All to C. G. Miller & Son.

Light Brahmas—All to L. M. Haynie.

Buff Cochins—Wm. Johnmeyer, 1 cockerel, 3 hen, 1 pullet, 1 pen. Mrs. T. A. Nelson, 2 cock, 2 hen.

White Cochins—All to Wm. Johnmeyer.

Silver Laced Wyandottes—All to W. H. Carpenter.

Golden Wyandottes—All to Johnmeyer.

White Wyandottes—Mrs. Grace Viertel, Booneville, 3 cockerel, 1, 2, 3 pullet, 1, 2 hen.

Rhode Island Reds—All to Miss Isa Holway, New Franklin.

Red Caps—All to Rudolph Toennes, Booneville.

White Crested Black Polish—All to Mrs. Jesse McMahan, Blackwater.
Golden Polish—All to Wm. A. Adams, Jr., Booneville.
Houdans—All to Emil Mueller, Booneville.

S. S. Hamburgs—All to Rudolph Poennes.

S. C. Brown Leghorns—Wm. Johnmeyer, 1 cock, 2 cockerel, 1, 2, hen, 3 pullet, 2 pen. H. A. Jewett, Clark's Fork, 1, 3 cockerel, 1, 2 pullet, 1 pen.

S. C. White and R. C. Brown Leghorns—All to Wm. Johnmeyer.

Buff Leghorns—John S. Hughes, Fayette, 1, 2 cock, 1, 2 hen, 3 (tie) pullet, 2 pen. Wm. Johnmeyer, 1, 2 cockerel, 1, 2, 3 (tie) pullet, 1 pen.

Buff Orpingtons—Mrs. W. N. Marshall, Lisbon, Mo., 1, 2, 3 cock, 1 cockerel, 1, 2 hen, 2, 3 pullet, 1 pen. Mrs. Grace Viertel, Booneville, 2 cockerel, 3 hen, 1 pullet, 2 pen.

Buff Cochins Bantams—All to John S. Hughes, Fayette.

Golden Sebright Bantams—All to Mrs. T. A. Nelson.

During the great International Live Stock Exhibition at Chicago, November 30 to December 7, there was considerable talk of the live stock display to be made at the St. Louis world's fair in 1903. It was the general opinion of everyone who was at Chicago that they would be there, and hundreds of others, insuring for St. Louis the greatest live stock exhibition ever held in the world. An appropriation of \$750,000 was asked for, with an assurance of at least \$250,000 more, to be contributed by several states, and a number of different stock associations, thus making a fund of one million dollars to be devoted entirely to the live stock exhibit. Of this amount \$60,000 was allotted to the poultry, pigeon and pet stock department. This we feel will enable us to put the largest, finest and best exhibit in this line that has ever been shown in the world. Entry fee will be small and premiums large, and we call attention to this matter thus early so that every fancier may know that something big will be going on at St. Louis in 1903.

J. A. LELAND,
Springfield, Ill., Chairman.
HENRY STEINMESCH,
St. Louis, Mo.

I. K. FELCH,
Natick, Mass.

L. N. COBBLEDICK,
Oakland Cal., and for the Pacific Coast.

Committee on Poultry, Pigeons and Pet Stock, Louisiana Purchase Exposition, St. Louis, 1903.

O. MO. HUN. DRO.

Breeder of Prize-Winning
IMPERIAL WHITE P. ROCKS.
Stock for sale at all times. Eggs in season.
E. B. OMOHUNDRO, Bowling Green, Mo.

ROSE COMB BUFF ORPINGTONS

Black Langshans. Stock and eggs for sale. See winning at Red Oak and Osceola, Iowa.

Mrs. J. A. LASH, Osceola, Iowa.

The manufacturer of the

Shaub Compartment Brooder

's not offering something for nothing, but does offer the best brooder in the world for the money. The best is always the cheapest. Illustrated catalogue. 4c in stamp.

M. O. Sherer,
Box 19. Louisville, Ohio.

BARRED PLYMOUTH ROCKS

WINNERS FOR PAST SIX YEARS Nov. 26th, 30th, 1901—194 B. P. Rocks in class at Red Oak, Ia., won 1st Cock, 1st Hen, 2d Pullet, 2d Cockerel, 1st Pen. At Osceola, Ia., Dec. 3d-6th, won 1st Cockerel, 1st Pullet, 1st Hen, 1st Pen. Two hundred choice breeding and exhibition birds for sale.

H. R. McLean,
Red Oak, Iowa

Buff Orpingtons and Cochins.

Bred from my own Importations.

I won more premiums than any other two exhibitors at the Nebraska State Show, 1901. Before buying anything write me—it will be a pleasure to give you prices.

Ida J. Buehler, Kenesaw, Nebraska.

Old Homestead Brooder.

The best on earth. All your chickens can be saved in the Old Homestead Brooder. Try one. Write for prices. Address

Old Homestead Brooder Co.,
Middleboro, Mass....

Cyphers' Catalogue For 1902.

The new and complete catalogue of the Cyphers Incubator Company for 1902 will be ready for mailing about the 15th of January. This book will consist of 196 pages, 8x12 inches in size, with a handsome embossed cover with gold lettering, and will contain color plate reproductions of the full line of the non-moisture, self-ventilating Cyphers Incubators. It will also contain photographic illustrations of a large number of America's best known and most successful duck, broiler, egg and specialty plants. This new catalogue weighs fully one pound, and will be sent free to any address in any country for ten cents in stamps or silver to pay cost of delivery.

A feature of this new catalogue is the department of foreign testimonials telling of the uniformly good work the Cyphers patent-diaphragm, non-moisture, self-ventilating incubators are doing "the world around." The sun now never sets on "the Cyphers at work," and the department referred to

The Western Poultry Fanciers' Association of Cedar Rapids, Ia., which holds its seventh annual exhibition at Cedar Rapids on January 13 to -8, 1902, wish to call the attention of poultry fanciers to a few of the special attractions of their show. The American Buff Rock club and the American Black Langsham will be two of the special features.

Theo. Hewes of Trenton, Mo., and J. A. Tucker of Concord, Mich., will judge the poultry; R. J. Finley of Macon, Mo., will judge the hares, and Henry Tieman of Baltimore, Md., will

contains numerous reports from persons dwelling in foreign lands who are using the Cyphers Incubator with gratifying success.

So great has become the foreign demand for these American-made incubators that the Cyphers Company has found it advisable to take out a trademark, which has been registered in every country where a demand for incubators exists. This has been done to protect the Company's trade and friends against "pirated" imitations, so that foreign poultrymen may be sure they are buying "the genuine Cyphers made in U. S. A." Herewith is shown an imprint of the new Cyphers trademark and hereafter this trade-mark will appear in gold and colors on the front of every Cyphers Incubator manufactured by the Cyphers Incubator Company in their new and greatly enlarged factory at Buffalo, N. Y. Note our advertisement, 2 cuts, page 34, this paper.

All persons who are interested in the development of the poultry business and the improvement of poultry appliances should send for a new Cyphers catalogue. Ask for book No. 122 and address nearest office.

CYPHERS INCUBATOR COMPANY,
Buffalo, N. Y., cor. Court & Wilkeson sts.
Chicago, Ill., 325 Dearborn st.
Boston, Mass., 34 Merchants' Row.
New York, N. Y., 8 Park Place.

judge the pigeons.

Write for premium list December 1, 1901. Entries close January 4, at midnight.

E. E. RICHARDS, Sec.

W. S. Russell of Ottumwa, Iowa, writes us that he has a fine lot of Barred Plymouth Rock cocks for sale very reasonable. Mr. Russell breeds as good as there is and furnishes prize winners in many of our best shows. If you want something good, just write him and get prices. See his ad in this paper.

For Sale..

High class fancy pigeons, as follows: Fantails, Carriers, Magpies, Owls, Archangles, Barbs, Homers, Swallows, Dragons, Nuns, Turbits, Jacobins, Pouters, Trumpeters, Runts, Starlings, Tumblers, outside and inside. Also ten kinds of poultry: White Holland Turkeys, Toulouse Geese, Rouen Ducks. Write for price list.

D. L. BRUEN, - Oldenbusch, Neb.

Buff Cochins. Rose Comb Brown Leghorns

My birds score from 90 to 95 by Frank Hitchcock and have won for two years in the show room. Prices reasonable. Write your wants.
Mrs. Ida Bard, Imperial, Nebraska.

BARRED PLYMOUTH ROCKS

* The kind that win and lay eggs.
Satisfaction to all. Circular free,

H. SHIVERS, Knoxville, Ia.

Lock box 500.

GREAT CROPS OF STRAWBERRIES AND HOW TO CROW THEM

Is the title of a Book which I as worked a revolution in strawberry growing, and CAUSED TWO BIG BERRIES TO GROW WHERE ONE LITTLE ONE grew before. The author has grown the LARGEST CROPS OF BERRIES EVER PRODUCED on an acre. The book explains how YOU CAN DO THE SAME. It will be sent to you FREE IF YOU MENTION THE PAPER IN WHICH YOU SAW THIS NOTICE. The only scientifically developed THOROUGH-BRED STRAWBERRY PLANTS to be had for spring planting. One of them is worth a dozen common scrub plants.

R. M. KELLOGG, Three Rivers, Mich

EGG FOOD.. Make It Yourself.

Eggs are high at this time of year. Fill your egg basket and reap the benefit of the high prices. Guaranteed recipe for making the best egg food known. Easily and quickly made. Recipe price only 50c; Death To Lice, 15c; Essex Cholera and Condition Powder, best on earth, 60. The 3 for \$1.00.

John J. Kautzmann,
590 Bergen St. Newark, N. J.

CAPITOL RABBITRY, Augusta, Me.

I am closing out my whole stock of Belgians, over one hundred, 24 prize-winners included. There are 1 Hares, 4 Gold Medal Winners, 1 choice Doe of the State Winner of Sweepstakes, prize for 'highest scoring animal in show: a silver cup goes with her.

Now is the time to gather in prize winners for winter shows. These prices are reasonable and animals way up. Will send copy of Pedigrees and Prices.

H. F. ADAMS,
Augusta, - - Maine.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough cardboard. Contains all the rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Rules, Handling, Nursing and everything relative to the royal sport of cocking.

By Dr. H. F. Adams, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator one year

For 25 Cents.

Address, THE INVESTIGATOR
Clay Center, Nebraska.

Give
Your Breed-
ing Does

Rabicide

During gestation and while nursing their young it will enrich the blood improve the appetite, increase the flow of milk, thereby making the young strong and healthy.

Give RABICURE a trial and you will never be without it. 50c a box postpaid.

Vermont Belgian Hare Co.,
Lyndonville, Vt.

TO CHICAGO EXHIBITORS.

What, from the exhibitor's standpoint, goes to make up a successful poultry show? Fair judging by competent men, liberal prizes, careful handling, intelligent feeding, protection against loss, prompt return of stock, and settlement of prizes. Nothing is quite so irritating to an exhibitor as to have his stock returned in a badly demoralized condition, showing plainly that they have been ill treated, with possibly a specimen or two changed, or even missing. If the exhibitor will use care in shipping his stock, being particular to give all necessary information on coops, remembering that the management has thousands of specimens to handle in the short space of twenty-four hours, a great deal of unnecessary confusion will be avoided. The Chicago show has adopted a plan that will do away with all "mix-ups" or tampering with fowls. As the birds are removed from the shipping coops they will be banded with a sealed leg band marked "Chicago, 1902," bearing the number of coop the fowl will occupy during the show. This number will be used on all show records, including score cards, prize certificates, and premium list, thereby giving every bird something to show that it has been exhibited at Chicago, whether judged by comparison, or scored. With this system how easy it will be to turn to the catalogue at any time and convince any skeptic that a certain bird did so and so. How simple it will be to keep out of the tangle found at every show when a fowl becomes misplaced, and what a relief to know that each and every specimen is in the hands of its rightful owner when it leaves the room. Locked coops give you a false sense of security, but any attempt to remove an unbanded bird will open up an investigation that will prove disastrous to wrongdoers. With such able men as Mr. C. M. Davidson in charge of poultry, Mr. Wm. Plaehn, pigeons, and Mr. J. C. Knapp, pet stocks, exhibitors may rest assured that their stock will be fed and cared for carefully and intelligently. If you intend to show, put Chicago at the head of your list; if you don't intend to show, change your mind, and come to Chicago—you'll not regret it. Chicago will have the greatest show in the land this year without the slightest doubt, and it will be to your advantage to come. Don't forget the date, January 20 to 25, inclusive. Exhibits will be received the 19th and 20th, positively not later.

C. A. DAMON,
General Superintendent.

Have you seen it?

The Fanciers' World

America's leading publication for fanciers. Special departments for dogs, cats, pigeons, hares, poultry, etc. 32 pages. Profusely illustrated. Per year, 50 cents. Sample copy free.

The Fanciers' World

F. M. Slimmonds, Jr. Publisher, Chicago, Ill.

Why Buy Stock and Poultry Foods?

Make your Own! I can send you formulas for all kinds of stock and poultry foods. Here are a few: Chick food 35c; egg food 35c; poultry condition powder, 45c; stock condition powder, 35c; hog condition powder, 30c. Write for others.

A. W. Collins,

630 Grand Ave. Keokuk, Ia.

BARRED P. ROCKS

Pure Thompson's Ringlets

40 ex. fine Ckls. for sale, with score cards also. 25 Extra Fine M. Bronze Turkey Toms 19-1 hatch, weighing upwards 25 lbs. Write for prices.

C. M. HULBURT, Fairbury, Neb.

Mrs. A. P. Rogers,
of Bowling Green, Mo..

Has first-class stock of Barred P. Rocks. See ad in February number 1902.

For bargains, write quick.

For Sale....

200 Fine Black Langshans. 200
Some of the best I ever raised.

Address

Ben. S. Myers,
Crawfordsville, Ind.

QUEEN CITY BUSINESS COLLEGE.

One of the leading schools of the west. Large attendance. Great demand for its graduates. Expenses low. Address

H. S. Miller, Pres., Hastings, Neb
Reference: Sure Hatch Incubator Company

Buff Orpingtons AND White Wyandottes

No better Stock
Raised.

I never have failed to win in largest shows. Birds score from 90 to 95½.

C. ROCKHILL,
Harvard, Nebraska.

It is next to impossible to raise poultry, even a small flock on a city lot to say nothing of a large flock on a poultry farm or plant, without the aid of a trained

Fox Terrier Dog.

Our dogs are taught to parole the place night and day. Write, Nevada Foxterrier Kennels, Nevada, Mo.

Buff Orpingtons, Barred Rocks, S.

C. W. Leghorns, White Wyandottes.

Stock from high scoring birds and winners wherever shown. Prices right Send your wants.

KING & KING, Fairbury, Neb.

Notice!

I have a few Partridge Cochins Ckls. at a bargain if taken soon. Also Golden Seabright Bantams from \$1 to \$2 each. Will exchange fancy pigeons for any kind of standard bred poultry.

W. F. HOLCOMB, Clay Center, Neb.

Mammoth Bronze Turkeys

Young stock for sale. Gobs weigh from 20 to 27 pounds. Price, \$3.50 each. My stock is as good as the best.

J. P. Schroeder, Clay Center, Nebraska.

You Can Buy Eggs

From my Prize Winning White Wyandottes balance of this season at \$1.50 per 15. See April GOLDEN EGG, p. 21.

GRANT MOTT,

Box A-29. Austin, Minn.

My Buff Rocks

Won at Madison Square Garden this season; at Boston and other great shows past seasons. Stock and Eggs for sale. Write for Circular and Show record.

MILES H. LOUER,

Box M. East Onondaga, N. Y.

Dogs! : : : Dogs!

I have a litter of fine Pups from a large Bitch, ½ St. Bernard and ½ Newfoundland, bred to a great Dane.

These pups make the best of watch dogs for farm or poultry plant. Male pups \$5 each. **D. W. GRANT,** Alma, Kans.

Now Ready..

Young stock for sale at the Golden Rule Poultry Yards. Pullets and Cockerels of pure Empire White Plymouth Rocks, that are white. White Wyandotte Cockerels, sired by male direct from Duston, and hatched from a pen of "Duston" hens. Also a few W. P. R. hens and one male yet for sale, at a bargain. Write for price and description of stock.

MRS. MATTIE WEBSTER, BELMONT, WIS.

THE GREAT CHICAGO SHOW.

Present indications are that the coming Chicago show will be the biggest poultry gathering the National Fanciers' association has ever experienced. No reader of this paper who wants to stand in the front ranks as a breeder of fine fowls should think of passing this show, but make it a point to be there with the best his yards contain, and secure a record on his bird that will be world wide. With a third more floor space in the recently completed annex to the Coliseum building, the association will have ample accommodations for the increased display that will be seeking honors.

C. A. Damon will serve the interests of both exhibitor and association as president. The gentleman is too well known in the show room as a successful breeder of fine fowls to need any introduction to the fraternity. However, to the prospective exhibitor it should be told that he is known among his associates to possess strong executive ability, originality and honesty of purpose in everything undertaken. Having these qualities, coupled with untiring energy, his superintendence should assist materially in making the next Chicago show a hummer. The method of judging adopted by the management is, as a journal states editorially, "A unique one to satisfy exhibitors in the placing of awards, and there is no doubt but it will be appreciated."

The plan is simply to allow the exhibitor to decide how the variety in which he has specimens entered in for competition should be judged, each bird to county a vote, a majority in each variety to rule. This method will no doubt breed a few kickers, but with the truth before us that every progressive step in the world's past history has had to convert numerous fault-finders, there need be no fear that this system of judging the Chicago show will prove disastrous. The fact is that breeders throughout the middle west in particular are pretty evenly divided for, and against the score card, and where you may find exhibitors in one variety strongly in favor of the score card., you will find a majority of the breeders exhibiting another variety radically opposed to it. Anyhow, the method of judging the next Chicago show is in the hands of the exhibitor, hence, do not forget to express your preference when making entries.

Vermont Belgian Hare company will furnish to all breeders free Hutch record cards and all they ask is for stamps to pay postage on the same.

MAMMOTH BRONZE TURKEYS.

That score from 94 to 97½; Barred Rocks score from 87 to 90; Buff Cochins, score from 87 to 93½; Pekin Ducks that have won hundreds of premiums, have been sold to all parts of America and Europe. Chester White Swine.....

Mrs. Chas. Jones,

PAWPAW, ILL.

Golden Wyandottes.

Our Wyandottes never have failed to win in the best company. Young stock for sale.

J. C. KAPSER, Clay Center, Neb.

They Are Going..

Prize winners and reliable breeders at half price to make room.

Partridge Cochins, B. B. R. Game Bantams, Buff Plymouth Rocks.

Send for Catalogue.....

L. A. NOFTZGER,

Oaklyn Place. N. Manchester, Ind.

Olentangy : : : Poultry Yards

Delaware, : : : : Ohio. Barred Plymouth Rocks, Cornish Indian Games, Buff Cochins Bantams and Golden Wyandottes Eggs \$2 00 per 15. Send for circular....

GOLDEN WYANDOTTES AND WHITE HOLLAND TURKEYS.

In Lacing, shape and size unexcelled. Fifty Cockerels and Pullets to sell. Eggs in season.

W. J. EAST, Clay Center, Neb.

WHITE POULTRY

Holland Turkeys, Embden Geese Indian Geese, Rose Comb Leghorns, Plymouth Rocks, Wyandottes and Langshans, Colored Homing and Tumbler Pigeons. All stock winners or bred from winners and as represented. Southdown Sheep, Berkshire Swine

J. A. LELAND,

Woodside Farm,

SPRINGFIELD, ILL.

MY MAMMOTH PEKIN DUCKS

Are holding their own throughout the west. Have always won highest honors at Great St. Louis Fair and Poultry Shows; also in the hands of my customers. A few elegant Buff flocks at half real value.

OTTO STOECKER, Box 18, Manchester, Mo

PEKINS

HALLOCK STRAIN.

Will sell a few choice drakes and ducks. Each. Orders for eggs booked now.

Belgian Hares

Pedigreed, leading strains. A grand lot of youngsters sired by a 95%-point buck. Bred goes always on hand. Booklet on the industry for stamp.

Stephani Poultry Co.

Belleville, Illinois.

Clubbing List

By taking the advantage of the following combinations you can get two papers often at the price of one. Look at these offers:

	Price with Poultry Investigator.
Poultry Tribune	50c
Poultry Herald	50c
Poultry Gem	25c
Commercial Poultry	50c
Western Poultry News	25c
Poultry Success	40c
Poultry Topics	25c
Poultry Gazette	25c
Nat'l Poultry Journal	50c
Farm Poultry	\$1.00
American Poultry Journal	50c
Feather	50c
Nebraska Farmer	\$1.00

..Just Think of It..

Farmer and Breeder, price	\$1.00
Any 50c paper you choose above	.50
The Poultry Investigator	.25

Total

We will send the three to you for \$1.00.

Address,

POULTRY INVESTIGATOR.

NOTICE—We do not send samples of other papers.

SURE SEE THE 1902 Noxall incubator

IT HAS many new features, the Regulator, Ventilating and Molting system is perfect, I want price. But not how to get one FREE. Our catalogue gives remedy for every known poultry disease. 4c. for postage circular and price list free.

Noxall Incubator Co., Quincy, Ill.

SCORING THE KEEPER.

We read and write pages and pages of feathered literature about fancy birds and how to score and how to mate them for way up there blue ribbon catchers.

There is a chance for running a score card on the keepers of poultry or in fact anything else. It is not the fancy poultry that furnishes the millions of commercial wealth, but it is the rustling, bustling old farm biddy. It does not make any difference whether her plumage will bear inspection for a fancy Rock or Cochon or anything of that sort, but will her nest bear inspection every day at egg hunting time. Well, here comes the point, some hens lay well, others do not, and when the hesses of the farm poultry, viz., the old ladies, meet at some carpet-rag sewing, or birthday party, the subject of "hen luck" comes up. You know how the story goes. Mrs. A. tells the others how poor her hens do, like this: "O, dear me, such bad luck; they simply don't amount to anything. We have seventy-five or more and only get two or three eggs and every once in a while one dies." Say, readers, did you ever read such a story; did you ever see such a flock of chickens? I have. Is the trouble luck or the chickens, or the keeper. I'll tell you—score the chickens, and then the keeper and I will guarantee the chickens will out-score the keeper 110 points, and the lice will eat up the chickens and "luck" both.

Then Mrs. B. speaks up in a somewhat prompted tone and says something to this effect: "Why, it's too bad, Mrs. A. Our chickens are doing so well we get lots of eggs; the hens have red combs and go around singing and seem cheerful." Well, now, readers, compare in your own minds the difference in the way the fowls are fed, watered and looked after, and the whole secret will be as open daylight. Don't always look at the feathers, but look at the nest. Don't expect the hen to do all. Do some yourself. It is not generally ignorance, but genuine neglect that makes failures. Now is a good time to care for the flock in winter, when you are not so busy. Get an incubator and be happy.

By the way, Mr. Incubator Man, I expect to get another machine this year and if you want to send a catalogue of your goods, give it to Uncle Same and write on the face of it,

JAMES PEARSON.

Germantown, Neb.

G.B. CLARY

Fairbury, Nebraska

Breeder of: Chalk White Wyandottes, Mammoth Light Brahmas, Buff Orpingtons.

Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

FREE..

THINK OF IT!

By special arrangement you can get all three (3) of the following one year for only 50c. Never an offer like this before

♦♦♦♦

The Poultry Investigator

CLAY CENTER, NEB.

The only exclusive poultry paper published in the west. Original, up-to-date, instructive. Profusely illustrated and never prints a dead line. Contains from 32 to 40 pages each month.

Fancy Fowls, Hopkinsville, Ky

The leading poultry organ of the south. Three years old. Well established and prosperous. 36 to 40 pages each month.

Michigan Poultry Breeder

BATTLE CREEK, MICH.

Established 1885. The publisher has devoted 11 years of his entire time and attention to the poultry industry. It is a success—24 pages.

The price asked for these papers all one year is only 50 cents, which any of them are worth, and you get the others free. Send your subscription to any one of them. A free sample copy can be had by addressing each one. Better send your order now.

White
Langshans
Exclusively

Eggs from stock scoring from 90 to 95 points, \$1.50 per 15; \$2.75 per 30; this season only. Some

good Ckls. for sale with score cards by Ben S. Myers.

All Stock Farm Raised.

MRS. JACOB HUGHES, JR.,
Rock Port, - - Missouri

Northeast Missouri Poultry Show
held at Bowling Green, Mo.,
December 3-6, 1901.

BARRED P. ROCKS.

J. R. Lamppon, Mexico, Mo.—1st on cock; 1st, 2nd and 3rd on cockerel; 1st and 2nd on hen; 1st on pullet; 1st on pen; Also \$25 cash on best pen B. P. Rocks.

J. R. Dayball, St. Louis—2nd on pullet; 2nd on pen.

Jas. D. Clarkson, Ballwin, Mo.—2nd on cock.

Mrs. L. Neville, Frankford, Mo.—3rd on cock.

Miss Jennie Ferry, Elsberry, Mo.—3rd on hen; 3rd on pen.

F. B. Schlotter, Keokuk, Ia.—3rd on pullet.

W. P. ROCKS.

E. B. Omohundro, Bowling Green, Mo.—1st on cock; 1st and 3rd on cockerel; 1st on pen. Also \$10 special on best cock, cockerel, 2 hens and 2 pullets.

Doc Holcomb, Bowling Green, Mo.—2nd and 3rd on hen; 2nd on pullet; 2nd on pen.

R. C. Lawry, Bowling Green, Mo.—3rd on cock; 3rd on pullet.

J. A. Douglass, Ferguson, Mo.—1st on pullet; 2nd on cock; 3rd on pen.

John Kemper, Troy, Mo.—1st on hen; 2nd on cockerel.

BUFF P. ROCKS.

L. T. Sanderson, Bowling Green,—1st on cock; 1st on cockerel; 1st on hen; 2nd on pullet; 1st on pen. Also \$10 cash special on best pen in Buff varieties and \$10 Buff Rock special on best cock, cockerel, hen and pullet.

B. E. Johnson, Kirkwood,—2nd on cock; 2nd and 3rd on cockerel; 1st on pullet; 2nd on pen.

J. S. Fitzgerald, Bowling Green,—2nd and third on hen; 3rd on pen.

WHITE WYANDOTTES.

W. R. Purnell, Bowling Green,—1st and 2nd on cockerel; 1st on hen; 2nd on pullet; 1st on pen. \$10 cash special on best pen in white varieties.

John A. Shaw, McKittrick,—1st and 3rd on pullet; 2nd and 3rd on hen; 2nd on pen.

Mrs. Eva White, Cyrene,—3rd on cockerel.

S. L. WYANDOTTES.

John A. Shaw, McKittrick,—1st on cock; 3rd on cockerel; 3rd on pullet; 1st on pen.

Mrs. Maggie R. Appleton, Bowling Green,—2nd on cockerel.

Henry T. Reed, Camp Point, Ill.—1st on hen; 3rd on pen.

Mrs. L. Neville, Frankford,—2nd on hen; 1st and 2nd on pullet; 2nd on pen.

BUFF WYANDOTTES.

John A. Shaw,—1st on cock; 1st and 2nd on cockerel; 1st on hen; 1st, 2nd and 3rd on pullet; 1st and 2nd on pen.

GOLDEN WYANDOTTES.

John A. Shaw,—1st on cockerel; 1st, 2nd and 3rd on pullet; 1st on pen.

LIGHT BRAHMAS.

Mrs. Nathan Newby, Bowling Green,—2nd on cockerel; 1st on hen; 1st and 2nd on pullet; 2nd on pen.

Henry T. Reed—1st on cockerel; 2nd on hen; 1st on pen; \$10 cash special on best pen in Parti-Colored varieties.

BUFF COCHINS.

Otho N. Gay, Camp Point, Ill.—1st and 2nd on hen; 1st and 2nd on pullet.

WHITE COCHINS

T. H. Sebastian, St. Louis,—1st on cock; 1st and 2nd on hen; 1st and 2nd on pullet; 1st on pen.

BLACK LANGSHANS.

L. E. Meyer, Bowling Green,—2nd and 3rd on cock; 2nd on cockerel; 2nd and 3rd on hen; 2nd on pen.

Mrs. W. H. Tinsley, Edgewood,—1st and 2nd on pullet; 3rd on pen. \$2.50 special on best pullet.

John Hettich, Bowling Green—1st on cock; 1st and 3rd on cockerel; 1st hen; 3rd on pullet; 1st on pen; \$2.50 special on each cock, cockerel and hen. Also Silver Cup offered by American Langshan Club on best pen.

BUFF LEGHORNS.

Mrs. L. Neville—1st on cockerel; 1st on hen; 2nd and 3rd on pullet; 1st on pen.

Stephen Pollard, Bowling Green,—2nd on cockerel; 1st on pullet; 2nd pen.

R. C. W. LEGHORNS.

Charlie Gibbs, Bowling Green,—1st on cock; 1st and 2nd on hen.

S. C. W. LEGHORNS.

John Lovell, Bowling Green,—1st on cockerel; 1st, 2nd and 3rd on hen.

S. C. B. LEGHORNS.

J. D. Clarkson, Ballwin,—2nd on hen, Ogre Poultry Yards, Thompson,—1st on cockerel.

V. S. Smith, Bowling Green,—1st and third on pullet.

BLACK MINORCAS.

C. S. Hickstep, Elsberry,—1st on cockerel; 1st on hen; 1st, 2nd and 3rd on pullet; 1st on pen.

HOUDANS.

J. C. Huckstep, Bowling Green,—1st on cock; 1st on cockerel; 1st and 2nd on hen; 1st and 2nd on pullet; 1st on pen.

BUFF ORPINGTONS.

Mrs. R. L. Pollack, Bowling Green, 1st on pullet; 2nd on pen.

Dodge Bros., Louisiana,—2nd on cockerel; 3rd on pen.

J. J. Peay, Bowling Green,—1st on hen; 3rd on cockerel.

Henry Woether, Barrett Station—1st on cockerel; 2nd and 3rd on pullet; 1st on pen.

BUFF COCHIN BANTAMS.

Zamo Debertshausen—1st on cockerel; 2nd on hen.

Otho N. Gay, Camp Point, Ill.—1st on cock; 1st on hen.

WHITE BOOTED BANTAMS.

Dodge Bros., Louisiana—1st on cock; 1st on cockerel; 1st on hen; 1st pullet.

S. S. HAMBURG.

Devo Hendrick, Bowling Green,—1st on cock; 1st and 2nd on hen; 1st pullet; 1st on pen.

C. I. GAMES.

Joe F. Strauss, Bowling Green,—1st on cock; 1st and 2nd and 3rd on hens.

M. B. TURKEY.

Mrs. M. R. Appleton, Bowling Green,—1st on cock; 1st and 2nd on hen; 1st on pen.

Miss Jennie Ferro, Elsberry; 2nd on cock; 3rd on hen.

WHITE PEKIN DUCKS.

Vest Omohundro, Bowling Green,—1st and 3rd on best pair.

Mrs. Eva White, Cyrene,—2nd pair.

WHITE FANTAIL PIGEONS.

R. H. Thompson, Bowling Green,—1st, second and 3rd on best pair.

Maplewood, Mo., March 18, 1900.

W. F. Chamberlain, Kirkwood, Mo.

Dear Sir—The sample order of chick feed I bought of you sometime ago has been fed with the very best results. You have beyond a doubt, the very best feed for little chicks ever put on the market—it is a wonder. I feed them your feed all the time and they never tire of it, eating up clean all that is given them. As I cannot be without it, send me another order like the last.

Yours respectfully,

W. Clement.

Hatch Chickens by Steam

with the Simple, Perfect, Self-regulating

NEW WOODEN HEN

The most efficient incubator for raising poultry on a small scale ever invented. A perfect hatcher—automatic, self-regulating, thoroughly constructed, fully guaranteed. Thousands in successful operation. Guaranteed to hatch a larger percentage of fertile eggs at less cost, than any other hatcher.

THE NEW WOODEN HEN.

Three Sizes:

50 Egg Capacity, only	\$ 6 80
100 " " "	10 00
200 " " "	12 80

Send for large FREE catalogue with 16 colored views.

GEO. H. STAHL,

114-122 S. 6th St., QUINCY, ILL.

Winter Layers

Now that winter is again with us, we are so frequently asked what results we get from our pullets as winter layers and what breed of poultry have we found to give the most eggs in winter, and don't we find a serious objection to the large single comb of the Leghorn and the Minorca.

We have had Leghorns for many years, but our experience with the Minorca was only for a few seasons. We would not object to the Minorca on account of large comb and would as soon keep them in a cold climate as any breed, so far as comb is concerned.

Our aim has always been to improve any breed of poultry we handled. To do so we found that we must study summer and winter care, the food that would give best results, not feeding the same during heat of summer that we would feed in zero weather in winter. We have found corn and meat to be necessary as a heat producing food for poultry in winter. The writer does not mean this alone, but as a last meal at night corn is excellent. We have used cracked corn for the reason that coarse cracked corn cannot be eaten as quickly. We have noticed fowls gorge themselves on corn, as is the case with mash, but mash, being a softer food, it is not as likely to pack a crop as harder substances that will swell, as does corn and wheat. For this reason some acquaintances cook all the wheat and corn, swelling it to its uttermost. We have tried feeding in that way, but do not like it as all hard grain or all soft food is not the thing for poultry, and we are much better satisfied to feed the grain in a litter of straw and have the fowls scratch for it, and if fed on the ground it takes a longer time to pick the grain up. To let a chicken stuff all it will eat and then stand off in a corner, especially if fed corn, it will get too fat to be a profitable egg producer. The active pullet that gets plenty of food but not enough so as to be indolent, is the most profitable egg producer. It is the nature of most breeds of poultry to work, and one can notice the chickens picking the fine gravel and often it is too fine to be grit. Dirt and mud is often taken into the crop. Where the chickens are kept in unclean houses or runs this ground is unhealthy, especially when picked up and eaten. If one watches chickens they will notice them doing this very thing.

In winter, when there is snow and ice on the ground, we have noticed

the pullets when a place was cleaned or the snow shoveled off south of the houses and the pullets allowed to go out. Most of them will eat snow and ice until one would think it would make them sick, which it has done sometimes, causing bowel trouble.

In a climate where snow stays on the ground so long it is hard on the birds to keep them housed so long and unless it is too cold when the sun shines bright we have the snow shoveled away, the ground swept, and throw down some straw. We see to it that the fowls go in their houses about four o'clock in the afternoon. One can get them in when taking the feed in their shed or house.

Scratching sheds built onto every house so as to be opened or closed are very desirable. Wire such as is used on a fence can be had to enclose the front; a small door to let the birds out, but two large doors with a window, these closed when the weather is very cold, make the ideal scratching shed.

The beginner as a rule crowds the birds, and that is one of the greatest causes of failure. To have eggs in winter one should have the hens together, and the pullets separated from the hens in houses and run by themselves. Then hens or older pullets will impose on the younger birds, and the pullet thus imposed upon, even though a naturally thrifty bird and good layer, will not do half as well as it would where it did not fear being abused when it moved, as a boss will take advantage of timid bird, whipping and abusing it at every opportunity.

A child or any living thing, if abus-

BEST FRUIT PAPER

Western Fruit-Grower is the best paper treating of all kinds of fruit, and nothing but fruit; monthly; illustrated; 16 to 48 pages; 50 cts. a year, 10c for three months' trial subscription.

THE WESTERN FRUIT GROWER.
Box 13, St. Joseph, Mo.

CALVIN E. BARNEY, - - Kearney, Neb
Breeder of Light Brahmans Exclusively.

My birds are heavy weight fine markings, close feathered. Eggs, \$2.00 for 15; \$3.50 for 30 choice birds, old and young, for sale. Write your wants. No circulars.

STAR ☆ ☆ ☆ ☆

Incubators

.....And Brooders.

A large free Catalogue tells you all about them.

Our New No. 2 Double Walled
Dead Air Space Self-
Regulating

BROODERS

are without an equal. See cut.

Price \$12.00.

Our New A-1 just the same, only with single walls at **\$10.00** is the real thing. **GOOD Brooders for \$5.00.**

Send for Circulars and Price List

Dead Chicks Don't Pay.

Chicks thrive best on a balanced feed of meaty, cereal and grain element. That's

STAR SPECIFIC NO. 7.

It isn't a medicine, but a health and strength builder. It prevents most of the diseases that kill chicks. Carefully compounded from results of expert experimenting and study.

Price, at Dealers:

1 lb. pkg. . . . 10c.	50 lb. bag. . \$2.25
5 lb. pkg. . . . 35c.	100 lb. bag. . \$3.50

Star Incubator Co.,

12 Church St. Bound Brook, N. J.

Star Specifics

Is guaranteed to cure.

No 1. Cholera in old Fowls.	No 5. For Inactive Mules.
No 2 Same, for chicks	No 6. For indigestion
No 3 Egg Food and Tonic.	No 7. Food for Small Chicks.
No 4. For Cold and Croup.	No 8. Disinfect Insect Powder.

Chick Feed.

Extra Quality.

We are putting up the best dry feed on the market to-day. It is especially prepared for the rearing of young chicks from the time they were hatched until eight weeks old.

We want reliable agents in all parts of the United States. The feed is all right and when once tried is always used. Sample by mail 4c. Circulars free.

Steinmesch & Co.,

St. Louis, Mo.

Reference: Editor this paper.

Utility Poultry Farm

Are you looking for something fine in the way of White and Barred Plymouth Rocks, Black Minorcas & White Wyandottes. If so we have them. Also Games and Leghorns.

H. S. FULTON & CO.,

Lock Box 24 Stewartstown, Pa.

High Scoring Pen of

WHITE PLYMOUTH ROCKS

One Cockerel, score 96½, weight 9 lbs.; two pullets, score 92, weight 7 lbs.; three pullets, score 94½, weight 6½ lbs.; four pullets, score 96½, weight 6½, 7 7½ lbs.; two pullets, score 96, weight 6½, 7 pounds.

Eggs from the above pen, \$3.10 per 15. Other breeding stock for sale. Judge J. W. Wall says, this is the best lot of White Plymouth Rocks he has scored this year.

REUBEN HIATT, Lees Summit, Mo.

MAMMOTH STRAIN LIGHT BRAHMS

... as bred by ...

H. T. RODGERS, Calaisville, Mo.

Are great prize
winners again

At the recent Calaisville, Mo. Show, against birds that have since won at St. Louis and other large shows, we made a remarkable record which proves the MAMMOTH STRAIN is as good as the best.

1st on Cock, 1st on Hen, 1st, 2d and 3d on Pullets, Cockerels and pens; also every special including the grand prize over all.

Blue Barred Plymouth Rocks

Our stock is first class. We have some yearling stock and young stock for sale. Prices reasonable.

P. J. SCHWAB, Clay Center, Nebr.

ed, will never thrive or do as well as when kindness is used toward it and it has its freedom.

We try to grade our stock and provide good comfortable quarters for the pullets we expect to lay during the cold months.

The hens moult their feathers and often begin laying with or at the same time the pullets begin. Thus it will be seen that all stock kept during winter should be given the best possible care, for eggs pay a good profit and it is our aim to always keep the best layers of any breed we handle.

We select the next season's breeding stock early in the fall, that is we dispose of those we do not want to winter over early, so that any birds we have on hand when winter comes we consider are worth keeping, and if we do not sell those we would not be losing. A good layer, whether it be a hen or pullet, is well worth keeping.

To sell extra good breeding stock and run short of eggs for hatching in the spring is not advisable.

We have known breeders, because offered an extra good price, to sell off the breeding stock so close as to hardly get young stock enough for the next season. They were not in a position to sell eggs for hatching and had so few birds in the fall that as a business it could not be called a success. When one advertises and establishes a business it is important to be fixed so one can fill most of the orders.

CORA RICKARDS.

Ogden, Utah.

DOG ADOPTS YOUNG CHICKENS.

A curious case is reported from the upper end of the city. This is nothing more than the adoption of a flock of motherless chickens by a dog. The canine follows the chicks about whenever anyone approaches shows fight at once. The animal belongs to a family living near the Rock Island roundhouse and the strange occurrence has created a good deal of interest.

The dog was first noticed following the chicks about and a short time later was seen to lie down, whereat the chicks snuggled close to the body of their protector and were kept warm. A curious spectator, who witnessed the strange proceeding, ventured close enough to look, when the dog showed so much fight that he retreated at once. The chicks are thriving and threaten to live to a good old age under the protecting care of their new guardian.—Peoria Herald.

The Michigan Poultryman...

Only Exclusive Poultry
Paper in Michigan.....

All the practical poultrymen contribute to its pages. Expert poultrymen will give its readers free such information as they may ask for.

All the news of the poultry world. Well illustrated.

For a short time you can get this paper one year for 15c. Send postal for sample.

Michigan Poultryman,
Ithaca, Mich.

Bonniedale Poultry Farm !

S. DOTTES, Barred Rocks, Light Brahmas, Golden Doves, S. C. B. Leghorns, C. I. Games, B. Minorca Cockerels \$2 each, \$5 per 3. M. B. Turkeys \$3 each. Toulouse Geese \$3 per pair.

LT. BRAHMA, S. C. B. Leghorns \$1 each; \$2 per trio.

ROUF CURE. Our make. Cures when eyes are swelled shut. Powder for half pint, small syringe and full instructions 50 cents postpaid.

SCORE CARDS. 17 S. Postal card stock 50 cents per 100, \$3 per 1000. Water fountain galvanized iron, hangs on nail, 1 gallon size 50 cents.

CREAMOLINE. Tablesofcount for quart of water paints your hen roost. Trial bottle 25 cents postpaid. Circulara free.

MRS. MAY TAYLOR, HALE, MO.

LOCK BOX 176,

Poultry Supplies

Ideal Leg Bands 15c per dozen, \$1 per 100.

Smith Seal Bands 25c per dozen, \$1 per 100.

Standard of Perfection each \$1.

Spray Pumps each 75c.

Liquid Lice Killer, gallon can 75c.

Conkey's Roup Cure 25c and 50c a box.

Chamberlain's Chick Food \$2.50 per 100 pounds.

J. D. W. Hall's Guaranteed Roup Cure 50c and \$1 a box.

Reliable Spring Punches each 25c.

Midland Poultry Food at factory prices

Humphrey Bone Cutter F. O. B. Clay Center, \$12.

Oyster Shells F. O. B. Lincoln, Neb., per 100 pounds \$1.00

Lime Stone Grit and Mica Grit F. O. B. Lincoln, per 100 lbs \$1 00

Bone Meal, Raw Bone, Beef Chops, Blood Meal, as cheap as the cheapest.

Sure Hatch Poultry Co.,

Clay Center, Nebr.

The best Folding Exhibition Coop..

Jas. A. Rudge, Palmyra, Neb.

Manufactures and sells the best Exhibition Folding Coop on the market. Pricewise within the reach of all. He also has 50 S. C. B. LEGHORN COCKERELS for sale from 75c to \$3.00 each. Write your wants.

1890

ROYAL BLOOD

1901

SILVER LACED WYANDOTTES FOR SALE.

Winners Big 1 Show at Sioux City, Ia., '98; at Lemars, Ia., '99; at National Fancier's Meet, Cedar Rapids, Ia., 1900, and at Nebraska State Show, Lincoln, Nebr., entered 10 birds in 1901, where we won 1st cock, score 92½; 1st, 2d and 3d cockerel, score 94½, 1st, 2d and 3d pullets, score 93½; 2d hen in large class and very warm competition. We have never had but one bird defeated and never had our birds scored except in the show room. We have a few breeding pens to spare, not quite up to weight, but will soon be, at \$12.50; trios \$7.50.

See cut of birds on page 14. We can't sell quite as good as these at that price but can guarantee they will produce prize winners. Exhibition birds a specialty. We can please you.

I. & N. M. CONNOR, Ponca, Neb.

SAME OLD STORY.**JONES Wyandottes and Sebrights win again at Indianapolis.**

If you are looking for winners in SILVER, GOLDEN, WHITE, BUFF or BLACK WYANDOTTES, G. S. and S. S. BANTAMS just write to JONES, he can furnish you. I won every 1st in Silvers, but cockerel; every 1st and 2d in Golden, including breeding pens; every 1st and 2d in Blacks; every 1st but one in S. S. Bantams; every 1st and 2d in G. S. Bantams.

A Record Unequaled by any Wyandotte Breeder in the Country.

This only proves that the World's Record is upheld from year to year and that my strains keep ahead of the times.

700**Grand Birds for Sale.****700**

Egg orders booked now—\$3 per setting, \$5 for two settings. Send stamp for catalogue, it tells it all. 50 Bronze and White Turkeys for sale at a low figure. Toulouse and Embden Geese. Scotch Collie dogs—best blood.

R. E. JONES, Box 2, Flat Rock, Ind.**IF PANDEMONIUM**

Reigns supreme in your brooders and the chicks die wholesale you can positively check the mortality by using

PURITAN CHICK FOOD,
a readily assimilated and scientifically balanced ration. Use it under positive guarantee.

FREE:—Our new and beautiful 64-page catalogue. Finest ever issued. A mine of information. Send at once to America's largest plant

PURITAN POULTRY FARMS,
BOX 357 A. STAMFORD, CONN.

PETALUMA INCUBATOR**WHY IT HATCHES****...HIGH PER CENTS...**

Success in an incubator depends upon two things:
the right principle and the right construction.
The uniform success of the

Petaluma Incubator

is not a mere "happy so." It hatches 100 per cent of fertile eggs because it's built on the right principles; it is scientifically correct, and because the very best skill and workmanship obtainable are put into its making. It is built right; it does its work right. We put a guarantee behind it which means something. It is hot air machine, and has demonstrated that its regulation of heat, air and moisture is perfect. Made in four sizes—from 14 to 324 eggs. We pay the freight anywhere in the United States. It will pay you to send for our attractive free catalogue.

PETALUMA INCUBATOR CO.,

Box 58 Petaluma, California.

WHITE WYANDOTTES. WINNINGS: At the St. Louis Show January, 1901; 1st Cock; 1st and 3d Hen; 2d Cockerel; 1st and 2d Pullet and pen. Two specials: At the Chicago Show, January, 1901. 1st Cock; one special. Eggs from best pens, \$3.00 per 13, \$5.00 per 20.

ROSS C. H. MALLOCK, 6313 Clifton Avenue, St. Louis, Mo.

Poultry Investigator

Is edited by a practical poultryman of 30 years experience and is full of plain, common sense articles by those that breed poultry and work instead of theorizing. It is just what you want. Send us the names and addresses of 15 persons interested in breeding good poultry and we will send you the **POULTRY INVESTIGATOR** one year for your trouble. Subscription price 25c. Address,

Poultry Investigator Co.,

Clay Center, : : Nebraska

... The New ...

Standard of Perfection

Revised Edition, 1900.

This work is issued by the American Poultry Association. It is a book of over 250 pages, cloth cover, and contains the only official descriptions of the several varieties of fowls. It is on this Standard that all poultry judges base their awards. Every experienced fancier has a copy of this book and every poultryman needs it to learn the requirements to which his stock must be bred.

The Standard of Perfection

—AND—

The Poultry Investigator

One Year, for \$1.00

Address,

POULTRY INVESTIGATOR,

CLAY CENTER, : : : NEBRASKA

POULTRYMEN Your stationary won't look well unless **PRINTED** neatly. I do it it is well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

Buff ORPINGTONS LEGHORNS**and Brown Leghorns**

Young or old stock, first class birds cheap. Hundreds to select from. Eggs all the time. M. & F. HERMAN.
Box 178, Hinsdale, Ill.

BUFF ORPINGTONS—WYANDOTTES, R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock, fit to breed and exhibit for sale. Thos. H. Mills, Poultry Judge, Port Huron, Michigan.

The "Perfect" Hatcher

200-Egg Hatcher and Brooder combined, \$10.00
100-Egg Hatcher, \$6; Brooder, \$5.
Barred Plymouth Rock Fowls and Eggs. None Finer.
Testimonials and Illustrated circular free.

J. A. CHELTON, Fairmount Md.

Rather Risky Business,

this buying untried incubators in these days of the perfectly working and surprisingly simple

Reliable Incubators and Brooders,

where every fertile egg means a strong healthy chick. Guaranteed to do the work and do it as it has never been done before. The 20th Century Poultry Book ought to be in every chickenman's house. You will not part with it for many times its cost. Discusses the poultry business from your view point. Sent anywhere for 10c. Reliable Incub. & Brood Co., Box 4, Quincy Ill.

Incubators..

Built on entirely new principles and the only machine made that will allow the chicks when hatching to come out of the machine in the pure, fresh, outside air at their own will, just exactly the same as they do when hatching under the hen. Guaranteed to imitate nature closer and to hatch equal to any machine on the market. For further particulars address with stamp.

L. P. MEISTES, Troy, Mo.

OVERNMENT POSITIONS.

Nearly 10,000 appointments made last year. Chances better for 1902. Hundreds of those who have been appointed were prepared by us by N. J. Established 1893. Full particulars free concerning government positions, salaries and examinations, when and where held, our methods etc. Write to-day NATIONAL CORRESPONDENCE INSTITUTE, 14-42 Second Nat'l. Bank Bldg., Washington, D. C.

Get a Dandy Keep it 30 days and if you don't like it send it back.

Get a Dandy and see how easy it is to get more money from your hens.

The Dandy GREEN BONE Cutter

is built to increase the profits of poultry keepers. We should like to send you one (price from \$5 up.) If you don't think it does the work after you have tried it 30 days, send it back and we won't find fault with you. Without question it's the most substantial bone cutter built to-day. It has a perfect automatic feed. Produces better poultry food than any other, and it turns more easily.

We Sell Direct

to poultrymen at wholesale prices, saving you all middlemen's and dealer's profits. Get a Dandy and try it for yourself. Our new book, "More Money from Your Hens," is full of good, common-sense suggestions and handsome illustrations.

Stratton Mfg. Co.,

Box 48, Erie, Pa.

UNION LOCK POULTRY FENCE.

For Poultry, Rabbits, Orchards, Gardens, etc.

Patented July 12, 1899

and April 25, 1909.

All main strands are two wires twisted together.

Pickets 3 in. apart. Cables 1 1/4 in. apart at bottom.

Stronger and closer spacing than any other make. Our Union Lock Hog, Field and Cattle Fence, Union Lawn Fence Gates, etc., guaranteed first class.

Your dealer should handle this line—if not, write us for prices. Catalogue free.

UNION FENCE CO., DE KALB, ILL., U. S. A.

Pride of the West...

Is Mackey's own Strain of Bronze Turkeys, bred in line for 15 years. Show record on open book. They are in the yards of many of the best fanciers in the U. S. and Canada. B. P. Rocks, Conger & Felch; Black Langshans, Emory Felch & Robinson, Felch Lt. Brahmas, eggs at all seasons from hens. Young stock now ready to ship. Write for prices. Mackey's Magic Cholera Cure is a sure cure.

HILLSIDE POULTRY YARDS,

Mrs. B. G. Mackey, Proprietor.

CLARKSVILLE, : : : : MISSOURI.

Single Comb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

ora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS,
Ogden, Utah.

White Wyandottes--TRIUMPH STRAIN...

Fifteen years of careful breeding has produced a strain of fowls unequalled in practical qualities and winners of the highest honors in the show room with only four birds in the Bos-on show, January, 1901; won 2nd on Cockerel; 3rd on Hen, commended on Cock and two specials for Best Shape Cockerel. This is a class of our 400 White Wyandottes and after selling my two best males, I breed, raise and own my show birds. Stock and eggs for sale.

W.E. Mack, West Woodstock, Vermont.

Incubator Eggs!

From good, healthy and
vigorous stock

\$6 per 100
\$3.50 per 50

White Wyandottes,
Light Brahmas,
Partridge Cochins,
White Rocks,
Barred Rocks,
Buff Rocks,
S. C. B. Leghorns,

Send your orders early
and we will take
care of you.

**THE WILDWOOD
POULTRY FARM,**
ST. LOUIS, MO.

815 Chestnut St.

Farm at
WEBSTER GROVE, MO.

Morning View Poultry Yards.

....HAVE....

..Barred Plymouth Rocks..

Extra large heavy bone, finely barred,
red, full above the eyes.

Eggs in Season. \$1.50 per Setting.

James M. Perkins,

RAVENWOOD. : : : MISSOURI.

Mrs. J. B. Jones, 3 3 3
Breeder of
Barred Plymouth Rocks
and Mammoth Bronze
Turkeys.....

STOCK FOR SALE. EGGS IN SEASON.

ABILENE, : : : KANSAS.

BUFF WYANDOTTES,

EXCLUSIVELY. Our Buff Wyandottes are bred from best strain obtainable and in line. We breed the pure golden Buff, not the dark red. They're prize winners.

E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

W. J. CHENEY,

Breeder of

Thoroughbred Fancy Poultry,

BOX 68.-CUBA, MO.

500 young birds \$1 each. 100 yearling hens, \$1 each. This stock I have bred for my own use, and is first class; have more than I will require for my breeding pens. VARIETIES—B. P. Rocks Light Brahmas, Partridge Cochins, White Wyandottes, S. C. W. Leghorns, S. C. B. Minorcas. Write for particulars. Circulars Free.

W. J. CHENEY,

BOX 68.-Crawford Co., -CUBA, MO.

For Sale!

SUNNY SLOPE POULTRY FARM ½ mile east of Clay Center; a good 8 room house with cellar, a never failing well with windmill, 2 cisterns, fine Russian cave, good barn, corncribs, hog houses, granary, poultry houses and runs, 500 young, peach, plum, cherry and apple trees just come into bearing.

Two acre hog lot, cherry and plum orchard fenced in for ducks and geese.

Address,

A. B. SHROYER,

Clay Center, Neb.

FRANK MYERS,

Free Port, Ill., U. S. A.
Box 20.

Breeder of

Barred Plymouth Rocks

They are Barred Right and good size. No Culls for sale. Choice breeding Ckls. \$2 to \$5 each.

IDEAL
ALLUMINUM

LEG
BAND.

Also manufacturer of

**Ideal Aluminum Leg
Band : : : :**

The acknowledged leader. 12 for 15c, 25 for 30c, 50 for 50c, 100 for 75c. Samples and circular of Barred Rocks mailed for stamps.

Conkey's Roup Cure

all others. One 50 cent package makes 25 gallons of medicine. Directions with every package. If it fails to cure money refund. Postpaid, small size 50c, large \$1. Conkey's Louse Killer never fails to kill. Try it. 25 cents per package, and 15 cents extra for postage.

Conkey's Egg Food and Poultry Tonic will keep your fowls in perfect health, and produce more eggs than any similar preparation. 25 cents per package and 15 cents extra for postage. **C. E. CONKEY & CO., Cleveland, O.** Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal. Eastern wholesale office: No. 8 Park Place, New York City and S.H. I. Co., Clay Center, Neb. For sale by all poultry supply houses. Agents wanted.

Cure Guaranteed!

THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, especially in pigeons, this cure excels

The Reading Man

is the man who makes the most money now-a-days. He reads up on what he wants, and then goes after it. Do you read? Would you like to read our poultry book, "All Right"? It tells a lot of practical things about poultry, and how to care for and raise it. It tells about our "All Right" Incubators and brooders, and how we ship them anywhere on

40 DAYS FREE TRIAL,

that they may be tested before bought. We send the book free upon request.

Clay Phelps Incubator Co.,

Station 87, Cincinnati, Ohio.

GREER'S PEDIGREED BARRED PLYMOUTH ROCKS

are in my breeding pens for 1902
ers get eggs from the same hens I use for myself. Send for booklet of matings.

Poultry Exhibits Properly Judged.

Eggs from my birds never fail to produce PRIZE WINNERS. The best place to buy eggs is from a breeder who makes a speciality of one variety. "Blue Bird," "Lady Blue" and the best I have raised for three years. Every bird a beauty and barred to the skin. My customers get eggs from the same hens I use for myself. Send for booklet of matings.

O. P. GREER, Bourbon, Ind.

GET MORE HEN MONEY

Feed cut raw bone and double your profits; get more eggs, more fertile eggs; more vigorous and healthy fowls.

MANN'S Model BONE CUTTER

New design, open hopper, enlarged table, new device to control feed; you can set it to suit any strength; never clogs. Sent on

10 DAYS FREE TRIAL. No money asked for until you prove our

New Model will cut any kind of bone, with all adhering meat and gristle, faster and easier and in better shape than any other type of bone cutter. If you don't like it send it back at our expense. Free catalog, explains all.

F. W. MANN COMPANY, Box 1, Milford, Mass.

IT BEATS ALL.

The Natural Hen Incubator beats the old way of setting hens ten times over. 100 egg hatcher costs only \$2. 94,00 sold principally by agents. We want 5,000 active men and women agents for the new season. Special terms with you—a large margin of profit. 100 egg formula and catalogue sent free, if you write today. Territory may be gone tomorrow.

NATURAL HEN INCUBATOR CO., B 11, COLUMBUS, NEB.

DON'T SET HENS

The same old way of setting hens is 10 times more expensive than the new plan. 100 egg hatcher costs only \$2. 94,00 sold principally by agents. We want 5,000 active men and women agents for the new season. Special terms with you—a large margin of profit. 100 egg formula and catalogue sent free, if you write today. Territory may be gone tomorrow.

NATURAL HEN INCUBATOR CO., B 11, COLUMBUS, NEB.

GOT A DOLLAR?

Invest in our choice Fruit Trees, Shrubs or Vines. They are well rooted, healthy and true to name. **Trees** Send a trial order today. Due bill good for 25 c and Catalogue in German or English free. WE PAY FREIGHT ON 10 ORDERS.

25 Grafted Apple Trees for - \$1 00
25 added Peach Trees for - \$1 00
40 Concord Grape Vines for - \$1 00

**Fairbury Nurseries, Box 50,
Fairbury, - - - Nebraska**

F. A. CROWELL,

Granger, : : : Minnesota.

Has some fine Breeding and Exhibition Buff Orpingtons yet for sale, also Indian Runner Ducks at \$5 a trio. Circular free.

Silver Lace Wyandottes
White Wyandottes : : :
Buff Leghorns
Pekin Ducks...

All first class stock. Prices reasonable. **MRS. W. E. TIBBITS,
Imperial, Neb.**

High Hill . . .

Poultry Yards

Bronze Turkeys and Buff Rocks.

Turkeys are bred from prize winners and are winners, making almost clean sweep wherever shown. Young Toms \$5 each; Pullets, \$2.50 to \$3.00 each. My Rocks are noted for shape and orange colored legs. 90 point; Co. Kerels, \$2.50 each; 91 to 92 1/2 point Cockerels \$3.00; each Pullet not scored, \$1.00 each.

Mrs. Wm. Rogers, Box 74, Sleda, Mo.

Black Langshans

Large, vigorous stock, free from disqualification; up to standard weight; winners at Clay County Show. A fine lot of Chicks for sale. Prices reasonable. Eggs for sale in season. Address,

MRS. N. W. JOHNSON, Clay Center, Neb.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

GOLD MEDAL AND HIGHEST AWARD

AT THE PAN-AMERICAN, OCTOBER, 1901, WERE PLACED ON

THE CYPHERS INCUBATOR

Time and time again the Cyphers 360-egg machine in the hands of our customers has hatched upwards of 300 CHICKS FROM 360 UNTESTED EGGS. Allowing ten chicks to the hen, IT WOULD TAKE THIRTY HENS TO HATCH 300 CHICKS.

THE EVIDENCE:--

"My latest batch was 345 chicks out of 360 eggs."—J. F. Ramsey, Mortonville, Pa.

"I got 305 chicks out of 318 fertile eggs."—Edw. Sharpe, Genoa, N. Y.

"I hatched 344 chicks out of my 360-egg Cyphers."—Herman Friedl, Haskell, Ind.

"From 360 eggs we hatched 347 of the brightest, strongest chicks I ever saw."—Frank B. Taylor, Prompton, Pa.

"From my No. 3 Cyphers, holding 360 eggs, we hatched 311 chicks."—L. R. Hobart, Lake Crystal, Minn.

"Out of our largest size incubator I hatched 314 good, healthy chicks."—H. Murr, Gordonville, Pa.

"My incubator holds 360 eggs and from one loading I got 301 chicks."—Jas. C. Myers, Oakes, Pa.

"One hatch I obtained 327 strong, healthy chicks from the 360-egg Cyphers."—Sprague Bros., Florence, O.

Think of the work and the worry in caring for the thirty hens it would require to hatch 300 chickens, ten to each hen!

FIVE MINUTES, morning and evening will take perfect care of the Cyphers 360-egg incubator—THIS WE GUARANTEE:

ALL OF LIFE ARE DOING AS WELL AS THE FEW ABOVE.

LITERALLY THOUSANDS OF persons in EVERY W. QUOTED, and the smaller sizes of Cyphers Incubators (60, 120 and 220 eggs) do precisely as good work as this largest size, on this you can absolutely depend.

While you are about it, WHY NOT BUY THE BEST and know that you are right?

Illustrative descriptive 32 page circulars, English, German or Spanish. FREE ON REQUEST. Complete catalogue 196 pages, 8x11 inches, 10 cents in stamps for postage. Ask for Book No. 122 and address our nearest office.

CYPHERS INCUBATOR COMPANY

BUFFALO, N. Y.,
Court and Wilkeson St.

CHICAGO, ILL.,
325 Dearborn St.

BOSTON, MASS.,
34 Merchants Row

NEW YORK, N. Y.,
8 Park Place.

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one piece. Nothing to stray. The neatest and strongest coop on the market.

Wm. MILLER, North Bend, Neb

Barred Rocks . .

That have made a National Reputation. Bred in all their purity. Grand in size and color. Eggs and stock from my yards will start you right. Cockerels from \$2.00 up; eggs \$2.00 per 13, \$5.00 per 40.

GEO. H. WALLACE

Box 101, Navau, Minn

SPECIAL BARGAIN SALE.

The high price of feed compels me to close out my surplus stock of S. C. Br. Leghorns. Will give special bargains for next thirty days. This stock is sired by Boston and Chicago prize winners. I have some fine Pups for sale, 1 Newfoundland, 1 St. Bernard and 1 Great Dane. These pups make extra fine watch dogs. I am also making a special offer on Grant's Practical Brooder to introduce it. Write for circular at once.

D. W. GRANT,

ALMENA, KANSAS

Buff Orpingtons

The Coming Breed.

W. H. BUSHELL, Importer and Breeder.

DAVID CITY, : : : NEBRASKA

Winnings at the Nebraska State Fair Sept. 1-7, 1901. Entered 13 birds, won 1-2 on Cock, 1-2 on Hen, 1-2 on Cockerels, 1-2 on Pullets, 1st on pen of chicks. Every bird a prize winner. Also winners at Ill. State Poultry Show of four first premiums 1899, and Nebr. State Poultry Show four first premiums. Young stock for sale in pairs, trios and pens only. Single Ckls. for sale.

LIGHT BRAHMAS.

Prize-winning stock, first prize at the Great St. Louis Fair. Of four entries at Kansas City, Mo., won 1 first, 2 seconds, 1 third. Stock and eggs for sale. Write us

STECKER BROS.,

4639 Cottage Ave., St. Louis, Mo

J. W. Eastes . . .

Buff Orpingtons. R. C. W. Leghorns, Barred & White Rocks, W. C. P. Bantams, Belgian's Hares, Eggs. Stock in season. Agents wanted. Thrifty Prizes; silver cup last year.

Galesburg, . . . Illinois.

Brief Business Catchers.

30 WORDS
SINGLE INSERTION
50 CENTS

Under these headings cards of **THIRTY WORDS** or less will be inserted for **FIFTY CENTS** a single insertion, or twelve insertions for **THREE DOLLARS**. No display can be allowed and all cards must be uniform in size and style. A change in makeup allowed each quarter.

30 WORDS
WITH INVESTIGATOR
1 YEAR \$3.00

FOR SALE! Rose Comb Black Minorcas in singles or trios also Buff Leghorns and Buff Rock Ckls., the best of stock for \$1.25 each, or \$3 for 3. Write us at once. C. E. Olson, Colon, Nebr.

BUFF ROCKS. Breeding and exhibition stock for sale. Write at once for description and prices. Satisfaction guaranteed or money refunded. Tell us what you want. F. Winkle, Appleton City, Mo.

C. E. DUNLAP, breeder and buyer of thoroughbred chickens. Can fill your order for any breed or strain, from the yards of reliable specialists. Prices reasonable. Correspondence solicited. Yours Truly, C. E. Dunlap, Liberal, Kans.

BLACK LANGSHANS, best winter layers, best rustlers, best all purpose fowls, also handsome. I take great pains to have the best and largest stock. Large fine Ckls, \$1 each. Oscar Jenne, Liberty, Nebr.

FOR EXCHANGE. A 60-egg Sure Hatch Incubator, for Exhibition B. B. R. Games. Must be first class stock. A. J. Williams, Clay Center, Nebr.

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert K. Sweet, 364 Mosley St., Elgin, Ill.

BLACK LANGSHAN. W. P. Rockall old stock for sale at \$1 each, young white Pekin ducks 6 for \$4.00 all from high scoring stock. Mrs. Henry Shrader, Berlin, Nebraska.

J. W. WHITNEY, Chatham, Ohio, Poultry Judge. All Varieties Private scoring and expert mating a specialty.

40 GOOD WHITE WYANDOTTES for sale cheap if taken soon. C. E. Genoways, Aurora, Nebr.

FINER AND CHEAPER than ever, Buy early. Games, Heathwoods, Irish and Mexican Grays, Blks. Reds; Tornados and Cornish Indians. Free illustration circular. C. D. Smith, Fort Plains, N. Y.

Fine Warr. White Holland Turkeys - - \$1.75
Pure Bred Red Belgians - - - \$1.00
Pure White Rock Cockerels - - - \$1.00
Pure White Wyandots - - - \$1.00
New Strain White-breasted Guineas - \$0.75
All above from prize-winning stock and line bred. Catalogue sent.

J. C. BAKER, Proprietor.
White Plume Farm, Richtfield, Ill.

ROSE COMB WHITE LEGHORNS

If in need of a good cockerel to improve your present stock, write me, as I have twenty fine cockerels bred from St. Paul and Mitchell winners that must be disposed of.

J. F. Rehnelt, - - - Tripp, S. Dakota

If you want . . .

Belgian Hares

Call on or write to

OLD ORCHARD RABBITRY, Old Orchard, Mo.

Or 2003 Clark, Ave., St. Louis, Mo.,

WM. G. STEINICKE, Mng'r.
100 Hares to choose from.

EGGS FOR SALE from Rose and Single Comb White Leghorns, White Rocks and Light Brahmas, \$1.50 per setting of 15 eggs. Write wants. John H. Rownd, Dowas, Kas.

ROSE COMB White and Rose Comb Brown Leghorns, White and Silver Laced Wyandottes, also Rouen Ducks. Eggs in season, \$1.81; 39. 82. Duck eggs \$1 per 11. J. W. Cook, Poneto, Ind.

BUFF and BARRED ROCKS, Buff Leghorns, B. B. Red Games, Pekin Ducks. Fancy Pigeons, very fine lot of stock for sale. For prices write. Utz Poultry Yards, Estherville, Iowa.

BUFF TURKEYS: Pure buff throughout No white wings and tails. Large birds and ready to ship. Mrs. T. G. Smith, Polo, Ill.

100 S. HAMBURGERS. Stock for sale. Eggs at prices to suit the season. Stock in good condition fashionably bred and artistically marked. Rev. G. A. Chamblin, Moran, Kansas.

MEADOW BROOK farm has for sale Pekin Ducks, Light Brahmas and B. Plymouth Rock Cockerels at \$1 each, Toulouse Ganders, and M. Broke Toms at \$2 each. Poi and Chica hoes a matter of correspondence J. D. Grimes, Chamber, Neb.

WHITE PLYMOUTH ROCKS a specialty. 1 yr old hens and this year's pullets, and cockerels for sale. Old stock score 92 points and up to 954. Write for prices. Geo. N. Wood, Weldon, Ia.

SUNNY SLOPE FRUIT AND POULTRY Farm, O. F. Austin, Dearing, Kan., White Rock Specialist. Eggs, Frank Heck and John Hughes strains. 15 cockerels for sale Strawberry plants—best varieties. Square treatment.

PARTRIDGE COCHINS a specialty. The cream at Chicago and Cedar Rapids, 1901, 150 young-ers for sale after October 1st, finer than ever, superior feathering, shape and color. All awards satisfaction guaranteed. U. J. Shanklin, Wanbeck, Iowa.

FINE STANDARD BRED BIRDS.

For sale after September 1st of following breeds:

Barred Plymouth Rocks, \$1 to \$3 each. Light Brahmas, \$1.50 to \$3 each. Buff Cochins Bantams, \$1.50 to \$3 each. A few large 2-yr. old Toulouse ganders at \$3 each. Pekin ducks of standard weight at \$2. each

MRS. EUGENE HOLLARD,
Highland, Ill.

Watch Houston's Show Record this Winter.

He will make some of the boys smile, and girls too. His stock has always won wherever shown.

B. P. R. and Buff Orpingtons. I have 3 Trios left to sell of Buff Orpingtons. \$5, \$7 and \$10, and one pair \$12. Have been booking orders for eggs for some time. Rocks all sold.

A. L. HOUSTON, Keota, Ia.

I HAVE FOR SALE at a bargain 30 Buff Cochins, 25 Buff Cochins Bantams, also Golden Wyandottes and Barred P. Rocks that are extra good. Write your wants. H. Gregory, Wayne, Neb.

FOR SALE— a \$12 Humphrey Bone Cutter, nearly new for \$8. Also a Buff Orpington cockerel, weighs 9 pounds; will make an excellent breeder. Price \$5.00. Louis Mogensen, Racine, Wisc.

WHITE PLYMOUTH ROCKS exclusively. A few choice cockerels for sale; took 1st and 2nd premium at S. O. S poultry show. Write for prices. W. W. Matsoo, Stromsburg, Nebr. Route No. 2.

BARRED P ROCKS: Thoroughbred, farm raised. Good birds, good scores, give good satisfaction and good results. Eggs that hatch, \$1.00 per 15. Prices for birds as reasonable. If convenient please enclose stamp when writing for particulars.

Miss A. Sargent, Sarcoxie, Mo. Box 87.

WHITE H. TURKEYS. 1 W. Rock ckl., score 94½ by Russell, for sale. Also eggs from D. Brahmas Brown Leghorn, B. Pekin and Game Bantams. Expert Judge. P. M. Cooly, Milton, Ia.

PEACH GROVE POULTRY FARM. I have a few fine Black Langshan Cockerels for sale cheap if taken soon. Mrs. J. W. Stratton, Blue Hill, Neb.

BUFF ROCKS, BUFF COCHINS—evenest lot in the west. Have always won 1sts in best shows. Score 90% to 94% by Rhodes. Number 90 cheap. Rob't Larner, Ravenwood, Mo.

NEW SURE HATCH Incubators and Brooders for sale cheap. Address Mrs. J. T. Clark, 26th & Y Sts., Lincoln, Nebr.

MAMMOTH BRONZE turkey and white Pekin duck. Large fine specimens for sale at reasonable prices. Our stock is as good as money could procure. Mrs. E. I. Mathews, Morning Sun, P.J.??

Silver Wyandottes

I have 100 Silver Wyandotte females for sale at \$1 to \$1.50 each; my last season breeders. Want to get them out of the way of the young birds; these are bargains.

R. S. TRIMBLE, Somerset, Ky.

We Sell.

Hall's Guaranteed Roup Cure. Absolute sure cure; price 50c and \$1.00. Hall's Guaranteed Cholera Cure, a prevention for all diseases; price 50 cents and \$1.00.

Hall's Egg Model

an absolute necessity in operating incubators. Price 50c. Address,

Poultry Investigator,
Clay Center, Neb.

WM. TYRRELL AND WIFE, Perry, Kansas.

The above is a sample of over 200 photos that are in the SURE HATCH INCUBATOR COMPANY'S FIFTH ANNUAL CATALOGUE. The catalogue is free for the asking. Contains page after page of practical poultry information, it should be in the hands of every poultry-raiser. Those who use the SURE HATCH INCUBATORS are making a success, are proud of their SURE HATCH INCUBATORS and are friends to the SURE HATCH INCUBATOR COMPANY. Nothing short of good honest machines and square treatment would do this. Good material, simple and positive in construction and operation is what counts - hatching the eggs is the thing.

Good work for the inexperienced as well as for the experienced. The machine and results guaranteed. This is a safe proposition. The purchaser runs no risk. A postal card will bring you the handsome, big catalogue.

Address nearest office.

SURE HATCH INCUBATOR CO., Clay Center, Neb. or Columbus, O.

Golden Wyandottes

Highest Grade, Healthy Vigorous Stock, from careful Matings.

S. P. VAN NORT, OLD ORCHARD, MISSOURI.

1st, 2d, and 3d pullet and 3d c'h'l at St. Louis Show, Jan., 1901. Score 94-92½-91½ and 91½ by Butterfield. 3 seconds at same show 1900. 1st and 2d on pair at St. Louis fair. Eggs for hatching, \$2 per 13. Stock for sale. Write for full information

Poultry Supplies

The Best and Cheapest.

Lice Killers, Markers, Remedies, Incubators, Exhibition Coops, Egg Cases, shipping Coops and Boxes and everything to make poultry raising pleasant and profitable. Best seeds that grow. Nearly 20 years' experience. Send for free Catalogue.

First Premium at State Fair 1901

Archias' Seed Store, ☞ ☞ ☞

Pure crushed shell.....	per 100 lbs \$	75
300 pounds for.....		3.50
Raw bone meal fine or coarse per 100 lbs		2.00
Mica crystal grit.....	"	.80
Blood meal.....	"	2.55
Meat meal.....	"	2.25
Meat scraps.....	"	2.25
Chick feed.....	"	1.75
Sunflower seed.....	"	1.75
Bird seed 8c lb; 10 lbs 75c. Flood's and Flood's rump cure, 50c. Leg pads 80c per 100.		

Sedalia, Missouri.

BUFF WYANDOTTES

BUFF P. ROCKS . .

Bred from my Boston, Omaha, Kansas City, and Topeka prize winners. Old and young stock for sale. A large

flock to select from. Prices reasonable.

W. J. GOW, Norfolk, Neb.

White Wyandottes.

First and second premiums at Minneapolis, poultry show Dec. 19 to 21. Eggs from birds scoring 93, 94, 94, 94, 95½ cockerel 94½, \$1.50 per setting, 2, settings \$2.25. Few birds for sale.

W. H. Swartz, Minneapolis, Kansas.

White Leghorns.

Layers and winners. An inducement to buy at once and of us—tested breeders, hens \$8, \$10 and \$12 per dozen. Cocks \$1.50 to \$2.50 each. Scottish Terrier puppies \$5.

PRACTICAL POULTRY FARM,

R. French, Mgr. Box 47, Ford City, Mo.

High class stock for sale!

Barred and Buff Plymouth Rocks and S. C. W. Leghorns. Can furnish show birds for fall fairs. Drouth prices. EDW. C. WEEKS, Eldon, Mo.

Barred Plymouth Rocks.

We have Quality and Quantity. Farm raised prize winning stock, cheap for quality. If you want Rocks write us.

B. LOUDEN, Clay Center, Nebr.

Barred P. Rocks...

Extra fine, Extra large, Extra color

In the show room they have shown their excellence, have scored from 90 to 94 by prominent judges. Write wants. C. F. HINMAN, Friend, Nebraska.

HORTHAND and BOOKKEEPING.

Study at home and take a higher salary. Investing a little time and a little money in a business course with us and the dividend will never cease. All subjects TAUGHT BY MAIL. Complete course also in Engineering, Journalism, Science and Languages, etc. Write for free booklet. NATIONAL CORRESPONDENCE INSTITUTE, 1400 Second Nat'l. Bank Bldg., Washington, D. C.

Send Stamp for catalogue of
...WM. H. WIGMORE'S...

POULTRY AND CATTLE

—SPECIALTIES—
PHILADELPHIA, PA.

Catches Them Coming and Going,

The Greatest Bait to Poultrymen. Practical, Curable, Cheap, Convenient. A permanent fixture for all times. The Spider or Midge Louse can not exist where this system is in use. Do not put it off, but send for circular or send \$2.50 for trial dozen and be convinced.

SHRADER & BUCK,
BUCYRUS OHIO.

POULTRY CUTS at CUT PRICES.
Harper Eng. Co., Columbus, O.

May I "SHOW YOU"

That we raise as good Barred Rocks in Iowa as are sold by eastern breeders. Eastern price \$10, will sell his equal for \$5, or money back. If you buy a \$5 eastern bird I will beat him for \$3. Try me. CORWIN JONES, Sidney, Iowa.

P. Hostetler,

EAST LYNNE, MISSOURI.
Breeder of a good laying strain of gilt edge....

Barred Plymouth Rocks.

and best laying strain of
..S. C. White Leghorns..
At low down prices.

A HOON FOR POULTRY KEEPERS.
BETTER than a GOLD MINE.
We will tell you how we made our hens pay over 40 per cent profit. Merely send your name and address to Wayide Poultry Co., Clintonville, Conn.

Barred P. Rocks**EXCLUSIVELY.**

I have a number of early hatched cockerels that are good in all sections, and really poor in none, that I am offering for a short time only at \$1 and \$2 each. A few pullets to spare at \$1 to \$5 each. All farm raised.

W. S. RUSSELL,

Box 1, Ottumwa, Iowa.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

SHORT STORIES

bring high prices. Thousands of good stories which might easily be made salable make up the great mass of "rejected manuscripts." Our School of Journalism, in charge of successful authors, criticizes, corrects and revises, as well as teaches how to write. Write for booklet. NAT'L CORRESPONDENCE INSTITUTE 24 Nat'l Bank Bldg., Washington, D. C.

Sure Hatch Poultry Company

Has the largest aggregation of thoroughbred poultry in the west.

We import, breed and sell
All Varieties.

Each variety is bred separately on a farm. No chance for mixing up. Prices reasonable. Stock the best. Write your wants. Address,

Sure Hatch Poultry Co.
Clay Center, Neb.

Tiffany's paragon Lice Killer.

Kills lice and mites on poultry, dogs and animals, is the strongest and best lice killer made. With our double tube sprayer you can save one half the liquid and peuet rate all cracks and spray the bottom of the house where you find the mites or spider lice. It gets there every time. Every can is guaranteed or money refunded. Write and learn how to get a Sprayer and can of Lice Killer FREE.

Tiffany's Paragon Poultry Powder.

Kills lice on heads of baby chicks and turkeys. Kicks on dogs, ticks on sheep and lice on cattle and horses. Is a powerful disinfectant, keeps moths from your clothing and carpets. A large, free sample for 10 cents to pay postage. We give liberal terms to agents. We want one in every town.

Always use the powder before setting the hen.

THE TIFFANY COMPANY, - - - Lincoln, Nebraska.

BONANZA RABBITRY, ESTABLISHED IN 1885

Founders of the first herd of pedigree Belgian Hares to the world. The first to establish a system of registration for Belgians. The first to produce hares exceeding the standard weight and develop superior colors. Holder of the world's record for prize winnings.

Our sales for 1900 were over 5,000 head. Send 10 cents for the most complete and most beautiful 36-page catalog ever published.

Bonanza Rabbitry Manual, 4th edition, just coming from the press, \$1.00, written by Dr. B. C. Platt, the foremost authority on the subject, president of the National Association of Belgian Hare Judges; professional instructor of Belgian Hare Institutes; originator of the Decimal System of Judging and score card adapted to this system; inventor of Bonanza Tatting Mark for Belgians; inventor of the Perfect Belgian moulded in metal, presenting the ideal colors, also perfection in quality shape and size.

Address **DR. B. C. PLATT, 2741 N. Broad St., PHILADELPHIA**
Permanent Eastern Office and

Want a
GREEN
Bone Cutter?

The only ball bearing bone cutter made, is

The Adam,

runs easily, cleans itself, makes bone cutting play. Pays for itself in the egg basket. Cuts clean, fine shaving. No slivers, no rough pieces. Will make your hens lay. See our new Catalog No. 6, before you buy. Free.

W. J. ADAM,
Joliet,
Ills.

THE EASY BONE CUTTER

HUMPHREY

There is no one thing which has done more to make poultry raising profitable than the feeding of green bone. There is no nothing which has done so much to make feeding green bone possible as the HUMPHREY Green Bone and Vegetable CUTTER.

Why? Simply because the Humphrey is the only machine which a poultry raiser can use without deciding that it is more trouble than it is worth. That's why the Humphrey is so rapidly displacing all other machines. You find no Humphrey machines standing idle in the back yard. People who buy them, use them. It is the simplest in construction (only three working parts) and the easiest turning bone cutter made. It's the open-hopper machine—no chopping bones to pieces with an axe to pack them in a cylinder. If the Humphrey isn't the best machine, you don't want it. Try it and see.

We Guarantee that it will cut more bone, in less time, with less labor than any other bone cutter made; that it will cost less for repairs and give better general satisfaction all around.

If it doesn't do it, you get your money back. Try it for yourself and see. It's simply great for cutting vegetables and kraut. Send for our Book; it gives much valuable information, also contains blanks for a year's egg record.

We send it free on request.

HUMPHREY & SONS, Box 70, JOLIET, ILL.

SALES AGENTS.

JOSEPH BRECK & SONS, Boston, Mass.
JOHNSON & STOKES, Philadelphia.
GRIFFITH & TURNER CO., Baltimore.
SURE HATCH INCB. CO., Clay Center, Neb.
E. J. BOWEN, Portland, Oregon, Seattle, Wash. and San Francisco.

GINSENG...

The great Chinese Root. Immensely profitable, \$6 to \$12 a pound. Illustrated circular, fullest instructions, best published, with prices for plants and seeds, 10c. Buy direct and save 50 to 100 per cent in prices. Our own farms in California. Mention paper.....

Harlan P. Kelsy,
Tremont Bldg. Boston, Mass

B. B. Red Game Bants,
Buff Pekin Bants,
Buff Wyandottes,
Buff Leghorns,
Buff Rocks,

My stock is as good as can be had any where and have won in all principal shows in Illinois and Iowa, and score equal to the best.

D. LINDBECK,
Bishop Hill, : : Illinois.

JUST ISSUED
NEW
EDITION

Webster's **International** **Dictionary**

New Plates Throughout
25,000 New Words

Phrases and Definitions

Prepared under the direct supervision of W. T. HARRIS Ph.D., LL.D., United States Commissioner of Education, assisted by a large corps of competent specialists and editors.

Rich Bindings. 2364 Pages
5000 Illustrations

Better Than Ever for Home, School, and Office.

We also publish
Webster's Collegiate Dictionary
with Glossary of Scottish Words and Phrases.
"First class in quality, second class in size."

Specimen pages, etc. of both books sent on application.
G. & C. MERRIAM CO.
Publishers
Springfield, Mass.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

Cornish and White Indian Games.

Stock for Sale.

J. C. NAUMAN, Clay Center, Nebr.

CHAMBERLAIN'S PERFECT CHICK FEED.

BEYOND COMPARISON.

WORLD'S CHICK FEED OF TO-DAY.

CHAMBERLAIN'S PERFECT CHICK FEED, like everything else that has merit, has its imitations. DON'T BUY TRIBUTE. Insist on having the only Original Dry Feed. Stamped on each sack "Chamberlain's Feed, Kirkwood, Mo." All others are worthless imitations. Nothing "just as good."

GOOD MORNING SISTER

I am ready for Chamberlain's Perfect Chick Feed. DRY AND ALWAYS READY FOR USE. LITTLE GOES LONG WAY.

No Bowel Trouble when Chamberlain's Chick Feed is properly used. It is the fine mixture in Chamberlain's Feed that has made the name famous. For incubator chicks, for all chicks until 5 months old.

100 Lbs. \$2.50. 50 Lbs. \$1.50. 30 Lbs. \$1.00.
For the Broiler Man, the Fancier and the Farmer. Saves Time and Money.

Chamberlain's Hen Feed will make your hens Lay, 100 Lbs. \$2.00.

Factory and Shipping Depot, 302 N. Commercial St., ST. LOUIS, MO.

FOR SALE AT KIRKWOOD PRICES, \$2.50 PER 100 LBS., AT FOLLOWING AGENCIES:

Sprague Commission Co., Chicago, Ill.; Sure Hatch Incubator Co., Columbus, Ohio; J. Wilder & Co., Cincinnati, Ohio; Huntington & Page, Indianapolis, Ind.; Iowa Seed Co., Des Moines, Iowa; Wernick Seed Co., Milwaukee, Wis.; Sure Hatch Incubator Co., Clay Center, Neb.; Ripley Hardware Co., Grafton, Ill.; R. A. Pike & Co., Minneapolis, Minn.; H. McK Wilson & Co., St. Louis, Mo. If friends of my Feed in the East have trouble getting my feed write direct to me for prices.

Is It Wise to Guess at Results

when you may be absolutely sure about it!

If the eggs are good and you put them in a

Reliable Incubator

and follow instructions, you are sure to get a satisfactory hatch. If you put the chicks into a

RELIABLE BROODER

you will raise every one that could be raised in any other way. Our 20TH CENTURY POULTRY BOOK tells why and a hundred other things every poultry owner should know. Sent for 10 cents. We have 115 yards of thoroughbred poultry.

Reliable Incubator and Brooder Co.,
Box A-25 Quincy, Ills.

Jackson Boulevard Rabbitry

Royal Blood English Belgian Hares.

All animals English prize winners and from imported English parents. The renowned Golden Ball (doe) and Lord Salisbury at the head of the herd. Angora Cavies (Our Specialty), Abyssinian Cavies, For Pleasure and Profit. Peruvian Cavies, English Cavies, Both Imported and Domestic. The Angoras with their long, silky tresses and musical little voices have not their equal. Write for special descriptions and prices.....

MRS. GEO. D. HAWLEY,
2166 Jackson Bvd. Chicago, Ill.

WO RACKS O TEXAS

Effective March 10th, 1901,
the

FRISCO LINE

Announces the Opening of its
Red River Division
...To...

Denison and Sherman,
Texas.

Through Train Service will shortly
be established from St. Louis and Kansas
City over the

Shortest Line to Texas

1st Pullet, N. W. Missouri, 1899; 1st Hen, N. E. Missouri, 1900. Score, 95.

At the Big ..St. Louis Show..

January, 1901—1st Cock; 1st, 2d and 3d Hens; 1st and 3d Cockerel; 2d and 3d Pullets and 1st Exhibition Yard, and N. W. Missouri and N. E. Missouri, 1899-1900, more prizes than all other Langshan exhibitors combined—all my own breeding. If you want the very best at a low price write me.....

L. E. MEYER,
Bowling Green, : Missouri

30 DAYS TRIAL

Hatch Every Good Egg

Or Don't Keep It.

Send 2 cents for Number 102 Catalogue

SELF-REGULATING BUCKEYE INCUBATOR CO. SPRINGFIELD

50 EGG \$5
SIZE \$5
100 EGG \$0.50
SIZE \$1
200 EGG \$15
SIZE \$15

SECOND PULLET, BOSTON, 1900, FIRST
HEN AND CHAMPION AT PHIL-
ADELPHIA, 1900.

Latham's Victory at Philadelphia Show, 1900.

1st, 2d, 3d and 4th Hens—2d Pullet.
1st and 3rd—Exhibition Yards—Eight
Special Prizes, including the

**They Won
on
Their Merits**

Champion Barred P. Rock Female.

In quality of stock shown the Philadel-
phia show stands one of the hottest ever
held. I made my GRAND RECORD ON
BIRDS BRED AND RAISED ON MY
FARM. Send for Illustrated Circular and
descriptions of Matings.

Eggs

I will sell a LIMIT-
ED NUMBER of
Eggs at \$5.00
per 15.

**Choice Breeding Stock
For Sale!**

**Beauty and Utility Strain Barred
Plymouth Rocks.**

**Satisfaction Guar-
anteed.**

Address

C. H. LATHAM, BOX G.....
LANCASTER, MASS.

Our Motto, "Virtute non Astutia"

HARES BY THE HUNDREDS

IMPORTED - AND - DOMESTIC

From such Fashionable Strains as the following Champions:

Fashoda, Edinboro, Guinea Gold, Nonpareil, Unicorn, Dash,
Climax, Grimsby's Star, Priory Prince, Malten Mystery, Pal-
ace Queen, Lord Britain, Etc.

Our Stud Bucks are:

Fashoda Star]
Score 96 by Judge Almond, im-
ported, son of Ch. Fashoda.

Viscount
Score 95 by Judge Finley, im-
ported.

Lythedale
Score 94 by Judge Finley, im-
ported.

Sir Crabtree
Score .93 1/4 by Judge Crabtree,
and other domestic bucks
that will sc 14 to 96.

RUFUS RED BELGIAN HARES

At prices ranging from \$5 to
\$75 per head, pedigree and
score card with each animal.
Unpedigreed market stock,
good color and size, \$2.50 to
\$5 per pair. Hardy Black
Belgians (good to use as nurse
does) at \$10 per pair. Cor-
respondence solicited for spe-
cial price list which may not
be in effect long. Will re-
fund money and pay return
express charges if Hares pur-
chased are not as represent-
ed. Rabbits at Maplewood
and Fayette.

MISSISSIPPI VALLEY BELGIAN HARE COMPANY,

304 CHEMICAL BUILDING, : : : : ST. LOUIS, MISSOURI.

BUFF P. ROCKS Exclusively. Pure
Burdick Gold Nug-
gets. My Buff Rocks are as good as
can be found, and are up-to-date in
every respect. Some fine specimens
for sale; reasonable prices on applica-
tion. Address

MRS. ELLA PATRICK, Clay Center, Nebr.

200 Mammoth Pekin Ducks - 100 White Wyandotte Cockerels

If you need big drakes or cockerels get my prices. Look up my
record. Get my circular its free.

Lincoln, Neb., Box 456

E. E. SMITH.

VOL. 3.

FEBRUARY, 1902.

NO. 12.

Poultry Investigator

ADVANCE TO SUCCESS

25 ¢ a year

A Bird in the Hand

is worth a good many in the shell.
But a bird in the shell
is as good as hatched when
you put it in a

MARILLA Hot Air and Hot Water INCUBATOR.

It's the incubator which gives satisfaction.

It's the incubator which any one can operate successfully. It's the incubator which never fails. If you want a perfect machine, a dependable machine, a machine certain in results, you'll get a Marilla.

It is built of the best material throughout, by the best workmen that we can find.

It has double walls, double floors, double top.

It is absolutely fire-proof.

It has a regulator which is perfectly automatic and holds the temperature within a fraction of a degree.

Its system of ventilation is perfect.

It has thirteen years of success behind it.

It is sold on a positive guarantee to be easier to operate and surer in the hatch than any other incubator made.

It's Without an Equal

***As a Practical Hatcher
For all Classes of Poultrymen.***

Send 4c to-day for our handsome and beautifully illustrated catalogue and judge for yourself. It tells all about the Marilla Incubator, and how to get the most profit and pleasure out of poultry.

**MARILLA INCUBATOR CO.,
Box 97, ROSE HILL, N. Y.**

The Marilla Brooder is an easily managed, and carefully built machine, which takes better care of chicks than any mother you ever saw. Crowding and trampling is absolutely prevented. It is fully described in our catalogue.

WHITE PLYMOUTH ROCKS.

From the best strains in the country "Pure White." Stock and eggs for sale. Prices reasonable.

J. W. HALL, David City, Nebr

Forty-two acres devoted to Poultry.

Nothing Succeeds Like Success!

If you want to succeed with poultry, buy good breeding stock. We have them and at reasonable prices. White and Barred Plymouth Rocks, White and Golden Wyandottes, Rhode Island Reds and Pekin Ducks, Belgian Hares, 75 fine breeding cockerels at \$2.00 to \$6.00. Eggs from our best matings \$3.00 per 15. Duck eggs \$1.50 per 9. At Columbus shows Feb. 1901 and Dec. 1901, 1 won 1st 1st, 22nd 2nd, 6 3rds and 6 4ths.

MILES POULTRY FARM, near Worthington O.

O. P. Miles, Prop.

26 1-2 N High St. Columbus, O.

BUY STOCK AND EGGS from high scoring **WHITE LANGSHANS** and **BUFF ROCKS**. Fine winter layers. Cheap for quality. Eggs \$1.50 per 15. Mrs. L. M. MOWER, Durce Jersey Pigs. W. L. MUMPOWER, Chillicothe, Mo.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered Strain, from a long line of prize-winning ancestors; have made them a specialty for 19 years. Now offering fine exhibition and grand breeding stock of both 1900 and 1901 hatch at moving price if taken soon. Send for illustrated circular with half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Buff P. Rocks Exclusively...

We have Judge Harris' entire stock. These, together with our own prize winners, gives us the best flock of Buff Rocks in the country. We can please you both in quality and prices. Write us if you want winners bred from winners. Pekin ducks, Toulouse Geese for sale.

MRS. FLORA SHROYER
Clay Center, Neb.

WANTED!

250 White Wyandotte Hens and Pullets.
250 White Leghorn Hens and Pullets.
100 White Rock Hens and Pullets
100 Buff Orpington Females.
Will pay cash. Address,
Box 427, Clay Center, Neb.

We Have Those That Win...

Barred Rocks - - White Wyandottes

**WE HAVE
Some - Choice - Exhibition
AND
Fine Breeding Birds
For Sale!**

We have always won at State Fairs and State Shows more prizes than all other exhibits.

T. L. NORVAL, Seward, Nebraska.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS.

Are better than ever as they have farm range. Have 280 young and 30 old ones to draft from the coming sale season. Was winners of all firsts and part second in state show the last two years, also have been winning for customers in strong competition. Satisfaction guaranteed. Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

ARE YOU LOOKING FOR EXHIBITION BIRDS?

BARRED PLYMOUTH ROCKS. With that nice even ring barring to the skin as blue as the sky, and with elegant combs, golden beaks and shanks. Or heavy weight **SINGLE COMB BROWN LEGHORNS.** Elegant combs, fine striping to Hacket and Saddle, and shape to burn. Pullets with that soft even brown color, fine striped hackles and elegant combs. In fact birds that give the other fellow that tired feeling in the show room. If so, address

J. W. WHITNEY, Chatham, O., P. O. Box 1.

Belgian Hares

Best in America, very cheap during special sale. We guarantee satisfaction or no pay. Might exchange for fine clock, piano, gun or music box. What have you? Book free.

E. J. WHITE HARE CO., Brighton, Colo.

Barred Plymouth Rocks

..200 QUICK SALE 200..

We have more young stock than we can handle in cold weather hence make the following prices to reduce our stock. First comes first served.

35 Cockerels, well developed and very large.....\$3.00 each.
35 Cockerels xtra good breeders.....1.50 each.
50 Pullets, well developed and fine.....1.50 each.
50 Pullets, good breeders.....1.00 each.
25 Hens, one and two years old. Good ones.....1.50 each.
5 Cock Birds. Masses of correspondence. Write us what you want and can do you good circular free. Your Truly,

MR. and MRS. A. UPTON & SON, Fairbury, Neb.

MR. and MRS. C. A. BLANCHARD,

BREEDERS OF

White Plymouth Rocks, White Holland Turkeys and Pekin Ducks.

At Nebraska State Poultry show 1901 we won 1st pen, 1st hen, 1st cock, 3d cockerel, which was a prize on every bird entered. At the Nebraska State Fair, 3d to 6th of Sept., 1901, we won 1st pen chicks, 1st hen, 1st pullet, 1st cockerel--a first prize on every bird entered.

We have a fine lot of young stock for sale.

FRIEND,

NEBRASKA.

AFTER THE HATCH IS OVER. D. S. GARBER, BUTLER, OHIO, HIS LITTLE CHAPS, HIS SURE HATCH INCUBATOR, AND THE LITTLE CHICKS ON THE FLOOR.

The above photo is a sample of over 200 that are in the SURE HATCH INCUBATOR Catalogue. Besides the illustrations there is page after page of practical and applicable poultry information. **SURE HATCH**—the name means something; the results verify the name. They are simple and positive in construction and operation. Anyone can run them—they run themselves. Anyone can own them—the price is right. Made of California Redwood and 12 ounce copper. The Redwood cases and copper tanks are guaranteed for ten years, also the results. Sent on trial. If not as represented the purchase price is refunded. If you have not made yourself acquainted with the SURE HATCH INCUBATORS you have missed a good thing. Our Common Sense Brooders make winter out of summer; they make dollars out of baby chicks. For handsome free catalogue address

SURE HATCH INCUBATOR CO., Clay Center, Neb., or Columbus, O.

White
Minorcas
Buff
Cochins
and
Bantams.

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦
I have cockerels in the above named varieties for sale and eggs in season. (Score cards with cockerels). The Wyandottes are Dustin & Major strains direct. B. P. Rocks are Elliotts.

Yours Respectfully,

Pine Lawn Poultry Farm.

L. D. Metcalf, Prop
Wakefield - Nehr

SEED CORN.

Send for
Catalogue

Prize Winners and Mortgage Lifters. Tested and Pure at Farmers' Prices. Twenty Bert Varieties.

Onion Seed! Large Red Wethersfield, Prize Globe Danvers, yields 1,200 bu. to the acre! New seed at 80c per lb. prepaid, if you mention this paper.

Soja Beans and Stock Peas. Best kinds suited to this climate. Big yielder. Cane Seed, Kaffir Corn, Rape, Speltz, Grass and Flower Seeds—

Best Flower and Garden Seeds. Guaranteed fresh at wholesale prices. Nearly \$500.00 in prizes and 100,000 papers free seeds given to customers this year.

Archias Seed Store, Sedalia, Mo

THE GOLDEN POULTRY INVESTIGATOR

EGG

Vol. 3

Clay Center, Nebraska, February, 1902.

No. 12

❧ The Winter Layers. ❧

In practical poultry culture the hen that lays is the hen that pays. And right now is the time the hens should be laying, or at least those early hatched pullets should. If a pullet does not begin to lay in the fall the probabilities are that she will not lay until late in the winter or spring. Does it pay to winter these idle fowls, in order to secure a few cheap eggs in the spring? We believe not, with the average fowls. Of course, there are exceptions, such as in the case of hens which have already earned their keep during their first laying year and which it is desired to breed from another season.

It will take from 30 to 35 cents worth of grain to carry a hen through the winter, and if she does not lay until eggs are down to ten cents a dozen it will take nearly all she will lay during the summer to pay her winter's feed bill, and if she is not able or is not allowed to hunt her own food during the summer she will die in debt to you. The fault may be with the hen or with the owner. Perhaps the environments and food are not such as to induce laying, and then again the hens may not be bred to lay in winter. Winter laying is an inherent trait that is bred into fowls, and when they are so bred this will assert itself just as surely as will any trait of form or feather. Many do not pay enough attention to this point when selecting eggs for hatching and as a consequence have a great

many poor winter laying hens. During the natural winter season every hen that ever does lay is doing her best and when the eggs for incubation are selected, no attention is paid to which hen's eggs are set. Then we get a lot of poultry that are non-producers. We feed and care for them to the best of our ability, but they will not lay. They were not bred for winter laying, but were produced from hens that did most of their laying in the spring and summer and cannot in reason be expected to lay in winter.

The fact has long been apparent to the writer, that if we want winter laying hens we must breed them. They must be from a line of producers and bred in line for that purpose. Promiscuous breeding will not produce heavy winter layers any more than it will produce show birds. But how can we breed this trait into them? is the question we hear asked. This requires time, but is not difficult. Suppose we are to start with a lot of mixed hens and pullets, such as are usually found on a farm or in the flock of a village poulturer, either all one breed or mongrel stock. For the purpose of our illustration it matters not what they are, but we would not advise anyone to go to the trouble to breed an egg strain from any but pure bred fowls. In every flock of this kind there are likely to be found several hens or pullets that begin to lay in the fall, and lay more or less all winter. These are the fowls to

use in the breeding pen the first year. By the use of the trap nest it will be easy to note just what each hen does, but trap nests are not practicable in all cases, and where they cannot be employed it is a good plan to divide the fowls into small flocks, say twenty-five each, when by a little observation we can readily perceive which hens are laying. The practical poulturer can tell a laying hen by her appearance, but there are many who cannot, and if the fowls look so much alike that it is hard to tell the layers, mark each one that you know has laid with a legband or by tying a piece of flannel to her leg. You will then know the number that has laid, and by keeping an egg-record can tell their average production. By dividing the fowls into small flocks the chances of getting a good egg yield are much increased. Fifty hens are as many as should be kept in one flock, and they do much better when the number is reduced to twenty-five. In the spring place only such fowls in the breeding yard as have proven satisfactory winter layers, and by following this course for a number of seasons you will have a strain of fowls that are bred to lay.

A plan we have adopted is to breed from two-year-old hens that as pullets were good producers. When we commenced building up our strain, although we started with high cost, pure bred stock, the average yearly egg yield per hen was only about 120. The fourth year after breeding them we made 180 eggs the first laying year the requirement for a hen to enter the breeding pen.

The greatest profit is in the winter eggs. In order to have fowls at all

we must winter them, and if by an additional outlay of five or ten cents per hen for food or other requirements we can make each hen produce three to five dozen eggs, worth from twenty to twenty-five cents per dozen, during this time that she might be idle, we have really effected a saving of from sixty cents to one dollar on each hen that lays. It is true that winter eggs do not, in many sections, bring a price in proportion to the labor necessary to produce them, owing to a lack of good local markets, yet there are few sections of the country, especially in the north, where a strictly prime article will not bring twenty cents per dozen any time between November 1 and March 1.

In the west eggs are not so high as in the east, owing to a lack of local markets and the cheapness of grain and other foods used to produce them. A really fancy price can only be secured where eggs can reach the consumer within a day or two after being gathered. Such eggs will always bring from five to ten cents per dozen above market quotations if the producer can reach the consumer. At this writing strictly fresh eggs are quoted in the Springfield, Mass., market at forty cents per dozen wholesale, and to our knowledge a number of our poultrymen in that vicinity are getting from five to ten cents per dozen above this price for large brown eggs. Even with high priced grain there is money in producing eggs at such figures, if we have a strain of fowls that are bred to lay in winter.

FEEDING FOR EGGS IN WINTER.

I wish to give a few hints in regard to topic No. 1 in November issue. In the spring of 1900 we received more eggs on an average per hen than ever before. We fed a warm mash of mornings consisting of wheat bran and scraps from the table, and also gave them red pepper once or twice a week. Then we would turn them out and they had access to all the cane seed they cared to eat. When we took the ashes from the stove we always put it where they could scratch for the clear coal, which helped to keep them healthy and in a laying condition. They also had fresh water. As we live on a farm they get plenty of exercise. I think the B. P. Rocks are the best all-purpose chickens. I would be pleased to hear from any one in regard to sheds for turkeys to roost in. I know some think out doors is good enough for them, but ours went in the chicken house last night, as it turned quite cold here yesterday evening.

My Favorite Fowl.

The beautiful Black Langshans are a grand fowl. For an all-purpose fowl none can excel them. You may praise up your Plymouth Rocks, your Wyandottes and all that you consider good all-purpose fowls and never get any that are really better than these. Others may be as good, or at least nearly as good, but take it for beauty, egg production, size and ease of management, you will find an ideal in the Black Langshans.

Did you ever see a flock of them? Were you not charmed by their style and gracefulness? And did you not wish to be the proud possessor of such a grand flock of living beauties? If you never saw such a flock (I don't mean four or five of them, but twenty or thirty, all together, or even more), you have missed a really charming sight. Well, you say that any one kind of birds together look fine. Yes, remarkably so, but while others look well the Langshans look better. That's just the difference. Your white fowls or your parti-colored ones can never glisten and shine and reflect the sunshine as can the glossy black of the Langshans. The male bird as he paces to and fro among the hens is really "the monarch of all he surveys." Stylish, graceful, straight and trim. Always happy unless allowed exposure to storms and cold. In the warm weather, as they are out on the range, you will hear their song of happiness and contentment. In winter, provide them with a warm house and good feed, with litter for exercise, and the same joyful song is everywhere among them.

Do you want wild fowls, those that always want plenty of distance between you and them, and that you must leave the house before they will all go to eating? If so do not get a Langshan. You will find the Langshan a bird that will crowd around you and get under your feet, so that you will be stopped when trying to go through the building. They will even fly upon your arms and are never wild if you treat them kindly.

You want pets and such ones that you can pick up anywhere you chance to meet them, either in the house or in the field. The Langshans will meet the requirements in this case every time.

You want an active fowl; get the Langshan. They are active. The smaller, nervous breeds may get out of the way quicker and fly over your highest fence more often than the Langshan, but that does not make you believe that the Langshans are lazy. They might eat more than they need and get too fat for good results

Mrs. Emma Perkins, Ravenwood, Mo., breeder of Barred Plymouth Rocks. Mrs. Perkins' writings are read with much interest in several poultry papers, especially THE INVESTIGATOR.

if you allowed food to lay before them all the time. But that is not the way to care for fowls. It is a waste to allow food to remain before them all the time.

Now the practical value of them, as regards their profitability. While the foregoing words have given you a fair idea of their beauty and attractiveness, I wish to show wherein lies their true value. Every breed has its claims. The Langshan has as many as any of them. Some breeders claim that no breed will excel the Langshan in egg production. They are good, very good, layers. We never expect a large fowl to lay as well as a smaller one. But if we get a fowl that lays nearly as well as the smaller one, while at the same time it is a large bird and raises large chicks, we may say that we have an ideal bird. That is just where the Langshans come in. They are a fowl that lays nearly as many eggs as any of the small ones, if not just as many. Some may be able to get more eggs from Langshans, while some others may get better results from different breeds. Anyway, the Langshans will give others a close race in producing eggs, and if you count on raising chicks, they will surprise you in results. They will give as good results as any, and even if not better returns than all others they will surpass many. So if they are more beautiful and give as good if not better results than others, why not breed the noble Langshan?

Their large size and early maturing qualities give them prominence for market birds. But, you say, they don't mature very early. You have Leghorns matured in much less time. True, your Leghorns mature earlier, but when matured are not half so

White Langshan hen owned by Mrs. Thos. Hughes, Rock Port, Mo.

large as a Langshan. Wherein lies the choice? Would you give a little longer time for maturity and get a fowl twice as large, or prefer to take the smaller one and allow nearly as much time for it to mature? I would favor the former and choose the Langshan, wouldn't you?

Another objection often brought up. They have a white skin and don't look well in market, you say. Well, did you ever eat any meat of a Langshan? If so you won't try out the objection to their looks. No tenderer or finer grained meat is ever placed upon your table than the Langshan is. Their white skin makes no difference in price when they reach the market. While people prefer a yellow-skinned bird to some extent, any one who knows what a real good table fowl needs to be would select one that is fat, plum and well dressed regardless of its color. I have shipped Langshans to city markets and always received the very best prices. What more can be obtained, and ought there to be any objections to these grand birds? I should say no.

Their solid color gives more ease in meeting standard requirements and at the same time their beautiful, shining color produces an effect that other colors cannot produce. They are excellent setters and excellent in caring for the chicks. They are not persistent setters. While it is natural for them to have a desire to set, it is easily overcome by shutting them in a box or coop for a few days. With an incubator, a few brooders and a flock of good Langshans with proper housing and feed, I would make a success of it. You can do as well if not better.

If you are starting out in the poultry business and want a good all-purpose fowl you will make no mis-

take in getting the Langshan. You say that any one will praise their favorite fowl. While this is true, you can put all the praises together and find that the Langshan is just as good as any and better in some respects, that is, for certain purposes they are better.

PERCY W. SHEPARD.

Towanda, Pa.

FOR POULTRY INVESTIGATOR.

Having raised Belgian hares for several years and sold numbers of them, I will say for the industry it is a business to be learned; and at least one year is required to learn enough to find out if one is fit for the industry. So many buy and simply turn the care (which is all there is to do right) over to the children. Children and hares do not agree on any one point. It takes as much care and judgment to care and breed hares properly as to care and breed Hereford cattle. No wonder at so many getting disappointed after a few months handling hares. They expect too much for a small effort. Every new beginner makes some mistakes. Being too anxious to know about the nest of young ones, they must count them the first day. It is better to stay away for a week. Provide a nest box dark and in a quiet place. Next they will wean the young too soon. Better leave them 3 months than only three weeks. And then draughts must be watched. Do not let a hutch sit in a draught for a minute unless the hares have room to exercise and keep warm. They will catch cold and die. I have had them run in the snow in Colorado, but when I shut them in at night it was in a room where no wind could strike them. Heat killed some fine ones for me here in Indian Territory. They must be kept in the shade in hot weather.

I have had plenty of experience to prove to me that hares are hard to raise and many enemies stand ready to kill—rats, cats, dogs, ants. Yes, ants. They killed a fine litter for Mr. Holden of Chickasha. I have had several does eat their own young, but I am ready to buy all high scoring does that have got in the habit of eating up their own young. I like the fun of curing them; it does me good to fool them a trip. I tan the pelts. I have my shoes laced with strings cut from the skin of one I tanned, at less than half a cent. To leave the fur on and run a sharp razor over the fur and cut the coarse hair off makes trimming for ladies' gowns. Do not neglect to place a box or platform so the old doe can get away from the young. Do not forget the young will

come out of the nest box and get out of sight never to return.

If you are tired of the business, commence eating the surplus stock and see if you do not change your mind about getting rid of all of them. The Kansas City Star started out to bemean the business in an article headed, "Nobody Wants Them Now," and ended up by saying there was money in them raising them for meat prices. So there is. LEW BENSON. Anadarko, O. T.

HOW MAUD SET A HEN.

Maud Muller on a summer's day
Set a hen in a brand new way.
(Maud, you see, was a city girl,
Trying the rural life a whirl.)
She covered a box with tinsel gay,
Lined it snugly with new mown hay.
Filled it nicely with eggs, and then
Started to look for a likely hen.
Out of the flock selected one,
And then she thought that her work
was done.
It would have been, but this stubborn
hen
Stood up and cackled "Ka-doot!" and
then
Maud Muller came, and in hurt surprise
Looked coldly into the creature's eyes;
Then tied its legs to the box. "You bet
I know how to make you set."
But still it stood, and worse and worse
Shrieked forth its wrongs to the universe.
Kicked over the box with its tinsel gay,
And ignominiously flapped away.
Then a bad boy, over the barnyard
fence,
Tee-heed: "Say, Maud, there's a difference
'Tween hens, you know, and it is that
One says 'Ka-doot,' and one 'Ka-dat!'"
Then Maud recalled that the ugly brute
She tried to set had said "Ka-doot!"
And ever since that historic day
She blushes in an embarrassed way
To think of the hobbie she made once
when
She tried to set a gentleman hen.

An Angora Cavia owned by Mrs. Geo. D. Hawley, Chicago, Ill., 206 Jackson, Bldg.

Poultry Association.

Surprised Because of the Excellence of Exhibit.

The poultry show closed on Saturday night. The show was a surprise to those acquainted with such matters, both in the quality of stock exhibited, and in the number of birds shown. The placing of the birds was a feature, the classification was perfect.

The quality of the birds shown was far above the average, every breed having some high-class representatives. All in all, the show was the best ever held in the west.

The prizes awarded are:

BARRED PLYMOUTH ROCK.

Wilson & Ellis, first prize, pen; second prize, cock; second, third, fourth and fifth prizes, for cockerel; second and fifth prizes for pullets.

S. O. Day, Salt Lake, second prize for pen; second for hen, first for cockerel, third for pullet.

C. J. Trump, Salt Lake, third prize for pen, fourth and fifth for hen.

W. J. and J. L. Hancock, Ogden, fourth prize for pen, fourth for cock and third for hen.

A. E. Thorgood, Ogden, fifth for pen, J. M. Bishop, Ogden, fourth for pullets, third for cock.

A. G. Harris, Ogden, first for pullet.

Benjamin Smalley, Ogden, first for cock.

Harry Shibley, Ogden, fifth for cock.

WHITE PLYMOUTH ROCKS.

Frank Foulger, Ogden, first for cockerel.

George Taysum, Salt Lake, second for pen; first, second and third, pen; second for cock, fifth for pullet.

C. F. Dinsmore, North Ogden, first for pen; first for cock; second, third for cockerel; fourth and fifth for hen; first, second, third and fourth for pullet.

WHITE WYANDOTTES.

A. G. Maw, Ogden, second for hen, fourth for cockerel.

J. M. Bishop, Ogden, third for cockerel, third and fourth for hen, fourth for pullets.

Mrs. Grace Taysum, Salt Lake, second for pen; first for cock.

C. F. Dinsmore, North Ogden, first for pen, second for cockerel; first and third for pullets.

SILVER LACED WYANDOTTES.

Frank Foulger, Ogden, second for pen.

BUFF WYANDOTTES.

1. Thornton, first for cockerel, first,

second and third for pullet.

Golden Wyandottes—E. J. Hancock, Ogden, second for cock, second and third for hen.

Black Wyandottes—A. G. Harris, Ogden, first for cock; Wm. Woodfield, North Ogden, first and second for pens, third for cock, first, fourth and fifth for hen; first and second for cockerel; first, second, third and fourth for pullets; E. J. Hancock, second for cock, second and third for hen.

Rhode Island Reds—H. E. Peery, Ogden, first for pens; A. G. Harris, Ogden, first for trio, first for cockerel.

Partridge Cochins—W. J. and J. L. Hancock, Ogden, first for pens, second for cock, first for pullets; E. J. Hancock, Ogden, second and third for pullets, second for cock.

Light Brahmas—E. N. Morrison, Ogden, first for pen, first for cockerel; first, second, third and fourth for pullets; Mr. and Mrs. M. J. Hewitt, Ogden, second for pen; first, second, third and fourth for pen; first for cock, second for cockerel, fifth for pullet; E. J. Hancock, third for cock.

Black Langshans—W. W. Carder, Ogden, third for cockerel; Richard Bowbotham, Ogden, first for pen, first and fourth for cockerel; second, third and fourth for pullets; W. J. and J. L. Hancock, first for hen; Mrs. E. J. Meid, Ogden, second for cockerel; Ashton & Son, Ogden, first and fifth for hen, third for cockerel, first for cockerel.

White Leghorns—P. J. Tyler, fourth for cockerel; W. J. and J. L. Hancock, Ogden, third for pen, second for pullet; W. W. Carder, Ogden, second for cockerel, third and fifth for pullet; J. M. Bishop, Ogden, first for pen, first for cockerel, second and third for hen, fourth for pullet; Benjamin Smalley, Ogden, second for pen, first and fourth pullet.

Mottled Anconas—W. J. and J. L. Hancock, Ogden, first for pen; Louis Peery, Ogden, second for pen.

Buff Leghorns—J. W. Haslam, Salt Lake, first for pen, first for cockerel, first, second, third and fourth for pullet; L. Thornton, Ogden, second for cockerel; T. J. and J. W. Keogh, Ogden, third for cockerel, fifth for pullet.

Golden Polish—T. J. and J. W. Keogh, Ogden, first and second for pens, first, second, third and fourth for pullet, first for hen, first, second for cockerel; A. G. Harris, Ogden, third for pen, third for cockerel.

Silver Spangled Hamburg—Joseph Covington, first for trio.

GAME CLASS.

James Jacobson, Smoke Balls, first

for trio; J. H. Cunningham, Ogden, first for trio; white tail games, first; first for white Pyle games.

Cornish Indian Games—Harmon Peery, Ogden, first pair.

Bantams—W. J. and J. L. Hancock, Ogden, all on black tail Japanese.

Mr. and Mrs. M. J. Hewitt, Ogden, first for trio, White Crested White Polish.

T. J. and J. W. Keogh, Ogden, all on Buff Cochins; all on Silver Duckwing game bantams.

A. Earle Harris, Ogden, all on Red Pyle bantams.

Bronze Turkeys—All to Chas. Barnett, View, Utah.

White Pekin Ducks—All to Carl Poulten, Ogden.

Pigeons—W. J. and J. L. Hancock, Ogden, first for display.

Andrew Miller, Ogden, second for display; first for tumblers; first for Jacobins.

Fred Bateman, Ogden, third for pigeons.

Belgian Hares—Roy Carver, first for display; W. E. Archibald, second for display.

Winings of R. E. Jones of Flat Rock, Ind., at Indianapolis, December 4 to 10, 1901:

S. Wyandottes—First and 4th cocks; 1st, third and fourth hens; fourth cockerel; first and fourth pullets; second pen.

Golden Wyandottes—First, second and third cocks; first, second, third and fourth hens; first cockerel; first, second and third pullets; first and second pens.

Black Wyandottes—First and second hens; first cockerel, first and second pullets; 1st pen.

G. S. Bantams—First cock; first and fourth hens; first and second cockerels; first pullet; first pen.

S. S. Bantams—Second cock; first and second hens; first and second cockerels; first and second pullets; first pen.

A trio of White Wyandottes owned by G. B. Clarey, Fairbury, Nebr.

Fancier's Association of Indiana.

The third annual exhibition of this association, held at Indianapolis, December 4 to 10, was a success in every particular. The annual meeting and election of officers was held Monday evening, December 9, with a large attendance and the following officers were elected: President, Lora C. Hoss, Kokomo; first vice president, C. J. Ward, Irvington; second vice president, Ben S. Myers, Crawfordsville; third vice president, N. E. Woods, Pecksburg; fourth vice president, W. F. Coats, Columbus; fifth vice president, Ed B. Murphy, Carmel; treasurer, H. D. Lane, Indianapolis; secretary, C. W. Hackleman, Indianapolis. The new executive committee is the president, first vice president, treasurer, secretary; Wm. Tobin, Indianapolis, Dr. Jos. Haas, Indianapolis; Dr. D. C. Harrold, Elwood, F. P. Johnson, Howlands and H. B. Miller, Nashville.

Awards on poultry at the third annual exhibition of the Fanciers' association of Indiana, held at Indianapolis December 4 to 10, 1901:

Barred Plymouth Rocks—Entries: Nine cocks, 23 cockerels, 18 hens, 25 pullets and 6 hens: Fourth cock, W. H. Bolinger, Pendleton, Ind.; 4th cockerel, 3d and 4th hens, 4th pullet and 2d pen, Geo. Muck, Edinburg, Ind.; 2d and 3d cocks, 2d cockerel, 1st hen and 4th pen, C. A. Porter, Flatrock, Ind.; 1st cock, 3d cockerel, 2d hen, 1st, 2d and 3d pullets and 1st and 3d pens, Mrs. D. A. Stoner, Rensselaer, Ind.; 1st cock, A. C. Le Duc, Chenoa, Ill.

White Plymouth Rocks—Entries: Seven cocks, 14 cockerels, 18 hens, 30 pullets and 6 pens. Third pullet, Chas. Wagner, New Albany, Ind.; 4th pullet and 4th pen, Bowers & Husted, Elwood, Ind.; 4th cock, 4th cockerel, 2d hen and 1st pullet, J. R. Mathis, Boggstown, Ind.; 1st and 2d cocks, 1st and 2d cockerels, 3d and 4th hens and 2d and 3d pens, John Landis, Edinburg, Ind.; 3d cock, 2d cockerel, 1st hen, 2d pullet and 1st pen, G. M. Johnson, Boggstown, Ind.

Buff Plymouth Rocks—Entries: Four cocks, 20 cockerels, 11 hens, 26 pullets and 6 pens. Third pullet and 4th pen, F. E. Gilliland, Hope Ind.; 3d hen, 1st pullet and 2d pen, Huddleston Poultry farm, Winamac, Ind.; 3d cock, H. A. Armstrong, Plymouth, Ind.; 4th cockerel, Frank B. Smith, Danville, Ill.; 4th cock, Jos. Becker, Indianapolis, Ind.; 1st cock, 1st hen and 2d pullet, Ben Le Gore, Marshall, Ill.; 2d cock, 1st, 2d and 3d cockerels, 2d and 4th hens, 4th pullet and 1st and 3d pens, F. E. Mow, Union Mills, Ind.

Silver Laced Wyandottes—Entries:

Five cocks, 8 cockerels, 8 hens, 16 pullets and 4 pens. Second hen and 4th pen, Wesley Coffey, Spencer, Ind.; 2d and 3d cocks, 1st and 2d cockerels, 2d pullet and 1st pen, A. C. Le Duc; 3d cockerels, 3 pullet and 3d pen, Charles Batsch, Elwood, Ind.; 1st and 4th cocks, 4th cockerel, 1st, 3d and 4th hens, 1st and 4th pullets and 2d hen, R. E. Jones, Flatrock, Ind.

Golden Wyandottes—Entries: Three cocks, 3 cockerels, 5 hens, 3 pullets and 2 pens. Second cockerel, Seth T. Gallagher, Logansport, Ind.; 1st, 2d and 3d cocks, 1st cockerel, 1st, 2d, 3d and 4th hens, 1st, 2d and 3d pullets and 1st and 2d pens, R. E. Jones.

White Wyandottes—Entries: Seven cocks, 17 cockerels, 18 hens, 31 pullets and 7 pens. First cock, 1st hen and 1st pen, D. C. Harrold, Elwood, Ind.; 2d cockerel, F. M. Meloy, Shelbyville, Ind.; 4th cock, 3d and 4th hens, 1st, 3d and 4th pullets and 3d pen, Mrs. Geo. M. Hanley, Hoopeson, Ill.; 2d and 3d cocks, 1st, 2d and 4th cockerels, 2d hen, 2 pullet and 3d and 4th pens, Miller Bros., Nashville, Ind.

Buff Wyandottes—Entries: Two cocks, 9 cockerels, 5 hens, 17 pullets and 5 pens, 1st cock, 1st and 3d cockerels, 1st, 2d and 3d hens, 1st and 3d pullets and 1st pen, D. C. Harrold; 2d cockerel, 2d pullet and 2 pen, Foster Martin, Marshall, Ind.; 2d cock, 4th cockerel, 4th pen, 4th pullet and 3d pen, W. F. Rossman, Columbia City, Ind.

Black Wyandottes—Six entries. All prizes to R. E. Jones.

Partridge Wyandottes—Entries: Three cocks, 4 cockerels, 3 hens, 8 pullets and 2 pens. Second and 3d cocks, 1st and 4th cockerels, 1st and 2d hens, 2d pullet and 2d pen, C. F. Avey, Columbia City, Ind.; 1st cock, 2d and 3rd cockerels, 1st, 3d and 4th pullets and 1st pen, Earl D. Smith, Winamac, Ind.

Buff Orpingtons—Entries: Four cocks, 11 cockerels, 13 hens, 23 pullets and 6 pens. First cock, 3d and 4th cockerels, 2d and 4th pullets and 2d pen, C. S. Byers, Hazelrigg, Ind.; 2d cockerel, John McMillan, Bridgeport, Ind.; 2d, 3d and 4th cocks, 1st cockerel, 1st, 2d, 3d and 4th hens, 3d pullet and 1st, 3d and 4th pens, Mrs. R. Senour, 1518 Shelton street, Indianapolis, Ind.

Light Brahmas—Entries: Twelve cocks, 8 cockerels, 23 hens, 13 pullets and 3 pens. Fourth cock, Mrs. B. D. Courts, Anderson, Ind.; 1st cockerel, J. F. Wheatley, Edinburg, Ind.; 4th hen and 3d pen, N. E. Woods, Pecksburg, Ind.; 2d cock and 3d hen, H. A. Johnson, 2050 Park avenue, Indianapolis, Ind.; 1st and 3d cocks, 2d, 3d and 4th cockerels, 1st and 2d hens, 1st, 2d, 3d

and 4th pullets and 1st and 2d hens, F. P. Johnson, Nowlands, Ind.

Buff Cochins—Entries: Four cocks, 16 cockerels, 6 hens, 15 pullets and 3 pens. Fourth cock and 2d and 3d pens, C. J. Ward, Irvington, Ind.; 1st and 2d cocks, 1st and 2d hens, 1st and 4th pullets and 1st pen, T. A. Hefner, Farley, Ia.; 3d cock, 4th hen and 2d pullet, C. A. Johnson, R. D. No. 1, Greenfield, Ind.; 3d cockerel and 2d hen, J. B. Clark, 1114 Southport avenue, Chicago, Ill.; 1st, 2d and 4th cockerels and 3d pullet, John E. Walker, Friendswood, Ind.

Partridge Cochins—Entries: One cock, 3 cockerels, 2 hens, 6 pullets and 2 pens. First cock, 2d cockerel, 1st hen and 4th pullet, C. J. Ward; 1st and 3d cockerels, 1st, 2d and 3d pullets and 1st pen, C. H. Terry, Union Mills, Ind.

Black Cochins—Two entries: All prizes to Leo P. Gillon, Hale's Corners, Wis.

White Cochins—Two entries: All prizes to C. C. Freese, Laporte, Ind.

Black Langshans—Entries: Two cocks, 13 cockerels, 10 hens, 29 pullets and 5 pens. Third pen, H. J. Rader, Lafayette, Ind.; 2d cock and 4th pen, G. W. Wilkins, New Lancaster, Ind.; 1st cock, 1st, 2d, 3d and 4th cockerels, 1st, 2d, 3d and 4th pens, 1st, 2d, 3d and 4th pullets and 1st and 2d pens, W. M. Mayer, Danville, Ill.

S. C. Brown Leghorns—Entries: Three cocks, 15 cockerels, 15 hens, 20 pullets and 2 pens. First cock, 2d hen and 2d pen, Geo. Knauer, 152 W. Main street, Louisville, Ky.; 1st, 2d and 3d cockerels, 1st hen, 1st, 2d, 3d and 4th pullets, and 4th pen, W. H. Wiebke, Ft. Wayne, Ind.; 3d cock, 4th cockerel and 3d pen, Mr. and Mrs. J. F. Gault, Sycamore, O.; 4th hen, Carl Mueller, 515 Tecumseh street, Indian-

Light Brahma cock, 1st at Neb., State Show 1901, also 1st at Hebron, Neb., owned by G. B. Clary, Fairbury, Neb.

apolis, Ind. 2d cock, R. B. and F. R. Hale, Shelbyville, Ind.

R. C. B. Leghorns—Entries: One cock, 2 cockerels, 2 hens, 3 pullets and 1 pen. All prizes to C. R. Mills, Spencer, Ind.

S. C. White Leghorns—Entries: Four cocks, 15 cockerels, 12 hens, 16 pullets and 4 pens. First cock, 2d and 4th cockerels, 1st, 2d, 3d and 4th hens, 1st pullet and 1st pen, Wm. Tobin, 4747 E. Washington street, Indianapolis, Ind.; 4th pullet and 4th hen, Harmon Bradshaw, Lebanon, Ind.; 4th cock, H. L. Harlan, Indianapolis, Ind.; 3 cock, 2d pullet and 3d pen, Jas. L. Wood, Elwood, Ind.; 2d cock, 1st and 2d cockerels, 3 pullet and 2d pen, B. F. Hill, Indianapolis, Ind.

S. C. Buff Leghorns—Entries: Two cocks, 3 cockerels, 2 hens, 7 pullets and 2 pens. Second cock, 2d and 3d cockerels, 2d and 3d pullets and 2d pen, Wes. Loser, Terre Haute, Ind.; 1st cock, 1st cockerel, 1st and 2d hens, 1st and 4th pullets and 1st pen, Chas. Airgood, South Bend, Ind.

Rhode Island Reds—Two entries. All prizes to E. L. C. Morse, 8206 Cornell ave, Chicago, Ill.

S. C. Black Minorcas—Entries: Two cocks, 2 cockerels, 5 hens, 4 pullets and 2 pens. Second cock, 1st, 2d and 3d hens and 2d pen, T. M. Stocking, Broad Ripple, Ind.; 1st cock, 2d cockerel and 4th hen, Louis Clem, Bunker Hill, Ind.; 1st cockerel, 1st, 2d, 3d and 4th pullets and 1st pen, Lunny Reynolds, Westville, Ind.

Silver Bearded Polish—Entries: One cock, 1 cockerel and 8 hens. All prizes to Dr. M. A. Young, 454 E. Washington street Indianapolis, Ind.

B. B. Red Games—Entries: Two cocks, 7 cockerels, 8 hens, 4 pullets and 2 pens. First cock, 1st and 3d cockerel, 2d, 3 and 4th hens, 1st, 2d

and 3d pullets and 1st and 2d pens, H. D. Lane, 3613 N. Meridian street, Indianapolis, Ind.; 2d and 4th cockerels, F. C. Wright, Mt. Healthy, O.; 2d cock, 1st hen and 4th pullet, J. C. Pratt, La Grange, Ill.

Red Pyle Games—Two entries. All prizes to Wesley Lanius, Greengburg, Ind.

Pit Games—Entries: Two cocks, 4 cockerels, 4 hens and 4 pullets. All prizes to D. B. Shideler, 726 W. 42d street, Indianapolis, Ind.

Buff Cochon Bantams—Entries: One cock, 3 cockerels, 3 hens, 8 pullets and 1 pen. First cock, 1st cockerel, 1st hen and 3d pullet, Chas. Airgood; 2d and 3d cockerels, 2d and 3 hens, 1st, 2d and 4th pullets and 1st pen, W. A. Graffis, Logansport, Ind.

B. B. Red Game Bantams—Entries: Two cocks, 1 cockerel, 2 hens, 3 pullets and 1 hen. First cock, 1st cockerel, 1st and 2d hens, 1st and 3d pullets and 1st hen, Nicholas & Hoss, 234 W. New York street, Indianapolis, Ind.; 2d cock, R. B. and F. R. Hale; 2d pullet, T. M. Campbell, Darlington, Ind.

Red Pyle Game Bantams—Entries: Three cocks, 1 cockerel, 3 hens and 3 pullets. First cock, Nicholas & Hoss; 3 cock, 1st and 3d hens, R. B. and F. R. Hale; 2d cock, 1st cockerel, 2d hen, 1st, 2d and 3d pullets. T. M. Campbell.

Black Cochon Bantams—Entries: Two cocks and 2 hens. All prizes to Nicholas & Hoss.

Cornish Indian Games—Entries: Three cocks, 1 cockerel, 6 hens, 1 pullet and 1 pen. Second cock, 1st cockerel and 2d pen, J. W. Andrew, Warren, Ind.; 1st cock, Clover Bloom Poultry yards, Thurston, Ky.; 3d cock, 1st, 2d and 4th hens, 1st pullet and 1st pen, Gettinger & Shockney, Union City, Ind.

M. B. Turkeys—Entries: Two cocks, 1 cockerels, 3 hens, 4 pullets and 2 pens. Second cock, 2d and 3d cockerels, 1st and 2d hens, 1st and 2d pullets and 1st pen, G. W. Wilkins; 1st and 3d cocks, 1st and 3d cockerels, 3d and 4th hens, 3d and 4th pullets and 2d and 3d pens, S. B. and S. M. Johnson, Boggsstown, Ind.

Houllans—Entries: Two cocks, 1 cockerel, 2 hens, 3 pullets and 1 pen. All prizes to Robt. L. Higert, Greencastle, Ind.

Pekin Ducks—Entries: Two cockerels and 2 pullets. All prizes to C. S. Byers.

Silver Bebright Bantams—Entries: Two cocks, 2 cockerels, 4 hens, 2 pullets and 1 pen. First cock, 2d, 3d and 4th hens, T. M. Campbell; 2d cock, 1st

The Editor's dog at his favorite pastime.

and 2d cockerels, 1st and 2d hens, 1st and 2d pullets and 1st pen, R. E. Jones.

Golden Seabright Bantams—Entries: Three cocks, 3 cockerels, 4 hens, 5 pullets and 1 pen. Second and 3d cocks, 3d cockerel, 2d and 3d hens and 2d, 3d and 4th pullets, T. M. Campbell; 1st cock, 1st and 2d cockerels, 1st and 4th hens, 1st pullet and 1st pen, R. E. Jones.

Report of the annual exhibition of the Ottawa County Poultry association held in Minneapolis, Kan., December 18 to 21, 1901:

L. P. Harris, judge of awards.

White Plymouth Rock—First and second pen, W. A. Hilands, Culver, Kan.

Barred Plymouth Rocks—First and second pen, Mrs. Belle Nelson, Bennington, Kan.

Single Comb Brown Leghorn—First pen, John Chase, Glasgow, Kan.; second pen, G. C. Smith, Minneapolis, Kan.

White Wyandotes—First and second pen, W. H. Swartz, Minneapolis, Kan.; third pen, W. A. Hilands, Culver, Kan.

Silver Laced Wyandottes—First, second and third pen, Lew Pickrell, Minneapolis, Kan.

Golden Laced Wyandottes—First and third pen, E. Papham, Minneapolis, Kan.; second pen, J. H. Moorman, Solomon, Kan.

Partridge Cochon—First pen, Frank Sutton, Minneapolis, Kan.

White Faced Black Spanish—First pen, Capt. Sperry, Minneapolis, Kan. Mammoth Bronze Turkeys—First and second pen, C. H. Clark, Delphos, Kan.; third pen, B. C. McClelland, Ada, Kan.

Highest scoring cockerel—W. H. Swartz, Minneapolis, Kan.

Highest scoring pullet—W. H. Swartz, Minneapolis.

Highest scoring turkey—C. H. Clark Delphos, Kan.

G. L. SMITH, Secretary.

Buff Orpington pullet owned by Mrs. C. E. Browning, Fairbury, Neb.

Kansas State Poultry Show.

Held at Topeka, Kan., Jan. 6 to 11.

The exhibit was not so large as has been in previous years, there being only 755 birds in all, besides pigeons and canaries. There was a fair exhibit of Belgian hares, two or three coops of Flenish Giants, a line cage of coons, cats, one fox, three or four cages of Cavies or Guinea Pigs.

The quality of poultry was very fine, but a large number of the specimens were under weight, as has been very common this season, consequently the birds do not score so high on account of their weight.

There were in the Mediterranean classes a good many birds badly frosted from the effects of the cold snap that we had in December. Many of the specimens had been shown in prior shows and had scored from 92 to 95½ points, and the exhibitors thought, of course, that they ought to score just as much at Topeka as they did before they were frosted. The growlers were present at this show, as they are in nearly all shows. Take it all in all, the exhibit was a very creditable one and many classes deserve great praise, especially the exhibit of Buff Cochins, Buff Wyandottes, White Wyandottes, S. L. Wyandottes, Light Brahmas, Brown Leghorns, Orpingtons, Langshans, and White Plymouth Rocks.

There was no class that showed more real merit than the Buff Cochins and White Plymouth Rocks. These two classes showed specimens as good as can be found in any class in any show in the state.

The Partridge Cochins class contained 32 birds, all good in color, and very good in shape, A. B. Jones of Waukeena, Kan., winning most of the prizes.

Buff Cochins were 12 in number and were shown by Chas. Steinberger of Waukeena, Kan., who won all premiums.

Light Brahmas were good in class, but small in size. Aaron Sheets made

the best exhibit and won nearly all prizes. There were 50 Light Brahmas. W. A. Jones showed some very good specimens, also G. B. Clary of Fairbury, Neb.

The exhibit of Langshans numbered 55 and showed very good specimens throughout. There were some elegant shaped birds, also fine in color.

The Houdans were a good class, but small in number, the best being only 10 birds.

Hamburgs were not a large class, but were the finest that I ever saw. L. E. Cook of Oakville, Iowa, won nearly all the premiums. There were about 35 birds in the exhibit.

There was but one coop of Dark Brahmas shown, and they were shown by L. R. Nye of Leavenworth, Kan. They were good in color.

Buff Pekin Bantams were exhibited by two parties, Thos. E. Wiggins of Topeka, Kan., winning all first premiums. They were very good in color and shape.

There was one coop of Silver Seabrights; females very good, but cock very poor.

Of Single Comb Brown Leghorns the exhibit was quite large, 60 in number, and showing some very fine specimens. A good many were badly frosted and plumage faded. One or two exhibits were very poor in quality, not fit to be seen in the show room. W. A. Land of Manhattan, Kan., had a very fine exhibit, also M. and M. B. Bass of Kansas City.

Silver Laced Wyandottes were a good class, 51 in number. J. W. Gause of Emporia, Kan., had the best part of the exhibit. His birds were large in size, good in shape, and fine in color. Mr. Gause proved by his exhibit that they were breeding the very best that can be found.

There was a large class of Barred Rocks, 88 in number, the largest class in the exhibit. Among them were some very fine specimens that did not even get a place. The Acme Poultry Yards won the largest number of the premiums. There seemed to be much dissatisfaction with the exhibitors in this class. Mrs. Pinkerton showed some fine pullets both in size, color and shape. Wm. Vesper also exhibited some very choice specimens as well as Seeley Brown.

The Buff Rocks were 27 in number; two exhibitors, Frank Patton of Surprise and the Smiths of Manhattan, Kan. The exhibit, though not large, was full of quality.

White Plymouth Rocks were 63 in number. This was one of the best classes in the show room and showed more merit than any other class except the Buff Cochins. The principal exhibitor was C. A. Canfield of Bellevue, Kan. Mr. Canfield demonstrated his superior quality of stock by winning nearly everything in this large class. His birds were pure white in color, extra good in shape, combs and quality throughout. Thos. Owens of Topeka, Kan., also showed some very good specimens, but was not placed at all. Wm. Randolph of Lawrence, Kan., and Mrs. H. Both of Atchison, Kan., also showed some very fine specimens.

Buff Wyandottes were 50 in number and was one of the finest classes in the room. The first cock and first cockerel were the best two male birds I have ever seen in Buff Wyandottes. There

2nd prize, Partridge Cochins hen, owned by DeWitt Yates, Fairbury, Nebraska.

were several fine females, and taken in all the class was full of merit, and many fine specimens did not get a place. The best exhibit was that of W. A. Forbes of N. Topeka; second in size was that of T. W. F. Hughes of Topeka. Ross Bros. of Manhattan, Kan., also showed some extra fine specimens and won some premiums.

White Wyandottes was another large exhibit, numbering 52, and many very fine specimens, pure white in color and good in shape and size, did not even get a place. The third cockerel in this exhibit was the most typical White Wyandotte that I have ever seen in my twenty-eight years of experience in the show room. He was simply immense in shape and color but, like many other specimens, short of weight. This bird will be shown in Chicago if he can be made to gain one pound in weight before the show opens, and it is very probable that he can. Mannerling Bros. of Lawrence, Kan., won first on pen. Birds small, very poor in shape and good in color. H. J. Whittisey of Chanute, Kan., exhibited very fine birds, and he may well be proud of the same and deserve lots of honors. Geo. Gally showed best cockerel in shape and color. W. A. Forbes also showed some elegant cockerels, a hen and pullet, much better in shape and color than some of the winners to my notion. G. B. Clary of Fairbury also had some very fine birds in his exhibit.

B. B. Bantams were about 7 in number. Thos. I. Herrem of Topeka, Kan., showed some of the best I have ever seen. They were good in station, color and shape.

Marsterson Bros. of Arkansas City, Kan., showed the finest exhibit of Brown Red Bantams that I have seen since leaving New York.

The Golden Wyandottes were fine in color, but rather small in size. First cock an extra large, well marked specimen, free from frost in breast, with open lobe and fine color throughout.

The Turkey exhibit was small, but good in quality.

The Pekin ducks were a small class, but showed as much quality as any other class in any show room that I was ever in. The best exhibit was by E. E. Smith of Lincoln, Neb., who won four

E. W. Geer, Farmington, Mo. One of our contributors. Proprietor of Glen Raven Egg Farm and breeder of Barred and White Rocks, Brown Leghorns, Black Minoras and Bronze Turkeys. Mr. Geer is a first class poultry judge.

Dr. L. C. Stephens' White Wonder fowls, Carlton, Nebr.

birds. They were extra large in size, good in shape and fine in color. One could not ask for better specimens.

The annual meeting of the Kansas State Poultry Association was held on Thursday evening. Practically the same officers were elected as served this season. The show was a success in every respect, and more especially they are to be congratulated on getting out such a large attendance. The auditorium was filled to its utmost capacity during the afternoon and evening of every day. The attendance was simply immense. The management of the show was first class in every respect and much is due the officers for the good work done and the able manner in which they managed the exhibit. They have already commenced to form the plans, etc., for a greater exhibit next season.

LIST OF AWARDS.

Grand prize No. 1—M. L. Canfield, for largest display of any one variety of chickens, owned by one exhibitor, scoring over 90 points.

Grand prize No. 2—James R. Young, for the second largest display of any one variety of chickens, owned by one exhibitor, scoring over 90 points.

Grand prize No. 3—Aaron Sheets, North Topeka, Kan., for the third largest display of any one variety of chickens, owned by one exhibitor, scoring over 90 points.

Grand prize No. 4—W. A. Forbes, North Topeka, Kan., for the largest display of two or more varieties of chickens, owned by one exhibitor, scoring over 90 points.

Grand prize No. 5—Mrs. Henry Shrader, Berlin, Neb., for the second largest display of two or more varieties of two or more varieties of chickens, owned by one exhibitor, scoring over 90 points.

Grand prize No. 6—Col. J. W. F. Hughes, Topeka, Kan., for the third largest display of two or more varieties of chickens, owned by one exhibitor,

Advertise Where it Pays You.

KING & KING OF FAIRBURY says: The Investigator is the best advertising medium we have used yet.

I. & N. M. COXSON OF PUNEA, NEB., says: We are more than pleased with the Investigator. It has brought us good sales, the last two being to the amount of \$75. Of the five papers we use none equal the Investigator to advertise in.

J. T. REINELT, TRIPP, S. D.: Enclosed chance. I am well pleased with the Investigator as an advertising medium.

CORWIN JONES, SIDNEY, IOWA, says: The Investigator is all O. K., therefore continue my ad. Enclosed P. O. order.

D. W. GRANT, ALMENA, KAN.: We are more than pleased with our ad in the Investigator for December. Enclosed P. O. order for February ad.

A. UPTON, FAIRBURY, NEB., says: We have had lots of inquiries and sold more stock than from any other paper we use.

scoring over 90 points.

Grand prize No. 7—Mrs. Henry Shrader, for the largest display of chickens by any lady exhibitor.

Barred Plymouth Rocks—James R. Young, 1, 2, 3, 4 ckl, 1, 2, 4 hen, 1, 2, 3, 5 pul, 1, 2 pen; Frank Slater, Delphos, Kan., 5 hen, 5 pen; Mrs. Geo. Clarke, Topeka, Kan., 4 pul; Sealy L. Brown, Coffeyville, Kan., 3 pen; Chris Bearman, Ottawa, Kan., 4 pen; Mrs. W. C. Ellis, Mo., 5 ckl; Wm. Vesper, Topeka, 2, 3, 4 ckl; J. K. Thompson, Topeka, 1 ckl; 3 hen.

White Plymouth Rocks—M. L. Canfield, 1, 2 ckl, 1, 2, 3, 5 ckl; 1, 2, 3, 4, 5 hen, 1, 2, 3, 4, 5 pul, 1, 2, 3 pen; Wm. Randolph, Lawrence, Kas., 4 pen; Jno. B. Mills, Topeka, 3 ckl; Mrs. Henry Shrader, 4 ckl; Wm. H. Roth & Son, Atchison, 5 pen.

Buff Plymouth Rocks—Frank Patton, Surprise, Neb., 2 ckl, 2, 3 ckl, 1, 2, 3, 4 hen, 1, 4, 5 pul, 2, 3 pen; the Smiths, Manhattan, Kan., 1, 4, 5 ckl, 2, 3 pul, 1, 4 pen.

Golden Wyandottes—Edwin J. Kaffer, Salina, Kan., 1 ckl, 2, 3, 5 pul; Jno. A. Shaw, McKittrick, No., 3 ckl; Yellow Leg Poultry Yards, Maitland, Mo., 2 ckl, 1, 2 hen, 1, 4 pul, 2 pen; A. C. Smith, Topeka, 1 ckl, 1 pen.

Silver Laced Wyandottes—Mrs. J. W. Gause, Emporia, Kan., 1 ckl, 1, 3, 4, 5 ckl, 1, 2 hen, 1, 2, 3, 4 pul, 1, 3 pen; Elliot Marshall, St. Joseph, Mo., 5 pen; Mrs. Geo. E. McGill, Leavenworth, 2, 2, 4 ckl, 2 ckl, 3, 4, 5 hen, 5 pul, 2, 4 pen.

Buff Wyandottes—W. A. Forbes, No. Topeka, 1, 5 ckl, 1 hen, 1, 2, 5 pul, 1, 4 pen; John A. Shaw, McKittrick, Mo., 2 hen; Ross Bros., Manhattan, 2, 4 ckl, 3, 4 pul, 2, 5 pen; G. A. Kittell, McPherson, Kas., 3 ckl, 3 pen; Col. J. W. F. Hughes, Topeka, 3, 4, 5 hen; Allen G. Phillips, Topeka, 1 ckl.

White Wyandottes—W. A. Forbes, 2 ckl, 1, 5 ckl, 3, 5 hen, 3, 5 pen; Mauwaring Bros., Lawrence, Kas., 2 ckl, 2, 3, 4 pul, 1 pen; Geo. Getty, Syracuse, Kas., 3 ckl; G. B. Clary, Fairbury, Neb., 4 ckl, 4 hen, 1 pen; H. J. Whittlesey, Chauteau, Kas., 1 ckl, 1, 2 hen, 1, 5 pul, 2 pen.

Black Langshans—L. B. Myer, Bowling Green, Mo., 1, 2 ckl, 1, 2, 4 ckl, 1, 4 hen, 1, 2, 3 pul, 1 pen; Col. J. W. F. Hughes, 5 ckl, 4 pul; H. H. Borgmann, Kansas City, Mo., 3 ckl, 5 ckl, 3, 5 hen, 3 pen; Mrs. Henry Shrader, 3 ckl, 2 pen; Mrs. E. H. Inman, Bartlett, Kas., 4 ckl, 2 hen, 5 pul, 4 pen.

White Langshans—P. L. Wise, Topeka, 1, 2, 3 hen.

Buff Cochins—Chas. Steinberger, Wakeeney, Kas., 1, 2, 3, 4 ckl, 1, 2, 3, 1, 5 ckl, 1, 2 hen, 1, 2, 3 pul, 1 pen.

Partridge Cochins—Heether & Snyder, Huntsville, Mo., 3 ckl, 4 ckl, 2, 4 pul, 3, 5 pen; Prof. L. L. Dyche, Lawrence, Kan., 1 ckl, 3 ckl, 3, 5 hen, 2 pen; John E. Stone, Fayette, Mo., 2 ckl, 3 pul, 4 pen; Dr. A. B. Jones, Wakeeney, Kas., 1, 5 ckl, 1, 5 pul, 1 pen; DeWitt Yates, Fairbury, Neb., 2 ckl, 1, 2, 4 hen.

Light Brahmas—Aaron Sheets, No. Topea, 1 ckl, 1, 5 ckl, 1, 2, 3, 5 hen, 1, 2, 4, 5 pul, 1, 2 pen; Albert Hearick, Topeka, 4 ckl, 4 hen; G. B. Clary, Fairbury, Neb., 3 pen; Dr. A. B. Jones, Wakeeney, 2 ckl, 4 ckl; Stecker Bros., St. Louis, Mo., 3 ckl, 2, 3 ckl, 3 pul.

Dark Brahmas—N. R. Nye, Leavenworth, 1 ckl, 1, 2 hen, 1, 2 pul, 1 pen.

Single Comb Brown Leghorns—Mr. & Mrs. N. D. Bass, Kansas City, Kas., 1 hen, 1, 2 pul, 2 pen; H. C. Short, Leavenworth, 2 ckl, 3, 5 ckl, 5 pul, 4 pen; Clyde Patterson, Sedalia, Mo., 2 ckl, 3 pen; C. C. Smith, Topeka, 3 ckl, 4 ckl; A. J. Kerns, Salina, 4 ckl, 1 ckl, 3 hen, 3, 4 pul, 1 pen; W. A. Lamb, Manhattan, 1 ckl, 2, 3, 5 hen, 5 pen.

Single Comb White Leghorns—H. C. Short, 1 ckl, 1 ckl, 3, 4 hen, 1, 3, 4, 5 pul; J. T. Fry, Topeka, 2 ckl, 2, 3 ckl, 1, 2 hen, 2 pul, 2 pen.

Rose Comb Brown Leghorns—H. H. Bair & Son, Topeka, 1 ckl, 1 pul.

Rose Comb White Leghorns—Jennie E. Warren & Son, Cottonwood Falls, 1 ckl, 1, 2, 3 hen, 1, 2 pul, 1 pen.

Buff Leghorns—Mr. and Mrs. J. W. Shoemaker, Narka, Kas., 2 ckl, 1, 2, 3, 4 pullet, 1 pen; B. C. Fowler, Topeka, 2 ckl, 1, 2, 3, 4, 5 hen, 5 pul.

White Faced Black Spanish—Mrs. Hattie Tyler, Fairview, Kas., 1, 2, 3 hen, 1, 3 pul; H. W. Chestnut, Birmingham, Kas., 2 ckl, 2, 4, 5 pul, 1 pen.

Silver Spangled Hamburgs—L. Cook & Bro., Oakville, Iowa, 1 ckl, 1, 4 ckl, 1, 4 hen, 1, 2, 3, 4, 5 pul, 1, 2 pen; M. P.

A view of the extensive poultry plant owned and operated by J. C. Underwood, Columbus, Ohio.

Jensen, Barada, Neb., 5 hen; DeWitt Yates, Fairbury, Neb., 2 ckl, 2, 3 hen, 3 pen; Roy Baker, Abilene, Kas., 3 ckl. Hondans—W. L. Bullene, Lawrence, 1 ckl, 1 ckl, 1, 2, 3, 4 hen, 1, 2, 3, 4, 5 pul, 1 pen.

Buff Orpingtons—Mrs. S. Rickett, North Topeka, 1 ckl, 2, 4 hen, 3, 5 pul, 1 pen; Eccleston & Son Topeka, 2 ckl, 1, 3 hen, 2 pen; Mrs. Henry Shrader, Berlin, Neb., 1, 2, 4 pul.

English Gray Dorkings—Eccleston & Son, 1 ckl, 1, 2 hen.

Cornish Indian Games—Chas. Seiler, Atchison, Kas., 1 ckl, 1, 2, 3, 5 pul, 1 pen; E. Kaub, Michigan, Kas., 3 ckl, 1, 5 hen, 3 pen; Wm. Langan, Atchison, 1 ckl, 2 ckl, 2, 3, 4 hen, 2 pen.

Pit Games—Cyrus L. Ward, Narva, Kas., 1 ckl, 2 hen, 1, 2, 3 pul, 1 pen; John L. Patterson, Topeka, 1 ckl, 2, 3 ckl, 1, 3 hen; A. B. Elliott, Topeka, 2 ckl, 3 hen; J. L. Brown, Kansas City, Mo., 3 ckl.

Black B. R. Game Bantams—Thos. Herren, Topeka, 1 ckl, 1 ckl, 1, 2, 3, 4 pul, 1 pen.

Brown B. Game Bantams—Masterston Bros., 2 ckl, 1, 2 hen, 1, 2, 3 pul, 1 pen.

Buff Cochon Bantams—Thos. C. Wiggins, Topeka, 1, 2 ckl, 1, 2, 4, 5 pul; Jas. R. Young, Manhattan, 2 ckl, 3 ckl, 2 hen, 3 pul.

Golden Seabright Bantams—J. Aigner, Topeka, 2 ckl, 2, 3 hen.

Silver Seabright Bantams—Col. J. W. F. Hughes, 2 ckl, 1, 2, 3 hen.

White Pe in Ducks—E. E. Smith, Lincoln, Neb., 1 ckl, 1 ckl, 1, 1 hen, 1 pul; O. E. Martinson, Wichita, Kas., 2 ckl, 2 hen, 2 pul, 1 trio.

Manmoth Bronze Turkeys—Mrs. A. Griffiths, Ozawie, Kas., 1 adult ckl, 1, 2 hen, 1 trio.

White Holland Turkeys—Dr. A. B. Jones, Wameeney, 1 ckl, 1, 2 pullet, 1 trio; J. R. Taylor, Topeka, 2 ckl, 3, 4, 5 pul.

BELGIAN HARES.

Mature Bucks—1st, Fred Oliver; 2d, I. H. Holliday; 3d, C. Fairchild.

Imported Does—1st, J. P. Lucas, Mature Does—1st, W. H. Goit; 2d, 3d, J. P. Lucas.

Bucks, 7-lb class—1st, Fred Oliver; 2d, W. H. Goit.

Does, 7-lb class—1st, C. Fairchild; 2d, Fred Oliver; 2d, Fred Oliver and J. P.

Lucas, tied.

Buck, 6-lb class—1st, C. Fairchild.

Does, 6-lb class—1st, D. A. Wise; 2d, D. A. Wise two tied for 2d; 3d, D. A. Wise.

Bucks, 5-lb class—1st, Fred Oliver; 2d, Clyde Herrie.

Does, 5-lb class—1st, Fred Oliver.

White Angora Rabbits—John Haman, 1st mature buck; J. P. Lucas, 1st immature buck; J. P. Lucas, 1st immature doe; J. P. Lucas, Flemish Giants, 1st buck, 1st and 2d does.

Honest Birds at Honest Prices.

Wishing to establish another breed of fowls at Golden Dawn farm, it becomes necessary to have a new hen house. You know Ella Wheeler Wilcox has said "there is nothing woman can do that a man can't do and do better," which is well. But I also say a woman can do much if she tries. Well, I tried and in consequence have a nice warm house with plate glass (?) front. I set posts in the ground on the south side of the barn and boarded up and papered and hung a door to shut out cold nights and a glass one to let in sunlight on cold days.

As the building stands near the road, people passing gazed, and still their wonder grew to see a woman saw a board so true. I wasn't like our neighbor who bought a new dog and wanted a house for him. He took the lumber inside his shops to build and when he had it all made, discovered he could not get it out through the door without tearing it to pieces. O, no, my hen house is all right, and I have a nice wire netting fence around the yard, and my birds came through this late cold spell with the thermometer registering fifteen degrees below zero without a touch of frost and I shall be advertising prize winners bred and born from that same yard next fall. Speaking of advertising, some ads. just make me "larf

inwardly." This, for instance, "the best birds in the state," at one, two and three dollars apiece. I want to say when I get the best birds in the state I won't sell them for one dollar or even three. Why do people pay \$25 for a bird when they can get the best for from one to three. 'Tis naught when woman humbugs man, for that's the good old style. But, O, man's confidence in man makes countless millions smile. Some people think or at least talk that the standard of perfection is all wrong because it isn't dead easy to raise all show birds by following its teachings. They say the standard should be changed to suit their especial needs. I wonder what our prize birds would be without a standard to judge them by? I think I would rather take the standard of perfection as my guide and breed accordingly than to breed the easiest or any old way and then convince people that my birds were all right. I am afraid I would be like the young man who, when he began preaching, thought he would surely convert the whole world in about three months. He was speaking before a large audience, telling what wonders he expected to perform and said he longed for the wings of an eagle that he might fly from place to place, converting the people. A little boy piped up: "O, Mr. you wouldn't fly a mile before you would be shot for a goose." No, I say, let the standard stand, and may we raise honest birds at honest prices. I am keeping a list of the people who advocate that pulling an off color feather is no sin, and when I want to introduce new blood in my yard I will give them the go by. I may be in the wrong, but it seems as if one who would color the legs or pull feathers to make a sale or win a premium are that crooked that they can't lie straight in bed.

MATTIE MATTHEWS.

Wings of two Light Brahma pullets owned by T. B. Clary, Fairbury, Nebr.

A B. P. Rock cockerel owned and bred by Mrs. J. W. Pinkerton, Clay Center, Kansas.

Nebraska State Poultry Show Held at Lincoln.

One of the most successful poultry shows ever held in the west was held in the new auditorium at Lincoln from January 20 to 25 inclusive. There were on exhibition nearly 1600 birds, mostly from the state of Nebraska. Still there were large exhibits from the state of Kansas, Missouri, Iowa, and Illinois. As usual the most prominent classes were those of the Barred Rocks, White Rocks, White Wyandottes and Leghorns.

The White Rock class was very strong in quality, there being about 116 birds represented and the five premiums offered on single specimens in each class were given to birds scoring better than 94 points. Birds scoring less than this could not even get a mention. The most prominent exhibitors in this variety were M. L. Canfield of Belleville, Kansas, who won the cream of the prizes; J. W. Hall of David City had a good second, and also Mrs. C. A. Blanchard of Friend, and E. E. Spencer of Cortland, Neb.

There were ten exhibitors in the Barred Plymouth Rock class, most of the prizes going to J. W. D. Hall of Des Moines, Iowa, F. C. Hinman of Friend, and C. M. Hulbert of Fairbury. Many right nice specimens did not receive a mention in this class.

The Buff Rocks were represented by Frank Patton of Surprise, who won all first except one, Joseph Kay of David City, and also Albert Lemon of Lincoln, who exhibited five specimens in this class.

The Silver Wyandotte class was not as large as some other classes, but was full of quality. I. and N. M. Connor of Ponca won the best part of the prizes. Antone Coper won first pen, first cockerel.

Golden Wyandottes were shown by four exhibitors, W. J. East and J. C. Kasper, both of Clay Center, winning nearly all of the prizes.

Buff Wyandottes were shown by Mrs. H. E. Stein of Friend, Mrs. E. W. Orr of Clay Center, and E. B. Day of North

Bend, winning the best part of the prizes. L. B. Arnot won first, second, fourth pullets, third and fifth cockerel.

Partridge Wyandottes were shown by three exhibitors, Robert Black having the best exhibit.

Light Brahmas were shown by five exhibitors, M. M. Fox of Geneva and Jno. L. Smith of Cadams winning the best part of the premiums.

Buff Cochins were shown by five exhibitors, B. H. Dunn of Clay Center receiving the largest number of premiums and Antone Coper second largest number.

Partridge Cochins were shown by five exhibitors. There were some very good birds and prizes were distributed among the whole number, Ayreas & Son receiving the best part of the premiums.

Buff Orpingtons were a large class shown by seven exhibitors. H. H. Campbell of Osceola, and Jno. A. Ling of Harvard winning the best part of the premiums. Mrs. Rockhill won first on pen.

Langshans were shown by five exhibitors, J. A. Johnson of Holdrege and Albert Lemon of Lincoln winning the principal part of the prizes.

In the Leghorn class there were four exhibitors. Of the Single Comb White Leghorns there was a large exhibit shown by six exhibitors, L. C. Huntington of Omaha, Casper Dise of Roca, and C. L. Saylor winning the principal part of the prizes.

The exhibit in Black Minorcas, White Minorcas, Black Spanish, Silver Spangled Hamburgs, Golden Hamburgs were small in number but full of quality.

The Houdan class was small, four exhibitors. Jake Kasper of Clay Center and D. W. Evans of University Place won the principal part of the premiums.

The Cornish Indian Game was a good class and most prizes going to Robert Black.

There was an unusually large exhibit of Bronze and White Turkeys, and Pekin, Rouen, and Indian Runner Ducks. In fact, the water fowl exhibit was the best ever seen west of Chicago. E. E. Smith of Lincoln captured all the first prizes in Pekin Ducks, Emden Geese, and Indian Runner Ducks. Walter J. Camp won all the first prizes in Rouen Ducks. Walter Cameron won all first prizes on Toulouse Geese.

There was a fine display of eggs, W. A. Kirkpatrick of University Place winning first prize on eggs, E. H. Terwilliger winning second. There were five exhibitors. The sweepstakes won solid color with weight, by L. C. Huntington of Omaha; solid weight without color, by M. L. Canfield of Belleville, Kan.; part color with weight, by M. M. Fox of Geneva, and part color without weight, E. E. Eggart of Minden. The largest exhibit was that of E. E. Eggart, who showed 100 birds and won \$140 in premiums. There were 127 exhibitors of poultry, besides several exhibits in pigeon class and hares.

One thing was noticeable at this show and that was that there was unusual good feeling among all the exhibitors and very little dissatisfaction as to the judging. The scoring was all done the second day at 3 o'clock in the afternoon and all prizes awarded and premiums put up on the coops Thursday morning at the opening of the

Buff Orpington owned by Sare Hatch Poultry Co., Clay Center, Neb.

show. The annual meeting was held Thursday evening and the election of officers resulted in the following: Geo. W. Osterhout of David City as president, T. L. Norval of Seward as vice president, L. P. Ludden of Lincoln as secretary, and I. L. Lyman of Lincoln treasurer. The show was a financial success, and leaves a good amount of money on hand for the commencement of their next annual exhibit, which is to be held the third week in January, 1903.

The following is a list of awards as given by the judges:

Barred Plymouth Rocks—J. W. D. Hall, 1 pen, 2 ck, 2 ckl, 1 pul; F. C. Hinman, 2 pen, 1, 2, 3 hen, 5 ckl, 2, 5 pul; T. L. Norval, 3 pen, 4, 5 hen; L. A. Simmons, 3 ck; C. M. Hulbert, 1 ckl; E. M. Coffin, 3 ckl; J. S. Bishop, 4 ckl; Phil Mauer, 3 pul; E. J. Brown, 4 pul.

White Plymouth Rocks—M. L. Canfield, 1 pen, 3 ck, 1, 2, 3 hen, 1, 3, 5 ckl, 2, 4 pul; J. W. Hall, 2 pen, 4 ck, 2 ckl, 3 pul; G. H. Terwilliger, 3 pen; E. O. Spencer, 4, 5 pen, 5 ck, 4 hen; J. J. Ackenback, 1 ck, 5 hen, 5 pul; C. E. Taylor, 2 ck; Henry Shrader, 4 ckl; R. G. Ruley, 1 pul.

Buff Rocks—Frank Patton, 1 pen, 3 ck, 1, 3 hen, 1, 2 ck, 1, 2, 4 pul; C. H. Green, 1 ck, 3 ckl, 3 pul; Joseph Kay, 2 ck, 2 hen; Wm. J. Kerchenbusch, 4 ck; A. Lemon, 4, 5 hen, 5 pul.

Silver Wyandottes, Antone Coper, 1 pen, 1 ckl; A. R. Smith, 2 pen; I. & N. M. Connor, 2, 3, 4 ck, 1, 2, 4 hen, 2, 5 ckl, 1, 4 pul; V. E. Shirley, 2, 5 hen, 3 ckl, 3 pul; M. B. Caldwell, 4 ckl, 2, 5 pul.

Golden Wyandottes—W. J. East, 1 pen, 3 ck, 1, 2 hen, 1 ckl, 1, 3 pul; Jake Kasper, 2 pen, 2 ck, 4 hen, 2, 3 ckl, 2, 4 pul; J. W. Losey, 3 pen, 3 hen, 5 ckl; I. Payne, 5 hen, 4 ckl.

Black Wyandottes—Henry C. Witte all premiums.

White Wyandottes—J. W. D. Hall, 1 pen, 2, 3 ck, 3 hen, 2 pul, 2 pul; L. H. Beeche, 2 pen; E. E. Bowes, 3 pen, 4, 5 ck, 3 ckl; C. C. Wilson, 4 pen; C. Rockhill, 5 pen, 2 hen; E. E. Smith, 1 ck, 1, 4, 5 hen, 4, 5 ckl, 1, 3, 5 pul; Stephen Norton, 1 ckl; W. A. Goddard, 4 pul.

Buff Wyandottes—Mrs. H. E. Stein, 1

pen, 2 ck, 4 hen, 2 ckl; E. W. Orr, 2 pen, 3 ck, 5 hen, 4 ckl; E. B. Day, 1, 5 ck, 2, 3 hen, 1 ckl, 5 pul; A. R. Smith, 4 ck; H. M. Pettigrew, 1 hen, 3 pul; L. B. Arnot, 5, 5 ckl, 1, 2, 4 pul.

Partridge Wyandottes—Robt. Black, 1, 2 pen, 1, 2, 3 ck, 1, 2, 4 hen, 1, 2, 3 ckl, 1, 2, 5 pul; E. M. Crittenden, 3 pen, 4 ck, 3, 5 hen, 4 ckl, 4 pul; E. B. Day, 5 ckl, 3 pul.

Black Javas—R. L. Newton, 1 pen, 2 ck, 1 hen, 1, 2, 3 ckl, 1, 2, 3, 4 pul; J. A. Rudge, 1 ck, 2, 3 hen.

Light Brahmas—M. M. Fox, 1 pen, 1 ck, 2, 4 hen, 1, 2 ckl, 1, 3 pul; Casper Dice, 3 ck; G. W. Hardin, 2 ck, 5 hen, 5 pul; E. B. Day, 4 ck, 4 ckl; John L. Smith, 1, 3 hen, 5 ckl; G. H. Terwillinger, 3 ckl, 2 pul.

Dark Brahmas—All to Lucy Barger.

Buff Cochins—Antone Coper, 1 pen, 2, 4 hen, 2, 4 ckl; J. J. Lyell, 2 pen; B. H. Dunn, 2 ck, 3 hen, 3 ckl, 1, 4, 5 pul; C. K. Davis, 1 hen, 1 ckl; J. M. Myers, 5 hen, 5 ckl, 2, 3 pul.

Partridge Cochins—Ayers & Sons, 1, 2 pen, 1 ck, 1 hen, 1, 3, 5 ckl, 1, 4 pul; J. J. Lyell, 3 ck, 4 pen, 3 hen, 4 ckl; DeWitt Yates, 2 ck, 2, 5 hen; H. E. Bowman, 4 hen, 2 ckl, 3, 5 pul; H. M. Pettigrew, 5 pul.

White Cochins—James Craig all premiums.

Rose Comb Buff Orpingtons—All to J. A. Lash.

Buff Orpingtons, Single Comb—C. Rockhill, 1 pen; H. H. Campbell, 2 pen, 2, 3 hen, 2, 4 ckl, 1, 5 pul; E. E. Jennings, 3 pen; John A. Ling, 2 ck, 1, 5 hen, 1 ckl, 1, 4 pul; C. E. Browning, 4 hen, 3 ck; Mrs. M. G. Stauff, 5 ckl; W. H. Bushel, 1 ck, 3 pul; Mrs. Henry Shrader, 2 pul.

Black Langshans—J. A. Johnson, 1 pen, 2 cks, 2 ckl, 1, 3 pul; Harry J. Hunt, 4 pen; A. Lemon, 1, 2 pen, 1 ck, 1, 2 hen, 2, 4, 5 pul; E. E. Bowes, 3 ck, 3, 4, 5 hen, 4, 5 ckl; Mrs. Henry Shrader, 3 ckl.

S. C. B. Leghorns—A. R. Carnueth, 1 pen, 2 ck, 2, 3 hen, 2 ckl, 1, 5 pul; A. C. Short, 1 ck, 1 hen, 1 ckl, 2 pul; Jas. Rudge, 3 ck, 3, 4 pul.

Rose Comb Brown Leghorns—Jennie Birdsall, 2, 3 pen, 2 ck, 4 hen, 1, 2 pul; E. H. Eggart, 1 pen, 1 ck, 1, 2, 3 hen, 1, 2 ckl, 3, 4 pul.

Rose Comb White Leghorns—Casper Dice, 1, 3 pen, 1, 4 hen, 1, 4 ckl, 4 pul; E. H. Eggart, 2, 4 pen, 1, 2 ck, 2, 3, 5 hen, 2, 3, 5 ckl, 1, 2, 3 pul.

S. C. W. Leghorns—L. C. Huntington, 1, 2 pen, 5 ck, 3, 4 hen, 1 ckl, 3, 5 pul; Casper Dice, 3, 4 pen, 2 ck, 1, 2 hen, 4 pul; J. Cook Johnson, 5 pen, 3 ck, 3, 4 ckl, 2 pul; H. C. Short, 4 ck, 2, 5 ckl; C. L. Saylor, 1 ck, 5 hen, 1 pul.

Buff Leghorns—J. M. Clark, 1 pen, 2 ck; Wallen Cameron, 2 pen, 1 ckl, 1 pul; D. L. Bruen, 1 hen.

Black Leghorns—E. H. Eggart, all premiums.

Blue Andalusians—E. H. Eggart, all premiums.

Black Minorcas—Earl Eager, 1 pen, 1, 3 ckl; 1, 2 pul; D. Tipwood, 2 pen, 3 ck, 1, 2, 3, 4 hen, 2 ckl, 3, 4 pul; L. C. Fors, 2 ck, 5 hen.

White Minorcas—All to Eggart.

Black Spanish—All to Raymond Striker.

White Cap B. Polish—All to Fred I. Slocum.

S. S. Hamburgs—Ernest Gibson, 2 pen, 1 ck, 3 hen, 1 ckl, 4 pul; Sam J. Gadd, 1 pen, 2 hen, 4 ckl, 2 pul; D. L. Bruen, 5 hen, 1 pul; M. P. Jensen, 1, 4 hen, 3 ckl, 5 pul; DeWitt Yates, 2, 5 ckl,

The concrete poultry house of E. W. Geer, Farmington, Mo.

When we have a warm poultry house and our hens lay all the year, it makes us feel like we ought to raise chickens all the year.

In the concrete house we have an ideal place to run incubators. They are warm in winter, dry and cool in summer. Unlike the cave or hole in the ground, they are always dry would be suitable for man to live in.

So well pleased am I with my concrete houses for poultry and incubators that I intend putting up one this summer in which to ripen Kieffer pears and as a winter store house for apples.

We have kept apples in ours this winter and never had them keep any better.

A house made of concrete would be an ideal one in which to raise the brooder chicks. If the floor was also made of concrete, it would be rat proof.

We are never troubled with rats for they and I can't live on the same plant. I use earth floors altogether and cover them with leaves in winter.

In building the poultry house I used studding, one at each corner, and every ten feet apart, to fasten the roof to and to fasten the divisions to inside of the house.

The incubator house has no studding, the gable ends of it being made of concrete, holds the plate in place, to which the roof is fastened.

Mrs. Geer's father is shown in this picture sitting on the box by the coal oil can. He is an occupant of Glen Ravan.

Our little red incubator is now at work on this plant, with a lot of chicks on the way into this world, and we intend keeping it at work on well up into May.

3 pul.

Golden S. Hamburgs—All to E. E. Bowers.

Houdans—J. C. Kasper, 1 pen, 3, 4 hen; D. W. Evans, 2, 5 hen, 2, 3 ckl, 1, 2 pul; D. L. Bruen, 1 hen; E. B. Henderson, 1 ckl.

Cornish Indian Games—Robt. Black, 1 pen, 1, 2 ck, 1, 2, 3 hen, 2, 3 ckl, 1, 2, 4 pul; D. L. Bruen, 4 hen; Wm. J. Kerchenhusch, 1 ckl, 3 pul.

B. B. Red Games—All to C. L. Ward. Pit and Red Pile Games—All to Seth Abbott.

Golden Seabrights—All to Bruen.

Black Rose Comb Bantams—All to Earl Eager.

Bronze Turkeys—W. H. Lake, 1 tom, 1, 3 hen, 1 ckl, 2, 4 pul; C. E. Browning, 2 tom, 2 hen; Wallen Cameron, 3 tom, 4 hen; C. M. Hulbert, 2 ckl, 1, 3 pul; Walter J. Camp, 3 ckl, 5 hen.

White Turkeys—J. C. Day & Son, 1 tom, 1 hen, 5 ckl, 4 pul; J. C. Moffit, 3, 4, 5 tom, 2, 3, 4 hen, 1, 2, 4 ckl, 2, 3, 5 pul; Mrs. M. C. Stauff, 3 ckl, 1 pul.

Pekin Ducks—E. E. Smith, young pair, 1, 2, 3; old pair, 1, 3, 4; old duck,

1, 2, 3; young duck, 1, 2, 3; drake, 1, 3, 5; W. B. Swisher, y pr 4, dra' e 2; Wallen Cameron, old pr 5, old duck 4, y d 4; Lillian W. Taylor, old pr 2; Mrs. Henry Shrader, y duck 5, dra' e 4.

Rouen Ducks—D. L. Bruen, pr 4, old dra' e 4, old duck 3, young dra' e 4, young duck 4; Walter J. Camp, pr 1, 2, 3, old dra' e 1, 2, 3, old duck 1, 2, 4, young dra' e 1, 2, 3, young duck 1, 2, 3.

Indian Runner Ducks—All to E. E. Smith.

Toulouse Geese—Pairs all to Kirkpatrick. Wallie Cameron, old gander 1, old goose 1, young gander 3, young goose 1; W. A. Kirkpatrick, old gander 2, 3, 4, old goose, 2, 3, 4, young gander 2, 4, 5, young goose 2, 3, 4.

Emden Geese—E. J. Babcock, pair; E. E. Smith, all single.

Eggs—W. A. Kirkpatrick, 1; E. H. Terwilliger, 2; A. L. Clayberg, 3; W. L. Canfield, 5th eggs, E. E. Bower, 4th eggs.

Solid color without weight. Huntington: with weight. Canfield. Particolored with weight. Fox; without weight. Eggart.

Poultry Chats For February

By Mrs. C. A. Blanchard

Mating up our pens and preparing for our supply of eggs for hatching must occupy our full attention at the present time, if it has not already been done. The earlier we can get our chicks hatched the better they are, provided we have our pens in order to secure the best results in breeding for those early chicks. We have found old hens do not pay as breeders. It may pay to keep a few which are extra fine as show birds—they are sure to be up in weight—but for the business of laying eggs and hatching chicks they are a failure. They lay very few eggs, and what they do lay are extra large and very few of them will hatch, at least such has been our experience. We have always noticed that the very largest eggs were the ones left in the tray after the chicks were all done hatching. Chicks were dead in the shells at all stages of incubation. All the old hens have been disposed of and only the best of last year's pullets kept for this year's breeders. We make an extra effort to get our hens laying in the early fall. We want them at their best when eggs are needed for hatching purposes. If they have had a good long rest after molting their bodies are strong, they are in prime condition and will lay more fertile eggs.

Fertile eggs are what we are after when hatching time comes. Neither hens or incubators can hatch strong chicks from weak eggs. We must have eggs that will produce strong healthy chicks. In order to produce them we must give our poultry good care, clean quarters, proper food and regular attention. Haphazard, careless ways will not give the results we are after.

The last two years we have raised more of our first and second batches than any of the later ones. We had to keep them in the house part of the time, and expect to do the same again this year, as our farm cannot as yet boast of a brooder house.

A cosy place for sunny spring days was a muslin house. A frame was made 4x6 feet, four feet high at one side by one at the other. We covered it with unbleached muslin, then set the brooder outside with a small opening for chicks to run through, thus giving the chicks the full run of their little house. We kept chaff on the

floor and learned chicks early in life to scratch for their living. Our first, second and third hatches used the muslin house; after that it was too warm, so the large sheet was taken off and laid away for this year. When we were obliged to have the chicks in the house lath frames were made to fit the legs of the incubator, then covered with muslin. In that way we had a scratch pen under the incubator. I hear some one say noise and work. Yes, but no one need to think of making poultry raising a business without work. Children can and do save us many steps and do lots of the work, but there is much that calls older heads and hands. It is an easy way to send a child to feed and water the chickens, but if the children are not looked after it is feast or famine. Enough food is put in one yard for twenty hens where perhaps there are six to eat it, then water put in part of the fountains, while others are left without any. We find it pays to get out and be "that boy or girl" at least once a day ourselves. Then we know how things are going.

During the summer months our chief enemy to fight is lice. It is quite an easy matter to keep the poultry house in a healthy condition otherwise. In the winter it is dampness. While the days are bright and sunny and poultry can run at large we have very little trouble, but when cold, stormy days come and our birds are confined to their houses the walls soon become frosted. The litter on the floor becomes damp and soggy; in a very few days it must be removed and fresh put in. Hens cannot live and keep well in such a damp, foul air. The cry we hear is, "I brought clean straw just the other day." However, clean straw it is, even if we have to get it ourselves.

One of our very handiest implements is a one-horse wagon, made from an old worn-out buggy. The buggy box and springs were taken off and a box made of boards. That one-horse wagon comes into use in many a way and saves us much hard lugging. When our good old gray horse is hitched onto it we can soon have a clean poultry house, and if we are the only "boy" there is around we can go to the stack for straw. When we go ourselves we bring all we want. We

never ask how much we can have. I know there is many an old buggy standing around farms that could be made into something useful just as we have ours.

MRS. C. A. BLANCHARD.
Friend, Neb.

LOST

I want to tell you a true story. About four years ago I wanted extra fine B. P. R. eggs and raise some 94 to 95 point birds and be up with boy's high mucky mucks. Well, now, I was short of cash at the time, so one day there came a fine catalogue finely illustrated from Ohio, thirty or forty varieties and some fine cuts, an extra fine cockerel from Hawkins or Thompson, 94½, mated with fine pullets and hens, score 93 to 95 points honest points, and a line written on bottom of page, "What have you to trade?" Well, now I struck it. Now, I had a good gold watch—it cost \$33—and so I wrote him I had it and would trade it for eggs. He wrote back that he would cut the price on eggs—they were \$5 per setting—and he would let me have them for \$4 per setting and give \$2, if the watch was all O. K. I wrote back it was. He wanted the watch first; he could not send the eggs all at one time, but he would send 100 and in ten days send another 100. I wrote him I would have the incubator lit up and ready for the eggs. I run it along a week, making all trains every day looking for my eggs. Well, I am still looking, but no hopes. I wrote again to see what was the matter and also wrote the postmaster and mayor, and my letter came back marked "fraudulent signature, postmaster general." Well, now, wouldn't that cork you. I wrote again to the

sheriff, and he said he thought he could locate my watch and asked me the number of it. I gave the number. The sheriff found it. A preacher had it. He bought it of what will I call him, but would give it up if I paid so much for it. Who did you say the fellow was? No, I have not said yet, but he was in jail in Springfield, Ohio. I would like to ask him what time it was by his gold watch and chain; and when the smoke cleared away there were poultry journals, incubator men and a hundred others in the soup, frogged to beat the band. After that I had two hot water machines cook four batches of eggs, about 1,000, and in winding up, cats and rats got away with 125 chicks. Well, I have a new watch now, and am still doing business at the old stand as though nothing had happened. Many a one would have thrown up his boots and socks, if so fortunate as to have any, and quit in disgust. It takes grit and more of it and hold fast to the last is the only sure road to success. Buy good birds when you buy; pay a good price; don't say they must be cheap; breed in line, and raise your own show birds. Go slow, and stick everlasting at it. Yours for success,

A. L. HOUSTON.

How To Make A Cheap Winter Brooder

The problem which has been the most difficult to solve for those wishing to raise fall or winter chickens is how to give them summer-like conditions. Having purchased an exhibition trio of winning Barred Rocks at a high price and succeeded in getting a nice clutch by October 25, the question of how to get them through the long, cold winter months of this latitude was a puzzle that set me to thinking, and after long hours and several days' study, I finally hit upon the following plan that up to date has proved an astonishing success, not only to myself but the whole town, to say nothing about the beautiful little chicks, now a month old, not a weakening among the lot and as large as quail. But as to my plan. Supposing you have an outside cellar door usually called a cellarway, leading to your cellar; supposing it faces to the sun, or southeast, south or southwest, make a board floor from the second step down to the inside cellar door, where you cut a hole for a common stove pipe. In this place one joint of pipe, on top of this joint of pipe place an elbow and next another joint of stove pipe inserted in a T joint; elevate and fasten this T

This bird has won eleven 1st premiums, and was scored by H. A. Bridge, 95½; by E. R. Jones, 95½; by S. B. Lane, 95¼; and has been given first prize by comparison by Wick Hathaway, M. M. Bargar and Chas. McClave. He is the property of Maughlin Bros., of Colmbus, Ohio.

joint to a fixture about two feet above the floor underneath the opposite end of pipe and beneath your brooder floor place a brooder lamp; light lamp from cellar, being careful not to turn wick too high, causing lamp to smoke; inserting the chimney in end of pipe. For a cover to your brooder, purchase a small storm sash, say 2x4 feet; make a box out of 1-foot boards the size of storm window; place the sash on the box over the brooder, giving it a slant to shed rain and melting snow water; fit boards around the window box until cellarway or your new brooder is completely covered, banking with earth to top of sash-box, leaving a small hole at

lower end for small chicks to go out and in on warm days; make your storm sash to slide open and shut for ventilation to carry off lamp fumes, giving you a chance to get in to clean out frequently. Place in bottom of brooder a layer of sand, on this damp earth, then dry leaves or chaff; use a common thermometer; use good judgment as to amount of heat—about 60 degrees first week, 50 degrees third week, and gradually lower as chicks feather. Keep hen with them as long as she will cover them; let her out pleasant days when not below forty degrees; feed and water; give plenty of ventilation at all times. Clermont, Ia. E. A. FISK.

Poultry Investigator

Is published the first of each month at
Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.25 per inch each insertion. One inch one year \$12.00. These are our only rates for advertising and will be strictly adhered to. We treat all alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of **POULTRY INVESTIGATOR** is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in **THE POULTRY INVESTIGATOR**.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

The Poultry Investigator has received beautiful catalogues from the following companies this month: Cyphers Incubator Co., Hawkeye Incubator Co., Prairie State Incubator Co., Clay Phelps Incubator Co., Petaluma Incubator Co., Reliable Incubator Co., Stahl Incubator Co., The Marilla Incubator Co., The Humphrey Bone Mill Co., The Adams Bone Mill Co., The Mann Bone Mill Co., The Stratton Bone Mill Co. These people, as well as several other of our patrons, are sending out fine catalogues free. They are instructive, ornamental, and useful. Look up their ads and send for catalogues at once.

Among Ourselves

At this season of year one's mind naturally turns to the subject of "the weather," and we wonder if anything is suffering from cold, just as last July we had pitied the heat victims, ourselves included. A person can keep warm, but not always can he keep cool; a dumb creature can do neither, it is just at the mercy—anything but mercy sometimes—of careless, selfish mankind. But putting the cruelty question aside, why will a man let money slip out of his pocket daily because of this carelessness?

Coming home from a drive one cold evening not long since, we noticed a flock of fowls gone to roost in some trees. Their owner is a man who works hard to make ends meet and yet was letting—but how much she was wasting we may gather from the following report of a West Virginia experiment station, and we presume they know nothing about a western winter out there.

Two houses built exactly alike and situated side by side, were selected for the experiment, in each of which were placed twelve pullets. One house had previously been sheathed on the inside and covered with paper to make it perfectly tight. Both were boarded with matched siding and had shingle roofs.

The fowls were fed alike in each case. The morning mash consisted of corn meal, ground middlings and ground oats, and at night whole grain scattered in litter. They also had fresh water, grit and bone and granulated bone. The experiment started November 24 and continued for five months. The following table shows the number of eggs laid during each period of thirty days.

Result from cold and warm houses:
Warm house....87 130 138 120 154—629
Cold house....39 106 103 124 114—480

These experiments are interesting and instructive and we ought to be able to profit by them.

Now here is another experiment made by a man who says in **Farm Poultry**:

I keep 400 hens and make my entire living from them; do no farming of any kind and have no other income. My eggs are sold at wholesale prices to one man, and all poultry sold alive to the hen man at the door.

I make from \$700 to \$800 a year from my 400 hens.

He goes on to state how many eggs he gets per month, average price, etc., but to the experiment.

He says he put 200 in yards and

gave 200 free range and found he made a good deal more from the yarded hens than those on free range.

Quite a comfort to some of us who are compelled to yard our fowls or go out of business.

This breeder, in common with all others, holds that profitable poultry must produce winter eggs.

At a farmers' institute an Ontario agricultural college professor said:

"A winter egg will sell for three times as much as an egg produced in summer. * * * One of the first conditions necessary to the production of winter eggs is regularity of food and kindness. * * Hens have a better idea of time than you, without the aid of a watch, would have, and if the fowls are not fed when they think they ought to be, they become fretful and uneasy, and the result is loss."

He goes on to say that when he is away from the college flock as much as 25 or 30 per cent decrease in egg production occurs, and it takes four or five days to bring them back—all this, although they have the very best of care from the students.

Hens, like cows, need the same kind, steady hand over them; they do not even like a change in the wearing apparel of their attendant.

We were reading somewhere recently where a feminine fancier said in effect:

"It is a base slander to say that hens have no brains. Let me appear among my birds in ordinary costume of blue calico and all is serene; but if I go among them in Sunday clothes terror reigns."

Another feminine fancier bears this testimony:

"Our southern trip to Florida was the cause of dire calamity among our feathered pets. I didn't suppose our birds ever knew what was the matter, but that did not make me feel any more comfortable about it, and it will take me at least two years to repair damages. Who would dream that such havoc could be wrought in scarcely two months' time!"

It goes without saying that all creatures—human and dumb, but perhaps more especially the latter—are happier and more useful when kindness and regularity govern their care.

How we wish we might gain the ear of every man or boy in America who has in any way to do with animals. We would like to at least try to make him see the sin and folly of cruelty or even carelessness. Much of the misery in the dumb creation is due to thoughtlessness rather than downright cruelty.

A minister, past 60 years of age,

AN UP-TO-DATE POULTRY HOUSE.

said the other evening, referring to a little book we have in print, Master and I":

"After I read it I saw things that I would never have noticed before. First time I went down town I took note of a weary looking horse. I said to a man, 'How long has it been tied here?' 'O, all day and will probably be there all night. Man's in the saloon.'

"Well," I said, 'go to the marshal and have the animal cared for at once. Put him in a livery barn and charge it up to his master. Tell the marshal I will back him.'

And the good man added, half laughing, half shamefacedly. "In all my life it never occurred to me to meddle with such a thing."

It is not beyond anyone to provide warm quarters for their fowls. One of our hen houses—we came to Rose Lawn two years since and so far have had to make the best of what we found—is log, boarded outside and painted. It is well "chinked and painted"—"dauded," as the pioneer used to say—well lighted and warm. Away up above a man's head are perches that we suppose were used at one time in chicken history. Now there is a hopping board and perches away down. Our other hen house is a good, unused cow barn, or part of it; slats were nailed inside two closed stalls and straw stuffed between them and

the wall proper. This is nearly a foot in thickness and makes a hen "bed room" in which water rarely chills. One of these rooms is lighted by a regular window, the other by an opening over which white muslin is firmly stretched and tucked. A board just filling the aperture is handy and put into use if the night is very cold.

All floors are deep with straw and other clean litter. Besides the scratching grounds are liberally littered, and the birds are busy as the proverbial bee all the day.

VELMA CALDWELL MELVILLE.

An Improved Poultry House.

The illustration shows a rear view of E. W. Geer's concrete poultry house taken from the eastward. The house is $7\frac{1}{2}$ feet high in front, and 4 feet at the rear. Thirty feet of the concrete is covered with clapboards ceiled to rafters two-thirds the way up, the remaining 30 feet of concrete and the 14 foot brood house addition is covered with matched flooring.

The row of posts at rear of house support three foot wire netting to prevent the outside stock from going over the house into the breeding pens.

A row of Lombardy Poplars are seen in front of the house, planted there to shade the runs in summer time. A part of one row of sugar maples are also shown along the driveway between

the poultry house and our dwelling.

A vineyard of three hundred vines stands in front of the house into which all the scratch material is thrown together with the droppings of the fowls, serving a double and valuable purpose, as these three hundred vines yielded \$200 in fruit last season besides that which was used at home. Each 10x10 foot room has as entrance for the fowls both north and south so that they can be turned out either way. Edna Earl, the only child, dressed in dark, and her little friend Bessie, are also shown in this picture.

I can't possibly tell everything there is good about them at one time. If readers want to know more let them write me with stamp. I will write more from time to time.

The representative of the Poultry Investigator saw many nice displays at the Nebraska state show at Lincoln last month, but among the very best in the large auditorium was the Buff Orpington showing by H. H. Campbell of Osceola, Neb., who was the heaviest winner in this class. He entered one pen and nine singles, and out of a possible ten ribbons carried off seven, and the display of Orpingtons was the largest and most hotly contested ever known west of Chicago. A picture of Mr. Campbell's first prize pullet will appear in the March number of the Investigator.

Kansas City Fancy Poultry Club.

The first poultry show given by the Kansas City Fancy Poultry club was held in Kansas City, Mo., December 6, 7 and 8, 1901. W. S. Russell and T. W. Southard judged the poultry and John Haman judged the pigeons.

This was the most successful poultry show ever held in Kansas City. All promises were kept and all exhibitors went home satisfied. Out of town exhibitors showed their faith in Kansas City by attending and showing their stock. There were 105 exhibitors and over 1,000 entries in the poultry and pigeon classes. The Poultry Breeders' convention was held at the Midland hotel on December 6 and the Midland Poultry association was formed. Its first show will be held in January, 1903, and it will rival the Madison Square Garden show in magnitude. There were 350 entries in the pigeon classes. The awards for the Kansas City Fancy Poultry club show are as follows:

Barred Plymouth Rocks—Ten cocks, 53 hens, 50 cockerels, 83 pullets and 13 pens shown. Mrs. C. O. Bailey, Platte City, Mo., 1st cock, 3d cockerel, 5th pullet, 2d pen; J. R. Young, Manhattan, Kan., 1st and 4th cockerel, 1st, 2d, 3d and 4th pullet, 1st and 5th pen; Roley Bros., Sedalia, Mo., 2d and 3d cock and 4th hen; Brackenbury Bros., Independence, Mo., 5th cock and 4th hen; J. W. Faris, 3d hen; L. C. Bair, Kansas City, Mo., 4th cock, 1st and 2d hen; Mrs. W. C. Ellis, Liberty, Mo., 5th hen, 5th cockerel, 3d pen and 2d cockerel.

White Plymouth Rocks: Six cocks, 18 hens, 14 cockerels, 36 pullets entered. Geo. A. Tipple, Lee's Summit, Mo., 1st cock, 1st, 2d, 3d, 4th and 5th hen, 2d and 3d cockerel, 1st pullet and 2d pen; Mrs. T. J. Kennedy, Ridgely, Mo., 2d cock, 2d pullet, 3d pen; P. E. and J. I. Williams, Independence, Mo., 2d cock; E. H. Ieath, Kansas City, Mo., 3d cock and 5th pen; Wm. Meinhoffer, Kansas City, Mo., 4th hen and 4th pullet; Stifer & Sager, Kansas City, Mo.

Buff Plymouth Rocks—E. M. and O. C. Arnold, Independence, Mo., 2d cock; the Smiths, Manhattan, Kan., 1st hen, 1st and 2d cockerel, 1st, 2d, 3d, 4th and 5th pullets, and 1st pen.

Silver Wyandottes—Mrs. F. Markward, Kansas City, Mo., 2d cock, 3d hen, 2d pen; John B. Gage, Kansas City, Mo., 2d and 4th pullets; Reed Storms, Kansas City, Kas., 1st, 2d and 5th hens, 5th pullet; W. J. Munkers, Missouri City, Mo., 4th hen, 1st cockerel, 1st and 3d pullets, 1st pen.

Golden Wyandottes—A. N. Roun-

velle, Kansas City, Mo., 1st cockerel, 1st pullet.

White Wyandottes—Olney Bros., Kansas City, Mo., 1st cockerel, 1st hen, 4th cockerel, 5th pullet, 2d pen; J. H. Hisey, Kansas City, Mo., 2d and 3d cocks, 2d cockerel, 1st, 2d and 4th pullets, 1st pen; E. H. Mack, Kansas City, Mo., 2d and 4th hens; John B. Gage, 3d and 5th hens, 1st and 3d cockerels, 3d pullet; Mrs. Maud Rolfe, Wetmore, Kan., 5th cockerel, 6th pullet.

Rhode Island Reds—Wm. Meinhoffer, Kansas City, Mo., 1st, 2d and 3d cockerels; 2d and 3d pullets; E. T. Hunting, Kansas City, Mo., 1st cock, 1st, 2d and 3d hen, 1st pullet, 1st pen. Buff Orpingtons—Mrs. O. H. Bugbee, Kansas City, Kan., 1st cock; Stifer & Sager, Kansas City, Mo., 1st and 3d cockerel, 1st, 3d, 4th and 5th pullets, 1st pen; A. T. McAdow, Lamar, Mo., 2d pullet, 2d cockerel.

Light Brahmas—Dr. A. B. Jones, Wa Keeney, Kan., 1st cockerel; Steekwer Bros., St. Louis, Mo., 2d and 3d cockerel, 1st and 4th pullet.

Dark Brahmas—N. R. Nye, Leavenworth, Kan., 3d cock, 1st and 2d hen, 1st and 2d pullets, 1st pen.

Buff Cochins—Chas. Steinberger, Wa Keeney, Kan., 1st, 2d and 3d cocks, 2d and 3d hens, 1st and 2d cockerel, 1st and 2d pullets, 1st pen; J. B. Clark, Chicago, Ill., 1st hen, 3d, 4th and 5th cockerel.

Partridge Cochins—C. M. Neff, Kansas City, Mo., 2d and 3d cocks, 1st, 2d and 3d hens, 1st pullet, 1st pen; Dr. A. B. Jones, Wa Keeney, Kan., 1st cock, 2d and 3d pullets.

Black Langshans—H. H. Borgman, Kansas City, Mo., 1st, 2d and 3d cock, 1st, 2d, 4th and 5th hen, 2d 3d and 4th cockerels; 3d pullet, 2d, 3 and 4th pen; Hallwood Poultry farm, Carthage, Mo., 3d hen, 1st and 5th cockerel, 1st, 4th and 5th pullets, 1st pen; E. D. Taylor, Independence, Mo., 4th cock, 5th pen; Gus Orloff, Kansas City, Mo., 2d pullet; 4 cocks, 22 hens, 35 cockerels, 54 pullets and 5 pens entered.

S. C. Brown Leghorns—Darby Poultry yards, Kansas City, 1st cock, 2d, 3d hen, 4th cock, 1st and 4th pullets, 1st pen; W. A. Lamb, Manhattan, Kan., 2d cock, 3d and 5th pullets, 4th pen; J. J. Carel, Liberty, Mo., 1st, 4th and 5th hen, 1st and 2d cockerel. 3d pen; W. S. Shockley, Kansas City, Mo., 3d and 5th cockerel, 2d pullet, 2d pen.

S. C. White Leghorns—J. H. Adams, Missouri City, Mo., 1st cock, 1st and 2d hen, 1st cockerel, 1st, 2d, 3d and 4th pullet, 1st pen.

Buff Leghorns—J. P. Carson, Missouri City, Mo., 1st cock, 4th hen, 2d

The above photo has the distinction of being the first half-tone ever made of an incubator while hatching or after the hatch was off. We call it the Happy Family for the want of a better name; however, we think the name suits very well. We have adopted this scene as a trade mark. It has appeared in our advertising more than any other cut we have ever used. Have you got the Sure Hatch Incubator Company's new catalogue?

and 5th pullet, I. A. Harvey, Harrisonville, Mo., 1st, 2d, 3d and 5th hens, 2d cockerel, 2d pen; Clark Bros., Kansas City, Mo., 2d cock, 1st cockerel 3d and 4th pullet, 1st pen.

Cornish Indian Games—J. A. Buckner, Kansas City, Mo., 1st cock, 1st hen, 2d cockerel, 1st pen; E. F. Hunting, Kansas City, Mo., 2d cock, 4th and 5th hen, 2d pen; John B. Gage, Kansas City, Mo., 2d and 3d hen, 1st cockerel, 1st, 2d, 3d, 4th and 5th pullets.

S. Duckwing Games—Clarence Hovelman, Kansas City, Mo., 1st cock; N. H. Achison, Kansas City, Mo., 1st cockerel.

Pet Games—E. S. Jackson, Kansas City, Mo., 2d cock, 3d hen; Clarence Hovelman, Kansas City, Mo., 1st hen; John B. Sage, Kansas City, Mo., 2d hen, 3d and 4th cockerels, 1st pullet.

White Minorcas—D. V. Ault, Harrison, Ark., 1st and 2d hen, 1st cockerel, 1st trio.

S. S. Hamburgs—F. S. Schadel, Kansas City, Kan., 1st and 2d cocks, 1st hen; Eliz White, Kansas City, Mo., 3d cock, 2d hen.

Blue Andalusians—A. F. McAdow, Lamar, Mo., 1st, 2d, 3d and 4th pullets.

White F. Black Spanish—H. W. Chestnut, Birmingham, Kan., 1st, 2d, 8d and 4th hen, 1st and 2d cockerel, 1st, 2d, 3d and 4th pullets, 1st and 2d pens.

Buff Cochins Bantams—Hollywood

A B. P. Rock cockerel owned by Mrs. J. W. Pinkerton, Clay Center, Kas. She breeds nothing but the test.

Poultry Farm, Carthage, Mo., 1st cock, 1st and 3d hens, 1st cockerel, 1st and 3d pullets; Clark Bros., Kansas City, Mo., 2d cock, 2d hen, 2d cockerel, 2d pullet.

White Cochins Bantams—H. Schmidt, Kansas City, Mo., 1st cock, 1st, 2d, 3d and 4th hens, 1st cockerel, 1st pen.

Red Pyle, Same Bantams—Hallwood Poultry farm, Carthage, Mo., 1st cock, 1st hen.

White Pit, Same Bantams—E. L. James, Kansas City, Mo., 3d cock, 3d hen.

Golden Seabright Bantams—Willard C. Holmes, Kansas City, Mo., 1st and 2d hens, 2d and 3d pullets; Henry Bundselm, Independence, Mo., 1st pullets.

Main Bronze Turkeys—Mrs. P. H. Harsell, Kearney, Mo., 1st old tom, 1st and 2d hen, 1st young tom, 1st, 2d, 3d, 4th and 5th pullets, 1st pen.

White Holland Turkeys—Peter Pearson, Kansas City, Mo., 1st and 2d pullets.

Muscovy Ducks—A. Paledjl, Kansas City, Mo., 1st duck, 1st, 2d, 3d and 4th Ducks.

Eggs—E. M. and O. C. Arnold, Independence, Mo., 1st dozen.

Cavies—Ed Hills, Kansas City, Mo., 1st collection.

Incubators—Chace Mer. Co., Kansas City, Mo., 1st on Great Western.

GRAND SPECIALS.

Best 50 birds in the show—H. H. Borgmann, Kansas City, Mo.

Ten highest scoring birds in the show—H. H. Borgmann, Kansas City, Mo.

Best 2 cocks, 2 hens, 2 cockerels, 2

pullets in the American class—J. H. Hisey, Kansas City, Mo.

Best 2 cocks, 2 hens, 2 cockerels, 2 pullets in Asiatic class—H. H. Borgmann, Kansas City, Mo.

Ten highest scoring Indian Games—J. B. Gage, Kansas City, Mo.

Highest scoring bird in the American class, J. R. Young, Manhattan, Kan.

Best display, 10 or more Black Langshans—H. H. Borgmann.

Ten highest scoring White Wyandottes—J. H. Hisey.

Best twelve Barred Plymouth Rock females—Mrs. W. C. Ellis, Liberty, Mo.

Largest display of Bantams—Hallwood Poultry Farm, Carthage, Mo.

Best 50 pigeons in the show—Dr. W. E. Louckeer, Kansas City, Mo.

Winners at Garden City Show.

Mrs. Belle Lear, Ulrich, Mo.—Light Brahmas and Bronze Turkeys—Light Brahmas, cock, 1; hens, 1, 2, 3; pen, 1; trio, 1. Bronze turkeys, cock, 1; hen, 1; pair, 1.

P. H. DePree, Kansas City, Mo.—Buff Rocks, pullet, 3.

T. J. Jones, Garden City, Mo.—Barred, White and Buff Rocks and Pekin Ducks—Buff Rocks, cock, 1; hen, 1, 2, 3; cockerel, 2; pen, 2. Barred Rocks, cockerel, 3; pen, 3. White Rocks, pullet, 1, 2; pen, 2. Sweepstakes, 2d in American class. Display, 1st in American class. Ducks, drake, old, 1; duck, old, 1, 2; drake, young, 1; duck, young, 1, 2; pairs, 1, 2; trios, 1, 2.

W. H. Buckley, Garden City, Mo.—Buff Cochins, Partridge Cochins, White Langshans and B. P. Rocks—Buff Cochins, hen, 1, 2; cockerel, 1; pullet, 3; pen, 1. P. Cochins, cock, 1; hens, 1, 2; cockerels, 1, 2; pullets, 1, 2, 3; pen, 1; trio, 1. White Langshans, cock, 2; hens, 2, 3; cockerel, 2; pen, 2; trio, 2. Barred Rocks, cock, 2; cockerel, 2; pullet, 1; pen, 2; trio, 2; sweepstakes, 2, in class 2.

J. E. Brasfield, Garden City, Mo.—Buff P. Rocks, cockerel, 1; pullet, 1; pen, 1; trio, 1. Highest scoring pullet in class 1.

W. A. Kimberlin, Garden City, Mo.—White Langshans, hen, 1; pen, 3. Highest scoring hen in class 2.

J. P. Buckley, Garden City, Mo.—Barred P. Rocks.

H. B. Ingham, Lucas, Mo.—White P. Rocks, cock, 2; hen, 3; cockerel, 2; pen, 3; trio, 2.

S. P. Byler, Garden City, Mo.—White and Barred Rocks, White and Black Langshans and Buff Cochins—White Langshans, cock, 1; cockerel,

1; pullet, 1, 2, 3; pen, 1; trio, 1. Buff Cochins, cock, 1; hen, 3; pullet, 1, 2; pen, 2; trio, 2. Black Langshans, cock, 1; hens, 1, 2, 3; cockerel, 2; pullet, 2; pen, 1; trio, 1, 2. Barred Rocks, cock, 3; cockerel, 1; pullet, 2. White Rocks, hen, 2. Sweepstakes, 2, in class 2. Display, 1, in class 2. Highest scoring cock in class 2. Highest scoring cock in show.

Mrs. M. E. Graves, Garden City, Mo.—White P. Rocks, pullet, 3.

Dudley and Ralph Pringle, Garden City, Mo.—Fan Tail Pigeons and Belgian Hares—Pair, 1, on pigeons. Display, 2, on hares.

R. A. Kenagy, Garden City, Mo.—S. C. Brown Leghorns, cock, 1; hens, 1, 2, 3; pen, 1; trio, 1; cock, 1, in class 3; hen, 1, in class 3.

W. B. Crooks, Garden City, Mo.—Black Langshans, cockerel, 1; pullet, 1.

J. B. Schrock, Gunn City, Mo.—Golden and Silver Wyandottes and White and Barred Rocks—Silver Wyandottes, cockerel, 1; pullets, 1, 2; trio, 1. Golden Wyandottes, cock, 1; hens, 1, 2; trio, 1. Barred Rocks, cock, 1; hens, 1, 2; cockerel, 1; pullets, 2, 3; pen, 1; trio, 1. Display, 2, in class 1. White Rocks, cock, 1, 3; hen, 1; cockerel, 1, 3; pen, 1; trio, 1. Sweepstakes, 1, in class 1. Pen, 2, in class 1. Cock, 1, in class 1. Cockerel, 1, in class 1. Hen, 1, in class 1. Steve and Emery Nelson, Garden City, Mo.—White Langshans and Belgian Hares—Langshans, cockerel, 3. Hares, display, 1.

The Columbus, Ohio, Show.

The fifth annual exhibit held under the auspices of the Columbus Fanciers' Association, Dec. 26, 1901, to Jan. 2, 1902, was a marked improvement over all former shows, especially in quality. The birds seen at Columbus this year were of better quality than those seen at former shows. The awards were placed with the very best of satisfaction. We did not hear of a single dissatisfied exhibitor during the whole show. The competent judges were: H. A. Bridge, S. B. Lane, Robert Champion, Clas. Craner and M. M. Barger.

Some of the classes were not filled up as we expected to see, but those that were were of the highest quality. Plymouth Rocks were out in full bloom, some 250 Barred and the Whites numbering 212. There was also a very nice display of Wyandottes. The Asiatics were something fine, and the Mediterranean, Hamburg and Bantam classes were simply a dream. The pigeon entries amounted to some 400 and made a very nice display.

The awards were as follows:

Barred Plymouth Rocks—F. A. Bridgel, 1, 3 ck; 1, 3 hen; 1 pul; 4 ck; 2 pen. O. E. Miles secured, 1 ck; 1 pen; 2, 3 pul; 3 pen. J. M. Wilson, 3 ck.

White Plymouth Rocks—Maughlin

Bros. winning 1 ck; 3 ckl; 4 hen; 3 pen. E. R. Dunn, 1 ckl; 1 hen, tie; 4 pen. W. T. Elliott, 1 hen; 2, 3 ckl; 1 pul; 2 ckl; 1 pen. M. W. Morris, 2 pen; 2 pul; 3 hen; 1 ckl; 3 pul. F. A. Brigel, 1 ck.

White Wyandottes—W. O. Ruth'ord, 1 ckl; 1, 2 pul; 1 pen. J. C. Underwood, 3 ck; 4 ckl. O. E. Miles, 2 ck; 2 ckl; 1, 2, 3, 4 hen; 2 pen.

S. L. Wyandottes—Joe Pace, 1, 2 ck; 1 ckl; 1, 3 pul; 1, 2 hen; 1, 2 pen. C. L. Helsel, 3 ck; 3 hen.

G. Wyandottes—O. E. Miles secured all the prizes with a very fine display of birds of excellent shape and color.

Light Brahmas—J. C. Underwood had a clean sweep of all the prizes in this class with a string of large, fine station and excellent colored birds, with a male bird scoring 94 and with females scoring equally as good.

Black Langshans—The prizes were divided between I. C. Price and J. C. Underwood.

White Cochins—P. C. Gordon won 1 ck; 1 ckl; 1 pul; 1 hen; 1 pen.

S. C. Brown Leghorns—Frank McDonald secured all the prizes with as fine a lot of Brown Leghorns as we have ever seen.

White Leghorns—J. M. Kranter won 1 ckl; 1 pul; 1 hen. C. L. Helsel secured 1 ck. J. C. Underwood, 1 pen; 2 ck; 2 ckl; 2, 3 hen; 2, 3 pul.

Hamburgs—Theodore Dessium won 1 ck; 1 ckl; 1, 2, 3, 4 pul; 1, 2, 3, 4 hen; 1, 2 pen.

C. M. Stilse secured all the premiums on Black Minorcas.

White Minorcas—Harry Leibold with a fine display of birds won 1, 2 ck; 1, 2 ckl; 1, 2, 3, 4 pul; 1, 2, 3, 4 hen; 1, 2 pen.

Buff Cochins—D. A. Jones with a large display of little Buffs, which seemed to be the most attractive display in the show, won 1 ck; 1, 2 ckl; 1, 2, 3, 4 hen; 1, 2, 3, 4 pul; 1, 2 pen.

White Cochins—Robert Shewan won all the premiums offered on this variety.

From the pigeon department, where there were over 400 birds on exhibition, all of which were of the very finest type, the exhibitors were: H. A. Metz, E. Colwell, W. T. Bergin, and G. F. Abbe.

The incubator exhibit was something fine. It was made mainly by the Sure Hatch Incubator Co. of Columbus, O., and Clay Center, Neb.

1st prize Partridge Cochins hen owned by DeWitt Yates, Fairbury, Neb.

Wm. Metzmeier, Independence, Iowa, owns this beautiful B. P. Rock pullet and a fine flock of more of the same stripe. He can please you.

FROM MRS. MAY TAYLOR.

Did you ever notice the difference in exhibitors at the show? There are always more defeated candidates than those winning prizes, and these latter hold little consolation meetings up and down between the rows of coops and sympathize with one another, and pass jokes among themselves, and have a real good time. While the lucky ones, even while receiving the congratulations of friends and acknowledging gracefully the "kind words," seem to have a slight looseness and lonesomeness thrown around them; the distinction is hardly perceptible at times and at other times it is very marked. The winners, while getting the money and the "honors," do not seem to be getting that most prized of all prizes—happiness and satisfaction—out of the show which the other side does.

But one can not have it all their own way. And again I sometimes think the person who goes simply as a visitor gets more real unbiased satisfaction out of the show than any one else. Some things you do find out that you wish you hadn't, little weaknesses in characters that you had hitherto held in such high esteem; but still these when banked against the greatness of the lives of others so fade them into insignificance that you forget all about it and are strengthened and gladdened because of it.

These meetings are like—
"Ships that pass in the night

And speak each other in passing;
Only a signal shown,
Then darkness again and silence!"

We are all getting ready for the early egg trade and the early chick. We had such a beautiful fall to live and work in that we have this part of our business pretty well in hand, and think we will be ready to meet all calls for early eggs promptly. While our hen house under the hill is warm and snug, yet we do not intend that our fowls shall be turned into hot house plants by any means. We do not intend to turn them out in the snow, but they will get plenty of good cold air, and we expect them to earn their keep.

When packing eggs for early shipment, guard against cold as much as possible. Line the baskets with two or three thicknesses of paper and wrap each egg in paper. It makes no difference what the other manner of packing may be, paper will keep out the cold air as nothing else will, and it is always handy, at least in the home of any one who has eggs to pack. I don't believe any one could be a successful poultry man or woman without papers. We barely have time to glance through many that we get, and give them away by the bushel basketful.

We call all our readers attention to the advertisement of Archias' Seed Store, Sedalia, Mo. They have a fine catalogue and it is free. It will soon be time to put in your garden and flower seeds and the catalogue will do you good. Send for it.

A 94, Light Brahma hen owned by Geo. B. Clary, Fairbury, Nebr.

Does It Pay to Advertise?

Well, I should smile.

Do you suppose we Missourians would have found out that our president was assassinated had it not been for the printers' ink and the pulse of our nation? Some folks say that we Missourians have to see a thing before we will believe it, but that is a sad mistake. As Josh Billings has said, "We had no kin or kin-neck-slum" at Buffalo or Washington to write us up his obituary and send it to us, and as our chicken crop was too light to take such an elaborate trip this year, so we just turned our ears to the harp strings as they vibrated the sad news from shore to shore.

And so it is in the poultry business, or any other kind of enterprise, if you have not got your finger on the pulse and keep in touch with the life of your business, you had better close your eyes and take a nap. But remember while you are asleep you are losing your footing.

As I always write from my own letter box, and if you will please pardon me for such a slangy expression, "I'll blow my horn from the stump." When we first started into the poultry business we were very careful about exposing our names and live stock before the public, and we would say, "Little boats must keep near the shore," and all such cranky ideas.

We would not advertise our young stock in our home papers until the cockerels' voices sounded the masculine chord and they could fly to the top of the highest fence, flop their wings and crow like their great ancestors. But I'll show you what we missed by our short-sightedness.

One evening my husband came in and said, "Wife, we must advertise our birds or we will not get to make

a sale this season. I met one of our old customers in town with a bird under each arm, and I said, 'Hello, there. Where did you get your game?' He told me very pleasantly where he had made his purchase, saying he had looked every week for our 'ad.' in the paper and not seeing it he came to the conclusion we had quit the business. But I just told him that we had only sadly neglected our business." The same week we had another just such a case, and do you know that after that we did not need to be "showed" to believe it paid to advertise in time.

By the next week our ad. was in the home paper and we concluded that season that we had better let the world know what we had if we expected to live in the poultry business.

Then we were afraid to send very far away from home for eggs for hatching purposes for fear the long ride and continued jolting might cause the chicks to be "knock kneed" or "pigeon-toed," and then we would have to stand accountable for such deformity. But, psah! Eggs can be sent from California to New York if handled with proper care, hatch and make as well developed birds as if the eggs had never been taken from the nest.

We may live in any state in the union and know just who has fine poultry, what kind they have, and many times through the medium of poultry papers can see the yards, birds and into the very hen house doors of many poultry plants, and you can almost put your finger down upon the bird you want by keeping in touch with the vibrations of poultry-dom.

Each month I am very eager to read the articles written by experienced poultry raisers and hunt up their ads. to see if they are still alive, and if I do not find them, well, I think just like the other fellow, "they've quit the business."

They say that experience teaches a dear school, but I'll be liberal with the readers of the Investigator and give you, free of charge, what it cost me, so your advertising will not cost you as much as mine did, as the first sale I lost would have more than paid for the ad in our home paper. But, of course, a regular poultry paper is the place to advertise. It is the medium through which the very life blood of poultrydom flows, and each month as we feel their pulsation they quicken our energies and strengthen our enthusiasm to delve deeper and deeper into its hidden resources.

EMMA PERKINS.

Single-combed BROWN LEGHORNS.

(Exclusively)

Birds of choice breeding. Scoring from 92 to 94½ are in my pens for 1100. Eggs from these pens \$2.00 per dozen. A satisfactory hatch guaranteed.

Frank McDonald, Columbus, O.
(ROUTE 1, STA. B)

Caution! Don't Read This Ad.

For if you do you will discover where to get the best of White Rocks scoring from 93 to 96½ at the largest shows throughout the state of Ohio. At Columbus, 1901, we showed thirty White Rocks with an average score of 95½. A 4-year-old cock bird scored 85½, and a 3-year-old hen scored 84½. Cramer, Barger and Jones. Stock for sale. Eggs \$2.00 per 15.

Maughlin Bros. Columbus, Ohio.

S. S. HAMBURG. At the Columbus shows for the past three years I have won more prizes than all other exhibitors combined. Fine shape, excellent color, full combs and unexcelled layers. Stock for sale at all times. Eggs in season. A good hatch guaranteed.

THEODORE DESSIM, COLUMBUS, OHIO.
10 E. Chestnut St.

EGGS \$2.50 for 15
\$4.50 for 30
Any aim, fertile egg, hardy duck, bred to win best to lay.

STOPI
R. ROSE and SINGE, 603 Rhode Island Road, Buff. Leghorns. Winners wherever shown. Only strong robust stock in my pens and you will not regret it if you send your order for eggs to

Eric Aurelius, Perry, Lake co., Ohio.

Winners Again! High class!

White, Barred & Buff Rocks, Silver and Laced Wyandottes. At last St. Louis show won 1st pen, 2nd and special. Fowling Green show 1st pullet, 2nd cock, 3rd pen and special. They are sired by winners and bred to winners from shows in Mo., Ill. and Ky. Eggs \$2.00 per 15. 2 settings \$3.75.

J. A. Douglas, Ferguson, Mo.

Closing out Sale!!

OF STANDARD BRED Toulouse geese at the following prices: 1-year-old birds, \$2 to \$3, according to weight, 2-year-old birds \$3 to \$4 each. Pekin ducks of standard weight at \$1.50 each.

My geese and ducks have won many 1st and 2nd premiums in St. Louis, Mo., and are sure to please.

Mrs. Eugene Holland, Highland, Ill.

Something Worth Knowing.

Money saved by making your own poultry remedies. To cure Cholera, STRENGTH, Roup, Scald, Leg Lice, Mites, Cheep, remedy but sure. Excellent Poultry Food to make hens lay. Celebrated Dourges Mixture etc. All receipts for \$1.00 or 25c each. Address with 2c stamp.

A. M. HAGLAND, Goshen, Ind., R. F. D. No. 2.

My White Minorcas

Won 1st, 2nd and 3rd at Delaware and Columbus on old and young stock. Scored 90 to 94½. Eggs from my best pen \$2.00 per 15; \$5.00 per 45; satisfaction guaranteed.

HARRY LIEBOLD, Delaware, Ohio, R. D. 2.

POULTRY CHATS

Our farmers' institute is a thing of the past in Friend for this year. We attended the sessions as closely as other business would permit. Mr. M. F. Greeley of South Dakota talked to us on poultry. He advocated building poultry houses in connection with stock barns. His own are built on one side of the sheep shed. Then in cold weather the warmth from the sheep keeps the poultry warm. Very few sheep are kept through this part of the country, so I don't see how we could make it work, unless we planned things as father had them on his Minnesota farm. They had a large square barn with lean-to built on the south and west sides. The southeast corner of this lean-to part was mother's hen house. The hens had full run of the barn at all times, and in cold, storm weather they were not so closely confined; in fact, hardly felt that they were shut in. She always kept from one to three hundred hens, and shipped her eggs by the crate to Minneapolis. Hens always paid on that farm. They kept just common stock with a good deal of barred rock blood mixed in. Mother's chicks were always tame; she could take a handful of feed and pick one up at any time. The care given to baby chicks when they are young has everything to do with making them tame.

Most children like to care for chicks. The extra care they give them makes tame birds besides it is good for the children to have something to take care of. If there is some living creature depending on them for food and shelter it teaches them to be thoughtful and careful for the lives of others besides themselves. In many homes the children have nothing that is their own to look after.

POULTRY INVESTIGATOR.

They should have an interest in something. If we do not care to have them mixed up in the general flock of poultry we can give them some separate breed. A pair or two of some pretty bantams would be nice, as they are so small they do not mix with the larger breeds. Build them a house make it snug and comfortable and let them have them all to themselves; they would be a pleasure and a profit to any farm boy or girl. It is to our interest to make things pleasant for our boys and girls on the farm. We want to keep them here with us. The streets and slums of cities and small towns are full enough now. We do not need to contribute any of our bright boys and girls to fill their ranks. It is very seldom that a boy or girl is expelled from a country school but how often do we find it in our town schools. We have even known nearly a whole class of seniors to be expelled from the high school. If those were country scholars there would be a big hubbub made. In last year's graduating class was a country boy. One of our town ladies was feeling so very sorry for him, for fear he would not do as well as the town boys. We took pains to be present, and our country boy outstripped the town boys by a long way, both in composition and delivery. Why is it that school boards and professors want to take our country boys into the high schools. I can tell you what they say, at least. Because they set a good example to the town boys, are more, industrious, prepare their lessons more perfectly and by so doing lead the town boys a race they do not like. Professors and school boards can see these things, so are doing all in their power to get our country boys into the high schools. We want them there; farm boys can use high school and business college educations, and we intend they shall have them. Well, I have wandered a long way from my chicken talk, but my articles are only chats anyway, and I may be excused if I don't talk chicken all the time.

MRS. C. A. BLANCHARD.

GLEN RAVEN EGG FARM NOTES. (Written for Poultry Investigator.)

The past week has been a stormy one, and a terror to the poultry tribe. One week ago tonight lightning appeared in the distance; by midnight rain was pouring down and continued until the evening of the following day. Then sleet set in, followed by snow, and a fall of temperature of 60 degrees. One snowfall followed another, and finally a regular northern blizzard

Have you seen it?

The Fanciers' World

America's leading publication for fanciers. Special departments for dogs, cats, pigeons, hares, poultry, etc. 32 pages. Profusely illustrated. Per year, 50 cents. Sample copy free.

The Fanciers' World

F. M. Simmonds, Jr. Publisher, Chicago, Ill.

Why Buy Stock and Poultry Foods?

Make your Own! I can send you formulas for all kinds of stock and poultry foods. Here are a few: Chick food 35c; egg food 35c; poultry condition powder, 45c; stock condition powder, 35c; hog condition powder, 30c. Write for others.

A. W. Collins,

630 Grand Ave. Keokuk, Ia.

BARRED P. ROCKS

Pure Thompson's Ringlets

40 extra fine Ckls. for sale, with score cards also. 25 Extra Fine M. Bronze Turkey Toms 1901 hatch, weighing upwards 20 lbs. Write for prices.

C. M. HULBERT, Fairbury, Neb.

Black Langshans

Large, vigorous stock, free from disqualification: up to standard weight; winners at Clay County Show. A fine lot of Ckls. for sale. Prices reasonable. Eggs for sale in season. Address:

MRS. N. W. JOHNSON, Clay Center, Neb.

For Sale....

200 Fine Black Langshans. 200 Some of the best I ever raised. Address

Ben. S. Myers,
Crawfordsville, Ind.

QUEEN CITY BUSINESS COLLEGE.

One of the leading schools of the west. Large attendance. Great demand for its graduates. Expenses low. Address

H. S. Miller, Pres., Hastings, Neb
Reference: Sure Hatch Incubator Company

Buff Orpingtons
AND
White Wyandottes

No better Stock
Raised.

I never have failed to win in largest shows. Birds score from 90 to 95½.

C. ROCKHILL,
Harvard, Nebraska.

swept over us, the mercury fell to 12 below zero, and it has been playing close around that point for several days. Fine sleighing is in order. But the chicken man has no time to enjoy such sport. It behooves us to be up and doing to prevent the fowls from freezing, keep them fed and watered and also try to induce them to keep on laying, which we are succeeding in doing much better than one might suppose under the conditions, or inclement weather. It has frozen the lay out of the Barred and White Rocks and Black Minorcas, but the Brown and White Leghorns still keep at it. They have the advantage of a warmer house than the Rocks. Minorcas and Leghorns are all in the same house. We have saved the combs of nearly all our B. Leghorn cockerels and all of our own breeding cocks that we could possibly get into the concrete house. Our loss will be very light, considering the sudden change and low temperature.

There will be a large number of fowls perish from the affects of this storm all over the country. Such birds as have large combs and long wattles that roosted where they were exposed to the full force of the cold will be so badly frozen as to die from the effects. I have heard of a good many in this condition. All laying stock exposed to this storm will be "done for" for some time. They will not lay many eggs, if any, before warm weather comes, let that be late or early, and the longer the cold lasts the farther off will be the coming of eggs from all stock so exposed. Only for my warm concrete house, egg production on this place would have been cut short by this blizzard. I had made full preparations for the coming of cold and stormy weather, consequently stood in readiness to meet it, and by almost living with my fowls during the day and closing them in the houses securely of nights, I am holding my own. My egg record from

the fowls in this house has not fallen off but very little. The Brown Leghorn pullets average about the same as before the storm. The shortage is in the Minorcas and White Leghorns.

The storm and cold doesn't affect the turkey as it does the chicken. They have no light combs or long wattles to get frosted; they get up in the trees to roost, turn their breast windward (let it be north or south), put their heads under their wings and defy King Winter to "do them anything." They fly down from their tree perch rather late of a morning, wade the snow, and don't seem to care for a dry spot to stand on. I take a broom and sweep away the snow, making a nice place for them, but they go on wading the snow just the same. They seem to enjoy a sun bath of a cold day as well as the chicken. I like the turkey and have a fine flock of them. Some people say they will eat as much as a hog, but that's all stuff. Mine don't eat any more than a chicken, and they are in fine condition.

Wishing all the fraternity a happy and prosperous New Year, good night.
E. W. GEER.

Farmington, Mo.

MATE A PEN.

On most farms where poultry is kept just for market stock and eggs, and on some where it is kept for more fancy sales, it is customary to gather the eggs for hatching from the whole flock. While many are using good male birds each year and thus trying to improve their flock, the improvement is necessarily retarded by the using of eggs from females of every grade and stage of development in the flock. No matter what you are breeding for—and if you are raising poultry at all you surely have some purpose in view—it will pay you to select your females for breeding as well as your males.

Try selecting ten or a dozen of your best females, placing them with a good male in a yard by themselves, and compare the stock raised from these with that raised from the flock.

Many are kept from trying this plan because they think it is necessary to have large yards with grass runs, bone cutters, fancy feeds, etc., but it is not. With two or three different kinds of grain, some table scraps, sand, gravel or something of the kind for grit, and a reasonable amount of care, you can keep your pen in a yard 10x20 feet and produce good fertile eggs. We know for we have tried it.
R. R. FRENCH.

Ford City Mo.

STAR ☆ ☆ ☆ ☆

Incubators And Brooders.

A large free Catalogue tells you all about them.

Our New No. 2 Double Walled
Dead Air Space Self-
Regulating

BROODERS

are without an equal. See cut.

Price \$12.00.

Our New A-1 just the same, only
with single walls at **\$10.00**
is the real thing. GOOD
Brooders for **\$5.00.**

Send for Circulars and Price
List

Dead Chicks Don't Pay.

Chicks thrive best on a balanced
feed of meaty, cereal and
grain element. That's

STAR SPECIFIC NO. 7.

It isn't a medicine, but a health
and strength builder. It prevents
most of the diseases that kill chicks.
Carefully compounded from re-
sults of expert experimenting and
study.

Price, at Dealers:

1 lb. pkg. ... 10c. 50 lb. bag. \$2.25
5 lb. pkg. ... 35c. 100 lb. bag. \$3.50

Star Incubator Co.,

12 Church St. Bound Brook, N. J.

Star Specifics

Is guaranteed to cure.

No 1. Cholera in old Fowls.	No 5. For Inactive Males.
No 2 Same for chicks	No 6. For indigestion
No 3 Egg Food and Tonic.	No 7. Food for Small Chicks.
No 4. For Cold and Group.	No 8. Disinfect Insect Powder.

Practical Poultry Raising

By M. M. JOHNSON.

I like to see the Poultry Investigator grow, even though I had no personal interest in the paper, I live to see it expand. Nebraska needs a live, practical poultry paper. A big poultry raising state and deserves the best that is going. While the editor of a poultry paper is engineer, as it were, he can not make the very best paper without the help of other practical poultry raisers. Varied experiences are what make a paper valuable. The Poultry Investigator is exceptionally fortunate along this line, the articles from the numerous real poultry raisers each month in the Investigator makes it a good paper. The absence of jealousies and mud slinging makes it a clean paper; the fairness of all advertisers makes it a safe advertising medium. But I have slightly strayed away from my text. Practical poultry raising is what I am trying to talk about. What I mean by practical, is to really make the most possible profits out of the business. Now and then see it mentioned "Poultry raising for profit, or pleasure," thus separating the two ends. I have been looking for the man that would object to the profits. I want to see what he looks like. No, sir, there is no such a man. To the contrary, in ninety-nine cases out of a hundred his profits are his pleasure. Occasionally, no doubt, a man can be found that buys some handsome fowls because they are handsome. That's the first stage of the chicken fever. The next thing he does is to build some nests and watch for the eggs—the fever running its course, that is all. Then he sets some eggs (all pleasure, of course.) Then he hatches out some chicks, and before they are a day old he is figuring on the profits, on what he has really made out of his bother, etc. This is the second stage of the fever. Later he takes some birds to the show, "just to be in with the boys," he says, but don't I know where I am at if he don't leave that show room with the determination to do up the whole set of them another year with his favorite kind of chickens, and possibly he sold a rooster or two at the show for enough to raise a lot of his favorites, and I have never caught him giving away the price he hold the birds for, to some charitable institution, any more than he would some other kind of money. All dollars look alike to him, and he would as soon have chicken money as other money. This is

the third stage of the disease, and he seldom entirely recovers; he is a chicken man from then on. He is after the dollars as well as the pleasure, or in other words, he is a practical poultry raiser.

Most certainly the ultimate outcome and chief end or practical side of poultry raising is to make it pay, and the more it pays the more practical. I do not admit that I am a crank about thoroughbred poultry. I positively know the common mixed variety pays, and am equally sure that full-bloods pay better. Its just as true in poultry raising as it is in horse raising—a pony is a horse, of course, and will do to work, but he is a poor excuse just the same; nobody wants some like him; he is neither very useful or ornamental; nobody proud of him and nobody treats him decent. If full blooded poultry had no other advantages, it would have the advantage of being liked and will be taken care of. Yes, sir, and they should be on every farm. They command respect for their owner, they make his place look like somebody lived there, would raise the price of the farm through respect for it. Practical poultry raising is nothing short of making it pay to the extreme limit. Yours truly,

M. M. JOHNSON.

THE POULTRY SHOW AT MANHATTAN KANSAS.

The annual show of the Manhattan Poultry association is in full blast today (Wednesday), with a very creditable showing of nearly all varieties.

The largest class was S. C. B. Leghorns, with White Rocks a close second. The awards were:

Buff Rocks—All to the Smiths.

Buff Cochins—All to Mrs. George Flatter.

Buff Wyandottes—All to the Ross Bros.

White Rocks—A. Vilven, Wamego, first cock, first and second hen, first and third cockerel, second and third pullet, second pen. Mrs. L. R. Brady, second pullet, tie; third pullet, third hen, third pen. R. J. Barnett, first pen, first pullet, second cockerel, and sweepstakes for highest score.

Barred Rocks—All to T. J. Robinson except second cockerel.

S. C. B. Leghorn—W. A. Lamb, first cock, first cockerel, first pen, first hen, first and second pullet. H. Amos, third pullet, second cock, third cockerel. Mrs. George F. Brown, second and third hen, second cockerel, second pen.

S. C. White Leghorns—All to Mrs. George Flatter, except tie on first cock. A. J. Lamb, first cock, tie.

Ohio's Whitest White Rocks.

Winners wherever shown the past 10 years, scoring 91 to 96 points. Also Open Laced Wyandottes and Black Minorcas. Eggs \$1.50 per setting.

Mrs. Ella Pace, Columbus, Ohio.
Station A, Route 2

BUFF
COCHIN
BANTAMS

Exclusively. Winners at the great Columbus Show 1901-2, and Ohio State Exposition 1901. Stock for sale. Eggs \$1.50 per fifteen.

D. A. JONES, Columbus, O.

LIGHT BRAHMAS. White and B. Rocks. White and Silver Laced Wyandottes. White and Brown Leghorns. Pekin Ducks. America's best strains. My stock has won 200 premiums in the past 41 years at the great Columbus show, Newark and the Ohio State Exposition. Stock for sale at all times. Eggs \$1.50 per dozen.
Red Oak Poultry Farm, J. C. UNDERWOOD, Prop.
Sta. B, Columbus, Ohio.

BRIGEL'S Celebrated Strains

Barred Rocks. Males scoring as high as 94½ and females as high as 90½ under such judges as Bridge, Lane, Jones, have won 1st prizes at such shows as the great Columbus show, Newark and the Ohio State Exposition. Stock for sale at all times. Eggs \$2.50 per 15, the kind that win.

F. A. BRIGEL, Columbus, Ohio.

Light Brahmas and White Wyandottes.

Bred from stock that score 92 to 93½ points—I. K. Fetch strain—none better. A fine lot of White Wyandotte cockerels for sale. Prices reasonable.

Albert Von Bergen, Humphrey, Nebr.

White Plymouth Rocks.

Scored by Rhodes from 92½ to 94. Owens & Cumfield's strain, "Stay White." Eggs \$1.50 per 15.

Wm. Randolph,
Lawrence, Kansas. R. D. No. 1.

TRAP NESTS.

Just what you have been looking for. Cheaper than you can make them your self. Send a card with your address and we will tell you all about it.

ROXBOROUGH POULTRY FARM.

ROSS BROS., Manhattan, Kan.

Pure Bred Poultry.

DARK BRAHMAS
SILVER WYANDOTTES
BUFF WYANDOTTES

Stock and eggs for sale. Write.

M. D. KING, Minden, Neb.

For Sale.

100 choice young birds from winners at Kansas and Nebraska State Shows, 1901. S. S. Hamburgs, Partridge Cochins, Buff Cochins, Light Brahmas and B. P. Rocks. Show record on application. Eggs from choicest matings \$1.50 per setting.

DeWitt Yards, Fairbury, Neb.

Mr. A. B. Evans, Hartwell, Nebr., breeder of Barred Rocks. None but the best will do.

Black Minorcas—H. Amos, first cock, first hen.

Houdans—All to H. Chaffee.

L. Brahma—All to H. Chaffee.

Black Langshans—All to H. Chaffee.

Rowen Ducks—H. Chaffee, first duck, first drake.

Partridge Cochins—L. E. Brown, first pullet.

White Wyandottes—All to William Dougherty.

Trio Pekin Ducks—To K. S. A. C.

Belgian Hares—To Ross Bros. They also showed a trap nest that was next to perfection.

The greatest attraction was a pen of Scarlet Leghorns.

A meeting of the association was held during the show and the following officers were elected for next year: President, H. S. Cottrell; vice president, B. W. Smith; secretary, W. A. Lamb; treasurer, Mrs. George Flatter. Judge Rhodes scored the exhibit very satisfactorily.

Three Settings of Eggs

It had been a hard winter and Mr. Brown had each day found his financial resources growing less and less. He was a farmer in moderate circumstances, but had always been able to provide well for his family and send the boys and girls to a nearby town to school. The boys—three of them—were all established in homes of their own and only his youngest—Mary—remained at home; but somehow things had gone wrong and there had been little money to be spent for those little fineries that a girl cherishes.

Mary's mother noticed the condition

of affairs and after some deliberate planning, she proposed a scheme to Mary whereby she might earn the money for the things which she would want so badly when the next year's social season began.

This was the plan: Mrs. Brown should give Mary ten dollars and three setting hens and Mary should buy three settings of eggs and set the hens and care for the chickens when hatched and all the proceeds should be her own, as the actual cost of feeding the chicks would be small since they would have the range of a large farm and could pick up most of their living till fall.

So Mary and her mother drove nearly fifteen miles to a poultry breeder and bought the three settings of eggs for the ten dollars and the poultry man being very generous agreed that on the first of November he would take all the birds that scored 90 points or more and would sell them at fancy prices, giving Mary one-third of what they brought.

I shall now relate briefly Mary's adventure and her good fortune. She set the three hens and cared for them nicely, but only thirty downy chicks peeped a welcome to her, fifteen eggs she threw away. All that long hot summer Mary cared for her little brood. It was no easy labor, but she loved to watch the little chicks as they hunted for bugs and chased hither and thither, and they were growing so big and plump she felt repaid for her labor.

The fields and the orchard were their roaming place and Mary fed them just a little wheat or corn in the evening when she shut them up. When fall came they could no longer scratch for themselves, but Mr. Brown told Mary that she might turn the chickens into the feeding room after the cattle and sheep had been turned out, that they might gather up the scattered grain.

Mary had planted and raised some turnips and her mother gave her all the faulty cabbage, pumpkins and carrots, so Mary was singularly fortunate in getting food for her flock at a very slight expense.

With all of Mary's tender care only twenty chickens were to be counted when November came, but these were hardy fellows, full of strength and vigor, but since they had been made to hustle and had not been stuffed were not fat enough for selling at market prices.

The poultry man came and scored them and carried ten away with him to sell. These brought from three to ten dollars apiece, so that he was able to give Mary fifteen dollars as her

GOLDEN WYANDOTTES AND WHITE HOLLAND TURKEYS.

In Lacing, shape and size unexcelled. Fifty Cockerels and Pullets to sell. Eggs in season.

W. J. EAST, Clay Center, Neb.

WHITE POULTRY

Holland Turkeys, Embden Geese Indian Geese, Rose Comb Leehorns, Plymouth Rocks, Wyandottes and Langshans, Colored Homing and Tumbler Pigeons, All stock winners or bred from winners and as represented, Southdown Sheep, Berkshire Swine

J. A. LELAND,

Woodside Farm,
SPRINGFIELD, ILL.

We Sell..

Hall's Guaranteed Roup Cure. Absolute sure cure; price 50c and \$1.00. Hall's guaranteed Cholera Cure, a prevention for all diseases; price 50 cents and \$1.00.

Hall's Egg Model

an absolute necessity in operating incubators. Price 50c. Address,

Poultry Investigator,
Clay Center, Neb.

Fine Warr. White Holland Turkeys -- \$1.75
Pure Bred Red Belgians -- \$1.00
Pure White Rock Cocks -- \$1.00
Pure White Wyandots -- \$1.00
New Strain White-Breasted Geese -- \$0.75
All above from prize-winning stock and line bred. Catalogue sent.

J. C. BAKER, Proprietor,
White Plume Farm, Richfield, Ill.

Watch Houston's Show Record this Winter.

He will make some of the boys smile, and girls too. His stock has always won wherever shown.

B. P. R. and Buff Orpingtons.
I have 3 Trios left to sell of Buff Orpingtons. \$5, \$7 and \$10, and one pair \$12. Have been booking orders for eggs for some time. Rocks all sold.

A. L. HOUSTON, Red Oak, Ia.

If you want . . .

Belgian Hares

Call on or write to

OLD ORCHARD RABBITRY,
Old Orchard, Mo.

Or 2003 Clark, Ave., St. Louis, Mo.,

WM. G. STEINICKE, Mngr.
100 Hares to choose from.

"Sir Henry J." A White Wyandotte chl owned by Geo. B. Clary, Fairbury, Nebr. Score 94½.

share of the profits.

By persevering efforts Mary succeeded in selling the remaining ten among the neighboring farmers at one and two dollars apiece, bringing her fifteen dollars. Thus she had thirty dollars with which to buy other things besides the real necessities and thus Mary not only secured a few luxuries she craved, but she learned the lesson of hard work and careful management and by a closer contact with nature and nature's bounties she looked with clearer eyes upon the world and its maddening whirl of life.

O. P. GREER.

Eleven Years With Buff Leghorns

(By George S. Barnes, Battle Creek, Michigan.)

I have been breeding and showing this variety now eleven years. My first start was with pure white tails and wings. In 1893 I purchased a cockerel that gave me a true start, and since then great improvement have advanced, and there is plenty of chance yet for new improvements. During the eleven years, we have learned much about this valuable bred, and know, by actual experience, we have more to learn yet. The buff color is harder to breed than almost any other color, as the judges in almost all cases have different ideas what said color should be. I have heard breeders recommend to purchase nothing but pure buff birds. We would like to know how many pure buff birds these breeders have seen. It seems to me—I may be wrong—that when we get pure Buff Leghorns, we will have them scoring 94 to 96, as common as the Whites and Blacks. If we are right, then we have not the pure buff we want, or the judges are not giving them their just dues. Our opinion is that the

judges are giving them about what they are worth—from 90 to 94½, with a chance for us to improve. We have only seen, now and then, a bird honestly worth 94 to 95 in females, and they are as near buff as we believe we have today. So, when you are purchasing, do not think you can get the simon pure ones for any small price, in females or cockerels either. How many so-called pure Buff Leghorn cockerels ever proved to be good cocks? We have yet to see one. In most cases the good cocks, when they were cockerels, were chestnut or bronze in tail and wings, and, as cocks, this comes in lighter, which makes a fine buff. We have found, in our breeding, that a cockerel with chestnut or bronze in tail will throw as near pure buff offspring as we have seen. This is no guess work, but fact; also, females with black in tail, mated with a cockerel with buff tail mixed with white, will bring pure buff now and then. Any of these matings will bring you all the white you want, and more than we all want. For a good breeding bird give me a cockerel with chestnut, bronze, or even some black; on good females will produce a nice lot of show birds. If you can get a pure buff cockerel with strong tail and wings, he is worth his weight in Klondike nuggets. A great deal, in getting good birds, is the care, attention and feed. It is one-half the making of a show bird. This labor commences from the time the chick is hatched until it enters the show room. The chicks must have shade, and they can't have too much. We feed good, yellow corn, and plenty of it (would hot feed white corn if it was given us), wheat, oats, pumpkins, carrots, buckwheat, sunflower seeds, oil meal, potatoes and cabbage, and the last, plenty of green bone. Six weeks before show season we separate all cockerels from the females and put each show cockerel in small coops, and handle them once a day to tame them down, as the Buff Leghorns are high flyers, and when we first put them in the pens for winter and enter the coop, they remind us of little yellow balloons, popping up all over.

The Buff Leghorn is not the greatest fowl before the public—there are others just as good—but they are by no means the poorest, either. They are a beautiful breed, full of life and activity. Take a nice pen of them out on the lawn and they are admired by all, as the cockerel resembles "the only pebble on the beach." They are great layers—laying just as many eggs as any Leghorns—and for size they are larger, therefore laying a larger

It is next to impossible to raise poultry, even a small flock on a city lot to say nothing of a large flock on a poultry farm or plant, without the aid of a trained

Fox Terrier Dog.

Our dogs are taught to parole the place night and day. Write, Nevada Foxterrier Kennels, Nevada, Mo.
♂ Males \$10.00; females \$5.00.

Buff Orpingtons, Barred Rocks, S.

C. W. Leghorns, White Wyandottes.

Stock from high scoring birds and winners wherever shown. Prices right Send your wants.

KING & KING, Fairbury, Neb.

Notice!

I have a few Partridge Cochins Ckls. at a bargain if taken soon. Also Golden Sebright Bantams from \$1 to \$2 each. Will exchange fancy pigeons for any kind of standard bred poultry.

W. F. HOLCOMB, Clay Center, Neb.

MAMMOTH BRONZE TURKEYS.

That score from 94 to 97½; Barred Rocks score from 87 to 90; Buff Cochins, score from 87 to 93½; Pekin Ducks that have won hundreds of premiums, have been sold to all parts of America and Europe. Chester White Swine.....

Mrs. Chas. Jones, PAWPAW, ILL.

Golden Wyandottes.

Our Wyandottes never have failed to win in the best company. Young stock for sale.

J.C. KAPSER, Clay Center, Neb

WINNERS St. Paul and Cedar Rapids Show for sale. Stay White birds of large size Very vigorous, bay eyes, red face, bright yellow legs and skin. Write your wants and I will save you money.

GRANT MOTT.

Box A-29. Austin, Minn.

My Buff Rocks

Won at Madison Square Garden this season; at Boston and other great shows past seasons. Stock and Eggs for sale. Write for Circular and Show record.

MILES H. LOUER.

Box M. East Onondaga, N. Y.

Olentangy : : : Poultry Yards

Delaware. : : : Ohio. Barred Plymouth Rocks, Cornish Indian Games, Buff Cochins Bantams and Golden Wyandottes Eggs \$2 00 per 15. Send for circular....

1st prize B. P. Rock pullet owned by P. J. Schwab, Clay Center, Nebr.

egg.

Last season we raised seventy birds at home, with only six cull cockerels and eight cull pullets. We consider this breeding as good as most of the old standard breeds, and shows that they are not breeding all culls. They are quick growers, the cockerels crowing at six or seven weeks old, and females begin laying at five and six months, keeping it up all winter if given proper care and a warm place.

We hope that every person interested in this popular breed will join the American Buff Leghorn club, as it only costs \$1, and the benefits are worth five times the cost to the members and the breed.

Preparing Birds for Show and Shipping

The cold wave came suddenly and unexpectedly. We had a drop of 50 degrees in twenty-four hours. Personally, I like cold weather, but even I, who, as all my friends would tell you, never stop for the weather, only when it is "awful hot," cannot get used to the sudden cold, but there was work to do. Husband was gone to the state show; son and I at home alone. The chickens had not all taken to the hen house yet, though we had been trying to get them to, but the boy came bravely to our help, neglecting or leaving the other chores until after dark—the boy and the dog, a shepherd. The chickens scattered, hiding in the vineyard, but the boy and the dog went after them like hunting rabbits. The dog would lie down, holding the chicken under his paws until the boy got it. They made fun out of the work. Not a chicken was hurt, but how did the boy manage it? One or two that we did did not find that evening I tried to catch

with the dog afterward, when the boy wasn't at home, but I could not get him to look at the chicken. He would go off looking for rabbits every time I pointed toward the chick.

Husband brought our birds thirty miles across country. Some of the combs were frozen stiff. We thawed them out in cold water, then bathed them, after drying very carefully, with equal parts of glycerine and rosewater, and saved every comb and wattle except the small tip of one point.

This glycerine and rosewater is the very best preparation for chapped hands or faces, or to put on the combs or wattles of birds when shipping them in cold weather. I have always had to keep something of the kind for my hands, they chap so easily. I used to keep bay rum and glycerine, but that made such an unpleasant burning sensation, until some five years ago, while visiting an aunt of my husband's over in Illinois. One morning while preparing for a long drive about the country I made the remark that I would enjoy the drive so much, but that the wind would make my face burn like fire when we got back. Aunt picked up a bottle from the washstand and said, "May put some of this on your face and the wind won't hurt it. I always use it before I go on a long drive." I did so and it had such a pleasant soothing feeling that I asked what it was. "Glycerine and rosewater, equal parts mixed," she replied, and that drive was a revelation. We were out half a day, and for the first time in my life with no burning face from the effects of the wind. Just last week a neighbor and I went thirty miles across the country to the poultry show. I had bathed my face and hands in the preparation before starting, well knowing what I should suffer if I did not. My friend started out without it and at the end of the journey suffered no little inconvenience from her burning face.

But to get back to the chickens. When preparing them to go on a journey scrub their combs and wattles with warm soapy water with a toothbrush. Dry at once with soft cloth and apply immediately the glycerine and rosewater. It dries in at once, leaving them bright and handsome, with no greasy or oily look afterward. I wish you would clean one up in this way as soon as you can, just to see what an improvement it makes. To be most effective they must first be washed good and clean. So must your face and hands if you use it on them. Then as soon as wiping put it on. We treat our chickens' feet and

The Michigan Poultryman...

Only Exclusive Poultry Paper in Michigan.....

All the practical poultrymen contribute to its pages. Expert poultrymen will give its readers free such information as they may ask for.

All the news of the poultry world. Well illustrated.

For a short time you can get this paper one year for 15c. Send postal for sample.

Michigan Poultryman,
Ithaca, Mich.

Now Ready..

Young stock for sale at the Golden Rule Poultry Yards. Pullets and Cockerels of pure Empire White Plymouth Rocks, that are white. White Wyandotte Cockerels, sired by male direct from Duston, and hatched from a pen of "Duston" hens. Also a few W. P. R. hens and one male yet for sale, at a bargain. Write for price and description of stock.

MRS. MATTIE WEBSTER,
BELMONT, WIS.

Poultry Supplies

Ideal Leg Bands 15c per dozen, \$1 per 100.

Smith Seal Bands 25c per dozen, \$1 per 60.

Standard of Perfection each \$1.

Spray Pumps each 75c.

Liquid Lice Killer, gallon can 75c.

Conkey's Roup Cure 25c and 50c a box.

Chamberlain's Chick Food \$2.50 per 100 pounds.

J. D. W. Hall's Guaranteed Roup Cure 50c and \$1 a box.

Reliable Spring Punches each 25c.

Midland Poultry Food at factory prices

Humphrey Bone Cutter F. O. B. Clay Center, \$12.

Oyster Shells F. O. B. Lincoln, Neb., per 100 pounds \$1.00

Lime Stone Grit and Mica Grit F. O. B. Lincoln, per 100 lbs \$1.00

Bone Meal, Raw Bone, Beef Chops, Blood Meal, as cheap as the cheapest.

Sure Hatch Poultry Co.,
Clay Center, Nebr.

The best Folding Exhibition Coop..

Jas. A. Rudge, Palmyra, Neb.

Manufactures and sells the best Exhibition Folding Coop on the market. Prices within the reach of all. He also has 50 S. C. B. LEG HORN COCKERELS for sale from 75c to \$2.00 each. Write your wants.

The junior member of the firm of Mr. and Mrs. A. Upton & Son, Fairbury, Neb., feeding their prize-winning Rocks.

shanks in the same way. You have no idea how it brightens them up, and I do take a great pleasure in sending them from the station at home looking so bright and healthy. A chicken with a red face and comb can't help but look healthy. They simply can't sit humped up in the cold when heads and feet are so comfortably warm.

If you are subject to cold feet try it on yourself. Give them first a good soaking, wipe dry and put the preparation on at once.

People who do much desk work will often be troubled with cold feet, because of the rush of blood to the head to stimulate the brain, leaving the extremities unprovided for, and an unnatural and unpleasant coldness follows.

MRS. MAY TAYLOR.

Keep An Account

Keep an account of every part of your poultry business. It is necessary to do so if you want to know how you are getting along, whether you have made anything and if there is a chance to make a profit. Everyone wants to know how he is getting along in his business. The storekeeper knows how much profit he is getting and how much he may be losing. All business men know the same things. They know it only by keeping an account. They usually employ a person to do nothing else but attend to their books and write their letters, etc. But to keep an account of your poultry you do not need to employ some one for that purpose, neither need you to understand all the most difficult facts of double entry bookkeeping. You can charge your fowls with their cost and all feed used during the year, together with everything that you have bought for them. At the end of the year give them credit for all the eggs laid, counting

in what you have used and set and also what you have sold. Also give them credit for the value of those that you have left, as perhaps some of them have died. Any that you have sold or eaten should be given proper credit. The amount received for any other product, such as the manure, if you sell it, should be credited. The difference between the debit and credit sides of the account shows the gain. You can balance up the account each month, instead of the end of the year, if you desire; then you will know how you are getting along. You can keep an accurate account for the chickens raised or combine it with that of the fowls. I prefer to have it separate. The beauty of keeping an account is that it keeps you posted on how your fowls are paying you and if not paying, you will know it and be able to correct the management so it may pay you.

P. W. SHEPARD.

Perfect Chick Feed.

Armington, Ill., Dec. 21, 1901.
W. F. Chamberlain, Kirwood, Mo.

Dear Sir: As it has been sometime since you have heard from me I thought I would write you.

This has been a successful year with me in the poultry business. I raised the finest lot of Light Brahmas this year that I have ever raised and I attribute a good part of my success to CHAMBERLAIN'S PERFECT CHICK FEED, for with this feed and proper care there is no reason why one cannot raise little chicks, and chicks raised on this feed mature better. Every one that has seen my chicks this fall pronounce them the finest in this part of the country. I have had a splendid trade this fall and have not had a single complaint, so you may look for some big orders from me this spring, as quite a number have already spoke for the feed. I think I will try to keep a supply of it on hand at all times.

Yours respectfully,
C. F. Lipsey.

GINSENG...

The great Chinese Root. Immensely profitable, \$6 to \$12 a pound. Illustrated circular, fullest instructions, best published, with prices for plants and seeds, 10c. Buy direct and save 50 to 100 per cent in prices. Our own farms in California. Mention paper

Harlan P. Kelsy,
Tremont Bldg. Boston, Mass

B B. Red Game Bants,
Buff Pekin Bants,
Buff Wyandottes,
Buff Leghorns,
Buff Rocks,

My stock is as good as can be had any where and have won in all principal shows in Illinois and Iowa, and score equal to the best.

D. LINDBECK,
Bishop Hill, : : Illinois.

BUFF COCHINS

Exclusively.

Just What You Are

Looking For

The Pure Golden Buff. Winners in my company. Elegant in shape, profusely feathered, as good as the best. Prices low, write me.

B. H. DUNN, Clay Center, Neb.

White P. Rocks Exclusively....

My Rocks are of the best strains to be found and I have a fine lot of chicks to sell reasonable. Write,

MRS. NANCY WATSON,
Lincoln, Nebr.

David Larson,
Wahoo, Nebraska,
Expert Poultry Judge

I have had years of experience in breeding, mating and judging. For reference to qualification, write **POULTRY INVESTIGATOR**, Clay Center, Neb. I am open for engagements.

My...
Buff Orpingtons
...Have no equal

B. Plymouth Rocks
(Thompson Ringlets.)

If you want good stock I have it

JOHN A. LING,
Harvard - - Nebraska

Advertising and Selling

In late fall and winter the breeder who has been engaged in poultry culture long enough to have sufficiently mastered the business as to be recognized as a successful breeder has a great number of birds for which purchasers are wanted.

Not only has the breeder planned and toiled to hatch and raise birds needed for use in home pens and yards, but the hope and expectation of good demand and sale for all surplus stock of good quality has been an everyday incentive to best care and management of the fowls—matured and chicks—all through the season.

These "for sale" birds represent a great many dollars to the breeder, but while they remain in his yards, uncalled for, they will never realize the dollars for him.

What does it profit one, even though the owner of birds possessing every excellent quality and in great numbers if no sale is had for them? Such fine fowls may be the pride and delight of the breeder, nevertheless they are not loved so well that they cannot be parted from. Since the breeder has raised fine birds for possible customers, the first step toward accomplishing his object is to let the poultry public know that he is ready to supply the new breeders, by advertising the stock for sale. The more widely the breeder advertises and the better he is known, if known to be reliable and honest, the more successful is that breeder. Much depends upon the medium chosen to carry the news of surplus stock for sale, out into the poultry world. Better to use a small space in a poultry journal that is one of those having the widest circulation than to utilize a half page in one of the "lesser lights," even though the small space costs many times more than does the large advertisement. It will not take long for you to prove the worth of your advertising medium, if the paper is extensively read, and the copy furnished for your advertisement was "taking," or so worded as to attract and hold the attention, you will soon receive inquiries because of it. The realization of the desires that instigated the placing of an advertisement with some journals depends a great deal upon the wording and arranging of the copy. In the effort to secure customers, never fish for them with a falsehood-baited hook. Better never to sell a bird than to accomplish the sale by misrepresentation, and so have a dissatisfied customer. If the fowls for sale are of some particularly

noted and much sought after strain, it is all right to so state the fact; if the stock is scored and the score is such as to make them desirable, let the seeker after fowls of your breed or variety know of it; or if unscored, if your birds possess especially fine qualities in color, size, comb, or other parts, it may help to sell them to speak of this excellent quality. Say all the good things about your birds you want to say when advertising them, as long as there is no deviation from the truth.

The paper or journal in which our advertisement appears does not bring us sales, primarily, but inquiries for prices and description of fowls, and whether we make sales or not the advertising medium has done its part, and we must secure the inquirer for a customer by our own personal efforts, if he or she is secured at all. If the inquiry is explicit in making known the wants of the writer, it is an easy matter to answer it and so clearly and fully that the inquirer will have no doubt as to the appearance of the described bird or birds as it is, or they really are.

But, unfortunately, all letters are not explicit; on the contrary, in my experience at least they are more often than otherwise, obscure. Perhaps this very brevity may make the attempt to word a reply a very difficult undertaking. For instance, one I received recently: "Please give me your price on a male." As I breed two varieties of poultry, I had no way of knowing which the male was to be selected and priced. And study the inquiry as carefully as I could there was nothing in it to inform me for what purpose the male was wanted, or what qualities were desired. One cannot take time to fully describe males of different degrees of excellence in a reply to such an inquiry, and so must be confined to generalities, and to neglect placing our advertisement in some reliable, extensively circulated poultry journal, or to treat with careless indifference the letters of inquiry—the fruit of our advertisement. MATTIE WEBSTER.

Years of Experience

Has brought me the very best of Barred Plymouth Rocks to be found anywhere and from my different yards I have selected 5 pullets scored 93 and 8 which scored 92½ and from this yard I wish to sell a limited number of settings of eggs at 3.00 per setting. All eggs sold by me from this yard and from these birds exclusively. I have a few pullets scoring from 90 to 91½; also a few choice cockerels which I will sell at prices that are right. All eggs and birds sold by me will be as represented or money refunded.

Wm. Metzmer, Independence, Ia.

Black Langshans. . . .

1st chl. 1st hen, Nebr. State Show 1901. 1st pen. 1st chl. 1st chl. 2nd pullet, Nebr. State Fair, 1901. 1st pen. 1st and 3rd pullet, 2nd chl. 2nd chl. Nebr. State Poultry Show at Lincoln, 1902. Eggs \$2.00 per 13.

J A Johnson, Holdrege, Nebr.

BUFF WYANDOTTES!

1st, ck, 1st, chl, 2d, and 3d, hens 3d, pullet. PARTRIDGE WYANDOTTES, 3d, pullet, 3d, chl at Nebr. State Show. Light Brahmas. Eggs \$2.50 per 15.

E B DAY, North Bend, Neb.

BARRED and Buff Plymouth Rocks, Buff and Partridge Cochins Silver Lace and White Wyandottes. Correspondence cheerfully answered and all orders promptly filled. Stock first class.

Wm J Kersenbrock, Columbus, Neb.

Rose Comb White Leghorns!

Cockerels and pullets from winners at St. Paul and Mitchell, with score cards by Russell. Must sell quick to make room for breeders

J. F. Reinekt, Tripp, S. Dakota

W. A. Forbes. Breeder of Buff and White Wyandottes. For the past four years I have won the majority of the best premiums in full classes, 221st, 102nd, 93rd and 5 specials. I am booking orders now for a limited no. of eggs from these prize matings for \$2.00 per setting, 2 settings \$3.50, 3 settings \$5.00.

North Topeka, Kan.

Please Let Me Tell You

My Buff Cochins have again won their share of the ribbons at the McCook Show. To make room for my breeding pens I will sell trios, pens and singles at bargain for the next 30 days. Also a few R. C. B Leghorns. Eggs in season.

Mrs. Ida Bard, Imperial, Nebraska.

White Leghorns.

Incubator eggs from Stock \$3.00 per 100. From choice matings \$1.50 per 13. \$2.50 per 25. **LAYERS AND WINNERS.** Scottish Terrier puppies \$3.00 and \$5.00

PRACTICAL POULTRY FARM, R. R. French, Mgr. Box 47, Ford City, Mo

WHITE PLUME POULTRY YARDS have some extra Fine White Holland Turkeys for sale at \$1.50 to \$3.00 each. No. 1 White Rocks and White Wyandottes, both young and old stock for sale cheap. Holland Turkeys took 1st prize at Des Moines this winter as did Embden geese. A few White Guineas for sale at \$1.00 apiece. Eggs in season from above birds also White Cochins and White Indian Guineas. Mention INVESTIGATOR when you write.

Mrs. H. Clark, Dallas Center, Iowa

SILVER WYANDOTTES

MY BIRDS have been on exhibition at the last eight State Shows and many other large shows, winning more premiums than all other competitors of this variety combined. Good birds for sale. Eggs from prize pens 15 for \$3. 30, \$5. From standard breed stock, farm range, 100, \$4.

Mrs J. W. GANSE, Emporia, Kan.

Chick Feed.

Extra Quality.

We are putting up the best dry feed on the market to-day. It is especially prepared for the rearing of young chicks from the time they were hatched until eight weeks old.

We want reliable agents in all parts of the United States. The feed is all right and when once tried is always used. Sample by mail 4c. Circulars free.

Steinmesch & Co.,

St. Louis, Mo.

Reference: Editor this paper.

Utility Poultry Farm

Are you looking for something fine in the way of White and Barred Plymouth Rocks, Black Minorcas & White Wyandottes. If so we have them. Also Games and Leghorns.

H. S. FULTON & CO.,
Lock Box 24 Stewartstown, Pa.

Barred Plymouth Rocks. EXCLUSIVELY.

Cockerels \$2.00, \$3.00 and \$5.00 each. Pullets, \$1.00, \$2.00, \$3.00. Oorth double what I am asking for them. Above prices good for January only.

W. S. RUSSELL,
Box 1, Ottumwa, Iowa.

MAMMOTH STRAIN LIGHT BRAHMAS

...as bred by...

H. T. RODGERS, Calinsville, Mo.

Are great prize winners again

At the recent Calinsville, Mo. Show, against birds that have since won at St. Louis and other large shows, we made a remarkable record which proves the MAMMOTH STRAIN is as good as the best.
1st on Cock, 1st on Hen, 1st, 2d and 3d on Pullets, Cockerels and pens; also every special including the grand prize over all.

Blue Barred Plymouth Rocks

Eggs \$1.50 per 15, \$3.00 per 50, \$5.00 per 100. Our stock is first class.

P. J. SCHWAB, Clay Center, Nebr.

BUFF WYANDOTTES

We see by your last publication that you wish to hear from your patrons their experiences of the different varieties of poultry. Our experience has been very limited, dating back just some three years, although we have been paying strict attention to all details both large and small. We are, like many others, situated on a farm, and when that disease (chicken fever) struck us, we were prone to start with five varieties, but soon discovered that we had four kinds too many for an amateur. They were Barred Rocks, R. C. B. Leghorns, S. C. B. Minorcas, Houdans and Buff Wyandottes. We have discarded them all for the Buff Wyandottes, and they now have the exclusive right of the place.

We find in them the all-purposed fowl sought after by many—great layers, hardy, good mothers, and the best table fowl, and as to chicks we find them robust, far more so than any we ever raised. A neighbor who is a White Wyandotte and Barred Rock enthusiast, visited my yard during the hatching season and remarked that our chicks were so much stronger and active than his were. Management has a good deal to do with this. If the breeding pens are not made up of strong, active and healthy birds, do not expect the chicks to be healthy. Another point in having one variety is that a flock of one variety, no difference what kind, presents a far better and more pleasing appearance than do several kluds together. Again, in every community there are people who seem to look down on those who are breeding fancy poultry, and they are the very individuals who come around in the fall and pay from 50 to 75 cents each over market price for your surplus cockerels.

In conclusion, let me congratulate you on the tidy appearance of The Poultry Investigator. The last edition was well worth the price of a year's subscription.

CHARLEY E. BROOKS.
Palermo, Ohio.

ALFALFA FOR POULTRY.

We find alfalfa a splendid good feed for poultry; it is a hardy plant and comes the first green feed in the spring. As the snow melts away the green leaves may be seen just peering out of the ground. When once you get a good stand it will remain indefinitely, grows a mass of leaves which are rich in protein and makes a wonderful egg producing food. With some green ration it forms a perfect

O. MO. HUN. DRO.

Breeder of Prize-Winning

IMPERIAL WHITE P, ROCKS.

Stock for sale at all times. Eggs in season

E. B. OMOHUNDRO, Bowling Green, Mo.

Listen! IF YOU WANT BARRED P. ROCK cockerels, hens or pullets, worth every cent asked, scored or unscored, send me your order and let me prove my promise to please you. Eggs \$1. From all scored stock by Raup and Heimlich \$1.50 and \$2. No secrets about these pens. Ask what you want.

Mrs. A. P. Rodgers.
Bowling Green, Mo.

The manufacturer of the

Shaub Compartment Brooder

is not offering something for nothing, but does offer the best brooder in the world for the money. The best is always the cheapest. Illustrated catalogue. 4c in stamps.

M. O. Sherer,
Box 19, Louisville, Ohio.

BARRED PLYMOUTH ROCKS

WINNERS Nov. 26th, 30th, 1901—194
FOR PAST B. P. Rocks in class at Red
SIX YEARS Oak, Ia., won 1st Cock, 1st Hen, 2d Pullet, 2d Cockerel, 1st Pen. At Osceola, Ia., Dec. 3d-6th, won 1st Cockerel, 1st Pullet, 1st Hen, 1st Pen. Two hundred choice breeding and exhibition birds for sale.

H. R. McLean,
Red Oak, Iowa

Buff Orpingtons and Cochins.

Bred from my own
Importations.

I won more premiums than any other two exhibitors at the Nebraska State Show, 1901. Before buying anything write me—it will be a pleasure to give you prices.

Ida J. Buehler, Kenesaw, Nebraska.

Old Homestead Brooder.

The best on earth. All your chickens can be saved in the Old Homestead Brooder. Try one. Write for prices. Address

Old Homestead Brooder Co.,
Middleboro, Mass....

MY MAMMOTH PEKIN DUCKS

Are holding their own throughout the west. Have always won highest honors at Great St. Louis Fair and Poultry Show, also in the hands of my customers. A few elegant Buff Rox at half real value.

OTTO STOECKER, Box 18, Manchester, Mo

PEKINS

HALLOCK STRAIN.

Will sell a few choice drakes and ducks, \$1 each. Orders for eggs booked now.

Belgian Hares

Pedigreed, leading strains. A grand lot of youngsters sired by a 95%-point buck. Bred does always on hand. Booklet on the industry for stamp.

Stephani Poultry Co.

Belleville, Illinois.

Clubbing List

By taking the advantage of the following combinations you can get two papers often at the price of one. Look at these offers:

	Price with Poultry Investigator.
Poultry Tribune	50c
Poultry Herald.....	50c
Poultry Gem.....	25c
Commercial Poultry.....	50c
Western Poultry News.....	25c
Poultry Success.....	50c
Poultry Topics.....	25c
Poultry Gazette.....	25c
Nat'l Poultry Journal.....	50c
Farm Poultry.....	\$1.00
American Poultry Journal.....	50c
Feather.....	50c
Nebraska Farmer.....	\$1.00

..Just Think of It..

Farmer and Breeder, price.....	\$1.00
Any 50c paper you choose above..	.50
The Poultry Investigator.....	.25

Total \$1.75
We will send the three to you for \$1.00.

Address,

POULTRY INVESTIGATOR.

NOTICE—We do not send samples of other papers.

SURE SEE THE 1902 Noxall Incubator

IT HAS many new features, the Regulator, Ventilating and Moisture system is perfect, i. w. price, did not how to get our FREE. Our catalogue given remedy for every known poultry disease, &c. for postage and return list free.

Noxall Incubator Co., Quincy, Ill.

feed for growing chicks; their plumage will glisten and their yellow beaks and shanks seem to have perfect coloring. We have a large field adjoining the poultry yard here, the growing stock roam at will, they are bugs and grasshoppers in abundance, so with their morning feed of ground green corn, wheat or barley, fresh water and milk once a day they grow vigorous and free from disease. For the yarded birds they cannot have this privilege. Three times each day we go and nip of the tops as the young sprouts, either of which are tender and so well liked by all fowls, and give it to them to eat, either on boards or a clear space in their yards. How quickly they will gather around a bunch of green alfalfa. We cut the crop three times—three good crops, and the last one is about a half crop; so there is none ever gets moody, but are tender and of a lovely green color, and if the proper care be taken will come out of the steek in winter green and the leaves still on the stems and small branches. And here is where we get our alfalfa for winter use for the poultry as the armfuls are carried from the stack or shed and fed to cattle, horses and hogs, the leaves sheltering down and can be gathered in a basket. They are mostly leaves and no stems and all poultry eat them when placed within their reach; no scalding nor extra work; just scatter them along after their morning meal and soon you will see none left over. Poultry that have alfalfa for green feed keep in good condition. Hens will lay all winter when given this for green ration each day. I believe it would pay all poultry raisers to have a patch for their fowls if not for stock and hay. It withstood drouth so well this summer when no rain came for so long, and the alfalfa remained green and grew in spite of the drouth. Its roots go deep in the ground and find moisture.

MRS. J. B. JONES.

Abilene, Neb.

WILL IT PAY TO BUY AN INCUBATOR?

I was reading an article a short time ago in regard to incubators. The question was asked will it pay to buy an incubator for 150 hens. To the best of my knowledge and experience it will pay with only twenty-five hens. Some people think it is too much bother to look after an incubator, but the same people will work and carry old boxes or barrels around and use different kinds of lice killers to saturate the boxes and barrels and will have to pen old biddy on the nest for

G. B. CLARY
Fairbury, Nebraska

Breeder of: Chalk White Wyandottes
Mammoth Light Brahmas
Buff Orpingtons.

Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

FREE..**THINK OF IT!**

By special arrangement you can get all three (3) of the following one year for only 50cts. Never an offer like this before

♦♦♦♦

The Poultry Investigator
CLARY CENTER, NEB.

The only exclusive poultry paper published in the west. Original, up-to-date, instructive. Profusely illustrated and never prints a dead line. Contains from 32 to 40 pages each month.

Fancy Fowls, Hopkinsville, Ky.

The leading poultry organ of the south. Three years old, well established and prosperous. 36 to 40 pages each month

Michigan Poultry Breeder

BATTLE CREEK, MICH.

Established 1885. The publisher has devoted 14 years of his entire time and attention to the poultry industry. It's a success—24 pages.

The price asked for these papers all one year is only 50 cents, which any of them are worth, and you get the others free. Send your subscription to any one of them. A free sample copy can be had by addressing each one. Better send your order now.

**White . . .
Langshans
Exclusively**

Eggs from stock scoring from 90 to 95 points, \$1.50 per 15; \$2.75 per 30; this season only. Some

good Ckls. for sale with score cards by Ben S. Myers.

All Stock Farm Raised.

MRS. JACOB HUGHES, JR.,
Rock Port, - - Missouri

BUFF ORPINGTONS.

Hotstock for sale Rose Combs, Buff Orpingtons. A few eggs at \$5.00 per 18; Winners at Red Oak and Osceola, Iowa, and Nebraska State Show at Lincoln, Single Combs, eggs, \$3.00 per 18, \$5.00 per 36.

Mrs. J. A. LASH, Osceola, Iowa.

BUFF COCHINS.

1st ckl score 943, 1st hen 933, at Nebraska State Show at Lincoln. Eggs \$3.00 per 18. Breeders also of Short Horn cattle and Duroc Jersey swine. C. K. DAVIS, Prop.

W. J. MITCHELL, Poultry Manager.
Columbus, Nebr.

—White and Buff Wyandottes.—

Prize Winners. 1st ckl at Elgin, 1st and 2nd ckl, 2nd pullet, 3rd hen, 2nd pen at Rockford, 1st and 2nd ckl, 1st and 3rd ck, 2nd hen, 3rd pullet, 1st, 2nd and 3rd pens at Belvidere, Ill. 1902. Orders bonked for eggs \$3.00 per 18.

B R LUCAS, Belvidere, Ill

Don't Fool Yourself!

By selecting a poor vegetable cutter. Get a O. K. cutter every thing edible for the table or for the poultry. Send \$2.50 for sample machine. Agents wanted. Address

Dep't. A., O. K. Mfg Co. Florin, Pa.

**Single Comb
White Leghorns.**

Eggs for hatching from the cream of my flock, as I have the advantage of selecting my breeders from among seven hundred choice birds all bred and owned by myself. . . . Nothing but the very best specimens of most prolific layers are ever used. Descendant from generations of great layers of large, pure white eggs. Write at once for circulars. . . .

E. A. TEDDALL,
Slater, Story Co, Iowa

Houdans.

1st pen at Nebraska State Fair 1901, also 1st pen at Lincoln, Nebraska, State Show 1902. No stock but eggs at \$1.50 per 13.

Reuben H. Kapsner,
Clay Center, Nebr

White Plymouth Rocks.

In class of 117 birds, 12 exhibitors, 12 pens competing, composed of the best birds in the west. I won 2nd pen, 2nd ckl, 3rd pullet, 4th ckl. Eggs \$3.00 per 15, \$5.00 per 30.

J. W. HALL, Box 267 DAVID CITY, NEBRASKA.

Barred Plymouth Rocks.

BLUE PRINCE STRAIN 100 pullets and hens and a few good cks for sale. A few choice Cochins Bantams for sale. Stock \$1.00 to \$3.00 each.

A. L. Pedick, box A Ottumwa, Iowa.

a day or two before they can place the eggs under her, and then ten chances to one some other hen gets into the nest and breaks her eggs. One old hen is more bother than an incubator.

With an incubator you can hatch your chickens when you want them, and all know that one early pullet or cockerel is worth more than three late ones. It is a poor hand with poultry that cannot make an incubator pay. An incubator is an aid in getting the laying strain of hens, and if you keep them laying and do not allow them to set they will soon be laying again and in this way will be paying for their feed, and perhaps for the food on our own table as well. I know of a man who wanted to get an incubator and had no ready money, but the hens were laying well (this was in the middle of the winter.) He said, "I shall get an incubator and make the hens pay for it." So to the bank he went and borrowed the money to send for the machine; in thirty days it was paid for, and that was much less than 150 hens. By using an incubator fifty hens will lay enough more eggs than will pay for an incubator and brooder, too. It is a poor hen that does not bring \$1 a year in eggs and I have some that bring me \$2, but it isn't old speckle or brownie, but pure Barred Plymouth Rocks. Go away with the old hen for hatching, an incubator and brooder answers the purpose so much better. For instance, when a storm is coming up one can go to the brooder and tap on the lid and soon have the chicks inside and not have to run an old hen down, and then after the storm breaks search through the wet grass for the lost chickens. Give me the incubator and brooder every time and let old biddy lay. An incubator will hatch them if they will hatch at all. N. W. FULLER.

PEKIN DUCKS.

This brand is doubtless the most popular of the entire duck race. They are very handsome birds and the largest of all ducks. They were first brought to this country from China, about twenty-five years ago. I have found them as easy to raise as chickens, and the market is never overstocked. If they can have the run of a pasture, field or orchard they catch lots of bugs and eat many weeds, of which they are very fond, such as pigweed, ragweed, plantain and purslane, and only require a small amount of grain. One fall the native grasshoppers were so plenty that we expected them to take our crops when spring came. We thought perhaps the ducks and chickens could save the garden,

EGG FOOD..
Make It Yourself.

Eggs are high at this time of year. Fill your egg basket and reap the benefit of the high prices. Guaranteed recipe for making the best egg food known. Easily and quickly made. Recipe price only 50c; Death To Lice, 15c box; Essex Cholera and Condition Powder, best on earth, 60c box. The 3 by mail for \$1.25.

John J. Kautzmann,
590 Bergen St. Newark, N. J.

CAPITOL RABBITRY, Augusta, Me.

I am closing out my whole stock of Belgians, over one hundred, 24 prize-winners included. There are a 1 Hares, 4 Gold Medal Winners, 1 choice Doe of the State Winner of Sweet stakes, prize for highest scoring animal in show: a silver cup goes with her.

Now is the time to gather in prize winners for winter shows. These prices are reasonable and animals way up. Will send copy of Pedigrees and Prices.

H. F. ADAMS,
Augusta, - - Maine.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough tab-board. Contains all the pit rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Heels, Handling, Nursing and everything relative to the royal sport of cocking.

By Dr. H. P. CLARKE, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator one year

For 25 Cents.

Address, THE INVESTIGATOR Clay Center, Nebraska.

Give
Your Breed-
ing Does

Rabicide

During gestation and while nursing their young it will enrich the blood improve the appetite, increase the flow of milk, thereby making the young strong and healthy.

Give RABICURE a trial and you will never be without it, 50c a box postpaid.

Vermont Belgian Hare Co.,
Lyndonville, Vt.

so we raised all the early ones we could. They were ready for the hoppers when they hatched, and I never saw anything grow as fast. They only cared for the grasshoppers, never harming the vegetables, and soon had them cleaned out of there, when we turned them into the meadow and they kept them from doing any harm, while some of our neighbors had lost nearly everything. The ducks were soon nearly as large as the old ones, and it was fun to see them waddling home at night with their crops so full they could scarcely carry them. It really looked as if each held a teacupful.

While these ducks like running water they do very well without it and may be successfully raised with only enough to drink.

I find them very regular in their habits. Give them a good place in which to roost, and although allowed the run of the fields they come home every night.

These ducks are great layers, often laying an egg every day from February until September or October. They nearly always lay in the morning and should be fed in their house and left in until 9 or 10 o'clock during this season, or the eggs will be lost, many of them laying anywhere, not caring for a nest.

One drake in a flock of five is about right. A fence only two feet high will confine Pekin ducks and may be made movable, to give them fresh grass and clean ground.

RUTH LYNCH.

HAZARDVILLE, Conn., Dec. 27, 1901.—Poultry Investigator, Clay Center, Neb.—Dear Sir: Noticing Mr. Henry Hess' article in the December issue of Poultry Investigator on "Free Advertising," I would like to ask him to look at the question from the other point of view.

Shouldn't the readers of poultry papers be considered? I dare say that there are very few readers who are satisfied with a partial report of winnings of shows and it is policy for poultry publications to cater to the wants of their readers.

Most of our leading poultry journals have seen the wisdom of this and give winnings in full.

Parties interested in show reports are going to have them, and if one paper won't supply them, they will subscribe for one that will.

Another point. If I was a breeder and advertiser I should want the whole winnings reported in the paper I advertised in, that the readers might know what kind of competition

THE PIONEER INCUBATOR WOMAN

has invented a brooder. It differs widely from all others. It is the accumulated result of deep thought, wide experience and long experience. Like the old hen

This Mother Nature Brooder

warms the chick's back, where all the large blood vessels and vital organs are located. Warns by contact with brooder walls, not by heated, death-dealing heat. Suits chicks of all sizes. Note the sloping walls. Rat proof. Made entirely of metal. Reduces the fearful brooder loss to the minimum. Our Mother Nature Brooder is of equal superiority. Brooders and Hatches sent anywhere on free trial. Write for free illustrated catalogue.

THE ELLEN WEST COMPANY, Box 125 BLUE ISLAND, ILLINOIS.

For Sale! SUNNY SLOPE POULTRY FARM $\frac{1}{2}$ mile east of Clay Center; a good 8 room house with cellar, a never failing well with windmill, 2 cisterns, fine Russian cave, good barn, corncribs, hog houses, grauary, poultry houses and runs, 500 young, peach, plum, cherry and apple trees just come into bearing. Two acre hog lot, cherry and plum orchard fenced in for ducks and geese. Address, **A. B. SHROYER,** Clay Center, Neb.

\$5,000 POULTRY CATALOGUE FREE!

It is without a rival. Give lowest prices of fowls and eggs. Over 20 breeds Turkeys, Geese, Ducks and Chickens. Hundreds of plates from life. 16 best poultry house plans. Treatise on diseases, how to feed, breed, etc. Send 10c. for postage. J. R. Grabason, Jr. & Co., Box 100, Delavan, Wis.

Eggs Thoroughbred Barred P. Rock eggs—two dollars per setting of fifteen. Golden Seabright Bantams, two dollars per setting of fifteen. Colored Muscovy ducks, two dollars per setting of eleven. My stock are all strong and vigorous and have farm range. All eggs shipped will be strictly fresh.

Mrs. D. T. STONE, DeKalb, Mo
Clover Ridge Poultry Farm, Route No. 2.

Black Langshan, White P. Rock, S. C. Buff Orpington, W. Holland Turkeys, Mammoth White Pekin Duck, E. E. Smith strain. Eggs from \$1.00 to \$2.50 per setting. Won at Lincoln and Kansas State Shows. 15 ribbons from 2 to 5. Poor hatches duplicated at half price.

Mrs Henry Shrader, Berlin, Neb.

PURE MAPLE SYRUP!

Orders booked now and syrup shipped as soon as made, direct from the farm. If you want something nice and that is guaranteed pure and fresh, please send me your order and I will please you. Put up in 1, gallon cans, 6 cans to the crate. Price one dollar per gallon. Order early so not to be disappointed and you will have more next year.

E. E. Miller, Fairview Farm, Mountville, Ohio.

Light Brahmas!

1st, 2d and 3d at the Interstate Poultry Show at Red Cloud, Neb., also winning sweepstakes and grand sweepstakes. 1st, and 3d pens 5 cks 4 pullets at Neb., state show at Lincoln. Stock and eggs at reasonable prices.

J L SMITH, Cadams, Neb.

BIG money maker. Send 10c for greatest cat-alogue ever printed. Contains dollars of information. Handsomely illustrated. A famous guide based on practical experience. 35 varieties land and water fowls, diseases and sure cures, houses, how to feed, high quality stock, low prices. Bank and personal references. Absolutely reliable.

Iowa Poultry Company, Des Moines, Iowa
Box 39. copyrighted

INCUBATOR ON TRIAL

The Perfected Von Culin.

Successful result of 25 years' experience. Scientifically correct, practically perfect. Non-explosive metal lamps. Double and packed walls. Perfect regulation of heat and ventilation. Made of best materials, and highest quality of workmanship and finish.

PRICES \$7.00 AND UP.

SATISFACTION GUARANTEED OR NO PAY. We make Brooders, Bee Hives & Supplies. Catalog and Price List sent free.

THE W. T. FALCONER MFG. CO.,
Dept. 213J Jamestown, N.Y.

PLEASANT HILL POULTRY FARM.

• • • • •

Barred Plymouth Rock. Rose Comb Brown Leghorn.

Having disposed of all my surplus stock and mated up my pens, am prepared to book orders for eggs. Write at once for prices.....

J. H. TROUGH,
Minden, - - - Nebr.

Cornish and White Indian Games!

—Stock for Sale.—

J C NAUMAN, Red Lake Falls, Minn.

BUFF WYANDOTTES BUFF P. ROCKS . .

Bred from my Boston Omaha, Kansas City, and Topeka prize winners. Old and young stock for sale. A large flock to select from. Prices reasonable.

W. J. GOW, Norfolk, Neb.

White Wyandottes.

First and second premiums at Minneapolis, poultry show Dec. 19 to 21. Eggs from birds scoring 93, 94, 91, 94, 94, 95½ cockerel 94½, \$1.50 per setting, 2 settings \$2.25. Few birds for sale.

W. H. Swartz, Minneapolis, Kansas.

High Hill . . .

Poultry Yards

Bronze Turkeys and Buff Rocks.

Turkeys are bred from prize winners and are winners, making almost clean sweep wherever shown. Young Toms \$5 each; Pullets, \$2.50 to \$4.00 each. My Rocks are noted for shape and orange colored legs. 80 point Cockerels, \$2.50 each; 91 to 92½ point Cockerels, \$5.00; each Pullet not scored, \$1.00 each.

Mrs. Wm. Rogers, Box 74, Sieddo, Mo.

F. A. CROWELL, Granger, : : : Minnesota.

Has some fine Breeding and Exhibition Buff Orpingtons yet for sale, also Indian Runner Ducks at \$5 a trio. Circular free.

Silver Lace Wyandottes White Wyandottes : : : Buff Leghorns Pekin Ducks...

All first class stock. Prices reasonable.
MRS. W. E. TIBBITS,
Imperial, Neb.

GOT A DOLLAR?

Invest It In our choice Fruit Trees, Shrubs or Vines. Ours will grow. They are well rooted, healthy and true to name. Trees Send a trial order today. Due bill good for 25 c and catalogue in German or English free. WE PAY FREIGHT ON \$10 ORDERS.

25 Grafted Apple Trees for - \$1.00
25 Budded Peach Trees for - \$1.00
40 Concord Grape Vines for - \$1.00

Fairbury Nurseries, Box 50,
Fairbury, - - - Nebraska

Barred Rocks.

PRIZE WINNERS at McCook, Kearney and Nebraska State Show. Don't buy until you get my prices. Eggs \$2 per 15, \$3 for 30.

A. B. Evans, Hartwell, Neb.

I was entered against.

Again, from the readers' point, when we want to buy stock or eggs, we look over a man's winnings, we want to know who he has been competing against to win those prizes. It is worth more to know he was competing against some other well known breeder than with some unknown party.

Free advertising? Possibly, but there are very few who in buying will not send to advertisers, as their first thought is that they must be reliable, as their ad. appeared in such and such a paper, while they will reason that either hasn't anything to sell or isn't reliable. Yours respectfully,

E. L. PRICKETT.

In the Investigator I recently noticed some one telling of trouble by rats, etc., digging into the hen houses. I'll give you our plan, both for old and new houses. We had a fairly good hen house, without foundation. After losing several hens we decided something must be done, so Mr. B. dug a trench around under the house and placed a six-inch fence board upright where the foundation should be, then filled in the dirt and we were bothered no more. The little animals would dig until they struck the board and quit to try another place, with the same result, and finally give it up as a bad job. Of course the board would decay and have to be replaced in time, but we moved before that time and built new houses.

In both of these we laid brick foundations, consisting of brick two wide and two deep, the top being level with the ground. On top of this was laid a plank 2x6 inches, and the frame built up from this being built even on the outside, making a sort of shelf all around inside.

Then I nail window screens to the window and can sleep in peace. Have had this nearly three years and no animal has succeeded in getting in, though I often find places where they have tried. These are easily filled up, leaving everything safe as before.

MRS. M. A. BARRANS.

Lenox, Iowa.

THE BLACK RED GAME BANTAM
A "Black Red Game" do gaze at me.
Longest of legs have I, said he:

A body small,
A reach quite tall,
Head like a snake, a bright, keen eye.
A close, hard plumage, and I try
Stylish to be in all my moves,
And not to tread in time-worn grooves.
Do I succeed? Well, don't they sing
Praises to me and crown me king?
No other Bantams such prices bring.
Nor can they ever while "I am in the ring."

Printing for Poultrymen

We are prepared to do all kinds of printing for poultrymen. We have the highest grade machinery and new material; all work guaranteed first-class. Free use of standard poultry cuts to patrons. Write us your wants and get our prices on your work. Address,

Poultry Investigator Clay Center, Neb.

Bonniedale Poultry Farm !

Eggs to Hatch.

S. DOTTES: Very choice pen, \$2 per 15. Over 30 hens on different farms. Good pure stock. Eggs \$1 per 15, \$4 per 100.
BARRED ROCKS: Strictly standard system. 60 fin. hens and pullets, 4 extra large, stately growers, scoring from 90 to 94 by Judges Russell and Stransbough. Eggs \$2 per 15, \$3.50 per 30. 1st. Brahmas, S. C. H. Leghorns and C. L. Games. Good pure stock on separate farms. Eggs \$1 per 15, \$4 per 100.

ROUP DUKE: Our make, 50 cents, postpaid. Circulars free.

MRS. MAY TAYLOR, HALE, MO.
LOCK OX 176,

Ross Bros' Trapnest

Just what every poultryman needs.

In sets of 3 for \$3.00.
In sets of 5 for \$4.25. **Delivered.**

We sell them cheaper than you can make them.

Ross Bros.' Buff Wyandottes.

Lead in the best competition.

ROSS BROS. Manhattan, Kan.

White Wyandottes.

At the great Chicago Show, 1902, I won 3d and 5th cockerels in closest competition. 60 cockerels for sale. Eggs \$2.00 per 15.

GEORGE GETTY, Syracuse, Kan.

Buff Orpingtons.

From the best strains in the country. Prize winners. Stock and eggs for sale reasonable....

B F SCOTT, Rising City, Neb

Wanted—At Once.

100 Black Minorca females,
100 Rose Comb Brown Leghorn females
100 Rose Comb White Leghorn females.

Will Pay Cash for Same.

Box 227, Clay Center, Neb.

Brief Business Catchers.

**30 WORDS
SINGLE INSERTION
50 CENTS**

Under these headings cards of **THIRTY WORDS** or less will be inserted for **FIFTY CENTS** a single insertion, or twelve insertions for **THREE DOLLARS**. No display can be allowed and all cards must be uniform in size and style. A change in makeup allowed each quarter.

**30 WORDS
WITH INVESTIGATOR
1 YEAR \$3.00**

FOR SALE! Rose Comb Black Minorcas in singles or trios also Buff Leghorns and Buff Rock Ckls., the best of stock for \$1.25 each, or \$3 for 3. Write us at once. O. E. Olson, Colan, Neb.

BUFF ROCKS. Breeding and exhibition stock for sale. Write at once for description and prices. Satisfaction guaranteed or money refunded. Tell us what you want. F. Whaley, Appleton City, Mo.

C. E. DUNLAP breeder and buyer of thoroughbred chickens. Can fill your order for any breed or strain, from the yards of reliable specialists. Prices reasonable. Correspondence solicited. Yours Truly, C. E. Dunlap, Liberal, Kans.

BLACK LANGSHANS. best winter layers, best rustlers, best all purpose fowl, also handsome. I take great pains to have the best and largest stock. Large fine Ckls. \$1 each. Oscar Jenne, Liberty, Neb.

FOR EXCHANGE. A 60-egg Sure Hatch Incubator, for Exhibition B. B. R. Games. Must be first class stock. A. J. Williams, Clay Center, Neb.

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert R. Swett, 364 Mosley St., Elgin, Ill.

BLACK LANGSHAN. W. P. Rockall old stock for sale at \$1.00 each, young white Pekins ducked for \$1.00 each from high scoring stock. Mrs. Henry Shrader, Berlin, Nebraska.

J. W. WHITNEY. Chatham, Ohio. Poultry Judge. All Varieties Private scoring and expert mating a specialty.

40 GOOD WHITE WYANDOTTES for sale cheap if taken soon. C. E. Genoways, Aurora, Neb.

FINER AND CHEAPER than ever. Buy early. Games, Heathwoods, Irish and Mexican Grays, Blks. Reds; Tornadoes and Cornish Indians. Free illustrated circular. C. D. Smith, Fort Plains, N. Y.

FREE GAMES. Eggs \$1.00 per 13. Circular, Heathwoods, Irish and Mexican Grays, Tornadoes, Irish Blks. Reds, Cornish Indians, \$2.00. Fowls all times. C. D. Smith, Fort Plains, N. Y.

BIG MAIL for poultrymen. Insert your name in our poultry director and receive poultry papers, poultry catalogues, etc. every day. Only ten cents silver. Poultry Directory Co. A. Goshen, Ind.

DARK BRAHMAS exclusively. A few standard bred pullets for sale for 1.50 and eggs 1.50 per setting. Alice Treanor, Palmyra, Nebraska.

MRS. MATTIE STUFFT. breeder of Buff Orpingtons and White Holland Turkeys. Winners at Nebraska State Show. Write for prices. Lawrence, Kansas.

BARRED PLYMOUTH Rocks. No stock for sale. Eggs \$5.00 per 100, \$1.00 per 13. My stock is first class and have won in show room. J. P. Schroeder, Clay Center, Neb.

ALSEN Poultry yards has Hamburgs, Buff and Brown Leghorns, Buff Rocks, White Wyandottes, Polish and Andalusian. Won 26 premiums out of 27 entries at South Dakota state fair. Eggs for hatching, \$1.00 and up. Circulars free. H. P. Larson, Beresford, S. D.

BUFF ORPINGTONS. "Cook's Strains." Trios \$10.00. Eggs at your risk \$2.00 per 13, guaranteed \$5.00. A. Edward Green, Jr., Ilet, Ill.

LIGHT BRAHMAS. I have a few good hens and pullets for sale cheap. Mrs. Alice Allen, Clay Center, Nebraska.

EGGS FOR SALE from Rose and Single Comb White Leghorns, White Rocks and Light Brahmas. \$1.50 per setting of 15 eggs. Write wants. John H. Rownd, Downs, Kas.

ROSE COMB White and Rose Comb Brown Leghorns, White and Silver Laced Wyandottes, also Rouen Ducks. Eggs in season. 15; \$1, 30; \$2. Duck eggs \$1 per 11. J. W. Cook, Poneto, Ind.

BUFF and BARRED Rocks, Buff Leghorns, B. B. Red Games, Hain Ducks, Fancy Pigeons, very fine lot of stock for sale. For prices write. Utz Poultry Yards, Estherville, Iowa.

BUFF TURKEYS: Pure buff throughout No white wings and tails. Large birds and ready to ship. Mrs. T. G. Smith, Polo, Ill.

100 S. S. HAMBURG. Stock for sale. Eggs at prices to suit the season. Stock in good condition fashionably bred and artistically marked. Rev. G. A. Oshamlin, Moran, Kansas.

MEADOW BROOK farm has for sale Pekin Ducks, Light Brahma and B. Plymouth Rock Cockerels at \$1 each, Toulouse Ganders, and M. Brouze Toms, at \$2 each. Poland and China lugs a matter of correspondence. J. D. Grimes, Chamber, Neb.

WHITE PLYMOUTH ROCKS a specialty. 1 yr old birds and this year's pullets and cockers for sale. Old stock score 92 points and up to 95+. Write for prices. Geo. N. Wood, Weldon, Ia.

SUNNY SLOPE FRUIT and POULTRY Farm, C. P. Austin, Dearling, Kan. White Rock Specialist. Eggs, Frank Heck and John Hughes strains. 15 cockers for sale Strawberry plants—best varieties. Square treatment.

PARTIDGE COCHINS a specialty. The cream at Chicago and Cedar Rapids, 1901. 150 young birds for sale after October 1st. finer than ever, superior feathering, shape and color. Always satisfaction guaranteed. U. J. Shanklin, Wanbeck, Iowa.

WHITE WYANDOTTES, cockers scoring to 94½. Mammoth Bronze Turkeys scoring to 90½ sired by a Tom weighing 40 lbs and his hens weighing to 25 lbs. Prices reasonable. W. H. Lake, Hampton, Neb.

LIGHT BRAHMAS. Special bargains, three trios at \$5.00 per trio. Choice cockers to one half their value, several bred from Boston prize winners. G. W. Hardin, Ilysses, Neb.

HATTIE RYFIELD, McCook, Neb. Eggs for hatching from prize winning Light Brahmas and White Wyandotte chicken, White Holland turkeys and mammoth Pekin ducks. 150 eggs \$2.00, 9 turkey eggs \$1.50, 11 duck \$1.00. Duck eggs \$6.00 per 100. A few nice drakes to sell.

CORNISH INDIANS a specialty. Winners wherever shown. Scored by Russell, Hews, Emery and Wale. Pronounce first class birds. Eggs in season \$2.00 for 15. J. L. Bannson, Sarcoxie, Mo.

WHITE WYANDOTTES exclusively. The kind that are egg layers. Scoring 91 to 94½. Duston strain. Eggs 2.00 for 15 or 3.50 for 20. Mrs. D. J. Fink, Holdrege, Neb.

50 BUFF BARRED, White Plymouth Rocks, Light Brahmas. Fine cockers, hens and eggs \$3 each. Eggs \$5. \$1.94, 100, 80, 60, Milton Brown, box 94, Middleboro, Mass.

O. K. S. L. WYANDOTTES are all right. Eggs \$1.00 per 15 or \$4.00 per 100. W. T. Canaday, Dover, Lee county, Iowa.

BARRED PLYMOUTH ROCKS exclusively. Eggs \$4.50 for 100, \$1.00 for 15. Adam A. Weir, Clay Center, Neb.

I HAVE FOR SALE at a bargain 30 Buff Cochins, 25 Buff Cochins Bantams, also Golden Wyandottes and Barred P. Rocks that are extra good. Write your wants. H. Gregory, Wayne, Neb.

FOR SALE—a \$12 Humphrey Bone Cutter, nearly new for \$8. Also a Buff Orpington cockerel, weighs 9 pounds; will make an excellent breeder. Price \$5.00. Louis Mogensen, Racine, Wisc.

WHITE PLYMOUTH ROCKS exclusively. A few choice cockers for sale; took 1st and 2nd premium at S. O. S. poultry show. Write for prices. J. W. Matson, Stromsburg, Neb. Route No. 2.

BARRED P. ROCKS: Thoroughbred, farm raised. Good birds, good scores, give good satisfaction and good results. Eggs that hatch, \$1.00 per 15. Prices for birds as reasonable. If convenient please enclose stamp when writing for particulars. Miss A. Sargent, Sarcoxie, Mo. Box 87.

WHITE H. TURKEYS. 1 W. Rock ck., score 94½ by Russell, for sale. Also eggs from D. Brahmas, Brown Leghorn, B. Pekin and Game Bantams. Expert Judge. P. M. Cooley, Milton, Ia.

PEACH GROVE POULTRY FARM. I have a few fine Black Langshan Cockerels for sale cheap if taken soon. Mrs. J. W. Stratton, Blue Hill, Neb.

BUFF ROCKS, BUFF COCHINS—evenest lot in the west. Have always won 1st in best shows. Score 90½ to 94½ by Rhodes. Number 90 cheap. Robt Lerner, Ravenwood, Mo.

NEW SURE HATCH Incubators and Brooders for sale cheap. Address Mrs. J. T. Clark, 21th & Y Sts., Lincoln, Neb.

MAMMOTH BRONZE turkey and white Pekin duck. Large fine specimens for sale at reasonable prices. Our stock is as good as money could procure. Mrs. E. I. Mathews, Morning Sun, Iowa.

EGGS from Single Comb White, Brown, Buff, Black, Dominique, Silver Duckwing and Rose Comb White Buff and Brown Leghorns. Price 1st free. Sylvester Shirley, Port Clinton, Ohio.

FOR SALE, 2 trios extra choice Silver Sebright Bantams one year old. The price is \$5.00 per trio. Address Box 227, Clay Center, Nebraska, care INVESTIGATOR.

BLACK LANGSHANS clean sweep Elgin Show, 1st ck, 1st, 2d, 3d hen, 1st, 2d, 3d chl, 1st, 2d, 3d, 4th pullets, won Silver cup. Ben Myers, judge. Henry Snellgrove, Elgin, Ill.

WHITE WYANDOTTES. Duston and Norval strains direct. Score 92 to 94½ by Ben S. Myers. Quality and fair treatment guaranteed. Best winter layers. Eggs 2.00 per 15. Belgian hares. Chas. C. Wilson, Holdrege, Nebraska.

R. C. B. LEGHORNS. A few good ckls left. Eggs 1.00 per 15. Also a few Stay White Wyandottes. Eggs 1.00 per 15. C. H. Courter, Ashley, Ohio.

FOR SALE, 2 choice White Klondike hens, first money takes them. Place order at once. Address PULTRY INVESTIGATOR, Clay Center, Neb.

BUFF ORPINGTONS. "Cook's Strains." Eggs from large, healthy vigorous stock, \$5.00 per 15. R. Q. Brown and Sons, White Leghorn eggs \$1.50 per 15. Louis Mogensen, Racine, Wisc.

PIGEON BOOK complete, illustrating, describing all varieties, arranging loft, breeding, feeding, caring for, 5 cents, 1,000 pigeons for sale. Prices f. o. b. Wm. A. Bartlett & Co, Box 27, Jacksonville, Ill.

Incubator Eggs!

From good, healthy and vigorous stock

\$6 per 100

\$3.50 per 50

White Wyandottes,
Light Brahmas,
Partridge Cochins,
White Rocks,
Barred Rocks,
Buff Rocks,
S. C. B. Leghorns,

Send your orders early
and we will take
care of you.

**THE WILDWOOD
POULTRY FARM,
ST. LOUIS, MO.
815 Chestnut St.
Farm at
WEBSTER GROVE, MO.**

**Morning View
Poultry Yards.**

....HAVE....

..Barred Plymouth Rocks..

Extra large heavy bone, finely barred, full above the eyes.

Eggs in Season. \$1.50 per Setting.

James M. Perkins,
RAVENWOOD. . . . MISSOURI.

Mrs. J. B. Jones, ♀ ♀ ♀
Breeder of
Barred Plymouth Rocks
and Mammoth Bronze
Turkeys.
STOCK FOR SALE. EGGS IN SEASON.

ABILENE, KANSAS.

BUFF WYANDOTTES,
EXCLUSIVELY. Our Buff Wyandottes are bred from best strain obtainable and in line. We breed the pure golden Buff, not the dark red. They're prize winners.
E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

UNION LOCK POULTRY FENCE.
For Poultry, Rabbits, Orchards, Gardens, etc.

All main strands are two wires twisted together.

Patented July 12, 1905

and April 25, 1899.

Stronger and closer spacing than any other make.
Our Union Lock Hog, Field and Cattle Fence, Union Lawn Fence Gates, etc., **guaranteed** first class.
Your dealer should handle this line—if not, write us for prices. Catalogue free.

UNION FENCE CO., DE KALB, ILL., U. S. A.

FRANK MYERS,
Free Port, Ill., U. S. A.
Box 20.

Breeder of
Barred Plymouth Rocks
They are Barred Right and good size. No Culls for sale. Choice breeding Ckls. \$2 to \$5 each.
15 cents extra for postage.

IDEAL
ALUMINUM

LEG
BAND.

Also manufacturer of
**Ideal Aluminum Leg
Band** : : : : :

The acknowledged leader. 12 for 15c. 25 for 30c. 50 for 50c. 100 for 75c. Samples and circular of Barred Rocks mailed for stamps.

**Conkey's
Roup Cure**

Cure Guaranteed !

THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, especially in pigeons, this cure excels all others. One 50 cent package makes 25 gallons of medicine. Directions with every package. If it fails to cure money refund. Postpaid. Small size 50c, large \$1. Conkey's Louse Killer never fails to kill. Try it. 25 cents per package, and 15 cents extra for postage.
Conkey's Egg Food and Poultry Tonic will keep your fowls in perfect health, and produce more eggs than any similar preparation. 25 cents per package and 15 cents extra for postage.
C. F. CONKEY & CO., Cleveland, O.
Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal. Eastern wholesale office: No. 8 Park Place, New York City and S. H. I. Co., Clay Center, Neb. For sale by all poultry supply houses.
Agents wanted.

A Chicken Chorus

*"It's All Right! It's All Right!
An Incubator That Is Out of Sight!"*

The chickens do not really say it but they feel it, and their owners say it over and over. The

"All Right" Incubators

Sold on 40 Days' Free Trial

are such good machines, such perfect hatchers, so simple in operation, so durable in construction, that we gladly send them to any one on 40 days' free trial. Take off a hatch and then decide whether you want the machine or not. Isn't that "all right?" We couldn't do it if our machine wasn't all right. Send for book explaining why it does such good work. It's free.

CLAY PHELPS INCUBATOR CO.,
Station 87 Cincinnati, Ohio.

RIPPLEY'S

**Whitewashing, Spraying
and Painting Machine.**

GUARANTEED TO AS REPRESENTED

Read Our 30 Days Special Offer Below.

This Machine will Whitewash Buildings, Walls, Barns, Poultry Houses, doing it far better, saving 3¢ the time over the old method of using brush. Will Whitewash Buildings, or Spray Trees any height by using extra hose and extension rod to elevate spray. Endorsed and used by hundreds of noted breeders. It is used and endorsed by Sid Conger, Shelbyville, Ind.; J. R. Fleish, Hope, Ind.; Bredonbrook Poultry Farm, Dallas, Pa.; G. W. Brown, Camden, Ark.; A. G. Dutton, Marlboro, Mass.; Texas State Fair Ass'n, Dallas, Texas. W. B. Dean, Secretary of State Board of Agriculture, Yankton, S. Dak., says: "We gave all State Fair Buildings two coats with your machine. It is a complete success and a great labor saver." In order to get them introduced in every locality, we will allow freight to your station, for the

NEXT SIXTY DAYS ONLY,

at the following net cash prices: No. 6—Eight Gallon Heavy Galvanized Steel, complete as shown in cut with 10 feet of 1/2 inch hose and one 8-foot bamboo extension rod and brass cylinder pump with agitator, \$12.00. No. 7—Sixteen Gallon size, \$15.00. Terms cash with order, or we will ship C. O. D., if \$3.00 accompanies order. Take advantage of our Special Offer. Send 3¢ in stamps for a copy of our New Sprayer and Breeder Supply Catalog. Ripple Hardware Co., Box 54, Grafton, Ills.

Western Office, Box 54, Watertown, So. Dak.

BUFF ORPINGTONS.

Limited number of Fancy Stock for sale at \$3.00 to \$10.00 each.

H. H. CAMPBELL,

Osceola, Nebr.

GREER'S PEDIGREED BARRED PLYMOUTH ROCKS

are in my breeding pens for 1902. Every bird a beauty and barred to the skin. My customers get eggs from the same hens I use for myself. Send for booklet of mailings.

Poultry Exhibits Properly Judged.

O. P. GREER, Bourbon, Ind.

Golden Wyandottes

Highest Grade, Healthy Vigorous Stock, from careful Matings.

S. P. VAN NORT, OLD ORCHARD, MISSOURI.

\$5,000 POULTRY FREE!

It is without a rival. Gives lowest prices of fowls and eggs. Over 50 breeds: Turkeys, Geese, Ducks and Chickens. Hundreds of plants from life, 15 best poultry house plans. Treatise on diseases, how to feed, breed, etc. Send 1¢ for postage. J. R. Brabazon, Jr., P. O. Box 100, Delavan, Wis.

Trees and Plants

That Grow and Bear Fine Fruit.

We grow that kind. Largest stock. Honest dealing. Low prices. We pay freight. Budded Peaches 6c.; Grafted Apples 5c.; Concord Grapes 2c.; Russ. Mulberries 30c. per 100; Ash 75c. per 1000; Black Locust \$1.35 per 1000. English or German Illustrated Catalogues FREE.

CARL S. NDEREGGER, Proprietor, Box 27, Beatrice, Neb.

Canfield's White Rocks

STILL AHEAD! In Jan. 1901-2 my birds made almost a clean sweep at K. O. and Kansas State Show. At Topeka, Kansas State Show, 1902, they won 10 out of a possible 16 premiums in strong competition and at Nebraska State Show at Lincoln in a class of 116 birds they won 1. pen. 1. 2. 3. hen. 1. 2. 3. ckl. 2. 4. pullet. 3. ck. Eggs and stock in season.

M L Canfield, Belleville, Kan.

Were Your Crops Injured

by the drought? Well, even so, you needn't starve to death. A good flock of chickens will pay your taxes, buy your groceries, and leave a surplus besides. The

Hawkeye Incubators

will hatch them for you, with less bother and greater certainty than any other incubator sold to-day. Perfect regulation of temperature, ventilation and moisture. In actual results the Hawkeye takes a back seat for nobody. Three sizes—60, 100 and 200 eggs, at prices that are right. We make brooders, that really take care of the chicks after they are hatched. Our motto is "The Hawkeye Incubators are Good Incubators," and it means exactly what it says. Better send for our catalogue. See our special offers and guarantee. Book free, or send 10c and get also a year's subscription to a leading poultry paper.

Hawkeye Incubator Co.,
Department 108. Newton, Iowa.

THIS IS THE WAY

they come off for the man who uses
THE NATURAL HEN INCUBATOR.

Beats any plan yet devised. Costs you nothing if you follow our plan. We have an agents proposition that is the best money maker you ever heard of. Don't wait until your neighbor gets ahead of you. Catalogue and 10c Egg Formula free if you write to-day.

Natural Hen Incubator Co.,
B-11, Columbus, Neb.

WE DIDN'T KNOW

and it is reasonable to suppose that the average man who is interested in Poultry does not know and cannot know the many points brought out in this new book.

The Poultry Book DeLux

Filled from cover to cover with the rich, ripe wisdom of the hard years of disappointment and success of men who stand at the top in the poultry business to-day, it is absolutely alone among publications of this kind. There is not a phase of the poultry business that is not exhausted in this wonderful book. Experience that has cost thousands of dollars, boiled down and put within the reach of all for..... \$1.

13,000 copies already sold. Write for full information.

Reliable Incubator and Brooder Co., Box A 25 Quincy, Illinois.

30 DAYS TRIAL

Hatch Every Good Egg

Or Don't Keep It.

Send 2 cents for Number 102 Catalogue

SELF-REGULATING BUCKEYE INCUBATOR CO. SPRINGFIELD

50 EGG SIZE \$5
100 EGG SIZE \$9.50
200 EGG SIZE \$15

GET MORE HEN MONEY

Feed out raw bone and double your profits; get more eggs, more fertile eggs; more vigorous and healthy fowls.

1902 BONE CUTTER Model

New design, open hopper, enlarged table, new device to control feed; you can set it to suit any strength; never clogs. Sent on

10 DAYS FREE TRIAL. No money asked for until you prove our New Model will cut any kind of bone, with all adhering meat and gristle, faster and easier and in better shape than any other type of bone cutter. If you don't like it send it back as our expense. Free out'g. explain all.

F. W. MANN COMPANY, Box , Milford, Mass

For Sale..

High class fancy pigeons, as follows: Fantails, Carriers, Magpies, Owls, Archangles, Barbs, Homers, Swallows, Dragoons, Nuns, Turbits, Jacobins, Pouters, Trumpeters, Runts, Starlings, Tumblers, outside and inside. Also ten kinds of poultry: White Holland Turkeys, Toulouse Geese, Rouen Ducks. Write for price list.

D. L. BRUEN, - Oldenbusch, Neb.

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free,

H. SHIVERS, Knoxville, Ia.

Lock box 500.

HORT STORIES

bring high prices. Thousands of good stories which might easily be made snail-like make up the great mass of rejected manuscripts. Our School of Journalism, in charge of successful authors, critics, corrects and reviews, as well as teaches how to write. Write for booklet. NAT'L CORRESPONDENCE INSTITUTE 2d Nat'l Bank Bldg. Washington, D.C.

GREAT CROPS OF STRAWBERRIES

AND HOW TO GROW THEM

Is the title of a Book which has worked a revolution in strawberry growing, and CAUSED TWO BIG BERRIES TO GROW WHERE ONE LITTLE ONE grew before. The author has grown the LARGEST CROPS OF BERRIES EVER PRODUCED on an acre. The book explains how YOU CAN DO THE SAME. It will be sent to you FREE IF YOU MENTION THE PAPER IN WHICH YOU SAW THIS NOTICE. The only scientifically developed THOROUGHED STRAWBERRY PLANTS to be had for spring planting. One of them is worth a dozen common scrub plants.

R. M. KELLOGG, Three Rivers, Mich

GOLD MEDAL AND HIGHEST AWARD

AT THE PAN-AMERICAN, OCTOBER, 1901, WERE PLACED ON

THE CYPHERS INCUBATOR

LITERALLY THOUSANDS of persons in EVERY WALK of LIFE ARE DOING AS WELL AS THE FEW ABOVE QUOTED, and the smaller sizes of Cyphers Incubators (60, 120 and 220 eggs) do precisely as good work as this largest size, on this you can absolutely depend.

While you are about it, WHY NOT BUY THE BEST and know that YOU ARE RIGHT? Illustrative descriptive 32 page circulars, English, German or Spanish, FREE ON REQUEST. Complete catalogue 196 pages, 8x11 inches, 10 cents in stamps for postage. Ask for Book No. 122 and address our nearest office.

CYPHERS INCUBATOR COMPANY

BUFFALO, N. Y.,
Court and Wilkeson St.

CHICAGO, ILL.,
325 Dearborn St.

BOSTON, MASS.,
34 Merchants Row

NEW YORK, N. Y.,
8 Park Place.

Time and time again the Cyphers 360-egg machine in the hands of our customers has hatched upwards of 300 CHICKS FROM 360 UNTESTED EGGS. Allowing ten chicks to the hen, IT WOULD TAKE THIRTY HENS TO HATCH 300 CHICKS.

THE EVIDENCE:--

"My largest hatch was 345 chicks out of 360 eggs,"—J. F. Ramsey, Mortonville, Pa.

"I got 365 chicks out of 318 fertile eggs,"—Edw. Sharpe, Genoa, N. Y.

"I hatched 314 chicks out of my 360-egg Cyphers,"—Herman Friedl, Haskell, Ind.

"From 360 eggs, we hatched 317 of the brightest," strongest chicks I ever saw,"—Frank B. Taylor, Prompton, Pa.

"From my No. 3 Cyphers, holding 360 eggs, we hatched 311 chicks,"—L. R. Hobart, Lake Crystal, Minn.

"Out of our largest size incubator I hatched 314 good, healthy chicks,"—H. Murr, Gordonville, Pa.

"My incubator holds 360 eggs and from one loading I got 301 chicks,"—Jas. C. Myers, Oakes, Pa.

"One hatch I obtained 327 strong, healthy chicks from the 360-egg Cyphers,"—Sprague Bros., Florence, O.

Think of the work and the worry in caring for the thirty hens it would require to hatch 300 chickens, ten to each hen! FIVE MINUTES, morning and evening will take perfect care of the Cyphers 360-egg incubator—THIS WE GUARANTEE.

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one piece. Nothing to ro astray. The neatest and strongest coop on the market.

Wm. MILLER, North Bend, Neb

Barred Rocks . .

That have made a National Reputation. Bred in all their purity. Grand in size and color. Eggs and stock from my yards will start you right. Cockerels from \$2.00 up; eggs \$2.00 per 13, \$5.00 per 40.

GEO. H. WALLACE

Box 101, Navau, Minn

Special Bargain Sale!

I am selling choice S. C. B. Leghorns as follows: Cockerels, \$1.00, Trios, \$2.50. This stock is sired by Boston and Chicago prize winners. Try GRANT'S PRACTICAL BROODER. Specifications telling how to make and operate sent upon receipt of \$1.00.

D. W. GRANT,

ALMENA, KANSAS

Buff Orpingtons

The Coming Breed.

W. H. BUSHELL, Importer and Breeder.

DAVID CITY, : : : NEBRASKA

Winnings at the Nebraska State Fair Sept. 1-7, 1901. Entered 13 birds, won 1-2 on Cock, 1-2 on Hen, 1-2 on Cockerels, 1-2 on Pullets, 1st on pen of chicks. Every bird a prize winner. Also winners at Ill. State Poultry Show of four first premiums 1899, and Nebr. State Poultry Show four first premiums. Young stock for sale in pairs, trios and pens only. Single Chks. for sale.

LIGHT BRAHMAS.

Prize-winning stock, first prize at the Great St. Louis Fair. Of four entries at Kansas City, Mo., won 1 first, 2 seconds, 1 third. Stock and eggs for sale. Write us

STECKER BROS.,

4639 Cottage Ave., St. Louis. Mo

J. W. Eastes . . .

Buff Orpingtons. R. C. W. Leghorns, Barred & White Rocks, W. C. P. Bantams, Belgian's Hares, Eggs. Stock in season. Agents wanted. Thirty Prizes; silver cup last year.

Galesburg, - - - Illinois.

FROM
**BIG
TREES**
TO
**PETALUMA
INCUBATORS**

On the *Yosemite Valley, California.*

California Redwood

has been used for twenty-three years in the manufacture of

Petaluma

Incubators and Brooders

because we have found it superior to all other kinds. Several other incubator makers are giving their testimony to our good judgment by advertising to also use California Redwood. It is not only true that Petaluma Incubators and Brooders are made of the best lumber in the world, but every other article used in their construction is of the highest grade, and therefore these "Standard of the World" Incubators and Brooders occupy the same relative position to all other Incubators and Brooders that the mighty California Redwoods do to other trees.

Read "A Bit of Incubator History," in our new catalogue. We send it free. Address nearest office.

Petaluma Incubator Co.,

Box 58, Petaluma, Cal., or

Box 58, Indianapolis, Ind.

Hatch Chickens by Steam

with the Simple, Perfect, Self-regulating

NEW WOODEN HEN

The most efficient incubator for raising poultry on a small scale ever invented. A perfect hatcher—automatic, self-regulating thoroughly constructed, fully guaranteed.

Thousands in successful operation. Guaranteed to hatch a larger percentage of fertile eggs, at less cost, than any other hatcher.

THE NEW WOODEN HEN

Three Sizes:

50 Egg Capacity, only	\$ 6 8c
100 " " "	10 00
200 " " "	12 80

Send for large FREE catalogue with 16 colored views.

GEO. H. STAHL,

114-122 S. 6th St., QUINCY, ILL.

J. S. Markle.

Breeder of

Imported and Domestic
Fine Belgian Hares.

Write for prices. Box 511. Wahoo, Nebr.

BEST FRUIT PAPER

Western Fruit-Grower is the best paper treating of all kinds of fruit, and nothing but fruit; monthly; illustrated; 16 to 48 pages; 50 cts. a year, 10c for three months' trial subscription.

THE WESTERN FRUIT GROWER.

Box 13, St. Joseph, Mo.

CALVIN E. BARNEY, - - Kearney, Neb

Breeder of Light Brahmas Exclusively.

My birds are heavy weight fine markings, close feathered. Eggs, \$2.00 for 15; \$3.50 for 30. Choice birds, old and young, for sale. Write your wants. No circulars.

We will consider it a great favor if you will mention THE POULTRY INVESTIGATOR when writing to advertisers.

1890

ROYAL BLOOD

1901

SILVER LACED WYANDOTTES FOR SALE.

Winners Big 1 Show at Sioux City, Ia., '98; at Lemars, Ia., '99; at National Fancier's Meet, Cedar Rapids, Ia., 1900, and at Nebraska State Show, Lincoln, Nebr., entered 10 birds in 1901, where we won 1st cock, score 92½; 1st, 2d and 3d cockerel, score 94½, 1st, 2d and 3d pullets, score 93½; 2d hen in large class and very warm competition. We have never had but one bird defeated and never had our birds scored except in the show room. We have a few breeding pens to spare, not quite up to weight, but will soon be, at \$12.50; trios \$7.50.

See cut of birds on page 14. We can't sell quite as good as these at that price but can guarantee they will produce prize winners. Exhibition birds a specialty. We can please you.

I. & N. M. CONNOR, Ponca, Neb.

IF PANDEMONIUM

Reigns supreme in your brooders and the chicks die wholesale you can positively check the mortality by using :

PURITAN CHICK FOOD,
a readily assimilated and scientifically balanced ration. Use it under positive guarantee.

FREE:—Our new and beautiful 64-page catalogue. Finest ever issued. A mine of information. Send at once to America's largest plant

PURITAN POULTRY FARMS,
BOX 357 A. STAMFORD, CONN.

Why Not Buy the Best?

It costs no more than inferior styles. We claim that **Adam's Green Bone Cutter** is the best because it is the only Ball Bearing machine on the market. It works on the shear principle, turns easier, cuts faster and cleaner, and prepares the bone in better shape than any other. Write at once. Catalogue No. 6 Is Free.

W. J. ADAM,

JOLIET, ILL.

IF
IT'S AN
ADAM
IT'S THE
BEST

Oakes

Will Make Your
Old Incubator New.

Oakes' Hydro Safety Lamp, (with wick-tube surrounded by water jacket), the only safe and sure lamp. Never goes out nor smokes. Price, 75c to \$2.70.

New Aluminum Regulator gives perfect control of heat.

Oakes' Improved Wafer Thermostats—the standard regulator. We manufacture incubator and brooder fixtures of all kinds, Tanks, Heaters, Egg Testers, etc. Write for catalogue and get our money-saving prices.

L. R. OAKES, Mfr., No. 12 6th St., Bloomington, Ind.

Incubator and Brooder
Supplies.

WE
MAKE
THEM
HATCH

You Want Fertile Eggs

but fertility counts for little if the chick hasn't sufficient vitality to get out of the shell, and stand the trials of chickhood. Cut green bone promotes both fertility and vitality. Green bone is easily and rapidly cut by the

HUMPHREY GREEN BONE AND VEGETABLE CUTTER.

No fuss and bother about it. No hacking with an axe nor packing in a cylinder. You finish the job with a Humphrey before you get started with other types of machines. Sold on a positive guarantee to cut more bone, in less time, with less labor than any other machine made. Your money back if you are not wholly satisfied. It's a rapid vegetable cutter, too. Send for free catalogue (hand-somest of the season), and egg record book.

HUMPHREY & SONS, BOX 70, JOLIET, ILL.

Sales Agents—Joseph Breck & Sons, Boston, Mass.; Johnson & Stokes, Philadelphia; Griffith & Turner Co., Baltimore; Sure Hatch Incubator Co., Clay Center, Neb.; E. J. Bowen, Portland, Oregon; Seattle, Wash., and San Francisco. Des Moines Incubator Co., Buffalo, N. Y.

Poultry Investigator

Is edited by a practical poultryman of 30 years experience and is full of plain, common sense articles by those that breed poultry and work instead of theorizing. It is just what you want. Send us the names and addresses of 15 persons interested in breeding good poultry and we will send you the **POULTRY INVESTIGATOR** one year for your trouble. Subscription price 25c. Address,

Poultry Investigator Co.,
Clay Center, : : : Nebraska

..... The New

Standard of Perfection

Revised Edition, 1900.

This work is issued by the American Poultry Association. It is a book of over 250 pages, cloth cover, and contains the only official descriptions of the several varieties of fowls. It is on this Standard that all poultry judges base their awards. Every experienced fancier has a copy of this book and every poultryman needs it to learn the requirements to which his stock must be bred.

The Standard of Perfection

—AND—

The Poultry Investigator

One Year, for..... \$1.00

Address,

POULTRY INVESTIGATOR,

CLAY CENTER, : : : NEBRASKA

POULTRYMEN Your stationery won't look well unless **PRINTED** neatly. I do it it is well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

Buff ORPINGTONS and Brown Leghorns

Young or old stock, first class birds cheap. Hundreds to select from. Eggs all the time.

M. & F. HERMAN,

Box 178, Hinsdale, Ill.

BUFF ORPINGTONS—WYANDOTTES, R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock. fit to breed and exhibit for sale. **Thos. H. Mills, Poultry Judge, Port Huron, Michigan.**

You Get them All

You get all the chicks that it is possible to get from
a lot of eggs when you put them into the

PRAIRIE STATE INCUBATOR.

—more than all other incubators combined. Used exclusively by the Department of Agriculture at Washington. Used on the largest and most successful poultry and duck farms in the world.

Still doing business—more of it than ever—at the old stand. **Largest exclusive Incubator Factory in the World.** Our new catalogue is the most

complete, comprehensive and artistic ever issued by any Incubator Company. Over 700 original photographs, taken by our own artist; four original oil paintings (reproduced in colors)—nice for framing—and 50 tinted plates. These cover every phase of the poultry industry. We mail a copy free if you request it. Write for Catalogue No. 129, and address nearest office.

Prairie State Incubator Co., Homer City, Pa.

New York, N. Y., 23 Vesey St.
Philadelphia, Pa., 714 Chestnut St.
Columbus, O., 114 N. High St.
Indianapolis, Ind., 150 N. Delaware St.
Chicago, Ill., 86 Randolph St.
Cincinnati, O., 141 W. 4th St.
Denver, Col., 1519 Wazee St.
Boston, Mass., 47 N. Market St.
Norfolk, Va., 28 Union St.
Minneapolis, Minn., 32 Hennepin Av.
London, N. Eng., Waltham Cross.

Detroit, Mich., 544 Michigan Ave.
Dallas, Texas, 439 Cole Ave.
Louisville, Ky., 400 E. Main St.
Toronto, Ont., Can., 190 Yonge St.
Baltimore, Md., 235 N. Paca St.
Washington, D. C., 712-12th St., N.W.
Seattle, Wash., Main & Jackson Sts.
Smyrna, Ga., Belmont Farms.
Buffalo, N. Y., 65 Elkoot St.
Pittsburgh, Pa., 5 Union St.

W. J. Cheney,

Breeder of
Thoroughbred Fancy Poultry,
BOX 68—2—CUBA, MO

Catalogues Free.

I issue a very complete catalogue illustrating and describing leading varieties of thoroughbred poultry, giving special prices on large orders of eggs and stock.

W. J. CHENEY,

BOX 68—2—Crawford Co., —CUBA, MO

P stands for P uritan; pure and the best,
U stands for U sage, this stands the test.
R stands for R ation, balanced and true,
I stands for I ncome, doubled for you.
T stands for T ouble, a thing of the past.
A stands for A ctive smart chicks that will last.
N stands for N ature whose laws are observed.
C stands for C hickens their health is preserved.
H stands for H appy young P. C. F. chicken.
I stands for I llness which plays them no tricks
C stands for C ostly when losses ensue
K stands for K eeping these losses from you.
F stands for F olly when boiled eggs are fed.
O stands for O ld when some are not dead.
O stands for O rders, in volume they grow.
D stands for D rop us a line as below.

WHITE WYANDOTTES

WINNINGS: At the St. Louis Show January, 1901; 1st Cock; 1st and 3d Hen; 2d Cockerel; 1st and 2d Pullet and pen. Two specials: At the Chicago Show, January, 1901, 1st Cock; one special. Eggs from best pens, \$3.00 per 13, \$5.00 per 26.

ROSS C. H. HALLOCK, 6313 Clifton Avenue, St. Louis, Mo

Eggs \$1.00 Per Setting.

Varieties.

B. P. Rocks.
Light Brahmas
Partridge Cochins
White Wyandottes
C. C. W. Leghorns
C. C. B. Leghorns
R. C. B. Leghorns
Black Minorcas
Pekin Ducks

The line should be dropped to

The Puritan Poultry Farms, Inc.

For their superb and immense catalogue giving full details of this remarkable food and illustrating the

World's Largest Poultry Plant

In all its details, also showing which are the best Incubators and Brooders now in use. It is absolutely free to everybody. Write today.

Puritan Poultry Farm, Inc.

Box 357. Stamford, Conn.

Single Comb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

Cora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS,
Ogden, Utah.

Pride of the West....

Is Mackey's own Strain of Bronze Turkeys, bred in line for 15 years. Show record on open book. They are in the yards of many of the best fanciers in the U. S. and Canada. B. P. Rocks. Conger & Felch; Black Langshans, Emory Felch & Robinson. Felch Lt. Brahmas, eggs at all seasons from hens. Young stock now ready to ship. Write for prices. Mackey's Magic Cholera Cure is a sure cure.

HILLSIDE POULTRY YARDS,
Mrs. B. G. Mackey, Proprietor.

CLARKSVILLE, : : : MISSOURI.

Our Barred and White Rocks.

Are good layers and excellent market birds. Our White Leghorns are the hardy, vigorous, active kind that win in the shows and pay a large profit as layers. Eggs \$2.00 per 15. Incubator eggs \$5.00 per 100.

J. N. Krauter. Bucyrus, Ohio.

High class stock for sale!

Barred and Buff Plymouth Rocks and S. C. W. Leghorns. Can furnish few birds for fall fairs. Drouth prices. EDW. C. WEEKS, Eldon, Mo.

Barred Plymouth Rocks.

We have Quality and Quantity. Farm raised prize winning stock, cheap for quality. If you want Rocks write us.

H. B. LOUDEN, Clay Center, Nebr.

Barred P. Rocks...

Extra fine, Extra large, Extra color

In the show room they have shown their excellence, have scored from 90 to 94 by prominent judges. Write wants.

C. F. HINMAN, Friend, Nebraska.

HORTHAND and BOOKKEEPING.

Study at home and take a higher salary. Investing a little time and a little money in a business course with us and the dividend will never cease. All subjects TAUGHT BY MAIL.

Complete course also in Engineering, Bookkeeping, Science, Languages, etc. Write for free booklet. NATIONAL CORRESPONDENCE INSTITUTE, 1460 Second Nat'l. Bank Bldg., Washington, D. C.

Send Stamp for catalogue of... W. H. WIGMORE'S

POULTRY AND CATTLE SPECIALTIES—PHILADELPHIA, PA.

Catches Them Coming and Going.

The Greatest Boon to Poultrymen Practical, Durable, Cheap, Convenient. A permanent fixture for all times. The Spider or Midge Louse can not exist where this system is in use. Do not put it off, but send for circular or send \$2.50 for trial dozen and be convinced.

SHRADER & BUCK,
BUCYRUS OHIO.

POULTRY CUTS at CUT PRICES
CATALOGUE FREE
Harper Eng. Co., Columbus, O.

May I "SHOW YOU"

That we raise as good Barred Rocks in Iowa as are sold by eastern breeders. Eastern price \$10, will sell his equal for \$5, or money back. If you buy a \$5 eastern bird I will beat him for \$3. Try me. CORVIN JONES, Sidney, Iowa.

Prize Winning B. Rocks.

Cockerels and Pullets scoring 90 to 93 by Southard for \$2.50 to \$10.00 each. Good breeders not scored for \$1.00 to \$1.50 each—

P. Hostetter,

East Lynne, Mo.

A BIRD FOR POULTRY KEEPERS. BETTER than a GOLD MINE. We will tell you how we made our hens lay over 400 per cent profit. Merely send your name and address. Waukegan Poultry Co., Clintonville, Conn.

Buff Orpingtons Bronze Turkeys

We keep nothing but the choicest stock. Eggs for sale. Write for prices.

C. E. BROWNING,
Fairbury, Nebr.

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

JOURNALISM

Practical, paying newspaper work, writing short stories, etc.

TAUGHT BY MAIL by our successful system in personal charge of Mr. Henry Litchfield West, formerly managing editor of the Washington Post. Successful students everywhere. Write for illustrated booklet. NAT'L. CORRESPONDENCE INSTITUTE, 24 Nat'l Bank Bldg., Washington, D. C.

Sure Hatch Poultry Company

Has the largest aggregation of thoroughbred poultry in the west.

We import, breed, and sell All Varieties.

Each variety is bred separately on a farm. No chance for mixing up. Prices reasonable. Stock the best. Write your wants. Address,

Sure Hatch Poultry Co.
Clay Center, Neb.

BONANZA RABBITRY, ESTABLISHED IN 1885

Founders of the first herd of pedigreed Belgian Hares in the world. The first to establish a system of registration for Belgians. The first to produce hares exceeding the standard weight and develop superior colors. Holder of the world's record for prize winnings.

Our sales for 1900 were over 5,000 head. Send 10 cents for the most complete and most beautiful 56-page catalog ever published.

Bonanza Rabbitry Manual, 4th edition, just coming from the press, \$1.00, written by Dr. B. C. Platt, the foremost authority on the subject, president of the National Association of Belgian Hare Judges; professional Inspector of Belgian Hare Institutes; originator of the Decimal System of Judging and score card adapted to this system; inventor of Bonanza Tattooing Marker for Belgians; inventor of the Perfect Belgian moulded in metal, presenting the ideal colors, also perfection in quality shape and size.

Address **DR. B. C. PLATT**, 274 N. Broad St. PHILADELPHIA
Permanent Eastern Office and Salesroom.

Tiffany's paragon Lice Killer.

Kills lice and mites on poultry, hogs and animals. Is the strongest and best lice killer made. With our double tube sprayer you can save one half the liquid and penetrate all cracks and spray the bottom of the house where you find the mites or spider lice. It gets there every time. Every can is guaranteed or money refunded. Write and learn how to get a sprayer and can of Lice Killer FREE.

Tiffany's Paragon Poultry Powder.

For setting hens and baby chicks. Always to be used before the hen. For the next 60 days we will send our old and new customers, 100 lbs. Shell-crit, (coarse or fine) 100 lbs. time stone crit, one gallon Paragon Lice-killer, one Tiffany's Double Tube Sprayer, one 4-lb. pack-age Powder, all for \$2.50. These goods all 3rd class. Freight—cheap.

THE TIFFANY COMPANY, - - - Lincoln, Nebraska.

FARM.

Healthy Infants

must be raised among healthy surroundings or they will not have the vigor and health that will carry them through to successful henhood. In the first place the chick must be started right, and the way to start him right and keep him right is to have on the farm one of our

RELIABLE

Incubators and Brooders.

They are as near perfect as years of hard work, good material, and high class workmanship can make them. There is a farm down here in Illinois; we call it the **Reliable Poultry Farm**, where some of the finest birds in the world have been hatched and raised. There are 126 pens of them here now and they are crackerjacks. Here is where our machines are tested by experts. You will want a copy of our

20th Century Catalogue and Poultry Guide.

It tells you all about these things and many others that will be helpful to you. We send it for 10 cents.

Reliable Incubator and Brooder Co.,
Box A 25 Quincy, Ills.

Always Take THE Kansas City & Omaha Line For All Points East, South and West.

Close connections made at all junctions. For rates and information, call on or address

S. M. ADSIT, G. P. A., or S. M. WALLACE, Agt.

St. Joseph, Mo.,

Clay Center, Nebr.,

Price 95¢ up
Book free.

"MORE MONEY FROM YOUR HENS"

is the title of a handsome book telling about greater profits by aid of the **DANDY Green Bone Cutter** machine that really cuts green bone. Sold direct from factory, saving you agent's profits and giving you privilege of returning if not the easiest turning machine made. **STRATTON MANFG. CO., Box 48, Erie, Pa.**

The "Perfect" Hatcher

200-Egg Hatcher and Brooder combined, \$10.00

100-Egg Hatcher, \$6; Brooder, \$5.

Barred Plymouth Rock Fowls and Eggs, None Finer.

Testimonials and Illustrated circular 2c.

J. A. CHELTON, Fairmount, Md.

Incubators..

Built on entirely new principles and the only machine made that will allow the chicks when hatching to come out of the machine in the pure, fresh outside air at their own will, just exactly the same as they do when hatching under the hen. Guaranteed to imitate nature closer and to hatch equal to any machine on the market. For further particulars address with stamp.

L. P. MEISTER, Troy, Mo.

GOVERNMENT POSITIONS.

Nearly 10,000 appointments made last year. Chances better for 1902. Hundreds of those who have been appointed were prepared by us by N. J. Established 1893. Full particulars free concerning government positions, salaries and examinations, when and where held, our methods, etc. Write to-day **NATIONAL CORRESPONDENCE INSTITUTE, 14-42 Second Nat'l. Bank Bldg., Washington, D. C.**

Do you keep Bees?

THEN learn how to make them pay and send for our large illustrated free catalog, showing the best up-to-date hives and other articles used by progressive bee keepers.

Jos E Nyswander,

Des Moines, Iowa.

White and Golden Wyandottes...

CHAMBERLAIN'S PERFECT CHICK FEED.

BEYOND COMPARISON.

WORLD'S CHICK FEED OF TO-DAY.

CHAMBERLAIN'S PERFECT CHICK FEED, like everything else that has merit, has its imitations. DON'T BUY TROUBLE, insist on having the only Original Dry Feed. Stamped on each sack "Chamberlain's Feed, Kirkwood, Mo." All others are worthless imitations. Nothing "Just as good."

GOOD MORNING SISTER

I am ready for Chamberlain's Perfect Chick Feed. DRY AND ALWAYS READY FOR USE. LITTLE GOES LONG WAY.

No Bowel Trouble when Chamberlain's Chick Feed is properly used. It is the fine mixture in Chamberlain's Feed that has made the name famous. For incubator chicks, for all chicks until 5 months old.

FACTORY PRICE, 100 Lbs. \$2.50. 50 Lbs. \$1.50. 30 Lbs. \$1.00.

For the Broiler Man, the Fancier and the Farmer. Saves Time and Money.

Chamberlain's Hen Feed will make your hens Lay, 100 Lbs. \$2.00.

Factory and Shipping Depot, 302 N. Commercial St., ST. LOUIS, MO.

Freight charges added to factory price at all distributing points. Order from your nearest agent and save time and freight. FOR SALE AT \$2.75 PER 100 LBS., BY Soragme Con. Co., Chicago, Ill.; J. Wilder & Co., Cincinnati, Ohio; Iowa Seed Co., Des Moines, Iowa; Wernick Seed Co., Milwaukee, Wis.; R. A. Pike & Co., Minneapolis, Minn.; E. A. Pegler, Lincoln, Neb.; Hunting & Pace, Indianapolis, Ind.; Ripley Hardware Co., Grafton, Ill.; Alexander Seed Co., Augusta, Ga.; Norton Poultry Yards, Dallas, Texas, \$3.40 per 100 lbs. H. M. K. Wilson & Co., Agents for St. Louis, Mo. If friends of my feed in the east have trouble getting my feed, write direct to me for prices. W. F. CHAMBERLAIN, KIRKWOOD, MO.

Jackson Boulevard Caviary

Royal Blood English Belgian Hares.

All animals English prize winners and from imported English parents. The renowned Golden Ball (doe) and Lord Salisbury at the head of the herd. Angora Cavies (Our Specialty), Abyssinian Cavies, Peruvian Cavies, English Cavies, Both Imported and Domestic. For Pleasure and Profit, the Angoras with their long, silky tresses and musical little voices have not their equal. Write for special descriptions and prices.....

MRS. GEO. D. HAWLEY,
2166 Jackson Bvd. Chicago, Ill.

Ain't these beauties

But not so fine as chicks hatched from B. P. Rock and Buff Coch. In eggs that you can buy of Mrs. Kessler, I have a few fine Barred Ck's for sale yet. Write for prices and be pleased.

Mrs. Ida M. Kessler,
Weburn, Ill.

Black
Buff
White

Pekin Bantams

As Good as the Land can Afford

B. B. RED GAME BANTAMS,

tall reachy birds fashionably bred.

SILVER SEBRIGHT BANTAMS,

Beautifully marked prize winners.

All the above are as good as can be found. Eggs \$3.00 per 13.

A. J. WILLIAMS,
Clay Center, Nebr.

WINNERS, EAST and WEST!!!

Oaklyn Fowls have won in nearly every leading show east and west in my hands and for my customers. They win for others and can win for you. It pays to get the best. Pedigreed stock is no guesswork

Partridge Cochins, Buff Plymouth Rocks,
Buff Orpingtons, B. P. R. Game Bantams.

Bred in line of winners. Good breeders at reasonable prices. Show birds cheap - quality considered. Send for catalogue.

Oaklyn Place.

S. A. NOFTZGER:

North Manchester, Indiana.

Meyer's Langshans

Won
At
Kansas
State
Show

So good
ones to
sell.

1st and 2nd cock; 1st and 4th hens; 1st 2nd and 4th cockerels; 1st 2nd and 3rd pullets; 1st pen. Score 189½. Rhodes and Harris, judges. At N. E. Mo. show in a class of 82 Langshans all good ones, tied 1st cock, won 2nd and 3rd; tied 1st hen; won 2nd and 3rd; 2nd cockerel; 2nd pen and tied 3rd; pullet. Eggs \$2.00 per 15, \$3.50 for 30, \$5.00 for 45, from winners. Records of other big winnings in catalogue.

L. E. Meyers,
Bowling Green, Missouri.

\$5.00

Buys 100 eggs, \$1.25 one setting, \$2.00, ten Bronze Turkey eggs at GLEN RAVEN EGG FARM, Home of the all-year-round layers, Brown Leghorns, White Leghorns, Barred Rock, White Rock and Black Minorca. High scoring exhibition stock. Fowls for sale. Circular free. Mention INVESTIGATOR.

Write E. W. GEER, Farmington, Mo.

BARRED
ROCKS.

BRADLEY BROS. New York winners is what my flock is built from. Winners at the Columbus show, 1901-2. Eggs \$2.50 per 15. Stock for sale.

J. R. Henderson,
Sta. B. Route 1.
Columbus, O.

SECOND PULLET, BOSTON, 1900, FIRST
HEN AND CHAMPION AT PHILADELPHIA, 1900.

Latham's Victory at Philadelphia Show, 1900.

1st, 2d, 3d and 4th Hens—2d Pullet.
1st and 3rd—Exhibition Yards—Eight
Special Prizes, including the

**They Won
on
Their Merits**

Champion Barred P. Rock Female.

In quality of stock shown the Philadelphia show stands one of the hottest ever held. I made my GRAND RECORD ON BIRDS BRED AND RAISED ON MY FARM. Send for Illustrated Circular and descriptions of Matings.

Eggs

I will sell a LIMITED NUMBER of Eggs at \$5.00 per 15.

**Choice Breeding Stock
For Sale!**

**Beauty and Utility Strain Barred
Plymouth Rocks.**

Satisfaction Guaranteed.

Address

C. H. LATHAM, BOX G..... LANCASTER, MASS.

Our Motto, "Virtute non Astutia"

HARES BY THE HUNDREDS

IMPORTED - AND - DOMESTIC

From such Fashionable Strains as the following Champions:

Fashoda, Edinboro, Guinea Gold, Nonpareil, Unicorn, Dash-Climax, Grimsby's Star, Priory Prince, Malten Mystery, Palace Queen, Lord Britain, Etc.

Our Stud Bucks are:

Fashoda Star

Score 96 by Judge Almond, imported, son of Ch. Fashoda.

Viscount

Score 95 by Judge Finley, imported.

Lythedale

Score 94 by Judge Finley, imported.

Sir Crabtree

Score 93½ by Judge Crabtree, and other domestic bucks that will score 94 to 96.

RUFUS RED BELGIAN HARES

At prices ranging from \$5 to \$75 per head, pedigree and score card with each animal. Unpedigreed market stock, good color and size, \$2.50 to \$5 per pair. Hardy Black Belgians (good to use as nurse does) at \$10 per pair. Correspondence solicited for special price list which may not be in effect long. Will refund money and pay return express charges if Hares purchased are not as represented. Rabbitries at Maplewood and Fayette.

MISSISSIPPI VALLEY BELGIAN HARE COMPANY,

304 Chemical Building : : : : ST. LOUIS, MISSOURI.

BUFF P. ROCKS Exclusively. Pure Burdick Gold Nuggets. My Buff Rocks are as good as can be found, and are up-to-date in every respect. Some fine specimens for sale; reasonable prices on application. Address

MRS. ELLA PATRICK, Clay Center, Nebr.

Smith's Mammoth Pekin Ducks and White Wyandottes Win

Thirteen 1st, 5 2nds, at Nebraska state, Kansas state, Missouri state, Des Moines Iowa. Clean sweep in four states. 1 entered 12 W. W. in Nebr. state show and won 8 premiums; 1 ck. 1 hen, 1 pullet and 5 others. See circulars for report of the champion flock. Get eggs for hatching from the winners.

Lincoln, Neb., Box 456

E. E. SMITH

VOL. 3.

MARCH, 1902.

NO. 13.

Poultry Investigator

ADVANCE TO SUCCESS

*Empress-owned L.C. Stephens,
Carleton, Nebr.
Flemish Giant*

25 ¢ a year

Don't Fiddle Around

with an old fashioned, poorly regulated incubator. It's a shame to waste time, good eggs and oil that way. Get an

"ALL RIGHT" INCUBATOR

and you will be all right. You say "Yes, but how do I know the All Right is any better than others. I have never seen it." That is just what we want you to do. See it and try it—we know you will like it. That's why we send it anywhere on

40 Days' Free Trial

so that you can both see it and try it before you pay for it. This is the only fair way to sell an incubator any way, and our

"All Right" machines are good enough to send out on trial. They stay sold.

We know this, or we would not be foolish enough to make the offer. Send for our free catalogue and poultry book. It's a "dandy" and you ought to have it.

Clay Phelps Incubator Co.,
Station 87 Cincinnati, Ohio.

This is our \$10.00 bargain 88-Egg Copper Tank, all latest improvements on trial too.

With Open Arms

the workmanship and general superiority of the

RELIABLE INCUBATORS and BROODERS

have won them a home in every country in the world, and once taken into the home they usually make way for more of the same.

We are not merely manufacturers, but take our own medicine. The Reliable Poultry Farm, with its 126 pens of thoroughbred poultry is known as one of the finest and most complete in the world. We have experts there who get the practical knowledge that applied to our business has made our machines standard.

20th Century POULTRY BOOK

tells about these things and also everything else that experience and time have taught the successful poultry men who have prepared it. Sent for 10 cents.

Reliable Incubator & Brooder Co.,
Box A 25 Quincy, Illinois.

POULTRY INVESTIGATOR

Vol. 4

Clay Center, Nebraska, March, 1902.

No. 1

<p>Second Article ©</p>	<p>Life in the Egg By L. E. Keyser</p>	<p>The Embryonic Development of the Chick</p>
---------------------------------	--	--

Having considered the egg, its origin, formation and fertilization, we will follow its embryonic development through their various stages, for, in order to have a comprehensive understanding of the phenomena of incubation, we must have a general knowledge of the embryonic development of the chick. In our last article we noted the difference between a fertile and unfertile blastoderm, and shall now deal with the fertile one as it develops under normal conditions. As we have shown the yolk of the egg is encased by the vitelline membrane and immediately under this at the top of the egg is the blastoderm holding the embryo, which, as incubation progresses, is encircled by the germinal sac.

AFTER 3 HOURS OF INCUBATION

Fig. 4.

The blastoderm, which rests on the germ disc of the white yolk, spreads out like a thin circular sheet over the yolk immediately under the vitelline membrane and forms a sac termed the germinal membrane, steadily expanding until it reaches the opposite end, and completely envelops it, but not until quite a late period does the complete closing at the opposite pole take place, and the extension of the blastoderm practically goes on during nearly the whole period of incubation. In only a few hours, however, the central pellucid spot will become oval, with a furrow down the center and blood vessels appear around it. This enlargement is shown at Fig. 4, which represents the egg with the shell partially removed, lying flat, the spot which we see being on top of the egg, though in the illustration it might appear to be on the side. Now there begins to develop around it a double sac or membrane called the amnion, which later entirely encloses it and the germinal sac, between the two folds of which is what is called the amniotic fluid. The embryo is thus surrounded by two membranes which form a wall all around it, the inner one being called the inner or true amnion, and the one lying near the shell the outer or false amnion.

The allantois is an appendage of the alimentary canal, and starts from the naval of the embryo near the yolk sac, traversing the space between the true and false amnion and extends over the

yolk and albertmen, separated from the shell membrane only by the thin false amnion, and in this position it gathers nutriment for the growing chick and performs the function of a respiratory organ or lungs. The developments here noted go on through the entire or various periods of incubation and are here explained so all may know what organ is meant when we refer to it in tracing development, which we shall now do step by step.

First Day—After three hours of incubation the embryo presents an ap-

Fig. 5.

pearance as shown in Fig. 4. After twelve hours the blastoderm is greatly enlarged and the central or pellucid spot becomes oval in outline and very distinct. During the latter part of the first day the head can be discerned slightly elevated above the level of the blastoderm and in front of it the first fold of the amnion.

Second Day—At the beginning of the second day the head alone is seen projecting above the surface of the blasto-

POULTRY INVESTIGATOR.

Fig. 6.

derm. The amnion advances in growth very rapidly and nearly covers the head. At an early hour of this day the tail makes its appearance and a little later the first rudiments of the heat, which is of a tubular character, extending through nearly the entire length of the embryo, but no pulsations or motions are seen until the thirty-eighth or fortieth hour. At first the heart contains only a colorless fluid, but dark spots in the vascular area is perceived about the same time, but there is no connection between them and the heart, and it is not until a subsequent period that these cells coalesce and form veins carrying the blood to the heart. During the latter part of the day the heart separates into parts with a constriction around the middle. Fig. 5 is a top view taken about the forty-fifth hour and shows the heart still in a tubular form.

Third Day—The tube of the heart now becomes bent together and it is confined to that portion of the embryo to which it belongs. The circulation of the blood becomes quite vigorous, and during the day a complete system of blood vessels is formed with a definite circulation, and pulsations of the heart carry the blood to all parts of the embryo. Nutritive matter is transmitted to the blood and quite a quantity of yolk is absorbed, which is in turn replenished by the white, and by the end of the day the decrease in the white is strongly marked. The blastoderm covers about half of the yolk and the embryo is almost completely covered by the amnion, several folds of which meet along the line over the back, but their complete coalescence will not take place until the next day. Another important change also takes place on this day. The embryo up to this time has been lying on the yolk with the part which will be its face to lie on its left side and the whole embryo begins

to curve upon itself.

Fourth Day—The growth of the embryo has been very rapid since the third day and the white of the egg is still further diminished, the embryo lying almost in contact with the shell membrane, separated from it only by the thin false amnion which has also increased in size to such an extent as to make a covering almost obscuring the view of the body of the chick beneath, and all traces of its folds where it came together along the line of the back are lost. There is yet very little fluid in the amniotic sac and the dry amnion lies close to the embryo, which is thus fully exposed to atmospheric influences. At this period in artificial incubation is overheating more disastrous than at any other. The tail is now quite conspicuous, the limbs make their appearance and the curvature of the body is increased. The allantois is now discernable and begins to push out from

Fig. 7.

the digestive canal, between the two coats of the amnion and is at first a bag or sac protruding from the naval, independent of the yolk sac. During the first part of the day it is very small and its growth slow, but during the latter half the growth is more rapid and at the same time its blood vessels become important. By reference to Fig. 6 these changes can be plainly seen.

Fifth Day—The process of development goes on very rapidly and many changes are noted on this day. The germinal membrane has spread over the entire yolk sac and completely enclosed it. The allantois has reached far over the right side of the embryo, between the true and false amnion and its network of blood vessels has extended. The amnion has made a complete closure and its cavity begins to be filled with a fluid which raises it some distance from the embryo. The development is nicely shown in Fig. 7, which was taken at the close of the fifth

Fig. 8.

day.

Sixth and Seventh Days—While development is going rapidly on there are no marked changes on the sixth day, other than that each portion shows considerable growth, as will be seen by comparing Figs. 7 and 8, and the cavity between the true and false amnion becomes larger and is filling rapidly with fluid, but on the seventh day obvious movements appear in the amnion and it begins to pulsate regularly, which rocks the embryo to and fro in the egg. The allantois forms a flattened sac covering the right side of the embryo and spreads out in all directions between the folds of the amnions. The allantois is filled with fluid so its walls are separated from each other in spite of its flattened form. The veins which brought back the blood to the heart have disappeared and the yolk is not so fluid, but continues to absorb the white, which is diminishing rapidly. The liquid absorbed by the yolk from the white forms the amniotic, allantoic and other fluids and is also used as nourishment for the embryo. The head does not lie so near the tail as on previous days and the neck appears more

Fig. 9.

Fig. 10.

distinctly, though the head is still large in proportion to the body. A white substance appears on the face, which later develops into a beak.

Eighth, Ninth and Tenth Days—Ossification begins on the eighth or ninth day and the bones commence to form, but the skeleton is not complete until the thirteenth day. Signs of feathers can be distinguished on the ninth day along the middle line of the back, and especially the sacs of the tail feathers. There are no important changes in the amnion during these days; its cavity still being filled with fluid, and on the eighth day its pulsations are at their height. The allantois has covered the greater part of the yolk sac and is now the chief organ of respiration. The change in the formation of the embryo can be seen at Fig. 8, which represents it at the close of the ninth day. Here it has the form of a chick, but the head and eyes appear to be the biggest parts.

Eleventh Day—The body of the embryo is practically completed on this day, but it is still connected with its other appendages by a narrow tube or umbilicus which can be plainly seen in Fig. 10, and the chick retains its po-

Fig. 11.

sition the short way of the egg. The yolk has diminished rapidly and the yolk sac becomes flabby, forming a series of folds supplied with numerous blood vessels. The loops of intestines, which have been hanging down, are drawn up into the abdomen and the abdominal walls loosely formed. The allantois now surrounds the egg with the exception of the end opposite the embryo, where still remains a little of the white or albumen, which has formed a sticky mass tightly pressed into the end of the egg. There is nothing now between the allantois and the shell except the thin membrane of the false amnion and the vitelline membrane to which it partially adheres.

Twelfth Day—On this day the creative forces complete their work and the chick, though small, is fully formed. The embryo, it will be seen (Fig. 11), has turned partially over in the egg so that its head is more toward the large end. The allantois now alone performs the function of gathering nutri-

Fig. 12.

ment for the chick, which from now on has only to grow and develop, and to act as lungs. The carbon in the waste products of the blood is being burned out and the poisonous gases thus generated are thrown off through pores of the shell and the amount of oxygen entering the egg is quite a considerable.

Thirteenth and Fourteenth Days—On the thirteenth day the skeleton is complete and the various muscles of the body can, on close examination, be discerned. On the fourteenth day the embryo turns more completely over so that its head comes opposite the chorion and shell membrane which form the inner walls of the air cells. As this change in position is not completed until near the close of the fourteenth day we show it in the illustration of the fifteenth day (Fig. 12).

Fifteenth, Sixteenth and Seventeenth Days—The embryo develops very rap-

Fig. 13.

idly on these days and about the sixteenth day the allantois completely encircles it, passing over the poll of the yolk opposite the embryo.

Eighteenth and Nineteenth Days—On the eighteenth day the head of the embryo is turned a little to one side, so as to be more in a position to break the shell. In the illustration at Fig. 13 it looks as if it might be turning its head toward the small end of the egg, but this is not the case, it being due to the position from which the egg is viewed. The fluid in the amniotic sac has entirely disappeared and the chick is breathing the air it contained. The pulmonary circulation increases and the circulation of blood in the allantois has greatly diminished. On the nineteenth day the yolk sac, which has become greatly reduced in size, is drawn into the abdominal cavity, greatly extending it, and nothing remains but the allantois and the dry amnion.

Twentieth Day—During the early part of the day the blood in the allantoic vesicles is sluggish, and later as the chick succeeds in breaking its covering the blood ceases to flow through the umbilical arteries into the allantois and it dies. When the chick breaks

Fig. 14.

Fig. 15.

the shell it commences to breathe the outer air through the lungs and no longer has need of the allantois. In from six to ten hours after breathing the outer air the chick throws off the shell and makes it entree into the world, as shown in Fig. 15.

Buying Eggs for Hatching

Now is the proper time to decide what you want to buy and at what season you want your eggs delivered. Egg orders are filled by the breeders in rotation, and if a breeder treats customers with fairness it won't do any good to get an order in Saturday of one week, to get your incubator filled the Monday following—that is, unless your breeder happens to have a supply of eggs on hand and no orders booked.

When you receive your eggs, if they are broken or not properly packed, report the matter at once. If you wait too long the shipper will be suspicious that you wish to get your order duplicated free of charge.

When you test your eggs, if you find few infertile ones it may be as well to wait till the hatch is made before report is made, but if the reverse is the case, report at once. Be sure you properly test the eggs and not before the tenth day.

We have had some experience that teaches us that early reports as to results are proper. Last year we had but one complaint of turkey eggs, and in that case we replaced them, but had the complaint came in two or three weeks late we would have paid no heed to it. One year when all reports of our duck eggs were fine we received six weeks after shipping, a doleful tale about all those eggs being infertile. It was too long a delay in the face of our other good reports, and in view of the fact that the receiver had tested the eggs during incubation.

We never bought eggs of a breeder yet who would not endeavor to make matters right if we were prompt in stating our case.

We never sold a setting of eggs that turned out badly that we did not duplicate the order very carefully if immediate report was made.

We have waited until our patience well-nigh gave out when we neglected to order ahead. We have laid awake nights because of the impatience of some of our own customers who could only wait a day or two.

As a matter of fact there are only a few fowls in a good breeder's pens, and if you order from a certain pen you must have patience if the breeder is honest.

Perhaps you cannot tell when you will have a hen setting. If you have the setting kind you can be reasonably certain by watching the time they begin to lay.

HATTIE BYFIELD.

The Buff Leghorn

By N. K. Cornwall, Thamesville, Ont. I have read many able discussions on this beautiful breed of fowls, and I think they lead all other Leghorns for beauty and size. They lay as many large, white eggs as any, and then the shining metallic golden buff of the male and the soft, golden of the female leads me and many others to believe they are the leaders.

I am comparatively a young breeder of this variety, though I have had chickens around me since I can remember, and I get along nicely, feeding and caring for my buffs, and seldom losing any by disease.

Mornings I feed a mash mixture of barley bran and corn meal, equal parts, a quart merely dampened for each twelve hens; at noon, yellow corn cracked very coarse; at night, wheat. The corn and wheat always thrown in litter about one foot deep on the floor of pens to keep them busy all day. Green bone twice a week, and green food always before them, in winter principally cabbage and sugar beets; in summer my birds full access to the fields.

Three years ago when I started with

the Buffs I bought a trio, and both of the hens had half of their tails white. The cockerel was very dark, but I thought I had it, so showed at our county fair, but did not get a piece of the money, but this only woke me up, so I read all the poultry papers I could get hold of, and found out where I could get some good stock. I sent away and got some birds which proved O. K., and this year I made a clean sweep at the county fair. Now a word for our Buff Leghorn club. Everyone who has, and is interested in this beautiful breed should be a member. It only costs \$1 a year, and nothing puts a breed to the front as quick and as well as a lot of good men united and working.

George S. Barnes, Battle Creek, Mich., Secretary, is well known to all Buff Leghorn breeders as a hustler for the Buffs, and will give full information on application.

The mating up of breeding stock is, I think, the most important work a breeder has to do, as upon the proper performance of this depends his future success.

The Leghorn may be mated up in pens of from six to fifteen with good results. The male should be of good size and carriage, bright, active, full of live and vigor of good color and as well up in other standard requirements as possible. The females should also show that bright, active alertness which is one of the most charming characteristics of this variety. Let them also be well bodied birds, the breast bearing well forward, combs not only well serrated and properly folded, but both comb and mottles should show size and color to indicate good laying qualities, without being coarse.

R. R. FRENCH.

Q. P. Rock cockerel owned and bred by C. M. Hulbert, Fairbury, Nebr., "Ringlet Strain."

Poultry Chat

By Mrs. Albert Ray

Editor Investigator:

It is not so much that we busy farmers' wives need enthusiasm upon the subject as we need help, both to lighten the many and tiresome duties that overcome failure and lead to success.

Poultry farming is in itself fascinating and will enthuse its devotees to interest and action.

The many advantages attained by the successful poultry woman or poultry man—it is not necessary to enumerate—but suffice it to say that every thrifty farm home wishes to provide its members with an abundance of the best meat cleanly and carefully grown, as well as eggs—fresh eggs—the most wholesome and nourishing food when properly and daintily served.

While this much is being done for the home, much more can be done with comparatively little more expense and effort.

There are so many things to defeat us that sometimes we are almost discouraged and say, "Well, I have so much 'bad luck' that I hardly feel like trying." Yet we never give up and renew the effort each succeeding year with varying success.

Of course, every one has chickens, more or less, of some kind to begin with. Well, whatever kind, the stepping stones to success are first a home for them that is comfortable—roomy, sunny and well ventilated; next is cleanliness, which in its fullest sense is freedom from vermin.

We learn each year more and more of the value of the early hatched and well cared for chicks. These are a real delicacy for the home table as well as the market. This is indeed the "early bird that catches the golden worm." Also the pullets of the early hatches make the winter layers when eggs are a good price—this making twice that the early brood capture the highest prices for both broilers and eggs.

As this subject is one of expansion, we will talk only of helps to secure results referred to. We all know to have early chicks we must have early setters, and if one cares to prepare for a small brood it only requires a little more care and effort to raise more. It takes no longer time for many than few. And why not get them all early?

It is needless to recount the woes of the housewife in caring for setting hens which often do not seem as much interested in the welfare of the eggs and

chickens as the poultry woman herself.

Finding that it was a necessity to lighten my work (as I have no household help without hiring) we were ready to be convinced as to the best incubator and upon perusal of our poultry papers saw a contribution from a well known poultry woman who had had experience with incubators. She said among other things that as perfectly as some of these machines are, no busy woman should be without the help of an incubator.

I wrote her and asked her to kindly give me the benefit of her knowledge that we might make no mistake in the selection of an incubator, which favor she granted. We bought the one she recommended, she adding "you'll never regret the money spent." And we have not, but have been very pleasantly disappointed, and are so glad that there is anything so helpful.

We sat ours March 1st, and every three weeks thereafter, making four successful hatches. The first gave 90 per cent, second 95 per cent, third 90 per cent or a little more, and fourth 90 per cent. The chicks were the liveliest, most perfect and healthy we ever had anything to do with—doing nothing but grow. We lost hardly any from the first two hatches as broilers at only fair prices, but brought more than the cost of the incubator, leaving the early pullets for winter layers.

We have had excellent success raising the chickens from the four hatches,

excepting accidents which would not have happened had we been wise enough to get a brooder, too. And my work of raising would have been easier by far. The hens concluded that as they had nothing better to do they would keep the egg basket and egg case filled, which they have done, while their neighbors took a long vacation from laying after hatching and brooding chickens, lice and mites.

A Word About Hamburgs

So many inquiries reach my desk about this remarkably beautiful as well as useful family of chickens I have decided, Mr. Editor, to call on you for a little help. My song is always about the Silver Spangled variety.

We will begin by saying that there is no family of chickens that will surpass them for laying qualities. The Leghorn people have advertised and boosted their Brownies, Whites and Buifs until many people believe they are the only egg machines in the world, but here we desire to remark that the Leghorn is not a winter laying breed. The Hamburg is. It is a very rare thing, indeed, to see a frozen comb among them. Their low, close fitting rose comb is an almost sure guarantee against frost. Every poultryman knows that a hen will not lay so long as she is suffering with a frozen comb. The Hamburgs are the equal of any as winter layers and are surpassed by none during the warmer months of the year. There are none that will resist the encroachments of disease any better than they. They are bright, active and industrious, and always manage to keep up a good digestion and circulation, and there is not much chance for disease to attack

1st prize pen of Light Brahmas, scored 188 points by Rhodes at Superior, Nebr., owned by J. L. Smith, of Cadams, Nebr. Mr. Smith won the large part of the premiums at Superior and 1st and 3d hen, 4th pul, and 5th c'h'l at State Show at Lincoln, Nebr., 1902.

them. Being very fond of the dust box they keep themselves remarkably clear of lice and other vermin. Their non-sitting propensities saves them the loss of much valuable time. I never knew one to sit. In the past four years that I have handled them there has been just two hens that have been broody. They sat on the nest four or five hours a day for a couple of days and that ended their efforts to increase the hen population.

The eggs are medium in size and are a pure pearl white in color. They hatch well, in fact they are the equal of any for hatching purposes. The chicks are very active and strong and begin to feather out as soon as they are out of shell. By the time they are a week old the wing and tail feathers have made a good growth. For this reason they need to be fed on such food as will furnish material for feather growing. The period of a female's productiveness is equal to the length of her life. Hens 4 and 5 years old begin as prolific as pullets. A friend of the writer owned two hens that were 8 years old and they were as active as at any time during their younger years. One should never coop the young of any of the smaller breeds with those of the Americans or Asiatic classes. Keep them separate or the larger ones will tramp and smother the little ones to death. The birds when full grown will weigh $3\frac{1}{2}$ to $5\frac{1}{2}$ pounds each. They are inclined to be a little nervous, but with kind treatment are as gentle as one could wish for. They are quick to notice strangers and for that reason strangers should not go inside of their yards. Every change that is made in their runs or houses is quickly noticed.

Taken all in all, the Silver Spangled Hamburgs are among the very best breeds of today.

REV. G. A. CHAMBLIN.

Moran, Kan.

A trio of Silver Spangled Hamburgs that won first at South Dakota state fair owned by H. P. Larson, Beresford, S. D.

The third prize White Wyandotte cockerel at Chicago, Ill., and Topeka, Kas., owned by Geo. Getty, Syracuse, Kas. This bird attracted more attention than any other one bird in Kansas state show.

Premiums Awarded at the Glasco Poultry Show

Single Comb Brown Leghorns—First pen, John Chase, \$2; second, G. L. Smith, \$1; third, John Chase, blue ribbon.

Rose Comb Brown Leghorns—Blue ribbon on cockerel and pullet was awarded to B. F. McMillan.

Single Comb Buff Leghorns—First premium, B. F. McMillan, \$2; third, R. G. Pilcher, on cockerel, blue ribbon.

Partridge Cochins—First and second premiums were awarded to F. H. Sutton of Minneapolis.

Buff Wyandottes—First premium, J. E. Olmstead.

Black Minorcas—First and second premiums were awarded to John Chase.

Barred Plymouth Rocks—First and second premiums, F. L. Slater, also first on cockerel and first on pullet.

White Wyandottes—First premium, George D. Smith; second, C. Lee Archer.

White Faced Black Spanish—First and second, Captain Sperry of Minneapolis.

Buff Rocks—R. G. Pilcher received first and second premiums.

Buff Orpingtons—First and second premiums went to R. G. Pilcher.

Belgian hares—Roy Ott, blue ribbon. White rabbits—Earl Woodward, blue ribbon.

Game Bantams—Charlie Sutton first. Highest scoring bird in show—James Pratt received first and blue ribbon.

George Chapman received blue ribbon on his fine exhibit of pea fowls.

bon on his fine exhibit of pea fowls.

Pit games—John Chase received first. Tonlouse geese—John Chase first, also premium on White Holland turkeys.

On account of frosted combs on fowls the exhibit only numbered 216 birds; but great interest was taken by the public in the exhibition.

American Buff Leghorn Club

Officers—President, Charles L. Thayer, Chicago, Ill.; Eastern vice president, Harry M. Lamon, Watertown, N. Y.; Western vice president, Eugene N. Lacey, Kansas City, Mo.; secretary and treasurer, George S. Barnes, Battle Creek, Mich.

Honorary Vice Presidents—James Dundas, Deer Park, Ont., Can.; F. E. Olson, Galva, Ill.; C. A. Durling, Hopewell, N. J.; B. F. Hislop, Milford, Ill.; Richard Jones, Venetia, Pa.; George, F. Curtis, Fenton, Mich.

Executive Committee—Augustus D. Arnold, Dillsburg, Pa.; Thomas Peer, Fairfield, N. J.; James Dundas, Deer Park, Ont.

MEMBERS.

The breeders of Single Comb Buff Leghorns are recommended by the club as breeders worthy of your attention when you are in need of stock or eggs. The club will expell any member that does not deal fair and honest with his customers. It is with pleasure that the club and its officers can recommend the following brother fanciers and members:

Augustus D. Arnold, Dillsburg, Pa. George S. Barnes, Battle Creek, Mich.

Bill East and Bill Holcomb of Clay Center, Neb., are both chicken cranks. Bill East raises Golden Wyandottes and Bill Holcomb raises the Golden Seabright Bantams. At the poultry show held here at Clay Center last winter the two Bills got up an argument as to which was really the best chicken. Holcomb claimed that the Golden Seabright Bantams were on top every time. Of course, Mr. East disputed it. Mr. Holcomb caught Mr. East away from the show room one day and got a photo taken showing his bantam on top. We think the evidence is entirely one sided. If the above half tone is any evidence, most certainly the Golden Seabright Bantams are on top, but it is not on record that Mr. East ever gave it up that the Golden Wyandottes were not the best chickens.

Charles M. Clime, Terre Hill, Pa.
Naté K. Cornwall, Thamesville, Ont., Canada.

George F. Curtis, Fenton, Mich.
John I. Craig, 456 Devon st., Arlington, N. J.

C. A. Durling, Hopewell, N. J.
James Dundas, Deer Park, Ont., Can.
W. C. Draper, Govan, Wash.

B. W. Fellows, Big Rapids, Mich.
W. H. Fowler, Green Bay, Wis.

C. H. Fry, West Haven, Conn.
Chester B. Gleason, Sherman, N. Y.

A. W. Graham, Cortland, N. Y.
Richard Jones, Venetia, Pa.

Casper Hart, Venetia, Pa.
William L. Howell, Geneseo, N. Y.

B. F. Hislop, Milford, Ill.
G. C. Howe, Aurora, Ill.
Eugene D. Lacy, Kansas City, Mo., Palace Clothing Co.

Harry M. Lamon, Watertown, N. Y.
Wes Loser, Terre Haute, Ind.
Arthur J. McClain, Delaware, N. J.
G. W. Maurhoff, Saxonburg, Pa.
Mrs. C. W. Harrington, Hartford Mills, N. Y.

Gus Norton, Union City, Mich.
Fred E. Olson, Galva, Ill.
Thomas Peer, Fairfield, N. J.
M. L. Pressnall, Munden, Kas.
P. H. Ross, Waterloo, Ont., Can.

D. R. Shalfer, Turtle Creek, Pa.
W. W. Storms, Burlington, Wis.
John J. Spillane, Lockport, Ill.
C. A. Stimson, Eaton Rapids, Mich.
Sylvester Shirley, Port Clinton, O.
Stuart D. Talbot, Edmondston, N. Y.
Charles M. Thayer, Chicago, Ill., 7036 Union ave.
F. G. Toepfer, Toledo, O., 728 Tecumseh st.
William Vaude Mass, Midland Park, N. J.
T. J. Walp, Quakertown, Pa.
Edwin Wardle, Venetia, Pa.
George D. Williams, Toronto, Ont., Can., 100 Argyle st.
Dell Wolf, Battle Creek, Mich., 13 Sanderson st.
Daniel Wagner, Niles, Ill.

Mery Christmas has come and gone. The New Year has begun, with many resolutions for the future, as we have often done in the past but, alas, how few of them can we live up to as we

First prize Buff Cochin cockerel at Nebraska state show at Lincoln, owned by C. K. Davis, Columbus, Neb.

fully expected to do, for some cause or another. I spent the first of the New Year in the show room renewing old acquaintances and making new ones—a pleasure indeed. And as the ribbons were put on my favorites' coop (the Buff Cochins) I resolved to raise more and if possible better birds this year; for the awards showed me I have not toiled in vain to get better ones each year, although I never expect to reach the top round of the ladder of chicken-fame. I will strive to overcome the many drawbacks that surround me by doing the very best I can.

When reading the many journals that find a way to my desk I often think what perseverance and determination it takes to overcome the difficulties of

the vocation what it may, and how many of my sister fanciers are situated as I am. Never a word of encouragement. Many persons want the best bird in the yard for fifty cents or a setting of eggs at store prices, or perhaps want to exchange and when told the prices, look aghast and think me a fifth subject for a house in Lincoln—well, called the insane asylum. Others will complain of express charges and "birds ought to be sold cheaper when shipped a long distance on account of express charges." Permit me here to express my thanks to Cora A. Richards for the valuable article on "shipping coops," but another drawback: What are we to do when all the thin lumber that can be got must be from boxes purchased of the merchants? Sometimes a half dozen must be bought to make one coop. Are we to be considered dishonest to our customers for excessive express charges? Some may say, "but I do the best I can by making to coops as light as I can with the material I get."

As the days and years pass on I am determined to make the best of my situation, whatever it may be. Adversity and sorrow is often the means of making our character the better. With the new year I will wish you all success, bear the losses and disappointments bravely.

IDA E. BARD.

Imperial, Neb.

Fayette, Mo., Jan. 15, 1902.

The fourth annual exhibit of the Central Missouri Poultry and Pet Stock Association will be held in Fayette, Mo., Dec. 9th to 12th, 1902. Mr. Frank W. Hitchcock of Denver, Colo., will judge the show. In our report of the winnings at the third annual show, we made an error in the winnings of Mrs. W. N. Marshall, Lisbon, Mo., on Buff Orpingtons. She won as follows: 1st and 2nd cock; 1st and 2nd hen; 1st and 2nd cockerel; 2nd and 3rd pullet; 1st and 2nd pen. In justice to Mrs. Marshall we publish the corrected winnings.

H. P. MASON, Sec'y.

Mr. and Mrs. H. E. Clark, Dallas Center, Iowa.

This is the daughter of J. S. Markel of Wahoo, Nebr., holding one of his famous Belgian Hares. Look up his ad.

The Poultry Show

Notwithstanding the Side Play of Old Boreas and the Tightened Purse-strings of Our Citizens, the Show Was a Decided Success.

The Appleton City Poultry and Pet Stock Association held their first annual exhibition Dec. 17th to 20th, inclusive, and despite the extreme cold weather a most satisfactory display of fine fowls was on exhibition, and those who were the promoters of this organization have just cause to feel proud over the display. True the cold weather caught several of our breeders of choice fowls napping, and, as a result a number of chickens that were to have been on exhibition were unfit for the show room, and parties from a distance who had intended to compete for prizes did not put in their appearance. The number of chickens, turkeys, geese and ducks in the show room numbered a little over 150 and in this number was to be seen as fine scoring stock as can be exhibited at any average show of the same nature.

The only feature that did not come up to the expectation of the managers was the very light patronage by our city people, who, it was hoped, would give the show encouragement by their presence and financial support. Below we give a list of those who won prizes and their fowls:

D. Gillson—Barred Plymouth Rocks—1st on cock, 2nd on cockerel, 1st on hen, 1st on pen. Black Minorcas—1st and 2nd on cockerel, 1st and 2nd on hen, 1st and 2nd on pullet, 1st on pen. White Rocks—1st on pen. First

on White Holland and Narragansett Turkeys and first on Pekin ducks.

W. C. Gates—White Wyandottes—1st on cockerel and 1st on pullet.

Elmer Brooks—Buff Cochins—1st on pen, 1st on cock, 1st and 2nd on pullets. Rhode Island Reds—1st on cockerel and 1st on pullet. Barred Plymouth Rocks—2nd on pullet. White Rocks—3rd on cockerel.

Mrs. Luther Williams—Silver Laced Wyandottes—1st on cock, 1st and 2nd on cockerels, 1st on hen and 1st and 2nd on pullets.

Mrs. Staples—Golden Laced Wyandottes—1st and 2nd on cockerel, 1st, 2nd, and 3rd on pullets.

Branch & Son—Barred Plymouth Rocks—1st and 3rd on cockerels, 1st on pullet. White Rocks—1st on pullet, 2d pullet, 1st and 2d on cockerel.

S. H. Cotton—Black Langshans—1st and 2nd on pens, 1st on cock, 1st and 2nd on cockerel, 1st, 2nd and 3rd on pullets. Pen score 188½.

F. Whaley—Buff Rocks—1st and 2nd on pens, 1st on cock, 1st, 2nd and 3rd on cockerels, 1st, 2nd and 3rd on hens, 1st, 2d and 3rd on pullets.

Mrs. A. F. Wyckoff—Blue Andalusians—1st and 2nd on hen, 1st and 2nd on pullets.

P. C. Mendenhall—Black Cochins—1st and 2nd on pullets. White Cochins—1st on hen, 1st and 2nd on pullet. Buff Bantams—1st on cockerel, 1st on hen and 1st on pullet. Black C. Bantams—1st on hen.

H. R. Howard—Buff Cochins—1st on cockerel, 3rd on pullet.

A. T. Lowry—R. C. B. Leghorns—1st and 2nd on cockerel, 1st, 2nd and 3rd on pullets.

J. M. Brown won 1st on pair of Buff turkeys.

T. Cumins 1st on trio G. C. Bantams.

R. N. Burns 1st on pair Hoodans.

J. R. Waggoner and family will eat Christmas dinner with his son, Weldon, at Fort Scott.

Poultry Show Winings

List of Prize Winners at the First Annual Exhibition of the Arena Poultry Association at Sterling, Ill.—Show Closed Jan. 1, 1902.

The first annual show the Arena Poultry show closed Wednesday evening. In spite of the severe cold weather just preceding the show, which kept many intending exhibits away, the attendance was good and the quality of birds shown was exceptionally fine. Premiums have been paid in full, the enthusiasm of old fanciers has been raised to fever heat and new members

have been added to the association. The members of the association to whom this kind of work is new, have every reason to be satisfied with their first effort. The outlook is auspicious for a grand exhibition next winter. Dates have not yet been claimed for the second annual show, but they will be made known later.

The following is a list of the exhibitors and awards at the Arena poultry show, closing January 2, 1902:

Barred Plymouth Rocks: Cock birds—First, J. B. Delp, Sterling, Ill.; second, Fred Boehm, Sterling, Ill.; third, Earl Gilbert, Sterling, Ill. Hen—First, Earl Gilbert; second, J. B. Delp; third, S. H. Gearhart, Sterling. Cockerel—First, J. C. Troop, Sterling; second, J. B. Delp; third, J. C. Troop. Pullet—First and second, J. B. Delp; third, J. C. Troop. First pen, J. B. Delp; second pen, Earl Gilbert.

Buff Plymouth Rocks: Cock—First, R. L. Leitch, Rock Falls; second, Cecil Wheelock, Tampico; third, Hunter Wood, Sterling. Hen—First and third, R. L. Leitch; second, Cecil Wheelock. Cockerel—First and second, Cecil Wheelock; third, R. L. Leitch. Pullet—First and second, Franz Weimken, Dana, Ill.; third, Sam Lowry, Rock Falls. First pen, Cecil Wheelock; second pen, R. L. Leitch; third pen, Sam Lowry.

White Plymouth Rocks: Cock—First, Giddings, Sterling; second, R. B. McNeil, Rock Falls. Hen—First and second, Giddings; second, R. B. McNeil. Cockerel—First and second, Giddings; third, R. B. McNeil. Pullet—First and second, Giddings; third, Mrs. John Beales, Rock Falls. First pen, Giddings; second pen, R. B. McNeil.

Silver Laced Wyandottes: Cock—First, A. B. Kreider, Sterling. Hen—First, A. B. Kreider. Cockerel—First, Calvin Ott, Prophetstown; second and

Buff Orpington cock owned by Mrs. C. E. Browning, Fairbury, Nebr.

third, A. B. Kreider. Pullet—First, second and third, Calvin Ott. First pen, Calvin Ott; second pen, A. B. Kreider.

Golden Wyandottes: Cock—Second, A. J. McNeil, Rock Falls. Hen—First and second, A. J. McNeil. Cockerel—Second and third, A. J. McNeil. Pullet—First, A. J. McNeil.

White Wyandottes: Cock—First, E. R. Hopkins, Rock Falls. Hen—First and second, E. R. Hopkins. Cockerel—First, second and third, E. R. Hopkins. Pullet—First, second and third, E. R. Hopkins. First pen, E. R. Hopkins.

Buff Wyandottes—E. J. Pierce, Rock Falls, won first cock, first and second hen, first cockerel; first, second and third pullet, and first and second pen.

Black Wyandottes—E. R. Hopkins won first cock, first and second hen.

Light Brahmas—Dexter Woodard of Prophetstown won first and second

ver cup special to L. A. Kline from American Langshan club for the ten highest scoring Langshans.

Black Minorcas—E. C. Winters, Rock Falls, won first cock; first, second and third hen; first and second cockerel; first, second and third pullet; first and second pen.

White Minorcas—C. E. Goodrich, Rock Falls, won first, second and third hen.

Blue Andalusians—A. J. McNeil won third cock, third hen, second cockerel; first, second and third pullet; second pen.

White Crested Black Polish—F. E. Brown, Rock Falls, won first pullet.

Silver Spangled Hamburgs—Prof. B. F. Hendricks, Rock Falls, won first cock, first and second pullet.

Cornish Indian Game—C. W. Brown, Rock Falls, won first cock; first, second and third hen.

Buff Cochins Bantams: Cock—First,

Toulouse Geese—First pair, Charles Pippert, Rock Falls.

Why I Breed Buff Leghorns

By Wes Loser, Terre Haute, Ind.

For beauty they have no superior, and few equals. Did you ever see a flock of those proud and haughty birds, with their rich, even, golden buff color challenging the world as to beauty and utility? There may be some objections as to size, but by having small bone we have more meat in proportion to weight than in most of the larger breeds.

They are one of the most desirable of table fowls, having a deep breast, fine grain meat. It is a well known fact that they are considered the best of summer layers. I find by fair treatment they are good winter layers, and have so proven themselves to me. They bare confinement nice, are hardy, good foragers, and easily raised. They mature early, have had pullets commence

No. 199 Post Office,

Clay Center, Nebr.

Date, Feb'y 15th, 1902.

Received of L. P. HARRIS, Editor and Manager of Poultry Investigator,

THIRTY FOUR

dollars and

FIFTY THREE

cents

Newspaper and Periodical Postage on THREE THOUSAND, FOUR HUNDRED AND FIFTY THREE pounds of the Poultry Investigator,

JOHN M. JONES

Postmaster.

\$34 53

NOTE.—The Publisher or News Agent will please preserve this receipt.

It took 6 copies of the Poultry Investigator, in February, to weigh a pound. By multiplying the number of pounds mailed, 3453, by 6 you will readily see what our circulation was in February. 20,718.

cockerel; first, second and third pullet, and first pen.

Buff Cochins: Cockerel—First, R. L. Leitch; second and third, Carl Nelson, Morrison. Hen—First, second and third, R. L. Leitch. Pullet—First, Carl Nelson; second and third, R. L. Leitch. First pen, R. L. Leitch; second pen, Carl Nelson; third pen, Robert Collins, Morrison.

Partridge Cochins: Cock—First, W. C. Acox of Elburn, Ill.; Cockerel—Second, W. C. Acox; third, Hunter Wood. Pullet—First, second and third, W. C. Acox. First pen, W. C. Acox.

Black Langshans: Cockerel—First, Franz Wimken; second, L. A. Kline, Rock Falls; third, Dr. John Kole, Williamsfield, Ill. Hen—First—L. A. Kline; second and third, Dr. John Kole. Pullet—First and second, L. A. Kline; third, Dr. John Kole. First pen, L. A. Kline; second pen, Dr. John Kole; third pen, Franz Wimken. Sil-

R. E. Cushman, Sterling; second, A. J. McNeil. Hen—First and second, A. J. McNeil; third, R. E. Cushman. Cockerel—First, A. J. McNeil; second, R. E. Cushman. Pullet—First, R. E. Cushman.

Black Breasted Red Game Bantams—R. E. Cushman won first and second cock, first and second hen.

Rose Comb Black African Bantams—R. E. Cushman won first cock and first hen.

Golden Seabright Bantams—R. E. Cushman won first cock and first hen.

Bronze Turkeys—Mrs. G. W. Myers, Ashton, won first cockerel and first pullet.

Pekin Ducks: Old male—First, Franz Wimken; second, Hunter Wood; old female, first, Franz Wimken; second, Hunter Wood. Young male—First, Franz Wimken; second, Hunter Wood; young female, first, Franz Wimken; second, Hunter Wood.

to lay at four and four and a half months.

The difference in the number of eggs laid, and small cost of keeping will convince any reasonable person that they are very profitable, to both the fancier and farmer.

I have had Americans and Asiatics, but have discarded them for money Buff Leghorn getters. You may say they are rather wild, but it depends on whose hands they are in. I find them to be very easily handled by proper management.

We hope that every person interested in this popular breed will join the American Buff Leghorn club, as it only costs \$1. and the benefits are worth five times the cost to the members and the breed.

J. & N. M. CONNOR OF PONCA, NEB., says:—We are more than pleased with the Investigator. It has brought us good sales, the last two being to the amount of \$75. Of the five papers we use, none equals the Investigator to advertise in.

First prize S. L. Wyandotte cockerel at Topeka, Kas., owned by Mrs. J. W. Gause, Emporia, Kas.

Awards at the State Show

Following is a complete list of the awards on pigeons at the state show in Lincoln, January 21-25:

YELLOW POUTERS—D. L. Bruen, Oldenbush, Neb., first cock and first hen; David Larson, Wahoo, Neb., second cock and second hen.

WHITE POUTERS—Bruen, first cock; Larson, first hen and second cock.

CARRIERS, and color—Bruen, all premiums.

BARBS, Black, Red and Dun—Bruen all premiums.

BARBS, any other color—Bruen, first cock and second hen; Larson, first hen and second cock.

PARLOR TUMBLERS—Bruen, first cock and first hen.

BLACK JACOBINS—Bruen, first cock.

RED JACOBINS—Bruen, first hen.

YELLOW JACOBINS—Bruen, second hen; Larson, first cock and first hen.

ENGLISH OWLS—Bruen, first and second hen.

AFRICAN OWLS—Bruen, first cock and first hen.

BLUE TURBITS—Larson, first cock and first hen.

RED TURBITS—Bruen, first cock.

TURBITS, any other color—Bruen, first and second hen.

WHITE FANTAILS—Paul E. Cook, Lincoln, Neb., first and second cock and first and second hen.

YELLOW FANTAILS—Bruen, first cock and first hen.

RED FANTAILS—Bruen, first hen.

BLACK FANTAILS—Bruen, first cock and first hen.

BLUE FANTAILS—Larson, first cock and first hen.

BLACK TRUMPETERS—Bruen, first hen.

TRUMPETERS, and other color—Bruen, first cock.

BLACK MAGPIES—Larson, first cock and first hen.

RED MAGPIES—Bruen, first cock and second hen; Larson, second cock and first hen.

YELLOW MAGPIES—Bruen, first cock and first hen.

RED SWALLOWS—Larson, first cock and first hen.

YELLOW SWALLOWS—Bruen, first cock and first hen.

SWALLOWS, and other color—Bruen, first cock and first hen.

BLACK NUNS—Bruen, first cock.

NUNS, any other color—Bruen, first cock and first hen.

ARCHANGELS, light—Larson, first cock and first hen.

RED DRAGOONS—Bruen, first cock.

WHITE DRAGOONS—Bruen, first cock and first hen.

BLUE FLYING HOMERS—Larson, first cock and first hen.

FLYING HOMERS, any other color—Bruen, first and second cock and first and second hen.

MOOREHEADS—Larson, first cock and first hen.

SILVER STARLINGS—Bruen, first cock and first hen.

Poultry Show Premiums

List of winners at the second annual exhibition of Bates County Poultry and Pet Stock Association, held at Butler, Mo., Dec. 31st, 1901 to January 3rd, 1902; Thomas W. Southard, Judge of poultry, Reed Storms of Belgian hares:

Barred Plymouth Rocks—W. H. Buckley, 1 cock, 5 hen, 4 cockerel, 4 pen; J. W. Farris, 2 cock, 1, 3, hen, 1 and 2 pullet, 2 pen; Oak Farm, 3, 5 cock, 4 pullet; J. W. Ginn, 4 cock, 4 hen, 2 cockerel, 3 pen; Mrs. R. V. Williams, 2 hen, 5 pullet, P. Hostetter, 1 cockerel, 1 pen; R. A. Atkinson, 3 cockerel, 5 pen, H. A. Harrison, 3 pullet.

White Plymouth Rocks—Oak Park Farm, 1, 2 cock, 3 hen; A. B. Ludwick, 1, 2, 4 hen, 1, 2 cockerel.

Buff Plymouth Rocks—J. E. Brasfield, 1 cockerel, 1, 3, 4 pullet, Ora McCann, 2 cockerel, 2 pullet.

White Wyandottes—C. S. Douglas, 1 cock, 1 hen; Oak Park Farm, 2 cock, 5 hen; W. W. Graves, 2, 3, 4 hen, 1, 3 cockerel, 1, 2, 4 pullet, 1, 2 pen; M. R. Lyle, 2, 5 cockerel, 5 pullet, D. L. Frazee, 4 cockerel, 3 pen.

S. L. Wyandottes—All to Louis A. Osborne.

Golden Wyandottes—S. B. McGowan, 1 cockerel, 2, 3, 4, 5 pullet, 1 pen;

E. Gordinier, 1 pullet, 2 cockerel.

Light Brahmas—W. D. Yates, 1 cock, 1, 2, 3, 4, 5 hen pen; Mrs. Y. E. Winn, 2 cock, 1 cockerel, 3, 4 pullet, 2 pen, Mrs. J. J. March, 2, 3 cockerel; T. F. Weaver, 4 cockerel, 1, 5, pullet, 3 pen; M. R. Lyle, 5 cockerel, 2 pullet, 4 pen.

Buff Cochins—D. L. Frazee 1 cockerel, 1, 2, 3, 5 pullet, 1 pen; Mrs. W. P. Duvall, 4 pullet.

Black Langshans—H. H. Borgmann, 1, 4 cock, 1, 2, 3, 4, 5 hen, 1, 3 cockerel, 1, 3, 4 pullet, 1, 2 pen; Arthur Burton, 2 cock; Mrs. H. G. Walton, 3 cock, 2 cockerel, 5 pullet, 3 pen; J. B. Castor, 5 cock; Percy Speer, 4, 5 cockerel, 3 pullet, 4 pen.

White Langshans—W. H. Buckley, 1 pen; Mrs. H. G. Walton, 2 cockerel, 1 cock, 1 hen, 1 cockerel, 1, 2, 3 pullet, 4, 5 pullets.

S. C. Brown Leghorns—Clyde Patterson, 1 hen, 1, 2 cockerel, 1, 2, 3, 4, 5 pullet, 1 pen; Mrs. R. V. Williams, 2, 3 hen.

S. S. Hamburgs—All to W. W. Graves.

S. C. Rhode Island Reds—All to W. D. Yates.

C. I. Games—Hartwell Bros. 1 cock; W. W. Graves, 1, 2, 3, 4, 5 hen, 1 cockerel, 1, 2, 3, 4, 5 pullet, 1 pen.

Pit Games—Hartwell Bros., all except 2 stag; Ora McCann, 2 stag.

Bantams—W. W. Graves, 1 pair; Miss Lizzie Burklee, 2 pair; Mrs. Geo. O. Thompson, 3 pair; Oak Park Farm, 4 pair; George S. Templeton, 5 pair.

Pekin Ducks—All to Bruce Steele.

M. B. Turkeys—All to I. H. Blood.

Pigeons—Louis A. Osborne, 1 pair and best display; Oak Park Farm, 2 pair.

Cats—All to W. O. Atkeson.

Buff Rock hen owned by W. J. Kersensbrock, Columbus, Neb., winner of second at Nebraska state show at Lincoln.

First prize cockerel owned by M. L. Canfield, Belleville, Kan., won at Topeka, Kan., at state show.

POULTRY CLASS SWEEPSTAKES

American Class—W. W. Graves, 1 pen; A. D. Ludwick, 2 pen; P. Hostetler, 3 pen; J. W. Farris, 4 pen; J. W. Ginn, 5 pen.

Asiatic Class—H. H. Borgmann, 1, 2 pen; Mrs. H. G. Walton, 3 pen; W. H. Buckley, 4 pen; W. D. Yates, 5 pen.

Medeterranean Class—Clyde Patterson, 1 pen.

General Class, including standard breeds not in above, except bantams—W. W. Graves, 1, 2 pen.

Non-Standard Class—Hartwell Bros. 1, 2 pen; W. D. Yates, 3 pen.

POULTRY GRAND SWEEPSTAKES.

Parti-Colored Fowls—W. D. Yates, 1 pen; P. Hostetler, 2 pen; W. W. Graves, 3 pen; J. W. Farris, 4 pen; J. W. Ginn, 5 pen.

Solid Colored Fowls—H. H. Borgmann, 1, 4 pen; W. W. Graves, 2 pen; A. B. Ludwick, 3 pen; Mrs. H. G. Walton, 5 pen.

Highest Scoring Parti-colored bird—W. D. Yates, 1, 5; W. W. Graves, 2, 4; J. W. Farris, 3.

Highest Scoring and Solid Colored Bird—H. H. Borgmann, 1, 3, 5; A. B. Ludwick, 2, 4.

Highest Scoring B. P. Rock, J. W. Farris.

BELGIAN HARES.

Imported doe, Mamie Hartwell, 1st; Domestic mature buck, J. P. Young, 1, 2, 3; domestic mature doe, J. R. Young, 1, 2; domestic buck, 6 lb. class, Mamie Hartwell, 1; J. R. Young, 2, 3; domestic buck, 5 lb. class, A. O. Yeomans; 1, 3; J. R. Young, 2; domestic doe, 5 lb. class, J. R. Young, 1, 3; A. O. Yeomans, 2; domestic doe and litter, J. R. Young, 1; best five Belgians in show, J. R. Young, 1, 2.

At the annual meeting of the Asso-

ciation held during the show, the following officers were elected for the next year: W. W. Graves, president; J. W. Ginn, vice president; C. A. Allen, secretary; W. D. Yates, assistant secretary; C. A. Emerson, treasurer. The date for the next show was fixed for December 30, 1902 to January 2, 1903. Thomas W. Southard, who has judged for the past two years, was unanimously selected as judge of the next show. The association is increasing in numbers and is more than able to meet every demand, notwithstanding the very liberal cash premiums paid.

W. W. GATES, Pres.

C. A. ALLE., Sec'y.

Poultry

Standard Varieties with Comparative Values.

Forty years ago the "twenty quart" cow was to be a product of the future. Today she excites no surprise. Such an animal as a pedigreed hog would have been exhibited as a curiosity. Today almost every Ohio farm is stocked with the finest that scientific breeding can produce. Horses in those days were beasts of burden only. Today they are aristocrats commanding the admiration that one gives to a work of art. Sheep forty years ago were poor things at best. Today silken fleece is a living testimonial to the scientific breeding that the farmer has given to that thorough breeding that has so materially increased his profits as to enable him to erect homes that for their appointments are elegant enough for the occupancy of kings. Why this change? The farmer has found out that mongrel stock eats as much, requires as much care and brings less profit than finely bred stock. It is simply a matter of dollars and cents.

But how about the old Biddie? Very much has been done toward making her fit company for the aristocracy of the thoroughbreds, but distressing as it is to say it, it is none the less true, that what has been done is very little indeed, comparatively. The flock of chickens today is very much like the flock of forty years ago. A lot of mongrel hens who do not know that they ever had a grandmother. Their pedigree could not be traced further back than the spring before and even then it would be a question, for like as not the same old hen stole her nest away and was not missed until she came out one day with half a dozen colored chicks, born into the world of woe. Their roost a tree, their feed whatever they could find, their finish the huckster, finally ending their days

as an offering to the hungry man, even then despised, for their toughness yielded not even though all the arts of the kitchen were brought to bear in a vain effort to make them toothsome. These chickens are the representatives that lead the farmer to say that "poultry don't pay."

But poultry does pay. Do you know that if all the eggs laid annually in the United States were laid in a continuous chain that they would weigh 900,000 tons and encircle the earth more than twenty times. The value of the eggs and poultry-meat sold this year will aggregate \$300,000,000, a sum greater by nearly \$100,000,000 than the value of all the mperial product of the United States in the last year, and this estimate includes iron, gold and silver. The average cow weighs 130 times as much as the hen, yet the hen's year's earnings would buy all the cows in the country and the entire tobacco crop as well. Our cotton crop is a big one, but Biddie's product would buy every pound of it besides paying for every pound of tea imported. She can buy the entire wheat crop or the entire sheep clip and have enough left to give to every man, woman and child in the United States \$3.44 apiece. She can buy the entire oat crop and have enough left to buy all the mules besides. She can in any one year buy at their assessed valuation New Mexico, Arizona, North Dakota, Montana, Idaho, and Wyoming and if given but half a chance, can pay off every mortgage in this glorious country of ours. Every word of this is true, the facts coming from the Secretary of Agriculture. If the farmer will now turn his attention to the improving of his poultry he will be enabled to buy more land, have a

First prize Buff Wyandotte cockerel at Topeka, Kan., state show, owned by W. A. Forbes, North Topeka, Kan.

One of the poultry buildings used by J. C. Baker, Richfield, Ill.; shows also his White Holland turkeys.

fat bank account and provide his family with many luxuries that are now impossible.

The editor of this paper has arranged with me to furnish one article a month for the coming three months, upon subjects of practical interest to every person who owns a chicken. This series will embrace a study of those things that you must know if you are to make success crown your efforts. Over fifteen years constant study in the poultry yard, during which time many hard knocks have followed many mistakes, has given to me that experience that enables me to write those things that will save the reader time and money. I will show how to get out of the hen all the money possible for her to earn, and the easiest way to reach this much desired goal. I have made poultry pay and I will tell you how to do it. Theories and experiments will find no place here. On paper it looks easy to make a hen do so and so, but in practice she won't do it. A hen is a "stubborner" creature than a mule.

While I have had at my command all of the best literature written upon the subject, and while it has been of much value to me, I have learned that the every day study in the poultry yard is the only way in which one can gain that experience necessary to great success. I will tell you my methods but you must put them into practice in the yard.

First of all this statement must be accepted as true: If we are to have perfect success with poultry the chicken, the goose, the duck or the turkey must be a well bred bird or we will fail to get the legitimate profits that the business should pay. I can prove that the thoroughbred hen is as much superior to the old time "dunghill," as the Berkshire is superior to the "razor-back." It is unnecessary to take the space to prove it. Taking it for granted that you accept my statement as true, we will at once begin the study of our this month's subject: "Standard Varieties."

That I may be of greatest benefit to the reader of this paper I will answer

any and all questions that are asked me. A stamp enclosed will bring a personal answer, while questions of general interest I will answer in this column. Address all communications to Dr. F. B. Van Nuys,

STANDARD VARIETIES.

Your flock now, probably consists of a lot of mongrel chickens of all kinds of breeds, but none of which are purely bred. You must improve your stock and there are several ways to do it. The best way is to buy from some reliable dealer a breeding pen of, say six pullets and a cock. By keeping them separated from your stock they will in the course of one year populate your farm with as many finely bred fowls as you can care for. This plan may involve the expenditure of more money than you care to invest and if so, the next best way is to buy a setting or more of eggs from a reliable breeder, making your old mongrel hen do some good work for once in her life by hatching these eggs. But you must be sure that she is free from lice before you give her the fine eggs. Or

(Sunshine). Jake Kapser, Clay Center, Neb., breeds Golden Laced Wyandottes that will win for you sure.

you can buy a thoroughbred male or two and by allowing them to run with your flock you will in the course of time have a fairly good stock at a very nominal cost. Or, if you have no chickens at all, and want to begin, you can follow the plan of the Yankee made famous by Fannie Fern. He borrowed an old broody hen from one neighbor, a setting of eggs from another and by putting the two together got a fine lot of chicks. But the eggs had to be returned, so she kept the hen until she laid enough eggs to pay the debt, when she discharged the obligation and was well launched in the business.

Next month we will study in detail the standard varieties in each class, and be ready to consider the best methods of making them pay, no matter which

variety has been honored by your choice.

F. B. VAN NUYS, M. D.
Tiffany, Ohio.

Lake Charles, La., Dec. 31, 1901.
Editor Poultry Investigator, Clay Center, Neb.

Dear Sir: Three copies of your paper I have read and enjoyed very much. I have no poultry at present, but I love to raise chickens and hope to have some again when we have a permanent home. Would someone who has had experience with raising chickens in the South tell us all about it? Most people here tell me this is a poor country for chickens. Hoping to hear something about it through your columns. I am, Very respectfully,

MRS. VAN DEN BOSCH.
(A Subscriber.)

OLD, BUT GROWING.

One of the oldest and most thriving institutions on the Pacific coast is the Petaluma Incubator Company of Petaluma, Cal. An evidence of the growth of their business is the opening of an Eastern branch at Indianapolis, Ind., where they carry a complete stock of their machines. This, coupled with the advantage their factory enjoys adjacent to the alifornia Redwood forests, enables them to maintain the high standard of excellence adopted for their machines years ago, without increased cost to the consumer.

We know our readers will be interested in a few facts regarding this concern. In the territory west of the Rocky mountains they sell more incubators and brooders than all other makes combined. The largest poultry and ostrich farmers in that section are

A 92½ Barred Plymouth Rock cockerel bred by C. M. Hulburt, Fairbury, Neb., who won first on cockerel at the Nebraska state show at Lincoln, and exhibited 116 birds.

The Petaluma Incubator

using the Petaluma exclusively. The success of this machine in ostrich incubation is unequaled and they give the best satisfaction in every climate and altitude. Their foreign trade is probably the largest of any incubator company in the country. Large shipments have been made this past season to Australia, China, Japan, Philippines and Sandwich Islands, also to various South and Central American countries. It is interesting to know also that a number of their machines are in constant operation in Alaska and they are now negotiating for representation in Great Britain.

A word about the machine itself. It is the pioneer incubator among those advertised and sold today. It was the first machine made of California redwood selection. All the heaters are copper, the walls are double cased, lined throughout with heavy jute board asbestos sheeting, deadening felt, and the space between the cases is packed with wool. The machine is self ventilating and self regulating and has a special feature in a self diffusion of heat. Another feature is that the top of the machine is clear of all regulating mechanism, the lever being located beneath the machine.

The Petaluma Company prepay freight to all points in the United States, and no one need hesitate ordering through any uncertainty on this point. They issue a large and complete catalogue which they mail free to all who write them. One feature of the catalogue is an article entitled "A Bit of Incubator History," that will interest every one. We urge our readers to write the nearest office for a catalogue, which will be sent by return mail.

Address Petaluma Incubator Co., Box —, Petaluma, Cal., or Box —, Indianapolis, Ind., and mention this paper.

F. W. Crowell of Granger, Minn. has been one of our advertisers since the INVESTIGATOR was first issued.

Mr. Crowell breeds Buff Orpingtons and has been very successful this winter in the show room, winning first and second cockerel, first and second hen, first, second, third and fourth pullet and first pen. Mr. Crowell's birds are extra large sized and fine in color.

Advertise Where it Best Pays

John Nauman of Red Lake Falls, Minn., wrote us on Feb. 8: "Please take my advertisement out of the INVESTIGATOR as I have already sold all the Games. I can spare and am getting more inquiries than I like to answer from all over the south and west. The INVESTIGATOR is a fine advertising medium."

C. E. Dunlap of Liberal, Kas., writes under date Feb. 24: "I am thoroughly convinced there is not a better advertising medium than the POULTRY INVESTIGATOR. It brings better results than the — of Chicago or any other paper. It has brought me inquiries from every section, even as far east as Massachusetts."

W. L. Palmer, editor of The Sun, published at Clay Center, Neb., says in the Feb. 28 issue: "It affords us pleasure to announce that the POULTRY INVESTIGATOR of this city is booming both in circulation and as an advertising medium. 4,000 were added to its circulation in the month of February."

Mort Crawford, Pool, Ky., says: "I think the POULTRY INVESTIGATOR best and cleanest up-to-date poultry paper that comes to my desk. I received the worth of my money out of the first copy you sent me."

The winnings of J. T. Rein: It at the Mitchell show recently held were as follows: First and second cock, first, second and third hen, first, second and third pullet, first, second and third pen, scoring about 95 points, and five specials on R. C. W. Leghorns. Mr. Rein has some cockerels but no pullets for sale. He is vice president of the association at Mitchell and is a very prominent breeder.

Last month A. B. Evans placed his ad with us for the first time with the understanding that if he received good results from the same he would come back with us again, and we are glad to note that he has continued his ad in

the March number. Mr. Evans breeds Barred Plymouth Rocks exclusively, and they have been winners at McCook, Kearney, Friend, and Lincoln. Mr. Evans is a very successful breeder and any of our patrons will not miss it if they place their orders with him. He is located at Heartwell, Neb.

The Noxall Incubator & Brooder Co., Quincy, Ills., have space in this issue and request us to say that they have thousands of sworn testimonials from people using the Maxwell.

Absolutely self-regulating; when the heat raises above 103 it is taken directly away from the egg chamber. They also manufacture the Eclipse Bantam Incubator and Brooder Combined, manufactured in three sizes, 50 100 and 200 egg size; they are very convenient because incubator and brooder run and yard are all combined; they are extremely low in price. Send for their large catalogue, which will be sent free if you mention this paper. It gives a remedy for every known poultry disease. Don't forget the name — Noxall Incubator & Brooder Co., Quincy, Ill.

Mrs. Ida J. Buehler, Kenesaw, Nebr. Importer and breeder of Buff Orpingtons. If you want something good, write her.

TOULOUSE GEESSE . .

. . By Ruth Lynch

These geese are much more profitable than the common ones, being the largest of the goose tribe. The mature pure bred birds sometimes weigh fifty pounds per pair. They have dark slate colored necks and heads, while the breast is a light gray and the under part of the body white.

This branch of the poultry business is somewhat neglected in most parts of this country and offers good returns.

Geese should have a pasture of their own and a fence three and one-half feet high will confine the Toulouse. A piece of swamp or marsh land that is worthless for anything else is an ideal place for them, but an old worn out field or pasture on the upland will do very well if plenty of water and some shade is provided for them. They are great foragers and must have plenty of green stuff and prefer bulky food to grain. After they are grown they do well the entire summer on just grass and water. During winter feed some grain and plenty of chopped vegetables, cabbage, clover, hay, etc. In buying geese it is well to get well mated old ones, and although they naturally pair, three geese may be kept with one male. As the old geese are better mothers, their eggs produce stronger goslings and the young are always in demand in the market. It pays to keep the old birds for breeding for many years, as long as they are active and vigorous.

In February or March the old goose will be seen carrying bits of straw

around in her bill with which to make a nest. If she is shut in a large box or roomy coop until she lays, she will usually return to deposit the rest of her eggs. It seldom pays to give the eggs to hens as they do not seem to succeed as well in raising goslings as the old geese themselves.

Goslings should be fed regularly on a mixture of ground oats, corn meal and wheat bran, moistened with milk or water, also some cooked and mashed turnips and potatoes, with some scraps of meat occasionally. After grass comes they will require very little other food. In cold weather, warm the drinking water for the little ones to prevent cramps, and do not allow them water to swim in until they become feathered out, as they are easily chilled. Provide a warm, dry place for them at night. Young geese should be penned up to fatten about two weeks before selling. Feed three times a day on bran, corn meal and ground oats, scalded. Also feed chopped clover once a day. RUTH LYNCH.

How I Think We Should Handle Our Breeding Stock to Obtain the Best Results

By MRS. JACOB HUGHES, JR.

Don't make captives of your fowls but allow them full liberty of the place. Don't keep but one variety on the same farm or lot. Don't let this awful "hobby" of line-breeding scare you so that you come to the conclusion that you can't raise prize winners unless you line-breed. By experimenting you will find out that you can. Don't think that you can make money out of your poultry unless you spend money for good poultry. Call your stock and cull it very closely. Some people in looking over their stock never can see any culs. But there is none so blind as those that don't want to see.

Don't advertise your eggs and stock as first class and keep stock enough to supply eggs for the fancier and the market too, for you can't do both and do it successfully. I tried keeping some of my best stock penned last spring and allowed some the range of the farm and the result was I raised better birds from those that had their liberty than I did from those I kept penned, and from comparatively poor stock. I resolved right then that I would cull down my stock this spring until I only kept a dozen hens, if it was necessary, and allow them their freedom.

First prize hen at Topeka, Kan., owned by M. L. Canfield, Belleville, Kan., the man who has won more prizes on White Plymouth Rocks this winter than any breeder in the west.

Eggs from stock kept penned are to a great degree infertile and the chicks hatched are little, frail weakly things and subject to disease and death. If you keep your stock penned you are always having to re-fill egg orders at half price or some thing to that effect. I have not come any ways near making back the money I have spent on improving my White Langshans and I can see where I can still improve. The rest of you are all probably in the same boat if you will only speak the truth. Beware of those advertisers who always have perfection and can not make any improvement on their stock. I have bought stock from just such breeders and paid blue-ribbon prices for them and before I seen them I just "thot," "Well when those fine birds get here I expect they will make my birds run off and hide. But when they were sent to the show room the hiding went the other way. My birds got 1st premium and their stock 3rd and one pullet was disqualified. So you can see from this one incident that it is not always the perfection breeders that always have the best. I did not keep the stock and the party returned my money. The main thing is for us to become acquainted with the breed or breeds we are handling and then we will be better prepared to know whether we really have good stock and in buying to know whether we get our money's worth. I try to never write anything for the Investigator readers to read only those things that I have found to be true by experience. Keep good breeding stock and give them range and good results is sure to follow.

Second prize White Rock cockerel at Lincoln Jan. 20 to 23, in a class of 115 birds owned by J. D. Hall, David City, Neb.

Two Days in the Show Room

By Mattie Webster

What a bright, beautiful morning was that of January 8th, with just the faintest breath of winter in the air; the glad sunshine was conducive to light spirits and happy minds, then, we were glad, too, because of anticipations entertained of an exceedingly good time "today and tomorrow," for were we not on our way to take the train to the city where the poultry show was being held? We enjoyed the five mile drive so much that we almost wished we had planned to drive the entire distance—twenty-six miles—instead of going in the train. Reaching our destination, after satisfying the cravings of appetite we inquired the way to the show room, and bent our steps thitherward without the loss of any time. Our birds had preceded us and after presenting the "sentinel" at the door with our card, we were at liberty to enjoy the pleasure of the show. We did not have time to feel embarrassed or strange, for, scarcely had we entered when acquaintances and show-room friends of other years began to crowd around us, and as we listened to the kindly words of greeting we felt very much at home.

The hall was large and well lighted, and although we were told that over five hundred birds were on exhibition they were not in the least crowded. On either side of the broad aisles were rows of exhibition coops containing the very cream of many breeders' and fanciers' yards. Slowly we made our way around the room looking for our "white beauties," and when we found them they were thrown in the straw in

their coops, and did not seem to fret or worry because of imprisonment in such confined quarters. Perhaps they had been exchanging greetings and bits of personal history with the "lordly" Langshans just opposite them, across the aisle. The inmates of every coop in the hall were worth looking at and we admired and praised them all; but coops containing fowls of like breeds as ours found us most often before them. What a din there was; one could scarcely hear their own voice! But the crowing of the males, the singing and cackling of the Biddies, and the voices of the poultry enthusiasts all intermingled was music to our ears, because of interest in, and love for the fowls.

Cards were exchanged and new acquaintances made—in the show room breeders do not wait for formal introductions—and soon strangers of a few moments before are deep in the most friendly converse, the general subject of which is poultry. Experiences with fowls, their care and management, are related and experiments that have been made along different lines of the work, and their results, are talked over. Suggestions made, helpful ideas are received and stored away in some one of memory's "pigeon-holes" for future use, and breeders of the same breed or varieties compare and discuss the qualities and characteristics of each other's birds. Seldom is a breeder met with in the exhibition hall that is blind to the good points in other breeders' fowls, or seeing them is averse to speaking of them. As a rule the breeders we meet in the show room are generous, unselfish and kindly. The breeder likes to win the ribbons—that is the motive that impelled to the effort to prepare and place his (or her) birds side by side with others that are there because of some fond hope entertained, but failing to win, defeat is borne pleasantly and cheerfully. Near a window we see the judge, arrayed in linen duster, silently and rapidly deciding the fate of bird after bird. For a little while we stand and watch him, as he examines and marks the different sections, often wondering the "why" of some cut made but not wishing to interrupt or disturb the judge we just try to learn all we can by observation without attempting conversation with him. One is not allowed to tack cards on his or her exhibition coops if so desiring, because judges are counted honest and impartial, and so even knowing whose fowls they are scoring does not influence the markings in the least. Often I have watched the judge at work, and I do not think any one I have ever seen scoring birds ever noticed the

First prize White Rock cock at Topeka, Kan., state show, owned by M. L. Canfield, Belleville, Kan.

names on the coops as they were brought to him, or showed the least partiality, and we breeders, in most instances, accept his judgment as right, enjoying triumph if successful, or meeting defeat cheerfully, congratulating our more fortunate rival. Winning should not puff up neither should defeat discourage or dishearten. The show room "lightning does not always strike in the same place;" the defeated of this year may be the winner of next year. We have learned that success in the exhibition hall is not an accident, but the result of constant and arduous work of hands and brain; and that in no place is so much useful information acquired as in the show room. Once in a while some breeder says: "I don't believe in showing my poultry; don't think it does any good. Now I do believe it does a breeder great good to exhibit his or her birds. If the fowls are excellent in quality ribbons may be won, and the crowds surging through the showroom see the coops so adorned and pause to see the name upon them and can you call this anything but an advertisement of the breeder's stock? It is a good advertisement and may "bear much fruit" in the way of future sales. I think it pays to exhibit even if no honors are won, for if the breeder's stock is inferior, is it not to that breeder's advantage to know it, so that better quality birds may be obtained to replace those that are not worthy a place in the show room? Our two days were spent very pleasantly and profitably and the memory of them will encourage to greater effort toward improving our flock, and will make the work of the coming season easier because of the expectation, if all is well, of a repetition of our good times another year.

MATTIE WEBSTER.

First prize Buff Cochin hen at Nebraska state show owned by C. K. Davis, Columbus, Neb.

First prize Buff Orpington pullet at Topeka, Kan., and second prize at Lincoln, Neb., bred and owned by Mrs. Henry Shrader, Berlin, Neb.

Yarded Birds and Good Results

By Mrs. J. B. Jones

Now is the time to get your yards made up ready for this year's work, and as this is a very particular part of the work if we wish to be successful. Now only the best can go in this company. If one has had experience and can rely on our own judgment we can take the Standard of Perfection and mate our own yards. If not it is best to get someone who does understand mating for best results. Select the best females and then if no male bird seems good enough buy one of some reliable breeder. Write him a plain letter, describing your females; take time and paper, no difference if it takes five pages; then he can select one to suit your hens so much better than if you merely say you wish to buy and want one of the best, for the best means a pretty good price and sometimes you cannot afford so much and perhaps you could do with a cheaper bird after asking this question and receiving a reply with prices out of your reach you will more than likely say "They want too much; I won't buy of them," where, if your letter had contained a description you would have gotten several prices and could have selected the birds suiting the price you wished to pay. One can sometimes get good stock for little money. It is the exception not the rule, where one has been years building a strain of fowls that can win in good company, will reproduce themselves each year, so you can form a fair idea of the com-

ing year's stock. This confidence is only attained by close study and much labor. Some disappointments bravely met, for this stock is in good demand, and prices are not very low, especially for the best.

When one gets stock or eggs from these parties, don't think we are only getting a few chickens. We get a part of their reputation. Our buyers ask where did you get your stock, and if from some prominent breeder all the better for you. It pays to buy the best for our yards. One can raise a good number of chickens from six hens and a cockerel, can spare a few settings of eggs and have so much pleasure from them that it does not pay anyone to bother with scrub hens. The returns are so much greater. Last year from one yard of eight pullets mated with a two-year-old bird I sold ten settings of eggs, fifteen eggs to the setting; set a number of settings myself for this was one of my best yards; had no complaints from customers; some letters of praise; all hatched well. One can readily see this pays for one's time and care and yarded birds must have extra care and regular feed if they do their best. Keep an eye on the egg basket and see it keeps well filled. Only by selecting our best layers can we do this. My experience has been the best breed and most symmetrical and those nearest standard requirements are the best layers and bring the best prices. MRS. J. B. JONES.

Abilene, Kan.

Egg Markets

We read and we write. We talk and listen to all kinds of talk about egg markets. Oh! how we do growl about cheap eggs in the summer. It is not

First prize Buff Wyandotte cock owned by C. E. Day, North Bend, Neb. First at Lincoln, Neb., state show.

A "chalk white" White Wyandotte owned by G. B. Clary, Fairbury, Neb., at the head of his best breeding pen. Score 95½.

the market that makes the prices but the eggs that sets the price a whirling. In the first place little eggs bring as much as big ones; we hear the store keepers say, "an egg is an egg." So it goes. Then comes the dirty eggs—they go to—right in with the clean ones. Who on earth wants to buy eggs that are filthy to behold? they would seem like filth to hold. Here is where the careless poultry keeper helps to hurt the markets of good, nice eggs. Well, that is not all; here comes the rotten eggs, the half incubated ones; in they go with the good ones and the purchaser aims to make enough off of the good ones to make up for the poor ones. Thus you see how the good products are crowded out of value and position on the market. There are thousands of people in the cities who would gladly give 12 to 15 cents per dozen all summer for good, fresh, clean eggs right from your yards. Rotten eggs act on the egg market like oleo, does on the butter market. The one who sells rotten eggs is like the good sister that used to drop shirt buttons in the church collection basket. Rotten eggs are only counterfeit eggs and should be treated accordingly. Well, let the good and bad together mix, but for my part I would rather keep the eggs separated anyway. "Well," you say, "how can we?" It can be done, but how soon I cannot say.

In the first place, sell your eggs to customers upon the merits of the eggs and not on the merits of the markets. Have your eggs branded from whose yards they come and the date. And see to it that the eggs are the best. If you can't sell direct to the users, let your grocer make up a case every little while of "Select Hen Fruit." Let each person have a little rubber stamp and

stamp the name and date upon each egg that is sold, and if there is a faulty one found in the case it can be easily told from whom it came. Or labels about the size of postage stamps could be got and put on very rapidly. To be sure, where the ranch afforded a whole case of eggs every few days, it would be unnecessary to mark each egg. Simply mark the case and nail it up yourself. Years ago, bee keepers adopted the label method in order to protect themselves. Butter makers do so, and in fact almost all first-class articles bear the name of the producer. Why can't the eggs do likewise? Then there is another phase of the subject: In summer we have too many eggs; why could they not be canned in form of lunch merchandise, canned boiled eggs, already seasoned, etc.? Or fried ham and eggs just the same as pork and beans, and so many such things that are now upon the market. It seems to me here is a chance for a great Western industry. I am pleased to read the articles of professional fanciers, but as I can't reach the realm of that kind of authorship, I shall have to content myself chinking in a few off-hand remarks now and then to change the tune. Fancy poultry is good, profitable and a pleasure, but old farm biddy and her companion, every day egg is everybody's friend.

JAMES PEARSON,
Germantown, Neb.

Poultry Chats

By Mrs. C. A. Blanchard.

Pullets that are intended for breeding, whether pure bred or common stock, should be selected with care. To begin with they should be hatched as early as possible. The usual custom among those having common stock, when a "fry" is wanted, is to kill the largest one in the flock. Thus

First prize S. L. Wyandotte pullet at Topeka, Kas., owned by Mrs. J. W. Gause, Emporia, Kas.

E. B. Day's, North Bend, Neb., second prize Buff Wyandotte hen at Nebraska state show at Lincoln Jan. 20-25, 1902.

all the very best early cockerels are eaten, and often the pullets from the early hatches find their way to the frying pan.

Those very early, thrifty birds are the ones that should be kept for breeding purposes. By the time they are needed they have become full grown and have acquired bone and muscle, while the weather is warm and favorable.

During the fall and winter months those early hatched pullets will lay their first eggs, and by the time breeding season comes will be at their very best to furnish eggs for hatching. This is something that every poultry raiser needs to think of. Our earliest, best matured pullets will give us the most satisfaction as breeders. The chicks from mature birds are stronger and more easily raised than are those from stunted, half-sized stock.

Now, I don't want anyone to imagine for a moment that I favor the use of sickly birds for our tables. All such should be cared for until they are well and healthy or killed and thrown off some place away from all the others. Sometimes chicks become stunted and will probably never make nice, full-sized birds, but are all right to eat. You would never know the difference when they are cooked, and one might better kill two such birds than one of the thrifty ones. The same rule will apply to the cockerels, the most thrifty, large, active birds should be kept for breeding purposes.

Again, we should never kill our thrifty hens that work and sing all

day. Their combs are red and their eyes are bright and their feathers are well groomed. They would make a good meal, but the idle, fat one, that sits around all day, too shiftless to hunt, will make a better dinner, and the flock will be much more profitable without her.

Those fast growing chicks usually come from thrifty hens, and if care is taken along those lines, our flocks of farm poultry would be much improved, and our well filled egg basket go much more oftener to market.

Farmers in general do not realize what the hens or egg money really amounts to. They can open their eyes very wide at the amount of money it takes to keep the house running at a time when there are no eggs to turn off. Don't imagine I see all this at home; I can see lots of things in the homes of others, and know many a wife who supplies most of the groceries, besides many of the little luxuries for herself and daughters that would probably be denied if the husband were asked for money to purchase them.

I have wandered away from the subject I started on, but that don't matter, I can take it up at another time, if I find something worth writing about.

It would make me very tired to be obliged to ask a man for all the money I needed to use, and I know there are many more like me. With poultry, any farm wife who has a little get-up and rustle about her can have some

income of her own.

A short time ago we had one of our poultry journal friends from near Denver come to make us a call. Among the things he told us was this: that a year or two ago he had told his wife "those hens just ate their heads off." When the first of January came, she asked for grain to be weighed out for her, and during the year kept a strict account of everything the hens ate, also of everything sold. When January again rolled around she knew just what those seven dozen hens had done for her. The balance on the credit side of her account was \$75. Our caller said he was fully convinced that the hens had not eaten their heads off, and is now willing to help plan and build yards and houses; even willing when he was away from home to hunt around among poultry breeders to see if something better than they had at home could not be found. They found in dressing poultry for the city market the marks left from dark pin feathers were not liked by prospective buyers, therefore he was hunting white birds to replace the colored ones. By so doing they would have something that would sell more readily, and a little higher price could be asked for. It pays to supply our market with the best and not the poorer grades of poultry.

Why Did I Start in the Poultry Business

This is a hard question for me to answer. I can never remember the day I did not love the downy little balls that grew into nice chicken, that is, if I did not love chickie to death.

In 1881 mother raised twelve Brown Leghorn pullets that would not go to the (shed I would call it now) hen

house, but staid under the wood shed. That fall mother was so sick and frail her sister in California sent for us to visit her and stay a year, which mother and I did. Father banked the house. In one corner they made a nest. Every day all winter there were twelve eggs in that nest. Eggs was a good price that winter and this was something new. Father got interested in poultry for the first time, raised a nice lot of chicks himself that summer.

A brother of my mother owned a 1500 acre ranch. His wife was a poultry crank, her neighbors said. I staid with uncle six months then. I had never filled an egg case, as 15 to 20 dozen was the most eggs mother had ever sold at one time. You can't imagine how big I felt the first time Auntie asked me to fill an egg case on her cool porch all alone. They were sent to Sacramento, 20 miles away, the next day she got a check. My! it was a lot of money, and just think, I put every egg in the three egg cases. Chickens and turkeys all went the same way, the money was all Auntie's, such a lot!

Mother and I talked and planned and when we came home we worked and planned. In two years we had sold all old hens and cockerels. With this money we bought lumber and nails, four window sash 8x10. Father and brother built a new hen house 12x20, 5 feet high, with a double roof, the roof was corn stalks and straw. The next year it was shingled. (It is a good building now.) All this time we were getting eggs the year around, paying for all our groceries and most of our clothes, after mother gave up on account of her health I did the best I could raising chickens. Two years I raised ducks. Hot weather caused a great loss of 150 little ducks. I raised 90 nice ones, but gave them up. Turkeys the first year were enough for me.

Father has always made coops and feeding racks just as I wanted them. Mother so often said if I had only had coops like yours 20 years ago, but no one ever thought of making anything nice for just hens.

Mrs. Webster, I agree with you; I do like to be independent; I don't have to raise chickens. It is a pleasure to do the work. My chickens like to be with me. When I talk to them they will answer in chicken language. Two years ago I got a \$20.00 bookcase after the poultry was sold in the fall; in the spring I got a \$16.00 dresser with egg money. Both are golden oak. I have got lots of things I show my friends with pride. Last year I got an incubator. It is just fine; at least, I think so: I hatched 755 chicks out of 804 fertile eggs. How is that for a

new hand with an incubator? Only two cripples for the whole season.

In a few weeks I am in hopes to own a bone cutter paid for with egg money. I sent a 30-dove case to Chicago today. MISS BELLE UTLEY.

New Hampton, Ia.

MRS. J. W. GAUSE'S WINNINGS.

First Silver Wyandotte pullet at Topeka, 1902, score 93.

First Silver Wyandotte hen at state show, Topeka, 1901, score 94 by Rhodes. First at Topeka, 1902, score 93. Bred and owned by Mrs. J. W. Gause, Emporia, Kan.

First cock at state show, Topeka, score 91, cut $\frac{1}{2}$ for frosted wattles and $\frac{1}{2}$ for rough on legs. He won first at state show, Topeka, as cockerel, score 93 $\frac{1}{4}$. This cock will head my first prize per. Mrs. J. W. Gause, Emporia, Kan.

First Silver Wyandotte pullet at state show, Topeka, 1902, score 93, bred and owned by Mrs. J. W. Gause, Emporia, Kan.

A WORD IN TIME.

We have just received a copy of Ripley's 1902 Breeders' Supply and Sprayer Catalog, which is a very complete book, no breeder or farmer should be without it, as it contains dozens of articles that will save labor and increase the profits to the breeder, if they are used. One machine in particular that is needed by every poultry breeder is Ripley's Whitewashing, Painting and Spraying Machine, a cut of which we insert, as we think that it is to the interest of our readers to know that there has at last been a machine placed on the market at a reasonable price that will whitewash buildings to perfection, and do it far better and save three-fourths the time and labor over the old way of applying with a brush. It is also a fine machine for spraying trees, plants, gardens, etc, and will doubly pay for itself in a short time. We note that it is used and endorsed by such noted breeders as A. G. Duston, U. R. Fishel, Sid Conger and many others. In order to get this machine introduced, please not the special offer in their advertisement on another page of this issue.

We are pleased to recommend the Ripley Hardware Company, Box 7, Grafton, Ill., to the readers of our paper, as we know them to be a very reliable firm, and any orders entrusted to them will be promptly filled. Mail five cents in stamps and get copy of their 1902 Breeders' Supply and Sprayer Catalog.

Buff Rock cock owned by W. J. Kersenbrock, Columbus, Neb., winner of second prize at Nebraska state show at Lincoln.

From Solomon Valley, Kas.

Poultry Investigator: Perhaps a few words from the Solomon Valley of Kansas would not be amiss in your valuable columns. In the first place, let me say, while you are not listening that many of us think the Investigator is one of our very best poultry papers, especially for the great West. Well, in regard to poultry matters in this part of Kansas, in one of the best portions of our state, allow me to say that there has been a general awakening to the business. The talk now is: "Where can I get pure stock?" Instead of being content with "scrub," "mixed," and common-bred fowls, the demand is more for "line-bred" pure stock. A great many are learning the meaning of such terms as "line-bred," "double-mating" and "single-mating." There is not much use in trying to win at shows unless the exhibitor follows the business of breeding exhibition birds in a scientific way. The old farm way was comparatively good enough to raise a vigorous lot of birds, but there was very little uniformity in color of plumage, shape and other points in the flocks. One man would have a flock of Plymouth Rocks—so called—and he thought them fine; but when we observed them in regard to scoring they were more like an old-fashioned "Dominick" lot than like the Plymouth Rocks. Another would have the same kind as he would call them, but there were the leg and toe feathers, showing that while the plumage was tolerably fair, the Brahma or Cochinchina admixture was also there. Of course the fowls were large and good as there were. So we found them in the past, and so we find them at present among

the best of breeders for market, only. But now the inquiry is for not only pure breeds, but for the line-bred fowl of whatever variety the fancier may select. We have learned that score cards are as necessary to the business of raising and selling stock to the best advantage as it is to advertise in poultry or farm papers the stock for sale. If stock offered for sale as pure stock scores only 80-90, the owner might as well sell to poultry dealers, and be done with it. While of course such scores are better than no scores at all, it is far better to breed from the higher scoring ones, as then the progeny will more likely be superior stock, and fit for exhibition birds. That mysterious law of "breeding back," as it is called, is hard to be understood. We see it manifested in all nature by careful, common sense methods, and this is what may be termed "line breeding," "double mating," and "single mating." It is virtually the selection of the fittest in color, markings and shape. As I understand it, it does not mean to breed to the same exact color or shape; it may be breeding a certain type of color and other necessary points, to a lighter, darker or medium condition, to obtain the best results. There is something more than clean, yellow legs and barred plumage required in a Plymouth Rock. The feathers must be barred to the skin, the comb must be segregated just right, and not be too large, and the lightest fuzz of feather or black spots on legs and toes lessens the scores, even if they do not disqualify. Now some reader may say, that man has high scoring Plymouth Rocks for sale and he has put his "ad" into the Investigator. But I have not a pure Rock of any kind whatever; nor do I expect to raise them. They are grand fowls, and the best known of all pure breeds, and I have simply used them as an illustration of what is required in high scoring. In other words, "The Standard" requires certain points, and these must be met by the breeder of pure stock, or else he might as well give his "shingle" to the winds, and cut his "ad" on a tree in his back lot, for the poultry to look at. Now I say that in view of these facts we are all waking up and getting out of the ruts, and we mean to renew the whole business. The interest in pure stock had somewhat lessened in the Solomon Valley from what it had been five to eight years ago; but many have expressed themselves favorable to building up again.

At our Glasco Poultry and Pet Stock exhibition, which came off Jan. 1 to 4, we had a fair showing. The severe cold and the scarcity of corn discour-

Second prize hen at state show at Lincoln, Neb., in a class of 116 B. P. Rocks, owned by F. C. Hinman, Friend, Neb.

aged many who had expected to bring their stock. Such a lot of frosted combs as there was at the time, hindered also. We were somewhat disappointed in not having Judge Harris with us to do the scoring, but we had an excellent substitute in Mr. David Larson of Wahoo, Neb. He understands his business and was fair in his scores. Besides he is courteous and is willing to explain as he goes along in his work. We wish him success in his profession. The receipts of all kinds paid all the premiums and all expenses, with a little left over to sprout in the treasurer's hands, and grow for another show next winter. I secured a few subscribers for the Investigator, and could have secured more, if my duties as secretary had not hindered me.

Success to the Investigator.

BENJ. F. McMILLAN, Sec'y,
Glasco Poultry Asso.

POSITIVE PROOF IS WHAT COUNTS.

Quincy, Ill., May 22, 1899.

Noxall Incubator and Brooder Co.

Your incubator has proved very satisfactory. It is simple and self-regulating. I hatched 195 chicks out of 200 eggs. I am sure it will hatch every fertile egg if operated according to instructions, which are very simple. I recommend the Noxall, and prefer it to all others—and I have seen all the leading incubators that are manufacturer at the present time.

J. W. MORTZOLF.

Subscribed and sworn to before me this 22d day of May, 1899.

JOHN A. ALLEN, J. P.

Mr. Mortzolf made this hatch when he was living at Cherryvale, Kan., and when he was in Quincy, Ill., he made affidavit to the same.

A White Rock hen owned by J. D. Hall, David City, Neb.; score 95½. Hall breeds nothing but the best.

Poultry Investigator

Is published the first of each month at

Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.25 per inch each insertion. One inch one year \$12.00. These are our only rates for advertising and will be strictly adhered to. We treat alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of **POULTRY INVESTIGATOR** is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in **THE POULTRY INVESTIGATOR**.

Address all communications to

Poultry Investigator Co.,
Clay Center, Nebraska.

In another column of this paper you will find the advertisement of A. L. Pedrick of Ottumwa, Ia. Mr. Pedrick has been breeding thoroughbred poultry for several years and has bred several varieties, is one of the best informed men in southern Iowa as to quality and stock. Mr. Pedrick is doing quite a good deal of judging this season and he is open for dates for the season to come. He breeds the Blue Prince strain of Barred Plymouth Rocks and wins largely in all the shows where he exhibits. Any

parties wanting something fine in the Barred Rock class would do well to correspond with him.

W. A. Forbes, North Topeka, Iowa, won at Kansas state shows for the past four years the majority of the best premiums, against hot competition in full classes. 1889, 4 firsts, 2 seconds, 1 third; 1900, 7 firsts, 3 seconds, 3 third; 1901, 6 firsts, 3 seconds, 3 third, 2 specials; 1902, 5 firsts, 2 seconds, 2 third, 3 specials.

At Lincoln, Neb., at the state show our attention was called to the stock of J. L. Smith of Cadams, Neb., who showed Light Brahmas and won first and third hen, fourth pullet and fifth cockerel. At Superior he won first and second cock, first, second, and third hen, first, second and third pullet, first second, and third cockerel, first and second pen. First pen scoring 188 points, second pen 187 by Rhodes. He also won grand sweepstake for the best 15 birds in the room. Anybody wanting first class Light Brahmas will do well to write Mr. Smith.

We are proud to have with us as an advertiser F. C. Hinman of Friend, Neb., who has been breeding Barred Plymouth Rocks for 20 years and has won a great many premiums in the largest shows in the west. At the state show at Lincoln in January this season, Mr. Hinman won on Barred Plymouth Rocks as follows: Second pen, first, second and third hen, fifth cockerel, second and fifth pullet. Mr. Hinman is reliable and any orders placed with him will receive his prompt attention and his patrons will get all that they bargain for. Mr. Hinman keeps the very best stock that can be found anywhere.

Elsewhere in this paper will be found the advertisement of D. L. Buren, one of the most extensive pigeon raisers in Nebraska. Mr. Buren won nearly all of the prizes at Lincoln and his sales amounted to quite a large sum of money. Mr. Buren is an enthusiastic breeder and his stock is up to date. Look up his ad.

E. B. Omohondru of Bowling Green, Mo., writes that he made a good winning at the Northwestern Missouri poultry show which was held in December. He writes the following: "My success has been better this year than ever before. I showed 20 birds in a class of 70 as good as can be found anywhere, and 17 of my birds scored by Heimlick from 90-2 to 95 points." He won first and third cockerel, first cock,

second pullet, first on pen, and the W. R. breeders special, \$10, best prize for best cock, cockerel, two hens, and two pullets in the Barred Rock class.

F. G. Partington, Northboro, Mass. This gentleman is trying a new scheme worked by some fanciers last season, and he is selling chickens instead of eggs. He ships chickens any distance up to 1500 miles, and guarantees safe arrival. This is a very good plan as you do not have to take chances on eggs hatching, but you have the chickens already hatched and doing well.

From a late letter of A. L. Houston, recently from Keota, Ia., now located at Red Oak, Iowa., we understand that he has located permanently at the last named place and will devote the larger part of his time to the breeding of Buff Orpingtons, and anybody wanting stock of this kind will do well to correspond with him.

Mrs. Henry Shrader of Berlin, Neb., this month changes her ad from breeders' card to the display column, and finds that the **INVESTIGATOR** pays as an advertising medium. Mrs. Shrader won first on Orpington pullet at the Kansas state show and second pullet at Nebraska state show. In Black Langshans she won third cockerel at Nebraska state show, and third cockerel and second pen at Kansas state show.

One of the new exhibitors at the recent Nebraska state show was W. J. Kersenbrock of Columbus, Neb. He won second cock and second pen in Buff Rocks, which was one of the best classes in the show room. He also won first cockerel and third pullet in Cornish Indian Games, fourth cock in Buff Rocks.

Perfect Chick Feed.

Grand Rapids, Mich., Jan. 14, 1902.
W. F. Chamberlain, Kirkwood, Mo.

Dear Sir: Enclosed please find check for \$11.40, which kindly credit. I have given the poultry men an object lesson in your chick feed at our poultry show here four weeks ago. I brought 48 chicks out of the incubator and am keeping them in the window of the store and have fed them nothing but "Chamberlain's Perfect Chick Feed." I have never seen chicks grow so fast and I have not lost a chick. Just weighed one and it weighed 7 ounces. The boys say they will feed them nothing else. The chicks and feed attracted a great deal of attention.

Yours truly,

L. F. Jones Seed Co.

We had with us last month also L. D. Metcalf of Wakefield, Nebr., a prominent breeder of Barred Plymouth Rocks, White and Golden Wyandottes. Mr. Metcalf is a very extensive breeder and has good stock. We are glad to have him with us.

We are glad to welcome in our columns the name of M. L. Canfield of Bellvue, Kas., one of the best breeders of White Plymouth Rocks in the West. There is no man that ever exhibited in the West that has had better success in winning premiums than Mr. Canfield. Some four or five years ago, the editor met this man at Bellvue with a fine string of birds that took nearly everything in their class, and since at Kansas City this season he won nearly all of the first premiums; also at Topeka and Lincoln. His birds are pure white throughout; they are of excellent shape and have good combs. We produce in the INVESTIGATOR this month several half tones of his prize winning birds, and we would recommend Mr. Canfield to any and all parties wanting strictly first class Plymouth Rocks.

One of the most extensive exhibitors of poultry at Lincoln was that of the Highland Poultry Farm made by J. D. W. Hall, manager. These people exhibited White Wyandottes and Barred P. Rocks, and their stock was strictly first class. Winnings in the Barred rock class were as follows: First pen, second cock, second cockerel, first pullet. In the White Wyandottes, they won first pen, second and third cock, third hen, second cockerel and second pullet.

While at Topeka, Kas., attending the state show, my attention was called to a White Wyandotte cockerel owned by Geo. Getty of Syracuse, Kas., which was one of the most typical White Wyandottes, and the whitest bird the writer has ever seen. Had he not been a little bit under size he would have won first premium easily. This bird was the next week shown in Chicago, where he won third prize from a large class. Please notice the half tone of this wonderful bird in this issue of the INVESTIGATOR. Mr. Getty has first class stock in every respect and is a reliable breeder.

C. M. Hurlburt of Fairbury, Neb., comes back this month with four inches of space, advertising his superior strain of Barred Plymouth Rocks and Mammoth Bronze Turkeys. Mr. Hurlburt made his first exhibit at the Nebraska state show in January and won first

cockerel in a large class of 116 of the best Plymouth Rocks produced in the west. He also won third tom and fourth hen on bronze turkeys. Mr. Hurlburt has given considerable attention to the breeding of Barred Plymouth Rocks and breeds nothing but the Ringlet strain.

Another new advertiser this month is C. J. Beedle of Holdrege, Neb., who breeds Partridge Cochins. Mr. Beedle has some very fine birds and will be glad to fill orders for eggs from his superior matings.

We recently purchased of Mrs. Ella Patrick of Clay Center, Nebr., her entire stock of Buff Plymouth Rocks and she has put in a fine flock of fifty Black Minorcas, and is ready to fill all orders for eggs that may be placed with her. She has bought the best and has nothing else. The Minorca is one of the best of the Mediterranean varieties.

One of the most noted breeders in the state of Nebraska is Frank Patton of Surprise, Neb. Mr. Patton has made a wonderful record this winter. He showed at the Topeka state show and at Lincoln state show, and also at the great show at Chicago, where he won three prizes. At Lincoln the same week he won first pen, third cockerel, first and third hen, first and second cockerel, first, second and fourth pullet; and the week previous at the Kansas City show he won second on cock, second and third cockerel, first, second, third and fourth hen, first, fourth and fifth pullet, second and third pen. In these shows Mr. Patton did not show the same bird twice, which proves that his stock of Buff Plymouth Rocks are superior to any bred in the west. We are glad to note that he is an advertiser of the POULTRY INVESTIGATOR.

Another one of the most prominent breeders in Nebraska is T. L. Norval of Seward, Neb., who breeds White Plymouth Rocks and White Wyandottes. Mr. Norval this season showed in Chicago, and also in Lincoln the same week, winning several prizes in both exhibits.

Some of the most prominent breeders of poultry in the west are W. H. & M. E. Bushell of David City, Neb. In recent years they bred Buff Leghorns and made a success of them, winning in such shows as Lincoln, Omaha, Kansas City, and Chicago, and since the Buff Orpingtons have come into prominence they disposed of their Leghorns and took up the breeding of Buff Orpingtons, immigrating nearly all of

their first breeding stock from England. They have been very successful. Last season they exhibited at Chicago and made some winnings and again this winter, winning first cock, said to be one of the finest cocks in America. They showed the same week at Lincoln, winning several premiums. They won four out of five of the first premiums, and several of the second at the state show at Lincoln recently held. They are very nicely situated for raising their Orpingtons and have one of the finest brick pen houses and incubator houses that I ever was into. They also have a brooder house filled inside with brick and heat by steam. They spare no money in making their poultry pay and breed the best that can be procured. We would recommend them to all people who wish to buy Orpingtons of the highest grade.

Last month we showed a half tone of a White Lanshan pullet of Mrs. J. Hughes of Rockport, Mo., and in a description of the same we wrote Mrs. Thos. Hughes instead of Mrs. J. Hughes. Mrs. J. Hughes is a very enthusiastic breeder of White Langshans and her stock has won many premiums in the west. Her winnings at Bowling Green were first on hen, and third on cockerel. The competition was very strong and the half tone that was shown in our paper was that of her first prize hen.

Among our new advertisers this month appears the name of Mrs. Eva Gingrich of Aurora, Neb. Mrs. Gingrich has been a prominent breeder of Barred Plymouth Rocks for several years and has won a good majority of premiums in such shows as Aurora, Neb., and Clay Center, Neb. She has a very fine flock of females from which she is selling eggs at a very reasonable price for the quality of stock she keeps. Parties wanting eggs from strictly first class birds will do well to write her.

C. F. Austin of Dearing, Kas., won first and third pen, second and third cockerel, first, second and third pullet at Coffeyville, and at Chanute he won first and third pen, first and second cockerel, first, second and third hen, second and third pullet. Mr. Austin is a White Rock specialist and also has strawberry plants for sale.

We call attention of our readers to the advertisement of the Oletangy Poultry Yards of Delaware, Ohio. These people are well known throughout the country and are reliable people. Look up their ad if you are in want of anything in their class.

The Mating of Breeding Pens

The fanciers and breeders who have long since learned to perfection a, b, c of poultrydom and forgotten they had it to learn, to insure success, need not read this article, but it will do no harm for a beginner and possibly be a help in selecting the breeders for the season if they have not already done so. The object of all matings should be to constantly eliminate the greatest fault by selection of individuals of the highest merit. Each variety of fowls are mated differently to obtain certain results. Here is where the scored birds come in to a great advantage. Color of plumage in all sections and shape of the variety are scored by a competent judge, who has devoted years, perhaps to obtain the knowledge of what an ideal bird should be of the different breeds. Some has remarked "Why I never try to sell birds in the show room and I always exhibit." First, because I have far to ship birds to be scored, which is expensive to ship large numbers. Second, under no circumstances, not even money would I sell my best birds, for if they are good enough for another's breeding pens for better birds they are for mine. The best I have is none too good for my breeding pens and when scored by a competent judge then I can truthfully guarantee eggs from high scoring birds, where, if I were to sell the scored ones I could not. I always have more than a pen of females scored and extra cockerels, more than I wish to keep. My first experience of selecting my breeding and exhibition birds was as follows: I first got a Standard of Perfection, caught the best specimens to my ideas. Standard in hand I looked each one over carefully for disqualifications, then the plumage as I understood the colors should be by reading, color of eye, beak, legs and toes, last, shape. This was for the Buff Cochins and R. C. B. L., a pen of one, a trio of the other. I then went with them to the show at McCook, Neb. Theo. Hews was Judge. From the birds I selected they scored from 90 to 93½ points, not a bad score for the first, I don't think. I yet have the score cards, as I keep those birds for breeders. Some were good in wing colors, others breast, etc. I plucked a feather from each of the best color; then when I selected more birds for breeders I compared the colors, getting all my birds as near one color as possible. In the same way I used scored birds comparing combs, eyes, legs and toes, also shape. I then put in the pen the highest scoring male

bird. This finished the selections for the breeders. Far better breed from one or two extra choice hens or pullets than a dozen of all shapes, color and sizes. Don't wait until you have sold the best birds before selecting the breeders, better select the breeders first, then if you have more than needed for your wants, sell them, also the cockerels. As we learn by experience then we may branch out for pullet matings or cockerel matings. Another good way is to have a judge mate up the yards. There are no doubt many improved methods other than the one I described and as this is the season for the mating up of yards let us hear from some of our experienced brothers and sisters. I should like to hear from some one who breeds Buff Wyandottes, as I am a lover of the buff varieties.

IDA E. BARD.

Iowa Poultry Co. Winnings

DES MOINES FANCIERS' SHOW. DEC. 23-28, 1901.

W. Wyandottes—110 birds in class; 1, 2, 3, 4, pullets; 1, 2, 3, 5, hens; 1, 3, cock; 5, cockerel; 1, 3, breeding pens. Grand sweepstakes best and largest display, White Wyandottes. Gold special, \$15.00, best 10 birds in class; \$5 gold special, highest scoring pair W. Wyandottes; \$5 gold special, highest scoring W. Wyandotte cockerel, shape and color.

B. P. Rocks—1, cockerel; 2, cock; 2, 4, hen; 2 pen.

Part Wyandottes—1, 2, 4, hen; 3, pullet; 1, cockerel; 1, pen, \$5 gold special highest pen P. Wyandottes.

R. I. Reds—1, cock; 1, 2, 3, 4, pullet; 1, pen.

White Cochins—1, 2, 3, 4, hen; 3 cock; 1 pen; 7 specials prizes won in competition with 250 birds.

NEBRASKA STATE SHOW.

W. Wyandottes—1, pen; 2, pullet; 3, hen; 2, cockerel; 2, cock; 3, cock.

B. P. Rocks—1, cockerel; 2, cockerel; 2, cock; 1 pullet; 1, pen.

The ten prizes were the most coveted prizes. We took two firsts in entries of 17 pens B. P. R. and W. Wyandottes, prizes won in competition with 247 birds.

We wish to call the attention of our readers to the ad of the Iowa Poultry Co., of Des Moines, Ia. This plant is fully equipped for handling all varieties of land and water fowls. They have them all farmed out at separate farms which insures greater fertility and vigor. Their birds are fine and buyers will get good value for their money. Will give bank and personal references if desired. Send for illus-

W. A. Forbes, North Topeka, Kan., first prize White Wyandotte cockerel at Kansas state show at Topeka.

trated Catalogue and look up their ad on page —.

"The Open Door to Success With Poultry" is the title of the attractive new catalogue of the Natural Hen Incubator company of Columbus, Neb. It describes the very ingenious and successful method of hatching chicks by the Natural Hen Incubator, which is used in 100,000 poultry yards. A number of pages in the new catalogue contain some of the strongest testimonials ever written by poultrymen, relating the remarkable success by the use of this invention. This device was patented in October, 1901, and another patent is now pending. Improvements have been made from year to year until it has reached a point where the manufacturer and those who have used it regard it as nearly perfect. The expense is merely nominal and everyone engaged in the poultry business should post themselves on this method of incubation, as it's a winner and a money saver.

Send a postal card for this free catalogue. Address Natural Hen Incubator Co., Columbus, Neb., and mention this paper.

We have with us Mr. and Mrs. H. E. Clark of Dallas Center, Ia., breeders of White Turkeys, Emden Geese, White Plymouth Rocks, White Wyandottes and White Guineas. The Clarks are very enthusiastic poultry breeders and have good stock.

Among our new advertisers this month appears the name of L. A. Day, Brining, Neb., a very extensive breeder of Barred Plymouth Rocks. He is never contented unless he has the best.

G. D. McClaskey, Papillion, Nebr.

Introduction

It gives me great pleasure to announce myself as editor of the pigeon department of the Poultry Investigator. This department will be a regular feature of the paper hereafter and I trust it will improve from month to month. There certainly is plenty of room for more pigeon literature in the West. There are many farmers and breeders of good pigeons who are seldom heard of and I hope, with the assistance of the officers of our new association to bring the fanciers closer together, and in doing this the department will be of great help. I earnestly request all fanciers to send me what items of interest they can from month to month and help make this department interesting to all. I trust it will be better next month than it is this.

G. D. McCLASKEY.

Nebraska State Pigeon Fanciers Association

The first annual show of the Nebraska Pigeon Fanciers' Association was held in connection with the State Poultry Show at Lincoln, Neb., January 21-24, inclusive. Prior to the show the association was not permanently organized and only a few fanciers were aware of what was being done, consequently the exhibit was small, only about 100 birds being shown. The principal exhibitors were D. L. Bruen, of Odenbush, Neb.; David Larson, of Wahoo, Neb., and P. E. Cook, of Lincoln.

White Fantails were the largest class and several good birds were shown. Mr. Cook entered three cocks

and three hens and surprised the boys by winning first, second and third on both cock and hen. These birds are pure Gilbert strain, direct from the Gilbert lofts.

Undoubtedly the bird that attracted the most attention in the entire show was D. C. Bruen's little Yellow Parlor Tumbler hen. This little bird amused the visitors very much by tumbling and turning somersaults on the floor. By the close of the show it was pretty well tired out.

The different varieties of Pouters, Jacobins, Carriers, Stormers, Barbs, Swallows, Turbits, Owls, Trumpeters, Nuns, Mooreheads, Tumblers, Fantails, Archangels and Magnies made up a very interesting display, and attracted as much attention as any department in the show room.

John Haman, the well known judge and fancier of Topeka, Kan., placed the awards and gave entire satisfaction.

The last day of the show a permanent organization of the Nebraska Pigeon Fanciers' Association was effected, and the following officers were elected for the ensuing year:

President—D. C. Bruen of Odenbush, Neb.

Vice-President—W. F. Holcomb of Clay Center, Neb.

Secretary and Treasurer—G. D. McClaskey of Papillion, Neb.

Board of Directors—D. C. Bruen, W. F. Holcomb, G. D. McClaskey, David Larson and P. E. Cook.

It was decided to hold the next show in connection with the state poultry show. The entry fee was reduced from 25 cents per bird to 25 cents a pair, and we invite all pigeon fanciers of the country to show with us next year. The premium list, including valuable specials, will be arranged later. We also invite all fanciers to join our association and help to make it the best organization of its kind in the west. Membership fee is only \$1. The advantage to western fanciers by being members of this association are too numerous to mention here. Don't wait until next month to join, but join now and help work up a grand, big show

for next January. It is expected that the fanciers will be out in force with their birds at the Nebraska State Fair next fall.

Anything fanciers desire to know in regard to the new organization will be cheerfully furnished upon application to the undersigned.

G. D. McCLASKEY,
Papillion, Neb. Secy.-Treas.

Notes For Pigeon Fanciers

This year at the National Fanciers' great show in Chicago, 1,398 pigeons were exhibited. It was the grandest lot of birds ever brought together in Illinois.

At the big Philadelphia show this year 979 grand birds were shown.

Dispose of your surplus stock by advertising in the Investigator.

Don't keep poor birds. The best are none too good.

The banner pigeon show in the United States this year was at Boston, where 2,478 of the best birds the country affords were brought together. It was a grand show. Of Pigmy Pouters, a breed rarely met with in the West, over 200 were shown. Their were nearly as many Fantails and about 400 Jacobins. There were Tumblers by the hundred. Ten judges were employed and it took them two long days to place the awards on the grand collection of pigeons of superior quality. Let us hope that the charter members of the Nebraska Pigeon Fanciers' Association will live to see a pigeon display at Lincoln as wonderful as the recent show at Boston.

As the breeding season is almost here, see that your birds are properly mated, that is, mated with some definite object in view. Haphazard breeding don't pay.

In or near any city is the proper place for the man who desires to raise squabs for the market. He could find a ready sale for all the squabs he could produce.

David Larson of Wahoo, Neb., will make a specialty of Magpies.

D. L. Bruen has about 600 birds of thirty varieties in his lofts at his place near Odenbush, Neb.

There will be no more shows to attend this season. The next exhibit will probably be at the state fair. Let us make the pigeon display the best ever seen in the state.

Now is the time to join the Nebraska Pigeon Fanciers' Association.

First prize Silver Laced Wyandotte cock at Topeka, Kan., owned by Mrs. J. W. Gause, Emporia, Kan.

A Short Incubator and Chicken Talk

Written for the Investigator.

I wonder how many of our incubator friends are getting ready to set their wooden hens? I for one am thinking very strong about getting my wooden hen in setting order for the first of the new year 1902. What I mean by getting her in setting order is this: dust and clean all parts well; clean lamp as nice as new (yes, and keep it that way), see the wick is good and clean and a five gallon can of the best grade of oil ready for use; have the egg trays full of the choicest eggs and be sure they have never been chilled. But don't put the eggs in till you get the heat up to 103; now let the incubator doors be closed with the thermometer in plain sight for twelve hours; by that time you will know if every thing is in good running order. Now put your eggs in, of course, the heat will run down now very fast, but by no means change the flame or the regulator for you have had the doors open and also put in cold trays and eggs; now be patient and you will soon see the thermometer gaining, but slow, and in a short time it will be 103. Now give perfect attention to the lamp every day and turn the eggs twice a day regular. Now if you follow these directions close you will be well pleased on the evening of the 22d day. I always have better success with the early hatches, never any bowel trouble in the little flock and not half the trouble to raise as a summer flock; no mites or lice to wrestle with in the early hatch. I never give water to incubator chicks till four or five weeks old, but plenty of scalded new

milk, with corn bread, chopped onions, oat meal, bread crumbs, but no raw meal, for grit. I use sand and fine broken glass. I keep it mixed and where they can get it at all times. I feed five times a day till feathered and once a day sprinkle millet seed and wheat in their scratch pen. Be sure and always have fresh earth and straw or dry litter of some kind for them to scratch in for they enjoy it as well as the old birds. If you try this way of handling incubator chicks you can see them grow from day to day. Once in a while I give them a piece of raw meat to eat. It is quite exciting to watch them scramble and fight for it, enough so that you will not forget to give them another piece. The first time I used this method of feeding I put 108 little chicks in the brooder and when the brooder got too crowded I put them in a cool brooder but had it good and warm. They were well feathered by this time (they were Leghorns) and still 108 and as hardy as quails and ready to run at large always ready for feed and water. With these few remarks I will close.

MRS. W. E. TIBBETTS.

Chickens and Strawberries

Here is a great combination. The chickens to furnish manure, eat up the bugs and insects, and to provide spending money while the berries are being grown.

Bone meal and meat are the great fertilizers for strawberries. Add a little potash and it is superior to the best Peruvian guano

It must be ground fine and there is no machine on earth that can grind it as fine as the gizzard of a chicken. Bones and scrap meat can be had dirt cheap at all the meat markets. Feed it liberally and the chickens will shell out the eggs lively as well as the fertilizer.

A good flock of chickens is far better than a cow stable.

Compost the droppings with about four times their bulk of any loamy soil as fast as you clean out the roosts. The compost should be put under cover and kept dry. Mix well and sow broadcast and harrow in thoroughly before setting the plants.

Never mix ashes or lime with the manure before putting it in the soil. This absorbs the ammonia and holds it until it is in the soil.

The manure is so strong when not diluted with soil that if any quantity comes next to the roots it would burn and thus injure the plants.

The above is an extract from R. M. Kellogg's book, "Great Crops of

The Michigan Poultryman...

Only Exclusive Poultry Paper in Michigan.....

All the practical poultrymen contribute to its pages. Expert poultrymen will give its readers free such information as they may ask for.

All the news of the poultry world. Well illustrated.

Michigan Poultryman,
Ithaca, Mich.

Poultry Supplies

Ideal Leg Bands 15c per dozen, \$1 per 100.

Smith Seal Bands 25c per dozen, \$1 per 60.

Standard of Perfection each 75c.

Spray Pumps each 75c.

Liquid Lice Killer, gallon can 75c.

Conkey's Roup Cure 50c and 1.00 a box.

Chamberlain's Chick Food \$2.50 per 100 pounds.

J. D. W. Hall's Guaranteed Roup Cure 50c and \$1 a box.

Reliable Spring Puncches each 25c.

Midland Poultry Food at factory prices.

Humphrey Bone Cutter F. O. B. Clay Center, \$12.

Oyster Shells F. O. B. Lincoln, Neb. per 100 pounds \$1.20

Lime Stone Grit and Mica Grit F. O. B. Lincoln, per 100 lbs \$1.00

Bone Meal, Raw Bone, Beef Chops, Blood Meal, as cheap as the cheapest.

Sure Hatch Poultry Co.,

Clay Center, Nebr.

EGG ORDERS. Book now for Houston.

B. P. R. 2 matings, score from 90 to 93%. Eggs \$3. per 15, \$5 per 100.

Buff Orpingtons, 4 yards; 2 yards solid buff wing and tail, eggs \$5 per 15, \$8 per 30. Buff Orpingtons, 1 yard, eggs \$3 per 15, \$5 per 30. Buff Orpingtons, 1 yard eggs, \$2 per 15, \$5 per 40.

Winners wherever shown. Won more first and seconds than any other man. Guarantee good hatches, true to name and fresh.

A. L. HOUSTON, Red Oak, Ia.

Fine Warr. White Holland Turkeys - - \$1.75

Pure Bred Red Belgians - - - \$1.00

Pure White Rock Cocks - - - \$1.00

Pure White Wyandots - - - \$1.00

New Strain White-Breasted Guineas - \$0.75

All above from prize-winning stock and line bred. Catalogue sent.

J. C. BAKER, Proprietor,

White Plume Farm, Richfield, Ill.

Strawberries and How to Grow Them."

Mr. Kellogg is president of the Michigan State Horticultural Society and the most famous strawberry grower in the country, and this book tells how he grows his remarkable crops. We have arranged to have it sent to all our readers who are sufficiently interested to request it. Send a postal card direct to him, the only condition is that you must mention this paper. You will find his advertisement in this number.

Wichita Poultry Show

The Wichita Poultry Association has finished judging the exhibits and at their annual meeting last night at the show room on North Main street elected the following officers: President, A. J. Waddell; first vice president, Dr. F. W. Petrie; second vice president, Mrs. J. R. Kenworthy; third vice president, Dr. Bartlett, fourth vice president, H. L. Smizer; fifth vice president, M. S. Kohl; secretary, H. W. Shopf; assistant secretary, Asa Butler; treasurer, H. B. Allen; superintendent, O. Martinson; assistant superintendent, E. W. Groves.

The winners of the exhibit were passed upon last night in every department but that of the pet stock. The members of the association are more pleased with the showing this year than the financial success of the exhibit. Tomorrow has been set apart as children's day so the school children may enjoy the exhibition of birds. The admission will be half price to children. The poultry winners are as follows:

Barred Plymouth Rocks—M. S. Kohl, first pullet; L. L. Cross, first and second

and cockerel, first pen; Otto Weiss, third cock, third pullet, second and third pen, tie on first and second hen with C. L. Nelson; Mrs. Sternberg, third hen; C. L. Nelson, second pullet, tie on first and second hen with Otto Weiss; Mrs. J. T. Woodward, second cock.

Buff Plymouth Rocks—A. J. Waddell, first, second and third pullet, first, second and third cockerel, first, second and third hen, first and second cock, first and second pen.

Buff Aringtons—Otto Weiss, first and second cockerel, first and second pullets, first and second pens.

White Plymouth Rocks—E. H. Inman, first and second cockerel, first pullet, first pen; J. T. Welch, first hen, second and third pullets, second pen; W. E. Bartless, third cockerel, second third hen.

White Wyandottes—Frank H. Miller, second cock, third hen; Mrs. K. E. Curtis, first cockerel, first hen, first and second pullets, first pen; L. L. Constant, third cockerel; A. G. Burr, first cock, second hen, second cockerel, third pullet, second pen.

Silver Laced Wyandottes—H. B. Allen, second cock, second and third pullets, second and third hens, second and third cock, first second and third pullets, second and third hens, second and third cockerel, third pen.

Light Brahmas—Mrs. A. C. Wright, first and third cock, first, second and third pullets, second pen; H. L. Smyzer, second cock, third hen; J. R. Kenworthy, third cock, first and second hen, first and second cockerel, first and third pen.

Buff Cochins—Mrs. M. E. Sayles, first hen, second cockerel, first, second and third pullets, second pen; Dr. F. W. Petrie, first cockerel, second cock, second and third hen, first and third pen.

Partridge Cochins—Otto Weiss, first cockerel, first second and third hens, first, second and third pullets, first pen.

Black Langshans—W. M. Tipton, first cockerel, first, second and third pullets, first pen.

Anconas—D. C. Smoke, first and second pullets, first, second and third cockerels.

Single Comb Brown Leghorns—H. P. Swerdfeger, first, second and third cockerel, first and second pullets, first, second and third hens, first and second pens; F. L. Noble, third pullet, third pen.

Buff Laghorns—J. W. Snyder, second cockerel, first second and third pullets.

Rose Comb White Leghorns—L. C. Wiedman, first cockerel and first pul-

EGG FOOD..

Make It Yourself.

Eggs are high at this time of year. Fill your egg basket and reap the benefit of the high prices. Guaranteed recipe for making the best egg food known. Easily and quickly made. Recipe price only 50c; Death To Lice, 15c box; Essex Cholera and Condition Powder, best on earth, 60c box. The 3, by mail for \$1.25.

John J. Kautzmann,
590 Bergen St. Newark, N. J.

CAPITOL PRAISE, Augusta, Me.

I am closing out my whole stock of Belgians, over one hundred, 24 prize-winners included. There are 4 Hares, 4 Gold Medal Winners, 1 choice Doe of the State Winner of Sweepstakes, prize for highest scoring animal in show; a silver cup goes with her.

Now is the time to gather in prize winners for winter shows. These prices are reasonable and animals way up. Will send copy of Pedigrees and Prices.

H. F. ADAMS,
Augusta, - - Maine.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough tag-board. Contains all the pit rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Hens, Handling, Nursing and everything relative to the royal sport of cocking.

By DR. H. F. CLARK, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator one year

For 25 Cents.

Address, THE INVESTIGATOR
Clay Center, Nebraska.

Give

**Your Breed-
ing Does**

Rabicide

During gestation and while nursing their young it will enrich the blood improve the appetite, increase the flow of milk, thereby making the young strong and healthy.

Give RABICURE a trial and you will never be without it, 50c a box postpaid.

Vermont Belgian Hare Co.
Lyndonville, Vt.

F. C. Hinman's first prize Barred P. Rock hen at Nebraska state show at Lincoln, Jan. 21 to 25.

First prize S. L. Wyandotte hen at Topeka, Kas., owned by Mrs. J. W. Gause, Emporia, Kas.

let.

Indian Games—J. W. Snyder, first, second and third pullets.

B. B. R. Games—J. M. Smits, second cockerel, second and third pullets.

The following additional awards were made at the poultry show this afternoon:

M. B. Turkeys—C. W. Peckham, first, pullet; M. S. Kohl, first, adult tom; first, yearling tom; first, pair. Mrs. J. T. Woodford, second, pair.

Pekin Ducks—O. E. Martinson, first, pair; Otto Weiss, second, pair.

Pekin Ducks—O. E. Martinson, first, pair; cockerel; Wm. Berkshire, second, cockerel.

Belgian Hares—Wichita Belgian Hare Co., first second and third, mature doe; first, second and third, immature buck; best hare in show.

Cavies or Guinea Pigs—Peruvian male cavies: first, Wichita Belgian Hare Co.; second, Shuman. Female Peruvian cavies: First, Wichita Belgian Hare Co., second, Shuman; third, Heller Ferrel, English male: First and third, Ward; second, Mrs. Wright. English female: First, Mrs. Wright; second and third, Ward. Best cavie in the show, Mrs. Wright. Broken: first and third, Ward; second, Wichita Belgian Hare Co.

Ferrets—Best display: first, Ward; second, Wichita eBigian Hare Co.

Tumblers—First black muff hen, Ward; first red clean leg cock, Ward; best pigeon in the show, Ward.

Homers—First blue cock, Ward; second, Shuman; third, Lane.

Blue Check—First cock, Shuman; second, Sollers; third, Lane; first hen, Lane; second, Sollers; third, Shuman.

Red Check—First cock, Lane; second, Shuman; third, Sollers; first hen, Sollers; second and third, Lane.

Turbits—First and second cock, Wiedman; first and second hen, Wied-

man.

Rabbits—First and second, Ward; third, McGee. Female—First and second, Ward; third, McGee.

I. & N. M. Conner, Ponca, Neb., writes that they will make a reduction on trios of Silver Laced Wyandottes, for the next thirty days, from \$7.50 to \$6.00; pens, \$12.50 to \$10.00, to make room for breeding pens, and will take orders for future delivery at \$2.50 per fifteen. Mr. Conners won largely at the late state show at Lincoln, Neb.

L. E. MEYER OF BOWLING GREEN, MO.

The Langshan specialist, won at Kansas State show, January 6 to 11, 1902, in a hot class, first and second cocks, first and fourth hens; first, second and fourth cockerels; first, second and third pullets; first pen, 189½. He had six scores tied and won every one on weight. He breeds the big kind. His first hen weighed 10¾ pounds. Rhodes, judge. At Northeast Missouri show held at Bowling Green, in a class of 82, all good ones, he tied first cock, won second and third, tied first hen, won second and third, second cockerel, second pen, tied third pullet. See his ad on last cover.

A. L. PEDRICK, OTTUMWA, IA.

Breeder of Blue Prince strain Black Plymouth Rocks, Buff Cochins and Buff Cochins Bantam. Breeding twelve years, has exhibited in the leading shows of Iowa. Has bred twenty odd different breeds of poultry. Has been judging the past five years. Has a few dates open for engagements.

THE "PERFECT" HATCHER.

The Poultry Investigator is always pleased to note the success of its incubator advertisers who have won fame and fortune by the excellence of their hatcher. Prompt and careful attention to orders and courteous treatment of customers. The best example we can cite our readers is the progress made by the firm of J. A. Chelton, of Fairmount, Md. After an investigation we find that the "Perfect Hatcher," manufactured by this firm is the equal of any hatcher, and superior to many now on the market, while it is the lowest priced hatcher made. The 200-egg size being only \$10. We advise our readers who are interested in purchasing a good hatcher at a low price, to write Mr. J. A. Chelton direct, enclosing a two-cent stamp as he will take pleasure in answering all such inquiries. He is a gentleman of the highest standard in the commercial world and enterprise as well as integrity.

Chalk White Wyandottes.

Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

G.B. CLARY Fairbury, Nebr.

FREE..

THINK OF IT!

By special arrangement you can get all three (3) of the following one year for only 50 cts. Never an offer like this before

♦♦♦♦

The Poultry Investigator

CLAY CENTER, NEB.

The only exclusive poultry paper published in the west. Original, up-to-date, instructive. Profusely illustrated and never prints a dead line. Contains from 32 to 40 pages each month.

Fancy Fowls, Hopkinsville, Ky.

The leading poultry organ of the south. Three years old, well established and prosperous. 36 to 40 pages each month.

Michigan Poultry Breeder

BATTLE CREEK, MICH.

Established 1885. The publisher has devoted 14 years of his entire time and attention to the poultry industry. Its a success—24 pages.

The price asked for these papers all one year is only 50 cents, which any of them are worth, and you get the others free. Send your subscription to any one of them. A free sample copy can be had by addressing each one. Better send your order now.

**White
Langshans
Exclusively**

Eggs from stock scoring from 90 to 95 points, \$1.50 per 15; \$2.75 per 30; this season only. Some

good Ckls. for sale with score cards by Ben S. Myers.

All Stock Farm Raised.

MRS. JACOB HUGHES, JR.,
Rock Port, - - Missouri

The Marilla Incubator

We believe our readers will be interested at this time in a few facts regarding this splendid machine. We present herewith an illustration showing the new factory of the above company, located at Rose Hill, N. Y., in combination with one of their 200-egg machines and the ornamental label which decorates and designates each incubator shipped out by them. Their factory is one of the most completely equipped of any in the country for the manufacture of incubators and no machine is more highly regarded than the Marilla by those who have tried it. It is the result of nearly twenty years' experience in practical incubation, on the part of its inventor, Mr. H. H. Blackman. His little work "Artificial Incubation and Brooding," has been most favorably received. Mr. Blackman first engaged in manufacturing his machine at Marilla, N. Y., but two or three years ago removed to Rose Hill, and incorporated the strong Company, with which he is now connected. Some of the special merits of the Marilla Incubator are these:

First, the great care taken in its construction. It is built of Georgia pine and highly finished in the beautiful natural color of the wood. The makers claim that it is the handsomest of all incubators. They say it is just as easy to make it attractive as otherwise, when you know how. The labor entering into its construction is all skilled and of high order. Another important feature is the system of heating and ventilating, which is as perfect as can be devised. Mr. Blackman calls the regulator a "thermometer regulator" mercury being the active element, and as it is much more sensitive to variations of temperature the control of the incubator

is much more positive and instantaneous. There are many other advantages for which substantial claims are made and these are fully described in the catalogue which every reader ought to have. The machine is absolutely guaranteed in every respect, and is sold on an unconditional thirty days' free trial. A most remarkable list of testimonials is presented from those who have used it. Last season a grand prize of \$100 was awarded to the purchaser of a Marilla, who obtained the largest percentage of hatch in three successive trials. This was awarded to Mrs. Miles Van Alstine, of Lansing, Mich., who from her three trials averaged 99 per cent. Many others had records almost as high. A number of sworn statements regarding these are given in the catalogue, of which 100,000 copies have been printed and so far as we know, this is the largest edition yet issued by any incubator company. It is most attractively gotten up and will both interest and instruct. It is sent to all for four cents to cover postage. Write for one before they are all gone.

Address Marilla Incubator Company, Rose Hill, N. Y.

GREEN BONE PRIZE ARTICLE.

This contribution to the Farmer's Voice by W. F. Adams, Yoakum, Tex., awarded the Grand Prize—\$100—as the best of 27 submitted.

Judges—F. L. Kimmey, president American Poultry Association, Miller Purvis, Editor Commercial Poultry; F. H. Shellabarger, Poultry Judge and Fancier.

My experience with cut bone as a

White Wonders!

The Farmers and Poultryman's money makers. The best combination fowl out. Extra choice eggs, \$2.00 per 13. Satisfaction guaranteed.

Dr. I. C. Stephens & Co.

Carleton,

Nebr.

White Rocks Exclusively!

Two pens mated for this year's breeding, scoring from 90½ to 91½. At Tabor Poultry Show won 1st, 2d, ckl, 1st, 2d, 3d, pullet, 1st. pen; every premium entered for; Russell, Judge. Eggs, per 15, \$2.00. 30 for \$3.50, 50 for \$5.00.

W. H. Utterbeck, Hillsdale, Iowa

BARRED PLYMOUTH ROCKS,

(Exclusively.)

Farm Range. - - - Good Stock

Eggs that will hatch, \$4.00 per 100. \$1.00 per 15. Satisfaction guaranteed.

Adam Weir, Clay Center, Nebr.

Cherry Hill Poultry Yard

BARRED P. ROCKS, Exclusively.

Eggs \$1.50 per 15. 100 for \$6.00.

Mrs. Eva J. Eingrich, Aurora, Neb.

~~~~~

Black Minorcas.

No. 1 stock, up to weight and the best of color. Eggs \$2 per 13. No stock for sale.

Mrs. Ella Patrick, Clay Center, Neb.

~~~~~

EUREKA POULTRY PLACE.

WHITE PLYMOUTH ROCKS of the Stay White kind. No straw color or flies on ns. Nothing too good for the Irish. Eggs \$1.00 per 15. Address

L. G. French, Deep River, Iowa.

Taylor's Otee White

Plymouth Rocks are prize winners at Red Oak, Ia., and Lincoln Score 92 to 96 points. Eggs 5, 10 and 15 cents each. Write for particulars.

C E Taylor, Nebraska City, Neb.

Black Langshans.

I won 1st pen, 1st pullet, 1st, 2d and 3d ckl, 1st ck, 1st, hen and 2 sweepstakes at Osceola, Neb. BARRED P. ROCKS, 1st pen, 2d ckl, 2d and 3d pullet, 3d, hen, 2 sweepstakes, at Osceola, Neb. 4 pullets at Lincoln Show. Langshan eggs \$5.00 per 100 \$1.50 per 15. B. P. Rock \$2, per 15.

J. E. Brown, Osceola, Neb.

food for fowls extends over two years only with a flock of 100 hens. Prior to that time I had not used cut bone and my article is based on the percentage of gain growth, health and eggs of fowls over two years previous, when I did not use bone; all other conditions for the four years being about the same.

My attention being called to the value of fresh cut green bone as a food for poultry, I determined to experiment. I crushed some hog bones as best I could and fed it to layers. The result was so satisfactory I bought a small bone cutter and began to feed green cut bone to my poultry regularly twice a week. I tried all sorts of bones and have found the hog and the beef bones the best, being easier obtained and containing more of the nutritive value.

I get a soup bone of the butcher, shave off the meat (a little meat want hurt if you intend feeding as soon as cut) and I feed the same day.

Some people make the mistake of using bones that have been boiled or lain out and sunbleached. Some of the most essential feeding value of the bone has thus been lost, especially as feed for growing chicks. The animal, as well as the mineral qualities of the bone, is what makes it valuable. I experimented with cut chicken bone a little and fancied I saw an improvement over the other bone, but I am not sure, and even though there be, it is not convenient to get green chicken bone. Be sure that the bones used are not those of animals that have died of disease, old age or starvation. The former two are dangerous to the health of fowls, the latter worthless. Bones of young animals are best.

For growing chickens, after two weeks old, I mix the bone meal with corn chops, dampened with curd milk (water will do), so that each bird gets from a half to one teaspoonful of the bone meal, according to age.

It is an excellent bone food for the fowl and general invigorator and

growth forer.

Extra large and quick growth bone in fowls means more meat, and more meat means 7 to 10 cents a pound.

For laying hens I feed mixed as above, only that each hen gets one tablespoonful twice or three times a week, according as I think they may need an extra allowance. They need more when they are laying regularly or moulting.

The results of the bone as a feed is seen in a very few days in the renewed vigor health and appetite, and last, but not least, egg product.

Taking every advantage gained by feeding bone—i. e., general health of flock, quick growth of broilers, increase in amount of eggs, etc., over the two years bone was not fed, I figure it—and I keep close accounts—that the profit derived is 15 per cent over the two preceding years. This 15 per cent is attributed to the bone feed and other increase in profits was credited to the source from which they came.

Now don't feed an overdose at first, or at any time for that matter; feed regularly.

Don't expect the hens to lay two eggs daily and the young chicks to spring up in one night like mushrooms, when they are fed bone. Mix well with the other food so that each bird gets its proportionate share.

Don't expect to feed bone only. The bone is only an additional feed, a sort of tonic.

Now I am not going to go into detail to explain how the bone assists—couldn't if I wanted to—only to say that the component parts of all meat bones are the same, and the mineral part of bone may be found in egg shells. Bone and shells must be supplied from what the fowl eats, hence we feed it to them, directly in the shape of cut bone, instead of indirectly, in the shape of corn, oats, etc., etc.

If you once give fresh green cut bone a trial as a food for fowls you will never discontinue it. W. F. Adams, Yoakum, Texas.

BUSINESS CATCHER

FOR SALE! Rose Comb Black Minorcas in singles or trios also Buff Leghorns and Buff Rock Chicks, the best of stock for \$1.25 each, or \$3 for 3. Write us at once. C. E. Olson, Colon, Nebr.

BUFF ROCKS. Breeding and exhibition stock for sale. Write at once for description and prices. Satisfaction guaranteed or money refunded. Tell us what you want. F. Winsley, Appleton City, Mo.

C. E. DUNLAP, breeder and buyer of thoroughbred chickens. Can fill your order for any breed or strain, from the yards of reliable specialists. Prices reasonable. Correspondence solicited. Yours Truly, C. E. Dunlap, Liberal, Kans.

FOR EXCHANGE. A 60-egg Sure Hatch Incubator, for Exhibition B. R. Games, Must be first class stock. A. J. Williams, Clay Center, Nebr.

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Bert R. Swett, 364 Mosley St., Elgin, Ill.

J. W. WHITNEY, Chatham, Ohio, Poultry Judge. All Varieties Private scoring and expert mailing a specialty.

40 GOOD WHITE WYANDOTTES for sale cheap if taken soon. C. E. Genoways, Aurora, Nebr.

FINER AND CHEAPER than ever. Buy early. Games, Heathwoods, Irish and Mexican Grays, Blks. Reds; Tornadoes and Cornish Indians. Free illustrated circular. C. D. Smith, Fort Plains, N. Y.

FREE GAMES. Eggs \$1.00 per 13. Circular, Heathwoods, Irish and Mexican Grays, Tornadoes, Irish Blks. Reds. Cornish Indians. 25 Cents. Write for all times. C. D. Smith, Fort Plain, N. Y.

BIG MAIL for poultrymen. Insert your name in our poultry directory and receive poultry papers, poultry catalogues, etc., every day. Only ten cents silver. Poultry Directory Co. A. Goshen, Ind.

DARK BRAHMAS exclusively. A few standard bred pullets for sale for 1.50 and eggs 1.50 per setting. Alice Trenary, Palmyra, Nebraska.

BARRED PLYMOUTH ROCKS. No stock for sale. Eggs \$3.00 per 100, \$1.00 per 12. My stock is first class and have won in show room. J. P. Schiorder, Clay Center, Neb.

ALSEN Poultry yards has Hamburgs, Buff and Brown Leghorns, Buff Rocks, White Wyandottes, Polish and Andalusian. Won 26 premiums out of 27 entries at South Dakota state fair. Eggs for hatching, \$1.00 and up. Circulars free. H. P. Larson, Beresford, S. D.

LIGHT BRAHMAS. I have a few good hens and pullets for sale cheap. Mrs. Alice Allen, Clay Center, Nebraska.

EGGS FOR SALE from Rose and Single Comb White Leghorns, White Rocks and Light Brahmas. \$1.50 per setting of 15 eggs. Write wants. John H. Rownd, Downs, Kas.

ROSE COMB White and Rose Comb Brown Leghorns, White and Silver Laced Wyandottes, also Rouen Ducks. Eggs in season. 15, \$1.25; 20, \$2. Duck eggs \$1 per 11. J. W. Cook, Poneto, Ind.

100 S. S. HAMBURGERS. Stock for sale. Eggs at prices to suit the season. Stock in good condition fashionably bred and artistically marked. Rev. G. A. Chamblin, Moran, Kansas.

MEADOW BROOK farm has for sale Pekin Ducks, Light Brahma and B. Plymouth Rock Cockerels at \$1 each. Toulouse Ganders, and M. Bronze Toms, at \$2 each. Pol- and China hogs a matter of correspondence. J. D. Grimes, Chamber, Neb.

WHITE PLYMOUTH ROCKS a specialty. 1 yr old hens and this year's pullets and cockerels for sale. Old stock score 92 points and up to 95+. Write for prices. Geo. N. Wood, Weldon, Ia.

The Strongest Chicks

come from the strongest eggs. Such eggs in largest quantities result from proper feeding of the hens.

EGGE

combines in its make up all those elements which impart tone and vigor to the hen and strong vitality to the egg and consequently to the chick. Cures Cholera, Rump, Pile, Diarrhoea, Croup, Worms, etc. in fowls of all ages. Prices, 50c, \$1.00, 100c, \$1.00, 250c, \$5.00, and \$10.00. Net weight guaranteed in every case. You don't have to pay for the package we do that. All tin packages and consequently "EGGE" always retains its strength. Write for circulars, etc.

AMERICAN STOCK FOOD CO.
19 Front Street, Quincy, Illinois.

BUSINESS CATCHERS

BUFF ORPINGTONS. "Cook's Strains," eggs 15 for \$3.00; hatch guaranteed \$5.00 from birds buff to the skin and progeny of imported stock. Express prepaid. A. Edward Green, Joliet, Ill.

EGGS for hatching. From 2 splendid pens prize winning Black Langshans, score 92 to 95%. Buff Orpingtons and Rose Comb Black Bantams. Circulars free. John Cole, M. D. Williams—Id., Ill.

EGGS from my Beauty Strain of high scoring Light Brahmas and prize winning Black Numas, 15 for \$1.00. They are up-to-date. Chas. M. Palmer, Nettatt, N. Y.

BUFF COCHIN chickens, Toulouse geese, Duroc Jersey swine, Cuckereils for sale with score cards. Chicken eggs \$2.00 for 15. Geese eggs 25c each. Chas. A. Allison, Fennesse, Ill.

BELGIAN HARES. 25 young does bred to fine bucks scoring 94; at \$3.00 each, or 2 does and a buck for \$7.00. All first-class stock. J. S. Markel, Wahoo, Neb.

WHEATLAND POULTRY FARM. M. B. Turkeys, prize winner B. P. Rocks, (Ringlet Strain S. S. Wyandottes, S. C. Brown Leghorns. Birds for sale. Eggs in season. Mrs. Taylor Raker, Magnolia, Mo.

THE STAR POULTRY YARDS has S. C. Brown Leghorns, Barred and White Rocks and White Wyandottes. Located 3 miles south of East Peoria, D. E. Glafied, East Peoria, Ill., manager.

PARTRIDGE COCHIN ONLY. A few choice heavily feathered pullets for sale. Eggs \$1.50 per 15. Pen headed by 2d ckl. Neb. state show, 1902. Satisfaction guaranteed. H. E. Bowman, Lawrence, Neb.

SILVER SPANGLED HAMBURG. Most beautiful fowl and great layers, Cockerels for sale. Eggs \$1.25 for 15; \$2.25 for 30; \$3.00 for 45. J. E. Haynes, Ames, Monroe Co., Ill.

BLACK LANGSHANS. Partridge Cochins, Silver Laced Wyandottes, Rose Comb Brown Leghorns. Stock and eggs for sale. Prices very reasonable for quantity of stock if you want something good write at once. C. P. Kurtz, Lawrence, Neb. Have fine English Berkshire hogs.

EGGS. Barred Plymouth Rock birds scoring 90 to 92%. Eggs \$1.50 per 15; 2.50 per 30. Birds scoring 88 to 92, \$1.00 per 15; 1.50 per 30, 4.00 per 100. J. F. Loun & Son, North English, Iowa. R. F. D. 2.

SILVER GRAY DORKINGS. White Wyandottes, Single Comb Brown Leghorns. They are state winners. Live and let live is our motto. Dorkings, 1.50 per setting, other settings 1.00. Circulars free. O. Mullin, Beauford, Minn.

WHITE WYANDOTTES. Line bred for fancy utility, heavy laying strain. Best shade winning 1st ck. 1st. head, at Ohio state show, also at Poultry Show at Akron. Eggs 2.00 incubator eggs, special eggs 1.50 per setting. Cockerels for sale. C. D. McVicker, Pleasant Home, Ohio.

WHITE AND GOLDEN WYANDOTTES. Eggs 1.00 per 13. White Wyandotte cockerels 1.00 each. Pekio ducks 2.50 per trio. Eggs per setting, 95c. Mrs. H. W. Clark, Seward, Nebraska.

EGGS for sale. White Crested Black 2.50 per 15. Buff Rocks, Buff Leghorns, Light Brahmas, eggs 1.25 per 15. Stock for sale. Write your wants. C. E. Olson, Colon, Neb.

WHITE PLYMOUTH ROCKS. Farm raised. Eggs 75 cents per 15. Strawberry plants 60 cents per 10. Loudan. Red Raspberry plants, 50 cents per 12. Mrs. Lydia Beebe, Coryville, Pa.

EGGS. Barred Rocks (Thompson strain) White Rocks (Emire) White Wyandotte (Duston) Silver Laced Wyandotte (Goette) Light Brahma (Delch) 12 for 1.25. Also a few fine cockerels. L. M. Whittaker, 385 east Robie, St. Paul, Minn.

THE INTERNATIONAL POULTRY EXCHANGE wants every person who has good, medium priced thoroughbred poultry for sale to send description and prices, with 10c, to answer inquiry; also anyone who wish to buy any breed of thoroughbred poultry to send for prices, we can fill all your orders near your home. C. E. Dunlap, Supt., Liberal, Kansas; U. S. A.

HATTIE BYFIELD. McCook, Nebr. Eggs for hatching from prize winning Light Brahmas and White Wyandotte chickens, White Holland turkeys and mammoth Pekin ducks, 15 hen eggs \$2.00, 9 turkey eggs \$1.50, 11 duck \$1.00. Duck eggs \$6.00 per 100. A few nice drakes to sell.

SUPERIOR BLACK LANGSHANS. Eggs 14 for 1.00. I am a member of the American Langshan club and breed them exclusively. Buy stock and eggs of me. S. H. Cotton, Appleton City, Mo.

POULTRY PAPERS at cost. Valuable circulars free. Eggs 1.00 per 15, 4.00 per 100. Buff Rocks, Buff wyandottes. Big birds, fertile eggs. A. B. Canlier, Macedon, N. Y.

FOR SALE. Two 200 egg size Sure Hatch incubators. In first class condition, will sell very cheap. White Rock Farm, Wap 110, Iowa.

COMB SINGLE Comb Brown Leghorns Regular egg machines. Stock direct from best eastern breeders. Eggs for sale 1.00 for 15. W. E. Combs, Julian, Neb.

BUFF AND BARRED ROCKS. Buff Leghorns Black Breasted Red Games. Pekin ducks; Fancy Pigeons. Eggs from fine stock. Get our list at once. Satisfaction guaranteed. The Utz Poultry Farm, Estherville, Ia.

LIGHT BRAHMAS. From Boston winners. Eggs 2.00 per setting, delivered. Yard-headed by prize winners. Females as good as the best. G. W. Hard n. Ulysses, Neb.

CHEAP to close out. As fine a lot of birds as you ever saw. Golden Wyandottes, Barred Plymouth Rocks and Buff Orpington Bantams. H. Gregory, Wayne, Neb.

BUFF COCHINS and White Holland Turkeys. Eggs for sale from large healthy stock, winners at Nebraska state show. Chicken eggs 2.00, turkey eggs 1.50. Mattie Stult, Lawrence, Kan.

BUFF ROCKS. Evenest lot in the west, 1st premium stock at leading shows, 93 to 94. 3 grand matings, eggs 2.00 per 15. Robt. Larmer, Ravenwood, Mo. Box 7 S. V. Pres. Buff Rock Club.

EGGS 75c per 15. Farm range. Black Langshan and single comb Brown Leghorn. From pen No. 1, Black Langshan, 2.00 per 15. Pen No. 2, White Wyandotte, 1.50 per 15. M. M. Browning, Appleton City, Mo.

ONE DOLLAR buys 15 eggs from extra fine stock of Buff and Barred Plymouth Rocks, White Wyandottes and Rose Comb Brown Leghorns. C. R. Norman, Stromsburg, Neb.

EGGS. Buff turkeys, 3.00. Barred P. Rocks, 1.25 per 13. Black Langshans 1.00 per 13. Mrs. T. G. Smith, Polo, Ill.

SILVER LACED Wyandottes exclusively. From the best stock, bred for show and best egg production. They are winners, eggs that will hatch 1.00 for 15. W. O. Johnson, Stromsburg, Neb.

BARRED PLYMOUTH ROCKS, winners from Norval's strain. No stock, all sold, on ly eggs for hatching. Most, 2.50; 31, 2 prize; 3d, 1.50; 4th, 1.00 only, per setting of 15. 1 per setting, twice the single price! Place your orders early. Mrs. M. E. Bittner, Osceola, Neb.

NORTH STAR POULTRY YARDS. A few choice Barred Rock and White Wyandotte cockerels left. Northwestern buyers save exorbitant express rates and order early. J. C. Tjaden, Lentoos, South Dakota.

BARRED P ROCKS: Thoroughbred, farm raised. Good birds, good scores, give good satisfaction and good results. Eggs that hatch, \$1.00 per 15. Prices for birds as reasonable. If convenient please enclose stamp when writing for particulars. Miss A. Sargent, Sarcotte, Mo. Box 87.

SIXTEEN EGGS. 2.00. From my Kansas City and Omaha prize winning White Wyandottes (Duston Strain) stock. Scores 95 to 94. Incubator eggs cheap. Mention Investigator. Mrs. Maud Rolfe, Wetmore, Kansas.

BUFF ROCKS. Eggs from prize winners at 1.50 per 15. Will replace all infertile eggs free. Have 3 pens mated, send for description. We can please you. F. Whaley, Appleton City, Mo.

NEW SURE HATCH Incubators and Brooders for sale cheap. Address Mrs. J. T. Clark, 26th & Y Sts., Lincoln, Neb.

FOR SALE. 2 nice extra choice Silver Sebright Bantams one year old. The price is \$5.00 per trio, Address Box 227, Clay Center, Nebraska, care INVESTIGATOR.

BLACK LANGSHANS Clean sweep Elgin Show, 1st ck, 1st, 2d, 3d, 4th, 1st, 2d, 3d, ckl, 1st, 2d, 3d, 4th pullets, won Silver cup. Ben Myers, judge. Henry Snellgrove, Elgin, Ill.

R. C. B. LEGHORNS. A few good cks left. Eggs 1.00 per 15. Also a few Stay White Wyandottes. Eggs 1.00 per 15. C. H. Courter, Ashley, Ohio.

FOR SALE. 2 choice White Klondike hens, first money takes them. Place order at once. Address Poultry Investigator, Clay Center, Neb.

BUFF ORPINGTONS. "Cook's Strains." Eggs from large, healthy vigorous stock, \$3.00 per 15. R. O. Brown and S. C. White Leghorn eggs \$1.50 per 15. Louis Mogensen, Racine, Wis.

PIGEON BOOK complete, illustrating, describing all varieties, arranging loft, breeding, feeding, caring for, 5 cents, 1,000 pigeons for sale. Prices free. Wm. A. Bartlett & Co. Box 27, Jacksonville, Ill.

WHITE PLYMOUTH ROCKS our specialty. Eggs 1.00 per 15. Pekin duck eggs 1.00 per 11. Try us. F. J. Kolasa, DuBois, Neb.

For Sale.

Black Langshan Cockerels, 50c and pullets 75c each. Pekin drakes \$1.00 each. M. B. Turkey Toms \$2 and \$3r. All stock pure blood.

Mrs. Albert Ray & Son, Wilsey, Kan.

\$5,000 POULTRY CATALOGUE FREE!

It is without a rival. Give lowest prices of fowls and eggs. Over 60 breeds—Turkeys, Geese, Ducks and Chickens. Fine drops of plates from life. 15 best poultry house plans. Treatise on disinfecting, breeding, and raising. Send for postage. J. K. Brazdon, Jr. & Co., Box 106, Delavan, Wis.

SURE SEE THE 1902 Noxall Incubator

IT HAS many new features, the Regulating, Ventilating and Moisture system is perfect, lowest price. Find out how to get one FREE. Our catalogue gives remedy for every poultry disease, &c. for the large circular and price list free.

Noxall Incubator Co., Quincy, Ill.

HELLO! WHOSE ARE THESE?

Why, Hall's Famous Prize Winning

White Wyandottes and Barred Plymouth Rocks. Won 150 regular and special prizes in Chicago and leading western shows. All our first prize birds are in our pens. B. P. R. males and females score 90 to 93%. White Wyandottes 93 to 96. We always win, so can you if you buy of us. Our P. Wyandottes, W. P. Rocks, S. and R. C. R. I. Reds, Blk. B. W. and P. Cochins, T. Geese, and Pekin Ducks are all winners. Illustrated catalogue tells you all. Stock and eggs for sale.

J. D. W. HALL. Box 700

Des Moines, Ia.

Printing for Poultrymen

We are prepared to do all kinds of printing for poultrymen. We have the highest grade machinery and new material; all work guaranteed first-class. Free use of standard poultry cuts to patrons. Write us your wants and get our prices on your work. Address,

Poultry Investigator
Clay Center, Neb.

Notice

The German Nurseries, Beatrice, Neb., are advertising with us this season, as they have done in former years. This nursery is owned by Carl Sonderegger and was formerly located at Fairbury, Neb., but a year or two ago removed to Beatrice, where it is possible to have better shipping facilities, which advantage our readers will fully appreciate. Mr. Sonderegger has equipped his nurseries with very complete buildings for housing and preparing his stock for shipment, so that anyone ordering from him can feel reasonably sure of getting their stock in the best possible condition. Mr. Sonderegger's catalogue is printed in both English and German and anyone contemplating the purchase of nursery stock will find it to their advantage to write for this catalogue before placing their order. Catalogue is sent free on request. In writing kindly mention having seen his ad and this notice in our paper.

Puritan Incubators and Chick Food

We beg to call the special attention of our readers to the advertisement of the Puritan Poultry Farm, Inc., in this issue.

They manufacture and have for sale the "Puritan Incubator and Brooders" and are likewise the proprietors of the now world renowned Puritan Chick Food. All other hatching machines have been discarded on the Puritan Farms for the "Puritan Incubator," which is certainly the very best recommendation possible. The "Puritan" is a strictly up-to-date and excellent machine, being built of the very best possible materials, no expense being spared in its construction. It is novel in a great many points and differs to quite an extent from most of other makes now on the market.

The new catalogue of the Puritan Poultry Farms is a veritable work of art and contains page upon page of original matter, in fact is a fine poultry treatise in itself and tells you all about Puritan Chick Food and all Puritan products. It will be sent absolutely free to all our readers who mention where they saw their advertisement.

This book should be in the hands of every lover and breeder of poultry and we advise you to send for it today.

You will notice among our advertisers this month the name of E. A. Teasdale of Slater, Ia. Mr. Teasdale is a prominent breeder of S. C. W. Leghorns and breeds as good stock as can be found anywhere in the United States.

Single-combed BROWN LEGHORNS.

(Exclusively)

Birds of choice breeding. Scoring from 92 to 94% are in my pens for 1902. Eggs from these pens \$2.00 per dozen. A satisfactory hatch guaranteed.

Frank McDonald, Columbus, O.
(Route 1, Sta. B.)

Caution! Don't Read This Ad.

For if you do you will discover where to get the best of White Rocks scoring from 93 to 96% at the largest shows throughout the state of Ohio. At Columbus, 1901, we showed thirty White Rocks with an average score of 88%. A 4-year-old cock bird scored 95% and such juvies as Hridge, Lane, Cranner, Barger and Jones. Stock for sale. Eggs \$2.00 per 15.

Maughlin & Sons, Columbus, Ohio.

S. S. HAMBURG.

At the Columbus shows for the past

three years I have won more prizes than all other exhibitors combined. Fine shape, excellent color, full combs and unexcelled as layers. Stock for sale at all times. Eggs in season. A good hatch guaranteed.

THEODORE DESSIM, COLUMBUS, OHIO.
19 E. Chestnut St.

EGGS

\$2.50 for 15
\$4.50 for 30
My aim,
fertilize eggs,
hardy
duck, bred
to win best
to lay.

STOPI

#1 RCSE and SINGLE, "B" Rhode Island Reds, Buff Leghorns. Winners wherever shown. Only strong robust stock in my pens and you will not regret it if you send your order for eggs to
Eric Aurelius, Perry, Lake Co., Ohio.

Winners Again!

Rocks and Wyandottes. White and Barred. Score 92 to 95. Silver and Buff. They are sired by winners and bred to winners from some of our largest shows. Eggs \$2.00 per 15 straight from pens headed by 1st and 2d prize birds.

J. A. Douglas, Ferguson, Mo.

Something Worth Knowing.

Money saved by making your own poultry remedies. To cure Cholera. SCURE CURE. Roup, Scaly Leg, Lice, Mites. Cheap remedy but sure. Excellent Poultry Food to make hens lay. Celebrated Douglas Mixture etc. All receipts for \$1.00 or 25c each. Address with 2c stamp.

A. M. HAGLAND, Goshen, Ind., R. F. D. No. 2.

My White Minorcas

Won 1st, 2nd and 3rd at Delaware and Columbus on old and young stock. Scored 90 to 94%. Eggs from my best pen \$2.00 per 15; \$5.00 per 45, satisfaction guaranteed.

HARRY LIEBOLD, Delaware, Ohio, R. D. 2.

Old Homestead Brooder.

The best on earth. All your chickens can be saved in old Old Homestead Brooder. Try one. Write for prices. Address
Old Homestead Brooder Co., Middleboro, Mass....

Bonniedale Poultry Farm!

Eggs to Hatch.

S DOTTES: Very choice pen, \$2 per 15 Over 300 hens on different farms. Good pure stock. Eggs \$1 per 15, \$4 per 100. HARRIED ROCKS: Strictly standard system. 60 fine hens and pullets, 4 extra large, stately crows, scoring from 90 to 94 by Judges Russell and Stranbough. Eggs \$2 per 15, \$4.50 per 30. Lt. Brahmas. S. O. B. Leghorns and C. I. Games. Good pure stock on separate farms. Eggs \$1 per 15, \$4 per 100. ROUP CURE: Our make. 50 cents, postpaid. Circulars free.

MRS. MAY TAYLOR, HALE, MO.
LOCK OX 176,

J. W. Eastes . . .

Buff Orpingtons. R. O. W. Leghorns. Barred & White Rocks, W. O. P. Bantams, Belgian's Hares. Eggs. Stock in season. Agents wanted. Thirty Prizes; silver cup last year.

Galesburg, Illinois.

Scott's Cure

For **Chicken Cholera**

Guaranteed to cure Chicken Cholera or money refunded. Testimonials on file. Bank. Reference: Rising City Bank.

B F SCOTT, Rising City, Neb

Pride of the West...

Is Mackey's own Strain of Bronze Turkeys, bred in line for 15 years. Show record on open book. They are in the yards of many of the best fanciers in the U. S. and Canada. B. P. Rocks. Conger & Felch; Black Langshans, Emory Felch & Robinson. Felch Lt. Brahmas, eggs at all seasons from hens. Young stock now ready to ship. Write for prices. Mackey's Magic Cholera Cure is a sure cure.

HILLSIDE POULTRY YARDS,

Mrs. B. G. Mackey, Proprietor.
CLARKSVILLE, MISSOURI.

This is for You!

Owing to my judging engagements for season of 1923, will not be able to show my birds and will hereby reduce the price of eggs from \$3.00 to \$2.00 per 15. I have S. O. Brown Leghorns, Black Leghorns, Barred Plymouth Rocks, (Violet Strain)

David Larson, Wahoo, Nebr.

Pekins-Hallock strain. Will sell a few choice drakes and ducks, \$1.00 each. Egg orders booked now.

BELGIAN HARES. Pedigreed. Grand lot of youngsters sired by a 95% point buck. Bred does always on hand. Booklet on the industry for stamp.

Stephani Poultry Co. Belleville, Ill.

BUFF COCHINS

Exclusively.

**Just What You Are
Looking For . . .**

The Pure Golden Buff. Winners in my company. Elegant in shape, profusely feathered, as good as the best. Prices low, write me.

B. H. DUNN, Clay Center, Neb.

Glubbing List

By taking the advantage of the following combinations you can get two papers often at the price of one. Look at these offers:

	Regular price	Poultry Investigator.
Poultry Tribune	50c	50c
Poultry Herald	50c	50c
Poultry Gem	25c	35c
Commercial Poultry	50c	50c
Western Poultry News	25c	25c
Poultry Success	50c	40c
Poultry Topics	25c	25c
Poultry Gazette	25c	25c
Nat'l Poultry Journal	50c	50c
Farm Poultry	\$1.00	\$1.00
American Poultry Journal	50c	50c
Feather	50c	50c
Nebraska Farmer	\$1.00	\$1.00

..Just Think of It..

Farmer and Breeder, price.....\$1.00
Any 50c paper you choose above... 50
The Poultry Investigator..... 25

Total\$1.75
We will send the three to you for \$1.00.

Address,

POULTRY INVESTIGATOR.

NOTICE—We do not send samples of other papers.

I. & N. M. Conner, Ponca, Neb., won 3 firsts, 2 seconds, 2 thirds, 3 fourths. Their bird sales were so large this fall that they did not have an early bird left and had not intended showing until a few days before the show. All pullets and cockrels shown were August hatched and cut from two to four points on weight.

A. L. Houston, formerly of Keota, Ia., has removed to Red Oak, Ia., bought a small farm near town and will breed his Orpington and Rock on a large scale. His place will be known as Forest Hill Poultry Farm, and has good range and water. We wish him success in his new venture.

WINNINGS AT INDIANAPOLIS.
DEC. 4-10, 1901.

Winnings of R. E. Jones, Flat Rock, Md., at Indianapolis, Dec. 4-10, 1901:
S. Wyandottes—1st, 4th, cocks; 1st, 3rd and 4th hens; 4th cockerel; 1st and 4th pullets; 2nd pen. Golden Wyandottes, 1st, 2nd and 3rd cocks; 1st, 2nd, 3rd and 4th hens; 1st cockerel; 1st, 2nd and 3rd pullets; 1st and 2nd pens. Black Wyandottes, 1st and 2nd hens; 1st cockerel; 1st and 2nd pullets; 1st pen. G. S. Bantams, 1st cock; 1st and 4th hen; 1st and 2nd cockerels; 1st pullet; 1st pen. S. S. Bantams—2nd cock; 1st and 2nd hen; 1st and 2nd cockerels; 1st and 2nd pullets; 1st pen.

We wish to call the attention of our readers to the ad of J. D. W. Hall of his famous winnings, w. Wyandottes and B. P. Rocks. He has taken several other popular breeds to raise and we are informed that all of his stock is of that high standard that he has won on his W. Wyandottes and B. P. R. in the past.

His great success in the best shows in the United States prove his knowledge of the business. This should insure his customers the best treatment and value for their money. We heartily recommend this form to all buyers. Look up his add on page —, and list of winnings on page —.

R. M. Kellog, Three Rivers, Mich., will send you "Great Crops of Strawberries and How to Grow Them."

This is much more than a catalogue. It is a treatise on plant physiology and shows how the fruit producing organism of a plant may be developed so it will throw its energies to the production of fruit instead of useless runners and foliage.

Fruit growers will appreciate this book and feel thankful to the paper which puts it in their hands.

Kindly look it over carefully and criticize it.

Houdans.

1st pen at Nebraska State Fair 1901, also 1st pen at Lincoln, Nebraska, State Show, 1902. No stock but eggs at \$1.50 per 13.

Reuben H. Kapser,
Clay Center, Neb.

Eggs!**From Line Bred Stock.**

Twelve years experience in mating and breeding. Eggs from fine mated hens \$1.50 per 15, \$2.00 per 30. Eggs from extra fine mated pens \$2.00 per 15, \$3.00 per 30.

A. L. Pedick, box A Ottumwa, Iowa.

—White and Buff Wyandottes.—

Prize Winners—1st Ckl at Elgin, 1st and 2nd Ckl, 2nd pullet, 3rd hen, 2nd pen at Rockford. 1st and 2nd ckl, 1st and 3rd ckl, 2nd hen, 3rd pullet, 1st, 2nd and 3rd pens at Belvidere, Ill. 1902. Orders booked for eggs \$3.00 per 13.

B R LUCAS, Belvidere, Ill

Don't Fool Yourself!

By selecting a poor vegetable cutter. Get an O. K. cuts every thing edible for the table or for the poultry. Send \$2.50 for sample machine. Agents wanted. Address
Dep't. A., O. K. Mfg Co. Florin, Pa.

BUFF ORPINGTONS.

Notstock for sale! Rose Combs, Buff Orpingtons. A few eggs at \$5.00 per 18. Winners at Red Oak and Osceola, Iowa, and Nebraska State Show at Lincoln, Single Combs, eggs, \$3.00 per 13, \$5.00 per 26.

Mrs. J. A. LASH, Osceola, Iowa.

For Sale.

100 choice young birds from winners at Kansas and Nebraska State Shows, 1901. S. S. Hamburgs, Partridge Cochins, Buff Cochins, Light Brahmas and B. P. Rocks. Show record on application. Eggs from choicest matings \$1.50 per setting.

DeWitt Yates, Fairbury, Neb.

O. MO. HUN. DRO.

Breeder of Prize-Winning
IMPERIAL WHITE P, ROCKS,
Stock for sale at all times. Eggs in season.
E. B. OMOHUNDRO, Bowling Green, Mo.

Listen!

—IF YOU WANT—
Barred P. Rock

cockerels, hens or pullets, worth every cent asked, scored or unscored, send me your order and let me prove my promise to please you. Eggs \$1. From all scored stock by Rapp and Heimlich, \$1.50 and \$2. No secrets about these pens. Ask what you want.

Mrs. A. P. Rodgers,
Bowling Green, Mo.

BUFF WYANDOTTES BUFF P. ROCKS . .

Bred from my Boston Omaha, Kansas City, and Topka prize winners. Old and young stock for sale. A large flock to select from. Prices reasonable.

W. J. GOW, Norfolk, Neb.

White Wyandottes.

First and second premiums at Minneapolis, poultry show Dec. 19 o 21. Eggs from birds showing 93, 94, 94, 91, 94, 9½ cockerel 91½, \$1.50 per setting, 2 settings \$2.25. Few birds for sale.

W. H. Swartz, Minneapolis, Kansas.

High Hill . . .

Poultry Yards

Bronze Turkeys and Buff Rocks.

Turkeys are bred from prize winners and are winners, making almost clean sweep wherever shown. Young Toms \$5 each; Pullets, \$3.50 to \$5.00 each. My Rocks are noted for shape and orange colored legs. 90 point to kernels \$2.50 each; 91 to 92½ point Cockerels \$3.00; each Pullet not scored, \$1.00 each.

Mrs. Wm. Rogers, Box 74, Sledd, Mo.

CROWELL'S Buff Orpingtons.

Win at St. Paul Show. Cockerels 1st and 2d, pullets 1st, 2d, 3d, 4th and 5. Hens 1st, and 2d. 1st Pen. Eggs, \$3.00 per 15, \$5.00 per 30. Two trios Indian Runner Ducks at \$5.00 per trio. Eggs \$2.00 per 15. Satisfaction guaranteed.

F. A. Crowell, Granger, Minn.

Silver Lace Wyandottes
White Wyandottes . . .
Buff Leghorns
Pekin Ducks...

All first class stock. Eggs for sale.

MRS. W. E. TIBBITTS,
Imperial, Neb.

Barred Rock Eggs, —For Hatching.—

Fertile eggs and big healthy chicks is what you want. Try mine this year. \$1.50 for 15, \$2.50 for 30, \$3.00 for 45.

A. B. Evans, Heartwell, Neb.

Buff Orpingtons
Bronze Turkeys

We keep nothing but the choicest stock. Eggs for sale. Write for prices.

C. E. BROWNING,
Fairbury, Nebr.

The Republican Valley District Poultry Association

The Republican Valley District Poultry Association has just closed a most successful show. Perhaps the number of birds shown this year was not quite so large as in previous years, but that was to be expected. We are having hard times in this section this winter, and it has in some cases interfered with the size of our show, but it did not interfere with the perfect harmony and good fellowship of the exhibitors, and there was no note of discord when the awards were made known.

During the last hours spent together there was some little discussion of methods by which we might grow and prosper. It struck us that we and many other associations might be benefited by a discussion through one of our favorite magazines. The Investigator, for instance. Now, would it not be nice and instructive if some of the oldest and most successful of our poultry associations were to come forward and tell us by what methods their association was run in peace and harmony for—well, say for twenty years? Wonder if there is an association in the state that has run continuously for that length of time? If there is won't you let us hear from you? Please tell us all about yourselves? What methods made your association the long lived shining success that it is? Tell us of your mistakes, too. You can date them back quite a spell. We would not expect you to tell any that had been lately committed for that might have a bad effect on your organization even after years of success. Of course you will never make more mistakes. We take that for granted, but a review of those you made years and years ago, might steer many a young association clear of disastrous breakers.

Do you think monthly meetings the best plan? Or do you come at a call of the president? How long before the show do you think it best to distribute the premium lists? This question has been much discussed by members of our association, some of our members holding that if the lists were a little old in the hands of their possessors they were quite forgotten before the show. Personally we believe that the premium lists should be distributed a month at least before the show. If any of you disagree with me please explain reasons why. We think that when a breeder receives his lists he or she decides very soon whether their birds are going to that show and we

These beauties

But not so fine as chicks hatched from R. P. Rock and Buff Cockerels that you can buy of Mrs. Kessler. I have a few fine Barred Chicks for sale yet. Write for prices and be pleased.

Mrs. Ida M. Kessler,
Woburn, Ill.

Nebraska Queen.

First Prize Hen. Weight 9 lbs.

Highest score any B. P. Rock at the late State Show Judge Myers said she was the best one he had seen this year. I won 8 regular premiums at the above show. 20 years a breeder of this variety exclusively. Write your wants. Address

F. C. HINMAN, Friend, Nebraska.

Barred Plymouth Rocks.

We have Quality and Quantity.

Farm raised prize winning stock. Eggs \$1.50 per 15, \$5.00 per 100.

H. B. LOUDEN, Clay Center, Nebr.

Single Comb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

Cora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS,
Ogden, Utah.

RINGLET B. ROCKS

The Kind that Wins! We Double Mate.

Ben Hur, 1st cockerel at Lincoln Show 1602, at head of our cockerel breeding pen. No females in our pullet breeding pen scoring less than 90, mated to extra choice pullet breeders. Stock all sold, eggs reasonable. Write for prices.

C. M. Hurlburt, Fairbury, Neb.

Black Langshans---

Tho winter layers, of standard weights, good colored plumage and eyes, well feathered shanks no scrub among them. Score 93 to 97. Eggs \$2.00 per 15.

C. M. Hurlburt, Fairbury, Neb.

Mammoth Bronze Turkeys!

None under weight—scores 93 to 97. 1st and 3rd pullet at Lincoln, also 2d cockerel weight—31 pounds. Write for prices on eggs.

C. M. Hurlburt, Fairbury, Neb.

Please Let Me Tell You

My Buff Cochins have again won their share of the ribbons at the Muckook Show. To make room for my breeding pens I will sell trios, pens and singles at bargain for the next 30 days. Also a few R C B Leghorns. Eggs in season.

Mrs. Ida Bard, Imperial, Nebraska.

White Holland Turkeys and Embden Geese.

Des Moines, Ia. Prize Winners.

W. P. Rocks and W. Wyandottes scoring 92 to 95½ points for sale. Eggs for hatching from above stock, also W. Cochins, W. I. Game and W. Guineas. Guinea Pigs for sale. Write for particulars and mention Poultry Investigator.

White Plume Poultry Yards.

Mr. and Mrs. H. E. CLARK, Dallas Center, Iowa.

SILVER WYANDOTTES

MY BIRDS have been on exhibition at the last eight State Shows and many other large shows, winning more premiums than all other competitors of this variety combined. Good birds for sale. Eggs from prize pens 15 for \$3. 20, \$5. From standard bred stock, farm range, 100, \$4.

Mrs J. W. GAUSE, Emporia, Kan.

BUFF COCHINS.

1st ekl score 94½. 1st hen 91½. at Nebraska State Show at Lincoln. Eggs \$3.00 per 15. Breeders also of Short Horn cattle and Durco Jersey swine. C. K. DAVIS, Prop.

W. J. MITCHELL, Poultry Manager, Columbus, Nebr.

believe it may take some preparation and change of plans to take in that particular show, and it is a pretty good idea to give the breeders time to arrange matters. If the breeder makes up his or her mind to go to a show while the premium list is fresh in hand, there will be no forgetting the date even if the list is mislaid. Now these are our reasons for believing in an early distribution of premium lists.

In the first years of the existence of the R. V. D. P. association some of the members thought it the fair thing that every bird exhibited should have been raised by the exhibitor. As a matter of fact a great many birds exhibited at our first show were bought at long figures out of the Nebraska state show. We bought some ourselves at figures that made our neighbors question our sanity. Then we that bought the birds we exhibited brought our birds that we raised in by the back door and had them scored and in many instances found that we owned birds quite as good as those purchased at the state show.

After the first show we were none of us particular to have our show held after the state show. We had learned the lesson, some of them, that novices must learn and now we all want to get through with our show in time to attend the state show, if our birds score high enough. There is a whole delegation of us expect to go and make it warm for the old exhibitors next winter, too. Look out for us.

Finances is a subject that would bear some discussion, we think. Our association never has much money left after all the show expenses are paid, consequently we all quake in our boots before every show lest we come out behind this time, and have to dive into the immense incomes we make off our poultry business to pay up what we run behind, but a day or two after the show we are all reassured by the secretary that our incomes are safe. The show paid out. Nevertheless we shall probably discuss the giving of halls and suppers in order that no more such menaces to our private fortunes need exist.

Now ye twenty-year-old associations, come forward and tell us how you keep your coffers brimful?

Now lastly as old fashioned preachers say, how is a secretary to manage to come forth unspotted before his association? We have special reasons for wanting this last question answered because we know a new one that has done some fault-finding with past secretary that may find the coming task not so funny.

HATTIE BYFIELD.

It is next to impossible to raise poultry, even a small flock on a city lot to say nothing of a large flock on a poultry farm or plant, without the aid of a trained

Fox Terrier Dog.

Our dogs are taught to parole the place night and day. Write, Nevada Foxterrier Kennels, Nevada, Mo.
Males \$10.00; females \$5.00.

Buff Orpingtons, Barred Rocks, S. C. W. Leghorns, W. Wyandottes.

Before buying anything, write to us. It will be a pleasure to give you our prices. We respond promptly. Bargains if taken soon.

KING & KING, Fairbury, Neb.

Golden & Silver Seabight Bantams!

Eggs. Golden, \$1.50 per 15. Silvers, \$2.00 per 15. Par. Cochins, \$2. per 13. Price of pigeons on application. 8 varieties for sale. Address

W. F. HOLCOMB, Clay Center, Neb.

Poultry Investigator one year with each order.

Olentangy :: Poultry Yards

Delaware, :: :: :: Ohio.

Reed Bros, Props. C. C. Reed, Mgr.

Rose Comb R. I. Reds. C. I. Games. Barrd P. Rocks. Buff C. Cochins. Eggs \$2.00 per 15. Satisfactory hatch guaranteed. No birds in breeding pens scoring less than 91 points. Send for circulars.

My Buff Rocks

Won at Madison Square Garden this season; at Boston and other great shows past seasons. Stock and Eggs for sale. Write for Circular and Show record.

MILES H. LOUER, Box M. East Onondaga, N. Y.

Now Ready..

Young stock for sale at the Golden Rule Poultry Yards. Pullets and Cockerels of pure Empire White Plymouth Rocks, that are white. White Wyandotte Cockerels, sired by male direct from Duston, and hatched from a pen of "Duston" hens. Also a few W. P. R. hens and one male yet for sale, at a bargain. Write for price and description of stock.

MRS. MATTIE WEBSTER, BELMONT, WIS.

MY MAMMOTH PEKIN DUCKS

Are holding their own throughout the west. Have always won highest honors at Great St. Louis Fair and Poultry Show; also in the hands of my customers. A few elegant Buff Rox at half real value.

OTTO STOECKER, Box 18, Manchester, Mo

Have you seen it?

The Fanciers' World

America's leading publication for fanciers. Special departments for dogs, cats, pigeons, hares, poultry, etc. 32 pages. Profusely illustrated. Per year, 50 cents. Sample copy free.

The Fanciers' World

F. M. Simmonds, Jr. Publisher, Chicago, Ill.

Why Buy Stock and Poultry Foods?

Make your Own! I can send you formulas for all kinds of stock and poultry foods. Here are a few: Chick food 35c; egg food 35c; poultry condition powder, 45c; stock condition powder, 35c; hog condition powder, 30c. Write for others.

A. W. Collins,

630 Grand Ave. Keokuk, Ia.

Black Langshans

Large, vigorous stock, free from disqualification: up to standard weight; winners at Clay County Show. A fine lot of Chks. for sale. Prices reasonable. Eggs for sale in season. Address,

MRS. N. W. JOHNSON, Clay Center, Neb.

"Twenty-Five Years in the Poultry Yard."

A perfect Manual for Success. Gives symptoms and remedies for all diseases. Gapes, Roup, Hog and Poultry cholera. 108 pages. Price 25 cents.

A. H. LANG, Covedale, Ky.

Trees and Plants

That Grow and Bear Fine Fruit.

We grow that kind. Largest stock. Honest dealing. Low prices. We pay freight. Budded Peach-trees 6c.; Grafted Apples 5c.; Concord Grapes 3c.; Russ. Mulberries 30c. per 100; Ash 75c. per 1000; Black Locust \$1.35 per 1000. English or German Illustrated Catalogues FREE.

CARL SONDEREGGER, Proprietor, Box 27, Beatrice, Neb.

Buff Orpingtons AND White Wyandottes

No better Stock
Raised.

I never have failed to win in largest shows. Birds score from 90 to 95%.

C. ROCKHILL,
Harvard, Nebraska.

Standard Weight Is Most Desirable

Written for Poultry Investigator by
Judge O. P. Green, Bourbon, Ind.

I find a number of people who think that it is wrong for a judge to cut for deficiency in weight. The opinion is advanced more of ten in regard to private scoring. They reason that if a bird is one or two pounds under standard weight, in time it will develop and attain the correct weight. Those who reason in this manner are wrong, for it is usually the late hatched fowls which are not of correct weight and the chances are that they never will reach the right weight.

From my point of view, there is one part of the standard which should be changed, or at the very least, should receive careful thought. The standard says that when standard specimens are equal in their scores, the heavier one shall be awarded the prize. Now if nine and one-half pounds is the proper and standard weight for a Plymouth Rock cock, the bird which has a weight nearest to the above standard should be given the preference. If the standard makes a certain weight the correct one, I believe in standing by it and not offering a premium for a heavier weight.

Such a premium encourages people to work and breed for birds of more weight than required by the standard and in consequence are very liable to lack in quality, egg production and general utility.

The Plymouth Rock in many yards has been bred for large size to the depreciation of other desirable qualities. It has been the plump body and medium size that have added so much to the popularity of this variety. As they are being bred so much with seeming disregard for these admirable qualities, there are many people who have discarded the Plymouth Rock to raise the Wyandot, believing that it will prove more satisfactory in size and weight.

If a certain weight receives the approval of the A. P. A. and is required by the standard, it behooves every breeder and judge to try to secure that weight. If a deficiency is wrong, an excess should not be viewed with especial favor.

Early hatched birds the best, the more vigorous and more prolific. Such birds will have their full weight in time for exhibition at the winter shows and should be cut for weight if they are lacking in that particular, for it is almost a fact that an early hatched bird which lacks in weight at a January show will always lack in weight unless

Our Barred and White Rocks.

Are successful show birds and excellent for market. Our S. C. W. Leghorns are winners in strongest competition and great layers of large white eggs. Incubator eggs \$5.00 per 100. Eggs \$2.00 per 15.

J. N. Krauter, Bucyrus, Ohio.

If you want . . .

Belgian Hares

Call on or write to

OLD ORCHARD RABBITRY,
Old Orchard, Mo.

Or 2003 Clark, Ave., St. Louis, Mo.,

WM. C. STEINICKE, Mgr.
100 Hares to choose from.

Black
Buff
White

Pekin Bantams

—As Good as the Land can Afford—
—Eggs \$3.00 per 13.—

A. J. WILLIAMS,
Clay Center, Nebr.

Black Langshans. . . .

1st ckl, 1st hen, Nebr., State Show 1901. 1st pen. 1st ck, 1st ckl, 1st and 2d pullet Nebr. State Fair, 1901. 1st pen. 1st and 3rd pullet, 2nd ck, 2nd ckl. Nebr. State Poultry Show at Lincoln, 1902. Eggs \$2.00 per 13.

JA Johnson, Holdrege, Nebr.

BUFF WYANDOTTES!

1st, ck, 1st, ckl, 2d, and 3d, hens 3d, pullet. PARTRIDGE WYANDOTTES, 3d, pullet, 3d, ckl at Nebr. State Show. Light Brahmas. Eggs \$2.50 per 15.

E B DAY, North Bnd, Nebr.

Just a Moment Please!

Now is the time to book your orders and Wm. KERSENBROCK has prize winning birds of Barred and Buff P. Rocks, Partridge and Buff Cochins, Silver Laced and White Wyandottes and Cornish I. Games.

Wm J Kersensbrock, Columbus, Neb.

Rose Comb White Leghorns!

Made a clean sweep at Mitchell winning 5 firsts, 5 seconds, 4 thirds, and 4 specials, birds scoring to 92. At three shows in last two years won 11 firsts, 6 seconds, 6 thirds and specials. Cock-erels for sale. Eggs \$1.50 per setting

J. F. Reinelt, - - Tripp, S. Dakota
—Vice-President State Association,—

White Leghorns.

Incubator eggs from flock \$5.00 per 100. From choice matings \$1.50 per 13. \$2.50 per 26. LAYERS and WINNERS. Scottish Terrier puppies \$3.00 and \$5.00

PRACTICAL POULTRY FARM,

R. R. French, Mgr. Box 47, Ford City, Mo.

Buff Orpingtons and Cochins.

Bred from my own
Importations.

I won more premiums than any other two exhibitors at the Nebraska State Show, 1901. Before buying anything write me—it will be a pleasure to give you prices.

Ida J. Buehler, Kenesaw, Nebraska.

Barred Plymouth Rocks. EXCLUSIVELY.

Cockerels \$1.00, \$3.00 and \$5.00 each. Pullets, \$1.00, \$2.00, \$3.00. Worth double what I am asking for them. Above prices good for January only.

W. S. RUSSELL,
Box 1, Ottumwa, Iowa.

Blue Barred Plymouth Rocks

Eggs \$1.50 per 15, \$3.00 per 50, \$5.00 per 100. Our stock is first class.

P. J. SCHWAB, Clay Center, Nebr

My ..
Buff Orpingtons
Have no equal
B. Plymouth Rocks
(Thompson Ringlets.)
If you want good stock I have it

JOHN A. LING,
Harvard - - Nebraska

White P. Rocks Exclusively....

My Rocks are of the best strains to be found and I have a fine lot of chicks to sell reasonable. Write,

MRS. NANCY WATSON,
Lincoln, Nebr.

W. A. Forbes. Breeder of Buff and White Wyandottes. For the past four years I have won the majority of the best premiums in all classes, 22 1st, 10 2nd, 9 3rd and 5 specials. I am booking orders now for a limited no. of eggs from these prize matings for \$2.00 per setting, 2 settings \$3.50, 3 settings \$5.00.

North Topeka, Kan,

Years of Experience

Has brought me the very best of Barred Plymouth Rocks to be found anywhere and from my different yards I have selected 5 pullets scored 93 and 8 which scored 92½ and from this yard I wish to sell a limited number of settings of eggs at 3.00 per setting. All eggs sold will be from my yard and from these birds exclusive 1y. I have a few pullets scoring from 90 to 91½ also a few cockerels which I will sell at prices that are right. All eggs and birds sold by me will be as represented or money refunded

Wm. Metzmer, Independence, Ia.

it is the fault of the breeder, and in that case no allowance should be made for his carelessness.

Late hatching ought not to be encouraged, and this what a judge does if he refuses to cut for deficiency in weight. There are and always will be many careless breeders and it is against the results which they secure that the careful breeder must be guarded. Because one man through neglect has raised chickens which fall short in weight, the other exhibitors should not be compelled to suffer on his account.

CYPHERS INCUBATOR CATALOGUE FOR 1902.

All who have seen a copy of the magnificent catalogue issued a year ago by the Cyphers Incubator Company will be interested to learn that this company's catalogue for 1902 is now ready for mailing and is a distinct improvement over their great book of last year.

This new and complete catalogue consists of 196 pages and cover is 8x11 inches in size and weighs over one pound. It contains a complete description of the Cyphers patent-diaphragm, non-moisture, self-ventilating incubators, with fine color plate reproductions of all sizes of the Cyphers incubators. It contains also an illustrated description of the Cyphers apartment brooders, and the full line of poultry appliances manufactured by this company. In it will be found beautiful half-tone pictures of over 200 of the largest and best known poultry plants of America, Canada and Europe where the Cyphers incubators are in use.

The Cyphers Incubator Company is now completely installed in its great factory at Buffalo, N. Y. The company is now completely installed in its great factory at Buffalo, N. Y. The company also has offices and sales-rooms in Chicago, Boston and New York City, and is in a position therefore to serve customers to advantage in all parts of the country at a saving of time and money in shipping by freight.

All who are interested in the latest developments in incubator and brooder manufacture should secure a copy of the Cyphers Incubator Company's complete catalogue for 1902. See advertisement elsewhere in this paper.

L. G. French, of Deep Water, Iowa., sends in an ad. this month. Mr. French is a reliable breeder, and his stock is known far and near. Anybody wanting anything in his sale will please look up the advertisement.

Ohio's Whitest White Rocks.

Winners wherever shown the past 10 year, scoring 94 to 96 points. Also Open Laced Wyandottes and Black Minorcas. Eggs \$1.50 per setting.

Mrs. Ella Pace, Columbus, Ohio.
(Station A, Route 2.)

BUFF COCHIN BANTAMS

Exclusively. Scoring 92 to 95 points. Won at the great Co mmbus Show 1901-2, and Ohio State Exposition 1901. Stock for sale. Eggs \$1.50 per fifteen.

D. A. JONES, Columbus, O.

LIGHT BRAHMAS. White and B Rocks. White and Silver Laced Wyandottes. White and Brown Leghorns. Pekin Ducks. America's best strains. My stock has won 200 premiums in the past three years at the great Columbus show, Newark and the Ohio State Exposition. Stock for sale at all times. Eggs \$1.50 per dozen.

Red Oak Poultry Farm, J. C. UNDERWOOD, Prop.
Sta B, Columbus, Ohio,

BRIGEL'S Celebrated Strains

Barred Rocks. Makes scoring as high as 94½ and females as high as 94½ under such judges as Bridger, Lane, Jones, have won 1st prizes at such shows as the great Columbus show, Newark, and the Ohio State Exposition. Stock for sale at all times. Eggs \$3.50 per 15, the kind that win.

F. A. BRIGEL, Columbus Ohio.

FOR SALE! Light Brahmas.

Felch Strain. None better. Eggs from stock scoring 92 to 93½, \$1.50 per 15. White Wyandotte eggs \$1.25 per 15.

Albert Von Bergen, Humphrey, Neb

White Plymouth Rocks.

Scored by Rhodes from 92½ to 94. Owens & Canfield's strain, "Stay White." Eggs \$1.50 per 15.

Wm. Randolph,
Lawrence, Kansas. R. D. No. 1.

Pure Bred Poultry.

**DARK BRAHMAS
SILVER WYANDOTTES
BUFF WYANDOTTES**

Stock and eggs for sale. Write.

M. D. KING, Minden, Neb.

BARRED PLYMOUTH ROCKS

WINNERS Nov. 26th, 30th, 1901—194 **FOR PAST SIX YEARS** B. P. Rocks in class at Red Oak, Ia., won 1st Cock, 1st Hen, 2d Pullet, 2d Cockerel, 1st Pen.

At Osceola, Ia., Dec. 3d-6th, won 1st Cockerel, 1st Pullet, 1st Hen, 1st Pen. Two hundred choice breeding and exhibition birds for sale.

H. R. McLean,
Red Oak, - - Iowa

BUSINESS CATCHERS

SUNNY SLOPE FRUIT AND POULTRY FARM, C. F. Austin, Dearing, Kan. White Rock Specialist. Eggs. Frank Heck and John Hughes strains. 15 cockerels for sale. Strawberry plants, best varieties. Square treatment.

PARTHURGE COCHINS a specialty. The cream at Chicago and Cedar Rapids, 1901, 150 youngsters for sale after October 1st, finer than ever, superior feathering, shape and color. Always satisfaction guaranteed. W. J. Shanklin, Wanbeck, Iowa.

WHITE WYANDOTTES, cockerels scoring to 94½. Mammoth Bronze Turkeys scoring to 96½ sired by a Tom weighing 40 lbs and from hens weighing to 25 lbs. Prices reasonable. W. H. Lake, Hampton, Nebr.

LIGHT BRAHMAS. Special bargains. Three trios at \$5.00 per trio. Choice cockerels at one half their value, several bred from Boston prize winners. G. W. Hardin, Ulysses, Neb.

CORNISH INDIANS a specialty. Winners wherever shown. Scored by Russell, Hewes, Emery and Wale. Pronounce first class birds. Eggs in season \$2.00 for 15. J. L. Bannison, Sarcoxie, Mo.

WHITE WYANDOTTES exclusively. The kind that are egg layers. Scoring 91 to 94½. Duston strain. Eggs 2.00 for 15 or 3.50 for 30. Mrs. D. J. Fink, Holdrege, Neb.

MAMMOTH BRONZE turkey and white Pekin duck. Large fine specimens for sale at reasonable prices. Our stock is as good as money could procure. Mrs. E. L. Matthews, Morning Sun, Iowa.

EGGS from Single Comb White, Brown, Buff, Black, Dominique, Silver Duckwing and Rose Comb White Buff and Brown Leghorns. Price list free. Sylvester Shirley, Port Clinton, Ohio.

500 BUFF, BARRED, White Plymouth Rocks, Light Brahmas, Fine cockerels, hens and pullets \$2 to \$3 each. Eggs 25, 50 or 100, 75, 100. Milton Brown, box 94, Middleboro, Mass.

FOR SALE a \$12 Humphrey Bone Cutter, nearly new for \$8. Also a Buff Orpington cockerel, weighs 9 pounds; will make an excellent breeder. Price \$5.00. Louis Mogensen, Kadzie, Wis.

WHITE PLYMOUTH ROCKS exclusively. A few choice cockerels for sale; took 1st and 2nd premium at S. O. S. poultry show. Write for prices. J. W. Matson, Stromsburg, Nebr. Route No. 2.

WHITE H. TURKEYS, J. W. Rock ck., score 94½ by Russell, for sale. Also eggs from D. Brahmas Brown Leghorn, B. Pekin and Game Bantams. Expert Judge. F. M. Cooley, Milton, Ia.

PEACH GROVE POULTRY FARM. I have a few fine Black Langshan Cockerels for sale cheap if taken soon. Mrs. J. W. Stratton, Blue Hill, Neb.

WHITE WYANDOTTES. Duston and Norval strains direct. Score 92 to 94 by Judge Kropf. Quality and fair treatment guaranteed. Best winter layers. Eggs 2.00 per 15. Belgian hares. Chas. C. Wilson, Holdrege, Nebraska.

O. K. S. L. WYANDOTTES are all right. Eggs \$4.00 per 15 or \$4.00 per 100. W. T. Canaday, Dover, Lee county, Iowa.

BARRED PLYMOUTH ROCKS exclusively. Eggs \$4.00 for 100, \$1.00 for 15. Adam A. Weir, Clay Center, Nebr.

It Brings More Eggs

Get a **DANDY** Green Bone Cutter and double your egg yield. Our new catalogue tells all about feeding green bone, and the best machine for cutting it.

Sold Direct **PRICE, \$5**
on 50 days' trial, and up
Stratton Mfg. Co., Box 48, Erie, Pa.

Fresh Opportunities

follow the purchase of a Victor incubator. That is the testimony of thousands of successful poultry raisers who will have no other machine. Absolutely self-explaining, and the simplest, surest, most durable butcher ever made. Guaranteed positively as represented or money refunded. The

VICTOR Incubator

is scientifically correct, mechanically perfect—solid and enduring. Catalogue telling how to get increased results from almost any machine, for 6 cents.

Geo. Ertel Co., Quincy, Ill.

California Redwood

has been used for twenty-three years in the manufacture of

Petaluma

Incubators and Brooders

because we have found it superior to all other kinds. Several other incubator makers are giving their testimony to our good judgment by advertising to also use California Redwood. It is not only true that Petaluma Incubators and Brooders are made of the best lumber in the world, but every other article used in their construction is of the highest grade, and therefore these "Standard of the World" Incubators and Brooders occupy the same relative position to all other Incubators and Brooders that the mighty California Redwoods do to other trees.

Read "A Bit of Incubator History," in our new catalogue. We send it free. Address nearest office.

Petaluma Incubator Co.,

Box 58, Petaluma, Cal., or

Box 58, Indianapolis, Ind.

FROM
**BIG
TREES**
TO
**PETALUMA
INCUBATORS**

On the edge of
Yosemite Valley, California.

Barred P. Rocks.

Hawkin's Strain!

I breed them by the Trap nest system. Eggs that will hatch First Prize winners, \$2.00 per 13, \$5.00 per 40. Send an order.

GEO. H. WALLACE

Box A. Navan, Minn.

LIGHT BRAHMAS.

Prize-winning stock, first prize at the Great St. Louis Fair. Of four entries at Kansas City, Mo., won 1 first, 2 seconds, 1 third. 4 prizes at Kansas State Show. Stock and eggs for sale. Write us

STECKER BROS.,

4639. Cottage Ave., St. Louis. Mo

Eggs From prize winning Golden Wyandottes, \$2. per 13, scoring from 90 to 93½, by Shellenberger.

J. Gardinier, Keota, Ill.

Silver Laced Wyandottes.

Eggs for hatching. \$3.00 per 26 pure bred. Price for 2 pullets \$4. Fine scoring

Albert Lisius, Lake Mills, Mo.

I Sell You

Barred Rocks at one cent on the dollar.

By selling you chicks just out of the shell from stock the sire of which cost \$50.00, the dam, \$10.00, total \$60.00. You get chicks for 60 cents each—thus one cent on the dollar. W. P. R ducks at 50 cents each. This is the best chance in the world to start with good solid foundation of pure bred eastern stock. We ship lots of 10 or more and guarantee safe arrival 1,500 miles. Hatching all the time. Order in advance. Cash with order.

PARTINGTON, Northboro, Mass.

White Minorcas, Barred Plymouth Rocks, Golden and White Wyandottes and Buff Cochins Bantam Cockerels.

I have cockerels in the above named varieties for sale and eggs in season. (Score cards with cockerels). The Wyandottes are Dustin & Keller strains direct. B. P. Rocks are Elliotts.

Yours Respectfully,

Pine Lawn Poultry Farm.

L. D. Metcalf, Prop'r.

Wakefield - Nohr.

Single Comb White Leghorns.

Eggs for hatching from the cream of my flock, as I have the advantage of selecting my breeders from among seven hundred choice birds all bred and owned by myself.... Nothing but the very best specimens of most prolific layers are ever used. Descendant from generations of great layers of large pure white eggs. Write at once, for circulars.....

E. A. TEDSALL,

Slater, Story Co, Iowa

P stands for P uritan; pure and the best,
U stands for U sage, this stands the test.
R stands for R ation, balanced and true,
I stands for I ncome, doubled for you,
T stands for T ouble, a thing of the past.
A stands for A ctive smart chicks that will last.
N stands for N ature whose laws are observed.

C stands for C hickens their health is preserved.
H stands for H appy young P. C. F. chicken.
I stands for I llness which plays them no tricks
C stands for C ostly when losses ensue
K stands for K eeping these losses from you.

F stands for F olly when boiled eggs are fed.
O stands for O ld when some are not dead.
O stands for O rders, in volume they grow,
D stands for D rop up a line as below.

The line should be dropped to

The Puritan Poultry Farms, Inc.

For their superb and immense catalogue giving full details of this remarkable food and illustrating the

World's Largest Poultry Plant

In all its details, also showing which are the best incubators and Brooders now in use. It is absolutely free to everybody. Write today.

Puritan Poultry Farm, Inc.

Box 357. Stamford, Conn.

Meyer's Langshans

Won At Kansas State Show

So good ones to sell.

1st and 2nd cock; 1st and 4th hens; 1st 2nd and 4th cockerels; 1st 2nd and 3rd pullets; 1st pen. Score 189½. Rhodes and Harris, judges. At N. E. Mo. show in a class of 82 Langshans all good ones, tied 1st cock, won 2nd and 3rd; tied 1st hen; won 2nd and 3rd; 2nd cockerel; 2nd pen and tied 3rd; pullet. Eggs \$2.00 per 15, \$3.50 for 30, \$5.00 for 45, from winners. Records of other big winnings in catalogue.

L. E. Meyers,

Bowling Green, Missouri

W. J. Cheney,

Breeder of
Thoroughbred Poultry.
BOX 68-CUBA, MO

Varities.—B. P. Rocks, Light Brahmas, W. Wyandottes, Partridge Cochins, S. C. B. Minorcas, S. C. W. Leghorns, S. and R. C. B. Leghorns, Pekin Ducks. Eggs for hatching, \$1.00 per setting, \$3.00 for 50.

Write for my new illustrated poultry catalogue. Describes leading varieties of thoroughbred poultry, quotes prices on eggs and fowls. Tells you all about The Cheney Poultry Farm. Catalogues free.

W. J. CHENEY.

BOX 68-CUBA, MO

\$5.00

Buys 100 eggs, \$1.25 one setting, \$2.00, ten Bronze Turkey eggs at
CLEN RAVEN EGG FARM, Home of the all-year-round layers, Brown Leghorns, White Leghorns, Barred Rock, White Rock and Black Minorca. High scoring exhibition stock. Fowls for sale. Circular free. Mention INVESTIGATOR.

Write **E. W. GEER, Farmington, Mo.**

From Those Who Use The SURE HATCH Incubator.

C. C. Fitzsimmons, Wann, I. T.—Oct. 31, 1901.—I can recommend the Sure Hatch to everyone who wants a machine that can be depended upon in every instance. I have used two other makes of incubators, machines that are advertised as first-class incubators, but they couldn't come up to the Sure Hatch. The Sure Hatch only required about one-third the care that the other two did. My first hatch with the Sure Hatch more than paid for the machine. I commenced hatching in December and made six hatches in all; the last one was in May. Of the first hatch I sold 75 at 45c a piece, and kept 30 pullets and they have been laying since the 20th of May and show no signs of letting up. I am going to start my incubator again the 1st of December and keep it going until June.

Mrs. Geo. A. Eby, Howard, Kan.—Nov. 4, 1901.—The Sure Hatch is all that you claim for it. We had one hatch during the hottest weather of 182 chicks out of 197 eggs. Whenever we want another machine it will have to be the Sure Hatch.

O. O. Epley, Jefferson, Ore.—Oct. 28, 1901.—My faith is strong in the Sure Hatch. I believe it to be the best incubator on the market. All praise belongs to an incubator that can hatch and will hatch, and that incubator is the Sure Hatch.

J. Fletcher, Rutherford, Tenn.—Nov. 5, 1901.—We have given the Sure Hatch another name—the Hen Beater. We are always ready and anxious to say a good word for these machines.

W. P. Ames, Foster, Ia.—Oct. 21, 1901.—To say that I am pleased with the Sure Hatch would be putting it mild, and the Sure Hatch Company have my thanks and best wishes for success for the kind and courteous treatment tendered me.

Mrs. R. E. Chaplin, Navajoe, Okla.—Nov. 4, 1901.—We had two Sure Hatch machines in Nebraska, but sold them when we came here. We hope to order another before long. How I did wish for my Sure Hatch incubator this spring! Setting hens are so unsatisfactory.

M. L. Carpenter, Ellis, Neb.—Oct. 16, 1901.—It affords me great pleasure in recommending your machine to any one who wants to raise poultry. We never raised any poultry to amount to anything but this year my wife sent and got a 100 egg incubator of you and she has simply covered the place with chickens, and she has sold more than enough to pay for the incubator, besides, we have had all the chicken we wanted to eat, and I consider that a whole lot.

Mrs. C. W. Chasey, Pleasant Mound, Ill.—Nov. 6, 1901.—We cannot say too much for the Sure Hatch. From 107 eggs we got 105 lively chicks; from 97 eggs we got 93 chicks, and from 88 eggs we got 83 chicks. We would like your new catalogue. We are always pleased to get anything from the Sure Hatch.

Mrs. Otho Bell, Larned, Kan.—Nov. 1, 1901.—The Sure Hatch is O. K. I always take pleasure in recommending it to my neighbors. One of my neighbors who didn't believe in incubators tried to beat me with hens. She had over 200 hens, while I had 50 and my incubator, but I came out ahead about 200 chicks.

Fay Branscombe, Marysville, Kan.—Nov. 13, 1901.—We are perfectly satisfied with our incubator and brooder. Last April when it was so rainy and no sunshine for two weeks we saved 85 chicks out of 87 by using the Common Sense brooder.

Earl Brown, Lyons, Neb.—Nov. 10, 1901.—We have had splendid success with our incubator and brooder. We do not think the Common Sense brooder can be beat for raising young chicks.

W. B. Bishop, Cleburne, Tex.—Oct. 30, 1901.—We made four hatches last spring which averaged 83 per cent. We considered them very satisfactory.

Mrs. Julius Franz, Pipestone, Minn.—Nov. 10, 1901.—I have one of your machines and am well pleased with it; we hatched 96 chicks from 102 eggs.

Mrs. S. E. Froman, Staplehurst, Neb.—Nov. 4, 1901.—The Sure Hatch is all right and no mistake about that. Our last hatch was 100 chicks from 112 eggs.

Ella E. Selleck, Woodbine, Ia.—Jan. 28, 1902.—I received my incubator in good condition and have made two big hatches. I am always ready to speak of its merits.

For free 160 page catalogue describing SURE HATCH Incubator, address the nearest office...
NEW YORK
1901-1902

Sure Hatch Incubator Co

Clay Center, Neb.

-Or-

Columbus, O.

Why Do You Suppose

The best known and most successful
Poultrymen of America use and swear by ☆ ☆

The Cyphers Incubator.

It is not because the Cyphers is the cheapest in price, nor because they love the manufacturers. Then why is it?

Unquestionably it is because the poultry business has developed until now experienced poultry raisers understand that to be successful they must be supplied with an incubator that will bring forth a robust chick from every hatchable egg. The CYPHERS was designed to meet this demand and we have not felt justified in cutting down the quality of our goods to meet the prices of cheaper machines. A first-class article in any line of manufacture commands a fair price and when quality and results are well considered, the CYPHERS is today the cheapest machine on the market.

Big Plants and Big Men.

Here is a partial list of the great poultry plants of America, and of the leading poultrymen who use the Cyphers and pronounce it the best on the market.

Some of the Big Plants.

Forest Lake Poultry Farm, Brown's Mills, N. J.—use 82 largest size.
Meadow Brook Farm, Dallas, Pa.—use 50 largest size.
Spring Lake Poultry Farm, Harrisburg, Pa.—use 48 largest size.
Oxford Poultry Farm, Oxford, Pa.—use 46 largest size.
Sussex Poultry Farm, Newton, N. J.—use 30 largest size.
White Leghorn Poultry Yards, Waterville, N. Y.—use 10 largest size.
Weber Bros., Wrentham Mass.—use 10

largest size.
Wildwood Poultry Farm, St. Louis, Mo.—use 30 incubators and brooders.
Grosse Isle Duck Ranch, Grosse Isle, Mich.—use 28 largest size.
House Rock Poultry Farm, Wollaston, Mass.—use 23 largest size.
J F. Stocking & Co., Montvale, N. J.—use 21 largest size.
Millville Poultry Farm, Millville, N. J.—use 20 largest size.
Hudson River Poultry Farm, Poughkeepsie, N. Y.—use 20 largest size.
Willowcrest Poultry Yards, Goshen, N. Y.—use 10 largest size.

H. Fell Poultry Farm, Sewell, N. J.—use 20 of the largest size.
Ernest Sommerfield, Grunberg, Schl. Germany,—use 15 largest size.
The May R. Poultry Plant, Connorsville, Ind.—use 12 largest size.
Fisher's Island Farm, Fisher's Island, N. Y.—use 12 largest size.
Messrs High Bros. Blackpool, Lancashire, England.—use 10 largest size.
Rateman Poultry Farm, Wellston, St. Louis Co., Mo.—use 10 largest size.

And scores of others who use 5 to 10 Cypher Incubators.

Some of the Big Men.

A. C. Hawkins, Lancaster, Mass.
Arthur G. Duston, Marlboro, Mass.
Knapp Bros, Fabius, N. Y.
E. B. Thompson, Amenia, N. Y.
Bradley Bros., Lee, Mass.
Samuel Cushman, Bristol, R. I.
C. S. Wetmore, Lockport, N. Y.
M. F. Norris, Lexington, Ky.
E. S. Nicholson, Cambridge, N. Y.
Willis J. Storke, Groton, N. M.

Philander Williams, Taunton, Mass.
H. J. Blanchard, Groton, N. Y.
J. W. Shaw, Brocton, Mass.
W. S. Russell, Ottumwa, Ia.
Geo. W. Mitchell, Bristol, Conn.
W. P. Gibson, W. Alexander, Pa.
Henry Steinsmesch, St. Louis, Mo.
P. H. Gossard, Mo. Valley, Ia.
W. H. Bushell, David City, Nebr.
F. W. Richardson, Hicksville, O.
W. H. Overbaugh, Hanover, Pa.

Aug. D. Arnold, Dillsburg, Pa.
M. B. Gardner, Philadelphia, Pa.
C. F. A. Smith, Waltham, Mass.
O. E. Skinner, Columbus, Ohio.
J. H. Jackson, Hudson, Mass.
Dr. O. Bennett, Mason, Ill.
U. R. Fishel, Hope, Ind.
L. C. Piser, Shushan, N. Y.
Sharpe Butterfield, London, Ont.

—And hundreds of others —

Remember that the Patent-Diaphragm, Non-Moisture, Self-Ventilating and Self Regulating CYPHERS INCUBATOR is now used on no less than 26 Government Experiment Farms in the United States, Canada Australia and New Zealand, where the professors of agriculture and poultry experts use them to demonstrate to their annual poultry classes the scientific principles of artificial incubation; note their fac-simile letters of endorsement on pages 65-83 of complete catalogue. Furthermore the CYPHERS is by far the best incubator for the beginner, for the amateur. See the hundreds of specimens of testimonials in complete catalogue, particularly on pages 165-180 inclusive.

Each and every CYPHERS INCUBATOR is sold with the distinct understanding that it will do satisfactory work in the hands of the purchaser, or it can be returned in 90 days and money will be refunded.

Elegant 180-page (8x11 inches in size) complete catalogue for 1902, containing over 200 half-tone reproductions of photographs of the largest and best managed poultry plants in the world, sent postpaid to any address for 10 cents in silver or stamps. Ask for Book 122 and address nearest office.

Cyphers Incubator Co.,

Buffalo, N. Y.

Chicago, Ill.

Boston, Mass.

New York, N. Y.

Cor. Court & Wilkeson Sts. 325 Dearborn St.

34 Merchants Row.

8 Park Place.

Always Take

THE Kansas City & Omaha Line

For All Points
East, South and West.

Close connections made at all junctions. For rates
and information, call on or address

S. M. ADSIT, G. P. A., or S. M. WALLACE, Agt.

St. Joseph, Mo.,

Clay Center, Nebr.,

The "Perfect" Hatcher

200-Egg Hatcher and Brooder combined, \$10.00
100-Egg Hatcher, \$6; Brooder, \$5.
Barred Plymouth Rock Fowls and Eggs. None Finer.
Testimonials and Illustrated circular 2c.

J. A. CHELTON, Fairmount, Md.

Price \$6 up.
Book free.

"MORE MONEY FROM YOUR HENS"

is the title of a handsome book telling about greater
profits by aid of the **DANDY Green Bone Cutter**
the machine that really cuts green bone. Sold direct from
factory, saving you agent's profits and giving you privi-
lege of returning if not the easiest turning machine made.
STRATTON MANFG. CO., Box 48, Erie, Pa.

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one piece.
Nothing to go astray. The neatest
and strongest coop on the market.

Wm. MILLER, North Bend, Neb

SEED CORN.

Prize Winners and Mortgage Lifters. Tested and
Pure at Farmers' Prices. Twenty Bert Varieties.

Onion Seed! Large Red Wethersfield. Prize
Globe Danvers, yields 1,200 bu. to the acre! New
seed at 80c per lb. postpaid, if you mention this paper.

Soja Beans and Stock Peas. Best kinds suited to
this climate. Big yielder. Cane Seed, Kafir Corn,
Rape, Speltz, Grass and Flower Seeds—

Best Flower and Garden Seeds. Guaranteed fresh
at wholesale prices. Nearly \$500.00 in prizes and 100-
000 papers free seeds given to customers this year.

Archias Seed Store, Sedalia, Mo

Do you keep Bees?

THEN learn how to
make them pay and
send for our large il-
lustrated free catalog,
showing the best up-
to-date hives and oth-
er articles used by
progressive bee keep-
ers.

Jos E Nyswander,

Des Moines, Iowa.

White and Golden Wyandottes...

Incubators.

Built on entirely new principles and the
only machine made that will allow the chicks
when hatching to come out of the machine
in the pure, fresh outside air at their own
will, just exactly the same as they do when
hatching under the hen. Guaranteed to im-
itate nature closer and to hatch equal to any
machine on the market. For further partic-
ulars address with stamp.

L. P. MEISTER, Troy, Mo.

GOVERNMENT PO- SITIONS.

Nearly 10,000 appointments
made last year. Chances
better for 1902. Hundreds
of those who have been ap-
pointed were prepared by
us by N. I. Established 1863
Full particulars free con-
cerning government posi-
tions, salaries and exam-
inations, when and where
held, our methods, etc. Write to-day.
NATIONAL CORRESPONDENCE INSTITUTE, 14-42 Second Nat'l. Bank Bldg., Wash-
ington, D. C.

Winning White Wyandottes.

WE WIN East and
West. At the great
Chicago Show, 1902
in hot competition,
in a class of 64
White Wyandotte
cockerels, the finest
ever seen, our
birds were given two prizes out of five,
winning the 3d and 5th prizes. We
have 4 pens of high scoring females
headed by prize birds. Eggs \$2 per 13.

GEORGE GETTY, Syracuse, Kan.

Heavily Feathered, Highly Pencilled PARTRIDGE COCHINS.

Eggs \$2.00 per 15. Satisfaction guar-
anteed. Write for particulars.

C. J. Beedle, Holdrege, Neb.

WHITE PLYMOUTH ROCKS

At Neb. State show 1902, in class of 117 birds, 13 exhibitors, 12 pens in competition, won 2d pen, missing 1st by 3/4 point, 2d cl, 3d pullet, 4th ck. Eggs \$3 per 15, \$5 for 30. Write for prices on incubator eggs.

J. W. HALL,

David City, Nebr

QUEEN CITY BUSINESS COLLEGE.

One of the leading schools of the west. Large attendance. Great demand for its graduates. Expenses low. Address

H. S. Miller, Pres., Hastings, Neb

Reference: Sure Hatch Incubator Company

BUY STOCK and EGGS from high scoring WHITE LANGSHANS and BUFF ROCKS. Fine winter layers. Cheap for quality. Eggs \$1.50 per 15. Mrs. L. MUMPOWER, Duroc Jersey Pigs. W. L. MUMPOWER, Chillicothe, Mo.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered Strain, from a long line of prize-winning ancestors; have made them a specialty for 19 years. Now offering fine exhibition and grand breeding stock of both 1900 and 1901 hatch at moving price if taken soon. Send for illustrated circular with half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Buff Rocks
Pekin Ducks
Toulouse Geese
Bronze Turkeys.

MRS. FLORA SHROYER,

Perry, O. T.

Formerly at
Clay Center, Nebr.**WANTED!**

250 White Wyandotte Hens and Pullets.

250 White Leghorn Hens and Pullets.

100 Buff Orpington Females.

Will pay cash. Address, Box 427, Clay Center, Neb

For Sale! - - -

Toulouse Geese, Pekin and Muscovy Ducks. At State Poultry Show on four entries of geese I took first 3 premiums. Eggs for sale in season.

Wailen Cameron,

Schuyler, Nebr.

**We
Have
Those
That
Win...**

Barred Rocks - - White Wyandottes

**WE HAVE
Some - Choice - Exhibition
AND
Fine Breeding Birds
For Sale!**

We have always won at State Fairs and State Shows more prizes than all other exhibits.

T. L. NORVAL, Seward, Nebraska.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS.

Are better than ever as they have farm range. Have 280 young and 30 old ones to draft from the coming sale season. Was winners of all firsts and part second in state show the last two years, also have been winning for customers in strong competition. Satisfaction guaranteed. Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

ARE YOU LOOKING FOR EXHIBITION BIRDS?

BARRED PLYMOUTH ROCKS. With that nice even ring-barring to the skin as blue as the sky, and with elegant combs, golden beaks and shanks. Or heavy weight SINGLE COMB BROWN LEGHORNS. Elegant combs, fine striping to Hack and Saddle, and shape to burn. Pullets with that soft even brown color, fine striped lackles and elegant combs. In fact birds that give the other fellow that tired feeling in the show room. If so, address.

J. W. WHITNEY, Chatham, O., P. O. Box 1.

BARRED ROCKS.

BRADLEY BROS. New York winners is what my flock is built from. Winners at the Columbus show, 1901-2. Eggs \$2.50 per 15. Stock for sale.

J. R. Henderson,

Sta. B. Route 1.

Columbus, O.

PULLET SALE.

We have no more cockerels for sale, but have 50 choice pullets that we will sell for One Dollar each. Send in your order at once, they will sell quick at this price. Send for egg circular describing our five breeding yards, mated for best results. Eggs, \$2.50 per 15 straight.

MR. and MRS. A. UPTON & SON, Fairbury, Neb.**MR. and MRS. C. A. BLANCHARD,**

Breeders of

White Plymouth Rocks, White Holland Turkeys and Pekin Ducks.

At Nebraska State Poultry show 1901 we won 1st pen, 1st hen, 1st cock, 3d cockerel, which was a prize on every bird entered. At the Nebraska State Fair, 2d to 6th of Sept., 1901, we won 1st pen chicks, 1st hen, 1st pullet, 1st cockerel-- a first prize on every bird entered.

We have a fine lot of young stock for sale.

FRIEND,

NEBRASKA.

STAR ☆☆☆

IncubatorsAnd Brooders.

A large free Catalogue tells you all about them.

Our New No. 2 Double Walled Dead Air Space Self-Regulating

BROODERS

are without an equal. See cut.

Price \$12.00.

Our New A-1 just the same, only with single walls at **\$10.00** is the real thing. **GOOD Brooders for \$5.00.**

Send for Circulars and Price List

Dead Chicks Don't Pay.

Chicks thrive best on a balanced feed of meaty, cereal and grain element. That's

STAR SPECIFIC NO. 7.

It isn't a medicine, but a health and strength builder. It prevents most of the diseases that kill chicks. Carefully compounded from results of expert experimenting and study.

Price, at Dealers:

1 lb. pkg.10c. 50 lb. bag. ..\$2.25
5 lb. pkg.35c. 100 lb. bag. ..\$3.50

Star Incubator Co.,

12 Church St. Bound Brook, N. J.
Star Specifics

Is guaranteed to cure.

No 1. Cholera in old Poultry.	No 5. For Inactive Males.
No 2. Same, for chicks.	No 6. For Indigestion.
No 3. Egg Food and Tonic.	No 7. Food for Small Chicks.
No 4. For Cold and Croup.	No 8. Disinfect Insect Powder.

POULTRY INVESTIGATOR.

THE PIONEER INCUBATOR WOMAN

has invented a brooder. It differs widely from all others. It is the accumulated result of deep thought, wide experience and long experience. Like the old hen

This Mother Nature Brooder

warms the chick's back, where all the large blood vessels and vital organs are located. Warmth by contact with brooder walls—not by vitamin, death-dealing heat. Suits chicks of all sizes. Note the sloping walls. Eat proof. Made entirely of metal. Reduces the fearful brooder loss to the minimum. Our Mother Nature Brooders are of equal superiority. Brooders and Hatchers sent anywhere on Free trial. Write for free illustrated catalogue.

THE ELLEN WEST COMPANY, Box 125 BLUE ISLAND, ILLINOIS.

Golden Wyandottes

Highest Grade, Healthy Vigorous Stock, from careful Matings.

S. P. VAN NORT, OLD ORCHARD, MISSOURI.

1st, 2d, and 3d pullet and 3d c'h'l at St. Louis Show, Jan., 1901. Score 94-92½-91½ and 91½ by Butterfield. 3 seconds at same show 1900. 1st and 2d on pair at St. Louis fair. Eggs for hatching, \$2 per 13. Stock or sale. Write for full information

\$5,000 POULTRY CATALOGUE FREE!

It is without a rival. Given lowest prices of fowls and eggs. Over 60 breeds—Turkeys, Geese, Ducks and Chickens. Hundreds of plates from life. 16 best poultry house plans. Treatise on diseases, how to feed, breed, etc. Send 10c. For postage. J. R. Brabson, Jr. & Co., Box 109, Delaware, Wis.

Eggs Thoroughbred Barred P. Rock eggs two dollars per setting of fifteen. Golden Sebright Bantams, two dollars per setting of fifteen. Colored Muscovy ducks, two dollars per setting of eleven. My stock are all strong and vigorous and have farm trials. All eggs shipped will be strictly fresh.

Mrs. D. T. STONE, DeKalb, Mo
Clover Ridge Poultry Farm, Route No. 2.

Black Langshan, White P. Rock, S. C. Buff Orpington
W. Holland Turkeys, Mammoth White Pekin Duck, E. E. Smith strain. Eggs from \$1.00 to \$2.50 per setting. Won at Lincoln and Kansas State Shows. 15 ribbons from 2 to 5. Poor hatches duplicated at half price.

Mrs. Henry Shrader, Berlin, Neb.

PURE MAPLE SYRUP!

Orders booked now and syrup shipped as soon as made, direct from the farm. If you want something nice and that is guaranteed pure and fresh, please send me your order and I will please you. Put up in 1 gallon cans, 6 cans to the crate. Price one dollar per gallon. Order early so not to be disappointed and you will want more next year.

E. E. Miller, Fairview Farm, Montville, Ohio.

SHORT STORIES

bring high prices. Thousands of good stories which might easily be made saleable, make up the great mass of "rejected manuscripts." Our School of Journalism, in charge of successful authors, critics, corrects and reviews, as well as teaches how to write. Write for booklet. NAT'L CORRESPONDENCE INSTITUTE 2d Nat'l Bank Bldg. Washington, D. C.

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free,

H. SHIVVERS, Knoxville, Ia.

Lock box 500.

INCUBATOR ON TRIAL

The Perfected Von Culin.

Successful result of 25 years' experience. Scientifically correct, practically perfect. Non-explosive metal lamps. Double and packed walls. Perfect regulation of heat and ventilation. Made of best materials, and highest quality of workmanship and finish. **PRICES \$7.00 AND UP.** SATISFACTION GUARANTEED OR NO PAY. We make Brooders, Bee Hives & Supplies. Catalog and Price List sent Free. **The W. T. FALCONER MFG. CO.,** Dept. 213, Jamestown, N. Y.

PLEASANT HILL POULTRY FARM.

Barred Plymouth Rock. Rose Comb Brown Leghorn.

Having disposed of all my surplus stock and mated up my pens, am prepared to book orders for eggs. Write at once for prices.

J. H. TROUGH,
Minden, - - - Nebr.

GREAT BARGAINS

Importers and Exporters of 35 varieties land and water fowls. Stock and eggs for sale at all times. Write before you buy. Bank and personal references given. Send for Full Illustrated Circular. Iowa Poultry Co., Box 623, Des Moines, Iowa.

1890

EGGS! From our Royal Blood Silver Wyandottes.

1902

Prices Reduced from 3.00 to 2.00 per setting of fifteen eggs. Last year we sold every egg we had to spare. This year have two more line pens. We know that the Wyandottes are the best variety on earth. They are the coming fowl and to boost them along have reduced the price. Our Silvers have never been defeated in the show room. At Nebraska State Show, Jan. 24 to 28, 1902, we won 10 of the 16 ribbons, nearly twice as many as all other competitors. We are now shipping eggs. We are book your future egg orders now or may not be able to fill the bill. We are headquarters for prize-winners. Stock for sale at all times at Ponca Wyandotte Yards. Refer to express agent, postmaster, Security Bank or Dun's agency. **L. & N. M. CONNOR, Ponca, Neb.**

IF PANDEMONIUM

Reigns supreme in your brooders and the chicks die wholesale you can positively check the mortality by using

PURITAN CHICK FOOD, a readily assimilated and scientifically balanced ration. Use it under positive guarantee.

FREE:—Our new and beautiful 64-page catalogue. Finest ever issued. A mine of information. Send at once to America's largest plant

PURITAN POULTRY FARMS, BOX 357 A. STAMFORD, CONN.

Why Not Buy the Best?

It costs no more than inferior styles. We claim that **Adam's Green Bone Cutter** is the best because it is the only **Bull Bearing** machine on the market. It works on the shear principle, turns easier, cuts faster and cleaner, and prepares the bone in better shape than any other. Write at once.

Catalogue No. 6 Is Free. **W. J. ADAM, JOLIET, ILL.**

IF
IT'S AN
ADAM
IT'S THE
BEST

Oakes

Will Make Your Old Incubator New.

Oakes' Hydro Safety Lamp, (with wick-tube surrounded by water jacket), the only safe and sure lamp. Never goes out nor smokes. Price, 75c to \$2.70.

New Aluminum Regulator gives perfect control of heat.

Oakes' Improved Wafer Thermostats—the standard regulator. We manufacture incubator and brooder fixtures of all kinds, Tanks, Heaters, Egg Testers, etc. Write for catalogue and get our money-saving prices.

L. R. OAKES, Mr., No. 12 6th St., Bloomington, Ind.

Incubator and Brooder Supplies.

WE
MAKE
THEM
HATCH

You Want Fertile Eggs

but fertility counts for little if the chick hasn't sufficient vitality to get out of the shell, and stand the trials of chickhood. Cut green bone promotes both fertility and vitality. Green bone is easily and rapidly cut by the

HUMPHREY GREEN BONE AND VEGETABLE CUTTER.

No fuss and bother about it. No hacking with an axe nor packing in a cylinder. You finish the job with a **Humphrey** before you get started with other types of machines. Sold on a positive guarantee to cut more bone, in less time, with less labor than any other machine made. Your money back if you are not wholly satisfied. It's a rapid vegetable cutter, too. Send for free catalogue (hand-somest of the season), and egg record book.

HUMPHREY & SONS, BOX 70, JOLIET, ILL.

Sole Agents:—Joseph Breck & Sons, Boston, Mass.; Johnson & Stokes, Philadelphia; Griffin & Turner Co., Baltimore; Sore Hatch Incubator Co., Clay Center, Neb.; E. J. Bowen, Portland, Oregon; Seattle, Wash., and San Francisco. Des Moines Incubator Co., Buffalo, N.Y.

Poultry Investigator

Is edited by a practical poultryman of 30 years experience and is full of plain, common sense articles by those that breed poultry and work instead of theorizing. It is just what you want. Send us the names and addresses of 15 persons interested in breeding good poultry and we will send you the **POULTRY INVESTIGATOR** one year for your trouble. Subscription price 25c. Address,

Poultry Investigator Co., Clay Center, Nebraska

Standard of Perfection

Revised Edition, 1900.

This work is issued by the American Poultry Association. It is a book of over 250 pages, cloth cover, and contains the only official descriptions of the several varieties of fowls. It is on this Standard that all poultry judges base their awards. Every experienced fancier has a copy of this book and every poultryman needs it to learn the requirements to which his stock must be bred.

The Standard of Perfection

—AND—

The Poultry Investigator

One Year, for.....\$1.00

Address,
POULTRY INVESTIGATOR,
CLAY CENTER, : : : NEBRASKA

POULTRYMEN Your stationery won't look well unless **PRINTED** neatly. I do it is well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

Buff ORPINGTONS LEGHORNS

and Brown Leghorns

Young or old stock, first class birds cheap Hundreds to select from. Eggs all the time **M. & F. HERMAN,**
Box 178, Hinsdale, Ill

BUFF ORPINGTONS—WYANDOTTES. R. 1. Reds and Indian Runner Ducks. Winners bred to winners. Good stock. \$1 to breed and exhibit for sale. Thos. H. Mills. Poultry Judge. Port Huron, Michigan.

Incubator Eggs!

From good, healthy and vigorous stock

\$6 per 100

\$3.50 per 50

White Wyandottes,
Light Brahmas,
Partridge Cochins,
White Rocks,
Barred Rocks,
Buff Rocks,
S. C. B. Leghorns,

Send your orders early
and we will take
care of you.

**THE WILDWOOD
POULTRY FARM,**
ST. LOUIS, MO.

815 Chestnut St.

Farm at
WEBSTER GROVE, MO.

Morning View Poultry Yards.

....HAVE....

..Barred Plymouth Rocks..

Extra large heavy bone, finely barred, full above the eyes.

Eggs in Season. \$1.50 per Setting.

James M. Perkins,
RAVENWOOD. : : : MISSOURI.

Mrs. J. B. Jones, 3 3 3
Breeder of
Barred Plymouth Rocks
and Mammoth Bronze
Turkeys.....
STOCK FOR SALE. EGGS IN SEASON.

ABILENE, : : : KANSAS.

BUFF WYANDOTTES,
EXCLUSIVELY. Our Buff Wyandottes are bred from best strain obtainable and in line. We breed the pure golden Buff, not the dark red. They're prize winners.
E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

UNION LOCK POULTRY FENCE.

For Poultry, Rabbits, Orchards, Gardens, etc.

All main strands are two wires twisted together.

Pickets 3 in. apart. Cables 1 1/4 in. apart at bottom.

Patented July 12, 1898

and April 15, 1899.

Stronger and closer spacing than any other make. Our Union Lock Hog, Field and Cattle Fence, Union Lawn Fence Gates, etc., guaranteed first class.

Your dealer should handle this line—if not, write us for prices. Catalogue free.

UNION FENCE CO., DE KALB, ILL., U. S. A.

FRANK MYERS,
Free Port, Ill., U. S. A.
Box 20.

Breeder of
Barred Plymouth Rocks

They are Barred Right and good size. Eggs 15 for \$2.30 for \$3.50. 50 for \$4.00, 100 for \$7.00, and 15 cents extra for postage.

IDEAL
ALUMINUM

Also manufacturer of
Ideal Aluminum Leg Band : : : : :

The acknowledged leader. 12 for 15c, 25 for 30c, 50 for 50c, 100 for 75c. Samples and circular of Barred Rocks mailed for stamps.

Conkey's Roup Cure

Cure Guaranteed!

THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, especially in pigeons, this cure excels

all others. One 50 cent package makes 25 gallons of medicine. Directions with every package. If it fails to cure money refund. Postpaid. Small size 50c, large \$1. Conkey's Louse Killer never fails to kill. Try it. 25 cents per package, and 15 cents extra for postage. Conkey's Egg Food and Poultry Tonic will keep your fowls in perfect health, and produce more eggs than any similar preparation. 25 cents per package and 15 cents extra for postage. **C. E. CONKEY & CO., Cleveland, O.** Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal. Eastern wholesale office: No. 8 Park Place, New York City and S. H. I. Co., Clay Center, Nebr. For sale by all poultry supply houses. Agents wanted.

**GOLDEN WYANDOTTES AND
WHITE HOLLAND TURKEYS.**

In Lacing, shape and size unexcelled.
Fifty Cockerels and Pullets to sell.
Eggs in season.

W. J. EAST, Clay Center, Neb.

High class stock for sale!

Barred and Buff Plymouth Rocks
and S. C. W. Leghorns. Can furnish
new birds for fall fairs. Drouth prices.
EDW. C. WEEKS, Eldon, Mo.

**HORTHAND and
BOOKKEEPING.**

Study at home and take a
higher salary. Investing a
little time and a little money
in a business course with
us and the dividend will
never cease. All subjects

TAUGHT BY MAIL

Complete course also in Engineering, Journalism, Science, Languages, etc. Write for free booklet. NATIONAL CORRESPONDENCE INSTITUTE, 1460 Second Nat'l. Bank Bldg., Washington, D. C.

For Sale....

200 Fine Black Langshans. 200
Some of the best I ever raised.
Address

Ben S. Myers,
Crawfordsville, Ind.

Catches Them Coming and Going, **Oil Cup Bracket
and Perch Supporter**

The Greatest Boon to Poultrymen
Practical, Durable, Cheap, Convenient

A permanent fixture for all times. The
Spider or Midge Louse can not exist where
this system is in use. Do not put it off, but
send for circular or send \$2.50 for trial dozen
and be convinced.

**SHRADER & BUCK,
BUCYRUS OHIO.**

Ross Bros' Trapnest

Just what every poultryman needs.

In sets of 3 for \$3.00. **Delivered.**
In sets of 5 for \$4.25.

We sell them cheaper than you can
make them.

Ross Bros.' Buff Wyandottes.

Lead in the best competition.

ROSS BROS. Manhattan, Kan.

POULTRY CUTS at CUT PRICES
CATALOGUE FREE
Harper Eng. Co., Columbus, O.

May I "SHOW YOU"

That eggs bought of me will hatch
Barred Rocks for you that will satisfy
the most exacting. If not
treated right, publish me in the Investigator.
CORWIN JONES,
Poultry Judge. **Sidney, Iowa.**

Prize Winning B. Rocks.

Cockerels and Pullets scoring 90 to
93 by Southard for \$2.50 to \$10.00 each.
Good breeders not scored for \$1.00 to
\$1.50 each-

P. Hostetter, East Lynne, Mo.

A Boon for Poultry Keepers.
BETTER than a GOLD MINE.
We will tell you how we made our
hens pay over 40 per cent profit.
Merely send your name and address
Way Side Poultry Co., Cliftonville, Conn.

B. P. Rocks Exclusively.

Some good cockerels for sale yet
Eggs for sale at \$2 per 15, \$3 for 30.

L. A. DAY,
Bruning, Neb

Please mention the INVESTIGATOR
when answering advertisements. It
will accommodate both the advertiser
and us.

JOURNALISM

Practical, paying newspaper work,
writing short stories, etc.

TAUGHT BY MAIL

by our successful system in per-
sonal charge of Mr. Henry Lich-
field West, formerly managing
editor of the Washington Post.
Successful students everywhere.
Write for illustrated booklet.

NAT'L CORRESPONDENCE INSTITUTE,
24 Nat'l Bank Bldg., Washington, D. C.

**Sure Hatch Poultry
Company**

Has the largest aggregation of
thoroughbred poultry in the west.

We import, breed, and sell
All Varieties.

Each variety is bred separately on
a farm. No chance for mixing up.
Prices reasonable. Stock the best.
Write your wants. Address,

Sure Hatch Poultry Co.
Clay Center, Neb.

BONANZA RABBITRY, ESTABLISHED IN 1885

Founders of the first herd of pedigreed Belgian
Hares in the world. The first to establish a
system of registration for Belgians. The first
to produce hares exceeding the standard
weight and develop superior colors. Holder of
the world's record for prize winnings.

Our sales for 1900 were over 5,000 head. Send
10 cents for the most complete and most beau-
tiful 36-page catalog ever published.

Bonanza Rabbitry Manual, 4th edition, just
coming from the press, \$1.00, written by Dr. H.
C. Platt, the foremost authority on the subject,
president of the National Association of Bel-
gian Hare Judges; professional instructor of
Belgian Hare Institutes; originator of the Decimal System of Judging and score card adapted
to this system; inventor of Bonanza Tatting Mark for Belgians; inventor of the
Perfect Belgian moulded in metal, presenting the ideal colors, also perfection in quality
shape and size.

Address **DR. B. C. PLATT, 2741 N. Broad St., PHILADELPHIA**
Permanent Eastern Office and Salesroom.

Tiffany's paragon Lice Killer.

Kills lice and mites on poultry, hogs and ani-
mals, is the strongest and best lice killer
made. With our double tube sprayer you
can save one half the liquid and penetrate
all cracks and spray the bottom of the house
every time.
where you find the mites or spider lice. It gets there
a sprayer and can of Lice Killer FREE.

Tiffany's Paragon Poultry Powder.

For setting hens and baby chicks. Always to be used before sitting the hen. For the next 60
days we will send our old and new customers, 100 lbs Shel-grit, (coarse or fine) 100 lbs line
stone grit, one gallon Paragon Lice-killer, one Tiffany's Double Tube Sprayer, one 4lb pack-
age Powder, all for \$2.50. These goods all go 3rd class freight—cheap.

THE TIFFANY COMPANY, Lincoln, Nebraska.

THIS IS THE WAY

they come off for the man who uses

THE NATURAL HEN INCUBATOR.

Beats any plan yet devised. Costs you nothing if you follow our plan. We have an agents proposition that is the best money maker you ever heard of. Don't wait until your neighbor gets ahead of you. Catalogue and 10c Egg Formula free if you write to-day.

Natural Hen Incubator Co.,
B-11, Columbus, Neb.

OSCAR E. MILES. Owner of

Forty-two acres devoted to Poultry.

MILES' POULTRY FARM.

Breeder of White and Barred Plymouth Rocks, White and Golden Wyandottes, Rhode Island Reds, Pekin Ducks and Belgian Hares. Hereafter I shall handle but three breeds of poultry. All my White Plymouth Rocks, Golden Wyandottes and Pekin Ducks are for sale at low prices considering quality; nothing reserved, must be sold by March 1st. WINNER of 47 regular premiums and many specials the last two years at Columbus shows. 22 1sts, 13 2ds, 5 3ds, 7 4ths. Eggs \$3.00 per 15. MILES POULTRY FARM, near Worthington O.)

O. E. Miles, Prop.

26 1-2 N High St.

Columbus, O.

AMERICA'S LARGEST BREEDERS and IMPORTERS

of Single Comb Buff Orpingtons.

Winners at the great Chicago Show. 1st. on cock, 1st on pullet, 2d and 4th on hen, 2d on pen and tied for 1st on pen. At Lincoln, Nebr. on same date, we won 3d on cock, 1st on hen, 1st and 2d on pullet. At the Nebraska State Fair, won 1st and 2d on cock, 1st and 2d on hen, 1st and 2d on cockerel, 1st and 2d on pullet, 1st on pen of chicks. No stock for sale, all sold. Eggs from strictly first class exhibiting stock only, \$5.00 per 15. Free egg circular.

W. H. & M. E. BUSHELL,

David City, Neb.

Grant's Practical Brooder.

Prevents piling up, and overheating of chicks. Complete specifications, telling how to make and operate, with privilege of making all you want for your own use, for \$1.00. These brooders work out doors or in, can be cleaned in two minutes, are cheap and will last a life time. They have a floor space of 2x6 ft. Give this brooder a trial, if not satisfied you get back your dollar.

Alfalfa Seed, \$5 00 per bushel!

I have some Extra Fine S. C. B. LEGHORNS. Pen No. 1. is headed by the cock which headed 3d prize pen at Boston, 1900. Pen No. 2 is headed by 3d prize cockerel at Chicago, 1901. These birds are mated to some of my choice females (circular giving full particulars free.) Eggs, pen No. 1, \$2.00 per 15. Pen No. 2, \$1.50 per 15. Incubator eggs, \$5.00 per 100.

D. W. GRANT,

Almena, Kan.

30 DAYS TRIAL

Hatch Every Good Egg

Or Don't Keep It.

Send 2 cents for Number 102 Catalogue

SELF-REGULATING BUCKEYE INCUBATOR CO. SPRINGFIELD

50 EGG SIZE \$5
100 EGG SIZE \$5.50
200 EGG SIZE \$15

GET MORE HEN MONEY

Feed out raw bone and double your profits; get more eggs, more fertile eggs; more vigorous and healthy fowls.

MANN'S BONE CUTTER

New design, open hopper, enlarged table, new device to control feed; you can cut it to suit any strength; never clogs. Sent on

10 DAYS FREE TRIAL. No money asked for until you prove our guarantee on your own premises; that our New Model will cut any kind of bone, with all adhering meat and gristle, faster and easier and in better shape than any other type of bone cutter. If you don't like it send it back at our expense.

Free cat'g. explains all. **F. W. MANN COMPANY, Box 1, Milford, Mass.**

For Sale.

All kinds of fancy pgeons. Prices reasonable.

Toulouse geese eggs 20c each. Rouen duck eggs 18 for \$1.00. White Holland Turkey eggs, \$1.50 for 9. Also Houdans, Golden Sebright, Bantams, Buff, Brown and Black Leghorns, S. S. Hamburgs, C. I. Games, Buff Cochins, Pearl Guineas, Buff and Silver Laced Wyandottes. Poultry eggs, 15 for \$1.00. Yards score from 90 to 94½ points. Satisfaction guaranteed.

D. L. BRUEN, - Oldenbusch, Neb.

If you Succeed You must have a Pull!

Get it by buying eggs from Pinkerton and Co's Ringlet Strain of B. P. Rocks. Winners wherever shown. Eggs per setting, \$2.00. Two settings for \$3.00. Address

PINKERTON & Co. Clay Center, Neb.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

Is the title of a Book which has worked a r evolution in strawberry growing, and CAUSED TWO BIG BERRIES TO GROW WHERE ONE LITTLE ONE grew before. The author has grown the LARGEST CROPS OF BERRIES EVER PRODUCED on an acre. The book explains how YOU CAN DO THE SAME. It will be sent to you FREE IF YOU MENTION THE PAPER IN WHICH YOU SAW THIS NOTICE. The only scientifically developed THOROUGHED STRAWBERRY PLANTS to be had for spring planting. One of them is worth a dozen common scrub plants.

R. M. KELLOGG, Three Rivers, Mich

RIPPLE'S

Whitewashing, Spraying
and Painting Machine.

GUARANTEED to be AS REPRESENTED

Read Our 30 Days Special Offer Below.

This Machine will Whitewash Buildings, Walls, Barns, Poultry Houses, doing it far better, saving 3¢ the time over the old method of using brush. Will Whitewash Buildings, or Spray Trees any height by using extra hose and extension rod to elevate spray. Endorsed and used by hundreds of noted breeders. It is used and endorsed by Sid Conger, Shelbyville, Ind.; U. R. Fisher, Hope, Ind.; Meadowbrook Poultry Farm, Dallas, Tex.; G. W. Brown, Camden, Ark.; A. G. Dunston, Marlboro, Mass.; Texas State Fair Ass'n, Dallas, Texas. W. B. Dean, Secretary of State Board of Agriculture, Yankton, S. Dak., says: "We gave all State Fair Buildings two coats with your machine. It is a complete success and a great labor saver." In order to get them introduced in every locality, we will allow freight to your station, for the

NEXT SIXTY DAYS ONLY,

at the following net cash prices: No. 6.—Eight Gallon Heavy Galvanized Steel, complete as shown in cut with 10 feet of 1/2 inch hose and one 8-foot bamboo extension rod and brass cylinder pump with agitator \$12.00. No. 7.—Sixteen Gallon size, \$15.00. Terms cash with order, or we will ship C. O. D., if \$3.00 accompanies order. Take advantage of our special offer. Send for in stamps for a copy of our 1902 Sprayer and Breeders' Supply Catalog. **Ripple Hardware Co., Box 54, Grafton, Ills.** Western Office, Box 54, Watertown, So. Dak.

GREER'S PEDIGREED

BARRED PLYMOUTH ROCKS

are in my breeding pens for 1902

eggs get eggs from the same hens I use for myself. Send for booklet of matings.

Poultry Exhibits Properly Judged.

Eggs from my birds never fail to produce PRIZE WINNERS. The best place to buy eggs is from a breeder who makes a specialty of one variety. "Blue Bird," "Lady Blue" and the best I have raised for three years. Every bird a beauty and barred to the skin. My customers order. Take advantage of our special offer. Send for in stamps for a copy of our 1902 Sprayer and Breeders' Supply Catalog.

O. P. GREER, Bourbon, Ind.

BUFF ORPINGTONS.

Winners 1, 5, pullet, 2 and 3, hen, 2, and 4, ckl, and 2, pen at Nebr. State Show, 1902 against red cock competition. Eggs 1st pen, \$5.00 per 15, 2nd, pen, \$3.00 per 15, 3rd pen, \$2.00 per 15.

Limited number of young Stock for sale at \$3.00 to \$10.00 each.

H. H. CAMPBELL,

Osceola, Nebr.

Hatch Chickens by Steam

with the Simple, Perfect, Self-regulating

NEW WOODEN HEN

The most efficient incubator for raising poultry on a small scale ever invented. A perfect hatcher—automatic, self-regulating, thoroughly constructed, fully guaranteed.

Thousands in successful operation. Guaranteed to hatch a large percentage of fertile eggs, at less cost, than any other hatcher.

Three Sizes:

50 Egg Capacity, only \$ 6 8c

100 " " " 10 00

200 " " " 12 80

THE NEW WOODEN HEN.

Send for large FREE catalogue with 16 colored views.

GEO. H. STAHL,

114-122 S. 6th St., QUINCY, ILL.

Canfield's White Rocks

**Still Take
the Lead!**

In 1900 and 1901
at the Convention

Hall Shows, Kansas City, my birds made almost a clean sweep of premiums including Sweepstakes in Am. class. In 1900 at Kansas State Show they won 14 out of a possible 15 premiums. In 1901, 15 out of 15 and in 1902, 16 out of 16 possible ribbons not including 4ths and 5ths. At Nebraska State Show, 1902, they won 1st pen, 1st, 2d, 3d, hen, 1st, 3d, 5th cockerel, 2d, 4th pullet, 3d cock and sweepstakes for best 5 in solid colors with weight. Eggs \$3.00 per setting, \$5.00 for 2 settings.

M. L. Canfield, Belleville, Kan

White Wyandottes Exclusively.

Score 93 to 95½ points by Larson and Hews, Keeler strain. Eggs \$1.50 to \$2.50 per 15. Stock is strictly white.

N. B. Carver, - - Hampton, Neb.

BEST FRUIT PAPER

Western Fruit-Grower is the best paper treating of all kinds of fruit, and nothing but fruit; monthly; illustrated; 16 to 48 pages; 50 cts. a year; 10c for three months' trial subscription.

THE WESTERN FRUIT GROWER.

Box 13, St. Joseph, Mo.

CALVIN E. BARNEY, - - Kearney, Neb

Breeder of Light Brahmas Exclusively.

My birds are heavy weight fine markings, close feathered. Eggs, \$2.00 for 15; \$3.50 for 30 choice birds, old and young, for sale. Write your wants. No circulars.

Light Brahmas!

—First and 2d cock, hen, cockerel, and pullet at Interstate Poultry Show at Red Cloud, Neb., also winning sweepstakes and grand sweepstakes. 1st, and 3d pens 5 cks 4 pullets at Neb., state show at Lincoln. Stock and eggs at reasonable prices.

J L SMITH, Cadams, Neb.

We will consider it a great favor if you will mention THE POULTRY INVESTIGATOR when writing to advertisers.

CHAMBERLAIN'S PERFECT CHICK FEED.

BEYOND COMPARISON.

WORLD'S CHICK FEED OF TO-DAY.

CHAMBERLAIN'S PERFECT CHICK FEED, like everything else that has merit, has its imitations. DON'T BUY TROUBLE, insist on having the only Original Dry Feed. Stamped on each sack "Chamberlain's Feed, Kirkwood, Mo." All others are worthless imitations. Nothing "Just as good."

GOOD MORNING SISTER

I am ready for Chamberlain's Perfect Chick Feed. DRY AND ALWAYS READY FOR USE. LITTLE GOES LONG WAY.

No Bowel Trouble when Chamberlain's Chick Feed is properly used. It is the fine mixture in Chamberlain's Feed that has made the name famous. For incubator chicks, for all chicks until 5 months old.

FACTORY PRICE, 100 Lbs. \$2.50. 50 Lbs. \$1.50. 30 Lbs. \$1.00.

For the Broiler Man, the Fancier and the Farmer. Saves Time and Money.

Chamberlain's Hen Feed will make your hens Lay, 100 Lbs. \$2.00.

Factory and Shipping Depot, 302 N. Commercial St., ST. LOUIS, MO.

Freight charges added to factory price at all distributing points. Order from your nearest agent and save time and freight. FOR SALE AT \$2.75 PER 100 LBS. BY Sprague Com. Co., Chicago, Ills.; J. Wilder & Co., Cincinnati, Ohio; Iowa Seed Co., Des Moines, Iowa; Wermick Seed Co., Milwaukee, Wis.; R. A. Pike & Co., Minneapolis, Minn.; E. A. Pegler, Lincoln, Neb.; Hunting & Pate, Indianapolis, Ind.; Ripley Hardware Co., Grafton, Ills.; Alexander Seed Co., Augusta, Ga.; Norton Poultry Yards, Dallas, Texas, \$3.40 per 100 lbs.; H. McK Wilson & Co., Agents for St. Louis, Mo. If friends of my feed in the east have trouble getting my feed, write direct to me for prices. **W. F. CHAMBERLAIN, KIRKWOOD, MO.**

Our Motto, "Virtute non Astutia"

HARES BY THE HUNDREDS

IMPORTED - AND - DOMESTIC

From such Fashionable Strains as the following Champions:

Fashoda, Edinboro, Guinea Gold, Nonpareil, Unicorn, Dash, Climax, Grimsby's Star, Priory Prince, Malten Mystery, Palace Queen, Lord Britain, Etc.

Our Stud Bucks are:

Fashoda Star

Score 96 by Judge Almond, imported, son of Ch. Fashoda.

Viscount

Score 95 by Judge Finley, imported.

Lythedale

Score 94 by Judge Finley, imported.

Sir Crabtree

Score 93½ by Judge Crabtree, and other domestic bucks that will score 94 to 96.

RUFUS RED BELGIAN HARES

At prices ranging from \$5 to \$75 per head, pedigree and score card with each animal. Unpedigreed market stock, good color and size, \$2.50 to \$5 per pair. Hardy Black Belgians (good to use as nurse does) at \$10 per pair. Correspondence solicited for special price list which may not be in effect long. Will refund money and pay return express charges if Hares purchased are not as represented. Rabbits at Maplewood and Fayette.

MISSISSIPPI VALLEY BELGIAN HARE COMPANY,

304 Chemical Building : : : : ST. LOUIS, MISSOURI.

Wanted—At Once.

100 Black Minorca females.
100 Rose Comb Brown Leghorn females
100 Rose Comb White Leghorn females.

Will Pay Cash for Same.

Box 227, Clay Center, Nebr.

Smith's Mammoth Pekin Ducks and White Wyandottes Win.

Thirteen 1st, 5 2nds, at Nebraska state, Kansas state, Missouri state, Des Moines Iowa. Clean sweep in four states. I entered 12 W. W. in Nebr. state show and won 8 premiums; 1 ck, 1 hen, 1 pullet and 5 others. See circulars for report of the champion flock. Get eggs for hatching from the winners.

Lincoln, Neb., Box 456

E. E. SMITH

We will consider it a great favor if you will mention THE POULTRY INVESTIGATOR when writing to advertisers.

RELIABLE

Get in Line to
Carry Off the Ribbon.

This matter of bringing home the ribbon is merely a matter of getting started right in the first place. There are **Chicken Men** at

The Reliable Poultry Farm

men who have been working for years to make perfect the thoroughbred stock shown in the 126 pens on the most complete poultry farm in the country.

These Men Know. They have studied the strains for years and are producing the kind of stock you want. They have gotten out a book for this season, the

20th Century Poultry Book

that will be of infinite value to you as poultry breeders. This book is replete with information regarding Reliable Strains, Reliable Incubators and Reliable Supplies. Much space is also given to discussion on Breeding, Feeding, Raising, etc. 10 cents in stamps will put this book in the family library.

Write while they last.

Reliable Poultry Farm, Box A 25, Quincy, Ill.

Like an Old Friend.

We have been making incubators and brooders for so long a time that to most people seeing the name

“Prairie State”

is like meeting an old friend. Well, we are still doing business at the old stand, and merely ask you to remember the name and the place. It's the “**Prairie State**” that is used exclusively by the Department of Agriculture at Washington. It's the “**Prairie State**” that has taken 342 first premiums—more than all other makes of incubators combined. It's the “**Prairie State**” that is used on the largest and most successful poultry and duck farms in the entire world. It's the “**Prairie State**” that is made in the largest and most completely equipped, exclusive incubator and brooder factory in the world. It's the “**Prairie State**” that this year issues the most complete, comprehensive and artistic catalogue ever put out by any incubator company. 50 tinted plates; 4 original paintings, reproduced in colors, 700 original photographs. These are but a few of the good things it contains. We mail it free to every interested inquirer. Send for catalogue No129.

Prairie State Incubator Co., Homer City, Pa.

New York, N. Y., 28 Vesey St.
 Philadelphia, Pa., 714 Chestnut St.
 Columbus, O., 114 N. High St.
 Indianapolis, Ind. 150N Delaware St.
 Chicago, Ill., 86 Randolph St.
 Cincinnati, O., 141 W. 6th St.
 Denver, Col., 1519 Wazee St.

Boston, Mass., 47 N. Market St.
 Norfolk, Va., 38 Union St.
 Minneapolis, Minn., 32 Hennepin Av.
 Detroit, Mich., 54 Michigan Ave.
 Dallas, Texas, 429 Cole Ave.
 Louisville, Ky., 400 E. Main St.
 Toronto, Ont., Can., 190 Yonge St.

Baltimore, Md., 205 N. Paca St.
 Washington, D. C., 712-12th St., N.W.
 Seattle, Wash., Main & Jackson Sts.
 Smyrna, Ga., Belmont Farms.
 Buffalo, N. Y., 65 Elliott St.
 Pittsburgh, Pa., 5 Union St.
 London, N. Eng., Waltham Cross

Address Nearest Office.

BAD EGGS

That's about all you have left when
you depend on a fussy old hen.

What You Want Is

an Incubator on the place. A good Incubator. A money maker.

A MARILLA

We make the **Marilla Incubators and Brooders**, both hot water and hot air. Not a fairly good machine, but the very best there is. We have been at it thirteen years, and every **Marilla** is the best we know how to make. To do this, we buy the best material, and only the best. Our methods and workmen are the results of years of selection. The survival of the fittest.

If these machines are not all we claim when you get them, send them back. We won't keep your money.

The system of regulating temperature, moisture and ventilation is the best that has yet been devised.

No need of watching or worrying over the **Marilla**. It will take care of itself, and bring off whopping big hatches.

The Brooder is built with the same careful attention to details that have made them so successful in the past. The only Brooder that prevents overcrowding and trampling.

Our catalogue, a book of practical suggestions for the poultry man, sent for four one cent stamps.

Marilla Incubator Co., Box 97
Rose Hill, N. Y.

F.B.W. Co.

VOL. 4.

APRIL, 1902.

NO. 2.

Poultry Investigator

ADVANCE TO SUCCESS

25 ¢ a year

Mrs. J. W. Pinkerton and Miss Kincaid of Clay Center, Kansas, exhibited the Sure Hatch Incubator and Common Sense Brooder at the Kansas Agricultural College at Manhattan, Kansas, Feb. 17 to 22, 1902, making an average hatch of 93 per cent, and showed to the satisfaction of some twelve hundred to fifteen hundred students that the Sure Hatch Incubators and Common Sense Brooders are leaders in the Incubator and Brooder class.

There were other incubators there, but they were not in operation. Incubators in operation is our hobby. People buy them to operate them; more than this they buy them to hatch the eggs with and the brooders to raise the chicks with. It is very doubtful if there is a machine made that has been exhibited in competition more times than has the Sure Hatch in the last three years.

We do not claim to make the only good incubator, but we do claim to make the only good incubator that is sold at a low price. The cases are made of California redwood and the tanks are made of 12 ounce cold rolled copper and are furnished with the Oakes Hydro-Safety lamps, and the other fixtures are first quality. We are able to make a moderate price in consequence of our many sales and our other advantages in manufacturing. We are contented with a fair profit. We carry in stock the goods that we advertise and can make prompt shipments. While we do not advertise on trial for 30 days, yet every incubator we send out is sent out on trial and the machine must be as represented or the money is refunded. Write for our on trial plan. Let us tell you about prices and prepaid freight shipments. Our plan will interest anyone looking for good incubators and brooders. We have a new proposition for late spring and summer orders. We do business on quick sales and small profits. Address nearest house for free catalogue and prices.

SURE HATCH INCUBATOR CO.,

Box 1, Clay Center, Nebraska.

Box 1, Columbus, Ohio

Vol. 4

Clay Center, Nebraska, April, 1902.

No. 2

Practical and Profitable Poultry Culture

By L. E. Keyser

Preparing for Early Chicks

It is time now that we mate our breeders. There will be nothing gained by deferring, and much may be lost if we do not have them properly mated in time. We shall want some of the eggs laid the latter part of this month for our first March broods. We can now tell what our hens have been doing and which of them are worthy of a place in the breeding pen.

We should feed our breeders somewhat differently than we do fowls designed only to produce eggs for market. Too much soft or moist food has a tendency to over-stimulate the hen and lessen the vitality of the germ of the egg, and we therefore feed a mash very sparingly, not oftener than two or three times a week. Good, sound grain, coarsely ground beef scraps or cut green bone and plenty of green food in the shape of chopped roots, cut clover or alfalfa hay, etc., make a good diet for breeding fowls, and they should be made to work for it. If sufficient exercise is not given the hens will become fat and the germs weak. We give our breeders a light feed of grain in deep litter early in the morning, or throw it in at night when making the rounds to lock them up, so they will commence working as soon as they come from the roost and get nicely warmed up for their regular breakfast, which is fed between 8 and 9 o'clock, and consists of finely chopped roots with a little middlings or bran and

ground beef scraps sprinkled over it. About 4 in the afternoon we give a liberal feed of grain well covered in the litter, and if we have green cut bone we mix it with the grain. The grain consists of as great a variety as we can conveniently secure, corn, oats, wheat and buckwheat usually comprising the bill.

The average poulterer and farmer is yet in no hurry to get a hatch, for unless he has every facility for caring for these little orphans it is not best to bring them into the world much before the first of next month. March and April will be busy months, however, and we should prepare now to get off a large number. One early pullet is worth two late ones, and will bring it, even if sold as a market fowl, but she will be still more valuable if kept for a winter layer. Leghorns and the lighter breeds may be hatched well into May, but if we expect to raise fowls that will fill the egg basket next winter we should not hatch them a bit later than the first of June, and even pullets hatched at this time are uncertain. Market fowls can be raised at all seasons, but the margin of profit is small on the summer hatched chick.

Nothing is gained by bringing chicks designed for laying and breeding stock off before the first of March, as those hatched earlier than this will be likely to moult just at the time you most wish them to lay, but if one has an incubator it is a good plan to start it

the second week in February in most localities. This will give us chicks the first week in March, which is plenty soon enough. We must, of course, have everything in readiness, and a good warm brooder in a dry shed or house will answer where no regular brooder house is available. Chicks can be raised in out-door brooders, but in the early spring it is best to have them in a house or shed. Chicks confined to a brooder will never do well, even if they live at all. They must have exercise in the open air, no matter how cold it is, if the weather is fair. After a chick is two weeks old it can stand a good deal of cold if it can run in occasionally and get warmed up, but it cannot stand to run out in the wind and rain.

Occasionally we find people who attempt to raise early chicks in out-door brooders and keep them in the brooder all the time, except perhaps during the warmest part of a bright day. Most brooders have two compartments, one not quite so warm as the other, and designed as a feeding and exercise room. This is all right for baby chicks but by the time they are a week old they need to get out of the brooder into the open air. If there is no place under shelter they can only be allowed out a short time, and if confined in a warm brooder they become tender, are liable to disease and many die.

A number of small portable houses are an excellent thing to have on a place where poultry is made much of, as they can be used to place brooders in in the early spring and later be utilized for growing stock, breeding pens or laying hens, and can be moved to different points and thus obviate the necessity and expense of building yards.

A White Rock cock owned by E. B. Omohundro, Bowling Green, Mo.

Next month we will try to describe and illustrate a style of house that has proven of special value to us, both as colony houses and when drawn near the farm buildings for the purpose of convenience in caring for fowls, have made suitable winter quarters.

Another point we have found of great advantage is to keep both fowls and chicks in small flocks. Fifty hens are a whole flock and as many as should be allowed to run together, and we know we get a better egg yield when the number is reduced to twenty-five. Chicks in small broods will also do better, and while there are people who succeed excellently with 100 chicks in a brooder, the average person will do better if only fifty are placed in a flock, and still better if the number be reduced to twenty-five. In large flocks chicks will crowd, and if they once get into a jam and are overheated they are of very little value afterwards. Once overheated they are tender and will crowd whenever a number are together, no matter what the temperature of the brooder may be. I would about as soon have a dead chick as astunted one. It is only a waste of care and food to bring them to maturity.

The reason some people succeed with a large number is because they pay very close attention to every detail, never allowing the brooder to become foul and looking well to the temperature. While one person may succeed with 100 in a flock fifty will fail, because the average person will not give the care and attention necessary. They may think they have done all that can be done, but some small matter may be neglected which is seemingly unimportant, yet this very thing may cause

or lay the foundation for trouble which may end in the death of a large number of chicks.

Another thing to be avoided is keeping young chicks on board floors. They must be gotten on the ground, and when floors are used they should be well covered with earth and litter, continually keeping chicks on board floors is sure but certain death.

A due regard for little things assures success in practical poultry culture and by painstaking work we can make chicken raising both pleasant and profitable.

Morrisville, Vt., Jan. 31, 1902.

Poultry Investigator: Up to date I have received you and like you very much. The articles you contain are not long drawn theories but are every day practical and full of good sense that helps one over many stumbling blocks in the way to success in the poultry business. May I ask you a few questions? Is there no redress when your neighbor's cat catches your best chicks—those from your high-priced eggs? Those you would not sell for a dollar each? If we shoot the cat what can the neighbor do? But we can't do that for that makes trouble in the neighborhood.

I have a cellar under my house 30x38 with four windows in it. It is all in one room and there is a furnace in one end of it. Opposite the furnace is a window containing three lights 10x14 glass facing south. The window is under a bay which is 4x16 feet, not from the cellar proper and the wall in there only goes just below front line, so there is a space with earth floor 3x13 or 14 feet right in front of this window, and is 4 feet above the cellar floor. I have an idea of putting my brooder up on horses to make it on a level with this shelf, you might call it, and let my chickens run on this earth floor back to the brooder. Will this make a good place? The cellar never gets cooler than about 50 degrees above zero.

Won't this make a good place for my incubator also? I have an incubator and like it very much.

This is enough for once, I may come again. Respectfully yours,

J. A. ROBINSON.

The Rhode Island Red

For the benefit of those who do not know the Rhode Island Red I will briefly try to give your readers information about them as I find them.

Among my many inquiries I am asked not only what good qualities they have but also how do they compare with Rocks and 'Dottes, and you can read between the lines there is something lacking, something more wanted, something that the breed now kept is lacking and what is it? Can the Rhode Island Red settle their difficulties, will they fill the bill, is it the breed looked for? And now my friends, can I answer? Some say, "My birds do not lay in winter; my chicks are weak and tender, and still others complain of poor hatches.

Let me ask you why do men and women who make a living from Poultry take up the Reds, those that look at the commercial side of the question, those that want every egg count, why do they?

Because they find the Rhode Island Reds are just a little ahead, just a little better, but that little means much—it means perhaps more profit, perhaps profit instead of loss; we are always trying to improve trying to find something just a little better and I tell you we have found something in the Rhode Island Red just a little better. They lay just a few more eggs; you can hatch just a few more chicks from one setting and you can raise just a few more chicks from those eggs.

I can see a good many of those that keep other breeds jump high, but wait a little; perhaps the Rhode Island Red man got just a few more eggs from each hen than you; perhaps you did well, but the Rhode Island Red man did better. Don't jump at conclusions because you don't know. The Rhode Island Reds are the utility fowl for the twentieth century.

ERIC AURELIUS.

A White Rock hen owned by E. B. Omohundro, Bowling Green, Mo.

Timely Thoughts For 1902

By Mrs. Albert Ray

Judging from the great interest and pleasure shown by the many who witnessed the hatching of chicks by machinery at the several fairs and poultry shows this season, there will surely be many who will take up the poultry work ere the new year is fairly begun. With a new zeal and determination to succeed in it, to a degree more profitable than ever before, assisted by the modern helps which do so much to make an already hard task much more pleasant and remunerative.

In order that we may reap best rewards for our poultry work, let us begin immediately and go to work in earnest. Some may think that there is plenty of time, but experience has taught us much better, for we know that many losses come when everything is not in readiness for the hatching and care of the early chicks. We all must know that it is the very early chick that pays—the chick that is hatched before a hen begins to think about the business at all. Beginning early enough is out of the question if we cannot have eggs—and eggs of good quality, too. These eggs cannot be had in readiness for the work of 1902 if our flocks are not kept in proper condition, as many will be tempted to cut short the rations; on account of scarcity of food improper variety this particular year; now, let's not do so, it will not pay, for in winter poultry requires more feed than in summer, for enough must be provided to help them

overcome the effects of the cold, to just keep them "holding their own" to say nothing of the further and extra amount and variety required to produce eggs. Such food should be as near a substitute for a summer diet as possible, and is provided in vegetables, hot bran mash, warmed grains, clean, warmed water in quantity, warmed milk and meat scraps if possible, besides plenty of sharp grit and dust for baths always at easy access.

First, in order to economize the food given make the houses comfortable; then provide litter such as leaves, hay, straw or light trash, sowing broadcast among it the warmed grain, thus compelling the hen to "scratch for her living." This warming exercise has a most helpful tendency to induce "biddy" to lay, keep well and happy.

We can not start early enough for greatest profits if we allow our poultry to run down in condition. Now is the time; keep the condition they came into cold weather with and improve it if it is not the best before there is further loss. Let us stop to consider what a large per cent of animal tissue is water. An egg contains a much larger per cent. Water is the very cheapest of egg producers; never cold in winter, always warm and clean.

Now is the time to cull out everything that lowers the quality of our stock and properly mate our poultry with a goodly number of better grade fowls, that the stock of eggs may be strongly fertile and young fowls be of a purer, truer type; so, too, that as large a per cent as possible, of chicks, may be had as a reward for what we have attempted to do, for no hen or incubator can ever hatch an infertile egg—time spent on them is simply wasted; but most of such trouble can be saved by proper mating, variety of food, and in cold weather gather eggs two or three times a day, keep them in a place neither too cold nor too hot, turn occasionally and do not keep too long.

We do not think it pays anyone who raises chicks to do without an incubator, for the labor is so lessened and results so multiplied; our actual experience was that the young cockerels from our first two hatches more than paid for the machine, sold at only an ordinary price as they were not extra early and the young hens from second hatch have been laying since second

week of November, thus doing their part when eggs are good price.

Let all of us care for our flocks as aforesaid and if we do not use a machine there is going to be a good demand for sets of eggs for other people's incubators and let us treat each other honestly and let our customers know to depend, that, as far as we can know, our eggs are fertile, fresh, and have been carefully gathered and cared for while waiting for enough to fill the incubator order.

Again, if we wish to replace the money invested in our machines or raise poultry for market, let us use eggs of some of the larger varieties in our first two early settings, beginning February 1. Plymouth Rocks preferably, as they will be most easily obtained, and on marketing are uniform in size, color and shape and readily attain a good weight and during the months of May and early June, we hope to capture a price of 18 or 20 cents per lb.

An advantage of the machine over the hen is that we get such a number all the same size and age at once, that is economy; for it is no more trouble to care for a large hatch than to care for the chicks of two or three hens, and much more interesting and satisfactory; then the uniformity for market is so desirable.

Trusting we may all conspire to make the year 1902 memorable for the great impetus and financial success of our farmers in the poultry industry. I would again urge that we have, at least this most important branch of the work, well looked after. The next important steps can be taken up next month.

Mrs. Albert Ray.

Wiley, Kansas.

E. B. Omohundro, Bowling Green, Mo. A White Rock specialist.

A White Rock pullet. 96 point. A prize winner owned by E. B. Omohundro, Bowling Green, Mo.

One of E. B. Omohundro's White Rock hens. Bowling Green, Mo.

Setting the Incubator . . .

By Mrs. May Taylor

The first essential toward getting the incubator set is to know how to put the machine together properly, putting all the adjustments "just so," or more properly speaking, adjusting all the attachments so that they will swing and work to a nicety without hitch or binding.

A new incubator is very liable to be stiff and sticky and should be run at least three days empty or until you are perfectly satisfied that it is going to go. An hour spent in studying the instruction book at that point where it tells about unpacking and setting up the machine is time well spent—very well spent and if I were selling incubators I would send the instruction book by mail a few days before the machine was to arrive so that the purchaser could tell at which end of the crate to begin to loosen up. The usual way is to put the book in with the machine and the "master mechanic" of the house goes to the case with hammer and chisel, hatchet and screwdriver, or somethin' improvised to take their places in case the next door neighbor has the real articles borrowed. I believe too, if I were making incubators to sell I would not only send the instruction book out ahead of time but I would print in big black letters on the very first page, "Have your tools ready," and make a list of what is needed so that the buyer would not only hunt up from barn and crib, sheds and store rooms the things needed, but could make the necessary call at the neighbors for what was lacking.

Years ago I knew a man, a very imminent and prominent citizen, a man of family, who had amassed a fortune, had many broad acres with farm machinery of all kinds to be had in those days, yet when it came to opening up a new parlor organ he took off one of the lamp stands thinking that was the proper way to get at the keyboard. He broke a piece of the lamp stand, and his wife laughingly explained how it happened. All he needed to do was to unlock it. And so the master mechanic of the house goes at the incubator case rightly clothed, and in good breathing order, but before he gets through is divested of all surplus outer raiment in the shape of coat and vest and with his breath coming in short gasps. Wouldn't a snap shot of the group be interesting? The machine and pieces, the family and a few "by-standers a standin' by," as Samantha would say. This is not any fancy picture by any means. Many an incubator buyer could paint you one in penwords just as real if not a little more so.

But now having the machine ready to set, and of course the question of where it is to set having been duly discussed and decided on before the day of arrival, the next question is to get it on its feet. The legs of an incubator is one of far more importance than anybody who never tried to steady one on spindle shanks ever thought of. A heavy machine set up on beautifully trimmed spindly shanks that threatens to fall over every time the egg drawer is pulled out or pushed in is—well, something of a nuisance. I would rather have them plain and straight from top to bottom, without any or very little tapering.

Get the machine level; to do this put a plate of water in the center on top, the water will tell which side needs raising or lowering. I once knew a man to walk over a mile to borrow a spirit level to level up a machine that was only about two feet square. Any flat vessel of water on top would have done as well.

Don't put water in a hot air machine. I have heard of such things being done. Follow all the instructions about putting the regulator together to the letter; this is a very important part to be observed. Have every part of the regulator scrupulously clean of dust. Run the weight as far out as possible when the heat is first turned on and if it still is insufficient to hold down the damper lay a weight on the wire rod. You see it is necessary to do this because as a general thing the blaze is turned up full strength and the regulator gets warmed up before the ma-

chine does and it will "work" or open the damper too soon, letting the heat pass out instead of in the machine.

I once knew a person who bought a second hand incubator, the former owner had run the machine with the weight at a certain place; it was marked quite plainly where it had been accustomed to stay, and the first party had instructed the second party to keep it there and it would be all right. She, the second party, did so, but could not get the heat up. I was called in to see what was the matter. The damper was two inches above the flue; the lamp flame was on full strength but the heat of course all went straight up and out. I told her she would have to move the weight as far out as it would go, but even then the damper would go up. I told her to put a weight on it, which she did, but left the flame too high and the lamp, a glass bowled one with no vent for the gas, exploded. I took over one of my lamps from small machine, a copper bowled one with safety vent for the gas to escape, and told her she could turn it as high as she wanted to and there would be no danger of it exploding. The lamp burned clear and steady for three days and nights but she could not get the machine to work right, and the last time I saw it she had it out in the yard for a stand to set the cream separator on. She was determined to use it for something. It worked well there.

When filling the machine you can put a great many more eggs in by leaving the turning rack out, if your machine has one, mine has. Some people very much prefer turning by hand; it is simply a matter of taste. I have the poorest success when I put the eggs in promiscuously like and turn by hand, and I have the best success turning with the rack. I put the eggs in the slats with the large end of first one slightly raised and laid up against the rack, the next egg in same position up against the first egg and so on until the row is completed. Have the small ends of the eggs always pointed the same way and be careful to put them in with the points slanting toward the way you want to turn them the first time, so that when they are turned the points will be standing toward the way you want to turn them next time, never lay them flat down in the rows for if you do they will turn in all sorts of ways, some on big end, some on little end, some piled up against each other and some won't turn at all. With the best of placing there will be a few to turn by hand each time until the growth of the chick makes the egg heavy, then it turns much better that at first. Eggs shrink in the process of

B. P. Rock pullet owned by C. M. Hubbard, Fairbury, Neb. He breeds the Thompson "Ranglets."

hatching, so that these which seem too large for slats at first will turn easily before the hatch is over. When the eggs are all in the tray, before you shut them in, take a narrow strip of card board, dip in ink and run it up and down the rows. Let it touch each egg as it passes over, redip in the ink as often as necessary. Sometimes I take a match instead of cardboard but the card is best.

How thankful I am that I have a patent hatcher, not only one but three, but specially thankful just now for the one small machine. Have a pet hen that I have been saving eggs from until I have 17, but no hen to put them under, so I steamed up the machine and set them yesterday. Those eggs are very precious if they hatch as they are from a special mating. The hen is our special pet. She has her nest to herself; no other hen is in her pen, but we are going to put her in another pen shortly. These eggs are an experiment, and if I did not have the machine what would become of the eggs? I know we would grieve over them until they were too old to keep longer, then they would go into the market or into custard pies. In times past when we had no machine, we had laid out many a fine setting of eggs and longed and wished for a setting hen, until they were too old to set then sent them to market and it was always just that way the best eggs had to be sold for by the time the hens took a notion to set the eggs were beginning to get small and runty. My neighbors were always good to loan me early setters when they had them. Have hatched many fine pure breeds under mongrel hens donated by the neighbors. Had eleven hens one spring from five different farms; ten of them attended strictly to busi-

ness but the eleventh wouldn't set when moved nor didn't set and all my persuasion couldn't make her set. I walked a mile through fields of snow slush one spring day to get a setting hen. My neighbor sent me word that if I would come after her I could have her and welcome, but not if I sent; you see after I went into the chicken business I had no time to visit, and the neighbors rebelled. That was years ago; they are used to it now—my not visiting—but she never dreamed of my walking after her on such a day, but husband had gone up country on business and would be back past there in the evening, so I walked across fields, stayed all day, got my dinner in the bargain, got my hen, too, took her over a three mile ride around through town, took her right under my arm into the swellest millinery shop, where I used to do my waiting when in town. Sat down with her in an upholstered rocking chair and held the hen in my lap until husband got read to go home. My milliner didn't care, I knew, but "me and the hen" was a subject for much comment and merriment among the other "bystanders standin' by." If they had been men folks I suspect there would have been a few bets as to whether the hen would set or not when I got her home. Yes, she did set.

* * * * *

We have an outdoor thermometer from the Sure Hatch Incubator Co. I suppose I ought also to add "of Clay Center, Neb." but it is entirely unnecessary as everyone knows where the Sure Hatch comes from. The thermometer is a beauty and we have it hung up by the door, and it looks like it was going to behave real nice. The liquid is green and there is a great long streak of it. This morning up to 30 above. We like to look at it and hope it will stay up and not creep down out of sight. It could hardly do that for there is room for 50 degrees below. We have never yet had the pleasure of using a Sure Hatch incubator but quite a number of our correspondents use them and all are well pleased. We have sold hundreds of eggs to hatch in the Sure Hatch machines.

MRS. MAY TAYLOR,
Lock Box 176, Hale, Mo.

Raising Young Ducks

We have found the raising of young ducks just as easy a chore as we ever undertook, but we do not have to travel far to find those who have no luck with ducks. There will be a whole lot of amateurs engage in the business this spring, and perhaps their start will be a solitary pair of ducks and a piano box for a house. We do hope there

will be a piano box, for ducks ought not to be housed with chickens, and we hope there will be little pens to hold the pair in the morning, so that none of the eggs may be lost or chilled, for it will be real encouraging if a good sized flock is the result of so small a beginning.

Now, if our beginner lacks modern appliances perhaps this small beginning is the better way, but one could gather a setting of eggs quicker and set them fresher if there was three or four ducks. Duck eggs will not hatch well when more than a week old. Pekin ducks do not often wish to set, so the eggs must be put in incubators or under hens. If hatched under hens great care must be taken to free them from lice when they are taken from the nests. No matter what care one gives the setting hen the ducklings will be found with lice on them. Herein lies the first bad luck of the uninitiated. When we use a hen mother we resort to that old fashioned remedy, grease, and we take particular pains to apply just a little down close to the beak where lice stay. Once a week the mother hen gets a liberal supply of lard and coal oil under the wings. We use Lee's lice killer and insect powder if we have them, sometimes for the ducklings, but our grease can is always ready and never fails of its purpose.

Ducklings should be penned until they can go over a 16 inch board. Small pens are all right if there is sand and green onions and lettuce to put in it. We always feed the ducklings oatmeal for a day or two. Then almost anything but not all corn meal. We mix bran, shorts, corn chop and a small quantity of sand, and if we have it we scald the mixture with sweet skim milk. The water must not be given in open dishes. We do not like to feed too many potatoes, but there is no danger of too large a potato diet this year. In early spring ducklings having access to water get chilled and die. Ducklings do not require as much heat as chickens and if care is taken to keep the brooders clean are more easily raised in brooders than chickens. Badly chilled ducklings may be saved by warming in blankets near the stove, and your saved duckling won't behave as little chickens do, get well only to take diarrhea a day or two later and die. No, you may take the brood of ducklings you forgot and left too long in the cold, warm them up, eat a hearty meal and be ready to broil in ten weeks. Now, when only a few ducks are raised and there is a necessity to shut them in rat-proof coops, there is danger that they grow too fast for their house, and that they be left closed

Buff Cochon Cockerel, score 93½, pullet score 92½, cut 2½ for weight; 1st prize winners owned by C. B. Allison, Tennessee, Ill.

up too long in the morning in which case you may find half a dozen stretched out apparently dead. Some times air and water will revive them, but the novice would be sure to bury them at once.

Ducklings are easily driven into their coops in case of a storm, but in case of daytime storms a great many ducklings may be smothered if the coops are not roomy and well ventilated. A lot of auger holes covered with wire screening up under the roof of the coop, is a good idea for the coop a woman perhaps builds for herself. Now to our sister breeders and would-be chick raisers, we would say it is easier to drive a stake than a nail, and if you stake the boards you use for your little duck pens into place, they are easier to move, and if your husband happens to want the boards again, presuming you borrowed them, there won't be such a fuss about split boards. Just a little attention to trifles will prevent loss. Ducklings are hardy and easy enough to raise if one gives a little attention to small details. To push the duckling food must be plenty but we have raised ducks that were never fed after they left the pens and that weighed up to the standard. Grasshoppers were thick however.

It is quite as well to give the ducklings no mother after warm weather begins. We have raised fifty ducklings in a twelve foot square pen, covering them with an old blanket at night and not losing one. Now this is the beginning. When there are ducks enough to fill the incubator with eggs and the brooder with ducklings, don't forget that the pens will save most of the bad luck. HATIE BYFIELD.

Chick Life

By Mrs. M. A. Beckett.

The time was in June. The place was a charming spot in the Salt Lake Valley, just under the eaves of the mountains. Benath a spreading apple tree there stood a humble cottage. Within this cottage there was great commotion. It was the day of the coming out of Misses Minnie and Midge Bantam, daughters of the old established family of Bull Cochon. After a period of confinement of a fortnight or more putting on the finishing touches of their toilets, they burst forth from their chambers of gold and of white dressed in garments of a buff, soft and clinging material, which showed each curve of their perfectly formed bodies. And amid the songs of birds and the fragrance of flowers they made their debut into the very best society of this province.

The young ladies were twin sisters. Their early training had been of the best, and by the indulgent care of their proud and matronly mamma they soon developed into perfect buds of vivacious young womanhood.

Each day saw some curve of their bodies becoming more rounded and firm, betokening that the time was not far distant when they would long for a wooer to come.

Their dainty heads were carried like a queen's. Their hair which was of a rich golden color, was always done in perfect taste and style, and invariably the finishing touches were given by the adjustment of a comb of rich

coral red.

As time went on, and they developed into young women they had admirers not a few. Their cheeks took on the color of spirited youth and turned to scarlet with the blushes of young maidenhood when Mr. L. Brahma addressed his attention to them. But he was not to their liking. He had seen so much of the world. He was old gray, and big and coarse. Old enough in fact to be their great, great, grandfather, while they were young things, fresh as the morning dew, and when he would endeavor to entice them to his side by picking up and throwing at their feet some dainty morsel, they would turn away and hide their heads, and laugh in their wings at him. Then, in a quiet, dignified way, he would say, 'O come, my sweet little buttercups, with my wisdom and knowledge of those mineral hills, I can scratch forth nuggets of gold for your gizzards.' But they would only run away and hide in the bushes like two little frightened doves.

It was late in October that there was introduced into their set a gallant knight and traveler by the name of Sir Tiddle De Winks, also of the B. Cochon style, who had lived long and seen a great deal of the world, much more than fall to the lot of most young men of his class. He had been a great traveler. He had come West, I might say to grow up with the country. In his very early age, in fact, before he had left the nursery, he had traveled from the great metropolis of New York to the charming little city of Ogden. It was there that he grew to manhood.

One day it was decided to hold a great function in the City of the Saints. A real beauty show it was to be. Miss Minnie was wild to attend and to enter the contest, but Miss Midget, who was a fidget, was compelled to remain at home. It was for the purpose of accompanying Miss Minnie, that Sir Tiddle De Winks came to this city. The young people took very particular pains to prepare for the contest. The young lady rearranged her feathers and comb. Thy polished their nails, and sometimes they would go bathing in the dust pan together.

Sir Tiddle De Winks was what might in those days be called a dandy. He wore a suit of yellow and gold. His leggings were of a similar material, and extended well down over his feet. Upon his knightly head he wore a helmet of red coral not unlike the young ladies' combs.

But, oh, I hope it will not detract from your good opinion of the young man's taste when I say that his whis-

John Hettick, Bowling Green, Mo., a Langshan specialist.

kers were long and thick and red. Yet those red, round whiskers were the young man's pride, and he never lost an opportunity to bring them into prominent view and especially at the great beauty contest when he and Miss Minnie were doing and looking their best.

Each wore a ring of yellow metal, just at that particular point where the shapely leggin ended and the dainty foot begun.

And all the time he seemed to be dancing to the tune of old "Miservia Ann," and singing:

"Don't you see my new shoes,

Ain't they handsome?

Ain't they handsome, number twos?"

The battle was over and won. Sir Tiddle De Winks and Miss Minnie were voted the handsomest couple there.

It was at this contest that he won the young lady's heart and the arrangements for the wedding made. It was to be a grand affair. But alas, must we always take the bitter with the sweet? Soon after the great contest was over and the young people had returned to the home by the apple tree, Sir Tiddle De Winks fell ill. He had a severe cold and quite a hacking cough; his eyes grew dull, and his appetite was failing him. It was thought it was caused from excitement, and possibly getting too warm in the dance. It was decided to defer the preparations for the big wedding, and just have a quiet little affair.

So Sir Tiddle De Winks and Miss Minnie were married. But in spite of her tender and loving care he gradually grew worse; he was given all kinds of tonics and "cure-all," but nothing

seemed to relieve him. His physician grew quite discouraged. That dread disease, consumption, was feared. A change of climate was advised. So preparations were made. A tiny cottage was secured, with a bed of fresh and bright straw under the box of Geraniums by the window in the den of his master and mistress. His bride of course accompanied him, not for the sake of her health, but simply for the purpose of comforting him, and lending to him her consoling presence.

It was hoped that the summer conditions, the sight of the greens and the flowers would restore him to perfect health again. They often talked it over together, and he would say, "C-o-o-ok, c-o-o-ok," which means in chicken talk, "I love you, my dear," and she would answer in the same sweet way.

One day there was cause for great hilarity under the Geranium box by the window. It seemed like old times. The days of the great beauty contest, even the old song and dance were there.

Buff Wyandotte Pullet owned by E. Day, North Bend, Neb. A winner at Nebraska State Show in Lincoln.

and a perfect deluge of joy, for there in a tiny little corner in a tiny little nest, was a tiny little toy-like egg. The invalid was so delighted that he seemed to pick up and grow stronger. He picked at the vines and some cereals a little raw beef steak and crumbs. His tea was sipped with a relish, and his physician grew encouraged and hopeful.

Each day the tiny eggs grew in number, one by one they were deposited in the little tiny nest, until all in all there were eight. Little Minnie seemed to grow despondent and fretful. At times she would even be cross with her husband, even in his delicate health. Her eyes grew dim and possessed a far-away look, and although she used to crow and sing so many

pretty songs, she would do nothing now but cluck, cluck, cluck. Poor little thing, she meant nothing harmful. Her domestic duties and the cares of an invalid husband had completely outdone her. She must have a rest, so she planted herself on those tiny little eggs in the tiny little nest under the window. And there she sat and sat, day after day. Sometimes thinking of the treasures in store for her, and sometimes dreaming of the conquests of the days of her youth. For Minnie is no longer young. Or, perhaps, who knows? She may have been weeping in silence. There were no tears in her eyes, but it would not do for her to let her dear husband see she was weeping, and perhaps the little faint heart was breaking, for how could she help but see that the one who was so dear to her was fading away. As he sat so close to her side, could she fail to see that the love-light in his eye was dying? Ah, no; she knew, and suffered in silence, and as he sat by her side so patiently and reconciled, hoping against hope that he might yet before the appointed time, see and caress those who were to inherit and honor his name.

He seldom left her side now, but sat close; now and then he would carefully adjust a truant straw about her, anxiously to help her up to the last.

It was on the eve of the twenty-first day. There was heard a "peep, peep," in that tiny nest and out from beneath the soft downy breast of the young mother there peeped two little bright eyes. And just as the last rays of the late December sun cast their glances of purple and gold on the hill to the east, Sir Tiddle De Winks said: "K-r-r Kret. K-r-r-Kret," which means "Our God, Thy will be done," and his head fell dead upon the wing of that sweet, sad wife and mother.

One of C. H. Hinman's, Friend, Neb. B. P. R. pullets. Mr. H. won largely at Lincoln, Neb., at state show.

Broiler House For 500 Broilers.

A party in Indiana has requested me to give plans for a broiler-house, 500 capacity, in the Poultry Investigator, but he does not state whether it is for continued production or for 50 for the season. From my own experience and from the information I can gather among successful broiler raisers, a house to contain 500 broilers continuously, or in other words to always have 500 broilers of different ages, should be 16x100 feet, this would make a floor space of 1,600 feet; if the party or person wishes to raise just 500 for the season he could get along with half or even less room. It is a very hard question to settle these things satisfactorily to all, so many things must be taken into consideration; some would depend a great deal on outside yards, others would depend entirely on the building. In my way of viewing it, long houses are more of a fad than the outgrowth of a successful experience. Long houses cost more to the square feet of floor surface and more of the building is exposed to the weather, of course the yards in front fit a long building, but for ordinary purposes, yards can always be fitted to square buildings. For 500 broilers for the season a building on the plan as per cut 20x24 will do very well, in fact, I have known of excellent success with much less room where the chicks were allowed yards. Another advantage in a square building is its adaptability to economical heating. I have tried various methods for warming a brooder house and have never used anything more successful than a hardcoal burner.

I prefer the Round Oak soft coal burner with a hard coal magazine, and use hard coal instead of soft coal. Coils can now be secured that fit these stoves and from that a hot water pipe system can be attached. I prefer a square house and to set the heater in the center of the building, making a pit for the stove deep enough to allow discharge from pipe coils to come about eight inches above the floor. Several courses of pipes can be run here or there, using the pipes to warm hovers or what would best suit the party. For my part I prefer keeping the room at about 70 degrees; using individual brooders for the different hatches of chicks. For success some chicks would need a warmer temperature, thus the individual brooders would be preferable.

This paper is ready to go to press, in some near future issue I will try to suggest more definite. It occurs to me that the question of brooder houses would be a good question for some of the writers for this paper to give their experience. I will do my best. Let us hear from others, it is a question that hardly any two view alike. Yours truly,

M. M. JOHNSON.

GAPES

One of the aggravating things in poultry raising is to discover in a flock nicely feathered out and seemingly past the danger point the premonitory sneezes. And yet it is usually after they are well started in growth that this dread disease attacks them.

It is generally understood that it is caused by the presence of a small threadworm in the windpipe, eventual-

ly causing suffocation. Those skilled in the art may, by a skilful turn of a horsehair bent into a loop and inserted in the throat, speedily remove the offender. Yet it is not an inviting process, and the novice is liable to give his first patient more torture than relief.

Several years ago I was quite disheartened by the outbreak of the disease in a previously thrifty flock. A member of the family suggested kerosene, and for want of anything better it was given a trial. It was administered in a bran mash, about a teaspoonful in food sufficient for a dozen chickens. If given in such quantity that they can detect the odor they simply refuse the food. And I find that more can be covered up in the mash than in bread crumbs or grain.

One of the chicks on which this experiment was tried—and the remedy was original so far as we were concerned, though I have seen it in print since—was past trying to eat before the kerosene was thought of, and of course died. All the others recovered, though several had reached an advanced stage in the disease and there was not one that had escaped the infection. Later in the season it was given to other flocks as soon as the first sneeze was noticed, and the gapes gained not another victim.

We thought we had found an infallible remedy. And I still think that if the birds could be induced to take the medicine it might so prove. But of late they seem to have grown more fastidious, and not always can they be induced to take enough to effect a cure though at the first trial there is improvement. After the trick has once

been played they are apt to sniff at the food and then leave it untouched.

Last season kerosene and camphor were tried by turn, neither being much relished either by the birds, or parasites. By this means of alternation only one bird was lost, but the cure was in no case as rapid as it would have been could the birds have been induced to feed freely.

Just how the worms got in the throat is not fully determined. Some maintain that they are coughed up by afflicted fowls and then passed in the food to well ones. Others think they pass into the ground and are transmitted through earthworms.

Early chicks are less liable to be infected than those hatched later. And ground that has been occupied by chicks afflicted with this disease should be avoided in future, as the parasites are liable to be in the soil and will then eventually find new hosts.

BESSIE L. PUTNAM.

POULTRY FOR CHILDREN.

"Shall the children be paid for their work?" is a question now much discussed. Those who favor it, advance the argument that in this way children learn the value of money and how to use it. On the other hand, the obliging boy or girl of the past generation is fast disappearing. He who delighted in doing an errand for parent or friend has given place to the strictly business-like boy, who expects a nickel or at least a penny, for all such little attentions. Business has swallowed neighborly accommodation, and good financiering seems to have been thoroughly divorced from friendliness.

The avenue of poultry raising is one which fully solves the problem of business applications, yet leaves a child free to do little favors for friends without inculcating the false notion that there must be a direct money remuneration in every instance.

An advantage in this for the country or village child is, that few families are so poor as to be unable to set aside a small stock for this purpose. A hen and a single sitting of eggs can be spared if the will is present. These, if misfortune does not overtake them, will furnish the nucleus for a plant that can be made to increase in proportion each year. And right here let it be said that from the first the child should be led to more ambitious work in the future. Be it in more setting hens or an incubator, better shelter, more scientific feeding — progress should be the constant watchword.

Poultry raising judiciously followed, may develop a good bit of character

building. "First, there is the feeling of responsibility. A child may from time to time assist in feeding the poultry, feeling that if he forgets it or it is not convenient at certain times for him to attend to this, others will look after it. In fact, the care rests with others, and his duties, voluntary or otherwise, are at least spasmodic. But with ownership, the case is different. He realizes that it is his business to look after matters himself. And while some other member of the family will doubtless relieve him on special occasions, it is his place to plan and see that the work is executed. Personal responsibility is early learned, and self reliance as well as reliability fostered.

Again, he must be methodical and punctual. Chickens to do well require care at stated intervals. His other duties and play can be made to con-

will be acquired of looking the field over and adjusting ones actions to existing conditions. Then there is the risk which each business man assumes, and one must make up his mind that after he has done his best it is useless to cry over spilt milk. We sometimes have to deal with those who make a square bargain so-and-so. Some unexpected loss occurs and they want to creep out and let the other party share the loss or at least a portion of it when they themselves originally assumed the risk. This is "child's play" which should not be tolerated, even in children. If a rat or hawk carries away two or three chickens, the proper method is to catch or put to flight the thief, and not expect mamma or someone else to replace the stolen goods. There are losses in all branches of business, and the sooner one learns to "give and take" cheerfully, whatever be the luck, the happier and more successful will be. "Nothing venture, nothing have," as a saying old but still true.

It keeps busy fingers profitably employed. Children, if healthy children, are proverbially active. They must always be doing something; and when on at work, they may find work which the elders would call mischief. Besides, there is nothing tiresome about this. It is healthful exercise. No dreary hours in a dingy shop or down a dark shaft, but plenty of fresh air and sunshine.

Communion with the little downy pets suggests many thoughts on nature study, and if a little care is taken in this direction, the daily observation of their forms and habits will create a wholesome spirit of observation and love for nature in general, an acquirement of more value than a princely inheritance. Gentleness in handling the inmates of the poultry yard begets gentleness and patience in other matters. And the little investment may eventually result not only in a snug allowance of pin money each year but a complete change in the character of the owner. BESSIE L. PUTNAM.

The mortality with your chicks is one the serious drawbacks attending poultry raising; due largely to improper feeding. Much credit is due to Mrs. S. E. Pinkerton of Clay Center, Nebr., who has formulated a perfect food for young chickens that will successfully carry them through the critical periods of their lives without losing them. The ingredients comprising this food I am well acquainted with; the component parts serve to make a healthy growth, combining as it does everything necessary to make bone, muscle and feathers.

C. H. RHODES.

form to the new requirements, and the helter-skelter plan of doing things when he thinks of it, when it pleases him—or perhaps, frequently not at all, will be abandoned.

The money-making part of the matter should be prominent as in any business venture. Money is not the end but the means; rightly gained and used, it is a blessing; but it is by no means the greatest thing in life. But to business: Even a child will readily acquire the principles of the industry. If broilers are to be sold, the chickens must be raised early. If winter eggs are the main requisite, ditto. The location, conditions of market, etc. modify requirements, and some guidance may be needed at times to secure the most profitable returns. But the idea

A flock of Geo. B. Clary's White Wyandotte and Buff Orpington cockerels at Fairbury, Neb.

Hints on Turkey Raising.

(II.)

Having decided to add turkeys to the denizens of the poultry yard, the question of breed became paramount. A neighbor may have a flock of no particular breed, yet the birds turn out "pretty well" and are always in good demand at Thanksgiving or the holidays. It seems a little extravagant to pay fancy prices for a pair or trio when one can buy plenty of them at the market prices for the meat. Or the eggs may be obtained near home for a comparatively small price.

"Pure bred," do you ask? Well, no; not exactly, but pretty nearly. So nearly that they will pass for pure.

Ah! there is a little mistake—in fact, a mistake of considerable size. This mixing of breeds may do all right in the hands of a fancier who follows scientific principles in his quest of improved varieties; but in the hands of the novice it is sure, or at least almost sure, to come to grief. The crossing once begun, it is hard to tell where it will end, and the manipulator sooner or later finds on his hands a stock of mongrels, inferior to ancestors on either side, and valueless if sale for breeding purposes is attempted. It is much better to study the breed and your own requirements carefully, and then choose and adhere to the breed chosen.

The Mammoth Bronze is the giant of the family, and is deservedly pop-

ular. In some localities, however, medium sized individuals have a preference in market over the larger ones. And if raising for such a market, the White Holland is in this respect preferable. The latter, too, is more staid in its habits, less inclined to roam; and if there is danger of trespassing the White Holland may be the better of the two. Some like to cross the Mammoth Bronze male with the White Holland female for this reason, claiming to acquire thereby birds of superior size, yet with the domestic proclivities of the mother. This may work all right on the first cross. But what have you with the second or third? Besides, the most shrewd always try to sell the best of their flock to breeders at a considerable advance over prices paid for table use; and the first cross spoils all this.

Turkeys commence to lay in March or April, often before the snow is entirely gone, and as the eggs are more susceptible to extremes of weather, the vagaries of the birds should be carefully watched and the eggs removed if there is danger of their becoming chilled. Shake as little as possible in doing this, and keep in a cool, dry place until ready for the incubating process.

The turkey seems to defy the vigilance of her owner in this respect, and though ordinarily tame and confiding, she becomes at nesting time the most wary of birds, and will often lead one

on many false clues. She usually chooses some neglected fence row or brush heap if such exist in the neighborhood, and each egg is carefully concealed by leaves or dried grass as it is deposited; consequently, the only sure way of locating the nest is to follow the bird; and the methods she adopts for misleading her pursuer would be quite comical were they not so vexatious.

The period of incubation is about one month. Before the days of incubators the fashion was to give the first setting to hens and thus double the turkey's egg producing capacity. But it is generally conceded that while the hen mother trained her children to home loving habits, she was not so patient; and that the methods of the turkey mother, resting frequently and moving at all times slowly, gave the best results. Those who have given it a trial speak in high terms of the advantages of the incubator for turkey raising, and in some respects it seems decidedly preferable to the setting hen.

Bread crumbs form a good diet for the first few days. Cottage cheese is an excellent food by way of variety. The crumbs from the family table may serve to cater to the wants of a small flock. An acquaintance, during one season when wheat was high and locally scarce, fed a flock on Johnny-cakes, and kept them growing nicely. It was mixed with sour milk and soda, and baked in the oven. Turkeys are especially fond of cabbage and similar green food, a hint which may prove of profit during the winter months when dependent upon their owner for all such delicacies. The rough leaves of the cabbage should always be converted into poultry food, as well as the small and ill-shaped heads.

Turkeys feast upon the slugs which infest roses bushes with a great relish. And if one has a bush infested it is pleasing to perch a half grown turkey upon the hand in reach of the bush, and notice the rapidity with which the number of pests decreases, as well as the keen eye which seeks out its prey. The cure is cheaper and quicker than with hellebore, and equally effective.

When the birds have become nicely feathered out the feeding problem is ruled mainly by their tendency to wandering. Fed at night, there is an inducement for them to come home to roost, a most desirable feeling to the owner. BESSIE L. PUTNAM.

If you want to buy any Black Langshans send for L. E. Meyers' fine circular and read what one of our best judges has to say of his stock. Mr. Meyer is located at Bowling Green, Mo.

First Prize pen of Buff Orpingtons at Nebraska State Show at Lincoln. Bred and owned by C. Rockhill, Harvard, Neb. These birds won in strong competition and are as good as grow.

The Farmer's Advantages.

Mrs. W. I. Hines.

By little things we mean chickens or orchard; in fact, anything outside of the grain crops or horses or cattle which are raised and sold upon the farm. When the farm fails to return profitable crops, like the season of 1901, this should teach farmers that it is not wise to trust to one or two main crops. Unfavorable weather may ruin the prospect of the corn farmer, but it is seldom some crops do not succeed each year. Therefore by having several eggs in your nest you will get some good results. I feel I can safely say that poultry and fruit should not be called little things, for last year those were fortunate who had their fruit trees at a bearing age and could add some to their income as all fruit did well last year. Our hen house is surrounded by our orchard. Chickens are good to destroy insects in an orchard and the waste fruit is good for them. The shade is also essential through the hot summer months. Any farmer who has a large orchard and does not keep a large flock of hens upon it is wasting valuable space which could be profitably utilized to great advantage. No one is so favored with natural advantages for profitable poultry as the farmer and we wish we could impress this fact upon every farmer who is disposed to give the slightest recognition to the part which the poultry pay in connection with the farm revenues. In many cases we will find farmers are poor and have a mortgage upon their farms. Do they know how to make the most of the so-called little

things they have around them? It is a question of management, nothing else. A penny saved is a penny earned. If this was applied to small things on the farm, no doubt many of our farmers would find their accounts in much better shape. I know farmers who think poultry is too small a fry for them to bother with. I hope our extreme drouth has taught some of them that their hens are not a very small thing after all. I think during the past season the hen has proven herself one of the most valuable possessions we have on the farm, for their earnings pay our grocery bills. It seems the prevailing idea with the average farmer is that a 25c scrub cockerel is good enough; but what a mistake to think of the years spent trying to do something with nothing. Thought and action are the great money forces on the farm. Winter is the best time for thought and the other season for action. Let us all start in this season (as feed is high) with a fixed purpose to raise less quantity and more quality. No one is justified in raising mongrel poultry. Not in this day and age of the world. It has been amply proven that extra prices can everywhere be obtained for good stock, be it horse, cow, pig, or chicken, and that it costs no more to raise pure bred stock than cheap scrubs. We have no right to expect results except as a logical result of effort and conditions. "We shall reap what we have sown." is as true today as when first uttered. Let us commence at the beginning and not expect to accomplish wonders in a

fortnight. If there were no obstacles, if there were no disappointments in store for us, and all were smooth sailing with the almighty dollar, there would be no money in the poultry business, for in that case every shiftless, careless man who tried it would succeed, and there would be nothing left as a reward for earnest efforts. To make poultry keeping profitable it is necessary to observe methods. A successful man in any occupation makes his business a study. He thinks, plans, and reasons, and his mind never loses sight of opportunities. If results are adverse from his expectations he is not satisfied until he has investigated the reasons. These discovered remedies are applied. Mistakes are considered as object lessons, and the same mistakes are not made the second time. The fact is, this man will make a complete success in the business, and there are other careless men who would make a complete failure, in the business in the same place and under the same identical conditions. This plainly indicates that knowledge is gained from experience, reading and using a lot of thinking and planning. Now that feed is high is a poor time to keep unproductive stock. Look over your flock and see if any saving can be made by disposing of part. The wise farmer will keep nothing but good stock. He should begin with but one variety of pure bred poultry. I know so many who keep from five to fifteen mongrel cockrels over for breeding stock every year. Now that feed is high why not sell every one of them and buy one or two nice thoroughbreds of whatever breed your choice may be. Now select your best hens to mate with them and only set eggs from their pen. You may think this lots of trouble, but I can assure you it will pay you every time. But remember, dear reader, "that like begets like" in the breeding pen.

The wise farmer will try to keep his stock comfortable. If you cannot do this with your present facilities, then keep them as comfortable as you can this winter and provide proper quarters for them before next. Many uncomfortable poultry houses can be greatly improved by the judicious use of a little lumber, supplemented with straw for filling in. In the absence of anything better, old newspapers will oftentimes stop holes and cracks. Farmers, as a class, are in the habit of looking upon their poultry as a side issue, or as we may plainly express it, "A gift from God." They give all their attention to their corn, oats, wheat, cattle, etc., and their poor chickens, after being raised by their good wives, are left entirely to nature. Now nature knows her busi-

1st Black Langshan cock at Springfield, Ill., owned by John Hettich, Bowling Green, Missouri.

Black Langshan cockerel, score 95½, at Illinois State Show. Weighs 10½ lbs. Owned by John Hettich, Bowling Green, Missouri.

ness, but the best farmer on earth cannot farm unless he has the proper things to do it with.

Now, good farmer, it is just so with your hens; if she has good material to work with she will not disappoint you. Furnish nature with the things needed for the performance of her duty and she is perfectly willing to do her part, but cannot unless given a fair chance, any more than your horse can do a good days plowing without food and drink. Filth and lice bring on conditions resembling cholera, and it is as handy to call it cholera as anything, but I find this does not make it so. I am confident the best cure for this complaint would be to start in taking care of your poultry. "An ounce of prevention is worth a pound of cure." On cold days the hens should be kept in the hen house and scratching shed connected with it, in which scatter small grain. I find the great secret of eggs in winter is to give clean wholesome quarters and make them scratch for their grain.

If possible always lay in a stock of cheap vegetables and apples for winter feed. I also have a rye patch for them to roam in on pleasant days. I give a warm mash on cold mornings composed of cooked Indian corn meal with all the odds and ends from the table of any fine food I can get. At noon I give them skimmed milk to drink. I keep the poultry house whitewashed outside and in, with the following

whitewash. There is nothing better for poultry houses. It is made as follows: Slack one bushel of good stone lime in boiling water, keeping it covered while slacking; strain and add one-half peck of salt dissolved in warm water; three pounds of ground rice boiled to a thin paste; one-half pound powdered Spanish whiting and one pound clear glue dissolved in warm water. Mix this all thoroughly with slacked lime and let it stand for several days. Apply as hot as possible with a clean brush.

I find this is a good preventative against lice and mites. I am confident if you would start in taking care of your poultry and keep accurate account of all receipts and expenditures among the fowls, and also credit them with all their returns. And if you have managed right I am sure it won't be but a few years until success crowns your efforts and you will also find you have accomplished something worthy and profitable, that will be a great pleasure to you or all that may see your flock of well bred, well cared for and vigorous poultry. My idea is to keep my Barred Plymouth Rocks in the most vigorous and healthy condition. To do so I have learned the most important thing is to keep their quarters free from filth, lice and mites. Look out for lice. You cannot breed them and raise healthy vigorous poultry. You cannot neglect your work and expect to make poultry pay.

NOTICE.

Any and all advertisers in the *POULTRY INVESTIGATOR* are earnestly requested to send us any photographs of their yards or birds and we will have half-tones made of the same and they will appear in the *INVESTIGATOR* and a description of the same with due credit to the owner. This is a picture age, nothing advertises one's stock as well as a nice half tone and you can't afford to let this opportunity pass without accepting it, so send us any photos of yourself, yards or birds and we will do the rest.

This is to certify that I have sold to Pinkerton & Co., Clay Center, Nebr., the following stock:

Eight pullets and one cockerel mated for cockerel breeding, and one cockerel mating. These birds are from my best exhibition cockerel line and I believe will produce prize winners. Also two cockerels of my best exhibition pullet line, same blood as my New York winning pullets.

E. F. THOMPSON.

NOTE.—Pinkerton & Co., have moved their fine stock of Barred Rocks to Clay Center, Nebraska.

The *Inland Poultry Journal* of Indianapolis, Indiana, is one of the best poultry papers published and is fully up-to-date in every respect. It has at the wheel Theo. Hughes a well known poultry judge, a first-class writer and a man familiar with all the details of journalism. The *Inland Journal* has improved very much during the past year and we wish them a prosperous future. Look up their ad elsewhere in this issue.

From I. A. Harvey.

Poultry Investigator, Clay Center, Neb. Dear Sirs: As I am a reader of your valuable poultry journal and like to read what other poultry raisers have to say in regard to their success and failure in the poultry business, I feel as though I might say something along that line that might be of interest to some of your many readers. Can a person raise poultry on a town lot to any advantage? I say yes. But you will have to keep a smaller flock than you would if you were where on had more room. We (that is, wife and I) have a lot about 100 by 40 feet for our poultry yard (you may say, too small to do any good, but we get there just the same.) This we have divided off in three parts. Two-fifths of this in one lot and the other three-fifths in two lots. All three lots are connected with the poultry house. In the big lot we have six fine plum trees and one fine peach tree that bear fine fruit. About the middle of September we turn the birds out of this lot. Get some rye. Sow it very thick on top of the ground and then dig it under about four or five inches. Of course you can't cover it all up, but this the sparrows will pick up. We have to keep the birds off of it about two weeks, and by that time the rye is up so thick that it completely covers the ground. This will give them greens enough as long as the snow is off. We have had winters that there was one or two days in every week that they could get green rye enough to do them. As soon as spring opens up and the snow leaves and from this patch they can get green stuff enough until the rye ripens, and then they get the ripe grain. We usually have from 25 to 30 birds on this patch, and they can't keep it down, the rye being sown so thick in the first place, will leave plenty to go to seed, which the birds soon find. Bread down the straw and relish the new grain. By the time that the rye ripens I dig up one of the other patches and plant it in corn. This I do for three purposes. First, they are about out of green stuff in the rye patch and have to have something else; second, hot weather is coming on and they need some shade, and third, why not raise a little corn while you are doing the rest. It won't bring very much, but it may bring you a bushel, which will feed your hens for a little while. You will not have to pull any weeds or suckers; your birds will do that for you. Later on I plant turnips in the other lot. When the corn doesn't furnish any more green stuff for the birds (but still furnishes shade) I have plenty of turnips and tops to feed them, and at the same time you

have turnips for table use. Poultry to do well must have some green stuff to pick at. When rye sowing time comes again I put the first lot in rye again, and so keep things moving. We always have healthy chickens and most always have plenty of eggs and some to sell. We have two kinds of poultry, Buff Leghorns and Black Langshans, both pure stock and fine birds.

Respectfully yours,

I. A. HARVEY.

Harrisonville, Mo.

THE INVESTIGATOR brought the sale of four birds from Colorado. Inquiries are coming in from Nebraska, Missouri, Indiana and other states. I am now on a small farm 1 mile east of town and am prepared to do business in good shape; will be connected by phone in a few days. Am building a new \$1,200 church in town and preach three times every Sunday. Yours for success.

CHAMBLIN.

INCREASE IN POULTRY.

The Incubator That Hatched the Greatest Number of Chicks and Endowed Them With Health.

Among the hundreds of incubators advertised broadcast throughout the land those manufactured by the Geo. Ertel Company, Quincy, Ill., stand preeminent for volume of product and quality.

Any chicken raiser—farmer or poultry fancier—who is not familiar with the advanced theories and successful practice demonstrated in the Ertel incubators must eventually confess himself behind the times.

The George Ertel Company have issued a finely illustrated 178-page booklet descriptive of the various styles and sizes of incubators and brooders that have made the name Ertel famous in the poultry world. This book any one may have who will write his wants to the George Ertel Company.

ERTEL'S "VICTOR" INCUBATOR.

To those who do not own an Ertel incubator or who have not seen the book, it will be interesting to know that this book tells how a hatch in almost any machine may be increased, and how any brood may be kept in good health, and hundreds of other things every chicken owner should know.

There is also an interesting chapter on raising ducks and others on building poultry houses and poultry yards. The acquaintance with the pleasant business methods of Messrs. George Ertel Company which will result from application for this book will not be the least interesting experience.

Write to-day to George Ertel Company, Quincy, Ill.

BUSINESS CATCHER'S

FOR EXCHANGE. A 60-egg Sure Hatch Incubator, for Exhibition B. R. R. Games. Must be first class stock. A. J. Williams, Clay Center, Nebr.

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert R. Swett, 364 Mosley St., Elgin, Ill.

J. W. WHITNEY, Chatham, Ohio. Poultry Judge. All Varieties. Private scoring and expert mating a specialty

40 GOOD WHITE WYANDOTTES for sale cheap if taken soon. C. E. Genoways, Aurora, Nebr.

FREE, GAMES, Eggs \$1.00 per 13. Circular, Heathwoods, Irish and Mexican Grays, Tornadoes, Irish Blks, Reds, Cornish Indians, \$2.00. Fowls all times. C. D. Smith, Fort Plain, N. Y.

BIG MAIL for poultrymen. Insert your name in our poultry director and receive poultry papers, poultry catalogues, etc., every day. Only ten cents silver. Poultry Directory Co. A. Goshen, Ind.

DARK BRAHMS exclusively. A few standard bred pullets for sale for 1.50 and eggs 1.50 per setting. Alice Trenary, Palmyra, Nebraska.

BARRRED PLYMOUTH ROCKS. No stock for sale. Eggs \$3.00 per 100. \$1.00 per 13. My stock is first class and have won in show room. J. P. Schroeder, Clay Center, Nebr.

ALSEN Poultry yards has Hamburgs, Buff and Brown Leghorns, Buff Rocks, White Wyandottes, Polish and Andalusian. Won 26 premiums out of 27 entries at South Dakota state fair. Eggs for hatching, \$1.0 and up. Circulars free. H. P. Larson, Beresford, S. D.

LIGHT BRAHMS. I have a few good hens and pullets for sale cheap. Mrs. Alice Allen, Clay Center, Nebraska.

EGGS FOR SALE from Rose and Single Comb White Leghorns, White Rocks and Light Brahms, \$1.50 per setting of 15 eggs. Write to John McLeod, Downs, Kas.

ROSE COMB White and Rose Comb Brown Leghorns, White and Silver Laced Wyandottes, also Rouen Ducks. Eggs in season. 15, \$1; 39, \$2. Duck eggs \$1 per 11. J. W. Cook, Poneto, Ind.

MEADOW BROOK farm has for sale Pekin Ducks, Light Brahma and B. Plymouth Rock Cockerels at \$1 each. Toulouse Geanders and M. Broeze Tons, at \$2 each. Poland and Libal also a matter of correspondence J. D. Grimes, Chamber, N. Neb.

WHITE PLYMOUTH ROCKS a specialty. 1 yr old hens and this year's pullets and cockerels for sale. Old stock score 92 points and over 97.5. Write for prices. Geo. N. Wood, Weldon, Ia.

50) BUFF, PARRED, White Plymouth Rocks, Light Brahms. Fine cockerels, hens and pullets \$2 to \$3 each. Eggs 15, \$1.00, 100, \$6.00. Milton Brown box 94, Middleboro, Mass.

WHITE PLYMOUTH ROCKS exclusively. A few choice rockrels for sale. Look for 2nd mention at S. O. S. poultry show. Write for prices. J. W. Matson, Stromsburg, N-br. Route No. 2.

WHITE H. TURKEYS 1 W. rock ck. score 94 1/2 by Russell, for sale. Also eggs from D. Brahms, Brown Leghorn, B. Pekin and Game Bantams. Expert Judge. F. M. Cooley Milton, Ia.

WHITE WYANDOTTES. Duston and Norval strains direct. Score 92 to 95 by Judge Rhodes. Quality and fair treatment guaranteed. Best winter layers. Eggs 2.00 per 15. Belgian hares. Chas. C. Wilson, Holdrege, Nebraska.

O. K. S. L. WYANDOTTES are all right. Eggs \$4.00 per 15 or \$4.00 per 100. W. T. Canaday, Dover, Lee county, Iowa.

BARRRED PLYMOUTH ROCKS exclusively. Eggs \$4.00 for 100, \$1.00 for 15. Adam A. Weir, Clay Center, Nebr.

EGGS from standard bred White and S. L. Wyandottes and Light Brahms, \$1.50 per setting. C. Feldman, 2035 N. Main st. Fremont, Neb.

WHITE WYANDOTTES, pure white and as good as the best. Eggs \$1.50 per 15, \$2.50 for 30. Write for wants. A. H. Murray, Clay Center, Nebr.

A pair of Barred Plymouth Rock chicks that weigh 16 pounds—cockerel 8½, pullet 7½—owned by J. H. Trough, of Minden, Neb.

Some Lessons Poultry Exhibitions Teach.

By J. W. Whitney.

The average poultry exhibition gives food for much practical knowledge. Perhaps the young and ambitious breeder of prize fowls receives more useful and lasting information from his first exhibit, especially if he attends personally and is of an observing and retentive disposition than can be obtained from a year's breeding, or reading of poultry information. It is those things that directly affect us financially or our reputation and ability as breeders which are most easily observed and remembered. When mistakes and the imperfections of our fowls are brought to our notice in the show room, and we are also aware others see them in perhaps a stronger light than we ourselves, our pride, our capabilities as breeders receives and retains such lessons in a way to warrant renewed and more intelligent effort in the future. While the above is true and although poultry exhibitions, when rightly conducted, aid and foster the breeding and popularity of the prize poultry of today, yet there is noticeable in many of the exhibitions I have attended this winter a very unsatisfactory management, a poultry exhibition to be of the most value as an educational and financial success should be run on strictly business principles.

Many of the premium lists which have come to my address are wonders of useless information. The more important things have been omitted and those of only minor importance made to occupy nearly the whole pamphlet. A set of old, back-number rules and regulations which have been regularly inserted in each succeeding list for perhaps 10 or 12 years occupy the first few pages—rules that are never lived up to and that the association knows will not be. When they incorporate

them in their list. I have often wondered why poultry associations did not more generally make arrangements for the entertaining of the distinct exhibitor by securing rates and rooms at the most convenient good hotel, thus establishing a headquarters for visitors and exhibitors from a distance. It strikes me this would be a valuable addition to every list. How often it has taken me a day or two to find out where the boys were stopping in a big town, and we would hardly all get together before the closing day of the exhibition. This might all be avoided, a lower rate secured and all be together upon our arrival in town by a previous arrangement and notice in the premium list by the secretary, regarding a suitable place to secure accommodations, reduced rates, and association with those whose interests are in the same lines as your own is a great advantage. New acquaintances can be made, old ones renewed. These evenings devoted to the interchange of experiences and discussion of timely topics of mutual interest to us individual and in a breeder sense to the fancy as a whole are the more pleasurable part of the meeting. Every ambitious breeder attends these events more or less for the information and friendships he may there secure. The more of this fraternal spirit there is in evidence the more popular and successful our exhibitions will become. Again each premium list should contain clear and correct information regarding the position of the show rooms and hotels to the several depots. If by street car the names of the proper cars to take and the streets at which to leave the car should be given. A still hunt in a large city for a hotel or exhibition room, especially at night, is anything but an en-

viable undertaking. All these little courtesies by the association will prove to their future advantage and have a beneficial effect upon future exhibitions. The secretary of an exhibition is a busy man and many of these questions visitors or exhibitors generally ask might be foreseen and incorporated in the premium list in advance to his own and the convenience of he who attends. A hearty handshake and welcome to the show room upon the presentation of card or name by mombers of an association carries with it lasting memories and a warm feeling. Make the distant exhibitor feel he is welcome and give him fair and impartial treatment; look after his interest as promptly and carefully as those near by, and future successful exhibitions are an assured fact. Allow no familiarity with the judge in the show room when at work. His time and best judgment in justice to every exhibitor should not be diverted from the work he is employed to do. No man can have his mind on two subjects and do his best. Nse no partiality; make this a rule and enforce it to the letter. A judge surrounded by interested exhibitors or curious visitors, each making comments and remarks, many of which are intended for his ears, is placed in an unfavorable position to do good work and often receives censure for unintentional mistakes. These things are all worry. No association will receive less patronage for prohibiting any familiarity toward the judge by any one, member of the association or any one else when on duty. His clerk (a competent one is very important) should be in no way interested in results, or with the exhibit. An experienced man, expert in this line of work is preferable even if he must be paid for his services.

Again I have seen the door receipts of an exhibition reduced one-half at least by the offering of special prem-

A pair of Rose Comb Brown Leghorns owned by J. H. Trough of Minden, Neb., basking the warm sun.

"Ben Hur" 1st prize B. P. R. cockerel at Nebraska State show at Lincoln, bred and owned by C. M. Hulbury Fairbury, Neb

tions which were of a questionable or objectionable character, as spirituous liquors, littery tickets, or drink tickets at saloons, or other questionable places. Associations should be very careful in their acceptance of specials; only those of real value and of a perfectly reliable character should be incorporated in their lists.

The classification of a show and the proper arrangement of the exhibit aids the visitor, superintendent and judge materially in doing quick and satisfactory work. Too often we see a class scattered all over the room, when properly it should be in one row or section only. Where birds are shown in same coops in which they are sent to the show this is difficult but something approaching order can be maintained.

Within two hours after a class is judged the cards should be signed, card footed up and the ribbons or premium cards upon the coops. This can easily be done if the secretary is onto his job and no other kind of a secretary should be considered worthy the place.

The anticipation and preparation for prompt, quick work in each department, in advance is one-half the battle. A management which fully realizes these things, that is composed of honorable, reliable men, always have the satisfaction of having their exhibits well patronized and their association well spoken of. Not only this, a show conducted on right principles fosters and builds up the poultry interests, not only of the section in which it occurs, but also in a broader sense adds dignity and confidence to the whole fancy in-

terests of the country. While an improperly run exhibition is a step backward. It is said there is honor among thieves and criminals, but hardly of a character to create a great deal of confidence in them as desirable citizens. Place the management of our poultry exhibitions on a basis approaching to those empowered by our best conducted fraternal societies, backed up by a guarantee fund sufficient to cover all possible losses and the question of the payment of all obligation will be one which will give little anxiety to association or exhibitor. I refer to this as it is one of the more common causes for ill-feeling and dissatisfaction. No poultry association can draw a large exhibit unless premiums and all obligations are met promptly and in full. A mistake here often proves the cause of distrust of not only the association as a body but each of its individual members personally often affecting them and their reputation as men and breeders many times more than the amount it would take to strengthen up all indebtedness as soon as contracted. There are many other conditions which have a depreciatory affect upon a poultry exhibition but space at this time forbids their mention. The expression of these few thoughts are intended for only those whose experience is less than my own along these lines

J. W. WHITNEY.

THE SPRING RENOVATION.

One of the prominent symptoms of "spring fever" is the house-cleaning mania. And the tidy home keeper extends this to the poultry house as well. No matter how tidily the work of caring for the flock may have been done during the winter, with warm weather come demands for a complete renovation.

There are numerous effective methods of accomplishing this, each having to some individuals certain advantages. A popular method is to clear out all movable boxes and perches, clean them thoroughly, and then close the house tight and burn sulphur or brimstone, the fumes of which are proof against insect life. A coat of whitewash serves to further cleanse and sweetens the premises.

Finally washing the perches with kerosene is another method of dispersing vermin. By spraying the kerosene upon walls with a common fruit tree sprayer one can dislodge the pests; and as the kerosene evaporates rapidly, even a thorough drenching with the liquid does not prevent the use of the building for any great length of time.

Strong carbolic soap suds is another

valuable remedy easily and cheaply applied. Some usually sold under this head is not strong enough to be fully effective as a farm insecticide, but it may be easily concocted at home. To five pounds of common bar soap allow one-half pound of carbolic acid crystals. Put the soap into a pan with a little water and heat slowly until dissolved. Remove the cork from the bottle of acid and place the latter in a dish of hot water. This will transform the crystals into a fluid. Pour into the melted soap and stir thoroughly; then set away to cool. This soap will keep for a long time, and is extremely useful not only about the poultry house, but in ridding cattle of vermin. A strong suds applied to house plants infested with aphids and then washed off after a few minutes with clear water will be found an efficient remedy.

Now that carbon bisulphid is used so generally for destroying insect life, it seems that in renovating the poultry houses there might be made another successful application, though I have never seen it advocated for this purpose so far as I can recall. There is no doubt but that it would be death to lice or any other animal life therein, providing the building was shut up tight for 24 or 36 hours. The only danger would be that the substance is highly explosive, and during this time it would be imperative to guard the building from a single spark of light in any form.

BESSIE L. PUTNAM.

We present herewith a picture of R. R. French, Ford City, Mo. Standing on his lap is "Missouri Boy," score 94½, and a prize winner. He breeds S. C. White Leghorns exclusively, has been for some time, and his stock is well and favorably known in all parts of the country.

The White Hollands.

Their superior merits. And for a market purpose, I think they have no equal. While we do not think the White Hollands outdo the bronze turkeys in weight, I think they average up to them pretty well, and I am sure they are much easier to raise. Why? Because you do not have to out of the chicken range to hunt their nests. I use to spend a whole forenoon hunting a bronze nest—yes, several of them—and then perhaps when I did find it a skunk had got there first. You can fix a Holland nest just the same as a chicken's. They are not hard to take up from setting; in fact, they just act as if they know just what is wanted of them. Also think they mature a month earlier than the bronze. They fatten easier. You also can drive them in a flock anywhere you wish. Hatched 91 from three hens I lost quite a good many, too, by the hot weather while five weeks old of the late hatch, but I raised 54 large, fine turkeys. They were just handsome to look at, so pretty and white. We could drive them every morning to the meadow or wheat stubble to hunt grasshoppers. You would enjoy hearing them chirp and catch the hoppers. The children enjoyed taking them out to hunt the hoppers. When they come home they would have some wonderful story to tell about the turkeys. They can soon clean a field of these pests that are so destructive to our fall wheat and meadows. I can go out any time of day and pick my Hollands up. If you want to make a sale of any of them they will all come to see a stranger, you may be sure on that. The Toms will do their part in showing off by strutting. I sold a tryo to a lady that always raised the bronze. She sent me word to catch them on a certain night and she would be after them the next day. When she came she seemed to be quite put out about me not catching them, though it would make them wild to chase them. We went out and I called them up. She being a stranger, they soon fenced her in. I told her now to pick out her tryo. She just laughed and said they really seemed to be making fun of her. I saw the lady some time afterward. She was pleased with them; thought the longer she had them the better she liked them. This is quite a long White Holland letter, but if some of you wish I will tell you how I raised those birds, not with a hen, but very easy I am sure.

MATTIE STUFFT

Lawrence, Neb.

A prize winning White Wyandotte cockerel owned by W. A. Forbes, North Topeka, Kan.

Notice to Advertisers.

After this all matter relating to advertising, such as new ads, changes, etc., must be in the POULTRY INVESTIGATOR office as soon as the 15th of the month preceding the date of issue to insure insertion as we must hereafter print 30,000 copies to meet our circulation each month and we must have a little time to "ma'e up" and print the paper. All matter received after the 15th will consequently lay over until the following month.

It is a well known fact that 50 per cent of the chicks hatched throughout the country die before they are three weeks old. One of the greatest causes of this mortality is improper feed. The best feed for little chicks that has come to my notice is Mrs. Pinkerton's Perfect Chick Food. It contains the best material the market affords and all that is essential to the life and growth of the chick. I would not try to raise chicks without it.

L. P. HARRIS.

Socorro, N. M. March 2d, 1902.

Poultry Investigator:

Can any of your readers tell me how to pack and keep eggs for six months or more. Will packing in slacked lime and storing in a cool place keep all O. K. Will they not keep if packed in a barrel of salt brine?

W. D. BYERTS.

ORIOLE FARMS, Twin Lakes, Wisconsin, send free a Partridge Wyandotte catalogue, A. D. Burhaus.

S. C. W. LEGHORNS, three pens headed by 1st and 2nd cks and 2nd cock Knapp strains 1,000 per 15; 4,000 per 100 this season. Booking orders now. M. B. Plymott, Watonsota, Pa.

EGGS for hatching: White Plymouth Rocks and White Wyandottes, 15 for 1.75. S. C. White and Brown Leghorns, 1.25. Belgian hares for sale. S. S. Dunn, 450 Chicago Ave., Minneapolis, Minn.

WHITE WYANDOTTE females that are strictly pure white, mated to a 94.50 point cockerel, large and pure white. Eggs, 1.50 per 15. No stock for sale. Write for wants. C. W. Brehm, Harvard, Neb.

WASHINGTON PRAIRIE Poultry Farm, 13 varieties of thoroughbred poultry. Eggs for hatching from 60c to 1.25 per setting. Write for particulars. O. O. Lomen, Decorah, Iowa.

BARRED ROCKS. Lash pen, cockerel score, 93½, pullets 90½ to 93; eggs 3.00 for 13. Yd 2 and 3, 2.00 for 15; yd 4, 1.00 for 15, 4.00 per 100. Bronze Turkeys 2.00 for 10. Mrs. Chas. Lowry, Dunbar, Neb.

WHITE WYANDOTTES exclusively. Eggs from pen, 2.00 per 15. These are fine birds. Those at large, 1.00 per 15; 4.00 per 100. Mrs. M. A. Barrens, Lenox, Iowa.

EGGS FOR HATCHING, from full-blooded American Dominiques, \$1.50 per 13, 2.50 per 20. Also cockerels at 53 and pullets at 52. Blue Ribbon strain. E. W. Nick, 121 West 11th St., Erie, Pa.

WHITE PLYMOUTH ROCKS, pure Fishel strain. Pen headed by 225 cock; every hen a top-notch. Eggs, 2.50 per 15. Your chance to get the best White blood in the world. H. C. Nichols, P. M., Spearville, Kan.

EGGS Columbia Wyandottes, finest in the land. Buff Orpingtons, White Langshans, White Indian Games, R. C. White Leghorns Silver Wyandottes. Also from R. C. Brown Leghorns very cheap. Fowls, dogs, birds and pigeons cheap. Indian Runner ducks. Enclose stamp. No circulars. Address Hillcrest Farm, Millidgeville, Pa.

EGGS That will hatch. From Silver Laced Wyandottes 1.50 per 15, 2.50 per 30. Known as L. X. L. Poultry Yards. Satisfaction guaranteed or money refunded. Mrs. W. J. Barnes, Topeka, Kansas, Sta. B.

BUFF ORPINGTONS, Buff and White Wyandottes, White Kieckhefers, best obtainable. Stock and eggs for sale in season. T. W. Beecher & Co., Reed City, Mich.

BELGIAN HARES, \$2.50 per pair. S. L. Wyandottes, Pekin Ducks, 20 eggs \$1.00. Also Poland China hogs, White China Geese, and White Guinea pigs. H. L. Feller, Washta Cherokee county, Iowa.

MAMMOTH LIGHT BRAHMAS, prize winning stock scoring from 90 to 95 points. Eggs \$1.50 per 15. Mammoth Pekin Duck eggs \$1.50 for 11. No stock for sale. Mrs. Alice Allen, Clay Center, Nebraska.

O. L. C. SWINE for sale from one of the best herds in state of Illinois. Booking orders now for pigs, single, pairs and trios. Mated Noakin, breeds within reach of all. Also eggs from large, growthy Light Brahma and B. P. Rock chickens for sale at \$2.00 per 15 or \$3.00 per 30. Address Chas. Griffith, Waburn, Ill.

FINEST WHITE ROCKS in the state. Eggs \$1.50 per 15. Oris B. Lewis, 1123 Wabash Ave., Fort Wayne, Ind.

ORIOLE PARTRIDGE WYANDOTTE Farm sends free a Partridge Wyandotte Catalogue, A. D. Burhaus, Twin Lakes, Wis.

\$5,000 POULTRY CATALOGUE FREE!

It is without a rival. Greatest price of birds and eggs. Over 50 breeds Turkeys, Geese, Ducks and Chickens. Hundreds of plates from life. 15 best poultry house plans. Thousands of valuable facts. Send for free. J. R. Brabson, Jr. & Co., Box 100, Delavan, Wis.

For Sale.

Black Langshan Cockerels, 50c and pullets 75c each. Pekin ducks \$1.00 each. M. B. Turkey Toms \$2 and \$3. All stock pure blood.

Mrs. Albert Ray & Son, Wilsey, Kan.

BUSINESS CATCHERS

BUFF ORPINGTONS. "Cook's Strains," eggs 15 for \$3.00; hatch guaranteed \$5.00 from birds buff to the skin and progeny of imported stock. Express prepaid. A. Edward Green, Juliet, Ill.

EGGS for hatching. From 2 splendid pens prize winning Black Langshans, score 92½ to 95½. Buff Orpingtons and Rose Comb Black Minorcas. Circulars free. John Cole, M. D. Williams, St. Louis, Ill.

EGGS from my Beauty Strain of high scoring, L. 200 Irish and free winning Rock Sumatras, 15 for \$1.00. They are up-to-date. Chas. M. Palmers, Nassau, N. Y.

BUFF COCHON chickens. Toulouse geese, Duroc Jersey swine, Cockerels for sale with score cards. Chl. ken eggs \$2.00 for 15. Game eggs 25 each. Chas. A. Allison, Trenton, N. J.

WHEATLAND POULTRY FARM. M. B. Turkeys, prize winner B. P. Rocks, (Ringlet Strain) S. C. Wyandottes, S. C. Brown Leghorns. Birds for sale. Eggs in season. Mrs. Taylor Baker, Magnolia, Mo.

THE STAR POULTRY YARDS has S. C. Brown Leghorns, Barred and White Rocks and White Wyandottes. Located 3 miles south of East Peoria. D. E. Glatfield, East Peoria, Ill., manager.

SILVER GRAY DORINGS. White Wyandottes, Single Comb Brown Leghorns. They are state champions. 150 per setting, four months. 150 per setting, other settings 1.00. Circulars free. O. Mullin, Beauford, Minn.

BUFF ROCKS. Finest lot in the west. 1st premium stock at leading shows, 93 to 94. 3 grand matings, eggs 2.50 per 15. R. K. Larmer, Ravenwood, Mo. Box 7. S. V. Pres, Buff Rock Club.

EGGS 75c per 15. Farm raised, Black Langshan and single comb Brown Leghorn. From pen No. 1, Black Langshan, 2.00 per 15. Pen No. 2, White Wyandotte, 1.50 per 15. M. M. Browning, Appleton City, Mo.

S. H. COTTON. Superior Black Langshans; Eggs 15 for \$2.00. S. H. Cotton, Appleton City, Mo.

FOR SALE. 2 choice White Klondike hens. Place order at once. Address POULTRY INVESTIGATOR, Clay Center, Nebr.

WHITE AND GOLDEN WYANDOTTES. Eggs 1.00 per 15. White Wyandotte cockerels 1.00 each. Pekin ducks 2.50 per trio. Eggs per setting, 60c. Mrs. H. M. Clark, Sumner, Nebraska.

EGGS FOR SALE! White Crested Black Polish, 2.50 per 15. Buff Leghorns, Buff Rocks, Light Brahmas, eggs 1.25 per 15. Also Duroc Jersey swine. Write your wants. C. E. Olson, Colton, Nebr.

S. S. HAMBURG. Eggs only for sale! 1 setting 1.50; 2 or more settings 1.00; 5.00 per 1.0. Rev. G. A. Chaubillon, Moran, Kansas.

BUFF ORPINGTONS and W. Holland Turkeys. Eggs for sale from large healthy stock. winners at Nebraska state show. Chickens eggs, 2.00; turkey eggs 1.50. Mattie Stuft, Lawrence, Neb.

GET THE BEST! One dollar buys 15 eggs from choice pairs of S. S. Hamburgs and Rose Comb Black Minorcas. C. L. Norman, Stromsburg, Neb.

PRIZE WINNING S. C. W. Leghorns, White Rocks and Golden Sebright Bantams. Leghorns score to 95, headed by 2nd cock at Des Moines show. Eggs 1.50 and 1.00 per 15; 4.00 per 100. Write for winnings. Fred Cramer, Indianola, Iowa.

AMERICAN POULTRY FARM. 100 Bronze Turkeys, size 44 to 46 lbs. 200 cockerels P. Rocks, Wyandottes, Leghorns, Bantams, Game fowls, Jersey cattle. Stock and eggs for sale. 25 years a breeder. F. M. Munger & Sons, De Kalb, Ill.

WHITE WYANDOTTE and Barred Plymouth Rock eggs for hatching, from my best birds, 1.00 per 15; bred on different farms, free range. Pekin Duck eggs, 11 for 50c. B. L. Grover, Burton, Kas.

FOREST HILL Poultry Farm. R. C. B. Leghorns exclusively; 10 years standing; egg production strain. Can furnish 100 eggs per day. Price, 15 for 1.00; 50, 2.50 and 100, 4.00. C. H. Fawn, Council Grove, Kansas.

B. ROCKS eggs from 2 pens, 1.50 for 15, 1st strain, none better. Write your wants. J. W. Cottle, Edgar, Nebr.

There is a way to advertise without advertising premiums won by others. If you can't win with your own birds do not rob other people of their honors. Last month one of our patrons, through a mistake he claims, advertised that they won first on hen, first and second on pullet in the Orpington class at Lincoln last January, when the facts were they won none of these premiums. First hen was won by John A. Ling, Harvard, Neb., first pullet by P. H. Campbell, Osceola, Neb., and second pullet by Mrs. Henry Shrader, Berlin, Neb.

Dogs and Incubators.

Ida Shepler, Raleigh, Ind.

Dogs and incubators are not exactly classed in one list, but the outcome of the incubator, the chicken house, and the dog go together. And, one of my neighbors, who had 75 small chicks taken by a chicken thief from a brooder, lamented the absence of a dog in his vicinity, also.

A month or more ago, on these pages, some one asked what sort of dog was best to watch a chicken yard or house. Of course that depends. Dogs of the same breed or variety differ as to watchfulness. For my part, I think the Scotch Terrier the ideal watch dog not only for the chicken house but dwelling house. There is no dog more intelligent. They are trained for show dogs with half the training given other dogs of the show kinds. They are shy of strangers and resentful of strange intrusion on their grounds. Their bark is shrill as to be startling, and what is better for a watch dog, they will spring at a friend, with loud barks, the same as a stranger. They cannot see well and do not know a friend until they get their nose against him. In this case, though one of your neighbors, a favorite of the dog, same to the hen roost, the dog would warn you. They seldom eat from a strange hand, and if well fed for supper, I do not believe could be induced to eat meat given to them in the night. The great trouble in this country in the keeping of valuable watch dogs of the larger breeds is in this matter of poisoning. Very few are allowed to live. Thieves can easily make friends with those large dogs, and just as easily induce them to eat poisoned food.

I have a full blood Scotch Terrier, which was bought to guard the house inside at night, with no thought that he was the typical chicken dog. But that he is. Not a chicken squalls but he runs to investigate the reason. He can drive an old hen and her brood better than I can, and always accompanies me on such excursions taking his side of the flock and quietly keeping them in line to the place intended. He will lie down by a basket or box of newly

BUSINESS CATCHERS.

NORTH STAR POULTRY YARDS. A few choice Barred Rocks and White Wyandotte cockerels left. Northwestern buyers save exorbitant express rates and order early. J. C. Tjaden, Lehtox, South Dakota.

NEW SIZE HATCH Incubators and Brooders for sale cheap. Address Mrs. J. T. Cla k, 20th & Y Sts., Lincoln, Nebr.

SILVER LACED Wyandottes exclusively, strong, healthy, best show and best egg production. They are winners, eggs that will hatch, 1.00 for 15. W. O. Johnson, Stromsburg, Neb.

LIGHT BRAHMAS. From Boston winners. Eggs 2.00 per setting, delivered. Yards headed by prize winners. Females as good as the best. G. W. Hardin, Ulysses, Neb.

POULTRY PAPERS at cost, valuable circulars free. Eggs 1.00 per 15, 4.00 per 100. Buff Rocks Buff Wyandottes. Big birds, fertile eggs, A. B. Kathamler, Macedonia, N. Y.

FOR SALE. Two 300 egg size Sure Hatch Incubators. In first class condition. Will sell very cheap. White Rock Farm, Wap. Ho. Iowa.

C. M. B. SINGLE COMB Brown Leghorns. Light and white machines. Stock direct from best eastern breeders. Eggs for sale 1.00 for 15. W. E. Combs, Julian, Neb.

HATTIE BYFIELD. McCook, Nebr. Eggs for hatching from prize winning Light Brahmas and White Wyandotte chickens. White Holland turkeys and mammoth Pekin ducks. 15 hen eggs \$2.00, 9 turkey eggs \$1.50, 11 duck \$1.00. Duck eggs \$0.00 per 100. A few nice drakes to sell.

THE INTERNATIONAL POULTRY EXCHANGE wants every person who has good, medium priced, high bred poultry for sale to send description and prices, with loc. to answer inquiry; also anyone wishes to buy any breed of thoroughbred poultry to send for prices, we can fill all your orders near your home. C. E. Dunlap, Supt. Liberal, Kansas, U. S. A.

EGGS for sale. White Crested Black 2.50 per 15. Buff Rocks, Buff Leghorns. Light Brahmas, eggs 1.25 per 15. Stock for sale. Write your wants. C. E. Olson, Colton, Neb.

WHITE PLYMOUTH ROCKS. Farm raised. Eggs 75 cents per 15. Strawberry plants 60 cents per 10. Lowber, Rees, Raspberry Coryville, Pa.

EGGS. Barred Rocks (Thompson strain) White Rocks (Emire) White Wyandotte (Duck) Silver Laced Wyandotte (Goette) Light Bantam (Feldt) 15 for \$1.00. Also a few Rhode S. P. M. M.

BLACK LANGSHANS. Partridge Cochins Silver Laced Wyandottes, Rose Comb Brown Leghorns. Stock and eggs for sale. Price very reasonable for quality of stock. If you want something good write at once. C. F. K. Lawrence, Neb. Have fine English Berkshire hogs.

EGGS. Barred Plymouth Rock birds scoring 90-92½. Eggs \$1.00 per 15; 2.50 per 30; Rhode set eggs 92½ to 95 per 15; 1.50 per 30. 4.00 per 100. J. P. F. L. & Son, North English, Iowa. R. F. D. 2.

BELGIAN HARES. 25 young does bred to fine bucks scoring 94½ at \$3.00 each, or 2 does and a buck for \$7.00. All first-class stock. J. S. Markel, Wahoo, Neb.

WHITE WYANDOTTES. Line bred for fancy with heavy laying strain. Best show winning. 1.00 per 15, set at Ohio State show. About 100 to 120. Show at Akron. Eggs 2.00 per 15. Incubator eggs a specialty. 6.00 per 100. Cockerels to sell. C. D. McVickers, Pleasant Hill, Ohio.

PARTIDUE COCHON ONLY. A few choice heavily feathered pullets for sale. Eggs \$1.50 per 15. Pen headed by 2d chl. Nebr. state show, 1902. Satisfaction guaranteed. D. E. Bowman, Lawrence, Neb.

SILVER SPANGLED HAMBURG. Most beautiful low and alert layers. Cockerels for sale. Eggs \$2.25 for 15; \$2.25 for 30; \$3.00 for 45. J. E. Haynes, Ames, Monroe Co. Ill.

WHITE WYANDOTTES. My stock is first class and my prices right. I have spared neither time or expense to get the best stock. Scores from 92½ to 95½. Eggs for sale 1.50 per 15, fair hatch guaranteed. Circular free. E. E. Mowers, Bradshaw, Neb.

Ross Bros., Manhattan, Kas., 2nd prize Buff Wyandotte cockerel at Topeka, Kas., state show Jan. 6-10. Ross Bros. make the best trap nest known.

hatched chicks and if I allowed him would stay with them for days, scarcely leaving them to eat. A poultry buyer lives near us. The dog knows the roll of the chicken wagon far away and never fails to meet it, and nothing it seems can coax him away from watching every one of those chickens unloaded and walking under them to the coops kept for feeding them until shipped. No one has taught the dog this. It simply seems to be his nature to look after poultry.

It's a drop up or down, I scarcely know which, from the chicken guard to the chicken hatcher. There are some people, yet a few—the number is a diminishing one—who think the hen a proper machine to furnish heat, air and other necessities for hatching the egg, and caring for the ducks. Despite of this, the incubator is the outcome of all manner of devices for hatching eggs, the last thousand and more years, by people who did not want to put up with the old natural careless, shiftless method of the hen. Nature has a habit of wasting a bushel of everything to produce a thimbleful. She has plenty of time before her is the reason, while man in the chicken business hasn't. If he make anything he has got to get there early and late while the price is good and get his share, and this is where the incubator helps him.

A thousand years ago, the Egyptians hatched chickens in ovens prepared for the purpose. Long, long ago in China, and today also, people make their living hatching ducks for their neighbors and the trade far and near on their housetops in the sun. A pond of water near by is the brooder. I had a neighbor once who hatched lots

of chickens around a radiator opening from her kitchen into the room above. There are better ways of hatching chickens than under a crazy old hen. The day is shortly coming when farm wives and all other wives that raise chickens, will wonder that they ever bothered with hens. And the farmer will smile upon the old way as he now smiles on the old cradle for wheat cutting purposes.

There are some people yet who argue that it is little use purchasing an incubator unless you are going into the business big. That is another fallacy. If you have but room enough to keep fifty or one hundred chickens for your own table use in the summer, the quicker your work of hatching them out and caring for them through the most trying time of their life is over, the better. You can have all you need hatched out in three or six weeks at the farthest, and then that bother is over. I have known women, lots of them, on a farm to be all summer long getting from one hundred and fifty to two hundred chickens hatched. And then they were of all sizes and at all stages of trouble. And by the time the bulk of them were ready for market the market was down to nothing almost and they actually gave all their hard work away. But thank fortune, they are waking up gradually.

Talk about an incubator being a trouble. What is the trouble of flipping over a couple of hundred eggs morning and evening, and some incubators do their own work even here; to look after twelve hens sitting on the same amount of eggs. I've been there for years, I know. There never was twelve hens yet that would peacefully look after themselves, and bring out half the number of chicks the wooden hen brooding the same amount of eggs will. In the first place, they come off at just any time of day they please to be fed. You just run your feet off to find them and get them fed, keep the other chickens from eating it all up from the crazy thing, for a setting hen is that always. Then you must see they all get on their own nests, which they never exactly do. Then there is sure to be a fight, and you've got a new nest to make and take out the egg and wash all the broken egg off. By the time those twelve are ready to hatch not half of them will have had the eggs started with, and if half the half bring forth chickens strong and able to creep you may consider your self lucky. This is truth, not exaggeration. Every farmer's wife knows this to get one hundred chicks started safely going almost three times the amount of eggs must be wasted. And after all the hard work this is your

EGG FOOD..

Make It Yourself.

Eggs are high at this time of year. Fill your egg basket and reap the benefit of the high prices. Guaranteed recipe for making the best egg food known. Easily and quickly made. Recipe price only 50c; Death To Lice, 15c box; Essex Cholera and Condition Powder, best on earth, 60c box. The 3 by mail for \$1.25.

John J. Kautzmann,
590 Bergen St. Newark, N. J.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough cardboard. Contains all the pit rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Breeds, Handling, Nursing and everything relative to the royal sport of cocking.

By Dr. H. P. Clarke, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator one year

For 25 Cents.

Address, THE INVESTIGATOR
Clay Center, Nebraska.

Give
Your Breed-
ing Does

Rabicide

During gestation and while nursing
their young it will enrich the blood

Improve the appetite, increase the
flow of milk, thereby making the
young strong and healthy.

Give RABICURE a trial and you
will never be without it, 50c a box
postpaid.

Vermont Belgian Hare Co.

Lyndonville, Vt.

Old Homestead Brooder.

The best on earth. All your chickens can be saved in the Old Homestead Brooder. Try one. Write for prices. Address

Old Homestead Brooder Co.,
Middleboro, Mass....

pay.

The next thing is raising them. You might almost as well, especially in early spring, let the hen hatch the chicks as give them to her after the incubator hatched them. For she is sure to undo all its good work. A chicken, like everything else that goes afoot, is a creature of habit. The hen takes her brood far afield in deep brush and weeds, and not only teaches them to be wanderers, but before she discards them has allowed the greater part of the brood to become the prey of cats and many another chicken enemy lurking in weeds and brush to catch their straying feet. A flock of chickens raised in a brooder of any kind, no difference how roughly improvised, learns to stay close by that brooder. When old enough to trust away from it they seldom get out of its sight, for there they know comes their food, and there is shelter in cold and rain. Let a dash of rain come up and how they skurry to it. Take the chicks raised by the hen and they will cuddle down, after she has left them, under a bunch of grass or other small protection in a storm, and drown.

Feed is the next large consideration. Small chicks do not need much at a feed, but they require it regularly. In the brooder they get this at a saving expense. With the hen they do not, for after the first few days, she gobbles it all up herself. Watch and you will see. Not only this, but she brings her chicks up when she pleases, and you have to be running around at all hours feeding chickens. Though you have a feeding pen, made to turn the old hens, and let none in but the chicks, some of the chickens are bound to come up oftener and get more food than others.

As for the best incubator, that seems to depend on favoritism. Some will swear by one kind, some by another.

There never has been an incubator made, no difference how good or at what price, but what some one would find fault with it, the fault usually lying with the finder.

It is best, so it is claimed, in buying an incubator to buy one costing just a little more than you thought at first you could afford to give. One is more likely to be satisfied than if they bought a cheap one, though it fitted their pocketbook best. And yet a very dear high priced one may prove a poor source of satisfaction, if owned by a careless person. The best incubator that I know of was pronounced a complete failure by its first owner. After she had thrown away all the eggs her own and her neighbors' hens could furnish her for a space of two years, her husband bade her put the thing away and go back to the old way of hatching chickens. Afterward a neighbor bought the incubator with all its attachments cheap. "For his young daughter to experiment with," he explained. But the girl was not fond of experiments, as the first owner had been. She considered that the maker of the incubator knew his business. Sending for a new list of instructions she prepared to follow them. Giving the incubator only half its egg chamber space in eggs, and following her grandmother's rule to set the eggs same day laid, she put in 100 eggs gathered from nests that day. She did not venture to test these first ones, just letting them bring what they would, but she followed other directions closely and that incubator brought forth 96 strong chicks from those 100 untested eggs. Of course, she did not always do this well after even with eggs tested for fertility, but she comes so near it that she is a decided success with an incubator. That girl could redeem the name of a poor incubator, while the first owner of the machine would ruin the reputation of the best as far as her word could reach.

Ohio's Whitest White Rocks.

Winners wherever shown the past 10 year, scoring 94 to 96 points. Also Open Laced Wyandottes and Black Minorcas. Eggs \$1.50 per setting.

Mrs. Ella Pace, Columbus, Ohio.
Station A, Route 2.

BUFF
COCHIN
BANTAMS

Exclusively. Scoring
92 to 95 points. Won
at the great Co. omibus
Show 1901-2, and Ohio
State Exposition 1901.
Stock for sale. Eggs
\$1.50 per fifteen.

D. A. JONES, Columbus, O.

LIGHT BRAHMAS. White and B
Rocks. White and Silver Laced Wand-
dottes. White and Brown Leghorns. Pekin
Ducks. America's best strains. My stock
has won 29 premiums in the past three
years at the great Columbus show, Newark
and the Ohio State Exposition. Stock for
sale at all times. Eggs \$1.50 per dozen.
Red Oak Poultry Farm, J. C. LAMERWOOD, Prop.
Sta. B. Columbus, Ohio.

BRIGEL'S Celebrated Strains

Barred Males scoring as high as 94½ and
females as high as 94½ under such
judges as Bridger, Lane, Jones, have
won 1st prizes at such shows as the
great Columbus show, Newark and the Ohio
State Exposition. Stock for sale at all times.
Eggs \$2.50 per 15, the kind that win.
F. A. BRIGEL, Columbus Ohio.

FOR SALE! Light Brahmas.

Felch Strain. None better. Eggs
from stock scoring 92 to 93½,
\$1.50 per 15. White Wyand-
dote eggs \$1.25 per 15.

Albert Von Bergen, Humphrey, Neb

White Plymouth Rocks.

Scored by Rhodes from 92½ to 94.
Owens & Canfield's strain, "Stay
White." Eggs \$1.50 per 15.

Wm. Randolph,
Lawrence, Kansas. R. D. No. 1.

Pure Bred Poultry.

DARK BRAHMAS
SILVER WYANDOTTES
BUFF WYANDOTTES

Stock and eggs for sale. Write.

M. D. KING, Minden, Neb.

BARRED PLYMOUTH ROCKS

WINNERS Nov. 26th, 30th, 1901—194
FOR PAST B. P. Rocks in class at Red
SIX YEARS Oak, Ia., won 1st Cock, 1st
Hen, 2d Pullet, 2d Cockerel, 1st Pen.
At Osceola, Ia., Dec. 3d-6th, won 1st
Cockerel, 1st Pullet, 1st Hen, 1st Pen.
Two hundred choice breeding and ex-
hibition birds for sale.

H. R. McLean,
Red Oak, Iowa

Poultry Investigator

Is published the first of each month at

Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.25 per inch each insertion. One inch each year \$12.00. These are only rates for advertising and will be strictly adhered to. We treat all alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of POULTRY INVESTIGATOR is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in THE POULTRY INVESTIGATOR.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

Surprise, Nebr., Feb. 5, 1902.

Mr. L. P. Harris, Clay Center, Nebr.,

Dear Sir:—I am at home again from the east. I attended the Chicago show, had 16 birds on exhibit, won 2d and 3d pullet, 4th hen, 4th ck, 3d and 5th pens against the Boston and Chicago winners, 112 in class. At the Kansas State Show I won 2d ck, 2d and 3d ckl, 1st 2d, 3d, 4th hens, 1st, 4th, 5th pullets, 2d and 3d pens and special for largest display scoring over 90. At the Nebraska State Show, same week as at Chicago, I won 1st pen, 1st 2d ckl, 1st, 3d hen, 1st and 2d pullets. I did not in all of these shows show

but one bird the second time. How is this for one winter's shows. If we have fair luck I shall be with the hardest classes I can find next season. You know these fellows out west are the "show me" kind. They are not all from Missouri but they have to be showed before they will give up. The Chicago show was a grand show, coops were all filled with the finest specimens and all of the leading varieties well represented. Many of the winners from Boston and New York were there and some of them did not get a place. The managers and officers did themselves and the association nobly and gained many a staunch friend among exhibitors from a distance as well as their nearby brothers. The Chicago show is nearing the point of being the best poultry show in the U. S., and with a fairly good patronage of the best breeders of the west it will soon be knocking at the Garden Gate for a larger space than the new Coliseum.

FRANK PATTON.

Mr. John Hettich of Bowling Green, Mo., places an ad with us this month and writes that his trade has been extra good. Could have sold more if he had raised them. Was offered \$30.00 for 1st prize cockerel at Illinois State Show. Mr. H. breeds nothing but the best.

FEED FOR PENNED STOCK.

The custom is becoming very general of penning breeding stock instead of hatching from the general flock, and not only fanciers, but farmers and commercial poultry raisers are now following this method of improving their flocks. Upon the care given this penned stock depends to no small degree the success of the season's work, as they require a different treatment than they would if running on range. To give a general description of how we feed our breeding stock might perhaps be of interest to some of the many readers of the Investigator. While the cold weather lasts we believe in feeding a warm mash in the morning, consisting, say, of a mixture of cornmeal, ground oats, barley, etc., with potato peelings small potatoes (big ones will not hurt them if chopped fine), and table scraps. The noon feed, whole oats well scattered around to make them scratch. For the night feed we fill them up on all the warm corn they will eat. When the weather is warm in the late spring and summer we discontinue the mash in the morning and feed it only two or three times a week and at noon. During this kind of weather we feed oats in the morning, table scraps, vegetables, etc., at noon, and the corn at night. Of course this is only a general plan of feeding and must be varied by the circumstances of surroundings, feed at hand as obtainable, etc.

R. R. FRENCH.

Ford City, Mo.

Don't Fool Yourself!

By selecting a poor vegetable cutter. Get an O. K. cuts every thing edible for the table or for the poultry. Send \$2.50 for sample machine. Agents wanted. Address

Dep't. A., O. K. Mfg Co. Florin, Pa.

Pekins—Hallock strain. Will sell a few choice drakes and ducks, \$1.00 each. Egg orders booked now.

BELGIAN HARES, Pedigreed. Grand lot of youngsters sired by a 95¹/₂ point buck, Bred does always on hand. Booklet on the industry for stamp.

Stephani Poultry Co. Belleville, Ill.

BUFF COCHINS

Exclusively.

Just What You Are

Looking For . . .

The Pure Golden Buff. Winners in any company. Elegant in shape, profusely feathered, as good as the best. Prices low, write me.

B. H. DUNN, Clay Center, Neb.

Clubbing List

By taking the advantage of the following combinations you can get two papers often at the price of one. Look at these offers:

	Price with Poultry Investi- gator.
Poultry Tribune.....	50c
Poultry Herald.....	50c
Poultry Gem.....	25c
Commercial Poultry.....	50c
Western Poultry News.....	25c
Poultry Success.....	50c
Poultry Topics.....	25c
Poultry Gazette.....	25c
Nat'l Poultry Journal.....	50c
Farm Poultry.....	\$1.00
American Poultry Journal.....	50c
Feather.....	50c
Nebraska Farmer.....	\$1.00

..Just Think of It..

Farmer and Breeder, price.....\$1.00
Any 50c paper you choose above.....50
The Poultry Investigator.....25

Total.....\$1.75
We will send the three to you for \$1.00.

Address,

POULTRY INVESTIGATOR.

NOTICE—We do not send samples of other papers.

BUFF WYANDOTTES**BUFF P. ROCKS . .**

Bred from my Boston Omaha, Kansas City, and Topeka prize winners. Old and young stock for sale. A large flock to select from. Prices reasonable.

W. J. GOW, Norfolk, Neb.

White Wyandottes.

First and second premiums at Minneapolis poultry show Dec. 19 to 21. Eggs from birds scoring 93 to 95½ \$1.00 per setting. Special price on large lots for next 30 days.

W. H. Swartz, Minneapolis, Kansas.

High Hill . . .**Poultry Yards**

Bronze Turkeys and Buff Rocks.

Turkeys are bred from prize winners and are winners, making almost clean sweep where ever shown. Young Toms \$5 each; Pullets, \$2.50 to \$3.00 each. My Rocks are noted for shape and orange colored legs. 90 point to Rocks \$2.50 each; 91 to 92½ point Cockerels \$4.00; each Pullet not scored, \$1.00 each.

Mrs. Wm. Rogers, Box 74, Sledd, Mo

CROWELL'S

Buff Orpingtons.

Win at St. Paul Show. Cockerels 1st and 2d, pullets 1st, 2d, 3d, 1th and 5. Hens 1st, and 2d. 1st Pen. Eggs, \$5.00 per 15, \$5.00 per 30. Two trios Indian Runner Ducks at \$5.00 per trio. Eggs \$2.00 per 15. Satisfaction guaranteed.

F. A. Crowell, Granger, Minn.

Silver Lace Wyandottes
White Wyandottes : : :

Buff Leghorns
Pekin Ducks...

All first class stock. Eggs for sale.

MRS. W. E. TIBBITS,
Imperial, Neb.

Barred Rock Eggs,

For Hatching.

Fertile eggs and big healthy chicks is what you want. Try mine this year. \$1.50 for 15, \$2.50 for 30, \$3.00 for 45.

A. B. Evans, Heartwell, Neb.

Buff Orpingtons
Bronze Turkeys

We keep nothing but the choicest stock. Eggs for sale. Write for prices.

C. E. BROWNING,
Fairbury, Nebr.

A view of Geo. B. Clary's Poultry Yards, Fairbury, Neb.

THE POULTRY SHOW.

The second annual exhibition of the Coffeyville Poultry and Pet Stock Association has been held this week, January 15-18, in the old church building, corner Seventh and Union. The exhibition of Barred Plymouth Rocks was unusually fine, with White Rocks a close second. Some nice birds of the Buff Cochin variety were shown and also some fine Partridge Cochins. Pens of Light Brahmas attracted much attention. There were also some good specimens of turkeys and ducks. The show is beneficial in several ways. It brings the poultry raisers together with mutual benefit and creates an interest in standard bred poultry. John Dedley of Hartford was judge and gave eminent satisfaction.

The following is the official list of awards:

BARRED ROCKS.

S. L. Brown—First pen, second cockrel, first pullet, first hen, first cock.
A. B. Carpenter—Second pen, third hen.
J. A. Shuck—First Cockrell, third cockrel, third pullet.
A. M. Ragle—Second cock, third cock.

WHITE ROCKS.

E. C. Myers—First hen first cockrel, second pen.
C. F. Austin—Second and third cockrels, first, second and third pullets,

first and third pens.

WHITE WYANDOTTES.

Lee Lydick—First, second and third pullets, second cockrel.

BUFF LEGHORNS.

C. E. Davis—First, second and third cockrels, hen, pullets and pens.

BUFF COCHINS.

Dora Herod—First cock, first, second and third pullets, first pen.

J. M. Myers—First cockrel, third pullet.

W. C. Beachel—Second cockrel.

PARTRIDGE COCHINS.

Levi Boothby—Second cock, first second and third hens, first cockrel, second and third pullets, first pen.

S. Coffey—First pullet.

LIGHT BRAHMAS.

Mrs. Larry Powers—Second cock.

C. H. Kennedy—Second cockrel.

R. Y. Kennedy—First, second and third pullets, first hen, first pen.

BRONZE TURKEYS.

A. B. Carpenter—Second tom, first, second and third hens.

J. Swan—First tom.

KEEP A POULTRY RECORD.

Every poultry raiser ought to keep an exact record of the doings of the chicken yard. The most convenient record we have seen is that issued by Humphrey & Sons, Joliet, Ill. It is simple and at the same time most complete. They will send a copy free to every one of our readers who ask for it. At the same time you might ask, too, about the Humphrey Green Bone and Vegetable Cutter—the easy bone-cutter—guaranteed to cut more bone in less time and with less labor than with any other made.

A B. P. Rock cockerel owned by F. C. Hinman, Friend, Febr.

"Among Ourselves."

Now that eggs are 25 cents a dozen—whatever they may be when Investigator readers see these lines, we are all anxious to do our part toward making "dem hens lay." Ours are doing their part and fairly fighting to see which can lay the largest egg. Pompously we exhibit the egg basket to our neighbors, feeling a little pardonable pride in their ejaculations of wonder and admiration. One evening recently, when the flock was out for an airing—it is magnificent weather here, (Jan. 20.)—we had occasion to cross the street. Hearing something behind us, we glanced back only to see thirty snow white birds following in our train, the only disturbance in their ranks being caused by Jack (Jack is a Maltese kitten, if you please, of the bluest blue blood) rushing here and there in high glee.

"Well," we remarked to our neighbor, "we seem to be something of a circus when we go abroad."

"Oh, dear," she replied, "if I owned those chickens I'd be proud to have them follow me everywhere."

We suppose there are people too good (?) to pet their fowls, but we are not, even though we do not consider a hen very high in the order of intelligence.

Now what do we feed to insure eggs, whether cold or warm the weather? Well, we never could be scientific or systematic; we feed in a haphazard way that would set some modern scientific, balanced-ration men wild. In the morning it is a mash—ground feed and table scraps—if we have time to make it; but when the "Other One" is from home, as he is the most of the time, and we ar maid and man of all

work, we are as apt to scatter oats in the litter, rake it over a little and advise them to help themselves. About ten o'clock we then throw them a supply of corn on the ear. If the weather is at all fine they have a run out in the afternoon. At night they have shelled corn. This is one day; perhaps the next they have mash for breakfast and oats for dinner; then boiled oats come into the bill of fare and so on. All the time they have fresh water—frequently tintured with cayenne pepper—and plenty of cord fodder and oat straw to pick over. Most of the season so far there has been grass. Coal ashes and the charcoal from the wood stove is within their reach, as is also boxes of sand and gravel. Their house is warm. On cold days the floor is covered with litter and the grain scattered in, and they are kept confined. That terrible cold snap in December threw the whole flock into severe catarrhal trouble which certainly amounted to roup; but warm quarters, liberal dosing with cayenne and sulphur in the water soft food, fumigating house and flock together with sulphur burned on a pan of coals, a few doses of tincture of aconite and considerable general attention, brought all but three safely through. These grew poor and droopy when the rest began to pick up, so they were "beheaded to save their lives."

If one lives where they can it is well to have a basket at one of the meat markets with the request that the scrapings of the blocks and small waste pieces be dropped therein. Some proprietors will do this gratis; others will want a half cent per pound; but even at a cent a pound it is a good investment when eggs are wanted. Feed something like this or cut bone two or three times per week. Of course in summer we would not do this as there would be considerable "taint" to the contents of the basket if the weather was very warm.

This winter, for the most part, eggs could have been safely shipped; now, that shipping time draws nigh perhaps the weather will be more rigorous. There are many inventions and theories as regards packing eggs for safe transportation. In our opinion, however, there is one safe, simple way and it is the best way. We have used it for years and to our knowledge no egg has ever been broken. We save peach and grape baskets and when packing time comes we put a thick layer of excelsior in the bottom and a lining around the sides. Our eggs are wrapped in soft newspaper, using a generous piece and folding the ends well over, one turning to one side and the other turning to the other. Pack these in closely and

Black Langshans.

I won 1st pen, 1st pullet, 1st, 2d and 3d ckl, 1st ck, 1st, hen and 2 sweepstakes at Osceola. Neb. BARRED P. ROCKS, 1st pen, 2d ckl, 2d and 3d pullet, 3d, hen, 2 sweepstakes, at Osceola, Neb. 4 pullets at Lincoln Show. Langshan eggs \$5.00 per 100 \$11.50 per 15. B. P. Rock \$2, per 15.

J. E. Brown, Osceola, Neb.

White Wonders!

The Farmers and Poultryman's money makers. The best combination fowl out. Extra choice eggs, \$2.00 per 13. Satisfaction guaranteed.

Dr. I. C. Stephens & Co.

Carleton,

Nebr.

White Rocks Exclusively!

Two pens mated for this year's breeding, scoring from 90% to 94%. At Tabor Poultry Show won 1st, 2d, ckl, 1st, 2d, 3d, pullet, 1st, pen; every premium entered for; Russel, Judge. Eggs, per 15, \$2.00. 30 for \$3.50, 50 for \$5.00.

W. H. Utterbeck, Hillsdale, Iowa

Black Minorcas.

No. 1 stock, up to weight and the best of color. Eggs \$2 per 13. No stock for sale.

Mrs. Ella Patrick, Clay Center, Neb.

EUREKA POULTRY PLACE.

WHITE PLYMOUTH ROCKS of the Stay White kind. No straw color or flies on us. Nothing too good for the Irish. Eggs \$1.00 per 15. Address

L. G. French, Deep River, Iowa.

Taylor's Otee White

Plymouth Rocks are prize winners at Red Oak, Ia., and Lincoln Score 92 to 96 points. Eggs 5, 10 and 15 cents each. Write for particulars.

C E Taylor, Nebraska City, Neb.

BARRED PLYMOUTH ROCKS,

(Exclusively.)

Farm Range. Good Stock
Eggs that will hatch, \$4.00 per 100.
\$1.00 per 15. Satisfaction guaranteed.

Adam Weir, Clay Center, Nebr.

DON'T SET HENS

the same old way when our new plan beats it 10 times.

100 Egg Hatches, 200, 400, 800, 1600 in one case. 1000 in one. 5000 agents wanted for 1915. Also, see Pleasant work. Big profits. Catalog and the Egg Formula FREE from writer. Natural Hen Incubator Co., B 11, Columbus, Neb.

firm by means of small wads of excelsior. Two layers go easily in the ordinary basket. Over top put a thick cushion of the excelsior, and over this a cloth cut to a proper shape. Turn the edge under to make it safe and strong and sew it around with a stout needle and thread, drawing it so close that the top is unyielding when pressed on. Write name and address of purchaser on a piece of paper and stick it securely on the top of the basket. Your own name with "from" before it is also admissible on another piece of paper.

Somewhere among our poultry papers we caught the idea that this spring is an excellent time to go into the poultry business as there is a shortage owing to the shortage of corn. People have sold off their fowls very close, we are informed. Here is a pointer, "pass it on."

Another writer has been experimenting with green bone and gives us this: "Taking every advantage gained by feeding bone—i. e., general health of flock, quick growth of broilers, increase in amount of eggs, etc., over the two years bone was not fed, figured—and I keep close accounts—that the profit divided is 15 per cent over the profits of the two preceding years. This 15 per cent is attributed to the bone feed."

It is something to know how to "rush" the broilers at any rate.

And still another, feeding a handful of green bone per day to her 12 hens, says: "The 12 hens averaged eight eggs a day for over a month and nearly every egg hatched a strong, healthy chick."

It is amusing to read poultry papers and note the difference in opinions. Due, the writers say in all cases, to "experimentation" and "experience."

Of course, the majority agree on one point, viz., that the hen must have exercise if she is a success as a layer. Now here comes a fancier who says flatly that it is "no such thing," and cites her own flock as living, laying remnants of the theory. She has a 9½ pound Barred Rock that lays every day and Sunday too, or almost every day; did not stop even when she went to a poultry show. This same unconventional bird is sometimes cooped for weeks at a time. However this may be we agree with her owner on one point: a hen, to be a success must be well fed, warmly housed and never chased or frightened.

And here comes a man with this: "You will always have a good shell on the egg if you will feed plenty of clover." We don't know about the clover alone, we should want some lime and other ingredients within the hen's

reach. Somebody else warns against over-feeding with green cut bone, advising it in small quantities, adding, "Other egg-producing foods are an injury if you expect fertile eggs. It is not natural and hens so fed will not lay eggs whose germs are strong enough to produce robust chickens."

Another theory is that unless foreign blood is frequently introduced into a flock, it is bound to run out in two or three years.

HELENA CALDWELL-MELVILLE.

If you want to buy any Black Langshan and get L. E. Mayer's fine line circulars and read what one of our best judges say of his stock. Mr. Mayer is located at Bowling Green, Mo.

The Art of Poultry Fattening.

The commercial or utility side of the poultry industry while it has always been the moving power that drives the wheels of Fancy has now reached a stage in this country that will mark an epoch in its evolution. A new era has dawned. New forces are at work and they are powerful and capable of creating a revolution in methods. And his power is the great packing houses of the west: The Swifts, Armours and others whose facilities for buying, slaughtering and selling meat food products to the world are of such magnitude and their system so perfect that not a city, town or village in this, and not few in foreign countries in which their products are not sold or their influence felt. To these great establishments and not to the producers themselves are we indebted for the new conditions. More than five years ago one of them stated to the writer that nothing would please them more than to be able to enter foreign markets, not with better, but only as good poultry as those markets afforded. The reason that it could not be done was because the American people have always set up as their standard of perfection, a fat carcass. Yellow and plump without regard to what that plumpness consisted of. The only material known to them to produce it being corn, and the result from feeding it being grease or fat, deposited in layers under the skin and a pound or more in the abdominal cavity. The flesh being inferior, often stringy and tough and that poultry in this condition would be almost unsaleable in European markets. The American people with their reckless extravagance are willing to pay high prices for such poultry, because it is the best looking the markets afford, and when the meat is separated from the grease in trussing and cooking we are left but little edible portion and that not

of the best quality, deluding ourselves with the belief that we are eating a delicious morsel simply because we paid a high price for it. No such extravagance is tolerated in any other country; poultry to many there is a luxury rarely afforded. Under such conditions we can readily understand why a fowl must be finished for market, with the least possible percentage attainable of edible portion as compared to bones and oil; furthermore the texture of the skin, shape, appearance and firmness of flesh to the touch, and entire absence of layers of fat in the dressed bird, and the white, juicy, finely flavored qualities when cooked are the points of excellence. In order to attain this, a system of feeding for specific results became necessary.

Instead of turning the birds loose to range at will and shoveling corn to them, they confine them, limiting the exercise to small coops and feed them on material that produces these results. The method of feeding varies in manner and material in different countries. The most successful and profitable locality perhaps in the world is the Le Mans in Normandy. It is not uncommon for choice specimens to sell for 20 and 25 francs (four to five dollars) in the Halles Centrales in Paris, and not over six pounds in weight. Such prices, however, are not obtainable outside of France where their system of cooking and serving is so different from ours, making it possible for one fowl to serve three times as many persons as in any other country. The next most profitable district is the counties of Surrey Sussex and Kent, England, where whole families are engaged in it as were their ancestors for generations back. They know nothing else, they never have done and their children never will do anything else but fatten poultry for the London market. The method employed is in a trough feeding and the cramming machine, some using one, some the other, and many a combination of the two. The trough alone is not so profitable, but enables more fowls to be kept in process. Ten days of trough and ten machine feeding is more profitable, but the best results are obtained by machine feeding, from start to finish, care being taken to not overfeed during the first week gradually getting them up to full feed. These results are secured through the ability of the bird to digest and assimilate two or three times as much feed as it would consume from a trough if left to its own inclination. The food is made semi-liquid and no water or grit is given in addition to it, but it must be ground to meal and be com-

posed of just such material as will produce these results without sickening, or injuring the bird. By this method we are able to add three or more pounds of meat to a four pound bird in 21 days, at what would be in this country a cost in feed of about eight cents per bird for the 21 days and in turn make a profit not only on the weight gained but an increase per pound for quality and finish; the perfectly finished bird having what fat it carries deposited in globules throughout the tissue, rendering it of that superior quality demanded. If these fatters as they are called, are able to buy the ten to twelve weeks' old Irish birds sent over for this purpose at 75 cents each, paying the enormous prices they are compelled to for feed and sell their products at a profit, what is to prevent Americans not only sending such birds to the English markets, but from supplying their own with this most desirable meat. Mr. Chhas. W. Armour, the head of the Armour Packing Co., in an interview on this subject published in the Kansas City Star of December 1st 1901, stated that: "The American people will pay more for good food than any other people in the world." This is a significant statement from a man engaged in supplying the world with meat food. All the American people need is a taste of this kind of poultry and the demand will exceed the supply. When this demand sets in there will be a wide divergence in price between the thin and the finished stock. The best will go higher, the poor lower. While the thin chicken will always find sale at some price to the fatters, the greasy ones will go begging for buyers. Canada has for several years been developing rapidly along this line. England naturally looks to her colonies first for what she needs and they are prompt to act on any suggestions from the mother country, and foster such industries as are susceptible of development on their soil. At Ottawa, Ont., Truero, Nova Scotia and Bondville, Quebec, the fattening of poultry for the London market is carried on extensively under government supervision, and they have standing orders for greater quantities than they can possibly supply. The climate of England is very unsuited to poultry culture, being exceedingly damp and wet. Large poultry farms such as exist in this country are unknown there. While I believe it possible for those schooled in our methods of artificial incubation, brooding and rearing to adapt these methods to English climate and conditions, it remains to be done. There is no limit to the quanti-

ty this country can produce. We can supply every demand the foreign and some markets can impose upon us. If we can produce a good article the world wants it, but it won't do for us to try to force them to accept our false standard of excellence as theirs, at the same time knowing in our hearts that ours is not the proper, but simply a convenient one. We supply the world with the best beef; we finish our cattle up to the highest degree of perfection and the quality governs the price. If we had refused to do so and tried to sell Europe our grass-fed steers and insisted that such were the best we could produce they would have none of it, and our home market would be our only outlet. The reader can form some idea as to the quality and appearance of the best dressed poultry produced in England by the following: At the Smithfield, (London) Table Poultry Show held in December, the first prize winners shown and weighed in couples were: Buff Orpington Pullets, 21 lbs, 4 oz; Dorking Cockerels, 20 lbs, 8 oz; Farmyard Cockerels, 23 lbs, 13 oz; Farmyard Pullets, 17 lbs, 10 oz; Pekin Ducks, 15 lbs, 3 oz; Turkey Cocks, 59 lbs, 3 oz; Turkey Hens, 49 lbs, 10 oz.

There is nothing in the above that we cannot duplicate and even excel in weight and quality. We have only to adopt the necessary methods. The mum results, but trough feeding will add from 2½ to 3 pounds of flesh to a four pound bird in 21 days by the use of proper feed, which of course is the foundation. A live three pound pullet as it comes from the farm carries about 6 ounces of bone, 21 ounces of offal and after cooking about 18 ounces of edible meat. Here the percentage of waste to edible portion is excessive. The bird is now in its best condition to take on flesh, but the farmer unmindful of his opportunity to convert feed into meat rushes her off to market. The middleman steps in here and with but few dollars invested in capital; no risks incident to the production and maturing of the bird takes advantage of the situation and the growers indifference or ignorance, and in three weeks makes more than double the profit on a bird than the man who raised it. He skims the cream.

The following market quotations clipped from the Kansas City Star for December 6th, 1901, perhaps tells the story more forcible than we can, for after all the hard cash is the best argument:

Poultry Exchange quotations—hens, alive, 5½c; roosters, young, 20c; old, 15c each; springs, 6½c; ducks, 6c; geese, 4c; turkeys, hens, 5c; young,

W. A. Forbes. Breeder of Buff and White Wyandottes. For the past four years I have won the majority of the best premiums in full classes, 221st, 102nd, 23rd and 5 specials. I am booking orders now for a limited no. of eggs from these prize matings for \$2.00 per setting, 2 settings \$3.50, 3 settings \$5.00.

North Topeka, Kan.

Buff Orpingtons, Barred Rocks, S. C. W. Leghorns, W. Wyandottes.

Before buying anything, write to us. It will be a pleasure to give you our prices. We respond promptly. Bargains if taken soon.

KING & KING, Fairbury, Neb.

Golden & Silver Sebight Bantams!

Eggs. Golden, \$1.50 per 15. Silvers, \$2.00 per 15. Par. Cochins, \$2. per 13. Price of pigeons on application. 8 varieties for sale. Address

W. F. HOLCOMB, Clay Center, Neb.

Poultry Investigator one year with each order.

Olentangy :: : Poultry Yards

Delaware, : : : : Ohio.

Reed Bros, Props. C. C. Reed, Mgr.

Rose Comb R. I. Reds. C. I. Games. Barred P. Rocks. Buff C. Cochins. Eggs \$2.00 per 15. Satisfactory hatch guaranteed. No birds in breeding pens scoring less than 91 points. Send for circulars.

Mammoth Bronze Turkeys!

None under weight—scores 93 to 97. 1st and 3rd pullet at Lincoln, also 2d cockerel weight—31 pounds. Write for prices on eggs.

C. M. Hurlburt, Fairbury, Neb.

O. I. C!

It is winners you would raise for next winter's shows and are undecided where to send for eggs for hatching. Just send an order to the **GOLDEN RULE POULTRY YARDS**, the home of prize winning White Plymouth Rocks, pure Empire strain, and White Wyandottes, (Duston) and you will be pleased with young stock hatched. Eggs \$2.00 per setting of 15. A few fine W. P. R. and W. W. males yet for sale.

MRS. MATTIE WEBSTER, BELMONT, WIS.

Something Worth Knowing.

Money saved by making your own poultry remedies. To cure Cholera. **SURE CURE.** Roup, Scurly Leg, Lice, Mites. Cheap remedy but sure. Excellent Poultry Food to make hens lay. Celebrated Douglas Mixtur e-c. All receipts for \$1.00 or 25c each. Address with 2c stamp.

A. M. HAGLUND. Goshen, Ind., R. F. D. No. 2.

The Michigan Poultryman...

Only Exclusive Poultry Paper in Michigan....

All the practical poultrymen contribute to its pages. Expert poultrymen will give its readers free such information as they may ask for.

All the news of the poultry-world. Well illustrated.

Michigan Poultryman,
Ithaca, Mich.

A Generous Business Policy

has proven the best for us. We absolutely guarantee the

Marilla

Incubators and Brooders,

(both hot water and hot air) to be satisfactory in every way, or send back your money. It is years in the business of manufacturing Marilla's have made a business sure that these machines will set big hatcheries. That our system of regulating temperature, moisture and ventilation is the best there is. That the Marilla Brooder is the only one that prevents overcrowding and trampling, (there's no cage in like our incubators, the best on the market. Send in stamps. Don't you want it!)

MARILLA INCUBATOR COMPANY,
Box 97, Rose Hill, N. Y.

Poultry Supplies

Ideal Leg Bands 15c per dozen, \$1 per 100.

Smith Seal Bands 25c per dozen, \$1 per 60.

Standard of Perfection each \$1.

Spray Pumps each 75c.

Liquid Lice Killer, gallon can 75c.

Conkey's Roup Cure 50c (and 1.00 a box).

Chamberlain's Chick Food \$2.50 per 100 pounds.

J. D. W. Hall's Guaranteed Roup Cure 50c and \$1 a box.

Reliable Spring Punches each 25c.

Midland Poultry Food at factory prices.

Humphrey Bone Cutter F. O. B. Clay Center, \$12.

Oyster Shells F. O. B. Lincoln, Neb. per 100 pounds \$1.20

Lime Stone Grit and Mica Grit F. O. B. Lincoln, per 100 lbs \$1.00

Bone Meal, Raw Bone, Beef Chops, Blood Meal, as cheap as the cheapest.

Sure Hatch Poultry Co.,

Clay Center, Nebr.

S. S. HAMBURGS.

At the Columbus shows for the past three years I have won more prizes than all other exhibitors combined. Fine shape, excellent color, full combs and unexcelled as layers. Stock for sale at all times. Eggs in season. A good buy, guaranteed.

THEODORE DESSIM, COLUMBUS, OHIO.
19 E. Chestnut St.

EGGS

\$2.50 for 15
\$1.50 for 30
My aim is
fertile eggs,
hardy
duck, bred
to win best
to lay.

STOP!

RCSE and SINGLE, "G"
Rhode Island Reds, Buff Leghorns. Winners wherever shown. Only strong robust stock in my pens and you will not regret it if you send your order for eggs to
Eric Aurelius, Lake Co. Ohio
Perry,

My White Minorcas

Won 1st, 2nd and 3rd at Delaware and Columbus on old and young stock. Scored 90 to 94%. Eggs from my best pen \$2.00 per 15; \$5.00 per 45, satisfaction guaranteed

HARRY LIEBOLD, Delaware, Ohio, R. D. 2.

Fine Warr. White Holland Turkeys - - \$1.75
Pure Bred Red Belgians - - - - \$1.00
Pure White Rock Cocks - - - - \$1.00
Pure White Wyandots - - - - \$1.00
New Strain White-Breasted Guineas - - \$0.75
Aft above from prize-winning stock and line bred. Catalogue sent.

J. C. BAKER, Proprietor,
White Plume Farm, Richi. Ill.

Cherry Hill Poultry Yard

BARRED P. ROCKS, Exclusively.

Eggs \$1.50 per 15. 100 for \$6.00.

Mrs. Eva J. Elagruch, Aurora, Neb.

EGG ORDERS. Book now for Houston.

B. P. R. 2 matings, score from 90 to 93%. Eggs \$3. per 15. \$5 per 100.
♦ Buff Orpingtons, 4 yards; 2 yards solid buff wing and tail, eggs \$5 per 15, \$8 per 30. Buff Orpingtons, 1 yard, eggs \$3 per 15, \$5 per 30. Buff Orpingtons, 1 yard eggs \$2 per 15, \$5 per 40.

Winners wherever shown. Won more first and seconds than any other man. Guarantee good hatcheries, true to name and fresh.

A. L. HOUSTON, Red Oak, Ia.

The Prairie State Incubator

has long been recognized as the best incubator in the world. That is why the U. S. Department of Agriculture uses it exclusively. That's why it won 342 first premiums over all other makes of machines. This year we have made a catalog to fit such a machine. 50 tinted plate pages; 4 original paintings and over 500 half-tone illustrations. Mailed free as long as they last. Write for catalogue No. 56.

PRAIRIE STATE INCUBATOR CO., BOMER CITY, PA.

Largest Incubator and Brooder Factory in the World.

weighing over 7 lbs, 6c; young gobblers, 5c; culls, 5c; pigeons; 50 c dozen; squabs, per doz, \$1.25@2.00; dressed poultry, choice scalded in good condition brings 1 c above live poultry prices.

From an adjoining column on the same page we clip the following:

"THE SPECIALLY FATTENED CHICKENS THAT THE MARKET AFFORDS.

A Toothsome Meat Particularly Adapted to this Season of the Year.

"The newest offerings in poultry to be found on the market are especially fattened chickens which a local packing house is offering its patrons. Besides being unusually tender, all the meat is as white as the breast. While these chickens have been fattened primarily for the English trade, their popularity is likely to become as widespread at home as abroad. Like all choice morsels they sell at high prices. A pound costs 18 c in the shops, and buyers are offering their preference of either dry picked or scalded stock."

What reason or excuse can be advanced that will justify the producer in selling his pullets (springs) at 6½ cents, less express and commission charges, when if properly finished they will fetch his at least double per pound. Not theoretically or on paper, but in fact as it exists today. He would never dream of selling an unfattened steer or hog for slaughter, because the opportunity is his to convert grain into meat as a profit. He takes advantage of this slower and more expensive method, but ignores the quicker and more profitable one. His eyes are being opened, however, and the true situation is becoming apparent. The revolution is at hand and when the American people undertake it aright they will show the foreigner a clear pair of heels in this as we have in many other lines. The business has already assumed large proportions in the west. The Armour's at Kansas City, alone are killing ten thousand fowls a day, and they are but one among those now engaged in it. They predict that in two years they will be killing twenty times this number daily. There could not possibly be a greater stimulant to the poultry industry than these big establishments have injected into it, and the time is close at hand when cramming machines may be as common as churns. We already make a better and cheaper machine than the English. In the meantime let the cry go forth, better poultry and more of it.

H. E. MOSS,

Kansas City, Mo.

Please Let Me Tell You

My Buff Cochins have again won their share of the ribbons at the McCook Show. To make room for my breeding pens I will sell trios, pens and singles at bargain for the next 30 days. Also a few R C B Leghorns. Eggs in season.

Mrs. Ida Bard, Imperial, Nebraska.

Blue Barred Plymouth Rocks

Eggs \$1.50 per 15, \$3.00 per 50, \$5.00 per 100. Our stock is first class.

P. J. SCHWAB, Clay Center, Nebr

My Buff Orpingtons

At Nebraska State Show, 1902, made 8 single entries and took 1st ckl, 2d ckl, 1st and 5th hen, 3d and 4th pullet. If you are going to buy eggs send for my circular. Orpingtons and (Thompson) Barred Plymouth Rocks.

JOHN A LING

Harvard - - Nebraska

White P. Rocks Exclusively...

My Rocks are of the best strains to be found and I have a fine lot of chicks to sell reasonable. Write,

MRS. NANCY WATSON,
Lincoln, Nebr.

My Buff Rocks

Won at Madison Square Garden this season; at Boston and other great shows past seasons. Stock and Eggs for sale. Write for Circular and Show record.

MILES H. LOUER,

Box M. East Onondaga, N. Y.

Black Langshans---

The winter layers, of standard weights, good colored plumage and eyes, well feathered shans—no scrub among them. Score 93 to 97. Eggs \$2.00 per 15,

C. M. Hurlburt,

Fairbury, Nebr.

SILVER WYANDOTTES

MY BIRDS have been on exhibition at the last eight State Shows and many other large shows, winning more premiums than all other competitors of this variety combined. Good birds for sale. Eggs from prize pens 15 for \$3, 20 for \$5. From standard bred stock, farm range, 100, \$4.

Mrs J. W. GAUSE,
Emporia, Kan.

BUFF COCHINS.

1st ckl score 94½. 1st hen 93½. At Nebraska State Show at Lincoln. Eggs \$1.00 per 15. Breeders also of Short Horn cattle and Duroc Jersey swine. C. K. DAVIS, Prop.
W. J. MITCHELL, Poultry Manager.

Columbus,

Nebr.

Springfield, Ill., Feb. 8, 1902.

Editor Poultry Investigator: The Springfield Fanciers' Association will hold its fourth annual show on its regular dates the second week in December. The judges will be announced later.

The officers for 1902 are: J. E. Lauterbach, president; J. A. Neison, vice president; Louis M. Gietle, financial secretary and T. S. McCoy, corresponding secretary.

T. S. MCCOY,
Corresponding Secretary.

THE "PERFECT" HATCHER.

The Poultry Investigator is always pleased to note the success of its incubator advertisers who have won fame and fortune by the excellence of their hatchery, prompt and careful attention to orders and courteous treatment of customers. The best example we can cite our readers is the progress made by the firm of J. A. Chelton, of Fairmount, Md. After an investigation we find that the "Perfect Hatcher" manufactured by this firm is the equal of any hatchery and superior to many now on the market, while it is the lowest priced hatchery made. The 200-egg size is only \$1. We advise our readers who are interested in purchasing a good hatchery at a low price, to write Mr. J. A. Chelton direct, enclosing a two-cent stamp as he will take pleasure in answering all such inquiries. He is a gentleman of the highest standard in the commercial world and noted for enterprise as well integrity.

RINGLET B. ROCKS

The Kind that Win We Double Mate.

Ben Hur, 1st cockerel at Lincoln Show 1902, at head of our cockerel breeding pen. No females in our pullet breeding pen scoring less than 90, mated to extra choice pullet breeders. Stock all sold, eggs reasonable. Write for prices.

C. M. Hurlburt, Fairbury, Neb.

Barred Plymouth Rocks.

EXCLUSIVELY.

Drop me a postal card today asking for description of matings and price of eggs for hatching.

W. S. RUSSELL,

Box I, Ottumwa, Iowa.

Eggs for hatching from White Poultry.

Wyds \$1.50 per 15, \$4.00 per 50. Cochins, \$1.50 per 15. I. Games, \$2.00 per 15. Guinea eggs \$1.25 per 16. H. turkeys from stock weighing 18 to 35 lbs, as fine as any in the west, \$2.00 per 12. W. Embden eggs from extra large stock, \$2.50 per 11. W. P. Rock eggs from birds scoring 93½ to 95½, \$2.00 per 15, \$5.00 per 50. Eggs for incubators from stock scoring 90 to 93, \$5.00 per 100. Stock for sale at all times.

White Plume Poultry Yards.

Mr. and Mrs. H. E. CLARK,
Dallas Center, Iowa.

Buff Orpingtons and Cochins.

Bred from my own Importations.

I won more premiums than any other two exhibitors at the Nebraska State Show, 1901. Before buying anything write me—it will be a pleasure to give you prices.

Ida J. Buehler, Kenesaw, Nebraska.

Years of Experience

Has brought me the very best of Barred Plymouth Rocks to be found anywhere and from my different yards I have selected 5 pullets scored 92 and 8 which scored 925 and from this yard I wish to sell a limited number of settings of eggs at 3.00 per setting. All eggs sold will be from this yard and from these birds exclusively. I have a few pullets scoring from 90 to 91½ also a few choice cockerels which I will sell at prices that are right. All eggs and birds sold by me will be as represented or money refunded.

Wm. Metzmer, Independence, Ia.

PERSECUTED POULTRY.

I was just think about some cows of which I once knew, that were owned by one too little interested in their happiness to provide regular accommodations for them. At night a neighboring tree was their only shelter, even though the weather was inclement and the temperature low. They were expected to hunt their own feed, and worst of all, the range was limited to the smallest limit. Did they encroach upon a grain field, a dog was at once set upon them. Did they wander toward the orchard when the fruit was ripe, it was the same thing. The garden was of course forbidden ground, tempting as it looked; and if a gap was found or could be made, the unlucky intruder was forced to seek a rapid retreat. Forced to seek its own living and the tempting morsels were all forbidden, dogged and stoned if the promptings of nature induced it to cross defined barriers, is it any wonder that such stock proved unprofitable?

"That owner was a lunatic," you exclaim. "No sane man would so use his own stock." Yet I can assure you that no charges of insanity were ever preferred against him by any one, and he perhaps, exercises as much humanity as some of his neighbors. Pardon me, however, for a slip of the pen. It was hens instead of cows that were thus treated.

A lady not many miles away who raises an abundance of strawberries, raspberries, currants and other small fruit every year, also prides herself on her large flocks of poultry. "How do you manage?" asked a friend; of course you have spent some money in poultry netting. Is it the birds or the fruit that you enclose?" "Neither," was the reply. "Feed your poultry liberally and they will cease to be pilferers."

While we think it would require pretty generous feeding to restrain the average flock in sight of a nice strawberry bed in full fruit, yet there is room for considerable thought in the suggestion. Of course, if well fed they would not be so ravenous. Further, they might not wander about sufficiently to come upon all the forbidden fruits; or, never having been forced to experiment upon strange material to supply their inner wants, they may not have learned of their fine taste. These are some of the legitimate results which might be expected from the full feeding. And while we still doubt whether every one with every breed could so successfully unite the two branches so incompatible in the average experience, the suggestion is certainly worthy of note.

Buff Orpingtons.

Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

G.B. CLARY Fairbury, Nebr.

FREE..

THINK OF IT!

By special arrangement you can get all three (3) of the following one year for only 50c. Never an offer like this before

♦♦♦♦

The Poultry Investigator

CLAY CENTER, NEB.
The only exclusive poultry paper published in the west. Original, up-to-date, instructive. Profusely illustrated and never prints a dead line. Contains from 32 to 40 pages each month.

Fancy Fowls, Hopkinsville, Ky.

The leading poultry organ of the south. Three years old, well established and prosperous. 36 to 40 pages each month.

Michigan Poultry Breeder

BATTLE CREEK, MICH.
Established 1885. The publisher has devoted 14 years of his entire time and attention to the poultry industry. Its a success—24 pages.

The price asked for these papers all one year is only 50 cents, which any of them are worth, and you get the others free. Send your subscription to any one of them. A free sample copy can be had by addressing each one. Better send your order now.

**White
Langshans
Exclusively**

Eggs from stock scoring from 90 to 95 points, \$1.50 per 15; \$2.75 per 30; this season only. Some

good Ckls. for sale with score cards by Ben S. Myers.

All Stock Farm Raised.

MRS. JACOB HUGHES, JR.,
Rock Port, Missouri

White Leghorns.

Eggs from flock \$3.00 per 50, \$5.00 per 100; from choice matings, \$1.50 per 13, \$2.50 per 25. Can fill no more orders for over 100 egg lots. Scottish Terrier puppies \$3.00 and \$5.00.

PRACTICAL POULTRY FARM,

R. R. French, Mgr. Box 47, Ford City, Mo.

If you want

Belgian Hares

Call on or write to

OLD ORCHARD RABBITRY,
Old Orchard, Mo.

Or 2003 Clark, Ave., St. Louis, Mo.,

WM. G. STEINICKE, Mgr.
100 Hares to choose from.

Black
Buff
White

Pekin Bantams

—As Good as the Land can Afford—
—Eggs \$3.00 per 13.—

A. J. WILLIAMS,
Clay Center, Nebr.

Black Langshans. . . .

1st ckl, 1st hen, Nebr. State Show 1901, 1st pen. 1st ckl, 1st and 2d pullet Nebr. State Fair, 1901, 1st pen, 1st and 3rd pullet, 2nd ckl, 2nd and 3rd pullet, Nebr. State Poultry Show at Lincoln, 1902. Eggs \$2.00 per 13.

J A Johnson, Holdrege, Nebr.

BUFF WYANDOTTES!

1st, ck, 1st, ckl, 2d, and 3d, hens 3d, pullet, PARTRIDGE WYANDOTTES, 3d, pullet, 3d, ckl at Nebr. State Show, Light Brahm. Eggs \$2.50 per 15.

E B DAY, North Bend, Nebr.

Just a Moment Please!

Now is the time to book your orders and **WM. KERSENBROCK** has prize winning birds of Barred and Buff P. Rocks, Partridge and Buff Cochins, Silver Laced and White Wyandottes and Cornish I. Games.

Wm J Kersensbrock, Columbus, Neb.

Rose Comb White Leghorns!
Made a clean sweep at Mitchell winning 5 firsts, 5 seconds, 4 thirds, and 4 specials, birds scoring to 92. At three shows in last two years won 11 firsts, 6 seconds, 6 thirds and specials. Cockerels for sale. Eggs \$1.50 per setting

J. F. Reinekt, Tripp, S. Dakota
Vice-President State Association.

Our Barred and White Rocks.

Are successful show birds and excellent for market. Our S. C. W. Leghorns are winners in strongest competition and great layers of large white eggs. Incubator eggs \$5.00 per 100. Eggs \$2.00 per 15.

J. N. Krauter, Bucyrus, Ohio.

Just what the woman fed her poultry, I do not know. Doubtless she furnished a variety; and in this single word may reside almost as much as in her liberality the success attained. To expect a hen to subsist on a single lot of fare is unreasonable; and as this was never designed by nature, biddy pluckily resolves to supply the deficiency herself.

Those who do not feel like keeping the stock shut up year in and year out often find it advantageous to have a park in which they can enclose them for a few days at a time as occasion rises, or of an adjacent grain field are among the incidents which render this advisable. It is certainly much more profitable as well as much more humane than the merciless dogging or stoning that too often attends their attempts to carry out nature's plan.

BESSIE L. PUTNAM.

THE RIGHT MIXTURE.

As a usual thing I am a little suspicious of patent medicines and other mixtures, but I must say right here that I find Mrs. Pinkerton's Chick Food to be of the right material, seeds, grain and grit, in the right proportion and that it is very economical to use, considering the price of common grain and making a success raising the chicks. I have known of Mrs. Pinkerton's level headed ideas on Poultry raising for some time and when she proposed to put her chick food on the market, I encouraged her to locate at Clay Center, Nebr., so as to make it convenient for our patrons to get the feed without freighting it here and there before reaching the consumer.

M. M. JOHNSON.

Last month the INVESTIGATOR had Mrs. Mattie Stuft, of Laurence, Nebr., raising Cochius and living down in Kansas. We don't blame her for raising objections to such a procedure but our readers will please notice that she is located at Lawrence, Nebraska and breeds Buff Orpingtons of the best strains.

Winners Again!

Rocks and Wyandottes.

Barred and White, Silver and White. Score 92 to 95½. They are sired by winners and bred to winners from some of our largest shows. Eggs \$2 per 15 straight from pens headed by 1st and 2d prize birds.

J. A. DOUGLAS, Ferguson, Mo.

It's Up To You

To get 5,000 new subscribers. We will send the Fanciers' Guide, an up-to-date Poultry and Hare paper 6 months for only 10 cents. Special ad rates to P. I. readers. 1 inch 3 months for 1 dollar. 30 words breeder notice, 3 months, 50 cents. Try it now in egg season.

Fanciers' Guide, Montpelier, Indiana.

MY MAMMOTH PEKIN DUCKS Are holding their own throughout the west. Have always won highest honors at Great St. Louis Fair and Poultry Show; also in the hands of my customers. A few elegant Buff Rox at half real value.

OTTO STOECKER, Box 18, Manchester, Mo.

Have you seen it?

The Fanciers' World

America's leading publication for fanciers. Special departments for dogs, cats, alpacas, horses, poultry, etc. 32 pages. Profusely illustrated. Per year, 50 cents. Sample copy free.

The Fanciers' World

F. M. Simmonds, Jr. Publisher, Chicago, Ill.

Why Buy Stock and Poultry Foods?

Make your Own! I can send you formulas for all kinds of stock and poultry foods. Here are a few: Chick food 35c; egg food, 35c; poultry condition powder, 45c; stock condition powder, 35c; hog condition powder, 30c. Write for others.

A. W. COLLINS,

630 Grand Ave. Keokuk, Ia.

Black Langshans

Large, vigorous stock, free from disqualification; up to standard weight; winners at Clay County Show. A fine lot of Chks. for sale. Prices reasonable. Eggs for sale in season. Address.

MRS. N. W. JOHNSON, Clay Center, Neb.

"Twenty-Five Years in the Poultry Yard."

A perfect Manual for Success.

Gives symptoms and remedies

for all diseases. Gapes, Roup,

Hog and Poultry cholera. 108

pages. Price 25 cents.

A. H. LANG, Covedale, Ky.

Oh Yes!

We have imported stock. R. C. R. I. Reds, R. C. Minorcas, Buff Orpingtons, Barred Rock, Anconias, Lt. Brahmas, Pekin and Cayuga ducks. Eggs \$1.50 per 15. Duck eggs \$1.00 per 12. One setting free to best customer. Stock for sale. 5 R. C. Rhode Island Red cockerels for sale cheap.

P. G. Shelby, Florin, Pa. box A.

Buff Orpingtons
AND
White Wyandottes

No better Stock
Raised.

I never have failed to win in largest shows. Birds score from 90 to 95½.

C. ROCKHILL,
Harvard, Nebraska.

This is for You!

Owing to my judging engagements for season of 1923, will be unable to show my birds and will hereby reduce the price of eggs from \$3.00 to \$2.00 per 15. I have S. C. Brown Leghorn, Black Leghorns, Barred Plymouth rocks, (Violet Strain)

David Larson,

Wahoo, Nebr.

—White and Buff Wyandottes.—

Prize Winners—1st Chk at Elgin, 1st and 2nd chl, 2nd pullet, 3rd hen, 2nd pen at Rockford, 1st and 2nd chl, 1st and 3rd chl, 2nd hen, 3rd pullet, 1st, 2nd and 3rd pens at Belvidere, Ill, 1902. Orders booked for eggs \$3.00 per 15.

B R LUCAS, Belvidere, Ill

BUFF ORPINGTONS.

No stock for sale! Rose Combs, Buff Orpingtons. A few eggs at \$2.50. Winners at Red Oak and Osceola, Iowa, and Nebraska State Show at Lincoln, Single Combs, eggs, \$3.00 per 15. \$5.00 per 25.

Mrs. J. A. LASH, Osceola, Iowa.

For Sale.

100 choice young birds from winners at Kansas and Nebraska State Shows, 1901. S. S. Hamburgs, Partridge Cochins, Buff Cochins, Light Brahmas and B. P. Rocks Show record on application. Eggs from choicest matings \$1.50 per setting.

DeWitt Yates, Fairbury, Neb.

O. MO. HUN. DRO.

Breeder of Prize-Winning

IMPERIAL WHITE P, ROCKS.

Stock for sale at all times. Eggs in season.

E. B. OMOHUNDRO, Bowling Green, Mo.

Listen!

—IF YOU WANT—

Barred P. Rock

cockerels, hens or pullets, worth every cent asked, scored or unscored, send me your order and let me prove my promise to please you. Eggs \$1. From all scored stock by Raup and Heimlich, \$1.50 and \$2. No secrets about these pens. Ask what you want.

Mrs. A. P. Rodgers.

Bowling Green,

Mo.

IT BEATS ALL.

The Natural Hen Incubator beats the old way of setting hens ten times over. 100 egg hatcher costs only \$2. 94,000 sold principally by agents. Send for 1,000 men and women agents for the new season. Special terms with you—a large margin of profit. 10c egg formula and catalogue sent free. If you write today. Territory may be gone tomorrow.

NATURAL HEN INCUBATOR CO., B 11, COLUMBUS, NEB.

A CONCRETE POULTRY HOUSE

The concrete poultry house has come to stay. They are one of the best things that I have invested in since in the poultry business, which covers a period of 18 years, and I have had some experience with most all kinds of houses, from a straw pile up. I have had roup and kindred diseases to contend with all along the line, but since the advent of the concrete houses, doctoring fowls is a thing of the by-gone-days. The walls of a concrete house are the same as if of one solid stone, there is no cracks to admit of cold draughts on the fowls, consequently there is no roup with fowls in these houses. When we shut out wind, rain and frost and promote health in our stock we have taken a long stride to success in poultry culture. A vigorous, healthy hen is usually a good laying hen, and the hen that lays best is the one that pays best. When I devote most all my time to keeping poultry for the profit, and I must set down, fold my arms four months of the year, but the feed bills still run up into dollars and no income from my fowls, I wouldn't consider that I was making a success of it.

Let's make some figures in the business here today. The egg output was 33; value in the market here, 3 cents each, or 99 cents for the day's laying; one month at this rate would be \$30.69. Within ten days from now we expect to double this record, and will do it. My house cost me just about \$50 all told for the 60 feet of concrete and 14 feet planked up for a brood house at the east end, making a house 10x74 feet, divided into six rooms 10x10 of the concrete and one brood room 10x14 feet.

If my laying stock on the place will bring me an income of \$61.38 during the months of January and February eggs sold at market price, and pay for my house and still have me a balance of \$11.38, it proves to me very clearly that the concrete house is a success. Now if every farmer in the vicinity was getting eggs from their hens at this time I could not give the praise all to the warm house, and my care, but there is very few, if any eggs coming to market here now. Wife and I visited a well-to-do farmer near here yesterday who told us they had 85 Brown Leghorn hens and pullets and were not getting an egg. They had a barn large enough to hold nearly all the buildings on our place. But he said "their coop was too cold," and that's about what is the matter with the most of farmers' chicken business. "The coop too cold."

Morning View
Poultry Yards.

....HAVE....

..Barred Plymouth Rocks..

Extra large heavy bone, finely barred, full above the eyes.

Eggs in Season. \$1.50 per Setting.

James M. Perkins,
RAVENWOOD. : : : MISSOURI.

Mrs. J. B. Jones, 3 3 3
Breeder of
Barred Plymouth Rocks
and Mammoth Bronze
Turkeys.
STOCK FOR SALE. EGGS IN SEASON.

ARILENE, : : : KANSAS.

BUFF WYANDOTTES,

EXCLUSIVELY. Our Buff Wyandottes are bred from best strain obtainable and in line. We breed the pure golden Buff, not the dark red. They're prize winners.

E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

UNION LOCK POULTRY FENCE.

For Poultry, Rabbits, Orchards, Gardens, etc.

All main strands are two wires twisted together.

Patented July 12, 1892

and April 25, 1892.

Stronger and closer spacing than any other make. Our Union Lock Hog, Field and Cattle Fence, Union Lawn Fence Gates, etc., guaranteed first class.

Your dealer should handle this line—if not, write us for prices. Catalogue free.

UNION FENCE CO., DE KALB, ILL., U. S. A.

FRANK MYERS,
Free Port, Ill., U. S. A.
Box 20.

Breeder of
Barred Plymouth Rocks

They are Barred Right and good size. Eggs 15 for \$2.30 for \$3.50, 50 for 4.00, 100 for 7.00.

IDEAL
ALUMINUM LEC
BAND.

Also manufacturer of

Ideal Aluminum Leg
Band : : : : :

The acknowledged leader. 12 for 15c, 25 for 30c, 50 for 50c, 100 for 75c. Samples and circular of Barred Rocks mailed for stamps.

Conkey's
Roup Cure

Cure Guaranteed!

THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, es-

pecially in placeons, this cure excels all others. One 50-cent package makes 25 gallons of medicine. Directions with every package. If it fails to cure money refund. Postpaid. small size 50c. large \$1. Conkey's Louse Killer never fails to kill. Try it. 25 cents per package, and 15 cents extra for postage.

Conkey's Egg Food and Poultry Tonic will keep your fowls in perfect health, and produce more eggs than any similar preparation. 25 cents per package and 15 cents extra for postage. C. E. CONKEY & CO., Cleveland, O. Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal. Eastern wholesale office: No. 8 Park Place, New York City and S. H. I. Co., Clay Center, Neb. For sale by all poultry supply houses. Agents wanted.

The Inland Poultry Journal

Is the best 25 cent poultry journal published. The Inland is a monthly journal of reliable poultry information, profusely and handsomely illustrated. It is edited by poultrymen who have made a success of the poultry business and have the pleasing faculty of telling others how to reach success by the shortest route. The articles it contains are original, concise and practical, covering every phase of the fancy and commercial poultry business. Every number is worth more than the price of a year's subscription. If the best is wanted in poultry literature subscribe for the Inland. It is 25c a year and everyone ordering from this ad will receive a book, "Plans for Poultry Houses," free.

The Inland Poultry Journal Co.

Box 14, Indianapolis, Indiana.

The Marilla Incubator Co., of Rose Hill, N. Y., in order to care for its increasing business in the west, has established an office in Chicago at 1531 Monadnock Block. Mr. W. L. Taylor is the manager. Mr. Taylor has been employed in the general offices of the Chicago & Alton railroad. He is a practical poultryman and has been a breeder of Black Langshans of high quality. His practical experience in the operation of incubators will make him a valuable man in his new relations. The Marilla Incubator Co., ask that correspondence from the territory tributary to Chicago be addressed to W. L. Taylor, 1531 Monadnock block, Chicago. It is a pleasure for the Poultry Investigator to note the development of this valuable patron of the Poultry Press, and we bespeak for Mr. Taylor the interest and patronage of our readers.

NEMAHA COUNTY POULTRY ASSOCIATION.

The Nemaha County Poultry Association will hold its first annual show at Wetmore, Kans., December 22-24, 1902. We have engaged the well-known judge, Mr. C. H. Rhodes of Topeka, to score the birds. All fanciers are invited to co-operate and make the show a large one.

The membership fee is only 50 cents per year, and all members will have their names printed in the premium list free with name of the variety of fowls they breed. This alone will be worth 50 cents.

We need your co-operation and will appreciate your interest. Join with us and climb up to the top seat. Address all correspondence to Mrs. Maude Rolfe, Secretary, Wetmore Kans.

**You
Can
Raise
Chicks
If
You Use**

Pinkerton's Perfection Chick Food.

It contains everything that is essential for the chicks's life. Not a pound of material in it that is not the best the market affords. It is equal to any chick food on the market. Price 30 lbs, \$1.00; 50 lbs, \$1.50; 100 lbs, \$2.50. Manufactured by

Sure Hatch Incubator Co.

Clay Center,

Nebr.

BUFF ROCKS.

W. WYANDOTTES.

BARRED ROCKS.

LIGHT BRAHMAS.

Eggs.

Only \$3.00 per 50 or \$5.00 per 100 from our white breeds. \$4.00 per 50 or \$7.00 per 100 from our best pens—Hawkins, Dustin, Felch strains. Bred to win and to please. We guarantee our eggs to be as good as the best and positively thoroughbred of the best standard. The above low offer is for this season only. Catalogue free. Member of American Buff Rock Club.

JAMES Q. MYERS,

Oaks, Pa.

OAKES Lamps and Regulators.

THE STANDARD FOR OTHERS.

Oakes' Hydro Safety Lamp, (Water jacketed wick tube), the only safe and sure lamp. Never goes out nor smokes. Price 75c to \$2.00.
Oakes' Improved Wafer Thermostat, Special Regulator Circular issued April 1. Wafer regulators only \$1.25 prepaid. We manufacture incubator and brooder fixtures of all kinds, Tanks, Heaters, Egg Testers, etc. Write for catalogue and get money saving prices.

L. R. OAKES, Mfr., No. 12 1/2 Street, BLOOMINGTON, IND.

NEW Aluminum Regulator. Controls heat perfectly.

WE MAKE THEM HATCH

Fresh Opportunities

follow the purchase of a Victor Incubator. That is the testimony of thousands of successful poultry raisers who will have no other machine. Absolutely self-regulating, and the simplest, surest, most durable hatcher ever made. Guaranteed positively as represented or money refunded. The

VICTOR Incubator

is scientifically correct, mechanically perfect—solid and enduring. Catalogue telling how to get increased results from almost any machine, for 6 cents.

Geo. Ertel Co., Quincy, Ill.

GOLDEN WYANDOTTES AND WHITE HOLLAND TURKEYS.

In Lacing, shape and size unexcelled. Fifty Cockerels and Pullets to sell. Eggs in season.

W. J. EAST, Clay Center, Neb.

High class stock for sale!

Barred and Buff Plymouth Rocks and S. C. W. Leghorns. Can furnish few birds for fall fairs. Drouth prices. EDW. C. WEEKS, Eldon, Mo.

Caution! Don't Read This Ad.

For if you do you will discover where to get the best of White Rocks scoring from 93 to 96½ at the largest shows throughout the state of Ohio. At Columbus, 1901, we showed thirty White Rocks with an average score of 94½. A 4-year-old cock bird scored 95½, under such judges as Bridge, Lane, Cramer, Harger and Jones. Stock for sale. Eggs \$2.00 per 15.

Maughlin Bros. Columbus, Ohio

HORTHAND and BOOKKEEPING.

Study at home and take a higher salary. Investing a little time and a little money in a business course with us and the dividend will never cease. All subjects

TAUGHT BY MAIL

Complete courses so in Engineering, Journalism, Science and Languages, etc. Write for free booklet. NATIONAL CORRESPONDENCE INSTITUTE, 1400 Second Nat'l. Bank Bldg. Washington, D. C.

Single-combed BROWN LEGHORNS, (Exclusively)

Birds of choice breeding. Scoring from 92 to 94½ are in my pens for 1902. Eggs from these pens \$2.00 per dozen. A satisfactory hatch guaranteed.

Frank McDonald, Columbus, O. (Route 1, Sta. B.)

For Sale....

200 Fine Black Langshans. 200 Some of the best I ever raised. Address

Ben. F. Myers, Crawfordville, Ind

Ross Bros' Trapnest

Just what every poultryman needs.

In sets of 3 for \$3.00. Delivered.
In sets of 5 for \$4.25.

We sell them cheaper than you can make them.

Ross Bros.' Buff Wyandottes.

Lead in the best competition.

ROSS BROS. Manhattan, Kan.

POULTRY CUTS at CUT PRICES
CATALOGUE FREE.
Harper Eng. Co., Columbus, O

POULTRY INVESTIGATOR.

May I "SHOW YOU"

That eggs bought of me will hatch Barred Rocks for you that will satisfy the most exacting. If not tested right, publish me in the Investigator.

CORWIN JONES,

Poultry Judge. Sidney, Iowa.

Eggs

from 3 yards of prize winning Barred Rocks scoring up to 92½ at \$1.50 and \$2.00 per 15. From my S. C. White Leghorns (Blanchard's and Van Dresser heavy laying strains) scoring up to 94½, at \$2.00 per 15.

P. Hostetter, East Lynne, Mo

A Room for Poultry Keepers
BETTER than a Cold Room.
We will tell you how we made one
men pay over 400 per cent. profit.
Merely send me your name and address
Way-De Poultry Co., Clintonville, Conn.

For Sale. We Must Have Room!

- 15 Pure White Plymouth Rock Cockerels, \$1.50 and \$2.50 each.
- 10 Extra Fine Buff Red Cockerels \$2.50 and \$3.00; worth \$5.00 to \$10.00.
- 10 Extra Good White Wyandotte Cockerels \$1.50 to \$2.00 each.
- No other stock for sale. Eggs for hatching from 20 varieties of thorough bred poultry, \$5.00 to \$7.00 per hundred, \$3.00 to \$4.00 per 50.

SURE HATCH POULTRY CO., Clay Center, Nebr.

BONANZA RABBITRY, ESTABLISHED IN 1885.

Founders of the first herd of pedigreed Belgian Hares in the world. The first to establish a system of registration for Belgians. The first to produce burs exceeding the standard weight and develop superior colors. Holder of the world's record for prize winnings.

Our sales for 1900 were over 5,000 head. Send 10 cents for the most complete and most beautiful 56-page catalog ever published.

Bonanza Rabbitry Manual, 4th edition, just coming from the press, \$1.00, written by Dr. B. C. Platt, the foremost authority on the subject, president of the National Association of Belgian Hare Judges; professional inspector of Belgian Hare institutes; originator of the Mechanical System of Judging and score-card adapted to this system; inventor of Bonanza Tattooing Mark for Belgians; inventor of the Perfect Belgian moulded in metal, presenting the ideal colors, also perfection in quality shape and size.

Address **DR. B. C. PLATT**, 2741 N. 3rd St., PHILADELPHIA
Permanent Eastern Office and Salesroom.

Tiffany's paragon Lice Killer.

Kills lice and mites on poultry, hogs and animals, is the strongest and best lice killer made. With our double tube sprayer you can save one half the liquid and penetrate all cracks and spray the bottom of the house where you find the mites or spider lice. It gets there every time. Every can is guaranteed or money refunded. Write and learn how to get a sprayer and can of Lice Killer FREE.

Tiffany's Paragon Poultry Powder.

For setting hens and baby chicks. Always to be used before sitting the hen. For the next 60 days we will send our old and new customers, 100 lbs Shet-grit, (coarse or fine) 100 lbs blue stee grit, one gallon Paragon Lice-killer, one Tiffany's Double Tube Sprayer, one 4-lb package Powder, all for \$2.50. These goods all go 3rd class freight—cheap.

THE TIFFANY COMPANY, Lincoln, Nebraska.

B. P. Rocks Exclusively.

Some good cockerels for sale yet
Eggs for sale at \$2 per 15, \$3 for 30.

L. A. DAY,
Bruning, Neb

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

JOURNALISM

Practical, paying newspaper work, writing short stories, etc.

TAUGHT BY MAIL

by our successful system in personal charge of Mr. Henry L. H. Field West, formerly managing editor of the Washington Post. Successful students everywhere. Write for illustrated booklet.

NAT'L. CORRESPONDENCE INSTITUTE, 24 Nat'l Bank Bldg., Washington, D. C.

Always Take

THE Kansas City & Omaha Line

For All Points

East, South and West.

Close connections made at all junctions. For rates and information, call on or address

S. M. ADSIT, G. P. A., or S. M. WALLACE, Agt.

St. Joseph, Mo.,

Clay Center, Nebr.,

The "Perfect" Hatchery

200-Egg Hatchery and Brooder combined, \$10.00.
100-Egg Hatchery, \$6; Brooder, \$5.
Barred Plymouth Rock Fowls and Eggs. None Finer.

Testimonials and Illustrated circular 2c.
J. A. CHELTON, Fairmount, Md.

Our Leader B. P. Rocks.

30 eggs, \$2.00, from stock scoring 89 to 91. 30 eggs, \$3.00, from stock scoring 91 to 92½. Single settings \$1.50 to \$2.00 each. Buff Cochins Bantam eggs, \$1.50 per 15. Buff Cochins eggs \$1.50 per 15. S. C. Brown Leghorn eggs \$5.00 per setting. My stock is line bred and will produce 90 per cent exhibition birds. They did it last season and they will do it this season. Send me your egg orders if you want to raise show birds.

A. L. PEDICK, box A, Ottumwa, Iowa.

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one piece. Nothing to go astray. The nearest and strongest coop on the market.

Wm. MILLER, North Bend, Neb

SEED CORN.

Prize Winners and Mortgage Lifters. Tested and Pure at Farmers' Prices. Twenty Best Varieties.

Onion Seed! Large Red Wethersfield, Prize Globe Danvers, yields 1,200 bu. to the acre! New seed at 80c per lb. postpaid, if you mention this paper.

Soja Beans and Stock Peas. Best kinds suited to this climate. Big yielder. Cane Seed, Kaffir Corn, Rape, Speltz, Grass and Flower Seeds—

Best Flower and Garden Seeds. Guaranteed fresh at wholesale prices. Nearly \$500.00 in prizes and 100-000 papers free seeds given to customers this year.

Archias Seed Store, Sedalia, Mo

Ain't these beauties

But not so fine as chicks hatched from B. P. Rock and Buff Cochins eggs that you can buy of Mrs. Kessler. I have a few fine Barred C's for sale yet. Write for prices and be pleased.

Mrs. Ida M. Kessler, Woburn, Ill.

Nebraska Queen.

First Prize Hen. Weight 9 lbs.

Highest score any B. P. Rock at the late State Show Judge Myers said she was the best one he had seen this year. I won 8 regular premiums at the above show. 20 years a breeder of this variety exclusively. Write your wants. Address

F. C. HINMAN, Friend, Nebraska.

Barred Plymouth Rocks.

We have Quality and Quantity.

Farm raised prize winning stock. Eggs \$1.50 per 15, \$5.00 per 100.

H. B. LOUDEN, Clay Center, Nebr

Single Comb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

Cora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS, Ogden, Utah.

A Chicken Chorus

*"It's All Right! It's All Right!
An Incubator That Is Out of Sight!"*

The chickens do not really say it but they feel it, and their owners say it over and over. The

"All Right" Incubators

Sold on 40 Days' Free Trial

are such good machines, such perfect hatchers, so simple in operation, so durable in construction, that we gladly send them to any one on 40 days' free trial. Take off a hatch and then decide whether you want the machine or not. Isn't that "all right?" We couldn't do it if our machine wasn't all right. Send for book explaining why it does such good work. It's free.

CLAY PHELPS INCUBATOR CO.,
Station 87 Cincinnati, Ohio.

These Eggs Will Hatch White Plymouth Rocks.

chicks that have rich yellow legs and snow white plumage. (Fishes strain direct.) Eggs from pen No. 1. \$1.50 per 15 from pen No. 2 \$1.00 per 15.

Mrs. M. C. Downing, Elk City, Kan.

Free Barred Plymouth Rock

Circular telling about my superb Barred Rocks. Yards headed by cockerels direct from E. B. Thompson yards' prize winners from prize winning ancestry. Eggs \$2.00 per 15, 3 settings \$5.00.

PHIL MAURER, Beaver Crossing, Neb.

Buff Leghorns

The Coming Breed.

They are no doubt the best laying breed there is, and are larger than other Leghorns. Average weight of male and female is 7 and 5 lbs respectively. Golden Buff plumage, winners wherever shown.

Eggs 75c per 15. From trio winners, \$2.50 per 15.

E. C. Hartsock, Spring Valley, Ohio.

Black Langshans.

Winner of American Langshan Cup, at Bowling Green, Mo. They won for two years 1st ck, 1st and 3d ckl, 1st and 3d pullet, 1st hen, 1st pen. At St Louis, 1st ckl, 1st pullet, 2d ckl 2d pullet, 1st pen. At Illinois state show my 1st ckl scored 95½, 2 cks scored 94½ each, 2 hens 95 each, 3 pullets 95, 95, 96 each, pen 190½. I own the highest scoring ck, ckl, hen and pullet in the state. Eggs \$2.00 per setting.

JOHN HETTICH,

Bowling Green, Mo.

To the Editor:

Dear Sir:—While the girls and boys are discussing fine points in the chicken coops, please give them the one below to crack: In the fall of 1901 our turkeys and guineas layed until about October 1st; not wishing to market the eggs, we packed them in the cellar and we have been using them ever since the holidays, and if you did not know they are of last years' stock I am certain that you could not tell the difference from a newly layed egg. The cold storage people tell us that it requires 32 to 34 degrees to keep an egg good. The facts above does not show that you need to have a cold storage plant, but a good cellar will will answer as well. There is an old saying, "What will keep out cold will keep out heat," that answers in this case. Pack you eggs fresh; turn the cases two or three times a week and we are satisfied the eggs will keep from August 15th to April 1.

Mr. Editor: The above are facts as we can show you if you come out to the ranch. If the above is worth its room in your valuable paper, use it; if not, the waste basket.

M. P. ROBERTS.

WHITE PLYMOUTH ROCKS.

At Neb. State show 1902, in class of 117 birds, 13 exhibitors, 12 pens in competition, v on 2d pen, missing 1st by $\frac{1}{2}$ point, 2d ckl, 3d pullet, 4th ck. Eggs \$3 per 15, \$5 for 30. Write for prices on incubator eggs.

J. W. HALL,

David City, Nebr

MR and MRS C A BLANCHARD,

BREEDERS OF

White Plymouth Rocks, White Holland Turkeys and Pekin Ducks.

At Nebraska State Poultry show 1901 we won 1st pen, 1st hen, 1st cock, 3d cockerel, which was a prize on every bird entered. At the Nebraska State Fair, 2d to 6th of Sept., 1901, we won 1st pen chicks, 1st hen, 1st pullet, 1st cockerel-- a first prize on every bird entered.

We have a fine lot of young stock for sale.

FRIEND,

NEBRASKA.

QUEEN CITY BUSINESS COLLEGE.

One of the leading schools of the west. Large attendance. Great demand for its graduates. Expenses low. Address

H. S. Miller, Pres., Hastings, Neb

Reference: Sure Hatch Incubator Company

BUY STOCK and EGGS from high scoring WHITE LANGSHANS and BUFF ROCKS. Fine winter layers. Cheap for quality. Eggs \$1.50 per 15. Mrs. L. MUMPOWER, Durac Jersey Pigs. W. L. MUMPOWER, Chillicothe, Mo.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered Strain, from a long line of prize-winning ancestors, have made them a specialty for 19 years. Now offering fine exhibition and grand breeding stock of both 1900 and 1901 hatch at moving price if taken soon. Send for illustrated circular with half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Buff Rocks
Pekin Ducks
Toulouse Geese
Bronze Turkeys.

MRS. FLORA SHROYER,

Perry, O. T.

Formerly at Clay Center, Nebr.

WANTED!

250 White Wyandotte Hens and Pullets.

250 White Leghorn Hens and Pullets.

100 Buff Orpington Females.

Will pay cash. Address, Box 427, Clay Center, Neb.

For Sale! - - -

Toulouse Geese, Pekin and Muscovy Ducks. At State Poultry Show on four entries of geese I took first 3 premiums. Eggs for sale in season.

Wallen Cameron,

Schuyler, Nebr.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS

Are better than ever as they have farm range. Have 280 young and 30 old ones to draft from the coming sale season. Was winners of all thirds and part second in state show the last two years, also have been winning for customers in strong competition. Satisfaction guaranteed. Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

ARE YOU LOOKING FOR EXHIBITION BIRDS?

BARRED PLYMOUTH ROCKS. With that nice even ring barring to the skin as blue as the sky, and with elegant combs, golden beaks and shanks. Or heavy weight SINGLE COMB BROWN LEGHORNS. Elegant combs, fine striping in Hackett and Sadie, and shape to burn. Pullets with that soft even brown color, fine striped beaklets and elegant combs. In fact birds that give the other fellow that tired feeling in the show room. If so, address.

J. W. WHITNEY, Chatham, O. P. O. Box 1.

BARRED ROCKS.

BRADLEY BROS. New York winners is what my flock is built from. Winners at the Columbus show, 1901-2. Eggs \$2.50 per 15. Stock for sale.

J. R. Henderson,
Sta. B. Route 1.
Columbus, O.

PULLET SALE.

We have no more cockerels for sale, but have 50 choice pullets that we will sell for One Dollar each. Send in your order at once, they will sell quick at this price. Send for egg circular describing our five breeding yards, mated for best results. Eggs, \$2.50 per 15 straight.

MR. and MRS. A. UPTON & SON, Fairbury, Neb.

Hello! Whose are These? Why Hall's Famous Prize Winning

White Wyandottes and Barred Plymouth Rocks. Won 150 regular and special prizes in Chicago and leading western shows. All our first prize birds are in our pens. B. P. R. males and females score 90 to 93½—White Wyandottes 93 to 96. We always win, so can you if you buy of us. Our P. Wyandottes, W. P. Rocks, S. and R. C. R. I. Reds, Bk. B. W. and P. Cochins, T. Geese, and Pekin Ducks are all winners. Illustrated catalogue tells you all. Stock and eggs for sale.

J. D. W. HALL,

Box 700.

Des Moines Iowa.

Barred P. Rocks.**Hawkin's Strain!**

I breed them by the Trap nest system. Eggs that will hatch First Prize winners, \$2.00 per 13, \$5.00 per 40. Send an order.

GEO. H. WALLACE

Box A. Nayan, Minn

Single Comb White Leghorns.

Eggs for hatching from the cream of my flock, as I have the advantage of selecting my breeders from among seven hundred choice birds all bred and owned by myself. . . . Nothing but the very best specimens of most prolific layers are ever used. Descendant from generations of great layers of large pure white eggs. Write at once, for circulars. . . .

E. A. TEDSALL,

Slater, Story Co, Iowa

The line should be dropped to

The Puritan Poultry Farms, Inc.

For their superb and immense catalogue giving full details of this remarkable food and illustrating the

World's Largest Poultry Plant

In all its details, also showing which are the best Incubators and Brooders now in use. It is absolutely free to everybody. Write today.

Puritan Poultry Farm, Inc.

Box 357. Stamford, Conn.

LIGHT BRAHMAS.

Prize-winning stock, first prize at the Great St. Louis Fair. Of four entries at Kansas City, Mo., won 1 first, 2 seconds, 1 third. 4 prizes at Kansas State Show. Stock and eggs for sale. Write us

STECKER BROS.,

4639. Cottage Ave., St. Louis, Mo

Eggs From prize winning Golden Wyandottes, \$2. per 13, scoring from 90 to 93½, by Shellenberger.

J. Gordinier, Keota, Ill.

Silver Laced Wyandottes.

Eggs for hatching. \$3.00 per 26 pure bred. Price for 2 pullets \$4. Fine scoring

Albert Lisius, Lake Mills, Mo.

I Sell You

Barred Rocks at one cent on the dollar.

By selling you chicks just out of the shell from stock the sire of which cost \$50.00, the dam, \$10.00, total \$60.00. You get chicks for 60 cents each—thus one cent on the dollar. W. P. R ducks at 50 cents each. This is the best chance in the world to start with good solid foundation of pure bred eastern stock. We ship lots of 10 or more and guarantee safe arrival 1,500 miles. Hatching all the time. Order in advance. Cash with order.

PARTINGTON. Northboro, Mass.

White Minorcas. Barred Plymouth Rocks. Golden and White Wyandottes and Buff Gochin Bantam Cockerels.

I have cockerels in the above named varieties for sale and eggs in season. (Score cards with cockerels). The Wyandottes are Dustin & Kellier strains direct. B. P. Rocks are Elliotts. Yours respectfully,

Fine Lawn Poultry Farm.

L. D. Metcalf, Prop'r.

Wakefield - Nebr.

Meyer's Langshans

Won At Kansas State Show

So good ones to sell.

1st and 2nd cock; 1st and 4th hens; 1st 2nd and 4th cockerels; 1st 2nd and 3rd pullets; 1st pen. Score 189½, Rhodes and Harris, judges. At N. E. Mo. show in a class of 82 Langshans all good ones, tied 1st cock, won 2nd and 3rd; tied 1st hen; won 2nd and 3rd; 2nd cockerel; 2nd pen and tied 3rd; pullet. Eggs \$2.00 per 15, \$3.50 for 30, \$5.00 for 45, from winners. Records of other big winnings in catalogue.

L. E. Meyers,

Bowling Green, Missouri

W. J. Cheney,

Breeder of
Thoroughbred Poultry.
BOX 68-CUBA, MO

Varieties. B. P. Rocks, Light Brahmans, W. Wyandottes, Partridge Cochins, S. C. B. Minorcas, S. C. W. Leghorns, S. and R. C. B. Leghorns, Pekin Ducks. Eggs for hatching, \$1.00 per setting, \$3.00 for 50.

Write for my new illustrated poultry catalogue. Describes leading varieties of thoroughbred poultry, quotes prices on eggs and fowls. Tells you all about The Cheney Poultry Farm. Catalogues free.

W. J. CHENEY,

BOX 68-CUBA, MO
Crawford Co.

\$5.00

Buys 100 eggs, \$1.25 one setting, \$2.00, ten Bronze Turkey eggs at

CLEN RAVEN EGG FARM, Home of the all-year-round layers, Brown Leghorns, White Leghorns, Barred Rock, White Rock and Black Minorca. High scoring exhibition stock. Fowls for sale. Circular free. Mention INVESTIGATOR.

Write **E. W. GEER, Farmington, Mo.**

STAR ☆☆☆

IncubatorsAnd Brooders.

A large free Catalogue tells you all about them.

Our New No. 2 Double Walled Dead Air Space Self-Regulating

BROODERS

are without an equal. See cut.

Price \$12.00.

Our New A-1 just the same, only with single walls at **\$10.00** is the real thing. **GOOD Brooders for \$5.00.**

Send for Circulars and Price List

Dead Chicks Don't Pay.

Chicks thrive best on a balanced feed of meaty, cereal and grain element. That's

STAR SPECIFIC NO. 7.

It isn't a medicine, but a health and strength builder. It prevents most of the diseases that kill chicks. Carefully compounded from results of expert experimenting and study.

Price, at Dealers:

1 lb. pkg. . . . 10c. 50 lb. bag. . . \$3.25
5 lb. pkg. . . . 35c. 100 lb. bag. . . \$3.50

Star Incubator Co.,

12 Church St. Bound Brook, N. J.
Star Specifics

Is guaranteed to cure.

No 1. Cholera in old Fowls.	No 5. For Inactive Males.
No 2. Same, for chicks	No 6. For Indigestion
No 3. Egg Food and Tonic.	No 7. Food for Small Chicks.
No 4. For Cold and Croup.	No 8. Disinfect Insect Powder.

Why Not Buy the Best?

It costs no more than inferior styles. We claim that **Adam's Green Bone Cutter** is the best because it is the only Ball Bearing machine on the market. It works on the shear principle, turns easier, cuts faster and cleaner, and prepares the bone in better shape than any other. Write at once.

Catalogue No. 5. Is Free. **W. J. ADAM, JOLIET, ILL.**

IF
IT'S AN
ADAM
IT'S THE
BEST

Golden Wyandottes

Highest Grade, Healthy Vigorous Stock, from careful Matings.

S. P. VAN NORT, OLD ORCHARD, MISSOURI.

1st, 2d, and 3d pullet and 3d c'h'k at St. Louis Show, Jan., 1901. Score 94-92½-91½ and 91½ by Butterfield. 3 seconds at same show 1900. 1st and 2d on pair at St. Louis fair. Eggs for hatching, \$2 per 13. Stock on sale. Write for full information

\$5,000 POULTRY CATALOGUE FREE!

It is without a rival. Gives lowest prices of fowls and eggs. Over 10 breeds: Turkeys, Geese, Ducks and Chickens. Hundreds of plates from life. 15 best poultry house plans. Treatise on diseases, how to feed, breed, etc. Send 10c. for postage. **J. K. BRADSON, JR. & Co., Box 100, Delavan, Wis.**

Eggs Thoroughbred Barred P. Rock eggs two dollars per setting of fifteen. Golden Sebright Bantams, two dollars per setting of fifteen. Colored Muscovy ducks, two dollars per setting of eleven. My stock are all strong and vigorous and have farm range. All eggs shipped will be strictly fresh.

Mrs. D. T. STONE, DeKalb, Mo.
Clover Ridge Poultry Farm, Route No. 2.

Black Langshan, White P. Rock, S. C. Buff Orpington, W. Holland Turkeys, Mammoth White Pekin Duck, E. E. Smith strain. Eggs from \$1.00 to \$2.50 per setting. Won at Lincoln and Kansas State Shows. 15 ribbons from 2 to 5. Poor hatches duplicated at half price.

Mrs. Henry Shrader, Berlin, Neb.

PURE MAPLE SYRUP!

Orders booked now and syrup shipped as soon as made, direct from the farm. If you want something nice and that is guaranteed pure and fresh, please send me your order and I will please you. Put up in 1 gallon cans, 6 cents to the crate. Price one dollar per gallon. Order early so rate will be undisappointed and you will want more next year.

E. E. Miller, Fairview Farm, Montville, Ohio.

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free,

H. SHIVERS, Knoxville, Ia.

Lock box 500.

It is next to impossible to raise poultry, even a small flock on a city lot to say nothing of a large flock on a poultry farm or plant, without the aid of a trained

Fox Terrier Dog.

Our dogs are taught to parole the place night and day. Write, Nevada Foxterrier Kennels, Nevada, Mo.
♂ Males \$10.00; females \$5.00.

INCUBATOR ON TRIAL

The Perfected Von Culin.

Successful result of 25 years' experience. Scientifically correct, practically perfect. Non-explosive metal lamps. Double and packed walls. Perfect regulation of heat and ventilation. Made of best materials, and highest quality of workmanship and finish.

PRICES \$7.00 AND UP.

SATISFACTION GUARANTEED OR NO PAY. We make Brooders, Bee Hives & Supplies. Catalog and Price List sent Free.

THE W. T. FALCONER MFG. CO.,
Dept. 213, Jamestown, N. Y.

PLEASANT HILL POULTRY FARM.

Barred Plymouth Rock. Rose Comb Brown Leghorn.

Having disposed of all my surplus stock and mated up my pens, am prepared to book orders for eggs. Write at once for prices.

J. H. TROUGH,
Minden, - - - Nebr.

GREAT BARGAINS

Importers and Exporters of 35 varieties land and water fowls. Stock and eggs for sale at all times. Write before you buy. Bank and personal references given. Send for Full Illustrated Circular. Iowa Poultry Co., Box 623, Des Moines, Iowa.

HORT STORIES

bring high prices. Thousands of good stories which might easily be made salable, make up the great mass of "rejected" manuscripts. "Our school of Journalism, in charge of successful authors, critics, correctors and revisers, as well as teachers how to write. Write for booklet. NAT'L CORRESPONDENCE INSTITUTE 24 Nat'l Bldg. Bldg. Washington, D. C.

1890

1902

EGGS! From our Royal Blood Silver Wyandottes.

Prices Reduced from 3.00 to 2.00 per setting of fifteen eggs. Last year we sold every egg we had to spare. This year have two more fine pens. We know that the Wyandottes are the best variety on earth. They are the coming fowl and to boost them along have reduced the price. Our Silvers have never been defeated in the show room. At Nebraska State Show, Jan. 24 to 28, 1902, we won 10 of the 16 ribbons, nearly twice as many as all other competitors. We are now shipping eggs. Better book your future egg orders now or may not be able to fill them. We are headquarters for prize-winners. Stock for sale at all times at Ponca Wyandotte Yards. Refer to express agent, postmaster, Security Bank or Dun's agency. **I. & N. M. CONNOR, Ponca, Neb.**

IF PANDEMONIUM

Reigns supreme in your brooders and the chicks die wholesale you can positively check the mortality by using :

PURITAN CHICK FOOD,

a readily assimilated and scientifically balanced ration. Use it under positive guarantee.

FREE:—Our new and beautiful 64-page catalogue. Finest ever issued. A mine of information. Send at once to America's largest plant

**PURITAN POULTRY FARMS,
BOX 357 A. STAMFORD, CONN.**

The Best Work

can be done only by a good machine—the best machine. You feel certain that if you examine the

Marilla

Incubators and Brooders
(Hot Water or Hot Air.)

you will be convinced that they will give you better satisfaction than any other machine made. We sell them with that guarantee. Your money back if you want it. They have a regulator that regulates and you don't have to adjust it every other day. Send 1 cent postage for the catalogue. It will interest you.

Marilla Incubator Company, Box 97, Rose Hill, N. Y.

Standard of Perfection

Revised Edition, 1900.

This work is issued by the American Poultry Association. It is a book of over 250 pages, cloth cover, and contains the only official descriptions of the several varieties of fowls. It is on this Standard that all poultry judges base their awards. Every experienced fancier has a copy of this book and every poultryman needs it to learn the requirements to which his stock must be bred.

The Standard of Perfection

—AND—

The Poultry Investigator

One Year, for.....\$1.00

Address,
POULTRY INVESTIGATOR,
CLAY CENTER, : : : NEBRASKA

POULTRYMEN

Your stationery won't look well unless **PRINTED** neatly. I do it it is **PRINTED** well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

Buff ORPINGTONS LEGHORNS and Brown Leghorns.

Young or old stock, first class birds cheap Hundreds to select from. Eggs all the time **M. & F. HERMAN,**
Bx 178, Hinsdale, Ill

BUFF ORPINGTONS—WYANDOTTES. R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock, fit to breed and exhibit for sale. **Thos. H. Mills, Poultry Judge, Port Huron, Michigan.**

Folds into flat package for storage after season is over.

Your Profits INCREASED 25 Per Cent.

If you are raising chickens you cannot afford to be without the

Favorite Brooder Coop.

It will save many times its cost in young chicks. Comfortable for the hen. Convenient for chicks. Perfect safeguard against cats, minks, skunks, weasels, and rats. Write for particulars.

20th CENTURY POULTRY BOOK tells all about the Farm, with its 136 pens of thoroughbred poultry. Prepared by some of the best poultry men in the country. Also contains full information on Reliable Incubators and Brooders. Send 10 cents to pay partial postage. **Reliable Incubator & Brooder Co., Box A 25 Quincy, Ill.**

The Whole Year Round

you can feed cut bone with profit. It increases the egg yield, improves the fertility and vitality of eggs for hatching, pushes young chicks and broilers, and in short, is an all round poultry food. It is easily prepared with **HUMPHREY GREEN BONE CUTTERS** sold on a positive guarantee to cut more bone in less time and with less labor than any other cutter. Your money back if it does not. Send for handsome Catalogue and Free Record Book. Mailed Free. **HUMPHREY & SONS, Box 76, Joliet, Ill.**

Sales Agents—Joseph Brock & Sons, Boston, Mass.; Johnson & Stokes, Philadelphia; Griffith & Turner Co., Baltimore; Saxe Hatch Incubator Co., Clay Center, Neb.; E. J. Bowen, Portland, Oregon; Seattle, Wash., and San Francisco.

PETALUMA INCUBATOR**WHY IT HATCHES****...HIGH PER CENTS...**

Success in an incubator depends upon two things:
the right principle and the right construction.

The uniform success of the

Petaluma Incubator

is not a mere "happen-so." It hatches 100 per cent of fertile eggs because it's built on the right principles; it is scientifically correct, and because the very best skill and workmanship obtainable are put into its making. It is built right; it does its work right. We put a guarantee behind it which means something. It is a hot air machine, and has demonstrated that its regulation of heat, air and moisture is perfect. Made in four sizes—from 54 to 324 eggs. We pay the freight anywhere in the United States. It will pay you to send for our attractive free catalogue. Address nearest office.

PETALUMA INCUBATOR CO.,

Box 58 Petaluma, Cal., or Box 58, Indianapolis, Ind.

For Sale.

All kinds of fancy piggons. Prices reasonable.

Toulouse geese eggs 20c each. Rouen duck eggs 18 for \$1.00. White Holland Turkey eggs, \$1.50 for 9. Also Houdans, Golden Sebright, Bantams, Buff, Brown and Black Leghorns, S. S. Hamburgs, C. I. Games, Buff Cochins, Pearl Guineas, Buff and Silver Laced Wyandottes. Poultry eggs, 15 for \$1.00. Yards score from 90 to 91½ points. Satisfaction guaranteed.

D. L. BRUEN, - Oldenbusch, Neb.

OSCAR E. MILES, Owner of

Forty-two acres devoted to Poultry.

MILES' POULTRY FARM.

Breeder of White and Barred Plymouth Rocks, White and Golden Wyandottes, Rhode Island Reds, Pekin Ducks and Belgian Hares. Hereafter I shall handle but three breeds of poultry. All my White Plymouth Rocks, Golden Wyandottes and Pekin Ducks are for sale at low prices considering quality; nothing reserved, must be sold by March 1st. WINNER of 47 regular premiums and many specials the last two years at Columbus shows. 22 1sts, 13 2ds, 5 3ds, 7 4ths. Eggs \$3.00 per 15. MILES POULTRY FARM, (near Worthington O.)

O. E. Miles, Prop.

26 1-2 N High St

Columbus, O.

Grant's Practical Brooder.

Prevents piling up, and overheating of chicks. Complete specifications, telling how to make and operate, with privilege of making all you want for your own use, for \$1.00. These brooders work out doors or in; can be cleaned in two minutes, are cheap and will last a life time. They have a floor space of 2x6 ft. Give this brooder a trial, if not satisfied you get back your dollar.

Alfalfa Seed, \$5 00 per bushel!

I have some Extra Fine S. C. B. LEGHORN. Pen No. 1. is headed by the cock which headed 3d prize pen at Boston, 1900. Pen No. 2 is headed by 3d prize cockerel at Chicago, 1901. These birds are mated to some of my choice females (circular giving full particulars free.) Eggs, pen No. 1, \$2.00 per 15. Pen No. 2, \$1.50 per 15. Incubator eggs, \$5.00 per 100.

D. W. GRANT,

Almena, Kan.

GET MORE HEN MONEY

Feed cut raw bone and double your profits; get more eggs, more fertile eggs; more vigorous and healthy fowls.

MANN'S BONE CUTTER

New design, open hopper, enlarged table, new device to control feed; you can set it to suit any strength; never clogs. Rent on

10 DAYS FREE TRIAL. No money asked for until you prove our

New Model will cut any kind of bone, with all adhering meat and gristle, faster and easier and in better shape than any other type of bone cutter. If you don't like it send it back at our expense. Free catalog, explains all.

F. W. MANN COMPANY, Box 1, Milford, Mass.

30 DAYS TRIAL

Hatch Every Good Egg

Or Don't Keep It.

Send 2 cents for Number 102 Catalogue

SELF-REGULATING BUCKEYE INCUBATOR CO. SPRINGFIELD

50 EGG SIZE \$5
100 EGG SIZE \$9.50
200 EGG SIZE \$15

Is the title of a Book which has worked a r-revolution in strawberry growing, and CAUSED TWO BIG BERRIES TO GROW WHERE ONE LITTLE ONE grew before. The author has grown the LARGEST CROPS OF BERRIES EVER PRODUCED on an acre. The book explains how YOU CAN DO THE SAME. It will be sent to you FREE IF YOU MENTION THE PAPER IN WHICH YOU SAW THIS NOTICE. The only scientifically developed THOROUGHLY STRAWBERRY PLANTS to be had for spring planting. One of them is worth a dozen common scrub plants.

R. M. KELLOGG, Three Rivers, Mich

RIPPLEY'S

Whitewashing, Spraying
and Painting Machine.

GUARANTEED to be AS REPRESENTED

Read Our 30 Days Special Offer Below.

This Machine will Whitewash Buildings, Walls, Barns, Poultry Houses, doing it far better, saving $\frac{1}{2}$ the time over the old method of using brush. Will Whitewash buildings, or spray trees any height by using extra hose and extension rod to elevate spray. Endorsed and used by hundreds of noted breeders. It is used and endorsed by Sid Conger, Shelbyville, Ind.; U. R. Fisher, Hope, Ind.; Meadowbrook Poultry Farm, Dallas, Pa.; G. W. Brown, Camden, Ark.; A. G. Dutton, Marlboro, Mass.; Texas State Fair Ass'n, Dallas, Texas. W. B. Dean, Secretary of State Board of Agriculture, Yankton, S. Dak., says: "We gave all State Fair buildings two coats with your machine. It's a complete success and a great labor saver." In order to get them introduced in every locality, we will allow freight to your station, for the

NEXT SIXTY DAYS ONLY,

at the following net cash prices: No. 6.—Eight Gallon Heavy Galvanized Steel, complete as shown in cut with 10 feet of $\frac{1}{2}$ inch hose and one 8-foot bamboo extension rod and brass cylinder pump with agitator, \$12.00. No. 7.—Sixteen Gallon size, \$15.00. Terms cash with order, or we will ship C. O. D. at \$3.00 accompanies order. Take advantage of our special offer. Send for stamps for a copy of our 1902 Sprayer and Breeders' Supply Catalog.

Ripley Hardware Co., Box 54, Grafton, Ills.

Western Office, Box 54, Watertown, So. Dak.

F.B.W.G.

GREER'S PEDIGREED BARRED PLYMOUTH ROCKS

are in my breeding pens for 1902
eggs get eggs from the same hens I
Poultry Exhibits Properly Judged.

Eggs from my birds never fail to produce PRIZE WINNERS. The best place to buy eggs is from a breeder who makes a specialty of one variety. "Blue Bird," "Lady Blue" and the best I have raised for three years Every bird a beauty and barred to the skin. My customers use for myself. Send for booklet of matings.

O. P. GREER, Bourbon, Ind.

BUFF ORPINGTONS.

Limited number of young

Winners 1, 5, pullet, 2 and 3, hen, 2, and 4, ckl, and 2, pen at Nebr. State Show, 1902 against red hot competition. Eggs 1st pen, \$5.00 per 15, 2nd, pen, \$3.00 per 15, 3rd pen, \$2.00 per 15. Stock for sale at \$3.00 to \$10.00 each.

H. H. CAMPBELL,

Osceola, Nebr.

Hatch Chickens by Steam

with the Simple, Perfect, Self-regulating

NEW WOODEN HEN

The most efficient incubator for raising poultry on a small scale ever invented. A perfect hatcher—automatic, self-regulating, thoroughly constructed, fully guaranteed.

Thousands in successful operation. Guaranteed to hatch a larger percentage of fertile eggs, at less cost, than any other hatcher.

Three Sizes:

50 Egg Capacity, only \$ 6 80	
100 " " " 10 00	
200 " " " 12 80

THE NEW WOODEN HEN.

Send for large FREE catalogue with 16 colored views.

GEO. H. STAHL,

114-122 S. 6th St., QUINCY, ILL.

We will consider it a great favor if you will mention THE POULTRY INVESTIGATOR when writing to advertisers.

Canfield's White Rocks

**Still Take
the Lead!**

In 1900 and 1901
at the Convention

Hall Shows, Kansas City., my birds made almost a clean sweep of premiums including Sweepstakes in Am. class. In 1900 at Kansas State Show they won 4 out of a possible 15 premiums. In 1901, 15 out of 15 and in 1902, 16 out of 16 possible ribbons not including 4ths and 5ths. At Nebraska State Show, 1902, they won 1st pen, 1st, 3d, 3d, hen, 1st, 3d, 5th cockerel, 2d, 4th pullet, 3d cock and sweepstakes for best 5 in solid colors with weight. Eggs \$3.00 per setting, \$5.00 for 2 settings.

M. L. Canfield, Belleville, Kan

White Wyandottes Exclusively.

Score 93 to 95 $\frac{1}{2}$ points by Larson and Hews, Keeler strain. Eggs \$1.50 to \$2.50 per 15. Stock is strictly white.

N. B. Carver, - - Hampton, Neb.

BEST FRUIT PAPER

Western Fruit-Grower is the best paper treating of all kinds of fruit, and nothing but fruit; monthly; illustrated; 16 to 48 pages; 50 cts. a year, 10c for three months' trial subscription.

THE WESTERN FRUIT GROWER.
Box 13, St. Joseph, Mo.

CALVIN E. BARNEY, - - Kearney, Neb

Breeder of Light Brahmas Exclusively.

My birds are heavy weight fine markings, close feathered. Eggs, \$2.00 for 15; \$1.50 for 30 Choice birds, old and young, for sale. Write your wants. No circulars.

Light Brahmas!

—First and 2d cock, hen, cockerel, and pullet at Interstate Poultry Show at Red Cloud, Neb., also winning sweepstakes and grand sweepstakes. 1st, and 3d pens 5 ckl's 4 pullets at Neb., state show at Lincoln. Stock and eggs at reasonable prices.

J L SMITH, Cadams, Neb.

CHAMBERLAIN'S PERFECT CHICK FEED.

BEYOND COMPARISON.

WORLD'S CHICK FEED OF TO-DAY.

CHAMBERLAIN'S PERFECT CHICK FEED, like everything else that has merit, has its imitations. DON'T BUY TROUBLE, insist on having the only Original Dry Feed. Stamped on each sack "Chamberlain's Feed, Kirkwood, Mo." All others are worthless imitations. Nothing "Just as good."

GOOD MORNING SISTER

I am ready for Chamberlain's Perfect Chick Feed. DRY AND ALWAYS READY FOR USE. LITTLE GOES LONG WAY.

No Bowel Trouble when Chamberlain's Chick Feed is properly used. It is the fine mixture in Chamberlain's Feed that has made the name famous. For incubator chicks, for all chicks until 5 months old.

FACTORY PRICE, 100 Lbs. \$2.50. 50 Lbs. \$1.50. 30 Lbs. \$1.00.

For the Broiler Man, the Fancier and the Farmer. Saves Time and Money.

Chamberlain's Hen Feed will make your hens Lay, 100 Lbs. \$2.00.

Factory and Shipping Depot, 302 N. Commercial St., ST. LOUIS, MO.

Freight charges added to factory price at all distributing points. Order from your nearest agent and save time and freight. FOR SALE AT \$2.75 PER 100 LBS., BY Soraeue Com. Co., Chicago, Ill.; J. Wilder & Co., Cincinnati, Ohio; Iowa Seed Co., Des Moines, Iowa; Wermick Seed Co., Milwaukee, Wis.; R. A. Pike & Co., Minneapolis, Minn.; R. A. Pegler, Lincoln, Neb.; Hunting & Pure, Indianapolis, Ind.; Kinley Hardware Co., Grafton, Ill.; Alexander Seed Co., Augusta, Ga.; Norton Poultry Yards, Dallas, Texas. \$3.40 per 100 lbs. H. McK. Wilson & Co., Agents for St. Louis, Mo. If friends of my feed in the east have trouble getting my feed, write direct to me for prices. W. F. CHAMBERLAIN, KIRKWOOD, MO.

Our Motto, "Virtute non Astutia"

HARES BY THE HUNDREDS

IMPORTED • AND • DOMESTIC

From such Fashionable Strains as the following Champions:

Fashoda, Edinboro, Guinea Gold, Nonpareil, Unicorn, Dash, Climax, Grimsby's Star, Priory Prince, Malten Mystery, Palace Queen, Lord Britain, Etc.

Our Stud Bucks are:

Fashoda Star

Score 96 by Judge Almond, imported, son of Ch. Fashoda.

Viscount

Score 95 by Judge Finley, imported.

Lythedale

Score 94 by Judge Finley, imported.

Sir Crabtree

Score 93½ by Judge Crabtree, and other domestic bucks that will score 94 to 96.

RUFUS RED BELGIAN HARES

At prices ranging from \$5 to \$75 per head, pedigree and score card with each animal. Unpedigreed market stock, good color and size, \$2.50 to \$5 per pair. Hardy Black Belgians (good to use as nurse does) at \$10 per pair. Correspondence solicited for special price list which may not be in effect long. Will refund money and pay return express charges if Hares purchased are not as represented. Rabbitries at Maplewood and Fayette.

MISSISSIPPI VALLEY BELGIAN HARE COMPANY,

1317 Chemical Building, : : : : ST. LOUIS, MISSOURI.

Wanted—At Once.

100 Black Minorca females.
100 Rose Comb Brown Leghorn females
100 Rose Comb White Leghorn females.

Will Pay Cash for Same.

Box 227, Clay Center, Nebr.

Smith's Mammoth Pekin Ducks and White Wyandottes Win.

Thirteen 1st, 5 2nds, at Nebraska state, Kansas state, Missouri state, Des Moines Iowa. Clean sweep in four states. I entered 12 W. W. in Nebr. state show and won 8 premiums; 1 ck, 1 hen, 1 pullet and 5 others. See circulars for report of the champion flock. Get eggs for hatching from the winners.

Lincoln, Neb., Box 456

E. E. SMITH

VOL. 4.

MAY, 1902.

NO. 3.

Poultry Investigator

ADVANCE TO SUCCESS

25 ¢ a year

THE SURE HATCH HATCHES SURE.

THE SURE HATCH ALWAYS PLEASES.

The Day Force of the Sure Hatch Incubator Factory, Clay Center, Neb.

Nearly all these mechanics have grown up with our manufacturing business, are experts in their different lines. A very large per cent of them raise poultry and use our machines, hence they are in a position to know what a good incubator is. They have a personal interest in our welfare and each and every one does his very best to turn out perfect incubators and brooders that has placed as many machines this season as we, nor pleased as many people as we have. We do not think there is an incubator concern in existence that has placed as many machines this season as we, nor pleased as many people as we have. We have lots of incubators on hands yet. We are making right prices and can make prompt shipments. We have out a new catalogue describing our combined hot water and warm air incubators. These machines are a great improvement over either the exclusive hot water or exclusive hot air machines; they combine the good features of both and without the bad features of either. Run with less oil and less attention than any other incubator. Send for summer prices.

SURE HATCH INCUBATOR CO.,

Clay Center, Neb., or Columbus, Ohio.

POULTRY INVESTIGATOR

Vol. 4

Clay Center, Nebraska, May, 1902.

No. 3

SOME STANDARD CHICKENS

One of the oldest of our standard chickens is the Dorking. So called from Dorking, England. It is said to have been brought to England by the Romans.

The Dorking and the Game are our best fowls for table purpose, having full breasts of fine grain and flavor.

The Barred Plymouth Rock, our general purpose fowl, is a very recent breed. It gets its size and laying qualities from Light and Dark Brahma, which are two of its ancestors; its roaming quality from the Pit Game in its make up; its fine marking in part from the Dominique and Black Java.

The Black Javas are our oldest chickens of the American class. They are a fine chicken, as is also, the White and Mottled Java, and being a large chicken there is no reason why they should be so neglected as of late they have been.

The Wyandotte is a general purpose fowl the equal almost, if not quite, of the Plymouth Rock. It is a new fowl and a handsome one. In its make up is found the Breda, a French fowl; Silver Spangled Hamburg, which gives its fine form and proud carriage; the Dark Brahma and a little mix of Cochins blood.

The Brahmas, both Dark and Light, Ah, there's the rub, to tell just exactly what breeds they carry in their large bodies. All the large Asiatic breeds combined, but principally Shanghai, surely, to make that extra combination called Brahma. They were first called Brahma Pootra and specimens were shown exceeding twelve pounds in

weight for hens and fourteen pounds for roosters at some of the old time shows. They were known in other various places as Gray Shanghais, Cochins and what not. Today we know them simply as Brahmas, and they are still our largest chickens. They are extra good layers, producing as many eggs in a year as many of our boasted non-sitting breeds. Their eggs are according to their own size, the largest eggs of all chicken eggs.

The Light Brahmas breed true to color. They can never be mistaken for another kind, and down to the third or fourth generation of breeding out, they will persist in carrying their weight as well as color with them. This of itself proves them originally to have come from a mix of large breeds and very likely not more than two to produce the uniformity in shape and color.

There are four varieties of Cochins, Buff, Black, White and Partridge Cochins. The last is most difficult to breed true to feather. It seems to be akin in this line, as well as others, to the Dark Brahma.

I cannot say that I know exactly the origin of the Cochins, but to produce his diverse plumage, has necessitated the mixing of one or two breeds outside the large Asiatic fowl from which he gets his shape and size. I have no doubt but that the old Brahma Pootra, which had a tendency to pass from a rich cream in color to a bright yellow, with some black intermingled for the males, had much to do in adding color to our present day Buff Cochins. Then, there used to be a big fowl called the Hoang Ho, with a thick growth of down that made the young chicks almost impervious to cold when other breeds were freezing to death in the

chilly winds of spring. This fowl may have had something to do in providing our present Bufts with such a good coat and hardness against cold.

The Langshangs are the smallest of the Asiatic standard breeds, and are white and black distinctively. The white Langshangs being very white, and the black variety very black. They are an excellent farm chicken and great layers, average weight for hens, seven pounds.

The Leghorn is of the Mediterranean class of fowls and the egg layer of the fowl family. The Leghorn is closely allied to the primitive breed of chickens. They show their close kinship to the wild breeds by despising the close quarters of a chicken house, flying high to roost, and their roving qualities. The original home of the wild chicken is a warm climate, and the Leghorn shows this in its lack of an undergrowth of down to save it from cold. Domesticated it also refuses to produce its kind if it can get out of doing so. But in their present form, the Leghorns have long been domesticated. There are now six standard varieties, Buff, Black, Brown, Silver, Dominique and White.

The Minorca is another of the standard breeds, great in laying qualities, poor in setting. Their origin is in doubt. Some think them a variety of the Black Spanish, some deny this. The eggs of the Minorca are as large as those laid by the majority of the Brahmas. They are a medium sized chicken. Then hen when full grown weighing from 6 to 7 pounds.

The Hamburgs are the handsomest of all fowls, especially the Silver Spangled. They are great egg producers and are relatives to the famed old

A Buff Cochon hen owned by B. H. Dunn, Clay Center, Neb.

breed of Redcaps, called by our great grandmothers, Everlasting Layers.

The Black Spanish is an old variety of domestic fowl. For hundreds of years they have been noted as above the average in winter egg laying. They equal in size the Leghorn.

The Blue Andalusian is a handsome fowl and the only variety of its breed. It is a great egg producer.

The Black Polish are difficult to rear in our climate. They are black with a green lustre in the plumage, and the topknot a pearly white. It is a very old type of domesticated fowl. Long ago its various names were Frizzle, Woolly, or the Turk.

The Houdan is a handsome fowl. It is five toed. A Houdan is a very light feathered and, like the Leghorn, prefer to hunt for its own grub in summer. It is called a non-setter, but my Houdans were ready to raise a family for themselves in their second and third year.

There are several breeds of game chickens that are standard. The Pit Game I have found an excellent fowl for table use and egg production. The males at any age are tender and finely flavored for roasts, with the taste of a wild fowl imparted to dressings and gravy. The Exhibition Games are too numerous to mention. The White Indian Game is a fine bird for the epicure.

TOPEKA, KAN., April 23, 1902.

Mrs. A. L. Pinkerton:

I received today the sack of chick food by your order of the 17th. It is fine, and the youngsters are very fond of it. Yours truly, C. H. Rhodes.

COMB HONEY NOT MANUFACTURED.

A statement has been going the rounds of the press to the effect that nearly all the comb honey on the market is manufactured by a "cute machine," that the combs are filled with glucose and capped over by a mechanical process. The facts are, there is no such thing as manufactured comb honey anywhere in the United States, and in proof of this the publishers of leading bee journals of undoubted responsibility offer one thousand dollars for evidence to show that comb honey is manufactured, or that such an article is for sale in the open market. Although this offer has been out for fifteen years and has been duplicated by other responsible persons connected with the industry of bee keeping, no one has ever seen fit to take it up.

The United States Department of Agriculture has put out several published statements denying the existence of manufactured comb honey, and the American Grocer, the leading trade organ of its class, assures its patrons that all the comb honey on the market is absolutely the product of the bee.

NEVADA, Mo., March 4, 1902.

Editor Investigator:

As the spring approaches the chicken fever grows higher and out one great ambition is to raise the largest and nicest lot of chickens in the country. I am not an old head at the business, only about two years, but I have got it bad this spring, and each year the fever grows worse. I brought it on by attending a chicken show.

While I have been more or less successful in raising brooder chicks, I find I have made some mistakes. My first and greatest mistake was in starting with too many kinds. They were all non-setters, namely, W. F. B. Spanish, S. S. Hamburgs and W. Leghorn. Not having a very large place, I had to keep them in small pens, and right here is where my trouble began. I could not find a fence that they could not fly over, and I corresponded with a number of fence firms, too. My incubators consisted of a small Buckeye and an old incubator I made over. I have named it the Shure Failure, and set it out in the back yard, as I do not want to enter into the incubator business. I am on a trail now for a new incubator, which machine, I find on inquiry, gives better satisfaction than all the rest around here, and I have been around some, too. I have sold all my high flyers now and taken up my favorite, the White Wyandotte. I have a pen of nine hens and one rooster to commence with and shall buy several settings of eggs from different Wyandotte breeders, which will give me a good sendoff. I received several incubator catalogue some time ago, which ought to be in every family that is interested in chickens. I am like M. M. Johnson—a cow or two is a profitable thing to have along with chickens. I would like to hear through the columns of the Investigator the experience from some of the readers living on five or six acres of ground. What can be done on small capital in the way of raising broilers or eggs? Now, don't all speak at once. And by the way, Mr. Editor, can't you make the Investigator a weekly instead of a monthly. It is so long between times. As this is my first I will stop for fear of the waste basket.

Yours truly,

W. C. BARTON.

Burrton, Kan., Feb. 15, 1902.

Editor Poultry Investigator:

Dear Sir: I have just received advice from an old experienced poultry breeder, saying that stock that was intended for breeders the coming season should not be fed on egg ration at this time of year. The reason he gave was, feeding for eggs in the winter and having your hens all laying, that when spring comes the hens would not lay as many eggs and what they did lay would not be so fertile. If this be so, I am up a tree, as I have a pen of B. P. R., ten pullets and one cock, and I average eight eggs daily from this pen. Give me your idea through your papers. Yours,

S. E. STOUGHTON.

Suggestions How to Produce Profitable Poultry.

By Mrs. I. W. Hines, Walnut, Kansas.

No one will succeed in profitable poultry unless he has the proper qualifications. These qualifications consist in love for the work, not too high string in your ideas, and willing to plan your work and give it a fair, honest test. But if you are great on imagination, want to build air castles, have no particular love for your fowls, I would advise you to not enter the business. This matter of profit in poultry keeping is a thing each person must solve for himself, so much depends upon the keeper. Two mottoes (not a horseshoe) should be inscribed above the door of every hen house: "Cleanliness is next to godliness," and "Despise not the day of small things." A good farmer will get up at 4 o'clock in the morning, feed the horses and cattle, clean out their stalls, etc., but his poor old hens have to roost and lay in a dirty, filthy house from one week's end to the other and sometimes a whole year. Could his horses and cattle be profitable under such conditions? It seems that farmers cannot realize the great importance of the poultry produce of their farm, and that it is equal to our state in agricultural products marked. What other kind of live-stock is there that can compare with it in proportion to capital and labor invested? My experience has convinced me that there are some things about poultry raising that can be taught only by experience, and a little practice is worth a world of theory. It takes practical planning and patience to make a perfect success in the business. Begin moderately and acquire your own experience. Study the wants for your flock's comfort and make them pay all improvements as you go along. Get the best stock you can afford, and keep improving it, and give them good care like you do your horses and cows and then not results. I have learned that the poultry profit beats that of the dairy all to pieces, all things considered. I have found there is much more profit in selling eggs at the low price of 6 and 8 cents a dozen than there is in selling butter at 15 cents a pound. Whatever is good to increase the flow of milk is good to increase egg production. Farmers frequently make a mistake in feeding too much corn, as it has been clearly proven by experiment that corn should not form a very large portion of the grain ration for laying hens, it is too fattening, es-

pecially for hens kept in close confinement. The question arises which is the best feed for laying hens. There is no doubt that bran, in most instances is the most economical food. The way I feed laying hens is to take 3 quarts of bran, 1 quart of cornmeal and one pint of linseed meal. I also add one tablespoonful of Hines Poultry Food. I pour onto boiling water and stir it thoroughly until the consistency of ordinary mush and feed it warm winter and spring, in the morning. The quantity named is what I feed 200 hens breakfast, and at noon and evening feed some variety of grain, and make them work for it by scattering it some kind of chaff or straw. Never give your hens all they can eat as it has been said a full hen is like a full tramp, her wants are satisfied and she won't do nothing but loll about until she is hungry again. Make them scratch for their grain as the exercise will make them healthy and vigorous.

Fowls may have slight attacks of various forms of disease, which a little watchfulness and care at the start may entirely eliminate from the flocks. Successful poultry men spend much time in trying to prevent disease, and as prevention is far better than cure. If your hen houses are kept well cleaned and free from lice and mites and your fowls well cared for, I am sure you will prevent disease. Every poultry house should have some kind of a drinking fountain, for impure water will bring disease.

No doubt it will pay if we occasionally feed some charcoal, which can be by burning a lot of corn cobs.

Don't begin poultry keeping with a vague notion that it is an easy way to get a living—all the work being done mainly by your hens—as such persons inevitable fail, as they ought. Don't think there is any easy way that brings success. Don't attempt to raise poultry this year like you did last, unless you are sure you are right, then go ahead. Don't think you must raise common poultry as your father did, such poultry is not progressive, it is not up to date. Quality should often be sought above quantity. Extra quality is largely due to extra care, it is the proper feed and management that determines the profit with poultry.

Don't keep mongrels any longer than it will require to get better ones. The ordinary poultry raiser looses more

money in harboring and feeding cull stock than in any other way, and it is simply because he don't cull close and breed for quality rather than quantity. If you have only mongrel chickens and have never been interested in thoroughbreds, why not invest in at least a setting of good eggs this year. Make life worth living by having stock around your place that will give you pleasure as well as profit, that is if they are properly cared for, but if they are not properly cared for, they will in nine times out of ten, prove a failure. Therefore, we wish to impress upon the mind of the breeder at the outset, that this needs attention as well as purity of breed. I take notice that here exists gross neglect of the poor flocks generally. This neglect is not always confined to persons who have fancy for line poultry but extends even to many who have a reputation as fowl fanciers. Still as before stated, for poultry to be remunerative there must be good management in their proper care and keeping, as this is the first step essential to success.

A good, convenient poultry house should be properly constructed and should be placed in a warm, dry location with runways ample to allow of plenty of exercise. Above all, care should be taken that vermin does not get a foot hold in the henery. The house and its surroundings should be kept scrupulously clean and should not be over crowded. Nothing is made by over crowding the henery, on the contrary it will prove detrimental. Use plenty of dry earth in the hen house and coops as it is a purifier. Slacked lime is cheap, and floors, walls, roosts and yards may be freely dusted with it.

The way some people refuse to use whitewash would indicate that it was expensive. All poultry houses should be whitewashed at least twice a year, and frequent applications of Hines' Liquid Lice Killer would destroy any living vermin that may be lurking there.

Every poultry raiser should look out for lice. If taken in time and proper remedies used it is an easy matter to keep them down. This is of as much importance to the health of the brood as proper food.

The habit some have of giving too much food to poultry is a short space of time is a very bad one. If you will notice their habits you will perceive that the process of picking up their food under ordinary, or what we may call the natural condition, is a very slow one. Grain by grain, is the meal taken, and with the aggregate no small amount of pebbles and the like, all of which passing into the crop, assist digestion.

A Buff Cochon Hen owned by E. H. Dunn, Clay Center, Neb.

Many disease which affect chickens might be prevented by breeders were a little precaution taken in the simple matter of feeding. Do not neglect the grit supply, even if your fowls have range. If you will but place a good quantity of grit before them, you will be surprised at the quantity they will consume.

For stock of all kinds we need an abundance of grass. Poultry as a rule, grow best when able to feed themselves, and certainly it saves a great deal of work. We have great faith in alfalfa clover, rye, etc., which are all proving excellent grass range crops. With an abundance of such feed and a little grain the fowls can pick a living from start to finish.

To many fanciers and farmers, otherwise earnest in their business, are very careless concerning their fowls in the matter of judicious mating. Good people, there are the same good reasons for making choice of the best breeds of fowls as for making the same choice in other stock. For while a prune breed is as easily reared, fed and housed as a poorer one, there is a decided difference in the returns in favor of the former. If properly cared for we do not hesitate to say that fowls of superior order do yield the farmer the largest interest for the outlay he makes of any other stock he keeps. If you select hens well and use nothing but first class cockerels your young stock are certain to grow and do well under proper care, and when you come to sell them you can always command top prices.

Some people may say that there is a great deal of work and expense in taking care of poultry in this way. So there is, but what do you get now

days without trouble?. If experience in raising poultry does not make a man or woman wise, it counts but little. We often see places where people grow gray in the care of fowls and realize only little profit from them. This is because years ago they decided that they decided that they had mastered all there was to know relating to poultry, and have since never tried to get out of the rut.

Are you still satisfied to let things drag along in the old rut, simply because it was the way your father and grandfather did before you? If so, you have some few things to learn and apply to your farm management before you can be classed among the up to date farmers. We have everything of the best to work with these days. You don't thrash your grain with a flail, or tramp it out with oxen. You and your father outgrew that ancient method. Now just go a step farther and apply the knowledge you have to other things.

I learn from older people that they never hear of a poultry show unless at Chicago, or some eastern city. But now how changed! I hope the time is not far distant when every county will have its own poultry show. Then farmers will take more interest in good poultry, as the poultry show is the poultry educator. Then we can place our birds on exhibition and learn who has the best birds, how to select and buy stock or eggs.

It has always been a source of wonder to the writer why farmers pay no attention to the breeding of poultry. It seems that the business of selling a few dozen eggs and poultry for market is so small that they turn it over to the women folks, (they are small in business affairs you know.) Likewise much less attention is given them than their economic importance justifies, and the great aggregate of money, merchandise and substantial comforts they bring into the homes of farmers, mainly through the vigilant care taking by the good house wives, which is poorly comprehended or appreciated by the men folks who are so largely the beneficiaries.

The barn yard fowls are regarded by most farmers as a very insignificant part of their live stock. The conditions in the country are such that the poultry industry is capable of indefinite expansion, and therefore able to meet any demand that may be made upon it, either by home or foreign markets.

Do not edspise and look upon your wife as being beneath your dignity and consideration. You must afford to lavish on her a great big pinch of love every day in the pear or you cannot

expect to reach any degree of success. Heed the good advice of your wife, who knows more of the hen values than you do. Give better care, better housing and more comfort to your hens and they will buy your groceries by the way of the egg basket. Have no fears this work will ever be over done. The demand for poultry products is on the increase continually. We need to know the demands and then meet them as nearly as we can. To get the best prices, you must always provide the market with only what it wants. The best is always in demand, while the inferior is seldom wanted.

When the markets are filled with eggs which have lost their quality or flavor by long keeping, and many of which have acquired an offensive taste; when the broilers and roosters offered to the consumer are thin, tasteless, tough and altogether unfit for the table, it is not surprising that they are passed by and beef, mutton or pork taken in their stead. So it is with the exporter in buying for consignment to foreign markets, he must be able to find at all times a good article of eggs or poultry in sufficient quantity or he cannot continue his trade.

The best season to sell chickens is from January to October, as every farmer seems to dispose of his poultry during November and December. Consequently the market is always overstocked at that time.

We call attention to the fact that there is a demand in the market for finely bred broilers of a certain size, say two pound stock, good, fat, plump chickens. From the first of March to the first of July this grade of stock will always command top prices. The demand for 3 to 5 pound chickens on the market for the past year has been limited, because such chickens of this weight as have been sold are

We breed Barred and Buff Plymouth Rocks, White Wyandottes, S. C. Rhode Island Reds, Embden and Toulouse Geese, Indian Runner Ducks.

⌈ This half-tone shows a shipment of eggs and poultry supplies made by Mrs. May Taylor, Hale, Mo.

nearly grown cockerels and not the finished product of the skilled poultry growers, such as are sold in the eastern markets at that time.

There is a great deal of difference between a broiler that weighs from three to five pounds that is produced from high grade stock than mongrel cockerels that have been kept from April to December or January and then offered as a spring cockerel. Settle on but one breed of fowls and do not keep a mixed lot. Too many young cockerels in the poultry yard are a big nuisance. Cull them out and sell as soon as large enough to market.

Inbreeding is bad for all kinds of animals, and poultry is no exception to the rule. It causes degeneration. Breed only from perfect fowls. The crippled, the deformed, the diseased or the otherwise defective bird is apt to transmit its faults, on the well-known scientific principle of heredity.

I take notice that in most cases the poultry business is a feminine enterprise. If the women folks of the farm have this part of the work to attend to, why should we not do as we please in regard to the matter and take our earnings, at least until we get a nice flock of well-bred and well cared for poultry. If your husband is to busy with other farm work, why can't you do as I have done. Get a cheap mechanic to build hen houses, coops,

etc. They need not be elaborate in their fittings or expensive in consideration. The hen house and scratching shed attached to it should be located upon soil which is well drained. A dry and gravel knoll is best, but failing to find this, the site should be raised by the use of the plow and scraper until there is a gentle slope in all directions sufficient to prevent any standing water. The fowls must have comfortable and healthy quarters; they must have proper food and nesting facilities, but it is not at all necessary that these should be extravagant. I buy coffee boxes, which with a lath front attached, make very nice, large rat proof coops. Why not let us women prove that we can use a hammer and saw in such cases.

"No one ever obtained anything worth having without working for it," said Mrs. Brown to her husband who was in a discouraging mood when trying to make a rat-proof coop. "That's so," replied Mr. Brown, reflectively. "I remember that I obtained you without the slightest trouble."

Poor coops bring their trials and thin out the broods. At night the rats have a feast by "de glimmer of de moon." This could have been avoided, but the owner was "just agoing to mend up the coops" when it happened.

A practical man can adopt a systematic way of doing things that will be

labor-saving, but little details must be considered prominent factors, insignificant though they be, in poultry culture.

The poultry business is a "wheel within a wheel," and I find the tiniest wheel plays as important a part as the largest. If one part gets out of gear, trouble results.

If you are a poultry crank and want to try something that will pay, but which calls for a little personal attention every day in the year—work where a good, clear head will be required and patience a most glorious virtue—try poultry raising, for I am here to say that I

Ain't seen—I don't know when—Anything that comes nigh an ordinary hen.

You may talk about corn, and call it king, but its plainly seen
The Kansas hen is the Kansas queen.

SETTING HENS IN VERSE.

Josh Billings says: "The time to set a hen is when the hen is ready."

Some there may be who will deny this statement or rather doubt it, while there are others who will heartily agree with the pen picture so graphically given by Holman Day when he tells us: When a hen is bound to set,

Seems as though 'taint etiket

'Dowsin' her in water till

She's connected with a chill.

Seems as though 'twas scarcely right,

Givin' her a dreadful fright,

Tyin' rags around her tail,

Poundin' on an old tin pail,

Chasin' her around the yard.

Seems as though it was kind of hard

Bein' kicked and slammed and shoo'ed

'Cause she wants to raise a brood;

I sh'd say it's gettin' pay,

Just cause Natuf wants its way.

While ago my neighbor, Penn,

Started bustin' up a hen;

Went to yank her off the nest,

Hen, though, made a 'peck' and jest

Grabbed his thumb-nail good and stout

(Like to yank the darn think out).

Penn he twitched away and then

Tried again to grab that hen;

But, by ginger, she had spunk,

'Cause she took and snipped a chunk

Big as a bean right out his palm,

Swallowed it, and cool and calm

H'tisted up and yelled, "Cah-cah!"—

Sounded like she said "Hoo-rah!"

Well, sir, when that hen did that.

Penn he bowed, took off his hat—

Sunk just suits him, you can bet.

"Set," says he, "goll darn ye, set."

Mrs. Pinkerton's Chick Food can't be beat for raising little chicks.

S. E. INGRAM,
Clay Center, Neb.

STANDARD—Score 90 as a ck, weight 12 lbs. 2nd prize ck at Des Moines Fanciers' Show, 2nd prize at Nebraska State Show, competing in hard classes. His barring is beautiful, clear, open color.

BESSIE—Score 93½. Pronounced by Judge Russell as one of the most perfect wing barring he has seen. She is barred to the skin, a perfect black and white bar, no smut color. Last season she layed over two hundred eggs.

CHIEF—Score 93½. First prize B. P. R. cockerel in class of 30 at Des Moines Fanciers' Show. He also headed First pen at Nebraska State Show in class of 11 pens. He is barred to the skin, weighs 9½ lbs.

These Barred Plymouth Rocks are owned and bred by Highland Poultry Farm, Des Moines, Iowa, J. D. W. Hall, Manager.

Among Ourselves.

Just among ourselves. The thing I like best to read in a poultry paper is somebody's personal experience to improve one.

A famous evangelist said the other evening:

"The first time I ever tried to preach I was called upon to supply the place of a regular pastor suddenly taken ill. It was a hard place; some of the leading members always walking out on the appearance of a supply. However," he said, "I had one sermon—the text was out of the Bible and it was all right anyway. Well, we got through with the singing, prayer and collection. Then I dove into that sermon. I had to keep my finger on the place for fear of losing myself, but suddenly the breeze from an open window carried the whole MMS. over into the choir stand, scattering the leaves beyond hope of rearrangement. Then I stepped out in front of the pulpit and gave my experience, and the people said they never had a better meeting. Oh, I tell you," he added emphatically, "it is a grand thing to have had an experience."

Now without the slightest intention of levity, we repeat it: "It is a grand thing to have had an experience," even in the poultry business, and want of this is the shoal upon which the average amateur fancier strikes and goes down.

Not long since a man who knows about as much about a chicken as he

does about a Bengal tiger, said to us:

"I bought those birds when I rented this place. They were tiny things and the man did not want to bother moving them. I have had the greatest time! Something ailed them in the fall and I asked the advice of every chicken crank around here—only you, I did not know about you then. Well, the majority agreed it must be vermin. They looked poor and downcast and their fathers all fell out. I used all kinds of powders and finally made up a mess in which moth balls figured. Mercy, how it smells! But I used it faithfull and finally they began to pick up. Afterward I found out they were moulting."

When we told the Other One, he said: "Why, late hatched pullets don't moult in the early fall."

So there we leave it. What ailed those birds? That man needs experience—just the thing we all need.

Sure we realized this recently upon trying for the first time to operate an incubator—a Sure Hatch, if you please.

We should have given up in despair had not the Other One came home about that time. It took him at most no time to interpret those printed directions and fit them to the machine, and now all is running smoothly, whatever the outcome may be.

It was wonderful how much experience some other people had to dispense those three or four days when we could not keep the mercury anywhere, least of all at "from 103 to 105."

One woman sent word that it was all a terrible trouble, but that the very worst comes when the chicks are in the brooder; but we are very fearless, inasmuch as we have raised so many large families with only a box or muslin crate heated by bricks or hot water jug for brooder. Of course there were fatalities, lots of them, but there is ever that survival of the fittest, and we made money some of those years.

The brooder chicks escape so many of the vicissitudes of those raised with the hen. We remember one season when we had had good success hatching and some 60 or 70 fluffy Barred Rock balls were tumbling over the green grass. We were so proud of them. All at once they began to die. All the warning was they would stand around and gap.

"Gapes!" you say at once.

If so, we could find no trace of the worm and all directions for curing the disease were unavailing. They died till they got ready to stop, then stopped—a few of them. However, none raised away from the hen—at least very few—seemed ever so afflicted.

But don't you know there is something to experience, after all, that can not be told? Some way one just learns things, and it stays with them and operates all right, but when they come to pass it on—well, it is like a cake receipt; you have told it all right, but the amateur cannot take the directions and make a success after all.

As they say in the musical world, "There is everything in the touch."

1st Black Langshan pullet at N. E. Mo. show, score 95½ by Ben S. Myers. Owned by John Hattick, Bowling Green, Mo.

And so it is that we would discourage a new beginner from going into the poultry business too heavy. "Begin and work up," is as good advice here as anywhere.

Speaking of experience—here is what an eastern breeder has to set forth on the feeding question, and it really sounds more sensible than the majority of stuff that is going the rounds, and that we are all religiously trying to imitate.

He provides receptacles of corn, oats and wheat, grit and charcoal and just invites the birds to help themselves. He sees that the supply is kept good, furnishes milk and water, and gathers the eggs. Poultry keeping would be quite easy on these terms, and he claims that after once having all they want, the hens eat only what they really need afterward. The milk he substitutes for green bone.

We have left corn on the ear where our birds could get it all winter and there seems little demand for it. It is perhaps all in line with the merchant who, on hiring a new clerk, always insisted that they eat all the candy they wanted the first day. They were pretty sure to want no more after that.

When all our agricultural colleges have a "course in poultry," then we shall see as much progress in the business as we now see in other lines of pet stock raising, and there will be a call from all parts of the country for "professionals."

Kingston, R. I., has a most complete course designed to give instruction in the art and science underlying

successful poultry keeping; also the latest and best in practical management as given by the most successful specialists in the various lines of work.

To my mind nothing is more stimulating than knowing of others' achievements. It never discourages us in the least to know that someone else has made a grand success of perhaps what we have all but failed in. What others have done and are doing, we can do.

We read of great farms devoted to the poultry industry and sigh a little, maybe, over our restricted quarters, but something like this comes along:

R. S. Kellerman of Massachusetts has a plant of 650 hens and of his room he says: "My poultry plant is located partly on a vacant town lot 250 feet long and 150 feet deed, and partly in the back yard. The three houses run east and west and face the south," and he goes on to tell how they are built, and concluding with "the entire cost was about \$1,000."

We read this morning of a New Jer-

A fine W. Rock chl owned by M. L. Camfield, Belleville, Kan., a winner at Nebraska State Show at Lincoln, Nebraska.

sey plant that cost \$50,000, but it did not cost much of anything at first, the founder building a little house or two with his own hands. Evidently he began at the bottom. Indeed, some successful fanciers have begun their business career with only a few dry goods boxes for roosting rooms. We hope no one will adopt the plan, however, for winter use in a cold climate. Good, warm winter houses are essential, but they need not be expensive. Good drainage and a sunny front cost little. The trouble the coming summer will be too much "sunny front." Provide shade for the fowls. If you cannot

have trees or shrubbery in the run, make a trellis—anybody can do this—a bean one will do, or one of morning glories or wild cucumbers or Virginia creepers, or any fast growing vine. The birds will nearly "dust" the roots out, but water well at night and they will "stand the storm" all right. Be sure to provide something green for them to forage in for an hour each day at least. Sometimes when our fowls look a little droopy and act dissatisfied, we first throw open the doors and let them out into the world. Although they have a large run of their own, they appreciate the difference at once. Out they will rush and then likely raise on the wing for a little way and end with a regular game of—well, we don't know what they call it, but it seems some like "tag." Then they settle down to hunting for the things they want—just what they are the wisest fancier really knoweth not.

They always return to their domains as chick and lively as possible. A hen may be a foolish thing, but she knows some things you and I don't, and things we can't quite find out. If an aut can preach, perhaps a hen can teach.

Sun Prairie, Wis.

Mrs. Pinkerton's Chick Food.

The question of the cost of feed to raise chicks past the critical age is trivial compared with making a perfect success raising them. Mrs. Pinkerton's Chick Food is better and cheaper than oatmeal and other stuffs usually fed to small chicks. It is composed of just such seeds, grains, grit, etc., as the small chick needs on the start. It is all fed, no fan mill tailings.

M. M. Johnson,

Inventor Sure Hatch Incubators.

A Belgian Hare owned by J. S. Markle, Wahoo, Neb.

From Mrs. May Taylor

I surely think it must be getting along toward spring, because yesterday morning on my way up town, the first thing when I felt the railroad at the foot of the street, where I always turn off, there was a group of small boys playing marbles. A little further on was a couple of green, glossy parrots put out on a newly made perch to sun themselves, and I passed by another warm, sunny nook in another place filled with boys playing marbles. Today the bees are out; next thing the air will be full of kites, and this morning I began to ponder what had become of my old last summer's sunbonnet, poor thing. It hung over one of the slats of the inside gate leading into the hall of the hen house for a long time during the early winter, and I believe was finally used up for rags. So now I will have to make a new one or beg another old one from mother. She never wears out her bonnets, so you see I go begging for one she has worn last season and get her to make a new one for herself. You see I work headwork.

The turkey hens are keowking around and poking into all sorts of stray corners on the lookout for a good nesting place. The wheat fields in the distance look green since the snow went off, making patches of a veritable oasis in the desert looking wastes of brown and bare fields. The apple orchard in the distance looks red, so I think the buds must be swelling. There are still white patches of snow in the gullies and unsheltered spots. The roads are dry and dusty and the farmers are talking of sowing oats. I hope there will be a big acreage of oats and that it will yield abundantly. We are also looking for an abundant wheat harvest. We "sowed" a mixture of small seeds on the snow in our poultry yards, where the weeds were the thickest and the bare spots were last year. We have a few briar patches in there which we wish to kill out and the quickest way is to smother them out with grass.

Do you love trees? I do, and there is no shade so grateful to the average fowl than the green leaves of some kind of living tree or vine; put trees in your poultry yards as soon as possible. Fruit trees if you want to; plums do well, and the chickens pick up the surplus, though I think turkeys relish plums more than chickens do. Our hen yards have all sorts of trees, bushes and vines in them.

We had a hen woman friend to dinner the other day, and of course we

A pen of Buff Cochins owned by B. H. Dunn, of Clay Center, Nebr. He breeds none but the best, full feathered, elegant in shape and color. If you want something nice, try some of his Cochins.

visited the poultry plant at our leisure. Going through one of the gates she noticed the way it was made—out of lath—and said she must take the pattern; you know women always take patterns, so to speak, quilt patterns, tidy patterns, sofa pillow patterns, etc.; but in this case we did not cut a counterpane of paper, with notches and holes where to join together. Oh, no. She took the pattern in her head, like the judges do when they score chickens. But to get back to the gate; while she was taking it down mentally and saying she must have her husband make her some, I remarked incidentally, "that I had made it myself," made it and hung it, and that one over there, too, and all those you saw inside, and strung up all this wire netting." She said she could not do that, and I don't say it—tell what I have done—as a recommendation for others to go and do likewise, unless they have the knack for the work and like to do it. I come honestly by my love for a hammer and saw, because one of my grandfathers was a carpenter, and I used to play around his work bench and watch him handle his tools when I was a very little girl. I have five gates which I made and hung all by myself, each one of which can be opened and shut, and I am going to make some more before long, since spring has come. When I get that Kodak in running order, will send you a picture of a few of them, and how they open and stay shut. But as I said before, I don't believe in women doing this kind of work only in exceptional cases, like myself, for instance. It isn't hard work nor heavy

work, if one knows how to take advantage of it, and then I have such perfect health.

One of our Barred Rock crowsers has taken a violent dislike to Ruth, our general helper this spring, and she is very much afraid of him. Now, Ruth is the very soul of kindness and gentleness and just why this self-important, self-inflated stultic rooster should take such a dislike to her is a mystery to me. He got her cornered one day when she went in to feed them, and she said she never would have gotten out, for he headed her off on every turn, until another crower in the room as large and powerful as himself, came to her rescue. He engaged the attention of Sir Pugilist until Ruth made her escape. He is a very fine specimen and not for sale at any price. I mean Sir Pugilist, nor the other one either, for that matter, but I don't like fighting chickens. Do you suppose he will ever forget her and be civil? Ruth is a great admirer of fowls and likes very much to work with them, and I wish this one wasn't quite so "fifty," though the way he stretches himself up and crows when he has run her out of the lot makes us both laugh. He tried to run me out a time or two, but I didn't run, and I guess he has begun to think I don't intend to, and I believe if Ruth would just quietly upset him, as I did, without in any way letting him think that there was a row on hands, he would let her alone also, but she is afraid and runs and shies around out of his way; says she doesn't want to hurt him. I don't want to hurt him either, and would not, for he is a val-

Black Langshan cock. Second at Illinois state show. Score 91½, by Hewes. Owned by John Hattick, Bowling Green, Mo

able bird, but when he made a running shot and planted his two feet up against me I turned him on over. I didn't want him to think that I was teasing him and let him alone when he showed no fight. I find that he doesn't relish turning summercauls, and that the worst thing I could do for him would be to run, or even stand and take it. I helped him out with his fun and he didn't like it, so quit, so far as I am concerned in the play. When he runs Ruth out of the yard he stretches himself up and crows and looks so important it makes us both laugh.

MRS. MAY TAYLOR.

Artificial Incubation

By MATTIE WEBSTER

Again is the hatching season, that busiest and most interesting time of all the year for the poultry breeder, now calling for time and almost constant work and care, that baby chicks in numbers sufficient to supply the latest demand may be hatched and raised to maturity. Incubators have been pulled out of storerooms, firmly set upon their legs and when the right temperature has been reached and held in egg chamber for twenty-four hours, eggs have been consigned to the "wooden hen," and whole many a hatch has already been accomplished other breeders are faithfully and carefully filling the lamp and changing the wick every evening, that there shall be the right degree of heat within this artificial mother to insure a successful hatch, and patiently turning the eggs twice daily, that every side of each egg may receive equally the heat of the egg chamber. Yes, it means work and careful attention to every detail to manipulate an incubator successfully, but for my part I would much prefer to "manage" an incubator than to try to manage even one setting hen. We set our incubator, place the eggs within

and are perfectly confident that when we come again a few hours later we will find it is still "set," and the large nest of eggs unchilled and unbroken, which is more satisfactory behavior than Mrs. Broody Biddy usually displays. It is not always the easiest thing in the world to regulate and then keep the heat regulated, especially for the novice, and I admit that one must give the machine watchful care, but there is nothing about the management of the incubator that tries the breeder's patience like a setting hen does. If we must needs depend upon the hens to do our hatching, we perforce, must await their individual pleasure in the matter of raising a family of baby chicks; the earnestness of our desire has no power to influence the biddies to become broody. Often when we feel that March chicks are what we must have, not a hen will manifest a desire to set until late April or May. Not so with our "wooden hen." She is always "broody," and can be depended upon to give us the coveted March chicks if we "set" her and give her the right care. Even when a hen does decide to set, every breeder knows how perverse she is apt to be. In the first place, the nest she chooses for the process of incubation is not suitable, according to our superior wisdom, and we prepare a cosy nest in just the right place and "silently and by night" carry Mrs. Biddy to it, and with utmost gentleness place her upon it. Because of past experience we are wise and so securely fasten her within the nest. After a day or so eggs are entrusted to our setter's tender care, and after a few days more of close confinement, moved by a feeling of pity for biddy, we decide to trust to her honor in the keeping of her part of the contract and remove the barriers in front of her nest, that she may view her near surroundings and be at liberty to partake of nearby food and water, enjoy her loved dust bath, and after a little stretching of legs and wings, return to her nest. While there is no objection to this proceeding once a day, it does not meet with our idea of the fitness of things to have the greater part of each day taken as a vacation from the hatching work. No longer do I trust Mrs. Biddy when she promises to take such good care of the eggs I place under her, having learned her fickleness by previous experience, I always make sure her garrulous promises shall be kept by putting it out of her power to break faith with me. Yes, from start to finish of time of hatching I confine my setter, letting her off once a day for food, water and

exercise, and then if she does not return "where duty calls," of her own accord, in time to prevent any chilling of eggs (if early in season), I gently place her upon the nest and secure her there. Not only does the setting hen show a perverse desire to exchange nests with some neighboring sitter, or to desert her own cosy, filled nest for some empty box or barrel, that we cannot understand its attractions for her, but often a fit of destruction seems to possess her and when she comes off for morning food we behold a sight that is anything but pleasing to the eye. Eggs are broken and those that are intact are covered with the contents and the nest material is so smeared also that the remaining eggs must be washed, the straw removed from the nest and a new nest made. Now, never have I heard any one complain of being subjected to such cantankerous behavior by the "wooden hen." And how little time and trouble is needed for her right care during the three weeks of incubation. It is true she must be fed once a day, but all she eats or drinks is kerosene, and less than five minutes satisfies this demand and the work goes on smoothly and uninterruptedly. The turning of the eggs is a few moments work morning and evening, but they are always clean and no time is needed to wash them every few days.

The superior advantages and attractions of artificial incubation over natural incubation are being so well learned and so universally accepted, that no longer is the incubator looked upon with distrust and disapproval. Where very few were in use fifteen or twenty years ago, today few fanciers or breeders are without one or more of these machines, and it is not an uncommon thing to see an incubator side by side with the farmer's wife's best furniture in her best room, with lighted lamp, and attending strictly to the business of realizing her desire for "early chicks." And this is as it should be; for if the "wooden hen" is a desirable thing for breeder and fancier, is it not equally as desirable for the farmer folk that hatch many times more chicks each season? And do not the farmers' wives need to have their labor lessened in every possible way? Indeed, there are few idle minutes during the day for the farm-wife, and if incubation work and care can be lessened and be carried on in the house, many steps and much worry will be saved her. Are we sufficiently thankful for this invention that makes the hatching of hundreds of chicks less work than the hatching of dozens by the natural way?

POULTRY AS CLEANERS.

The pig is usually regarded as the scavenger of the farm, the receptacle into which all odds and ends may be thrown with profit. And yet, when we come to think about it, the chicken has as sharp an appetite for variety. Almost everything that any farm animal will eat is relished in some form by poultry. And while the omnivorous nature is sometimes aggravating when fowls are permitted to run at large, it is on the whole a convenient form of economy. There are so many things on the farm that would do no good were it not for the poultry, and it is in saving the little things that the farmer must depend largely for his success.

All of the grains are acceptable, and even the screenings and chaff that the larger animals would scorn are thoroughly appreciated by the chickens, which enjoy scratching for the stray grains that may be contained therein. Seed of sorghum and millet they will thresh out for themselves in fine shape; and for little chickens too young to manage the grains of corn, pop corn is a rich treat. The wild millet and other grasses and weeds contain much nutritious food which the fowls will glean. Oil meal and cotton seed meal, too highly concentrated foods to be given alone, are advantageous in small doses with other food.

A peculiar way of serving green food is to throw in fresh sods of grass or newly sprouted rye or oats, the energy expended in scratching the plants apart giving the needed exercise to individuals in confinement.

Few are the crumbs from the table which escape them; and in this they have an advantage over everything else; not even the cat will so persistently pick up every scrap.

As soon as the fruit commences to fall they are ready for it. No matter how wormy or dwarfed the specimen, it serves the purpose if it is not decayed. And while converting the culs into available flesh or eggs, they at the same time destroy many noxious insects.

Even in the garden the chicks do much good and little harm by their war upon insect pests. If incubator chicks, the old hen—the disturber of peace—to the gardener—will probably be a minus quantity. If her services are needed, she may be cooped near the garden and the chicks given free range. It is cheaper and less work than buying Paris green or other insecticide, besides furnishing them a good living.

In fall the culs of vegetables and

fruits that cannot be used at the time may with profit be set aside for later use. If there is no room in the root cellar apart from the rest, bury them. The variety which fowls consume with avidity is indicative of the wide assortment demanded by the system to secure the best results. And it is well to consider twice whether a thing cannot be worked into edible shape before destroying or letting it go to waste.

The shortage of the apple crop last year brought to the writer a practical illustration of this. In lieu of the larger fruit, experiments were made with the little wild crabapple. By soaking in water over night and then cooking until soft they were highly relished. To hasten the preparation, the crabs were cut into quarters before soaking. This process, by the way, removes the "crabby" taste, and should not be omitted if used for the table. One has no idea, without giving it a trial, how much this improves them; and the poultry seem to enjoy the change as well as people. Even when apples are plentiful some of the crabs will be found very convenient for late winter and early spring use, as they keep much better than most of the cultivated varieties.

A generation ago the housewife would have scoffed at the idea of there being for chickens any food value in clover save the seeds and insects it might contain; yet the steamed product is now conceded as one of the most valuable winter foods. This but suggests the thought that the end of the menu is not yet. Look out for the odds and ends and supply them generously, and keep an open eye for serving new dainties. The greater the variety of good food the greater the results. Stale material is never wanted, and shows in the ill-flavor of the eggs.

BESSIE L. PUTNAM.

From F. C. HINMAN.

FRIEND, NEB., APR. 23, 02.

Editor Poultry Investigator,

Clay Center, Neb.

Dear Sir:—I notice in the W. P. N. that the Hon. T. L. Norval still thinks that he did not get fair treatment at the state show and wants the people to know that his pen figures out 1-16 of a point more than 1st and 2nd pens which were a tie—1st¹⁸. To figure the way Mr. Norval does his best cockerel with best females, I would have had one pen 1st 3-16, another 1st¹⁸, another 1st¹², and four pens with an average score of 1st 5-16 by one of the hardest cutters that ever scored at state show. Mr. N. has had it his own way so long that he can hardly give it up that he was fairly beaten.

Yours respectfully,

F. C. HINMAN.

BUSINESS CATCHERS

WHITE PLYMOUTH ROCKS our specialty. Eggs 1.00 per 5. Pekin duck eggs 1.00 per 11. Try us. F. J. Kolasa, DuBois, Neb.

BARRED PLYMOUTH ROCKS, winners from Norval's strain. No stock, all sold, only eggs for hatching. Mated for prize winners. Has 4 pens. Best, 2.50; 2d, 2.00; 3d, 1.50; 4th, 1.00 only, per setting of 15. For 3 settings, twice the single price. Place your orders early. Mrs. M. E. Bittner, Osceola, Ia.

MRS. E. M. DOWNS, Bartley, Neb., Barred Rocks, well marked, extra large birds, both cockerel and pullet, mating pens. Eggs 2.00 for 15, 3.50 for 30, general stock, 2.00 per 100, White Wyandotte 2.50 and Cuffin strains direct, 2.00 for 15, 3.50 for 30.

ORIOLE FARMS, Twin Lakes, Wisconsin, send free a Partridge Wyandotte catalogue. A. D. Buckner, Wis.

S. C. W. LEIGHTONS, three pens headed by 1st and 2nd cks and 2nd cock Knapp strains, 1.00 per 15; 4.00 per 100 this season. Booking orders now. M. B. Plymett, Watstown, Pa.

EGGS for hatching: White Plymouth Rocks and White Wyandottes, eggs 3.00 for 15. Yd 2 and Brown Leghorns, 1.25. Belgian hares for sale. S. S. Dunn, 4550 Chicago Ave., Minneapolis, Minn.

WHITE WYANDOTTE females that are strictly pure white, mated to 1st and 2nd cockerels, large and pure white. Eggs, 1.50 per 15. No stock for sale. Write for wants. C. W. Brehm, Harvard, Neb.

WASHINGTON PRAIRIE Poultry Farm, 13 varieties of thoroughbred poultry. Eggs for hatching from 60c to 1.25 per setting. Write for particulars. O. O. Lemon, Decorah, Iowa.

BARRED ROCKS. Lash pen, cockerel score, 33.5, pullet 30.6, eggs 3.00 for 15. Yd 2 and 3, 2.00 for 15; yd 4, 1.00 for 15; 4.00 per 100. Bronze Turkeys 2.00 for 10. Mrs. Chas. Lowry, Dunbar, Neb.

WHITE WYANDOTTES exclusively. Eggs from pen, 2.00 per 15. These are fine birds. Those at large, 1.00 per 15; 4.00 per 100. Mrs. M. A. Barrans, Lenox, Iowa.

EGGS FOR HATCHING, from full-blooded American Dominiques, \$1.50 per 13, 2.50 per 20. Also cockerels at \$1 and pullets at \$2. Blue Ribbon strain. E. W. Nick, 129 West 11th St., Erie, Pa.

WHITE PLYMOUTH ROCKS, pure Fished strain. Pen headed by 25 cock; every hen a top-notch. Eggs, 2.50 per 15. Your chance to get the best White blood in the world. H. C. Nichols, P. M., Spearville, Kan.

EGGS—Columbian Wyandottes, finest in the land. Buff Orpingtons, White Langshans, White Indian Games, R. W. White Leghorns, Silver Wyandottes. Also from R. C. Brown Leghorns very cheap. Fowls, dogs, birds and pigeons cheap. Indian Runner ducks. Enclose stamp. No cash. Address: Hillcrest Farm, Milledgeville, Pa.

EGGS That will hatch. From Silver Laced Wyandottes \$1.50 per 15, \$2.50 per 30. Known as K. L. Poultry Yard's. Satisfaction guaranteed or money refunded. Mrs. W. J. Barnes, Topeka, Kansas, Sta. B.

BUFF ORPINGTONS, Buff and White Wyandottes, White Kildicks, best obtainable. Stock and eggs for sale in season. T. W. Beecher & Co., Reed City, Mich.

BELGIAN HARES, \$2.50 per pair. S. L. Wyandottes, Pekin Ducks, 20 eggs \$1.00. Also Poland China hogs, White China Geese, and White Guinea pigs. H. L. Felter, Washita Cherokee county, Iowa.

MANMOTH LIGHT BRAHMAS, prize winning stock scoring from 90 to 95 points. Eggs \$1.50 per 15. Manmoth Pekin Duck eggs \$1.50 for 15. No stock for sale. Mrs. Alice Allen, Clay Center, Nebraska.

O. I. C. SWINE for sale from one of the best herds in state of Illinois. Booking orders now for pigs, single pairs and trios. Mated Noakin. Prices within reach of all. Also eggs from large, growthy Light Brahma and B. P. Rock chickens for sale at \$2.00 per 15 or \$3.00 per 30. Address Chicago, Ill. W. J. Barber, Ill.

FINEST WHITE ROCKS in the state. Eggs \$1.50 per 15. Oris B. Lewis, 1125 Wabash Ave., Fort Wayne, Ind.

ORIOLE PARTRIDGE WYANDOTTE Farm sends free a Partridge Wyandotte Catalogue. E. D. Burman, Twin Lakes, Wis.

SHORT GRASS POULTRY Farm, Thompson strain, B. Rocks, S. C. Brown Leghorns, Black and White Langshans. Eggs, 2.00 per fifteen. Pride of the West strain of M. B. Turkeys. Pen scoring \$5.00, headed by 40-1b tom, Eggs 3.00 per 9, T. M. Barger, Spearsville, Ky.

A fine Light Brahma hen owned by G. B. Clary, Fairbury; Nebr.

Learning to Run an Incubator.

(By Percy W. Shepard.)

The greatest and usually the only fear of a new beginner in using an incubator is that they may not be able to learn to run it successfully. It is not a very hard undertaking to learn to manage an incubator. Some make a good hatch with the first trial; others fail with the first one and sometimes with several hatches. Most of these different results come from the difference in the amount of care given the hatcher. The one who believes that the incubator will take care of itself and make a good hatch with only a very few minutes of attention per day, is the one who fails until he learns different. The one who sees that it needs enough attention to properly follow the needs and directions in hatching, is the one who will be most likely to learn at the first trial. A beginner may study the directions of several different makes of incubators and when he comes to run a particular kind of machine he may try to use the directions, to some extent, of the other machine. This is not advisable. The maker of the machine knows more about them than you (a new beginner) does, and he gives in his book of directions the very best rules that he knows. It would be natural for him to do this in such cases, as he wants to further the sales of his machines. This he can do only by their proving effective hatchers. Always follow these directions to a letter if you want results instead of merely experience. To learn to be a successful hatcher depends much on your aptitude for such work and upon your ability to give it the proper attention. If you grasp the ideas of successful hatching easily, and like the work well, you will be able to learn easier than you will if all the

workings of the machine are difficult for you to understand and that you can't just get the thing going in an easy manner.

It is no small job to care for an incubator—that is, it needs much attention. Some think that a machine needs only about five minutes' attention each day. This is a mistake. You must cool the eggs nearly half an hour during the latter part of the hatch. You may leave them that long and go to do something else, yet you must keep your mind on them or you may forget about them and allow them to chill.

Then there is the testing. Twice this is usually done. This will take anywhere from half an hour to an hour or more, depending upon your experience in this part of the work. It does not pay to be too rapid in testing, as you may take out some eggs that would otherwise have hatched.

Turning the eggs once or twice a day is something that must be done. Some say turn them once a day; others say twice. It is best to turn them half way over twice a day.

Another thing is in depending altogether on the regulator to keep a uniformity in temperature. Do not depend too much on the regulator. It may serve well enough to regulate a small change in temperature, but they are not perfect and you must keep the lamp about right or the regulator can not do its work. The regulator is a grand, good thing, but upon the lamp depends most of your success. Keep it properly trimmed and cleaned and plenty of oil in it, so it will never go out. I saw an incubator become filled with soot over the lamp when poor oil was used and one day fell down and put out the blaze. It may do no serious harm to have the lamp go out if you discover it before the eggs get cold, but it is better to have no such accidents occur. Remember that you should go to your incubator several times a day and in very cold weather quite often. If the lamp should go out and you were following the belief that only five minutes a day were necessary for running it, most likely your eggs would be wasted.

If you want to learn to run an incubator get one now and run it. You will learn if you are careful enough and will become a successful hatcher. Don't become discouraged if the first one or two attempts are unsuccessful. It is your fault and not that of the machine.

When you have once learned you will be ready to make poultry raising an easy matter.

BUSINESS CATCHERS

BUFF ORPINGTONS. "Cook's strains," eggs 15 for \$3.00; hatch guaranteed \$5.00 from birds bred to the skin and progeny of imported stock, Express prepaid. A. Edward Green, Joliet, Ill.

EGGS for hatching. From 2 splendid pens prize winning Black Langshans, score 92½ to 95½. Buff Orpingtons and Rose Comb Black Bantams. Circulars free, John Cole, M. D. Williamsfield, Ill.

EGGS from my Beauty Strain of high scoring Light Brahmas and prize winning Black Sumatras, 15 for \$1.00. They are up-to-date. Chas. M. Palmers, Nassau, N. Y.

BUFF COCHIN chickens, Toulouse geese, Duroc Jersey swine, Cockerels for sale with score cards, Chl. hen eggs \$2.00 for 15. Geese eggs 25c each. Chas. A. Allison, Tennessee, Ill.

WHEATLAND POULTRY FARM. M. P. Turkeys, prize winner B. P. Rocks, (Ringlet Strain) S. S. Wyandottes, S. C. Brown Leghorns. Birds for sale. Eggs in season. Mrs. Taylor Raker, Magnolia, Mo.

THE STAR POULTRY YARDS has S. C. Brown Leghorns, Barred and White Rocks and White Wyandottes. Located 3 miles south of East Peoria. D. E. Glatfield, East Peoria, Ill., manager.

SILVER GRAY DORKINGS. White Wyandottes, Single Comb Brown Leghorns. They are state winners. Live and let live is our motto. Dorkings, 1.50 per setting, other settings 1.00. Circulars free. O. Mulhin, Beauford, Minn.

BUFF ROCKS. Evenest lot in the west. 1st premium stock at 1st State Fair, 1914. 3 grand matings, eggs 2.50 per 15. Robt. Larmer, Ravenwood, Mo. Box 7. S. V. Pres, Buff Rock Club.

EGGS 75c per 15. Farm range, Black Langshan and single comb Brown Leghorn. From pen No. 1, Black Langshan, 2.00 per 15. Pen No. 2, White Wyandotte, 1.50 per 15. M. M. Browning, Appleton City, Mo.

S. H. COTTON. Superior Black Langshans; Eggs 15 for \$2.00. S. H. Cotton, Appleton City, Mo.

FOR SALE. 2 choice White Klondike hens. Place order at once. Adams Street, Poultry Investigator, Clay Center, Nebr.

WHITE AND GOLDEN WYANDOTTES. Eggs 1.00 per 13. White Wyandotte cockerels 1.00 each. Pekin ducks 2.50 per trio. Eggs per setting, 95c. Mrs. H. M. Clark, Sumner, Nebraska.

EGGS FOR SALE. White Crested Black Polish, 2.50 per 15. Buff Leghorns, Buff Rock Light Brahmas, eggs 1.25 per 15. Also Duroc Jersey swine, Write your wants. C. E. Olson, Colon, Nebr.

S. S. HAMBURG. Eggs only for sale: 1 sitting 1.50; 2 or more sittings 1.00; 5.00 per 10. Rev. G. A. Chamblin, Moran, Kansas.

BUFF ORPINGTONS and W. Holland Turkeys. Eggs for sale. Large head stock, winners at Nebraska state show. Chicken eggs 2.00, turkey eggs 1.50. Mattie Stuft, Lawrence, Neb.

GET THE BEST! One dollar buys 15 eggs from choice pens of S. S. Hamburgs and Rose Comb Black Minorcas. C. L. Norman, Stromsburg, Neb.

PRIZE WINNING S. C. W. Leghorns, White Rocks and Golden Sebright Bantams, Leghorns score to 95, headed by 2nd cock at Des Moines show. Eggs 1.50 and 1.00 per 15; 4.00 per 100. Write for winnings. Fred Cramer, Indianola, Iowa.

AMERICAN POULTRY FARM. 100 Bronze Turkeys, sire 44 to 46 lbs., 200 cockerels P. Rocks, Wyandottes, Leghorns, Bantams, Guineas, Jersey cattle. Stock and eggs for sale. 25 years a breeder. F. M. Manger & Sons, De Kalb, Ills.

WHITE WYANDOTTE and Barred Plymouth Rock eggs for hatching, from my best birds, 1.00 per 15; bred on different farms, free range, Pekin Duck eggs, 11 for 50c. B. L. Grover, Burton, Kas.

FOREST HILL Poultry Farm: R. C. B. Leghorns exclusively; 10 years standing; egg producing strain. Can furnish 100 eggs per day. Price, 15 for 1.00; 50, 2.50 and 100, 4.00. C. H. Brown, Council Grove, Kansas.

B. P. ROCKS eggs from 2 pens, 1.50 for 15. Searle's strain, none better. Write your wants. Mrs. J. W. Cottle, Edgar, Nebr.

Spring Cleaning.

At this time of the year we hear a great deal about "house cleaning," and the male portion of the family are in constant dread of cold dinners and being asked to help. However, this hubbub of cleaning usually applies just to the dwelling houses, which are gone over from bottom to top. No closet or corner is left without a thorough overhauling. This is all right and strictly necessary in dustry Nebraska, and more especially where we live in one house for a number of years. Things will get put away and saved until house-cleaning time turns them out and they find their way into the fire by armfuls, which is the proper place for them. A lot of useless rubbish stowed around is only a harbor for mice and disease germs, and we cannot be too careful of these things. Decayed vegetables, making a foul cellar, can easily cause us no end of trouble. It was in regards to our poultry houses and yards that I started out to write about; but by this time my poultry friends will have found out that I get tired talking too long on one subject, and won't expect anything very prim from my pen.

On many farms the poultry house is not a matter of consideration until after everything else is done, and sometimes not even then. Our own houses and yards are perhaps not models, but they are cleaned often during the whole year and fresh straw kept in them. During the spring and summer extra care and cleaning is necessary. In years gone by we have used an apple tree sprayer and kerosene emulsion when we wanted to go into the cracks and corners. This year there is something of a little later pattern takes its place. It is a sprayer made for the purpose of using disinfectants about houses and cellars, and for house plants, as well as for use in the poultry house. It throws a very fine spray which can be forced into all the cracks, corners and crevices of the poultry house. There is no waste, and a gallon of lice killer will go as far again when used with a good sprayer. Nest boxes and perches need spraying often, for lice will hatch and multiply very fast in a poultry house in warm weather. If we do not keep everlastingly after them our hens stop laying, and we wonder why. We found a very convenient way of managing insect powder to rid the hens of lice. Take a good sized box and fill it about half full of fine dust, then empty a package of insect powder into it, put it in a sunny place, and "Biddy" will just

mix it to her heart's content, and her feathers will be dusted in much better shape than we could possibly do it. Insect powder is much safer and better to use on the hens than liquid lice killers and for use in brooders and around our young chicks. There is a gas used in most liquids that is death to many chicks, and after we have them hatched we do not want them to die from lice or the effects of lice remedies.

Our long spell of cold weather was not very conducive to a large supply of fertile eggs, and the supply of early chicks will be much less than last season. At this writing, March 25th, we have thirty-six, where we had 150 one year ago. However, a good large incubator is full and working in fine shape, which gives promise of a good hatch. When the three days' test was started every egg in about fifty was found fertile, so we quit, and will not test until the end of the second week. At that time all the poorly fertilized ones will be dead, and everything can be taken out except the good strong chicks. We can see chicks through some egg shells much more clearly than we can through others. If the shell is thick and dark colored the chick will not show up as clear as in a thin, white shelled egg.

Another important thing in running an incubator is to change the position of the eggs. At each turning take the eggs from the center of the tray and put them to the outer edges. Then, if there should be any difference in the temperature in different parts of the incubator we have overcome it, and will have an even hatch. We should also change the position of the trays. We know the outside eggs under old "Biddy" are not quite as warm as those in the center of the nest, but she mixes them up and turns them over so many times that they all hatch pretty even, so for fear of a different temperature in an incubator it is well to work on the same plan.

Experience has taught us that our earliest chicks were the best in every way. We can even raise a larger per cent of them. To be sure, there is much cold wather when we are obliged to keep them in the house if we have no extra warm place prepared for them, but this extra care is what counts, and when the weather comes out nice they are ready to rustle before the tall grass and weeds are grown to hide them. They have all summer to grow and mature, while the later ones are about half grown

BUSINESS CATCHERS.

MAMMOTH WHITE Pekin Ducks exclusively Eggs for hatching, \$1 per 13. Fred Kraenwald, Rear 347 Lowry St. Allegheny, Pa.

PARTRIDGE WYANDOTTES and Single Comb R. f. Reds. Eggs from as good as the best. Partridge, \$3 per setting, Reds, \$1.50 per setting. One third off after June 1st. Otto B. Cannon, Elsberry, Mo.

WHITE FACE BLACK SPANISH exclusively. Bred them 40 years on free range. Eggs will hatch. Free circular. Eggs \$1 per 13. John Bennett, Summit, Ripley Co. Indiana.

SUNNY HILL Poultry Yards. Barred P. Rocks. High class, fine color, fine cockerels. Eggs \$1 per 15; \$1.50 per 30; \$2 per 45 \$4 per 100. James E. Anderson, Montezuma, Ia.

INCUBATOR EGGS—Best strain of Barred P. Rocks; good size, prolific layers; \$2.50 per 100. Marsh & Sons, Fort Dodge, Ia.

YOU'LL NEVER REGRET it if you get a setting of my Barred P. Rock eggs at "live and let live" prices. \$1.50 per 13. They will please you. W. F. Crippe, Nevada, Mo.

LEGHORN EGGS from the greatest laying strain on earth. S. C. Brown, and White Leghorn eggs, 75c per setting, \$4 per 100. W. P. Chamberlain, Newstead, Mo.

WHITE WYANDOTTES. Macomb, Shaver, judge, 1st, 2nd 3d cklis, 95%, 93%, 93%; 1st, 2d 3d pullets, 95%, 95%, 95%; 2d, 3d hen, 95%, 95%; 1st pen, 91%, 1st for 10 best birds in American class, 95%. Dusty strain direct. Three yards headed by cockerels with extra good combs, eyes and lobes and white as snow scoring 98%, 94%, 94. Eggs \$1 per 13. W. E. Thompson, Box 105, Macomb, Ill.

BARRED ROCKS. Large, heavy bone, fine hatching, good layers. Eggs \$1 per 13, 25 per 100. Mrs. Tilla Leach, box X Cherryville, Ill.

BLACK MINORCA EGGS, large fowls, standard bred, \$1.50 per 15; \$2.50 per 30. Minorcas exclusively. Mrs. J. C. Wirtz, Delavan Prairie Farm, Delavan, Wis.

CORNISH I. GAMES. Tempton, Moore and Sharp strains. Eggs \$1 for fifteen. Also fine White Wyandottes and Buff Cochins. Bantams same price. Good birds cheap. I. W. Smith, Kendallville, Ind.

BUFF ORPINGTONS. Birds and eggs for sale. Correspondence solicited. Mrs. E. L. Palmer, Niles, Ill.

BUFF COCHINS for sale. Eggs from our pens of selected birds that will reproduce themselves at \$2 per 15. Satisfaction guaranteed. Krause Bros. cor. 29 and Burleigh St. Milwaukee, Wis.

TWO YARDS EACH of pullet and cockerel mating high scoring Single Comb Brown Leghorns. Eggs \$1 per setting, 30 eggs \$2. Roy Glasgow, Science Teacher, Public high school, Hannibal, Mo.

WHITE WYANDOTTES and S. L. Wyandottes. Eggs \$1 per 15; \$2 per 30; \$4.25 per hundred. Frank Hardwidge, Poneto, Ind.

POULTRY RAISERS send ten cents in stamps and get a Fumigating Nest Egg that will keep the nest free from lice and add to your egg production. Pollard & Cuthway, Bloomington, Ill.

BLACK SPANISH only. First prize winners at Mo. state, Kansas state, Kansas City, and Marshalltown, Ia. show. H. W. Chestnut, Birmingham, Kansas.

BUFF and BARRED Rocks, Buff Leghorns, Black headed Red Game, Pekin ducks, Fancy Pigeons—large fine stock. Get price list at once. Satisfaction guaranteed. The Utz Poultry Farm, Estherville, Ia.

BUFF LEGHORNS. First prize winners at Chicago and Buffalo, N. Y. 1902. Breeders are finer than ever. Stock for sale. Circulars free. Chas. L. Thayer, 7036 Union Ave. Chicago, Ill.

DARK BRAHMAS, the best of all the large varieties, for roasters, capons and winter eggs. Hardy, bear confinement and one of the handsomest fowl bred. Eggs the balance of the season, \$2 per 13, \$3.50 per 20, \$4 per 40. A few choice breeders to spare. N. R. Nye, Leavenworth, Kansas.

BARPED P. ROCK Bradley & Thompson) W. Wyandottes, Duston's Buff Cochins (Hares) fine young Barred P. Rocks for sale. Eggs for hatching in season. Write for prices. J. Dumenil, No. 19 So. 5th st. Keokuk, Iowa.

CHEAPEST, best, 25 leading varieties, Felch, Upson, Bond, Hawkins, Latham, Empire, Abbot, Nagget, Cook, Rowlands, Jackson, and other great English and American strains: Brahmas, Cochins, Langshans, Sherwoods, Orpingtons, Wyandottes, Rocks, Games, Leghorns, Ducks. Catalogue free. W. E. Hicks, Ponchaudla, Ia.

when the cold weather of fall catches them, and there are sure to be some that will sit round in the cold and get stunted.

Our yards are another matter of consideration. There are very few fruit yards that do not receive their proper raking in the spring. We who live in the country can even have a lawn mower and keep them cut close and looking fine all summer. I once thought that such a lot of work that we could never do it, but last year a lawn mower found its way out here and the yard was kept in good shape all summer. So I know it can be done.

So much for our fruit yards, but how about the back ones? They need getting after and cleaning up, too, all round the poultry yards and houses should be raked and scraped down to the earth. Last year two little folks came visiting on the Saturday we had planned to make use of our own boy to help clean yards. But by a little talking and the promise of a picnic lunch in the grove when we were through, all went to work, and the yards were cleaned of their winter's accumulations in good shape.

A cake, some cookies, and a large pitcher of cherry juice was taken to the grove, and we all had the picnic. For myself, the dining room would have been much more comfortable, but the grove was much the finest place for the rest of the company.

Our cherries are a late, sour kind, and in canning them I seal them and pour the juice off, then add water and sugar, and can them. This first juice that was poured off I boil down quite thick, then put sugar into it. It keeps nicely, and a tablespoon or two in a glass of cold water makes such a good summer drink.

A little extra planning in some of these ways saves a whole lot of planning, and the work gets done in better shape, to say nothing of the pleasure of having it cheerfully performed. Children when they work hard in school all the week don't always take to a hard day's work on Saturday, but a little extra cooking or planning will save hours of scolding.

ATTENTION, WHITE LANGSHAN BREEDERS.

Recognizing the good qualities that the White Langshans possess, and knowing that they are deserving of more attention than they are receiving by those who raise them—by this I mean that we do not try to advance them any in the minds of the poultry world. Those who breed the White Langshan could not be induced to ex-

change them for any other breed, and give them up entirely.

All my letters from people who are in the poultry business, either from a fancier's or market standpoint, where they are handling several varieties, and have the White Langshan, always give the White Langshan the top perch. Many of our best Langshan breeders who have been breeding only the blacks are taking up the White Langshans this spring, for they see that if they want to make the most out of the poultry industry they have got to take up the White Langshans.

I have been corresponding with some of our old time Langshan breeders in regard to organizing a White Langshan Club, and they seem to highly favor it, and have agreed to help me, but the help of a few is not sufficient. I want the help of every White Langshan breeder in the United States.

If we get up this club I want us to make it the banner specialty club, and we can do it if we will only all work together. Think over this, and all who favor the organization of such a club will please send me their address on a postal card. Let me see how many names I can get by the time of the next issue of the Investigator.

I will write more concerning the club work in the Investigator from month to month, and will also state the number of names I have received, so you can all see how we are progressing.

This work is getting up this club is not to put any feathers in my cap, only just to add a few more to the good points of the White Langshan.

MRS. JACOB HUGHES, JR.
Rock Port, Mo.

Our Circulation.

Guaranteed circulation for
March 26,014
Guaranteed circulation for
April 36,000

This is to certify that the Poultry Investigator has reached a circulation of 36,000, May 1st, 1902.

L. P. Harris, Editor and Manager.

Subscribed and sworn to before me this 5th day of May, 1902.

J. L. Campbell, Notary Public.
Commission expires Jan. 10, 1905.

Yankton, South Dakota, Jan. 9, 1902.
Ripley Hardware Co., Grafton, Ill.

Gents:—The Whitewashing Machine was a complete success. We gave all our buildings two coats with your machine. It is a great labor saver.

Yours truly,

Walter B. Dean, Sec'y State Board of Agriculture.

BUSINESS CATCHERS

BUFF ROCKS. Eggs from prize winners at 1.50 per 15. Will replace all infertile eggs free. Have 3 pens mated, send for description. We can please you. F. Whaley, Appleton City, Mo.

ENGLISH PHEASANTS. Beautiful, hardy, great game birds. Eggs for sale in season. \$3 per 15, \$9 per 50. Hatched and raised with common hens. Mrs. A. Schluckebier, Beaver Dam, Wis.

EGG machines are my Blue Andalusians and Buff Leghorns. Mortgage lifters and will not shappingly. After mating 1st, eggs \$1 per 15, \$2 per 30. O. P. Nesmith, Blufford, Ill.

BLACK LANGSHANS, winners at Delavan, Wisconsin poultry show. White Wyandottes, Kellar Strain Single Comb White Minorcas, Eggs \$1 for 15. Chas. Beardsley, Darien, Wis.

BUFF Poultry Yards. B. and red S. C. Leghorns Buff P. Rocks, Eggs \$1 per 13. H. Bailey, Port Norris, New Jersey.

BUFF P. Rocks, Buff Leghorns, Cornish and W. I. Games. None better. Eggs \$1 per setting, 2 settings. After mating. J. W. McNeil, K. F. D. No. 1 Springfield, Ohio.

BUFF Wyandottes exclusively. Eggs \$1 per setting. My Wyandottes are from prize winning stock. Cock heading this pen scores by Shauer, Satisfaction Guaranteed. Bert Chapin, Galesville, Wisconsin.

LARGE Black Minorcas Exclusively. Eggs from Chicago prize winners, \$2 per 15, \$3.50 for 30, guaranteed fertile. Dr. W. A. Franklin, Harvey, Ill.

NARRAGANSETT Turkeys, good size and quiet. Eggs 15c each. B. P. Rocks and S. C. W. Leghorns, both good laying strains. Eggs 15c; 40, \$2; 100, \$4. Money order, Salem, Ind. Martha Hoke, Ossage, Mo.

200 SILVER WYANDOTTES, farm raised, scored to 93 by Heimlich. Mammoth Bronze Turkeys, score 96½. Stock and eggs reasonable. Quality good. Mrs. J. D. Lydia, Box 12 Atlanta, Mo.

EGGS from Golden Wyandottes, scoring up to 94, and Mammoth Pekin Ducks, \$1 per setting. W. H. Turkey eggs, \$1.50 per setting. Incubator eggs a specialty. W. G. Young, Cheumung, Ill.

FOR SALE. Eggs from S. C. Brown Leghorns, \$1.25 per 15; breeder for 15 years. Also from Snow White Wyandottes, \$1.50 per 15. Standard bred birds. Henry Walther, Clinton, Ind.

BARRED ROCKS exclusively. Eggs from pens, headed by winners at Red Bad and Nashville Shows, \$1.50 per 15, during May and June, if you mention Investigator. Gravel Creek Poultry Farm, Sparta, Ill.

BUFF P. Rock coxers \$2. Eggs \$1.50 per 15. Double standard Polled Durham bulls ready for use. Reds. Good individuals. Strong polled blood. Prices reasonable. J. K. Myer, Kempton, Ill.

S. C. BLACK MINORCAS, winners at Cleveland and Rochester shows. Eggs \$1.50 per 13, four settings for five dollars. Catalogue free. Jos. Krenn, 114 Beecher st., Syracuse, N. Y.

EGGS FOR SALE from our Chicago prize winners. White Holland Turkey eggs, \$3 per 11; W. P. Rock eggs only \$1 per 15. Frank J. Hicks, Fargo, Ill.

EGGS FOR MATCHING. B. P. Rocks, two pens Congress, one pen Bradley Bros, also Empire W. Rocks. Eggs from either, \$1 per 13. Stock for sale. J. H. Howarth, Fairbury, Ill.

W. WYANDOTTES and W. Plymouth Rocks. Eggs from two grand pens \$1 per 15, \$3 for 50. Dr. Fred Evans, 104 N. Syracuse st. Grand Island, Neb.

BUFF COCHINS. My specialty is fine Buffs. Heavy feathered, rich colored birds fit for any company. A few choice color birds for sale at \$2 each. W. H. Minton, Springfield Kan.

EGGS. Barred P. Rock eggs from the Fairview poultry yards, 3 settings, \$2, per 100, \$3.50. Stock strong and vigorous. Satisfaction guaranteed. Scarle Bros. & Co., 148 S. 27 st. Lincoln, Neb.

FOREST HILL poultry farm. R. C. B. Leghorns exclusively, 10 years standing. Egg producing strain. Can furnish 100 eggs per day. Price \$1 per 15, \$2.50 per 30, \$4.00 per 100. C. H. Brown, Council Grove, Kan.

FOR SALE, eggs from good stock Buff and Barred P. Rock and W. Wyandottes 15 for \$1.50, 100 for \$7. S. C. Buff Orpingtons imported. 3 strains \$2.50 for \$12.00. Jacob Bassinger, Columbianna, Ohio.

R. ISLAND Reds. White and Partridge Wyandottes, Barred P. Rocks, B. P. Cochins, B. Cochins Bantams, geese, turkeys, duck, all winners. Illustrated circulars. Highland Poultry Farm, Des Moines, Iowa, box 700.

BUSINESS CATCHERS.

SILVER LAYED Wyandottes, exclusively strong, healthy stock, bred for show and best egg production. They are winners, eggs will hatch, 100 for 15, W. O. Johnson, Stromsburg, Neb.

FOR SALE. Two 200 egg size Sure Hatch Incubators. In first class condition, will sell very cheap, White Rock Farm, Wap 110, Iowa.

COMB'S SINGLE Comb Brown Leghorns Regular egg machines. Stock bred for best eastern breeders. Eggs for sale 1.00 for 15, W. E. Combs, Jullian, Neb.

HATTIE BYFIELD, McCook, Neb. Eggs for hatching from prize winning Light Brahma and White Wyandotte chickens. White Holland Turkeys and Mammoth Pekin ducks, 15 hen eggs \$2.00, 9 turkey eggs \$1.50, 11 duck \$1.00. Duck eggs \$6.00 per 100. A few nice drakes to sell.

THE INTERNATIONAL POULTRY EXCHANGE wants every person who has good, medium priced thoroughbred poultry for sale, to send description and prices with loc. to answer inquiries; also anyone wishes to buy any breed of thoroughbred poultry to send for prices, we will fill your orders near your home. C. E. Dunlap, Supt., Liberal, Kansas; U. S. A.

EGGS for sale. White Crested Black 250 per 15. Buff Rocks, Buff Leghorns, Light Brahmas, eggs 1 25 per 15. Stock for sale. Write your wants. C. E. Olson, Colon, Neb.

WHITE PLYMOUTH ROCKS. Farm raised. Eggs 75 cents per 15. Strawberry plants 60 cents per 100. Loudon. Red Raspberry plants, 50 cents per 12. Mrs. Lydia Becbe, Coryville, Pa.

EGGS. Barred Rocks (Thompson strain) White Rocks (Emire) White Wyandotte for price) Silver Laced Wyandotte (Goette) Light Brahma (Veich) 11 for 1 25. Also a few fine cockerels, L. M. Whitaker, 385 east Robie, St. Paul, Minn.

BLACK LANGSHIANS. Partridge Cochins Silver Laced Wyandottes, Rose Comb Leghorns, Leghorns, Stock bred for sale. Prices very reasonable for quality of stock if you want something good write at once. C. F. Kurtz, Lawrence, Neb. Have fine English Berkshire hogs.

EGGS. Barred Plymouth Rock birds scoring 90 to 92 1/2. Eggs \$1.50 per 15; 2 50 per 30. Birds scoring 88 to 92, \$1.00 per 15; 1 50 per 30, 4.00 per 100. J. F. Loun & Son, North English, Iowa. R. P. D. 2.

BELGIAN HARES. 25 young does bred to fine bucks scoring 94 1/2 at \$3.00 each, or 2 does and a buck for \$7.00. All first-class stock. J. S. Markel, Wabou, Neb.

PARTRIDGE COCHIN ONLY. A few choice heavily feathered pullets for sale. Eggs \$1.50 per 15. Pen headed by 21 ckl Nebr, state show, 1902. Satisfaction guaranteed. H. E. Howman, Lawrence, Neb.

SILVER SPANGLED HAMBURG. Most beautiful fowl and great layers. Cockerels for sale. Eggs \$1.25 for 15; \$2.25 for 30; \$3.00 for 45. J. E. Haynes, Ames, Monroe Co. Ill.

WHITE WYANDOTTES. My stock is first class and my prices right. I have spared neither time or expense to get the best stock. Scores from 92 to 95 1/2. Eggs for sale \$1.50 per 15, fair hatch guaranteed. Circular free. E. E. Bowers, Bradshaw, Neb.

EGGS from Single Comb White, Brown, Buff Black, Dominique, silver Duckwing and Rose Comb White, Buff and Brown Leghorns. Price 1st free, Sylvester Shirley, Port Clinton, Ohio.

SUNNY SLOPE FRUIT AND POULTRY FARM. C. F. Austin, Dearing, Kan. White Rock Specialist. Eggs. Frank Heck and John Hughes stralus. 15 cockerels for sale Strawberry plants best varieties. Square treatment.

WHITE WYANDOTTES, cockerels scoring to 94 1/2. Mammoth Bronze Turkeys scoring to 90 1/2; sired by a Tom weighing 40 lbs and from hens weighing to 25 lbs. Prices reasonable. W. H. Lake, Hampton, Neb.

PIGEON BUCK complete. Illustrating, describing all varieties, arranging to breed, feeding, caring for, 5 cents, 1,000 copies for sale. Prices 5 cts. Wm. A. Bartlett & Co. Box 27, Jacksonville, Ill.

CHEAP to close out. As fine a lot of birds as you ever saw. From Wyandottes, Barred Plymouth Rocks and Buff Cock Bantams, H. Gregory, Wayne, Neb.

Some Requisites for Raising Turkeys.

In some respect the turkey is of all the denizens of the poultry yard most desirable. It designed for local market, its large size and the almost invariable advance of at least two or three cents per pound over the price of chickens are in themselves sufficient argument in its favor for profit. The supply is not so general, hence prices are more firm. While if raised for breeding purposes, the higher prices realized both from birds and eggs are still sufficient incentives.

Yet there are certain conditions necessary which render not every farm a desirable location for an embryo turkey plant. Some who can raise chickens most successfully find in their more noble relative many unlooked for obstacles. On the other hand, there are certain difficulties in turkey raising that have been over-estimated; and the poultry grower who is wise will certainly consider the question before limiting himself to the smaller birds.

Turkeys require a greater range than chickens, and those who have only a limited range will most likely be disappointed in any attempt at their growth. The wild blood has not yet seemingly been eliminated, and non-restraint in the meadows and pastures is their delight. There they find the insect life, which is their standard bill of fare. And it may be emphasized that one of the greatest advantages in turkey raising is the large amount of grasshoppers and other troublesome insects they devour. On a moderate sized farm a flock of from thirty to fifty turkeys will keep in check these troublesome pests, though neighboring lands on all sides not similarly fortified are stripped of living green.

Turkeys, too, have the troublesome habit of "going visiting," and sometimes they are not inclined to return. It is a curious custom, doubtless induced through the love of companionship; for certainly in some instances the home abandoned has seemingly as good inducements as the adopted one. Nevertheless, it is a fact that when two flocks once get together it is very hard to get them separated permanently.

This is apt to lead to hardness between neighbors. Perhaps both are strictly honest. One has to endure the inroads of the doubled flock in orchard or garden, and of course this is unpleasant to the other as well; for though he may drive his flock home repeatedly, they soon find their way back. Sometimes, too, both parties are not strictly conscientious in the matter. It is an easy matter to feed a little

heavy and induce a flock of thrifty, almost grown birds to remain. If of the same breed they will so nearly resemble their companions that it is difficult to separate them. The owner calls, the trespasser upon keeps "his number"; and though his neighbor may be fully convinced in his own mind that this number has swelled materially since the combining of the two flocks, he has no recourse but to accept the leaveings or resort to a quarrel unpleasant if not disgraceful. More than one lasting feud has arisen from just such proceedings; and those surrounded by neighbors already engaged in turkey raising will do well to steer clear of it.

Likewise, those near a village will find their number of friends greater if this branch of the poultry department is not touched upon. The birds enjoy long walks; more, they enjoy cabbage and all similar garden dainties; and unless they have a wide range the forbidden ground will be appropriated—much to the disgust of the owner.

True, turkeys raised by a hen are much less inclined to rove. Yet they seldom thrive as well as when given their freedom unrestrained. It has been claimed that the wooden hen and brooder will satisfactorily settle this difficulty; and it would seem that the latter would be a decided improvement over the old hen, who is persistently fussing and tiring the tender little things out by running around hunting bugs, when they want her to cover them. It is also said that they may be enclosed by poultry netting as well as

A Partridge Cochin ckl owned by Wm. Postal, Aurora, Neb. The pullets from this mating are owned by W. F. Holcomb, Clay Center, Neb., as well as other prize winners.

BUSINESS CATCHERS

FOR SALE. Fantail pigeons, all colors. Write your wants. Robert Hoff, Wayne, Neb.

A. STRANSKY, Chilton, Wis., breeder of Black Langshans, Buff and W. P. Rocks, W. Golden and Buff Wyandottes, S. C. Brown and Buff Leghorns, W. and B. Minorcas, Houdans. Eggs, 1.50 per dozen. B. Turkey eggs, 1.50 per 9. Pekin and Rouen ducks 1.50 per 11. Red Tumblers, 1.00 per pair.

FOR SALE. Light Brahmas, 1 K. Felch strain none better. Single birds or breeding pens. Eggs from stock birds, scoring 122.99, by Kuss, sell, 1.50 per fifteen. Albert von Bergen, Petersburg, Neb.

PINE BROOK Poultry Farm. Barred Rocks, winners at the big Ft. Wayne show; first chl, first, second and third pullets; first pen. W. Wyandottes, Buff Rocks 1. R. Ducks, eggs 2.00 per setting. W. P. Smalley, Napoleon, Ohio.

BUFF LEGHORNS. Eggs 1.00 per setting. Super 100. Grandsons of first chl. and hen. New York 1st, head breeding pens. Females. Arnold strain. Loring N. Kirk, 525 12th st. Newcastle, Ind.

HOUDANS exclusively. Winners at Pen-American, Cleveland, Hartford, Detroit, Chicago, etc., or wherever shown. Eggs only 2.00 per 15 straight. Stock reasonable. My birds will not disappoint in breeding pen or show room. S. D. Lance, Troy, Ohio.

HOMERS, Imported and domestic. Strong flyers. Rants, Pouters. Prices reasonable. No room for poultry. Must sell. Black, Red, Red Pyle, Irish Gray Games, W. Rocks. C. A. Newton, Newville, Ill.

WHITE PLYMOUTH ROCKS exclusively. Eggs fifteen for 2.50, from my best pens. Pure white, good yellow legs, low combs. You are sure of prize winners. Pishel stock. Only a few settings to spare. M. E. Cunningham, Ada, Ohio.

R. C. W. LEGHORNS and W. Guineas. Eggs 1.50 sixteen, or 6.00 per hundred. Mrs. Winnie Chambers, Onaga, Kansas.

DO YOU WANT winners? If so, buy eggs of A. Z. Copeland, Potomac, Ill., W. W. Plymouth Rock, G. S. Bantam and W. Guinea. 1.25 per fifteen 2.25 per 30. A. Z. Copeland.

BUFF ORPINGTONS. Eggs from English standards best select stock. Indian Runner ducks. There are no better. Finest values guaranteed. L. E. Coryell, Monroe, Wisconsin. R. F. D. 1.

GOOSE BREEDERS send for my booklet 2008 raisin. Embuden and Toulouse Geese. Imported stock. Circular Free. H. S. Price, Specialty Breeder of geese. Pres. National Toulouse Goose Club, Waukegan, Ill.

R. J. REDS. Choice eggs from Pan-American, New York and Boston winners. 2.00 per setting. 5.00 for 40. Standard and standard John Crowther, sec. R. I. Red Club, Fall River, Mass.

SHERWOOD'S Buff and Barred Rock eggs 1.75 for fifteen, 3.00 for thirty. My catalogue tells all about them. F. B. Ritchie, Warrensburg, Illinois.

BARRED P. ROCKS. Conger strain, farm raised, large size and fine layers. Eggs 1.00 per fifteen. Fine Bronze Turkey eggs, 3.00 for 12. Mrs. C. C. White, Paris, Mo.

P. WYANDOTTES. 12.35 a pair. Worcester Boston, New York; breed only choice hens; 4 years a breeder; raise prize stock only. C. O. Loring, Dedham, Mass. One-half express paid to western points.

MONEY MAKERS are the four new kinds: Pearl Wyandottes, beautiful plumage; Silver Penciled or Dark Brahma Wyandottes, beautiful soft gray; Violet Wyandottes, bunch of violets; Sicily Wyandottes lay at 4 months; 8 first prizes, and 3, 4, 5, 6, prizes, at great Boston show 1902. Half express paid to western points. C. O. Loring, Dedham, Mass.

ONE DOLLAR buys fifteen eggs from extra fine stock of Buff and Barred Plymouth Rock, W. Wyandottes, and R. I. Red Leghorns. C. R. Norman, Stromsburg, Neb.

FOR SALE. Three trios of W. Plymouth Rock high scoring prize winning birds scoring from 92 to 95 points, are bred for their great egg production as well as show qualities. Each trio consists of 3 pullets and one old. Price per trio, 5.00. Eggs 1.00 per fifteen. Mrs. D. Beerer, Rose Cottage Farm, Box 465, Butler, Indiana.

P. NEWCOMB, of Cedar Rapids, Iowa, has the largest loft of fancy pigeons in the west to select from, having all the leading colors in English and Bohemian Pouters, Fantails, Archangels, Speedy Homers, English carriers, Tumblers, Jacobins, Swallows, Magpies, White Bruner Pouters and Turbits for sale.

1 PROF. E. L. C. MORSE, South Chicago.
2 J. L. DRAPER, Commercial Poultry, Chicago.
3 F. B. F. RHODES, South Chicago.
4 WILLIAM PLAEHN, Chicago.
5 F. L. KIMMEY, Secretary, Morgan Park, Ill.
6 E. B. EDDY, President, U. S. Ex. Co., Chicago.
7 G. G. BATES, Treasurer, Am. Poultry Journal, Chicago.
8 E. J. W. DIETZ, Vice Pres., Downers Grove, Ill.
9 H. N. NORTON, Oak Park, Ill.
10 J. C. PRATT, Nat'l Fanciers Journal, Chicago.
11 GRANT M. CURTIS, Reliable Poultry Journal, Quincy, Ill.
12 FRANK B. WHITE, Pres. Frank B. White Company, Chicago.

Twelve Directors Responsible for Chicago Poultry Show-1903.

chickens. But having seen them fly to the top of a moderate sized barn on one or two occasions, it seems a little discouraging to think of shutting them into a roofless enclosure.

Some are deterred from undertaking the business in the belief that turkeys are difficult to raise. Barring the first few weeks of their existence, when they are more tender than chicks, this is not the case; a half-grown turkey rarely fails to reach maturity unless some accident befalls it. Grapes are, of course, to be expected as with chickens, and treated in the same way. But aside from this, the young ones

when nicely feathered out are as hardy as chicks. In their earlier days the secret of health seems to be freedom from wet, draggled plumage. This almost invariably leads to sickness and often to death. And just here is where the hen, if allowed to have her own way, fail. I believe a good incubator and brooder would many times out-distance her in raising turkeys. If the little ones are kept from the grass during the rain or while wet with dew, much trouble will be saved in the end.

BESSIE L. PUTNAM.

Poultry Investigator

Is published the first of each month at

Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.25 per inch each insertion. One inch one year \$12.00. These are our only rates for advertising and will be strictly adhered to. We treat all alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of **POULTRY INVESTIGATOR** is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in **THE POULTRY INVESTIGATOR**.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

COOPS.

As we do not all own brooders, it is time to plan and build coops, that they may be in readiness when needed. I usually make my own, as I am pretty handy (for a woman) with a saw and hammer. At any rate I can make a coop that will turn water, rats and skunks.

Last year when the carpenters were building our house I gathered up all the scraps of rustic, ceiling and flooring; also some pieces of one by four,

left from the new picket fence. With these I made some coops in this way: For the frame I used the picket stuff, sawing four pieces each three feet in length, two pieces two feet long, two inches long. For the frame of the front of the coop I used the two 24-25 inches, two 17 inches and two 24 inch pieces and two of the 3-foot ones, laying them in a level place in this way:

Then I drove the eight penny nails into each corner, taking care to have the corners square.

Next I used the two 17-inch and the other two 3-foot pieces in the same way for the back, after which I nailed a 2-foot piece from the bottom of the back to the bottom of the front and the 25-inch ones at the top of each end, and the frame was done.

As some of the scraps of siding were quite short, I nailed them up and down at the back and larger ones at the ends, sawing them to fit the slope at the top.

Six penny nails are large enough for this purpose.

Across the top of the front I nailed a 6-inch board, and used 1-inch board below that for the door.

A small block was nailed on the frame at each end to hold the door in place and a button fastened it at the top. The cover was made of boards laid double, so there would be no leaks. The floor was scraps of old boards, sawed a little longer than the coop and fastened together by nailing cleats across the under side, but not nailed to the coop.

Then when the chicks were out on nice days, the coops were turned up, the floor cleaned and allowed to sun and dry. The floor should not extend back of the coop far enough to catch the water from the roof or it will run into the coop.

I suppose all these details look unnecessary to the men folks, but perhaps among the readers of the Investigator there may be some other women who have to make their own coops when the men folks are too busy. These measurements make large coops, but as I always give a good many chicks to each hen and keep them housed in bad weather, they need lots of room.

It is well to have a door of screen or lath to use during the day time, or warm nights. The 3-foot strips should be on the outside of the coop at both the front and back, to nail the siding to. Boxes that have good, tight bottoms may be turned up side down and doors cut in one end and used for coops, but should always have tight floors. This keeps rats and skunks from digging under and keeps the

BUSINESS CATCHERS

FOR EXCHANGE. A 60-egg Sure Hatch Incubator, for Exhibition B. B. R. Games. Must be first class stock. A. J. Williams. Clay Center, Nebr.

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert R. Sweet, 364 Mosley St., Elgin, Ill.

J. W. WHITNEY, Chatham, Ohio. Poultry Judge. All Varieties. Private scoring and expert mating a specialty

FREE, GAMES, Eggs \$1.00 per 13. Circular, Heathwoods, Irish and Mexican Grays, Tornadoes, Irish Blks, Reds, Cornish Indians \$2.00. Fowls all times. C. D. Smith, Fort Plain, N. Y.

DARK BRAHMAS exclusively. A few standard bred pullets for sale for 1.50 and eggs 1.50 per setting. Alice Trenary, Palmyra, Nebraska.

BARRED PLYMOUTH Rocks. No stock for sale. Eggs \$5.00 per 100. \$1.00 per 13. My stock first class and have won 15 shows. room. J. P. Schroeder, Clay Center, Neb.

ALSEN Poultry yards has Hamburgs, Buff and Brown Leghorns, Buff Rocks, White Wyandottes, Polish and Andalusian. Won 26 premiums out of 27 entries at South Dakota state fair, eggs for hatching \$1.00 and up. Circulars free. H. P. Larson, Beresford, S. D.

LIGHT BRAHMAS. I have a few good hens and pullets for sale cheap. Mrs. Alice Allen, Clay Center, Nebraska.

EGGS FOR SALE from Rose and Single Comb White Leghorns, White Rocks and Light Brahmas. \$1.50 per setting of 15 eggs. Write wants. John H. Rownd, Downs, Kansas.

ROSE COMB White and Rose Comb Brown Leghorns, White and Silver Laced Wyandottes, also Rouen Ducks. Eggs in season. 15, \$1; 30, \$2. Duck eggs \$1 per 11. J. W. Cook, Poneto, Ind.

MEADOW BROOK farm has for sale Pekin Ducks, Light Brahma and P. Plymouth Rock Cockerels at \$1 each, Toulouse Ganders, and M. Bronze Turkeys at \$3 each. Pol- and China hogs a matter of correspondence J. D. Grimes, Channah, Neb.

WHITE PLYMOUTH ROCKS a specialty. 1 yr old hens and this year pullets and cockerels for sale. Old stock score 92 points and up to 95%. Write for prices, Geo. N. Wood, Weldon, Ia.

500 BUFF, BARRED, White Plymouth Rocks, Light Brahmas, Fine cockerels, hens and pullets \$2 to \$3 each. Eggs 15, \$1.00, 100, \$6.00. Milton Brown box 94, Middleboro, Mass.

WHITE H. TURKEYS. 1 W. Rock chick, score 94% by Russell, for sale. Also eggs from D. Brahmas Brown Leghorn B. Pekin s. Expert Judge. P. M. Cooley Milton, Ia.

WHITE WYANDOTTES. Duston and Norval strains direct. Score 92 to 95 by Judge Rhodes. Quality and fair treatment guaranteed. Best winter layers. Eggs 200 per 15. Belgian hares. Chas. C. Wilson, Holdrege, Nebraska.

O. K. S. L. WYANDOTTES are all right Eggs \$1.00 per 15 or \$4.00 per 100. W. T. Canaday, Dover, Lee county, Iowa.

BARRED PLYMOUTH ROCKS exclusively Eggs \$1.00 for 100, \$1.00 for 15. Adam A. Weir, Clay Center, Nebr.

EGGS from standard bred White and S. L. Wyandottes and Light Brahmas, \$1.50 per setting. C. Feldman, 2035 N. Main st., Fremont, Neb.

WHITE WYANDOTTES, pure white and as good as the best. Eggs, \$1.50 per 15, \$2.50 for 50. Write for wants. A. B. Murray, Clay Center, Nebr.

CORNISH INDIANS a specialty. Winners wherever shown. Scored by Russell, Hews, Emery and Wale. Pronounce first class birds. Eggs in season \$2.00 for 15. J. L. Hanson, Sarcosie, Mo.

MAMMOTH BRONZE turkey and white Pekin duck. Large fine specimens for sale at reasonable prices. Our stock is as good as money could procure. Mrs. E. I. Mathews, Morning Sun, Iowa.

R. C. B. LEGHORNS. A few good chicks left. Eggs 100 per 15. Also for sale, White Wyandottes. Eggs 100 per 15. C. B. Courter, Ashley, Ohio.

Carl Dare, Oseola, Iowa. Mr. Dare has been a breeder of exhibition fowls for years, and comes well recommended to us as a poultry judge and is ready to judge shows or do private scoring. Parties wanting the services of an expert will do well to correspond with Mr. Dare.

chicks dry during rainy weather.

When the floors are separate they may be scalded and cleaned easily and there is less danger of vermine finding a hiding place. JESSIE L.

POULTRY ASIDE FROM A SOURCE OF PROFIT.

(By Perwas.)

Aside from their value as profit-bringers, let us consider poultry in its other phases. First, we look over the country and see many who are not breeding fowls for the money alone. They are not going into the business for a fortune, but instead they breed them as a source of recreation from the dull routine of work of other industries, and as a way to take their minds from the cares of business and life, to something that is a different work and study. For instance, you are running a store and perhaps have some spare time in which you desire something that will allow the thought of the cares of the store to pass from your mind at present. You can then look to poultry for a different study. It is a rest to come home and care for some fowls. It is a rest to read a poultry journal after reading some of the sensational stories and articles in the modern daily papers. It is a rest after a hustling, busy day, to go to the poultry yard and watch the beauties as they partake of their evening meal. It is something helpful to spend a few hours out of doors in the fresh air after a day's confinement in the store or office. And it is a joy to anyone to possess a pen

of beauties such as we may find in the yards of any high class breeder. Of course there is more joy and rest to an office clerk or merchant to care for such a flock in the summer, yet there is pleasure in caring for them in winter.

Also poultry is educational. It allows study and plenty of it. In poultry there can be as deep thinking and as much careful research as in most anything. There are many different opinions at present regarding feed, houses, hatching, mating, etc. The differences are not great, yet they are not all exactly the same. This shows that there is a chance for some deep thought and study on the subject yet. Men have been studying and mating and improving and trying to get perfect birds. A perfect bird must score 100 points according to the Standard of Perfection. No bird has ever reached that point yet. To anyone who does not know much about poultry it may seem strange that no bird has ever been produced that would score 100 points. Yet while there are some that come very near it, none has reached it and probably never will.

This is where the greatest part of the work is when profit is not considered. It is in producing birds near to perfection as possible. There is pleasure, joy and hope in watching the work from the time that you place the eggs in the incubator or under the hen, until the eggs have hatched and the birds grown to maturity. There is no other source of pleasure and way of recreation to a business man or office clerk who cannot leave home nor spend a large amount of money for that, that will compare with poultry. Of course you can raise pigeons and other pet animals, but yet they do not compare with poultry. It does not cost much to start with poultry. And even if you don't care for profit, they will pay enough to allow you to make many experiments and even then will more than pay for their feed and the time given them.

Poultry is all right for either profit or pleasure, or both.

Notice to Advertisers.

After this all matter relating to advertising, such as new ads, changes, etc., must be in the POULTRY INVESTIGATOR office as soon as the 15th of the month preceding the date of issue to insure insertion as we must hereafter print 30,000 copies to meet our circulation each month and we must have a little time to "make up" and print the paper. All matter received after the 15th will consequently lay over until the following month.

Do you keep Bees?

THEN learn how to make them pay and send for our large illustrated free catalog, showing the best up-to-date hives and other articles used by progressive bee keepers.

Jos E Nyswander,

Des Moines, Iowa.

Incubators.

Built on entirely new principles and the only machine made that will allow the chicks when hatching to come out of the machine in the pure, fresh outside air at their own will, just exactly the same as they do when hatching under the hen. Guaranteed to imitate nature closer and to hatch equal to any machine on the market. For further particulars address with stamp.

L. P. MEISTER, Troy, Mo.

Winning White Wyandottes.

WE WIN East and West. At the great Chicago Show, 1902 in hot competition, in a class of 64 White Wyandotte cockerels, the finest ever seen, our

birds were given two prizes out of five, winning the 3d and 5th prizes. We have 4 pens of high scoring females headed by prize birds. Eggs \$2 per 13.

GEORGE GETTY, Syracuse, Kan.

PLEASANT HILL POULTRY FARM.

Barred Plymouth Rock. Rose Comb Brown Leghorn.

Having disposed of all my surplus stock and mated up my pens, am prepared to book orders for eggs. Write at once for prices.

J. H. TROUGH,
Minden, - - - Nebr.

Heavily Feathered, Highly Pencilled PARTRIDGE COCHINS.

Eggs \$2.00 per 15. Satisfaction guaranteed. Write for particulars.

C. J. Beedle. Holdrege, Neb.

BUSINESS CATCHERS

S. S. HAMBURG eggs 90c. per setting. From fine birds that will stand the test in any show room. Guarantee good hatch or money refunded. Geo. Hahnenberg, Seymour, Ind.

BARRIED P. R. eggs, famous Ringlet strain. Stock direct from Thompson. R. C. B. Leghorn eggs, Schreiber's strains. Birds scoring 92 to 94 by Heimlich. One setting, 200, 2 settings 3.50. Pope & Schwartz, Hillsboro, Ill.

BARRIED ROCKS exclusively. Eggs from pen of fine birds hard to beat, 1.50 per setting. Mrs. Alice Jackson, Champaign, Ill. R. F. D.

KENTUCKY PIT GAMES, Far downs and Ky. Dominiques. Eggs 2.00 per 15, 3.50 for 30. Cocks 5.00, hens 1.50. Ben Lucas, Georgetown, Ky.

W. P. ROCK Eggs from the very best strain in the country. Our birds equal to ancestors. Eggs 1.50 for 15. Write wants and ask for Novel Egg Folder free. Geo. F. Stanton & Sons, Hennepin, Ill. Box F

SIXPENS of W. Rocks. Most noted strain on earth. Our birds score from 91 to 96 by reliable judges. Eggs this season only 1.50 per 15. Our elegant egg folder free. Geo. F. Stanton & Sons, Box F Hennepin, Ill.

NO TIME OR MONEY has been spared in selecting our stock of Light Brahmas, Pekin Ducks and Poland China wine. Eggs 1.50 per setting 100. Harry W. Garman, Parkville, St. Jo, Mo. Mich.

ORDER AT ONCE. Eggs from my 94, to 96 point S.C. W. Leghorns and Black Langshans at 1.25 per setting, 1st premium wherever shown. Henry Noth, Davenport, Ia.

BARRIED ROCKS. 3d bred 1st cock, 3d chl, 1st and 3d pullets, and 1st pen at Kankakee, 1902. Eggs of such breeding 2.00 per 15. Reeve Holbie, Kankakee, Ill.

BUFF ORPINGTONS. Large, healthy, vigorous birds. Clean sweep racine show. Eggs 3.00 per setting. R. C. Brown and S. C. W. Leghorn eggs 1.50 per setting. Louis Mogenenson, Racine, Wis.

FRANKS' BARRIED ROCKS. First pen headed by best chl at Macomb. Score 92½. 2d pen by chl score 91. Shaner, judge. Eggs 1.50 by 100. F. J. Chambers, Blountsville, Ill.

BUFF ORPINGTONS are the coming general purpose fowl. Cocks 10 to 12 lbs, hens 10 to 12 lbs. Eggs in season, 1.50 per 15; 3.00 per 30. Levi N. Schulte, Oregon, Missouri.

S. L. WYANDOTTES. Sixteen years a breeder. Birds shipped on approval. Fine in laying; laced wing bar. My strains will prize in the hands of my customers. Eggs 1.50 per 15. F. D. Blair, Georgetown, Ohio.

SNOW WHITE POLLY FARM. S. C. W. Leghorns and W. P. Rocks. Eggs from pens headed by our prize winners at Illinois state fair, \$2.50 per 15, 7.00 per 100. W. S. McGraw, Springfield, Ill. R. C. B.

EGGS \$2 per 15 selected W. Wyandottes, scoring 91 to 94, mated with males scoring 91 to 93. Shellabarger. Incubator eggs \$4 per 100. John Old, Woodbine, Ill.

MAMMOTH W. B. TURKEY eggs, \$2 for for 10. From prize birds at Chicago. S. C. Buff and Brown Leghorns, Barred Rocks, Thompson's Collie puppies, White Guineas. W. C. Jackson, Route 3, South Bend, Ind.

BUFF ROCKS exclusively. Eggs from two fine pens mated for the season's brooding, at \$1 for 15 or 1.75 for 30. All stock farm raised. B. E. Woods, Bluford, Ill.

WHITE P. ROCK eggs 1.00 for 15; high scoring hens, headed by a 94 point cockerel. Satisfaction guaranteed. J. H. Piper, Whitehall, Illinois.

BUFF ROCKS exclusively. Eggs, 15 for one dollar. Breeding stock good weight and color. Above price new for the quality. A. A. Simons, Hamburg, Iowa.

SILVER WYANDOTTES, first and third prize pen scoring 187½ and 185. Eggs from this famous stock, \$2 per fifteen. Incubator lots from stock, 6.00 per hundred. Martin Bender, Winona, Minn.

PEA COMB P. ROCKS, Barred, Buff, White. Also Rose comb White Face Black Spanish and Blue and Black Wyandottes. O. G. Vanhook, Brazil, Ind.

MAHOMET, POULTRY YARDS. Barred P. Rocks exclusively. E. B. Thompson strain. Eggs \$2 per 15; \$3.50 per 30. Eggs shipped in Eric baskets. Safe arrival guaranteed. Frank Purnell, Mahomet, Ill.

PREMIUM STOCK Poultry Yard. Barred, Buff and White Rocks. S. C. W. and Brown Leghorns and Black Minorcas. Fertile eggs 15 for 11. Stock for sale. A. Starginger, Carbondale, Ill.

Gold Medal Diploma awarded the Cyphers Incu ator Co. on its incubator and brooder at the Pan American Exposition October, 1901.

WINTER EGGS AND HOW I GET THEM.

Editor Poultry Investigator:

At the present time 80 per cent of my pullets are laying and have been all through the last four weeks of cold weather, and still shell out the golden egg so much prized at this time of the year. As there is not one farmer, I will say out of twenty, that his hens average one dozen eggs each through the months of December, January and February, while with the proper feed and better care the same hens would average twenty eggs each for each of the three months, and with very little extra labor. Most farmers expect the chickens to rustle their own living and roost wherever they can, and of course he doesn't expect many eggs (and well he may), for the best of hens could not lay under these conditions.

Every man or woman has his or her fancy for a certain breed for winter layers. My choice is B. P. Rocks. I do not think they are the only breed, but I do believe, with what experience I have had with different breeds, they are among the best and my love for old Biddy extends back to when I was a boy of twelve years (now a man of thirty-three years), but I have lots to learn yet. Something new comes up every day. Now as to my feeding for eggs. At night I scatter oats or wheat in the scratching shed so they will have something to do when they leave the roost. I cut alfalfa hay in length one-fourth of an inch long, pour boiling

water over it, let stand over night, pour off water, mix in bran and middlings. Feed warm every other day. I mix in with this fresh lean meat, cut fine, allowing one pound for each 12 fowls. At night I feed whole corn warm, and often parch it. My main idea is to keep the hens busy all the time. Several times during the day I throw a little wheat or oats in the leaves to give them something to do, for a busy hen is sure to lay, while one that is lazy (caused by being too fat) will seldom lay. I believe better success can be obtained by only having one breed of chickens on each farm, and look after that one breed carefully and never try to overcome but one fault at one mating. It is slow, but I believe surer. This is my first letter to the Investigator and if it doesn't find the waste basket before it does the typesetter, I may write again.

S. E. STOUGHTON.

Burton, Kan.e

Through an error one of the series of poultry articles by Dr. B. F. Van Nuys of Tiffin, Ohio, was printed in our columns of last month. This article was one of a series written by the Doctor for Farm papers and had been submitted to the editor personally with no intention of publication in the Investigator. We regret the circumstances but are pleased to state that later on the Doctor has agreed to contribute a series of articles for our readers.

Light Brahmās, owned by Chas. M. Palmer, Nassua, N. Y.

HOME-MADE BROODERS.

Many people buy an incubator, but make a brooder themselves. They realize that a home-made incubator would not pay, so they prefer to buy one, but when it comes to the brooder, they try to make one that will serve and be much cheaper than to buy one of a manufacturer. It will be cheaper. You can make a sort of a brooder for almost nothing, but it will not be of much value after you do get it. Now, in the first place, to be of practical value a brooder must be such that the chicks will live and thrive in it. All home-made brooders will not do this. Very few of them do it as well as a good one made by some reliable manufacturer. Of course, you may make just as good a brooder as any manufacturer if you put enough work and proper material in it. But in that case it will cost as much or even more than a ready-made one would, unless your time is not occupied with something else and you do all the work yourself.

A brooder is as important to be well made as is an incubator. An incubator must be well made and run properly or it will not hatch the chicks. So a brooder must be the same or it will not raise the chicks. You may say that it is easy enough to raise the chicks after they are hatched, but that it is hard to hatch them. You may be able to raise some without much care, but most likely they will not be strong when developed and never get full size nor be worth half as much as those that were well taken care of. Such you would be able to raise in a worthless brooder.

In a good brooder you would stand

more chances of raising as good birds as was possible. In a brooder that would be kept at an even temperature, admit plenty of sunlight and air, it would be possible to raise valuable birds, providing other necessities were supplied, such as proper feed, water and grit, together with cleanliness, etc. A good many home-made brooders are never as easily managed as a reliable factory-made one. If you have plenty of time to spare and a good plan it may pay you to make a brooder. But if you have not got plenty of time and no good plan, do not try to make a brooder unless you merely want to experiment. A properly constructed home-made brooder will do well enough, but guaranteed brooders can be purchased of reliable manufacturers so cheap that it does not pay to trust to untried ones. A good brooder is necessary. You need one if you intend to raise any amount of chicks. Hens will take care of a few chicks, and if you are raising only a very few, perhaps the hens will be all that you need. If you are raising more than a few, then a good, trusty incubator and a capable brooder are necessary.

Percy W. Shepard.)

TO BREAK HENS OF SETTING.

There is no excuse for the cruelty practiced by some people to break a hen of setting. Simply place her in a good coop and feed and water her well for three days and nights, and not one in a hundred will go back to the nest.

They should be turned out in the morning without their breakfast and they will go right to work. JESSIE L.

Eggs.

Buff Wyandottes, B.
Cochin Bantams. . .

Yards contain Boston, Kansas City and Topeka prize winners and high scoring birds. Prices reasonable.

W. J. GOW, Norfolk, Neb.

White Wyandottes.

First and second premiums at Minneapolis, poultry show Dec. 19 to 21. Eggs from birds scoring 93 to 95½ \$1.00 per setting. Special price on large lots for next 30 days.

W. H. Swartz, Minneapolis, Kansas.

High Hill . . .

Poultry Yards

Bronze Turkeys and Buff Rocks.

Turkeys are bred from prize winners and are winners, making almost clean sweep wherever shown. Young Tombs \$3 each; Pullets, \$2.50 to \$3.00 each. My Rocks are noted for shape and orange colored legs. 90 point Cockerels, \$2.50 each; 91 to 92½ point Cockerels \$3.00; each Pullet not scored, \$1.00 each.

Mrs. Wm. Rogers, Box 74, Sleda, Mo.

CROWELL'S Buff Orpingtons.

Win at St. Paul Show. Cockerels 1st and 2d, pullets 1st, 2d, 3d, 4th and 5. Hens 1st, and 2d. 1st Pen. Eggs, \$3.00 per 15, \$5.00 per 30. Two trios Indian Runner Ducks at \$5.00 per trio. Eggs \$2.00 per 15. Satisfaction guaranteed.

F. A. Crowell, Granger, Minn.

Silver Lace Wyandottes White Wyandottes : : :

Buff Leghorns
Pekin Ducks...

All first class stock. Eggs for sale.

MRS. W. E. TIBBITS,
Imperial, Neb.

Barred Rock Eggs, —For Hatching.—

Fertile eggs and big healthy chicks is What you want. Try mine this year. \$1.50 for 15, \$2.50 for 30, \$3.00 for 45.

A. B. Evans, Heartwell, Neb.

Buff Orpingtons Bronze Turkeys

We keep nothing but the choicest stock. Eggs for sale. Write for prices.

C. E. BROWNING,
Fairbury, Nebr.

BUSINESS CATCHERS.

"MODCOS", "Snowballs", "Red Cubans" and "McGinty Warriors," bred to fight for my own money. Illustrated circulars with rules of the put free. E. H. McCoy, Paw Paw, Mich.

B. WYANDOTTES, Pinner strain. Good layers, good market fowl, just the right size and color, and every day color. Eggs from fine birds, \$1 per setting. Breeders for sale. H. F. Yarnall, Pottstown, Pa.

B. C. BANTAM eggs from selected high scoring stock. A few good cockerels and pairs for sale. Some cards furnished. W. J. Cow, Norfolk, Neb.

FOR SALE. Eggs at \$2 for 15 from Black Langshans and Light Brahmas that are bred and mated right. Exhibited my Langshans at Indianapolis "Poultry" Association Show, 1901, winning American Langshan Club cup in hot competition. H. J. Kader, La Fayette, Indiana.

S. C. W. LEGHORNS eggs from pen of birds of the Wyckoff strain scoring 93%, 92%, 92%, 90% at \$1.00 per 15, \$5 per 100. Satisfaction guaranteed. M. C. Sherman, Delavan, Wis.

JERSEY STRAIN Light Brahmas, winners at the Eastern show. Illustrated circulars free. Eggs \$3. Fine breeding cockerels, \$3 up. F. R. Mueller, 68 Freeman St., Newark, N. J.

BARRER ROCK EGGS for hatching. E. B. Thompson's King of the Strain; 15¢. Lewis Roberts, Franklin, Ill.

SILVER Gape worm extractors, unequaled, 3 for 25¢. Big profits to agents. Samples and particulars 10¢. Satisfaction guaranteed or money refunded. Dr. Wm. Hallowell, Davisville, Bucks Co., Pa.

A. L. STANDARD Varieties, "new and old" prize poultry, pigeons, hares, collies, Angora cats, ferrets and supplies. Stock cheap. Eggs \$1 per 24. Catalogue free. John D. Souder, Telford, Pa.

BUFF LEGHORNS that are buff to the skin. Eggs from this great laying strain, \$1 per 15. G. Fischer, Elkhorn, Wis.

S. C. LEGHORNS eggs, 30 for \$1.50; 100 for \$3.50. W. Plymouth Rock eggs, 15 for \$1. A. H. Carlson, Chanute, Route 2, Kansas.

ROSE and Single Comb White Leghorn eggs, 15 for \$1; 26 for \$1.50; 50 for \$2.50; 100 for \$4.00. Good stock. I bred them since 1892. Joseph Kappes, Jr., Ashton, Iowa.

BARRER P. ROCKS exclusively. Thompson & Hawkin's strain strain, 12 years with this variety. Score 91 to 94%. Eggs \$1 per 15; \$2.40 per 50. Satisfaction guaranteed. Mrs. Rosalie Hendrickson, Marion, Ill.

JOHN R. GARBE, Billings, Mo., breeder of fine poultry. For May and June will pay express on eggs and deliver to your express office. White Holland Turkey eggs, 10 for \$3. Golden Wyandotters, S. C. B. Leghorns, Barred Rocks, White Plymouth Rock and W. Guinea eggs 15 for \$2. All are pure stock. Remember express prepaid anywhere in U. S. Mention Investigator.

ANGORA CATS, squirrels, ferrets, chipmunks, caviar, white rats and mice, Belgian hares, song birds, 35¢ variety catalogues of poultry, pigs, turkeys, geese, 34 page catalogue, 10¢. A. H. Nyce, Verfield, Pa.

EGGS from White and Black Minorcas, Buff Leghorns, Barred Rocks \$1 for 15. One good hen, four pullets and one cockerel, not related for sale after May 1. Price of the set, \$10. Also pen of White Minorcas for sale cheap if taken soon. A. A. Bair, Neptune, O.

HOUDAN SPECIALIST. Clarence A. Smith, Osceola, Ia. Large dark laying strain. Eggs from special mated pen all winners \$2 per 15; \$3.50 for 30. Order now. Good hatch guaranteed.

EGGS from Buff Orpingtons of high class Cook's and Edward's strains \$2.50 per setting, also stock for sale reasonable. Wm. S. Major, 219 7th street, Port Huron, Mich.

INDIAN RUNNER ducks. Regular egg machines. Eggs balance of season \$1.50 per set. \$2 per 15. Pine Brook Poultry Farm, Napoleon, Ohio.

BUFF P. ROCKS, four pens of the very best, picked from 250 carefully bred Buffs, none better. Eggs \$1.50 per 15. Herbert S. Redhead, 1257 Broadway, New Orleans, Iowa.

ARE YOU LOOKING for eggs that will hatch S. C. B. Leghorns. Place your order with Edwin W. Staebler, 36 Trenton st. Cleveland O. Eggs \$1.50 per 15. Winners of 3d, 4th, 3d and 5th at Cleveland, which is easy 4th on the list of great shows.

BIG MONEY for agents selling our Fumigation nest egg. Pollard & Couthway, Bloomington, Ill.

THE BUFF LEGHORN.

My experience with poultry has been short, ranging back only a few months. But, though just a beginner, I believe I have made a very wise choice in the selection of a breed, it being the Buff Leghorn. What breed is there so handsome, so full of life, as the noble, industrious Buff Leghorn, with its pure golden color, its spry, alert motions? Not only is the Buff Leghorn nice looking, but when it comes to filling the egg basket they are right in it. To show this I will give you a little bit of my experience with them.

I would say right here that I have not much time to tend to them, as I am away from home from 7 o'clock in the morning till 6 at night, part of the time, but most of the time I am at home at noon. In the morning I feel screenings, for which I paid 5 cents a sack; sometimes corn, and every two or three days I give a mash of bran, with just enough water to make it crumbly. At noon they get screenings or corn, and sometimes mash. I do not feed them at night, as I am seldom at home in time, that is, before they go to roost.

I seldom feed any green food, for I have none to feed. And yet from a pen of four females I often get three eggs per day. Right in the coldest weather, when the mercury was away below zero, I would often get two or three eggs per day.

Now, as to size. Some people think the Buff Leghorns aren't large enough to eat. Well, that's all right to think so, but I think that a hen which will weigh up to six pounds is all right to eat. And there are many Buff Leghorns which will weigh between five and six pounds, and the cocks will of course weigh more.

Taking it all together, I think the Buff Leghorn is among the best general purpose fowls of today. I suppose I have written about enough for today, and if this article is good enough for the columns of the Poultry Investigator maybe I will write again.

Success to the Investigator and Buff Leghorns are my best wishes.

G. PAUL PITT.

Watertown, S. D.

All good ones and lots of them; more than I can use. Eggs for hatching from my prize winners and scored stock at \$1.00 per 13 during May and June. Ida E. Bard, Imperial, Neb.

Red Spar Grit.

This is something New in Poultry Grits—is hard and sharp. Blocks instead of flakes. Guaranteed to please. We like it best of all grits. Price 1½ cents per pound f. o. b. Clay Center Nebr. Sure Hatch Incubator Co.

The poultrymen of Pontiac and vicinity held a meeting March 8th and organized the Livingston County Poultry and Pet Stock Association, with the following officers: President, J. R. Ingham; vice-president, C. M. Rice; secretary and treasurer, Harry Herbert; Board of Directors, W. L. Talbott, A. T. McClanahan, Ed. Damon, F. E. Righton, G. B. Eggert and L. L. Crum.

The first show of this association will be held Dec. 22, 23 and 24, 1902. D. T. Heimlich, judge. They expect to make it one of the leading shows of the coming season.

HARRY HERBERT, Secretary,
Box 344, Pontiac, Ill.

HILL made a clean sweep on Brahmas and B. P. Rocks at Nunda, 15 prizes including 71st with 16 entries. Circulars free. W. C. Hill, 113 Adams st. Yards 10001 S. Wood st., Chicago, Ill.

S. C. BROWN LEGHORNS, home show, 10 entries in class of 60. I have been winner 1st, 2d, 3d, 4th, 1st, 2d and 3d pullet and 1st pen. Eggs \$1.50 per 15. Satisfaction guaranteed. Edw. Pietsch, Elsberry, Mo.

BUFF ORPINGTONS—WYANDOTTES. R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock, fit to breed and exhibit for sale. Thos. H. Mills, Poultry Judge, Port Huron, Mich. Jan.

POULTRYMEN Your stationery won't look well unless **PRINTED** neatly. I do it for you. Good stock, fit to breed and exhibit for sale. Thos. H. Mills, Poultry Judge, Port Huron, Mich. Jan.

N. K. MENDELS, Grand Rapids, Mich.

Buff ORPINGTONS and Brown Leghorns

Young or old stock, first class birds, cheap hundreds to select from. Eggs all the time. M. & F. HERMAN.
Box 178 Hinsdale, Ill.

Poultry Investigator

Is edited by a practical poultryman of 30 years experience and is full of plain, common sense articles by those that breed poultry and work instead of theorizing. It is just what you want. Send us the names and addresses of 15 persons interested in breeding good poultry and we will send you the **POULTRY INVESTIGATOR** one year for your trouble. Subscription price 25c. Address,

Poultry Investigator Co.,
Clay Center, : : Nebraska

B. P. Rocks.

Descendants from winners. Eggs \$1.00 per 15, \$5.00 per 120. Toulouse Geese eggs 50c per 9. Satisfaction inured.

Ludwig Uehling, R. R. 1. Hoop, Neb

The Best

BUFF WYANDOTTES in the world are to be found at Shushan N. Y. I have some of them. Forry of this years breeders for sale at \$2.00 each. Eggs balance of season \$1 per 15.

J. F. Day, Shushan, N. Y.

After May 10th

I will sell my B. P. R. breeding Stock at very low figures. These birds have brought me pullets that scored 90, 92½ and 93. All these birds will be as I represent them. Eggs after the 10th of May will be \$2.00 per 15, or three settings for \$5.00.

Wm. Metzmer, Independence, Ia.

BRIGEL'S Celebrated Strains

Barred Rocks. Males scoring as high as 94½ and females as high as 94½ under such judges as Bridge, Lane, Jones, have won 1st prizes at such shows as the great Columbus show, Newark, and the Ohio State Exposition. Stock for sale at all times. Eggs \$2.50 per 15, the kind that win.

F. A. BRIGEL, Columbus Ohio.

FOR SALE! Light Brahmas.

Felch Strain. None better. Eggs from stock scoring 92 to 93½, \$1.50 per 15. White Wyandotte eggs \$1.25 per 15.

Albert Von Bergen, Petersburg, Neb

White Plymouth Rocks.

Scored by Rhodes from 92½ to 94. Owens & Canfield's strain, "Stay White." Eggs \$1.50 per 15.

Wm. Randolph, Lawrence, Kansas. R. D. No. 1.

Pure Bred Poultry.

DARK BRAHMAS
SILVER WYANDOTTES
BUFF WYANDOTTES

Stock and eggs for sale. Write.

M. D. KING, Minden, Neb.

BARRED PLYMOUTH ROCKS

WINNERS FOR PAST SIX YEARS Nov. 26th, 30th, 1901—194 B. P. Rocks in class at Red Oak, Ia., won 1st Cock, 1st Hen, 2d Pullet, 2d Cockerel, 1st Pen. At Osceola, Ia., Dec. 3d-6th, won 1st Cockerel, 1st Pullet, 1st Hen, 1st Pen. Eggs \$2.50 per 15.

H. R. McLean, Osceola, Iowa

Well Pleased with Results.

A. P. Rogers, Bowling Green, Mo., a breeder of B. P. Rocks, says: "We have sold all the stock we could possibly spare and could have sold more if we had had it. Enclosed is copy for May."

† † †

H. P. Larson, Beresford, Ill., breeder of 6 varieties of poultry, says: "I am getting all the orders I can fill. Continue my ad, and hope it will do me still more good."

† † †

Geo. Getty, Syracuse, Kansas, a White Wyandotte breeder says: "I am receiving lots of orders for eggs from my ad in your paper. Continue it up to July."

† † †

W. J. Gow, Norfolk, Neb., writes: "I have sold all my surplus stock at good prices. Continue my ad in May. I am well pleased."

LETTER FROM THEODORE HEWES.

Indianapolis, Ind., Feb. 17, 1902.
Mr. W. F. Chamberlain, Kirkwood, Mo.

Dear Sir:—It is certainly a pleasure to write you in regard to your "Perfect Chick Feed." For the past year and a half I have used and handled it myself, both in the yards and show room, where we were hatching young chicks, and have sold it to hundreds of people, but have never yet heard one complaint. Our experience has been in making hatches at the shows where we have fed from four to five hundred young chicks for a week at a time on this feed, that they start off and grow and seem to thrive, and are always healthy. It does not seem possible that any one can ever make a better feed or one cheaper, considering the growth it makes and the healthy condition of the chicks while growing.

Wishing you success and trusting this year's business will double that of any previous year, and assuring you that we feel that our goods warrant it, and with kind regards, I am,

Yours very truly,

THEO. HEWES.

The sixth annual show of the North Missouri Poultry Association will be held in Kirksville, Mo., December 2, 3, 4, 5 and 6, 1902. W. S. Russell, Judge.

F. M. BUCKINGHAM, Sec.

Black Langshans.

I won 1st pen, 1st pullet, 1st, 2d and 3d ckl, 1st ck, 1st, hen and 2d sweepstakes at Osceola. Neb. BARRED P. ROCKS, 1st pen, 2d ckl, 2d and 3d pullet, 3d, hen, 2 sweepstakes, at Osceola, Neb. 4 pullets at Lincoln Show. Langshan eggs \$5.00 per 100 \$81.50 per 15. B. P. Rock \$2, per 15.

J. E. Brown, Osceola, Neb.

White Wonders!

The Farmers and Poultryman's money makers. The best combination fowl out. Extra choice eggs, \$2.00 per 13. Satisfaction guaranteed.

Dr. I. C. Stephens & Co.

Carleton, Nebr.

White Rocks Exclusively!

Two pens mated for this year's breeding, scoring from 90½ to 94½. At Taber Poultry Show won 1st, 2d, ckl, 1st, 2d, 3d, pullet, 1st. pen; every premium entered for; Russel, Judge. Eggs, per 15, \$2.00. 30 for \$3.50, 50 for \$5.00.

W. H. Utterback, Hillsdale, Iowa

Black Minorcas.

No. 1 stock, up to weight and the best of color. Eggs \$2 per 13. No stock for sale.

Mrs. Ella Patrick, Clay Center, Neb.

EUREKA POULTRY PLACE.

WHITE PLYMOUTH ROCKS of the Stay White kind. No straw color or flies on us. Nothing too good for the Irish. Eggs \$1.00 per 15. Address

L. G. French, Deep River, Iowa.

Taylor's Otee White

Plymouth Rocks are prize winners at Red Oak, Ia., and Lincoln Score 92 to 96 points. Eggs 5, 10 and 15 cents each. Write for particulars.

C E Taylor, Nebraska City, Neb.

BARRED PLYMOUTH ROCKS,

(Exclusively.)

Farm Range. - - - Good Stock Eggs that will hatch, \$1.00 per 100. \$1.00 per 15. Satisfaction guaranteed.

Adam Weir, Clay Center, Nebr.

DON'T SET HENS the same old way when our new plan was first 10 times. 100 Egg Hatcher, \$2.50; 200, \$5.00; 500, \$10.00; 1000, \$20.00. Write for full particulars. The Egg Hatcher, P. O. Box 100, Natural Hen Breeder Co., B. 11, Columbus, Neb.

BLACK PRINCE—A Black Langshan owned by John Hettich, Bowling Green, Mo. Score 95½.

GREEN FOOD FOR POULTRY.

When planting for spring crops be sure to provide for the poultry. If they are yarded they will not need green feed all summer, and whether they are or not they will need plenty of it during the long winter months.

A small patch of millet will raise a lot of chicks next year and is fine feed, too. Chickens, ducks, geese and turkeys are all very fond of vegetables and keep in better health than when kept on a diet of grain alone.

We grow lots of mangel beets, Danvers carrots, cabbage, turnips, pumpkins and squashes and save the small potatoes and cull onions for the poultry. If one has a cutter vegetables may be fed raw, or may be sliced and cooked.

If your garden space is limited, the pumpkins and squashes may be grown in the corners or along the fence, and the cabbage plants set where hills of corn or potatoes are missing; also where early lettuce, radishes and peas have grown.

To provide green summer feed for yarded fowls sow kale, lettuce, spinach, etc. You will be surprised to see how quick young chicks will eat greens and they should have them, too. It is well to sow some rye in the fall, where the poultry can run on it during winter.

JESSIE L.

We carelessly left out the ad of C. R. Norman, of Stromsburg, Nebr. He breeds B. P. Rocks, Buff Rocks, R. C. W. Leghorns, and White Wyandottes. His stock is good. Those wishing eggs will do well to correspond with him.

Buff Orpingtons.

Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

G.B. CLARY Fairbury, Nebr.

FREE..

THINK OF IT!

By special arrangement you can get all three (3) of the following one year for only 50 cts. Never an offer like this before

♦♦♦♦

The Poultry Investigator

CLAY CENTER, NEB.

The only exclusive poultry paper published in the west. Original, up-to-date, instructive. Profusely illustrated and never prints a dead line. Contains from 32 to 40 pages each month.

Fancy Fowls, Hopkinsville, Ky.

The leading poultry organ of the south. Three years old, well established and prosperous. 36 to 40 pages each month.

Michigan Poultry Breeder

BATTLE CREEK, MICH.

Established 1885. The publisher has devoted 14 years of his entire time and attention to the poultry industry. Its a success—24 pages.

The price asked for these papers all one year is only 50 cents, which any of them are worth, and you get the others free. Send your subscription to any one of them. A free sample copy can be had by addressing each one. Better send your order now.

White . . . Langshans Exclusively

Eggs from stock scoring from 90 to 95 points, \$1.50 per 15; \$2.75 per 30; this season only. Some

good Ckls. for sale with score cards by Ben S. Myers.

All Stock Farm Raised.

MRS. JACOB HUGHES, JR.,
Rock Port, - - Missouri

Rose Comb White Leghorns!

Made a clean sweep at Mitchell winning 5 firsts, 5 seconds, 4 thirds, and 4 specials, birds scoring to 92. At three shows in last two years won 11 firsts, 6 seconds, 6 thirds and specials. Coc-erels for sale. Eggs \$1.50 per setting

J. F. Reineit, - - Tripp, S. Dakota
— Vice-President State Association, —

Buff Orpingtons, Barred Rocks, S. C. W. Leghorns, W. Wyandottes.

Eggs from the four best breeds in the country, at \$1.25 per setting for next 30 days. Can furnish B. Orpingtons and B. P. Rock egg in 100 lots. A few trios of B. Orpingtons for sale.

KING & KING, Fairbury, Neb.

Just a Moment Please!

Now is the time to book your orders and WM. KERSENBROCK has prize winning birds of Barred and Buff P. Rocks, Partridge and Buff Cochins, Silver Laced and White Wyandottes and Cornish I. Games.

Wm J Kersencbrock, Columbus, Neb.

Black
Buff
White

Pekin Bantams

— As Good as the Land can Afford —
— Eggs \$3.00 per 13. —

A. J. WILLIAMS,
Clay Center, Nebr.

Black Langshans. . . .

Of 30 of my prize-winning Black Langshans entered at State Fair and Neb. State Show the past 2 years, I won 25 1st, 3 2d, and 1 3d. Eggs \$2.00 for 15, \$3.50 for 30.

JA Johnson, Holdrege, Nebr.

White Leghorns.

Eggs from flock \$3.00 per 50, \$5.00 per 100; from choice matings, \$1.50 per 13, \$2.50 per 25. Can fill no more orders for over 100 egg lots. Scottish Terrier puppies \$3.00 and \$5.00.

PRACTICAL POULTRY FARM,

R. R. French, Mgr. Box 47, Ford City, Mo.

EGGS

\$2.50 for 15
\$3.50 for 50
My aim, fertile egg, hardy duck, bred to lay best to lay.

STOPI

RCSE and SINGLE, "Rhode Island Reds, Buff Leghorns. Winners wherever shown. Only strong robust stock in my pens and you will not regret it if you send your order for eggs to

Eric Aurelius,
Perry, Lake co. Ohio

If you want

Belgian Hares

Call on or write to

OLD ORCHARD RABBITRY,
Old Orchard, Mo.

Or 2003 Clark, Ave., St. Louis, Mo.,

WM. G. STEINICKE, Mng'r.
100 Hares to choose from.

Barred Plymouth Rocks.**EXCLUSIVELY.**

Drop me a postal card today asking for description of matings and price of eggs for hatching.

W. S. RUSSELL,

Box 1, Ottumwa, Iowa.

Eggs for hatching from White Poultry.

W Wyds \$1.50 per 15, \$4.00 per 50.
Cochins, \$1.50 per 15.
1. Games, \$2.00 per 15.
Guinea eggs \$1.25 per 16.
H. turkeys from stock weighing 18 to 35 lbs, as fine as any in the west, \$2.00 per 12.
W. Embden eggs from extra large stock, \$2.50 per 11.
W. P. Rock eggs from birds scoring 93½ to 95½, \$2.00 per 15, \$5.00 per 50.
Eggs for incubators from stock scoring 90 to 93, \$5.00 per 100. Stock for sale at all times.

White Plume Poultry Yards.

Mr. and Mrs. H. E. CLARK,

Dallas Center, — — Iowa.

Buff Orpingtons and Cochins.

Bred from my own
Importations.

I won more premiums than any other two exhibitors at the Nebraska State Show, 1901. Before buying anything write me—it will be a pleasure to give you prices.

Ida J. Buehler, Kenesaw, Nebraska.

RINGLET B. ROCKS

The Kind that Wins We Double Mate.

Ben Hur, 1st cockerel at Lincoln Show 1902, at head of our cockerel breeding pen. No females in our pullet breeding pen scoring less than 90, mated to extra choice pullet breeders. Stock all sold, eggs reasonable. Write for prices.

C. M. Hurlburt, Fairbury, Neb.

Brown's Roup Remedy.

For Fowls, horses and cattle. A wonderful antiseptic, soothing and healing, reliable safe remedy for roup, cankered mouth, chicken pox and cholera. Invaluable for horses and cattle. Quickly heals galls and prevents and removes proud flesh. Price 35c per package. Sole proprietor and manufacturer. Agents wanted in all the principal cities of the U. S.

Robert Brown, Port Richmond

Richmond Borough, N. Y.

PRAIRIE STATE PROGRESS.

Among the first incubator advertisers of which we had any knowledge was the Prairie State Incubator Company, of Homer City, Pennsylvania. We can very well remember that an incubator then was much of a curiosity, and that the claims of its utility and general good qualities were regarded by many people as being visionary, exorbitant, and, indeed, impossible. We have lived to see a very marked change in the sentiment of the public, so that today the incubator is regarded as not only being an adjunct, but a positive necessity for all those people who desire to make the growing of poultry success. Through all these years the Prairie State Incubator has stood out with special prominence, and has had, by the superiority of its work, perhaps more to do with the changing of this sentiment than any other element. Under these conditions there could be but one result, and that leads us to complete faith in the claims of the Prairie State people when they assure us that they have at Homer City the largest and most complete exclusive incubator factory in the world.

If anything were needed to further strengthen public faith in the Prairie State it might be found in the fact that in keenest competition in this and other countries it has won 342 premiums, awards and medals. These things do not occur to machines of any kind without merit. The \$15,000.00 catalogue put out by the Prairie State people this season is undeniably the finest, most elegant and comprehensive work of its kind ever issued, devoted to the poultry subject. The Prairie State Incubator Company is selling more machines today than at any time in its history, and they are very frank in attributing these improved conditions to their new catalogue. This applies to their foreign trade as well, which is very large and rapidly increasing. Within the past few days they shipped an order of 209 Prairie State machines to England. They have just booked an order for 1,000 machines to be shipped to far-off New Zealand. The "Prairie State" was awarded first premium at the International and Crystal Palace Shows, London, England, this winter. They were also awarded first premium at the Grand International Show, Brussels, February 22, 23 and 24. Space will not permit of our enlarging upon the merits of these excellent machines. Let our readers write at once for the catalogue.

These are white, fine Wyandotte shape and heavy winter layers. Score 92 to 95 by Rhodes. Eggs from Neb. State Show winners, \$2.00 for 15. Fair treatment insured. Eggs at reduced prices balance of season.

CHAS. C. WILSON,

Holdrege, Neb.

Why we ask \$5.00 for 13 Barred Rock Eggs.

Because the foundation stock was costly; \$50 for cock and \$10 for hen. Because we keep up to standard requirements: because it takes about 300 birds for us to mate up a pen of 30 when culled out; because we date every egg the day it is laid so you can see how fresh eggs you get; because we send you more than you order and pay back cash of 50 cents each for every infertile egg short of ten fertile ones out of each setting; because this insures you hatch of thoroughbred best eastern stock we can procure. If anybody treats you fairer, let us know.

Finally—we started right—why shouldn't you?

PARTINGTON. Northboro, Mass.

White Wyandottes Exclusively.

Score 93 to 95½ points by Larson and Hews, Keeler strain. Eggs \$1.00 per 13. Stock is strictly white.

N. B. Carver, — — Hampton, Neb.

Choice Eggs

For hatching from fine B. P. Rocks and big Buff Cochins. Eggs \$1.50 per setting from healthy stock.

IOA M. KESLER,
Woburn, Ill.

Silver Wyandotte and White Langshan

Eggs \$1.50 per 15.

Guaranteed to hatch.

A. E. GRIMES,
Decatur, — — Ohio.

Do

You know LAMB, the Leghorn man?

He ain't so many, you may say.
But his hens win prizes as well as lay
And that is the kind of hens that pay.

Single Comb Brown Leghorn eggs
Are half price after May.

W. A. Lamb, — — Manhattan, Kan.

\$5,000 CATALOGUE FREE!
It is without a rival. Give lowest prices of fowls and eggs.
Over 50 breeds Turkeys, Geese, Ducks and Chickens. Hundreds of places from Life. Is best poultry house plan. Treatise on diseases, how to feed, breed, etc. Send 10c. for postage.
J. R. Brabazon, Jr. & Co., Box 100, Delavan, Wis.

MY MAMMOTH PEKIN DUCKS

Are holding their own throughout the west. Have always won highest honors at Great St. Louis Fair and Poultry Show, also in the hands of my customers. A few elegant Buff Rox at half real value.

OTTO STOECKER, Box 18, Manchester, Mo

Have you seen it?

The Fanciers' World

America's leading publication for fanciers. Special departments for dogs, cats, pigeons, hares, poultry, etc. 32 pages. Profusely illustrated. Per year, 50 cents. Sample copy free.

The Fanciers' World

F. M. Simmonds, Jr. Publisher, Chicago, Ill.

Why Buy Stock and Poultry Foods?

Make your Own! I can send you formulas for all kinds of stock and poultry foods. Here are a few: Chick food 45c; egg food 35c; poultry condition powder 45c; stock condition powder 30c. Write for others.

A. W. Collins,

630 Grand Ave. Keokuk, Ia.

Black Langshans

Large, vigorous stock, free from disqualification; up to standard weight; winners at Clay County Show. Prices reasonable. Eggs \$1.00 per 15, \$5.00 per 100.

Address,

MRS. N. W. JOHNSON, Clay Center, Neb.

"Twenty-Five Years in the Poultry Yard."

A perfect Manual for Success. Gives symptoms and remedies for all diseases. Gapes, Roup, Hog and Poultry cholera. 108 pages. Price 25 cents.

A. H. LANG, Covedale, Ky.

Oh Yes! We have imported stock. R. C. R. I. Reds, R. C. Minorcas, Buff Orpingtons, Barred Rock, Anconias, Lt. Brahmas, Pekin and Cayuga ducks. Eggs \$1.50 per 15. Duck eggs \$1.00 per 12. One setting free to best customer. Stock for sale. 5 R. C. Rhode Island Red cockerels for sale cheap.

P. G. Shelby, Florin, Pa. box A.

Buff Orpingtons

AND

White Wyandottes

No better Stock
Raised.

I never have failed to win in largest shows. Birds score from 90 to 95%.

C. ROCKHILL,
Harvard, Nebraska.

Nebraska State Poultry Association

Abstract of the proceedings of the board of managers of the February meeting held at Lincoln:

All the members were present except Mr. Irvin.

The secretary read the written propositions of the eleven judges, and on motion the propositions of Judges' Russell, Rhodes, Larson and Carruth were accepted.

C. M. Lewelling was elected as superintendent.

Several small bills from the last show were presented properly audited and were allowed. The guarantee bond furnished by the treasurer was formally approved.

The secretary presented the formal proposition of the Auditorium association, tendering the free use of the Auditorium warmed and lighted, for the next show. Also the proposition of the Commercial Club, tendering the use of their parlors for the annual convention and business meetings. By motion both propositions were accepted and the show formally fixed for Lincoln, Neb., at the time fixed by statute, viz. January 19th to 24th, 1903.

The proposition to reduce the entrance fees from 25 cents to 10 cents was formally discussed, but action thereon was deferred until the semi-annual meeting. The board also discussed the question of allowing exhibitors of any class by vote to decide how they would have that particular class scored, by comparison or score card. Action on this was also deferred until the semi-annual meeting. The matter of printing advertisements in the premium lists was also presented and formally discussed, but action was deferred until the semi-annual meeting.

In case any of the judges elected failed to accept the term of our board, that Adam Thompson be selected to fill the vacancy.

The secretary was instructed to protest in writing to the board of managers of the Kansas City show against the holding of their show upon the same date as ours, and that he respectfully ask them to change the date of their show, as our date is fixed by statute.

Resolutions of thanks were adopted thanking the Auditorium Association, Commercial Club, Telephone Co., and the railroads for the many courtesies extended.

LUTHER P. LUDDEN,

Secretary.

This is for You!

Owing to my judging engagements for season of 1903, I will not be able to show my birds and will hereby reduce the price of eggs from \$3.00 to \$2.00 per 15. I have S. C. Brown Leghorns, Black Lechons, Barred Plymouth Rocks, (Violet Strain)

David Larson,

Wahoo, Nebr.

It's Up To You

To get 5,000 new subscribers. We will send the Fanciers' Guide, an up-to-date Poultry and Hare paper 6 months for only 10 cents. Special ad rates to P. I. readers. 1 inch 3 months for 1 dollar. 30 words breeder notice, 3 months, 50 cents. Try it now in egg season.

Fanciers' Guide, Montpelier, Indiana.

R. C. and S. C. B. ORPINGTONS.

Won firsts at Lincoln, Nebr., Red Oak and Osceola, Iowa.

Eggs for Sale.

Mrs. J. A. LASH, Osceola, Iowa.

Eggs \$1.50 per setting, from my prize winners at Kansas and Nebraska State Poultry Shows 1901 and 1902. Partridge Cochins, Buff Cochins, S. S. Hamburgs, Barred Plymouth Rock and 4 Light Brahmas Write for winnings.

DeWitt Yates, Fairbury, Neb.

O. MO. HUN. DRO.

Breeder of Prize-Winning
IMPERIAL WHITE P, ROCKS.

Stock for sale at all times. Eggs in season.

E. B. OMOHUNDRO, Bowling Green, Mo.

Barred P. Rock

Exclusively farm raised. Stock sold. Eggs from ch ice matings, \$1.50 per 15 for balance of season. All breeding stock scored 90 to 92%. Look for fine stock in next year. Send your orders early and secure your choice.

Mrs. A. P. Rodgers,
Bowling Green, Mo.

IT BEATS ALL.

The Natural Hen Incubator beats the old way of setting hens ten times over. 100 egg hatcher costs only \$2. 94.00 sold principally by agents. We want 5,000 active men and women agents for the new season. Special terms with you—a large margin of profit. The egg formula and catalogue sent free. If you write today, territory may be gone tomorrow.
NATURAL HEN INCUBATOR CO., B 11, COLUMBUS, NEB.

Always Take

THE Kansas City & Omaha Line

For All Points

East, South and West.

Close connections made at all junctions. For rates and information, call on or address

S. M. ADSIT, G. P. A., or S. M. WALLACE, Agt.
St. Joseph, Mo., Clay Center, Nebr.,

The "Perfect" Hatchery

200-Egg Hatcher and Brooder combined, \$10.00.
100-Egg Hatcher, \$6; Brooder, \$5.

Barred Plymouth Rock Fowls and Eggs. None Finer.
Testimonials and Illustrated circular 2c.

J. A. CHELTON, Fairmount, Md.

Our Leader B. P. Rocks.

30 eggs, \$2.00, from stock scoring 89 to 91. 30 eggs, \$3.00, from stock scoring 91 to 92½. Single settings \$1.50 to \$2.00 each. Buff Cochin Bantam eggs, \$1.50 per 15. Buff Cochin eggs \$1.50 per 15. S. C. Brown Leghorn eggs \$1.00 per setting. My stock is line bred and will produce 90 per cent exhibition birds. They did it last season and they will do it this season. Send me your egg orders if you want to raise show birds.

A. L. PEDICK, box A, Ottumwa, Iowa.

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one piece. Nothing to astray. The neatest and strongest coop on the market.

Wm. MILLER, North Bend, Neb

SEED CORN.

Prize Winners and Mortgage Lifters. Tested and Pure at Farmers' Prices. Twenty Bert Varieties.

Onion Seed! Large Red Wethersfield, Prize Globe Danvers, yields 1,200 bu. to the acre! New seed at 80c per lb. postpaid, if you mention this paper.

Soja Beans and Stock Peas. Best kinds suited to this climate. Big yielder. Cane Seed, Kafir Corn, Rape, Speltz, Grass and Flower Seeds—

Best Flower and Garden Seeds. Guaranteed fresh at wholesale prices. Nearly \$500.00 in prizes and 100,000 papers free seeds given to customers this year.

..... **Archias Seed Store, Sedalia, Mo**

O. I. C!

It is winners you would raise for next winter's shows and are undecided where to send for eggs for hatching. Just send an order to the **GOLDEN RULE POULTRY YARDS**, the home of prize winning White Plymouth Rocks, pure Empire strain, and White Wyandottes, (Duston) and you will be pleased with young stock hatched. Eggs \$2.00 per setting of 15. A few fine W. P. R. and W. W. males yet for sale.

MRS. MATTIE WEBSTER, BELMONT, WIS.

Barred Plymouth Rocks.

We have Quality and Quantity.

Farm raised prize winning stock. Eggs \$1.50 per 15, \$5.00 per 100.

H. B. LOUDEN, Clay Center, Nebr

W. A. Forbes. Breeder of Buff and White Wyandottes. For the past four years have won the majority of the best premiums in full classes, 22 1st, 10 2nd, 9 3rd and 5 specials. I am booking orders now for a limited no. of eggs from these prize matings for \$2.00 per setting, 2 settings \$3.50, 3 settings \$5.00.

North Topeka, Kan,

Mammoth Bronze Turkeys!

None under weight—scores 90 to 97. 1st and 3rd pullet at Lincoln, also 2d cockerel weight—31 pounds. Write for prices on eggs.

C. M. Hurlburt,

Fairbury,

Neb.

Golden & Silver Sebight Bantams!

Eggs, Golden, \$1.50 per 15. Silvers, \$2.00 per 15. Par. Cochins, \$2. per 13. Price of pigeons on application. 8 varieties for sale. Address

W. F. HOLCOMB, Clay Center, Neb.

Poultry Investigator one year with each order.

Single Gomb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My birds have taken premiums for years in the hands of customers as well as in Utah. They are bred for money makers. Greatest egg producers as well as premium birds. New circular free after September. Address,

Cora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS, Ogdén, Utah.

Printing for Poultrymen

We are prepared to do all kinds of printing for poultrymen. We have the highest grade machinery and new material; all work guaranteed first-class. Free use of standard poultry cuts to patrons. Write us your wants and get our prices on your work. Address,

Poultry Investigator
Clay Center, Neb.

Bonniedale Poultry Farm!

Eggs to Hatch.

S. DOTTES: Very choice pen, \$3 per 15. Over 30 hens on different farms. Good pure stock. Eggs \$1 per 15, \$4 per 100.
BARKED ROCKS: Strictly standard system. 60 fine hens and pullets, 4 extra large, stately crows, scoring from 90 to 94 by Judges Russell and Strausbaugh. Eggs \$2 per 15, \$3.50 per 30.
C. I. Games: Good pure stock on separate farms. Eggs \$1.50 per 15.
ROUP CURE: Our make. 50 cents, postpaid. Circulars free.

MRS. MAY TAYLOR, HALE, MO.
LOCK BOX 176,

J. W. Eastes

Buff Orpingtons, R. O. W. Leghorns Barred & White Rocks, W. C. P. Bantams, Belgian Hares, Eggs. Stock in season. Agents wanted. Thirty Prizes; silver cup last year.

Galesburg, - - - Illinois.

.....Scott's Cure

For Chicken Cholera.....

Guaranteed to cure Chicken Cholera or money refunded. Testimonials on application. Reference: Rising City Bank.

B F SCOTT, Rising City, Neb

Pride of the West....

Is Mackey's own Strain of Bronze Turkeys, bred in line for 15 years. Show record on open book. They are in the yards of many of the best fanciers in the U. S. and Canada. B. P. Rocks, Conger & Felch; Black Langshans, Emory Felch & Robinson. Felch Lt. Brahmas, eggs at all seasons from hens. Young stock now ready to ship. Write for prices. Mackey's Magic Cholera Cure is a sure cure.

HILLSIDE POULTRY YARDS,

Mrs. B. G. Mackey, Proprietor. ■
CLARKSVILLE, : : : MISSOURI.

1890

1902

EGGS! From our Royal Blood Silver Wyandottes.

Prices Reduced from 3.00 to 2.00 per setting of fifteen eggs. Last year we sold every egg we had to spare. This year have two more fine pens. We know that the Wyandottes are the best variety on earth. They are the coming fowl and to boost them along have reduced the price. Our Silvers have never been defeated in the show room. At Nebraska State Show, Jan. 24 to 28, 1902, we won 10 of the 16 ribbons, nearly twice as many as all other competitors. We are now shipping eggs. Better book your future egg orders now or may not be able to fill them. We are headquarters for prize-winners. Stock for sale at all times at Ponca Wyandotte Yards. Refer to express agent, postmaster, Security Bank or Dun's agency.

I. & N. M. CONNOR, Ponca, Neb.

IF PANDEMONIUM

Reigns supreme in your brooders and the chicks die wholesale you can positively check the mortality by using :

PURITAN CHICK FOOD.

a readily assimilated and scientifically balanced ration. Use it under positive guarantee.

FREE!—Our new and beautiful 64-page catalogue. Finest ever issued. A mine of information. Send at once to America's largest plant

PURITAN POULTRY FARMS,
BOX 357 A. - - - STAMFORD, CONN.

MR and MRS C A BLANCHARD,

—BREEDERS OF—

White Plymouth Rocks, White Holland Turkeys and Pekin Ducks.

At Nebraska State Poultry show 1901 we won 1st pen, 1st hen, 1st cock, 3d cockerel, which was a prize on every bird entered. At the Nebraska State Fair, 2d to 6th of Sept., 1901, we won 1st pen chicks, 1st hen, 1st pullet, 1st cockerel—a first prize on every bird entered.

We have a fine lot of young stock for sale.

FRIEND, - - - NEBRASKA.

BARRED ROCKS.

BADLEY BROS. New York winners is what my flock is built from. Winners at the Columbus show, 1901-2. Eggs \$2.50 per 15. Stock for sale.

J. R. Henderson,

Sta. B. Route 1.

Columbus, O.

Hines' Liquid Lice Killer.

Will destroy all animal vermin. Keeps poultry healthy and vigorous when used in conjunction with **Hines' Poultry Food**. Pays for itself in the egg basket. Directions for making 25c each. Barred Plymouth Rock eggs \$1.00 for 15. Mammoth Bronze Turkey eggs \$1.00 per 9.

Mrs I. W. HINES, Walnut, Kan.

Golden Wyandottes.

Highest Grade, Healthy Vigorous Stock, from careful Matings.

S. P. VAN NORT, OLD ORCHARD, MISSOURI.

1st, 2d, and 3d pullet and 3d c'h'l at St. Louis Show, Jan., 1901. Score 94-92½-91¼ and 91¼ by Butterfield. 3 seconds at same show 1900. 1st and 2d on pair at St. Louis fair. Eggs for hatching, \$2 per 13. Stock or sale. Write for full information

SURE SEE THE 1902 Noxall Incubator

IT HAS many new features, the Regulating, Ventilating and Moisture system is perfect, lowest price. Get out how to get one FREE. Our catalogue gives remedy for every known poultry disease. \$4. for postage circular and price list free.

Noxall Incubator Co., Quincy, Ill.

Trees and Plants

That Grow and Bear Fine Fruit.

We grow that kind. Large stock. Honest dealing. Low prices. **We pay freight.** Budded Peaches 6c.; Grafted Apples 5c.; Concord Grapes 2c.; Russ. Mulberries 30c. per 100; Ash 75c. per 1000; Black Locust \$1.35 per 1000. English or German Illustrated Catalogues FREE.

CARL SONDERGÖR, Proprietor, Box 27, Beatrice, Neb.

For Sale.

All kinds of fancy pigeons. Prices reasonable.

Toulouse geese eggs 20c each. Ronen duck eggs 18 for \$1.00. White Holland Turkey eggs, \$1.50 for 9. Also Houdans, Golden Sebright, Bantams, Buff, Brown and Black Leghorns, S. S. Hamburgs, C. I. Games, Buff Cochins, Pearl Guineas, Buff and Silver Laced Wyandottes. Poultry eggs, 15 for \$1.00. Yard's score from 90 to 94½ points. Satisfaction guaranteed.

D. L. BRUEN, - Oldenbusch, Neb.

If you Succeed You must have a Pull!

Get it by buying eggs from Pinkerton and Co's Ringlet Strain of B. P. Rocks. Winners who ever shown. Eggs per setting, \$2.00. Two set tings for \$3.50. Address

PINKERTON & Co. Clay Center, Neb.

Lock Box 24

Eggs For hatching from strictly high bred prize-winning Mammoth B. Turkeys, B. P. Rocks, and Pekin Ducks. If you are looking for something good write for my circular and price list.

JOHN BATCHELOR, - Thompson, Iowa.

Barred Plymouth Rocks

Stock for sale. Prices reasonable. Eggs 1st yard, \$2.00 per 15. 2d yard, \$1.00 per 15, \$4.00 per hundred.

Mrs. A. B. Jones,

Ahilene - - - - - Kansas.

POULTRY CUTS at CUT PRICES. CATALOGUE FREE. Harper Eng. Co., Columbus, O

Morning View Poultry Yards.

...HAVE...

..Barred Plymouth Rocks...

Extra large heavy bone, finely barred, full above the eyes.

Eggs in Season. \$1.50 per Setting.

James M. Perkins,

RAVENWOOD. : : MISSOURI.

The Inland Poultry Journal

Is the best 25 cent poultry journal published. The Inland is a monthly journal of reliable poultry information, profusely and handsomely illustrated. It is edited by poultrymen who have made a success of the poultry business and have the pleasing faculty of telling others how to reach success by the shortest route. The articles it contains are original, concise and practical, covering every phase of the fancy and commercial poultry business. Every number is worth more than the price of a year's subscription. If the best is wanted in poultry literature subscribe for the Inland. It is 25c a year and anyone ordering from this ad will receive a book, "Plans for Poultry Houses," free.

The Inland Poultry Journal Co.,

box 14, Indianapolis, Indiana.

Conkey's Roup Cure

Cure Guaranteed!
THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, especially in pigeons, this cure excels all others. One 50-cent package makes 25 gallons of medicine. Directions with every package. If it fails to cure money refund. Postpaid, small size 50c, large \$1. **Conkey's Louse Killer** never fails to kill. Try it. 25 cents per package, and 15 cents extra for postage. **Conkey's Egg Food and Poultry Tonic** will keep your fowls in perfect health, and produce more eggs than any similar preparation. 25 cents per package and 15 cents extra for postage. **C. E. CONKEY & CO., Cleveland, O.** Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal. Eastern wholesale office: No. 8 Park Place, New York City and S. H. I. Co., Clay Center, Neb. For sale by all poultry supply houses. Agents wanted.

UNION LOCK POULTRY FENCE.

For Poultry, Rabbits, Orchards, Gardens, etc.

All main strands are two wires twisted together.

Pickets 3 in. apart. Cables 1 1/4 in. apart at bottom.

Stronger and closer spacing than any other make. Our Union Lock Hog, Field and Cattle Fence, Union Lawn Fence Gates, etc., guaranteed first class.

Your dealer should handle this line—if not, write us for prices. Catalogue free.

UNION FENCE CO., DE KALB, ILL., U. S. A.

FRANK MYERS,

Free Port, Ill., U. S. A. Box 20.

Breeder of **Barred Plymouth Rocks**

They are Barred Right and good size. Eggs 15 for \$2.30 for \$3.50. 50 for 4.00, 100 for 7.00.

IDEAL ALLUMINUM

LEG BAND.

Also manufacturer of

Ideal Aluminum Leg Band : : : : :

The acknowledged leader. 12 for 15c, 25 for 30c, 50 for 50c, 100 for 75c. Samples and circular of Barred Rocks mailed for stamps.

Silver Laced Wyandottes.

Eggs for hatching. \$3.00 per 26 pure bred. Price for 2 pullets \$4. Fine scoring

Albert Lisius, Lake Mills, Wis.

For Sale.

Black Langshan Cockerels, 50c and pullets 75c each. Pekin drakes \$4.00 each. M. B. Turkey Toms \$2 and \$3. All stock pure blood.

Mrs. Albert Ray & Son, Wilsey, Kan.

Nebraska Queen.

First Prize Hen. Weight 9 lbs.

Highest score any B. P. Rock at the late State Show Judge Myers said she was the best one he had seen this year. I won 8 regular premiums at the above show. 20 years a breeder of this variety exclusively. Write your wants. Address

F. C. HINMAN, Friend, Nebraska.

When you write mention the Investigator.

BUFF WYANDOTTES,

EXCLUSIVELY. Our Buff Wyandottes are bred from best strain obtainable and in line. We breed the pure golden Buff, not the dark red. They're prize winners.

E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

When you write mention the Investigator.

Pekins—Hallock strain. Egg orders booked now. \$1.00 for 11.

BELGIAN HARES. Pedigreed. Grand lot of youngsters sired by a 95¼ point buck. Bred does always on hand. Booklet on the industry for stamp.

Stephani Poultry Co. Belleville, Ill

When you write mention the Investigator.

STERN OLD MOTHER EXPERIENCE

has enabled us after 16 years to make perfect The Reliable Incubator and Brooders. You ought to have our 20th Century Poultry Book in the house. It will cost you but 10 cents and will make you a master in the poultry business. Reliable Incubator & Brooder Co., Box A 25 Quincy, Ills.

Why Hall's Famous Prize Winning White Wyandottes and Barred Plymouth Rocks. Won 150 regular and special prizes in Chicago and leading western shows. All our first prize birds are in our pens. B. P. 3 males and females score 90 to 93½—White Wyandottes 93 to 96. We always win, so can you if you buy of us. Our P. Wyandottes, W. P. Rocks, S. and R. C. K. 1. Reds, Blk. B. W. and P. Cochins, B. and M. C. Bantams, T. Geese, and Pekin Ducks are all winners. Illustrated catalogue tells you all. Stock and eggs for sale.

J. D. W. HALL, Box 700. Des Moines Ia.

Golden Laced Wyandottes.

I have three pens which are second to none, considering size, shape, color and as egg producers. Orders for eggs are promptly filled.

J. C. Kapser,

Clay Center, Nebr.

B. P. Rocks,

White and

Golden Wyandottes L. D. METCALF,

Wakefield, Nebr.

Pine Lawn Poultry Farm.

Eggs \$2.00 per setting, 3 for \$5.00.

You can raise Chickens

—If you use—

Pinkerton's Perfection

**CHICK
FOOD.**

It contains everything that is essential to the chick's life. Not a pound of material in it that is not the best the market affords. It is equal to any chick food now on the market.

Price 25 lbs \$1.00. 50 lbs \$1.50. 100 lbs \$3.00.

Manufactured by

MRS. ANNA L. PINKERTON,

Clay Center, Nebr.

BUFF COCHINS

Exclusively.

Just What You Are

Looking For . . .

The Pure Golden Buff. Winners in any company. Elegant in shape, profusely feathered, as good as the best. Prices low, write me.

B. H. DUNN, Clay Center, Neb.

Clubbing List

By taking the advantage of the following combinations you can get two papers often at the price of one. Look at these offers:

	Price with Poultry Investigator.
Poultry Tribune.....	50c
Poultry Herald.....	50c
Poultry Gem.....	25c
Commercial Poultry.....	50c
Western Poultry News.....	25c
Poultry Success.....	50c
Poultry Topics.....	25c
Poultry Gazette.....	25c
Nat'l Poultry Journal.....	50c
Farm Poultry.....	\$1.00
American Poultry Journal.....	50c
Feather.....	50c
Nebraska Farmer.....	\$1.00

..Just Think of It..

Farmer and Breeder, price.....\$1.00
Any 50c paper you choose above.. .50
The Poultry Investigator..... .25

Total\$1.75

We will send the three to you for \$1.00.

Address,

POULTRY INVESTIGATOR.

NOTICE—We do not send samples of other papers.

WHITE, PLYMOUTH ROCKS.

Now is the time and David City, N. b., is the place to buy eggs that will start your right. Eggs are atching good. Our birds were prize winners at the Nebraska State Show, 1902. Write for prices.

J. W. HALL,

David City, Nebr

QUEEN CITY BUSINESS COLLEGE.

One of the leading schools of the west. Large attendance. Great demand for its graduates. Expenses low. Address

H. S. Miller, Pres., Hastings, Neb

Reference: Sure Hatch Incubator Company

BUY STOCK and EGGS from high scoring WHITE LANGSHANS and BUFF ROCKS. Fine winter layers. Cheap for quality. Eggs \$1.50 per 15. Mrs. L. MUMPOWER, Durco Jersey Pigs. W. L. MUMPOWER, Chillicothe, Mo.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered strain, from a long line of prize-winning ancestors; have made them a specialty for 10 years. Now offering fine exhibition and grand breeding stock of both 1900 and 1901 hatch at moving price if taken soon. Send for illustrated circular with half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Buff Rocks
Pekin Ducks
Toulouse Geese
Bronze Turkeys.

MRS. FLORA SHROYER.

Perry, O. T.

Formerly at Clay Center, Nebr.

Fine Warr. White Holland Turkeys - - \$1.75
Pure Bred Red Belgians - - - \$1.00
Pure White Rock Cocks - - - \$1.00
Pure White Wyandots - - - \$1.00
New Strain White-Breasted Guineas - \$0.75
All above from prize-winning stock and line bred. Catalogue sent.

J. C. BAKER, Proprietor,
White Plume Farm, Richfield, Ill.

Eggs From prize winning Golden Wyandottes, \$2. per 13, scoring from 90 to 93½, by Shellenberger.

J. Gordinier, Keota, Ill.

For Sale! - - -

Toulouse Geese, Pekin and Muscovy Ducks. At State Poultry Show on four entries of geese I took first 3 premiums. Eggs for sale in season.

Wallen Cameron,

Schuyler, Nebr.

EGG ORDERS. Book now for Houston.

B. P. R. 2 matings, score from 90 to 93½. Eggs \$3. per 15. \$5 per 100.
• Buff Orpingtons, 4 yards; 2 yards solid buff wing and and tail, eggs \$5 per 15, \$8 per 30 Buff Orping: tons, 1 yard. Eggs \$3 per 15, \$5 per 30 Buff Orpingtons, 1 yard eggs \$2 per 15, \$5 per 40.

Winners wherever shown. Won more first and seconds than any other man. Guarantee good hatches, true to name and fresh.

A. L. HOUSTON, Red Oak, Ia.

Please Let Me Tell You

My Buff Co-hins have again won their share of the ribbons at the McCook Show. To make room for my breeding pens I will sell trios, pens and singles at bargains for the next 30 days. Also a few R C B Leghorns. Eggs in season.

Mrs. Ida Bard, Imperial, Nebraska.

Blue Barred Plymouth Rocks

Eggs \$1.50 per 15, \$3.00 per 50, \$5.00 per 100. Our stock is first class.

P. J. SCHWAB, Clay Center, Nebr

My Buff Orpingtons

At Nebraska State Show, 1902, made 8 single entries and took 1st ckl, 2d ckl, 1st and 5th hen, 3d and 4th pullet. If you are going to buy eggs send for my circular. Orpingtons and (Thompson) Barred Plymouth Rocks.

JOHN A LING

Harvard - - Nebraska

White P. Rocks Exclusively...

My Rocks are of the best strains to be found and I have a fine lot of chicks to sell reasonable. Write,

MRS. NANCY WATSON,
Lincoln, Nebr.**Black Langshans---**

The winter layers, of standard weights, good colored plumage and eyes, well feathered shan s no scrubie among them. Score 93 to 97. Eggs \$2.00 per 15,

G. M. Hurlbut,

Fairbury, Neb.

SILVER WYANDOTTES

MY BIRDS have been on exhibition at the last eight State Shows and many other large shows, winning more premiums than all other competitors of this variety combined. Good birds for sale. Eggs from prize pens 15 for \$3. 30, \$5- From standard bred stock, farm raised, 100, \$4.

Mrs J. W. CAUSE,
Emporia, Kan.

The Michigan Poultryman...

Only Exclusive Poultry
Paper in Michigan.....

All the practical poultrymen contribute to its pages. Expert poultrymen will give its readers free such information as they may ask for.

All the news of the poultry world. Well illustrated.

Michigan Poultryman,
Ithaca, Mich.**Cherry Hill Poultry Yard**

BARRED P. ROCKS, Exclusively

Eggs \$1.50 per 15. 100 for \$6.00.

Mrs. Eva J. Gingrich, Aurora, Neb.

A Generous Business Policy

has proven the best for us. We absolutely guarantee the

MarillaIncubators
and Brooders,

(both hot water and hot air) to be satisfactory in every way, or send back your money. 12 years in the business of manufacturing Marilla's have made us absolutely sure that these machines will get big hatches. That our system of regulating temperature, moisture and ventilation is the best there is. That the Marilla Brooder is the only one that prevents overcrowding and tramping. Our new catalogue is like our incubators, the best on the market. Send for it in stamps. Don't you want it? **MARILLA INCUBATOR COMPANY, Box 97, Rose Hill, N. Y.**

Poultry Supplies

Ideal Leg Bands 15c per dozen, \$1 per 100.

Smith Seal Bands 25c per dozen, \$1 per 60.

Standard of Perfection each \$1.

Spray Pumps each 75c.

Liquid Lice Killer, gallon can 75c.

Conkey's Roup Cure 50c and 1.00 a box.

Chamberlain's Chick Food \$2.50 per 100 pounds.

J. D. W. Hall's Guaranteed Roup Cure 50c and \$1 a box.

Reliable Spring Punches each 25c.

Midland Poultry Food at factory prices.

Humphrey Bone Cutter F. O. B. Clay Center, \$12.

Oyster Shells F. O. B. Lincoln, Neb. per 100 pounds \$1.20

Lime Stone Grit and Mica Grit F. O. B. Lincoln, per 100 lbs \$1.00

Bone Meal, Raw Bone, Beef Chops, Blood Meal, as cheap as the cheapest.

Sure Hatch Poultry Co.,

Clay Center, Nebr.

Standard of Perfection

Revised Edition, 1900.

This work is issued by the American Poultry Association. It is a book of over 250 pages, cloth cover, and contains the only official descriptions of the several varieties of fowls. It is on this Standard that all poultry judges base their awards. Every experienced fancier has a copy of this book and every poultryman needs it to learn the requirements to which his stock must be bred.

The Standard of Perfection

—AND—

The Poultry Investigator

One Year, for.....\$1.00

Address,

POULTRY INVESTIGATOR,

CLAY CENTER, : : : : NEBRASKA

Humphrey
Green Bone & Vegetable
Cutter is guaranteed to cut
more bone in less time and with
less labor than any other cutter
made. Your money back if it
doesn't. Handsome book and egg
record sent free upon request.
Humphrey & Sons, Box 70, Joliet, Ill.

IT BEATS ALL.
The Natural Hen Incubator beats the
old way of setting hens ten times over.
100 egg hatcher costs only \$2.25. \$4.00 solid
principally by agents. We want 5,000 active
men and women agents for the new season. Special
terms with you—a large margin of profit. The egg
formula and catalogue sent free, if you write to-
day. Territory may be gone tomorrow.
NATURAL HEN INCUBATOR CO., BOX 11 COLUMBUS, NEB.

The Fertile Egg
In a Victor Incubator always yields
a vigorous chick. Simplest, most re-
liable, cheapest, first-class hatcher
is the **VICTOR**
INCUBATOR
Thousands in use; we pay
freight, catalogue & cents.
GEO. ERTL CO., Quincy, Ill.

Good Strong Basket
for shipping eggs. The Burlington
Basket. The special sizes and
shapes of these baskets have made
them a big favorite with shippers.
We guarantee them to be strong
and well made. Write today.
One setting size 40¢ per dozen.
Two " " 45¢ " "
Three " " 50¢ " "
Burlington Basket Co., Box 101, Burlington, Ia.

This Lightning Lice Killing Machine
kills all lice and nits, no injury to
birds or feathers. Handles any fowl,
smaller chick to largest gobbler.
Made in three sizes. Pairs for half price.
See Lightning Lice Killing Machine, Poultry
Idea, Life, Monitor, etc. We secure special low
prices. Catalogue sent free. Write us at
CHARLES SCHILD, Ionia, Mich.

When you write mention the Investigator.

Single Comb White Leghorns.

Eggs for hatching from the cream
of my flock, as I have the advan-
tage of selecting my breeders from
among seven hundred choice birds
all bred and owned by myself.....
Nothing but the very best speci-
mens of most prolific layers are
ever used. Descendant from ge-
nerations of great layers of large
pure white eggs. Write at once,
for circulars.....

E. A. TEDDALL,
Slater, Story Co, Iowa

Meyer's Langshans

Won
At
Kansas
State
Show

80 good
ones to
sell.

1st and 2nd cock; 1st and 4th hens; 1st 2nd and
4th cockerels; 1st 2nd and 3rd pullets; 1st pen.
Score 189½, Rhodes and Harris, judges' At
N. E. Mo. show in a class of 82 Langshans all
good ones, tied 1st cock, won 2nd and 3rd;
tied 1st hen; won 2nd and 3rd; 2nd cockerel;
2nd pen and tied 3rd; pullet. Eggs \$2.00 per
15, \$3.50 for 30, \$5.00 for 45, from winners.
Records of other big winnings in catalogue.

L. E. Meyers,
Bowling Green, Missouri

W. J. Cheney,

Breeder of
Thoroughbred Poultry.
BOX 68—CUBA, MO

Varieties.—B. P. Rocks, Light Brahmas, W. Wyandottes, Partridge Cochins, S. C. B. Minorcas, S. C. W. Leghorns, S. and R. C. B. Leghorns, Pekin Ducks.
Eggs for hatching, \$1.00 per setting, \$3.00 for 50.

Write for my new illustrated poultry catalogue.
Describes leading varieties of thoroughbred poultry.
quotes prices on eggs and fowls. Tells you all about
The Cheney Poultry Farm. Catalogues free.

W. J. CHENEY,
Crawford Co, —CUBA, MO

Eggs.

BUFF ROCKS.

W. WYANDOTTES.

BARRED ROCKS.

LIGHT BRAHMAS.

Only \$3.00 per 50 or \$5.00 per 100 from our
white breeds. \$4.00 per 50 or \$7.00 per 100
from our best pens—Hawkins, Dustin, Felch
strains. Bred to win and to please. We guar-
antee our eggs to be as good as the best and
positively thoroughbred of the best standard.
The above low offer is for this season only.
Catalogue free. Member of American Buff
Rock Club.

JAMES Q. MYERS, Oaks, Pa.

\$5.00

Buys 100 eggs, \$1.25 one setting, \$2.00, ten Bronze Turkey eggs at
CLEN RAVEN EGG FARM, Home of the all-year-round
layers, Brown Leghorns, White Leghorns, Barred Rock, White
Rock and Black Minorca. High scoring exhibition stock. Fowls
for sale. Circular free. Mention INVESTIGATOR.

Write **E. W. GEER,** Farmington, Mo.

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough tab-board. Contains all the pit rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has some comprehensive chapters on Health, Breeding, Nursing and everything relative to the royal sport of cocking.

By Dr. H. P. CLARK, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator one year

For 25 Cents.

Address, THE INVESTIGATOR
Clay Center, Nebraska.

Give
Your Breed-
ing Does

Rabicide

During gestation and while nursing their young it will enrich the blood. Improve the appetite, increase the flow of milk, thereby making the young strong and healthy.

Give RABICURE a trial and you will never be without it, 50c a box postpaid.

Vermont Belgian Hare Co.

Lyndonville, Vt.

We Don't Want a Cent

Of your money unless you get value received. THE ESSEX CHOLERA-CURE AND CONDITION POWDER is absolutely pure and free from poison and all other injurious substances and POSITIVELY CURES AND PREVENTS chicken cholera, roup, gapes and all diseases of the flock. It regulates the bowels, blood, digestive organs, and produces bone, muscle, feathers and larger fowls. Nothing on earth will MAKE HENS LAY like it. No matter what kind of food you use, mix with it daily, the Essex Condition Powder. THOUSANDS USE IT. Price, 60 cents a box by mail, 75 cents. 6 boxes for \$3.50. Write for special prices on ten pound lots. Manufactured by

John J. Kautzmann,

590 Bergen St.

Newark, N. J.

Old Homestead Brooder.

The best on earth. All your chickens can be saved in the Old Homestead Brooder. Try one. Write for prices. Address

Old Homestead Brooder Co.,
Middleboro, Mass....

Grant's Practical Brooder.

Prevents piling up, and overheating of chicks. Complete specifications, telling how to make and operate, with privilege of making all you want for your own use, for \$1.00. These brooders work out doors or in, can be cleaned in two minutes, are cheap and will last a life time. They have a floor space of 2x6 ft. Give this brooder a trial, if not satisfied you get back your dollar.

I have some Extra Fine S. C. B. LEGHORNS. Pen No. 1. is headed by the cock which headed 3d prize pen at Boston, 1900. Pen No. 2 is headed by 3d prize cockerel at Chicago, 1901. These birds are mated to some of my choice females (circular giving full particulars free.) Eggs, pen No. 1, \$1.00 per 15. Pen No. 2, 75c per 15. Incubator eggs, \$5.00 per 100.

D. W. GRANT,

Almena, Kan.

These Eggs Will Hatch White Plymouth Rocks.

chicks that have rich yellow legs and snow white plumage. (Fishes strain direct.) Eggs from pen No. 1, \$1.50 per 15. from pen No. 2, \$1.00 per 15.

Mrs. M. C. Downing, Elk City, Kan.

Free Barred Plymouth Rock

Circular telling about my superb Barred Rocks. Yards headed by cockerels direct from E. B. Thompson yards' prize winners from prize winning ancestry. Eggs \$2.00 per 15, 3 settings \$5.00.

PHIL MAURER, Beaver Crossing, Neb.

Buff Leghorns

The Coming Breed. Eggs 75c per 15. From trio winners, \$2.50 per 15.

E. C. Hartsock, Spring Valley, Ohio.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS

Are better than ever as they have farm range. Have 280 young and 30 old ones to draft from the coming sale season. Was winners of all firsts and part second in state show the last two years, also have been winning for customers in strong competition. Satisfaction guaranteed. Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

ARE YOU LOOKING FOR EXHIBITION BIRDS?

BARRED PLYMOUTH ROCKS. With that nice even ring barring to the skin as blue as the sky, and with elegant combs, golden beaks and shanks. Or heavy weight **SINGLE COMB BROWN LEGHORNS.** Elegant combs, fine striping to Hacket and Saddle, and shape to burn. Pullets with that soft even brown color, fine striped larkels and elegant combs. In fact birds that give the other fellow that tired feeling in the show room. If so, address.

J. W. WHITNEY, Chatham, O., P. O. Box 1.

Black Langshans.

Winner of American Langshan Cup, at Bowling Green, Mo. They won for two years 1st ck, 1st and 3d ckl, 1st and 3d pullet, 1st hen, 1st pen. At St Louis, 1st ckl, 1st pullet, 2d ckl 2d pullet, 1st pen. At Illinois state show my 1st ckl scored 95½, 2 cks scored 94¼ each, 2 hens 95 each, 3 pullets 95, 95, 96 each, pen 90¾. I own the highest scoring ck, ckl, hen and pullet in the state. Eggs \$2.00 per setting.

JOHN HETTICH,

Bowling Green, Mo.

\$5,000 POULTRY CATALOGUE FREE!

It is without a rival. Gives lowest price of fowls and eggs. Over 50 breeds Turkeys, Geese, Ducks and Chickens. Hundreds of plates from life. 13 best poultry house plans. Treatises on diseases, how to cook, breed, etc. Send 10c. for postage. J. R. Brabazon, Jr. & Co., Box 100, Delevan, Wis.

Eggs Thoroughbred Barred P. Rocks eggs two dollars per setting of fifteen. Golden Sebright Bantams, two dollars per setting of fifteen. Colored Muscovy ducks, two dollars per setting of eleven. My stock are all strong and vigorous and have farm range. All eggs shipped will be strictly fresh.

Mrs. D. T. STONE, DeKalb, Mo.

Clover Ridge Poultry Farm, Route No. 2.

Black Langshan, White P. Rock, S. C. Buff Orpington, W. Holland Turkeys, Mammoth White Pekin Duck, E. E. Smith strain. Eggs from \$1.00 to \$2.50 per setting. Won at Lincoln and Kansas State Shows. 15 ribbons from 1 to 5. Poor hatches duplicated at half price.

Mrs Henry Shrader, Berlin, Neb.

INCUBATOR TRIAL

The Perfected Von Culin.

Successful result of 25 years' experience. Scientifically correct, practically perfect. Non-explosive metal lamps. Double and packed walls. Perfect regulation of heat and ventilation. Made of best materials, and highest quality of workmanship and finish.

PRICES \$7.00 AND UP.

SATISFACTION GUARANTEED OR NO PAY. We make Brooders, Bee Hives & Supplies. Catalog and Price List sent Free.

THE W. T. FALCONER MFG. CO.,
Dept. 213; Jamestown, N.Y.

GREAT BARGAINS

Importers and Exporters of 35 varieties land and water fowls. Stock and eggs for sale at all times. Write before you buy. Bank and personal references given. Send for Full Illustrated Circular. Iowa Poultry Co., Box 623, Des Moines, Iowa.

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free,

H. SHIVERS, Knoxville, Ia.

Lock box 500.

It is next to impossible to raise poultry, even a small flock on a city lot to say nothing of a large flock on a poultry farm or plant, without the aid of a trained

Fox Terrier Dog.

Our dogs are taught to parole the place night and day. Write, Nevada Foxterrier Kennels, Nevada, Mo.
Males \$10.00; females \$5.00.

May 1 "SHOW YOU"

That eggs bought of me will hatch Barred Rocks for you that will satisfy the most exacting. If not treated right, publish me in the Investigator.

CORWIN JONES,
Poultry Judge. Sidney, Iowa.

Eggs from 3 yards of prize winning Barred Rocks scoring up to 92½ at \$1.50 and \$2.00 per 15. From my S. C. White Leghorns (Blanchard's and Van Dresser heavy laying strains) scoring up to 94½, at \$2.00 per 15.

P. Hostetter, East Lynne, Mo.

A Boon for Poultry Keepers. **BETTER than a GOLD MINE.** We will tell you how we made our hens pay over 400 per cent profit. Merely send your name and address. Way-side Poultry Co., Clintonville, Conn.

Pan-American Houdan Yards,

Wauseon, Ohio.

Breeder of fine exhibition Houdans. Breeders score from 92 to 95½. Headed by cock 91½. Prices reasonable.

Henry Weichmann,
Box 94. Wauseon, Ohio.

B. P. Rocks Exclusively.

Some good cockerels for sale yet Eggs for sale at \$2 per 15, \$3 for 30.

L. A. DAY,
Bruning, Neb

Please mention the INVESTIGATOR when answering advertisements. It will accommodate both the advertiser and us.

**You
Can
Raise
Chicks
If
You Use**

Pinkerton's Perfection Chick Food.

It contains everything that is essential for the chicks's life. Not a pound of material in it that is not the best the market affords. It is equal to any chick food on the market. Price 30 lbs, \$1.00; 50 lbs, \$1.50; 100 lbs, \$2.50. Manufactured by

Sure Hatch Incubator Co.
Clay Center, Nebr.

PULLET SALE.

We have no more cockerels for sale, but have 50 choice pullets that we will sell for **One Dollar** each. Send in your order at once, they will sell quick at this price. Send for egg circular describing our five breeding yards, mated for best results, Eggs, \$2.50 per 15 straight.

MR. and MRS. A. UPTON & SON, Fairbury, Neb.

For Sale.

We Must Have Room!

15 Pure White Plymouth Rock Cockerels, \$1.50 and \$2.50 each.
10 Extra Fine Buff Red Cockerels \$2.50 and \$3.00; worth \$5.00 to \$10.00.
10 Extra Good White Wyandotte Cockerels \$1.50 to \$2.00 each.
No other stock for sale. Eggs for hatching from 20 varieties of thorough bred poultry, \$5.00 to \$7.00 per hundred, \$3.00 to \$4.00 per 50.

SURE HATCH POULTRY CO.,

Clay Center, Nebr.

RIPPLE'S

Whitewashing, Spraying and Painting Machine.

GUARANTEED TO AS REPRESENTED

Read Our 30 Days Special Offer Below.

This Machine will Whitewash Buildings, Walls, Barns, Poultry Houses, doing it far better, saving $\frac{3}{4}$ the time over the old method of using brush. Will Whitewash Buildings, or Spray Trees any height by using extra hose and extension rod to elevate spray. Endorsed and used by hundreds of noted Breeders. It is used and endorsed by Sid Conger, Shelbyville, Ind.; U. R. Fitch, Hope, Ind.; Meadowbrook Poultry Farm, Dallas, Pa.; G. W. Brown, Camden, Ark.; A. G. Dunston, Harborside, Mass.; Texas State Fair Ass'n, Dallas, Texas; W. R. Henn, Secretary of State Board of Agriculture, Yankton, S. Dak., says: "We gave all State Fair Buildings two coats with your machine. It is a complete success and a great labor saver." In order to get them introduced in every locality, we will allow freight to your station, for the

NEXT SIXTY DAYS ONLY,

at the following net cash prices: No. 6—Eight Gallon Heavy Galvanized Steel complete as shown in cut with 10 feet of $\frac{3}{4}$ inch hose and one 8-foot hانبوب extension rod and brass cylinder pump with agitator, \$12.00. No. 7—Sixteen Gallon size, \$15.00. Terms cash with order, or we will ship C. O. D. If \$25.00 accompanies order. Take advantage of our Special Offer. Send 5c in stamp for a copy of our 1902 Sprayer and Breeders Supply Catalog.

Ripple Hardware Co., Box 54, Grafton, Ills.
Western Office, Box 54, Watertown, So. Dak.

F.B.W.G.

GREER'S PEDIGREED BARRED PLYMOUTH ROCKS

are in my breed no p s for 1902
ers get eggs from the same blood

Poultry Exhibits Properly Judged.

Eggs from my birds never fail to produce PRIZE WINNERS. The first place to buy eggs is from a breeder who makes a specialty of one variety - Blue Bird. "Lady Blue" and the best I have raised for three years. Every bird a beauty and barred to the skin. My customers buy for myself. Send for booklet of mailings.

O. P. GREER, Bourbon, Ind.

BUFF ORPINGTONS.

Winners 1, 5, pullet, 2 and 3, hen, 2, and 4, ckl, and 2, pen at Nebr. State Show, 1902 against red hot competition. Eggs 1st pen, \$4.00 per 15. 2nd, pen, \$2.50 per 15. 3rd pen, \$1.50 per 15.

Write for Circular.

H. H. CAMPBELL,

Osceola, Nebr.

DON'T Set Hens the Same Old Way, and let lice kill them on the nest. Tiffany's Sore Ditch Lice Powder will kill all vermin and your pen will bring brood off free from lice. Tiffany's Parago Lice Killer "Liquid," guaranteed to kill all lice and mites. Instantly kills lice on colts, calves, and hogs. By using our Sprayer a very little goes a great way. Penetrates all cracks. Spray bottom of house for spider lice. It is a powerful disinfectant. \$1 per gal. can give 5 gal. One gallon and Sprayer, \$1.50. Can get it free where no agents by a little work for us. THE TIFFANY CO., Lincoln, Neb.

If your hens do not lay try our **Grits**. We have several tons that MUST BE DISPOSED OF and we will ship you at our ton rates F. O. B.: 100 lbs. Pearl Mica Grit, 75c; 100 lbs. Oyster or Clam Shell Grit, 75c; 100 lbs. Limes or Grit, 65c; or all three to one address, \$2.00. At this price you can ship 1000 miles, as they go fourth class freight. Our Pearl Mica will make your egg shells perfect—a great thing when you ship eggs long distance.

THE TIFFANY COMPANY, Lincoln, Neb.

PETALUMA INCUBATOR

WHY IT HATCHES

...HIGH PER CENTS...

Success in an incubator depends upon two things: the right principle and the right construction.

The uniform success of the

Petaluma Incubator

is not a mere "happy case." It hatches 100 per cent of fertile eggs because it's built on the right principle, scientifically correct, and because the very best skill and workmanship obtainable are put into its making. It is built right; it does its work right. We put a guarantee behind it which means something. It is a hot air machine, and has demonstrated that its regulation of heat, air and moisture is perfect. Made in four sizes—from 54 to 324 eggs. We pay the freight anywhere in the United States. It will pay you to send for our attractive free catalogue.

Address nearest office.

PETALUMA INCUBATOR CO.,

Box 58, Petaluma, Cal., or Box 58, Indianapolis, Ind.

Canfield's White Rocks

Still Take the Lead!

In 1900 and 1901
at the Convention

Hall Shows, Kansas City, my birds made almost a clean sweep of premiums including Sweepstakes in Am. class. In 1900 at Kansas State Show they won 14 out of a possible 15 premiums, in 1901, 15 out of 15 and in 1902, 16 out of 16 possible ribbons not including 4ths and 5ths. At Nebraska State Show, 1902, they won 1st pen, 1st, 2d, 3d, hen, 1st, 3d, 5th cockerel, 2d, 4th pullet, 3d cock and sweepstakes for best 5 in solid colors with weight. Eggs \$3.00 per setting, \$5.00 for 2 settings.

M. L. Canfield, Belleville, Kan

White Wyandottes Exclusively.

Score 93 to 95 $\frac{1}{2}$ points by Larson and Hews, Keeler strain. Eggs \$1.50 to \$2.50 per 15. Stock is strictly white.

N. B. arver, - - Hampton, Neb.

BEST FRUIT PAPER

Western Fruit-Grower is the best paper treating of all kinds of fruit, and nothing but fruit; monthly; illustrated; 16 to 48 pages; 50 cts. a year. 10c for three months' trial subscription.

THE WESTERN FRUIT GROWER.

Box 13, St. Joseph, Mo.

CALVIN E. BARNEY, - - Kearney, Neb

Breeder of Light Brahmas Exclusively.

Now is the time to beautify and improve your yards. I can help you. Eggs \$2. for 15. \$3.50 for 30. Some choice pullets for sale.

Light Brahmas!

—First and 2d cock, hen, cockerel, and pullet at Interstate Poultry Show at Red Cloud, Neb., also winning sweepstakes and grand sweepstakes. 1st, and 3d pens 5 ckl 4 pullets at Neb., state show at Lincoln. Stock and eggs at reasonable prices.

J L SMITH, Cadams, Neb.

CHAMBERLAIN'S PERFECT CHICK FEED.

BEYOND COMPARISON.

WORLD'S CHICK FEED OF TO-DAY.

CHAMBERLAIN'S PERFECT CHICK FEED, like everything else that has merit, has its imitations. DON'T BUY TROUBLE. Insist on having the only Original Dry Feed. Stamped on each sack "Chamberlain's Feed, Kirkwood, Mo." All others are worthless imitations. Nothing "Just as good."

GOOD MORNING SISTER

I am ready for Chamberlain's Perfect Chick Feed. DRY AND ALWAYS READY FOR USE. LITTLE GOES LONG WAY.

No Bowel Trouble when Chamberlain's Chick Feed is properly used. It is the fine mixture in Chamberlain's Feed that has made the name famous. For incubator chicks, for all chicks until 5 months old.

FACTORY PRICE, 100 Lbs. \$4.50. 50 Lbs. \$1.50. 30 Lbs. \$1.00. For the Broiler Men, the Fancier and the Farmer. Saves Time and Money.

Chamberlain's Hen Feed will make your hens Lay, 100 Lbs. \$2.00.

Factory and Shipping Depot, 302 N. Commercial St., ST. LOUIS, MO.

Freight charges added to factory price at all distributing points. Order from your nearest agent and save time and freight. FOR SALE AT \$2.75 PER 100 LBS., BY Surague Com. Co., Chicago, Ill.; J. Wilder & Co., Cincinnati, Ohio; Iowa Seed Co., Des Moines, Iowa; Wermick Seed Co., Milwaukee, Wis.; R. A. Pike & Co., Minneapolis, Minn.; B. A. Pegler, Lincoln, Neb.; Hunting & Page, Indianapolis, Ind.; Ripley Hardware Co., Grafton, Ill.; Alexander Seed Co., Arcusia, Ga.; Norton Poultry Yards, Dallas, Texas, \$3.40 per 100 lbs. H. McK Wilson & Co., Agents for St. Louis, Mo. If friends of my feed in the east have trouble getting my feed, write direct to me for prices. W. F. CHAMBERLAIN, KIRKWOOD, MO.

Our Motto, "Virtute non Astutia"

HARES BY THE HUNDREDS

IMPORTED - AND - DOMESTIC

From such Fashionab'e Strains as the following Champions:

Fashoda, Edinboro, Guinea Gold, Nonpareil, Unicorn, Dash, Climax, Grimsby's Star, Priory Prince, Malten Mystery, Palace Queen, Lord Britain, Etc.

Our Stud Bucks are:

Fashoda Star

Score 96 by Judge Almond, imported, son of Ch. Fashoda.

Viscount

Score 95 by Judge Finley, imported.

Lythedale

Score 94 by Judge Finley, imported.

Sir Crabtree

Score 93½ by Judge Crabtree, and other domestic bucks that will score 94 to 96.

RUFUS RED BELGIAN HARES

At prices ranging from \$1 to \$75 per head. Unpedigreed market stock, good color and size, \$2 to \$3 per pair. Hardy Black Belgians (good to use as nurse does) at \$3 to \$5 per pair. High scoring pedigreed stock at moderate prices. Will refund money and pay return express charges if hares purchased are not as represented. Write for free booklet and further particulars. Rabbitries at Maplewood and Fayette.

MISSISSIPPI VALLEY BELGIAN HARE COMPANY,

1317 Chemical Building, : : : : ST. LOUIS, MISSOURI.

NOTHING LIKE IT.

There never was an incubator catalogue issued that approaches our 1902 book in design, beauty, worth and originality. 50 full page tinted plates, 4 reproduced original paintings and over 700 original half tone illustrations. We mail it free. Write at once for catalogue No. 129. The best incubators and brooders in the world are made by the Prairie State Incub. Co., Homer City, Pa.

Smith's Mammoth Pekin Ducks and White Wyandottes Win.

Thirteen 1st, 5 2nds, at Nebraska state, Kansas state, Missouri state, Des Moines Iowa. Clean sweep in four states. I entered 12 W. W. in Nebr. state show and won 8 premiums; 1 ck, 1 hen, 1 pullet and 5 others. See circulars for report of the champion flock. Get eggs for hatching from the winners.

Lincoln, Neb., Box 456 - - - - E. E. SMITH

VOL. 4.

JUNE, 1902.

NO. 4.

Poultry Investigator

ADVANCE TO SUCCESS

25 ¢ a year

Always Take THE Kansas City & Omaha Line For All Points East, South and West.

Close connections made at all junctions. For rates
and information, call on or address

S. M. ADSIT, G. P. A., or S. M. WALLACE, Agt.
St. Joseph, Mo., Clay Center, Nebr.,

Miller's Perfection Folding Exhibition Coop

Folds like a book. All in one piece
Nothing to ro astray. The neatest
and strongest coop on the market.

Wm. MILLER, North Bend, Neb

STERN OLD MOTHER EXPERIENCE

has enabled us after 16 years to make perfect The Reliable Incubators
and Brooders. You ought to have our 20th Century Poultry Book
in the house. It will cost you but a cent and will make you a master in
the poultry business. Reliable Incubator & Brooder Co., Box A 25 Quincy, Ills.

B. P. Rocks,
White and
Golden Wyandottes

Pine Lawn Poultry Farm.

Eggs \$2.00 per setting, 3 for \$5.00.

L. D. METCALF, Wakefield, Nebr.

For Sale. We Must Have Room!

- 15 Pure White Plymouth Rock Cockerels, \$1.50 and \$2.50 each.
- 10 Extra Fine Buff Red Cockerels \$2.50 and \$3.00; worth \$5.00 to \$10.00.
- 10 Extra Good White Wyandotte Cockerels \$1.50 to \$2.00 each.
- No other stock for sale. Eggs for hatching from 20 varieties of thorough
bred poultry, \$5.00 to \$7.00 per hundred, \$3.00 to \$4.00 per 50.

SURE HATCH POULTRY CO., Clay Center, Nebr.

\$5.00

Buys 100 eggs, \$1.25 one setting, \$2.00, ten Bronze Turkey eggs at
CLEN RAVEN EGG FARM, Home of the all-year-round
layers, Brown Leghorns, White Leghorns, Barred Rock, White
Rock and Black Minorca. High scoring exhibition stock. Fowls
for sale. Circular free. Mention INVESTIGATOR.

Write **E. W. GEER,** Farmington, Mo.

We will consider it a great favor if you

O. I. G!

It is winners you would raise for next
winter's shows and are undecided
where to send for eggs for hatching.
Just send an order to the **GOLDEN
RULE POULTRY YARDS,** the
home of prize winning White Ply-
mouth Rocks, pure Empire strain,
and White Wyandottes, (Duston) and
you will be pleased with young stock
hatched. Eggs \$2.00 per setting of
15. A few fine W. P. R. and W. W.
males yet for sale.

MRS. MATTIE WEBSTER,
BELMONT, WIS.

Eggs from 3 yards of prize win-
ning Barred Rocks scor-
ing up to 92½ at \$1.50 and
\$2.00 per 15. From my S. C. White
Leghorns (Blanchard's and Van Dres-
ser heavy laying strains) scoring up to
94¼, at \$2.00 per 15.

P. Hostetter, East Lynne, Mo.

W. A. Forbes, Breeder of Buft
dottes. For the past four years I have won
the majority of the best premiums in fall
classes, 221st, 102nd, 93rd and 5 specials. I
am booking orders now for a limited no. of
eggs from these prize matings, for \$2.00 per
setting, 2 settings \$3.50, 3 settings \$5.00.

North, Topeka, Kan,

Mammoth Bronze Turkeys!

None under weight—scores 93 to
to 97. 1st and 3rd pullet at Lin-
coln, also 2d cockerel weight—31
pounds. Write for prices on eggs.

C. M. Hurlburt,
Fairbury, Neb.

Golden & Silver Sebight Bantams!

Eggs. Golden,
\$1.50 per 15.
Silvers, \$2.00
per 15. Par.
Cochins, \$2.
per 13. Price
of pigeons on
application.
8 varieties
for sale. Ad-
dress

W. F. HOLCOMB,
Clay Center, Neb.

Poultry Investigator one year with each order.

Single Gomb Brown Leghorns.

Barred Plymouth Rocks.

First prize at Salt Lake City. My
birds have taken premiums for
years in the hands of customers as
well as in Utah. They are bred
for money makers. Greatest egg
producers as well as premium
birds. New circular free after
September. Address,

Cora A. Rickards,

SOUTH - OGDEN - POULTRY - YARDS,
Ogden, Utah.

Vol. 4

Clay Center, Nebraska, June, 1902.

No. 4

Artificial Incubation for Beginners

By Mattie Webster

ARTICLE I

So widely have incubators been advertised by the manufacturers of them, so much has been said and written of the excellent and therefore satisfactory work done by these machines, and so much cheaper are incubators than they were even a few years ago, that every breeder, or would-be breeder, if at all intelligent and progressive, has either purchased, or at least felt a desire, to own one of these machines.

Having considered the incubator question and becoming convinced that they are a good and profitable investment for the breeder, why does he (or she) hesitate to act according to convictions, and, becoming the possessor of a "wooden hen," hatch chicks by artificial method instead of the natural? It is easy to wish for something, but not always is it possible to obtain the object of our desires; many things may combine to render it inaccessible to us.

Reading and hearing of the successes of others with incubators, it is only natural for the incubatorless breeder to carefully consider the possibilities of like happy ownership.

The very first mental query is: "Can I afford to purchase a machine," and in many instances this question seemingly admits of but one answer, and that an emphatic negative. Now, in a few cases this is true, but the majority of those who think they can not afford to buy an incubator with determined planning could do so.

You know "where there is a will there is a way," and should this saying not prove true in your case, any brother or sister longing for a "hatching machine," "Find a way or make it." From experience I can tell you of an incubator that will prove a sure success every time with right management, and I think twelve dollars and a half, (thirteen dollars, at most), will lay one of a hundred egg capacity down at your depot. If the breeder lives on a farm, who desires very much to possess an incubator, and has no ready cash for its purchase, nothing is easier than to turn into cash some of the farm poultry if the farm flock is large; or, if there are no fowls to spare, surely there may be found something in the farm products that can be spared that will bring sufficient money for the incubator purchase. The breeder living in town or village suburb, with so few fowls that none can be spared, and no farm stock or grain to convert into an incubator, must, if unable to spare the money for immediate purchase, and yet determined to have a machine, plan to save a little here and there, or, perhaps, make some personal sacrifices of little luxuries that the object in view may be attained.

Having decided that by careful management an incubator can be afforded, a new beginner writes and asks: "When shall I purchase the machine?" Although this question was asked in the winter, my answer

was: "Send for it just as soon as you possibly can, and start it up with a few eggs that you may learn to manipulate it before time for early hatches." Even if a decision to buy a hatcher is made late in the hatching season, I would advise the purchase being made then rather than waiting until the beginning of the next season, for a trial hatch could be made and information gained that will be invaluable next season. No matter how intelligent is the breeder or how much sound sense is at command, there is much to be learned about an incubator that must be learned by personal experience in operating the machine.

Then an immediate purchase being possible, the breeder must decide what particular make to buy. This is as hard a task as planning for the money to be expended for the incubator, for the advertisements of all machines are alike in substance, if not in words. The manufacturers of each separate style of incubator has such faith in their creation that they would impress the readers of their advertisements with the great confidence they have in the machine's ability to do the most excellent work and would influence the breeder to a like opinion. There are many good incubators on the market and some that are almost worthless, so one needs to be careful and slow in making a choice.

The best help in choosing a machine is not assertions of what an incubator can do, but positive proof of what it has done, and there are very few breeders or would-be breeders that have not some one, friend, acquaintance, or some contributor for a favorite poultry journal that, because of

A yard of B. H. Dunn's Buff Cochins in his yards at Clay Center, Nebr.

articles that "ring true," has gained his or her confidence, to whom to turn for positive information concerning the merits of some make of machine owned and operated by them.

Manufacturers of some of the best incubators have at poultry shows and exhibitions proved the hatching powers of their machines by the excellent hatches made while there on exhibition.

I was led to purchase my second incubator by reading of trips made by a certain inventor of these machines from city to city, with incubators filled with eggs and in operation, set in a wagon, or carried by rail, and of the excellent hatches made under these seemingly, at least, adverse conditions for successful incubation. Surely, I reasoned, if that make of incubators will hatch chicks in such numbers while subjected to the jolt of the wagon and the jar of the train, and to sudden changes of temperature, with so little protection from cold and storm, it will give me satisfactory hatches under the conditions of location and operation in my home. And so I decided in its favor, and have not been sorry.

An incubator will hatch any and all eggs consigned to its care that a hen could hatch, but it has no more power than Biddy to hatch infertile or spoiled eggs, so if the breeder would have a satisfactory hatch, fresh and strongly fertilized eggs should be selected for the wooden hen's incubation. I say fresh eggs, and would prefer eggs not more than two or

three days old if I could obtain them, but eggs saved for two weeks, if kept and treated right, will be all right for incubation. I had boxes made just large enough that a pasteboard filled, such as merchants use in egg cases, would go inside them, and had the boxes made deep enough for two fillers each. Each box holds seventy-two eggs, and as I gather the eggs I wish to keep for my incubator I put each one in its little compartment, small end down. In the bottom of each box, under the filler, is a layer of cotton batting, and between the two fillers and on top of second filler, a pasteboard square same size as egg fillers, and then on top of second pasteboard another layer of cotton. A board lid is fitted over the box, and with seven hook and an eye on two opposite sides, is held firmly in place. Every day this box is gently turned completely over, and eggs kept in this way hatch very satisfactorily. In gathering eggs for very early hatching, one is quite apt to have some among those saved that have been chilled, and, while some breeders say: "Eggs are not rendered useless for incubation unless they have been frozen," I am satisfied that chilling, even if it does not kill the germ, so weakens it that if it manages to live until it breaks from the shell the chick is not vigorous and strong.

All soiled and dirty eggs should be cleaned by wiping off with a cloth slightly moistened in clear, lukewarm water before putting away to await the time for their incubation.

Something About Mites.

Mrs. W. C. Downing.

I wonder if there are any readers of The Investigator who have not had any experience with mites, or who have noticed that when the hens are setting and the mites get thick in the nests, which they very quickly do if not closely watched and kept cleaned out, that the eggs will not hatch.

I have had this very trouble more than once. The first time I was sick and everything was full of mites before I even suspected anything was wrong. As the eggs did not hatch well I supposed it was because the hens set "standing up" nearly all night, and again I thought it was because the mites sucked the blood out of the poor hens' body until they had not bodily heat enough left to complete the hatch.

I concluded to investigate and know. One hen I watched. I brought her with her mite infested nest and set her on the back porch where I could see her at any time. She was a good, faithful, old biddy, and stuck to her nest through it all, and really didn't seem to mind the mites. I fed her often an abundance of food and let her remain until time was up for the hatch. I would examine the eggs after night and they would be covered with gray mites. In the morning the mites would many of them be red, and several times larger than usual.

When the eggs did not hatch, as I knew they would not from former experiences, I broke and examined them. The little chicks were nearly full grown and seemed to be shriveled up. Every egg contained a chick, some of them more fully developed than others, and I am convinced that the mites suck the vitality out of the chickens in the egg. I know it was not the fault of the hen because she kept in good condition through the experiment. I reset her in a new, clean, nest, dusted her with insect powder, gave her fifteen fresh eggs, and she hatched thirteen little chicks, and she raised them every one. The eggs all come from the same pen. So if the mites did not suck the vitality out of the eggs, what did the mischief? Please somebody "investigate."

We are very careful now that our setting hens have no mites in their nests. It does take good care and very thorough cleaning to keep free of mites. Just lately a woman told me that last summer she didn't raise any young chickens because the mites got so bad in her house. She had fifteen hens setting and she threw away all the eggs and shut the hens out of the house to roost in trees.

W. P. Rock Cockerel owned by J. W. Hall, David City, Neb. He always will have none but the best.

She did not know she could have put on an old "mother hubbard" and cleaned out that henhouse, cleaned up those nests, or, better, used new ones, washed the eggs, dusted the hens with insect powder, and saved a large per cent of the chicks.

I know it is a detestable job when once the mites get the start of us. Better keep clean all the time and not get mites everywhere. We have had them in our hen houses so bad it seemed like we could never succeed in routing them out, but by "keeping everlastingly at it" we did succeed. Raising chickens is by no means a recreation if one means to succeed, but it is a health giving work. We have discovered that sunshine is fatal to mites, and it is a good plan to have two sets of roosts and nest boxes, and change about, keeping one set out in the sunshine all the time. We simply abhor the vile smelling liquid lice killers. Yes, they will kill lice and mites and little chicks, but that is another story. One may put on old clothes and wash them and put them out in the sun, but the scent of that lice killer remains with them still, and it permeates one's hair, and every time one goes into the henhouse one gets "some more smell." And then the eggs. Did you ever cook and try to eat eggs that were flavored with "lice killer?" Ugh!

Of late years we do not use "lice killers." We use a good lice powder on the hens for the little chick's benefit, but mites just revel in it if we put it in the nests. We put new straw in the nests frequently and burn the old; at the same time singe and scorch the nest boxes and roost poles. Sometimes we scald them with water left from the family washing and

sometimes we whitewash all with hot whitewash and dry them in the sun. I know it makes them mean to handle, but we soon take an old broom and sweep it all off. It has served its purpose and we are done with it. For disinfecting we use coppers. Dissolve about one and one-half pounds of coppers in one gallon of water and sprinkle it around henhouse and chicken coops, on the floors especially. It is cheap, so use it lavishly. Elk City, Kan.

From Bonnidale Poultry Farm By Mrs. May Taylor.

"Be brief—we have our living to make, and it takes considerable of our time."

The above is the beginning of a short sermon from the "echoes" of the street column of one of the great St. Louis dailies. The writer claimed to have seen them on a placard by the cashier's window of one of the city's banks, and he proceeded to preach a short sermon on the countless millions of useless words and expressions used by public speakers, writers and persons in general in the daily interchange of ideas between man and man.

This is an age of intenseness; people's nerves are strung to the extremest tension. We as a poultry people are a busy people. If we are in the business enough to be worthy of the name we have no time to waste on the enlightenment of the idly curious, no time to listen to the useless words of the make-talk kind, no time to read the long articles made up principally of adjectives and adverbs.

No doubt I have missed many good things which were so deeply buried in verbiage that I had no time to cull them out.

But of late years I have framed the habit of breaking the lengthy articles up into paragraphs, just the same as if they were short letters, and by this way get about all the good there is out of them.

Only a few days until Easter, the one day of all days that the egg holds the scepter. There will be eggs boiled and fried, scrambled eggs, and eggs served in every way possible for eggs to be served.

There is a big woody pasture back of our farm, and always on Easter Sunday, if it is a nice day, there can be seen small groups of boys wending their way to the woods for an egg roast. Last year somebody had an egg roast under the trestle of the railroad, where I saw the remains of the feast on my way uptown next day. But while the egg holds sway for the

day, we must not forget that there are other symbols aside from the merely gastronomic. There will be many beautiful Easter services, commemorating the bursting forth of the New Life. The first article in the March Investigator is symbolical as well as practical. The growth of the new life. The development of the chick in the shell is ever a new revelation. I test the eggs every day, not all at once, but a few at a time each day, as long as I can see the living, moving chick. I like to see live things grow and thrive. The opening up of plant life as well as the animal life. I have a box of tulips dug up out of the frozen ground and set near the fire. I think they will bloom before Easter.

Near me as I write is material for flags of all nations wherein there is a call for mission workers. "The bright colors remind me of the old-fashioned Easter eggs.

Beside me also are other symbols, a package of Easter cards, each bearing a cross. Who has not a cross to bear? But, blessed thought—each of these crosses is overshadowed with beautiful Easter lilies, so we may take up the burden of life well knowing that the season's work will bring crosses that must be borne; but if we do our duty towards all as we would be done by the peace of mind that comes, with the knowing that we have done our best, will overshadow all.

We are told that one should wear something new on Easter Sunday to bring them good luck through all the year. Every article of apparel that I shall wear on this Easter, old or new, from bonnet to shoes, will have been bought with poultry money. Surely that ought to bring me "good

A W. P. Rock Pullet owned by J. W. Hall, David City, Neb., who won largely at the Nebr. State Show.

White Langshans in the yards of Mrs. S. Mumpower, Chillicothe Mo.

luck" in the poultry business. The desire for poultry knowledge is on the increase. Persons who a few years ago thought they knew all about chickens will now stop you on the street or in the big road to ask about the management of hens. Some of the experiences you hear is quite serious, some amusing. Not long ago an old gentleman told me that he thought he would raise a few chickens for pastime, as he didn't have much to do. So he fenced off a corner in the orchard with netting, bought a couple of dozen of Silver Wyandottes from the market, kept them about two months, and found out that they were all "roosters." It would keep one busy all the time at our place to feed the grain in litter to scratch out and expect the hens to get much exercise at it. Our hens can scratch a pile of litter to riddles in ten minutes or less and get every grain out of it; and they know when there is no more to scratch out, and I never yet possessed a hen that would continue scratching when there was nothing there to scratch for. When the litter is raked into a pile they will scratch it level again, but it takes only a few minutes; then they are done. One would need to stand around and drop a few grains at a time to keep them scratching.

This is the day of the equinox, March 21st, and no rain worth mentioning. The air is more like Indian summer than spring, and poultry raisers are holding back the spring hatch fearing another drouth.

We could not get cut clover, so used alfalfa. We buy it in bales, and when making ready for use shake it up and pick out as many of the long straws as possible; then mix with the morning mash. This alfalfa is a wonderful "grass;" it retains its greenness so well and I have praised it so much since all the stock eat it so greedily that husband even tells the neighbors that I make tea of it for table use.

People often wonder why the hens scratch so much in the ashpile. They are after the charcoal. It is argued that ashes have a tendency to bleach the yellow shanks, but does anyone know for a certainty that it does? Would not the shanks have turned pale if they had never seen an ashpile? I am sure I do not know, and I am asking for information. I have been keeping house twenty years, but never had an ashpile. Husband always kept them cleaned up for the hogs. I have scratched ashes under the roosts and about the yards sometimes, but one must always be careful not to scatter fresh ashes if it is damp weather, for the hens will walk over them and make their feet sore.

We like plum trees for shade in the hen yards because they make a quick growth and the branches are wide-spreading, making good shade. The wood is tough and not easily broken by the wind. A tree seldom dies root and branch. If the branches die out other will sprout out and keep coming right along.

Hale, Mo.

The Cackling Hen.

Carleton, Neb., April 8, 1902.

Distant Investigator: One word for the cackling hen; long may she live; may her comb grow red with prosperity and may her egg pay every bill for the women. Please note what Uncle Sam's poultry did in 1896:

Earnings of poultry	\$290,000,006
Value of cotton crop	259,146,640
Value of wheat crop	237,932,998
Value of swine	186,529,747
Value of oats	163,655,068
Total of school expenses ..	178,215,556

We can plainly see by the above figures that the earnings of poultry are of great magnitude and yet some people will tell you there is no money in poultry; any common breed of chickens will bring almost \$6 per dozen, now at the present price, 8½ cents per lb. What can you raise any cheaper than one dozen fowls; besides the eggs they have laid all winter, that is if they were well cared for.

For the month of March past we sold over \$23.00 worth of eggs, and none at a fancy price. We have over seventy-five chickens at present writing and 27 hens incubating. We have not set our wooden hen, but probably will later on. We have a nice pen of Partridge Cochins and iLight Brahma, also Black Minorca, but give me the P. Cochin and you can keep every other breed that is in the standard.

Will some one please give their experience how to get rid of the large lice that bother both young and old chicks? We are trying comphor gum in each nest; results later on.

MRS. W. H. FERREE.

Carleton, Neb.

Among the newer of the commercial poultry foods, and one which has been the recipient of much favorable comment, is "Egge," which is being manufactured by the American Stock Food Co., of Quincy, Ill. It differs quite materially from other foods of this class, being made on an entirely different formula. This formula has been the private property of an experienced poultryman and feeder until it was taken up by the company named above, and has long been known for the excellence and uniformity of its good results. The people who now own and control this formula are splendidly equipped as to means and machinery for the manufacture of "Egge" and are prepared to supply it in any desired quantity. Poultrymen who desire those things which are newest and best in the line of their pursuits, should write, these people for circulars, prices, etc.

EGGS OR MEAT?

J. C. Baker

Two persons start into the poultry-for-profit business at the same time, but each has his own ideas about conducting the business and they run on altogether different lines. A's plan is to rear poultry enough to produce the eggs he wants for the market. B's plan is to rear mainly for meat stock. Now, of course, each will get eggs and each have some surplus fowls for sale each year, but with A the fowls are only incidental to the business and the same is about true in regard to eggs with B. Now let us see how results prove out:

First I will say that A never counts on selling young chicks on the market, his main reliance being the eggs he can produce during the entire year, while with B it is a little different; he sells some eggs for hatching besides the crop of young chicks he raises annually, adding materially to his purse thereby.

Now you say why couldn't Mr. A do as much with the chicks he hatches; the answer is, because he does not and cannot hatch more than he needs to replenish his breeding stock each year, for by his plan of conducting the business he must keep all his pullets for laying, and not having many hatched, his extra cockerels barely supply his table. He hatches April and May chicks which begin laying in October or November and keep it up through the winter, of course he has his fowls well housed and fed and cared for at all times; these pullets lay 20 to 30 cents a dozen eggs for at least two months, so of course the owner thinks he is being very well repaid for his trouble and cost. Well, about setting time his troubles begin; he sets his 200 egg machine, attends faithfully and carefully to the eggs and is rewarded with probably 50 chicks at the end of 21 days. They are put in a good brooder inside of a warm brooder house. They get all care, and assorted rations, grit and pure water necessary, yet by the time they reach three weeks of age less than a half dozen are alive. His next hatch proves some better and the third hatch about the same. This is his last hatch, for he never hatches any late chicks. He probably rears 75 to 100 chicks out of all these hatches. You ask why such a low per cent of chicks? It is simply because his eggs, being from pullets or yearling stock, the eggs are not strongly impregnated with fertility and those that do hatch are very weak in vitality

and succumb by the usual period of about three weeks. Now he loses at least 500 eggs valued at 12 to 15 cents a dozen at the hatching period; of course he gains, from his standpoint, in the winter months, when eggs are highest, but how much is his actual net gain? I leave it to figure out; he aims to run 100 pullets and six or eight males through the winter; he gets say about three to four dozen eggs each day for an average of three months; each year he sells off all his last year's hens, late in the fall, keeping only pullets.

Now, et us, for a moment look at B's way of managing and then compare them. He, too, makes one or two early hatches, using same size and kind of incubator, also same plan of brooding as A, but unlike A he keeps one, two and frequently three-year-old hens to furnish him with eggs and instead of stopping at three hatches he goes on hatching till about June 30. Well, he may not get off his first hatch as soon as Mr. A, but he is with him on the second one, so that the loss of time here really counts very little. Of course B's hens moult in fall and only a few begin laying again before cold weather, but it is a fact that he gets a few eggs at intervals all winter, enough at least for home consumption, and the writer believes that hen fruit is worth nearly as much on his own table as on some other fellow's table. Therefore the value of them is not exactly lost, but getting more to the point, I will say that those old hens begin operations about March 15th and keep everlastingly at it till about August 1 or when they begin to moult again, and I want to say that their eggs are more perfect, the germ stronger and when hatched, the chicks appear vigorous and strong, and a feed or two of rations that may not be exactly suited to their taste or health does not seem to affect them, and out o six or seven hatches or about 1,000 eggs he has rom 500 to 800 matured chicks. Some of the earlier ones he sells for broilers at 20 cents a pound. The balance soon get so they forage for a part of their living, thus helping to reduce the cost of keeping and he runs them till Thanksgiving, Christmas and the youngest to as late as the next February, when they bring 9 and 10 cents a pound. He then sells off all old stock over three years old and again having selected about one-fourth

large and well developed pullets, keeps them with the older females to make up his numbr next year, he, too aims to keep about 100 hens each year; also like A, he shelters all his fowls, feeds intelligently and according to the aims he has in view.

Now, reader, I have cited you two real cases of poultry raising, ones that have come under my direct knowledge, and while I have not went into detail as to the work, prices and profits of either, yet it seems to me that any fairly intelligent person can very easily draw their own conclusions. It so happened that conditions of both these parties were about the same, the only exception being the breeds each kept being different. A kept all pure bred Black angshans and B had W. P. Rocks as layers, kept under same conditions, there is little difference, with balance if any, in favor of the Rocks, but it must be remembered that A's hens, when he sold off each year, were two to three pounds heavier than Plymouth Rocks and twice as heavy as B's chicks he sold, so that these two points nearly balance. Well, any one may use his own calculations in figuring out who came ahead, but I will say that I think that of the two B had the broader view of the situation and had a better chance to "catch 'em comin' and goin'." And in this day and age it behooves us as bread winners and managers of our incomes to make as many sides count as we can, and while A and B are still doing business at the old stand, yet I may add as a hint to you, reader, that B's prospects (other things being equal) for occupying a front position in the poultry world is very good indeed, and that A is plodding along in the same old ruts, persistently refusing to learn the lesson from his neighbor, and therefore is not getting any further up the ladder of success, which B has by tact and good judgment been climbing so steadily. It would appear that there is an object lesson here and the beginner might with profit to himself study it well ere he launches forth in what may be to him an entirely new field of business.

J. C. BAKER.

The attention of the members of the Nebraska Pigeon Fanciers' Association is called to the fact that the annual dues are due and payable in advance the first of each year. The secretary-treasurer desires all members who have not paid their dues this year to send in the amount at once. There is a right and wrong way of doing things. Let us see that the business connected with the N. P. F. A. is done right.

AMONG OURSELVES

By Velma Caldwell-Melville

Sometimes we wonder that anybody survives the vicissitudes of even the first year in the poultry business; then multiply them by ten, fifteen or twenty years and the wonder grows. There is certainly no other venture so venture-some. Half the mornings, least it seems as often, when one goes out, one or two fine hens are lying under the perch dead, and they are sure to be the largest and handsomest in the lot. "Some egg diffidently," we say, sigh and go right on building air castles. The finest cockerels get into a fight and one retires from the field blind or maimed. Then goes \$5.00 or \$10.00, as the case may be. We cut off his head, bury him and proceed to set a hen, dreaming dreams of the fine birds to come out of those eggs.

Seventy-five out of 100 young chicks die and we plume ourselves on our good luck, and well we may.

Such losses in the swine or sheep world would drive a man to—well, to drink perhaps, but the fancier is made of sterner stuff, and then—but hear what a sensible, experienced writer says in *Fanciers' Gazette*:

"I have bought a good many eggs during the last twenty years and I have decided from my experience as a breeder that if I get three good chicks ready to begin work the next spring, I have done well with one setting of eggs. That means however, a hatch of about six chicks. If half the eggs produce chicks and half the chicks live to maturity, you have no reason to kick. I know this proportion looks very small to most people, but after you have been in the business ten years it will not look so small. Besides, the chances are that you could not buy three chicks in winter for what you paid for the setting of eggs; and this suggests another point. If a good breeding hen is worth \$2.00, eggs from such a hen should be worth \$2.00 per setting, and one chick would pay for the eggs. How much do you expect for \$2.00, anyhow?"

This writer further goes on to answer the question: "Shall we buy three settings of eggs or a trio of birds for a start?" He says: "From three settings of eggs you can not depend upon raising more than 12 or 15 chickens. A \$5.00 trio, in a season, should produce from 25 to 50 chickens. A \$5.00 pullet added each year thereafter will introduce all the new blood you need."

We agree with the above. Our start in the White Rocks was a trio, and one of the pullets laid four or five eggs a week for a year. She never "asked" to set, of course there was, we presume, a week of rest occasionally, but we considered her remarkable. The other pullet did the sitting for the whole family. To those who are breeding alone for show birds, this would naturally be a slow way. Indeed, the gathering of show birds, unless one has a mint of money, is slow business anyway at this day and age when the standard is so high.

Some one has said that Mr. Johnson has about taken the jar theory out of the egg business with his long trips overland, carrying his incubators with him and hatching on the way or any where. Further, he is said to have hired his engineer friends to carry baskets of eggs on their engines, running at high rate of speed; but it surely remains for us to finish the experiment for we are running a Sure Hatch and having the house remodeled at the same time. If the embryo chicks can stand the jarring and noise of—well, say the last two hours, they can do better than we can, for we are almost driven crazy.

If we have a hatch after this three weeks of turmoil, we shall be willing to take oath that nothing in the nature of a commotion can interfere with incubation, and we decided a long while ago that if a chicken was destined to live, you could not kill it, otherwise you could not keep it alive.

Owing to some trouble among the sitting hens, one evening some years ago, we took several eggs out of a nest and laid them down on the damp, cold ground immediately replacing them—all but one that escaped our notice, and was discovered the next morning. It had been a raw, cold night, but that egg hatched all right.

Once when walking in the woods we heard a chick peeping, and there in a deserted nest by a tree root, was a tiny fellow forsaken of kith and kin. We carried him to a farm house many rods distant where his whilom mother was found.

These and many similar observations prove conclusively that the natural chick is, or was, hardy, but about the "new chick," the product of artificial heat and most unnatural conditions, we

do not feel so sure. Indeed our experience so far is not of a nature to make us enthusiastic.

If only some one could find a sure cure for bowel trouble in brooder chicks, we would feel better; but, according to the theory advanced by the writer before mentioned, we suppose we must look for only the survival of the fittest.

It goes without saying that the poultry business is one of the leading industries of the country, a condition largely due to the numerous and excellent periodicals now published in its interest, also in a great measure due to the habit of advertising, which has become a fixed one with our people. Show us a man who does not advertise and we will show you a man who makes no sales except a few eggs and chicks at market price. If we have anything to sell, we must "tell it out."

We remember of remarking, in the presence of a man who claimed to be greatly interested in chickens, and who kept a good many, that we had shipped fowls and eggs to all parts of the United States the past season. After an interval of silence he suddenly queried:

"Did you publish?"

For a moment his meaning did not come to us; then we suppressed a smile and answered:

"Yes, oh, yes, indeed; we advertised in any number of papers."

"I never tried that," he said reflectively. A write in *Poultry Farmer* tells of meeting a man with a wagon full of coops destined to all points of the United States. One coop to Louisiana, another to Oklahoma and so on.

He said his business of the week aggregated \$300 and the receipts for one day was \$153. He gave advertising the credit.

It is unwise, however, to put a poor article on the market.

White Langshan cockerel owned by Mrs. S. Mumpower, Chillicothe, Mo. 1st at Missouri State Show.

A White Langshan hen owned by Mrs. S. Mumpower, Chillcothe, Mo.

"A good name is rather to be chosen than great riches," in the poultry world as well as elsewhere.

A small fancier gave us his experience this afternoon. Out of 52 eggs he hatched 37 chicks. Two died, the remaining 35 he keeps in the cellar. Think of that! But he says they are as hearty and lively as can be. He manages it in this wise. A platform was built up to the window and enclosed with fine chicken wire. In one end is the brooder. The little fellows are "brooder-wise" and back and forth they trot all the day long. He feeds them chiefly cracked wheat and oat meal. At night he throws a heavy blanket over the brooder to keep in the heat.

Another gentleman present said his father is a most successful incubator-chick man. Out of 200 eggs he has hatched 187 birds and he feeds them alone on rolled oats until three weeks old.

Some one has patly said that more chicks are killed by kindness than in any other way and we believe it.

If one is not feeding any of the patent chicken foods containing meat, it is an excellent idea to carry a small basket or paper box to your meat merchant and ask him to put into it the scrapings from the blocks—fine particles of meat and bone and saw dust. This feed while fresh and sweet makes the little fellows grow faster, is better than bone meal.

Keep rusty nails in a can of drinking water and add some of this to the water in their fountain.

Some way this is the time of year when the average fancier's heart "turns lightly"—more often heavily—to chickens, especially the brooder variety.

Velma Caldwell-Melville.

Which is the Better, Double or Single Mating?

The mating of Barred Plymouth Rocks is a subject that has been discussed, debated and written upon in the poultry journals for years, and as yet it has not been settled to the satisfaction of everyone whether single or double mating is the better.

Many breeders believe that double mating is necessary for the production of fine-colored males and females. I have always advocated that the proper and sensible way to mate Barred Plymouth Rocks is by the single mating plan, and I have found is less trouble to produce both fine cockerels and pullets by this method. Fewer culls have been raised than when the double mating has been practiced.

I have always opposed double mating for two reasons. In the first place, by the Standard, or single matings, we have fewer unsightly culls running around our yard, at which visitors may crack jokes, and more birds scoring 90 points. I have followed the standard mating for several years, and do not believe in the policy of extreme mating in any standard variety of fowls. What we desire in Barred Plymouth Rocks is a uniform color that will breed the same in both males and females, and as long as we continue to double mate we will not reach the desired end.

Another serious reason why we oppose the double mating is that we can never send out a cockerel or pullet from a double mating and guarantee them to breed true to color and reproduce themselves, as we are able to do with line-bred, pedigreed and standard mating.

The standard mating is the reasonable, the practical, the natural way to breed all kinds of domestic fowls, and therefore is the most successful. If a good line-bred, standard colored cockerel, which is well barred but free from wide bars, with good undercolor, showing no sign of cotton, is mated with a standard-bred pullet, good in barring and color, standard colored cockerels and pullets will be produced if the pair are from line-bred stock. There is no mistake in this plan, as many of the best Plymouth Rock breeders are producing good birds by this method.

The plan of crossing from dark to light and from light to dark is contrary to nature, and the system of mating based upon it will but a zig-zag way of producing a few good males and a few good females, with a number of black and white culls, without even a

pedigree to recommend them.

When birds have been purchased from double mating, the buyer does not know anything definite concerning their reproductive qualities. He pays his money, mates his birds or crosses them with another strain, and takes the chance of raising some good birds. Like will not produce like unless the same line of breeding has been established for several years, and then occasionally we see freaks of nature.

I have never said that fine birds can not be bred by double mating, for such is not the fact. Very fine males and females can be produced, and it may be that there is more money made by the double than by the single mating. I will explain: Nine-tenths of my orders are for male birds, especially cockerels. If I desired, I could make a special mating each season to produce strong-colored, well-barred cockerels, which would find a ready sale among the fanciers who have \$5 or \$10 to pay for such a fowl. The pullets in this pen could be sold for 6 cents a pound. I am not sure the above statement in regard to their being more money in the double mating is true, but the double mating advocates cling to the plan, and it is probable that it is to their pecuniary advantage to do so. It is possible the double mating system will produce more high-scoring cockerels than the standard mating, and as long as the trade demands mostly such birds there is money in supplying the demand. Every breeder knows that exhibition males bring the best prices, and by sacrificing everything else they may be produced.

The question arises, When such a sale is made, does the buyer receive value for his money? If the birds have been bred with nothing in view but to catch the trade, the buyer may have a bird with a good present value, but with no reproductive worth.

White Wyandotte pullet owned by Chas. E. Wilson, Holdrege, Neb.

PIGEON DEPARTMENT.

The Jacobin seems to be very popular with the amateur fancier.

J. R. Byers, of Gathenberg, Neb., has recently started in the fancy. He has started right by joining the N. P. F. A. He is all right. He sent in his dollar.

The writer hasn't heard from any of the boys since the state show. Remember your promises. Tell us what you are doing, and tell it often.

Jesse Gibson of Florence, Neb., writes that he intends to become a member of the N. P. F. A. Let others do the same.

A century ago the pigeon flocks of Modena were not only the marvels of Europe, but of the world. For centuries the inhabitants of Modena had been pigeon trainers and flyers, and the sport became an art. The men who conducted it took their positions in tall towers and by means of flags directed the movements of their flocks, some of which were all dark birds, others white or blue. The original pigeon fliers fought their flocks by training them to dart into each other, knives being attached to their feet. When a contest of this kind took place in mid-air, bodies and feathers dropped, telling of the slaughterdone. But in later days the fliers merely strive to develop beautiful figures and evolutions and to show the perfection of training.

We have lost one of our leading western fanciers in the person of John Haman, who has moved from Topeka, Kan. to Chicago.

Arrange the nests in your loft near the floor and hang the perches low and your birds will be tamer.

Have salt in some form when the birds have free access to it at all times.

The show season has its attractions, but it is hard to beat the pleasure the true fancier experiences during the breeding season.

THE ANCIENT PIGEON.

A breed of pigeons that seems to be but little known, and which is handled by only a very few fanciers, is the pretty little German toy pigeon, the Ancient. We know of but one fancier who handles this breed, and he raises hundreds of them annually. The Ancient is found in all colors, and a flock of them is indeed a pretty sight. In flight the Ancient has the action of the Tumbler, although it does not tumble as much as the latter, as its tumbling propensities are not sought after by the fancier. In motion it has a very slight vi-

bration of the neck, as does the Fantail. The skull of the Ancient is round, and the front quite predominant. The beak is short. The eye cere is red and quite prominent; the eye itself being large and bright. The Ancient has a shell crest, and is heavily hooded. It is marked as even as the Magpie, and the colors are very lustrous. Its body is very compact and feathers are hard and close. The Ancient has a hardy constitution and merry disposition. We do not see why this breed is not more generally bred and admired, as in beauty it is far ahead of many of the breeds that are bred quite extensively. The German Ancient is recommended to all those who desire a pretty toy pigeon.

A short time ago some one entered the writer's poultry and pigeon house and carried away some of our best birds, not only pigeons, but a fine pen of Buff Cechin bantams. The birds were not found, neither was the thief. It seems to us that about the meanest thing a man (of course no woman would) can do is to steal chickens or pigeons. Anyone who does do it ought to be caught and hung by the neck until he is dead, dead, dead!

The Best General Purpose Food--How and What to Feed.

As we have been asked repeatedly the question, what is the best all-round food for the production of eggs, meat and market poultry. This question has been asked us mostly by the farmers and contemplating fanciers, etc., and our answer was and is the White Plymouth Rocks. They are the most popular of all breeds. There is no breed of fowls that has won the respect of the fancier, farmer and market poultryman as the White Plymouth Rock. Why shouldn't they, as they are a beautiful bird and the best layers of the Plymouth Rock family, good foragers if given the range of the farm, and they also bear confinement well, and make the best of matters; and the finest table fowl and demand a better price in the market than any particular breed. The White Plymouth Rocks are undoubtedly the best general purpose fowl in existence. When I say White Plymouth Rocks I am speaking of the pure bred White Plymouth Rocks with pure white plumage, true rock shape, with two combs, rich yellow shanks and beaks. Not these little, narrow, contracted, high tailed,

White Plymouth Rocks, like some we have seen.

I started six years ago with a pen of eight White Plymouth Rocks, and ever since have bred and raised from three to twenty-three different varieties, and still make and will make a specialty of the White Plymouth Rocks, as we have so far failed to find any other breed that can take their place as an all round fowl, and again say I do consider this the best general purpose fowl in existence, but too much booming is not good for anything. What the beginner wants is more facts and not so much foolishness. I also wish to say that there are too many people writing for the poultry papers without experience. They have probably been breeding pure bred poultry for three months to a year, and think they know it all; hence write it up. They know more than they will know in ten years after.

I am like Mr. Benedict. I do not know now nearly as much as I thought I did six years ago. As to what to feed and how to feed, people should use more good common judgment in feeding their poultry, and not listen to every one who chooses to write a lot of stuff about the poultry business (and some of whom, no doubt, have never owned a hen). The best material for food is wheat, corn, oats and buckwheat. Do not feed much corn to laying hens. Feed it at night only, and feed it hot in cold weather. What is the best for the main food for laying hens? If the hens haven't a farm range, make them work for all the grains. Feed by scattering it in straw or litter of some kind, and keep them working all day if you want lots of eggs and happy, singing hens. For my part I do not believe in soft feed for a steady diet, but it is good as a morning mash two to four times a week. Scalded oats, bran, etc., and feed it hot in cold weather, and make it crumbly, not sloppy. And give your poultry plenty of good grit and oyster shells, and if the are confined to small

BUSINESS CATCHERS

R. C. W. LEGBORNS and W. Guinea. Eggs 1.50 sixteen, or 6.00 per hundred. Mrs. Winnie Chambers, Onaga, Kansas.

10 YOF WANT winners? If so, buy eggs of A. Z. Copeland, Potomac, Ill., W. Plymouth Rock, G. S. Bantam and W. Guinea. 1.25 per fifteen 2.25 per 30. A. Z. Copeland.

GOOSE BREEDERS send 10c for my book on goose raising. Embden and Toulouse Geese. Imported stock. Circular Free. H. S. Price, Specialty Breeder of geese, Pros. National Toulouse Goose Club, Waukegan, Ill.

PIGEON BOOK complete. Illustrating, describing all varieties, arranging loft, breeding, feeding, caring for, 5 cents. 1,000 pigeons for sale. Prices free. Wm. A. Bartlett & Co. Box 27, Jacksonville, Ill.

ards they must have plenty of green food of some kind.

This advice is not intended for the old poultryman, but for the beginner, and those contemplating breeding pure bred poultry. Hence I will say that anyone that is induced to use one of the pure bred egg producing breed for the production of eggs in the place of scrubs, will never use scrubs again. The same is true when a man is engaged in producing broilers. And for general purposes almost any of the pure bred varieties of Plymouth Rocks and Wyandottes will drive the scrubs off the farm, whenever given a trial, never to return again.

We could say lots more, but think it best not to say too much at once, so we bed to remain,

Yours respectfully,

J. B. McQUEEN.

Palermo, Ohio.

GEMS

By Percy W. Shepard.

There is no royal road to success. It is a common, well trodden road to start with, but becomes somewhat rough and tiresome as you advance. But after you get there it is very nice.

Practically, there's as much sunshine in your life when caring for poultry as there is in any work. How much brighter and healthier too, is a life among the fowls rather than in a hot tiresome office?

Fresh air is good for the fowls. It's good for you, too. A breeder's life is full of pleasure. A very few find it different, however. You must love to see the fowls grow and then the shows, why, they are simply grand.

It's a continual work, 'tis true; but then what of that? It's easy although it takes time. Not a long vacation at any one time. But still in the autumn there is time to get prizes. It won't do any harm to try for them.

Do you think the poultry business is being over done? Not when eggs get as high as thirty or forty cents a dozen, as they were this past winter. At that rate it will take some time yet to overdo the poultry industry. You will be safe in saying that it never will be a "failed industry."

It's a good thing everybody don't want to raise poultry. Everybody would soon run it ashore. But never worry about that. There's room for a few (?) yet. And at the top notch of success there's room for a vast number. Try to get there yourself.

If you don't get quite to the top, you may get far enough up to make it real interesting and profitable. Success is

waiting for you. It waits for all. Some went and received it; others sat still and waited in vain. Waiting never amounts to dollars.

It's a good thing, push it along. What? Why the poultry business. We need a few more energetic, lively hustlers to help build up the business to a higher state of perfection. In your assistance you will make a profit and learn what really good poultry is.

The world is moving on. So is poultry. Are you moving with the world? You don't have to go backward to get behind. Just stand still and the others will move on. eKeep up. You run in the race. The entry fee is light. Don't cost much to start. It may cost something in time and labor to win, but then the prize is a grand one. Get it.

Did you ever stop to think how long it took to get poultry up to its present high state of perfection? If not, just think how long it has been. It has been a few (?) years hasn't it? Well, the point is this: You can't expect to get the very best at a very insignificant price. Good birds come high. So do good profits. This seems to favor buying the bes34t, doesn't it? Yes, buy the best.

Do you know all about the poultry business? No, I guess you don't. There are lots of others in the same fix. "All" is a whole lot to know even if it is all about the little (?) poultry industry. We don't expect to know it all. Of course we learn a little every day. And these little learnings build up our work and place us where we can manage better and be more successful.

It pays to be a little particular about learning. Go into every part deeper than to give just a glance and pass on without learning all that is possible. Close observation, a few experiments, some study and common sense will teach you a vast amount about poultry. But then learning is of no value unless you apply some of the knowledge to your work. Use your learned facts and plans to an advantage.

Perseverance is a good thing to possess. The persevering business man gets along well. So does a similar poultryman. If you do not already possess such qualities you can acquire them if you try. You ca nmost always make yourself just what you want to be. If you want to be persevering and are not naturally so, get a hustle on and shove the poultry business right along.

It don't pay. What don't pay? Why, many things often done by out-of-date breeders never pay. Neglect, cheap birds, poor feed, poor buildings, waste, lice, disease and a number of other things never pay very well. Try some-ways that pay.

BUSINESS CATCHERS

BUFF PLYMOUTH ROCK Cockerels from first prize cock; very promising. Write for prices. Albert R. Swett, 364 Mosley St., Elgin, Ill.

BUFF ORPINGTONS, "Cook's Strauns," eggs 15 for \$3.00; hatch guaranteed. \$5.00 from birds buff to the skin and progeny of lured stock, Express prepaid. A. Edward Green, Joliet, Ill.

EGGS for hatching. From 2 splendid pens prize winniz Black Langshans, score 92½ to 95½. Buff Orpingtons and Rose Comb Black Bantams. Circulars free. John Cole, M. D. Williamsfield, Ill.

BUFF COCHIN chickens, Toulouse geese, Duroc Jersey swine, Cuckoos for sale with score cards. Chi-ken eggs \$2.00 for 15. Geese eggs 25c each. Chas. A. Allison, Tennessee, Ill.

THE STAR POULTRY Yards has S. C. Brown Leghorns, Barred and White Rocks and White Wyandottes. Located 3 miles south of East Peoria. D. E. Glatfield, East Peoria, Ill., manager.

SILVER GRAY DORKINGS, White Wyandottes, Single Comb Brown Leghorns. They are state winners. Live and live is our motto. Dorkings, 1.50 per setting, other settings 1.00. Circulars free. O. Mullin, Beaufort, Minn.

BUFF ROCKS, Evenest lot in the west. 1st premium stock at leading show. 93 to 94. 3 grand matings, eggs 2-50 per 15. Robt. Larnier, Ravenwood, Mo, Box 7. S. V. Pres. Buff Rock Club.

EGGS 75c per 15. Farm range. Black Langshan and single Comb Brown Leghorn. From pen No. 1, Black Langshan 2.00 per 15. Pen No. 2, White Wyandotte, 1.50 per 15. M. M. Browning, Appleton City, Mo.

S. H. COTTON, Superior Black Langshans; Eggs 15 for \$2.00. S. H. Cotton, Appleton City, Mo.

WHITE AND GOLDEN WYANDOTTES. Eggs 1.00 per 15. White Wyandotte cockerels 1.00 each. Pekin ducks 3.50 per 15. Eggs per setting, 95c. Mrs. H. M. Clark, Sumner, Nebraska.

S. S. HAMBURGS. Eggs only for sale; 1 sitting 15c; 2 or more sittings 1.00; 5.00 per 10. Rev. G. A. Chamblin, Moran, Kansas.

BUFF ORPINGTONS and **W. Holland Turkeys**. Eggs for sale from large healthy stock, winners Nebraska state show. Chicken eggs 2.00, turkey eggs 1.50. Mattie Stuft, Lawrence, Neb.

GET THE BEST! One dollar buys 15 eggs from choice pens of S. S. Hamburgs and Rose Comb Black Minorcas. C. L. Norman, Stromsburg, Neb.

PRIZE WINNING S. C. W. Leghorns, White Rocks and Golden Sebright Bantams, Leghorns score to 95, headed by 2nd cock at Des Moines show. Eggs 1.50 and 1.00 per 15; 4.00 per 100. Write for winnings. Fred Cramer, Indianola, Iowa.

AMERICAN POULTRY FARM, 100 Bronze Turkeys, score 44 to 46. 20 cockerels, 100 Rocks, Wyandottes, Leghorns, Bantams, Guineas, Jersey cattle. Stock and eggs for sale. 25 years a breeder. F. M. Munger & Sons, De Kalb, Ills.

WHITE WYANDOTTE and Barred Plymouth Rock eggs for sale in my best birds, 1.00 per 15; bred on different farms, free range. Pekin Duck eggs, 11 for 50c. B. L. Grover, Barton, Kas.

B. F. ROCKS eggs from 2 pens, 1.50 for 15. Searle's strain, none better. Write your wants. Mrs. J. W. Cottle, Edgar, Neb.

HILL made a clean sweep on Brahmas and B. P. Rocks at Nunda, 15 prizes including 7 1sts with 16 entries. Circulars free. W. C. Hill, 113 Adams st. Yards 10/001 S. Wood st, Chicago, Ill.

S. C. BROWN LEGHORNS, home show, 10 entries in class of 60. 1 have been winner 1st, ck 2d ck, 1st, 2d and 3d pullet and 1st pen. Eggs \$1.50 per 15. Satisfaction guaranteed. Edw. Fiesch, Elsherry, Mo.

BUFF ORPINGTONS—WYANDOTTES, R. I. Reds and Indian Runner Ducks. Winners bred to winners. Good stock, fit to breed and exhibit for sale. Thos. H. Mills, Poultry Judge, Port Huron, Michigan.

Some of Mrs. S. P. Rogers' prize winners at Pleasanton, Iowa. Look up her "ad" and see what she has good for sale.

Poultry Experiences

By Ida E. Bard

At this season of the year every breeder of poultry is interested in one subject—"How can I have fertile eggs and setting hens?" There are more causes than overfat or too thin in flesh and the numerous other causes we often read of that infertile eggs are found each season, and one which I have not yet seen any experienced breeder write on. Therefore I will give my experience which may be the means of saving both time and birds for someone else. My experience is with yarded fowls. Those that I have out to rood at their pleasure I never trouble with; they take care of themselves as far as matings are concerned. Some years ago I had a widow lady and her baby living with me who, like myself, liked to work with chickens. As my time was needed in other places she wanted to care for the chickens in the pens. After telling her just what to feed, and I knew they were made to scratch in litter for all the grain, hens were laying well and every bird looked the picture of health, but after using three settings of eggs and getting no chicks hatched from the eggs from the pens, I knew something must be wrong there, for the broody hens had all done so well with hatching other eggs and all were

reared for just the same, for caring for the setting hens I don't allow no one else to do unless I am too ill to do so. I finally told the lady I would feed and care for the fowls in the yards for a week and see if I could learn the cause of infertile eggs. We may read about science and theory in poultry rearing, but I learned we must use observation and intelligence (such as most of us are endowed with) in mating up the breeding pens. My first work was to examine fowls and see if they were overfat; learning they were not, I must seek elsewhere for the cause of infertile eggs, which I soon did. Wanting to hatch as many chicks as possible to get started in that breed and not having but one large yard, after selecting the best of the females I then had too many for one male, so I put in two, one a cock, the other a cockerel. I had noticed the cock bird was gallant to extremes. He would find grain of some kind, or a tempting morsel, and call the hens to eat it instead of eating it himself. This gallantry prevented him from getting as much to eat as his needs required to keep up vitality. The rest of the time he spent watching the cockerel and giving a chase around the pen. The result was no matings and no fertile eggs. I shut one male in a coop, leaving one in the pen a day, then changed by leaving the one in coop out or vice versa. After that I had plenty of fertile eggs and no more poor hatches. Another time in

BUSINESS CATCHERS

ENGLISH PHEASANTS. Beautiful, hardy, great game bird. Eggs for sale in season. \$3 per 15, \$9 per \$4. Hatched and raised with common hens. Mrs. A. Schluckebier, Beaver Dam, Wis.

EGG machines are my Blue Andalusians and Buff Leghorns. Mortgage lifters and will not disappoint you. After May 1st, eggs \$1 per 15, \$2 per 30. O. P. Nesmith, Blufford, Ill.

BUFF Poultry Yards. B. and red S. C. Leghorns Buff P. Rocks. Eggs \$1 per 15. H. Bailey, Port Norris, New Jersey.

BUFF P. Rocks, Buff Leghorns, Cornish and W. T. Games. None better. Eggs \$1 per setting, 2 settings \$1.75. J. W. McNeil, R. F. D. No. 1 Springfield, Ohio.

LARGE Black Minorcas Exclusively. Eggs from Chicago prize winners, \$2 per 15, \$3.50 for 3, guaranteed fertile. Dr. W. A. Franklin, Harvey, Ill.

NARRAGANSETT Turkeys, good size and quiet. Eggs 15c each. B. P. Rocks and S. C. W. Leghorns, both good laying strains. Eggs 15, \$1; 40, \$2; 100, \$4. Money order, Salem, Ind. Martha Hoke, Osnonia, Ind.

EGGS from Golden Wyandottes, scoring up to 94, and Mammoth Pekin Ducks, \$1 per setting. W. H. Turkey eggs, \$1.50 per setting. Incubator eggs a specialty. W. G. Young, Chemung, Ill.

FOR SALE. Eggs from S. C. Brown Leghorns, \$1.25 per 15; breeder for 15 years. Also from Snow White Wyandottes, \$1.50 per 15. Standard bred birds. Henry Walther, Clinton, Ind.

BARRED ROCKS exclusively. Eggs from pens, headed by winners at Red Bud and Nashville Shows, \$1.50 per 15, during May and June, if you mention Investigator. Gravel Creek Poultry Farm, Sparta, Ill.

BUFF P. Rock cockerels \$2. Eggs \$1.50 per 15. Double standard Polled Durham bulls ready for use. Reds, good individuals. Strong polled blood. Prices reasonable. J. K. Myer, Kempton, Ill.

S. C. BLACK MINORCAS, winners at Cleveland and Rochester shows. Eggs \$1.50 per 15, four settings for five dollars. Catalogue free. Jos. Krenn, 114 Beecher st., Syracuse, N. Y.

EGGS FOR SALE from our Chicago prize winners. White Holland Turkey eggs \$2 per 15. W. P. Rock eggs only \$1 per 15. Frank J. Hicks, Onarga, Ill.

EGGS FOR HATCHING. B. P. Rocks, two pens Congers, one pen Bradley Rocks, also Em. pen W. T. Rocks. Eggs \$1 per 15. H. H. Stock for sale. J. H. Howarth, Fairbury, Ill.

W. WYANDOTTES and W. Plymouth Rocks. Eggs from two grand pens \$1 per 15, \$3 for 50. Dr. Fred Evans, 104 N. Syracuse st., Grand Island, Neb.

BUFF COCHINS. My specialty is fine Buffs. Heavy feathered, rich colored birds fit for any company. A fine choice cockerels for sale at \$2 each. W. H. Minton, Springfield, Kan.

EGGS. Barred P. Rock eggs from the Fairview poultry yards, 3 settings, \$2 per 100, \$3.50. Stock strong and vigorous. Satisfaction guaranteed. Scarle Bros. & Co., 148 S. 27 st., Lincoln, Neb.

FOREST HILL poultry farm. R. C. B. Leghorns exclusively. 10 years standing. Egg producing strain. Can furnish 100 eggs per pair. Price \$1 per 15, \$2.50 per 50, \$4.00 per 100. C. H. Brown, Council Grove, Kan.

FOR SALE. Eggs from good stock Buff and Barred P. Rocks and W. Wyandottes 15 for \$1.50, 100 for \$7. S. C. Buff Orpingtons imported. 3 strains, 15 \$2, \$4.00 for \$12.00. Jacob Kassinger, Columbus, Ohio.

R. ISLAND Reds. White and Barred Wyandottes, Barred P. Rocks, B. P. Cochins, B. Cochit Bantams, geese, turkeys, duck, all winners. Illustrated circulars. Highland Poultry Farm, Des Moines, Iowa, box 50.

SUNNY SLOPE FRUIT AND POULTRY Farm. C. P. Austin, Derridge, Kan. White Rock Specialist Eggs Frank Heck and John Hughes strains. 15 cockerels for sale Strawberry plants—best varieties. Square treatment.

WHITE WYANDOTTES, cockerels scoring to 912, Mammoth Bronze Turkeys scoring to 905 sired by a Tom weighing 40 lbs and from hens weighing to 25 lbs. Prices reasonable. W. H. Lake, Hamilton, Neb.

SHERWOOD'S Buff and Barred Rock eggs 1.75 for fifteen, \$3.00 for thirty. My catalogue tells all about them. F. B. Ritchie, Warrensburg, Illinois.

BARRED P. ROCKS. Conger strain, farm raised, large size and fine layers. Eggs 1.00 per fifteen. Fine Bronze Turkey eggs, \$3.00 for 12. Mrs. C. T. C. White, Paris, Mo.

Buff Cochon cockerel owned by Krause Bros., Milwaukee, Wis

one season with two yards I had the male birds die before the breeding season was over. For a long time I could not tell why. In my ignorance I thought feed, water, grit and all that the hens ate; if they were hungry they would eat if they wanted it, but after the second one died from no disease I could see, I wrote a friend giving description. Not long before, she replied, "that she had the same experience when she started in the poultry business and that a noted poultry judge who mates up her yards annually gave her the cause of the male birds dying and the remedy, which I will briefly tell." The male bird's gallantry caused death by starvation and the remedy is to remove from the pen at least once a day and feed separately. Close observation at night by examining the crop when on the roost, to see if crop is full, is a very good way to learn if they are getting enough to eat. There may be females in the flock the eggs of which will be deficient in fertility which can be traced to unnatural mating. Domestic animals assert their nature as well as the human race and have likes and dislikes. Our eyes must be used here and judgment also. If we see a female in the flock where this absence of fondness on the part of the male is displayed it should be removed from the pen.

"Setting hens."—Anyone knows enough to set hens. So thought Socrates, when he attempted to set "the old blue hen," but what a dismal failure. There will be better results if broody hens are put in a pen where other hens cannot disturb them. I

move my setting hens in the evening to the pen purposely prepared for setting hens; give them a couple of nest eggs, put a board in front of the box to make the nest dark. The next evening, if they stay on the nest all day, I remove the nest eggs, give hens a dusting with insect powder and the eggs I want them to have, take the board from the front of nest and they can go off of nest when they wish to get feed and water, which is kept in the pen. Thus far I have not had one broken egg in the nest and other years when I kept the hens shut up and let them out every evening to eat. I usually had many eggs to wash, caused by being broken in the nest, and there was so much work to clean nest boxes too that I wished there were no setting hens, or I might have a wooden hen, and I am going to have one, too, for my hens persist in laying eggs and I like early chicks, but I shall set eggs, too. I will tell the readers of the Investigator next time how I care for chicks.

IDA E. BARD.

Reading Notice

Our enterprising advertisers, The Mississippi Valley Belgian Hare Company, advise us that their extensive stud is in fine condition and increasing rapidly: they are weaning 400 young this month. They have constantly on hand about a thousand head of hares of their own raising and are therefore at all times ready to fill orders for either pedigreed or unpedigreed Rufus Red or Black Belgian hares, singly or in pairs, trios or herds. Anyone wishing to embark in the hare industry, or those desiring to improve their stock, cannot do better than to correspond with these people who have been in business for years and are well known for honesty and reliability.

Notice to Wyandotte Breeders

I have recently been appointed Secretary of the Western Wyandotte Club and I earnestly wish every breeder in the West to become a member of our club. We expect to make this club second to none in the country, and by putting our heads together we will have no difficulty in making it such. Send me your name, and get as many other breeders of this "beauty breed" as possible to become members. We expect to be heard from this fall at the different shows over the West. Give this your earliest attention.

JOE C. RUSSELL, Secretary,
Western Wyandotte Club,
Breckenridge, Mo.

BUSINESS CATCHERS

S. S. HAMBURG eggs 90c. per sitting. From fine birds that will stand the test in any show room. Guarantee of quality money refunded. Geo. Dahlenburg, Seymour, Ind.

BARRED P. R. eggs, famous Ringlet strain, Stock direct from Thompson. R. C. B. Leghorn eggs, Schreiber's strains. Birds scoring 92 to 94 by Heimlich. One setting, 200, 2 settings 3.50. Pope & Schwartz, Hillsboro, Ill.

BARRED ROCKS exclusively. Eggs from pen of fine birds hard to beat. 1.50 per setting. Mrs. Alice Jackson, Champaign, Ill. R. F. D.

KENTUCKY PIT GAMES, Far downs and Ky. Dominiques. Eggs 2.00 for 15, 3.00 for 30. Cocks 5.00, hens 1.50. Ben Lucas, Georgetown, Ky.

W. F. ROCK Eggs from the very best strain in the country. Our birds equal to any others. Eggs 1.50 for 15. Write wants and ask for Novel Egg Folder free. Geo. F. Stanton & Sons, Heeneppin, Ill. Box F

SIX PENS of W. Rocks. Most noted strain on earth. Our birds score from 91 to 96 by reliable judges. Eggs this season only 1.50 per 15. Our elegant egg folder free. Geo. F. Stanton & Sons, Box F Heeneppin, Ill.

NO TIME OR MONEY has been spared in selecting our stock of Eggs, Leghorns, Pekin Ducks and Poland China wans. Eggs per setting 1.00. Harry W. Garman, Parkville, St. Jo, Co. Mich.

BUFF ORPINGTONS. Large, healthy, vigorous birds. Clean sweep at shows. Eggs 3.00 per setting. R. C. Brown and S. C. W. Leghorn eggs 1.50 per setting. Louis Mogenenson, Racine, Wis.

BUFF ORPINGTONS are the coming general purpose fowl. Cocks 10 to 12 lbs, hens 7 to 9 lbs. Eggs in season, 1.50 per 15; 3.00 per 30. Levi N. Schulte, Oregon, Missouri.

S. L. WYANDOTTES. Sixteen years a breeder. Birds shipped on approval. Fine in facing; laced wing bar. My strains wins prizes in the hands of my customers. Eggs 1.50 per 15. F. D. Blair, Georgetown, Ohio.

EGGS \$2 per 15 selected W. Wyandottes, scoring 91 to 94, mated with males scoring 91 to 93. Shellabarger, Incubator eggs \$4 per 100. John Old, Woodbine, Ill.

WHITE P. ROCK eggs 1.00 for 15; high scoring hens, headed by a point cockerel. Satisfaction guaranteed. J. H. Piper, Whitehall, Illinois.

BUFF ROCKS exclusively. Eggs, 15 for one dollar. Breeding stock good weight and color. Above price low for the quality. A. A. Simons, Hamburg, Iowa.

SILVER WYANDOTTES, first and third prize pen scoring 187. Eggs from this famous stock, \$2 per fifteen. Incubator lots from flock, 6.00 per hundred. Martin Bender, Winona, Minn.

MAHOMET, POULTRY YARDS. Barred P. Rocks exclusively. E. B. Thompson strain. Eggs \$2 per 15; 3.50 per 30. Eggs shipped in Erie baskets. Sale arrival guaranteed. Frank Purnell, Mahomet, Ill.

PREMIUM STOCK Poultry Yard. Barred, Buff and White Rocks; S. C. W. and Brown Leghorns and Black Minorcas. Fertile eggs 15 for \$1. Stock for sale. A. Starzinger, Carbondale, Ill.

P. WYANDOTTES, 1, 2, 3, 4, 5, prizes, Worcester Boston, New York; breed only choicest hens; 4 years a breeder; raise; prize stock only. C. O. Loring, Dedham, Mass. One-half express paid to western points.

MONEY MAKERS are the four new kinds—Part Wyandottes, beautiful plumage; Silver Penciled or Dark Brahma Wyandottes, beautiful soft gray; Violet Wyandottes, bunch of violets; Sicily Wyandottes lay at 4 months; 8 first prizes, and 3, 4, 5, 6, prizes, at great Boshow 1892. Half express paid to western points. C. O. Loring, Dedham, Mass.

ONE DOLLAR buys fifteen eggs from extra fine stock of Buff and Barred Plymouth Rock, W. Wyandottes and R. C. Brown Leghorns. C. R. Norman, Stromsburg, Neb.

FOR SALE. Three trios of W. Plymouth Rock high scoring prize winning birds scoring from 92 to 95 points, are bred for their great egg production as well as show qualities. Each trio consists of 3 pullets and one chl. Price per trio, 5.00. Eggs 15 for \$1.00. Mrs. D. Beerer, Rose Cottage Farm, Box 405, Butler, Indiana.

EGGS from Single Comb White, Brown, Buff Black, Dominique, -lyer Duckwing and Rose Comb White Buff and Brown Leghorns. Price 1st free, Sylvester Shitely Port Clinton, Ohio.

Poultry Investigator

Is published the first of each month at
Clay Center, Nebraska.

—BY—

Poultry Investigator Publishing Co.

L. P. HARRIS, EDITOR.

Subscription price, 25 cts. a Year.

Advertising Rates.

\$1.25 per inch each insertion. One inch one year \$12.00. These are our only rates for advertising and will be strictly adhered to. We treat all alike both great and small. Payment on yearly contracts quarterly in advance. All other contracts cash with order.

All communications and advertisements must be in our hands by the 15th to insure insertion in issue of following month.

Parties wishing to change their address should give the old as well as the new address.

This paper will not be sent after the year's subscription expires so be sure and renew promptly.

In Regard to Advertisers.

We are very careful in soliciting advertisements, to see that all are reliable. If at any time anyone answering any display advertisement found in the columns of POULTRY INVESTIGATOR is in any way swindled, will please write us at once, we will look into the matter, and if such an advertisement has been inserted for the purpose of defrauding our readers, we will drop the advertisement and publish the swindler's name. We wish to keep our advertising columns free from all such advertisers, and when writing to an advertiser whose advertisement was found in these columns, we would ask it as an especial favor that you say you saw it in THE POULTRY INVESTIGATOR.

Address all communications to
Poultry Investigator Co.,
Clay Center, Nebraska.

Change of Name and Ownership.

With this issue, I close my year's work as editor of the Poultry Investigator, and I thank the many patrons who have given it their hearty support. It has given me great pleasure to see its patrons grow into thousands from so small a beginning, and it has given me much more pleasure to know that my feeble efforts to give the readers of the Investigator a clean and good paper were appreciated, and I am sorry

that I am now obliged to give up the work, but I find that there is an end to man's endurance. As the Draper Publishing Company could give the readers of the Investigator so much better service, I felt, as well as the owners of the Investigator (the Sure Hatch Incubator Co.), that we would be justified in turning the Investigator over to them. In fact, the new management will enter upon the duties with a full sense of the obligation to an expectant public, with a clear conception of the far-reaching influence of their policy upon one of the most important industries of this country, and with a renewed zest and a new dignity to the poultry pursuits and an increased influence and remuneration to those engaged in it. With the assurance that all will be for the best, and that the patrons of the Investigator will in the end be the gainers, as well as for the best interests of the poultry industry at large.

With best wishes for the success of the Investigator, patrons, and the Draper Publishing Co., I am

Respectfully,

L. P. HARRIS.

This is the last number of the Poultry Investigator. The subscribers will receive the Commercial Poultry from now on. Advertising contracts up to and including this June issue, is a matter between the advertisers and the Sure Hatch Incubator Company.

We have negotiations under way in which we expect to dispose of our fine poultry business to a new company which will continue the business here at Clay Center, Nebr. The growth of our incubator business has reached such proportions that it requires my entire time and attention. To give the reader a more definite idea of the extent of our incubator, poultry, and poultry paper business, will mention that we have sold nearly 11,000 incubators and brooders since Jan. 1st, 1902, we have shipped over 100,000 eggs since March 15th, 1902, and in the last 10 months we have built up a subscription list of 18,000 subscribers for the Poultry Investigator.

Mr. Harris finds the poultry business enough to look after, and I am satisfied with having done a thorough job at the incubator business, hence the sale of the Investigator, to give us both a better show another year.

I here wish to thank all our patrons for their patronage. I hope our pleasant business relations will continue. I promise you my best effort. I can also promise you a good friend in the Commercial Poultry and from time to time you will hear from me through that paper. I will feel more at liberty in the

BUSINESS CATCHERS.

"MOCKERS," "Snowballs," "Red Cubans" and "McGinty Warriors," bred to light for my own money. Illustrated circulars with rules of the pit free. E. H. McCoy, Paw Paw, Mich.

B. C. BANTAM eggs from selected high high scoring stock. A few good cockerels and pairs for sale. See cards furnished. W. J. Gow, Norfolk, Neb.

FOR SALE, Eggs at \$2 for 15 from Black Langshans and Light Brahmas that are bred and mated right. I exhibited my Langshans at Indianapolis, Farmers' Association Show, 1901, winning American Langshan Club cup in hot competition. H. J. Rader, La Fayette, Ind.

JERSEY STRAIN Light Brahmas, winners at the big eastern shows. Illustrated circulars free. Eggs \$3. Fine breeding cockerels, \$3 up. F. R. Mueller, 68 Freeman St., Newark, N. J.

SILVER Cape worm extractors, unequaled. 3 for 25c. Big profits to agents. Samples and particulars free. Satisfaction guaranteed or money refunded. Dr. Wm. Hollowell, Davisville, Pa.

S. C. B. LEGHORN eggs, 30 for \$1.50; 100 for \$3.50. P. Plymouth Rock eggs, 15 for \$1. A. H. Carlson, Chanute, Route 2, Kansas.

BARRED P. ROCKS exclusively. Thompson & Hawkins's strain strain, 12 years with this variety. Secure 90 to 94%. Eggs \$2 per 15; \$3 per 100; \$2.50 per 50. Satisfaction guaranteed. Mrs. Rosalie Hendrickson, Marion, Ill.

JOHN R. GARBE, Billings, Mo. Breeder of fine poultry. For May and June will pay express on eggs and deliver to your express office. White Holland Turkey eggs, 10 for \$3. Golden Wyandottes S. C. B. Leghorns, Barred and White Plymouth Rock and W. Gaithe eggs 15 for \$2. All are pure stock. Remember express prepaid anywhere in U.S. Mention Investigator.

EGGS from White and Black Minorcas, Buff Leghorns, Barred P. Rocks, \$1.50 per 15; good hen, four pullets and one cockerel, not related for sale after May 1. Price of the six, \$10. Also pen of White Minorcas for sale cheap if taken soon. A. A. Eay, Neptune, O.

HOUDAN SPECIALIST. Clarence A. Smith, Osceola, Ia. Large dark laying strain. Eggs from special mated pen all winners \$2 per 15; \$3.50 for 30. Order now. Good hatch guaranteed.

EGGS from Buff Orpingtons of high class (Cook's and Edward's strains); \$2.50 per setting, also stock for sale reasonable. Wm. S. Major, 219 7th street, Port Huron, Mich.

INDIAN RUNNER ducks. Regular egg machines. Eggs balance of season \$1.50 per setting or \$2 per 20. Pine Brook Poultry, Farm, Napoleon, Ohio.

BUFF P. ROCKS, four pens of the very best, picked from 250 carefully bred Buffs, none better. Eggs \$1.50 per 15. Herbert S. Redhead, 1757 Brooks st, Des Moines, Iowa.

ARE YOU LOOKING for eggs that will hatch S. C. B. Leghorns. Place your order with Edwin W. Staebler, 36 Tremont st. Cleveland O. Eggs \$1.50 per 15. Winners of 34 ck, 34 and 2 pul, at Cleveland, which is easy 4th on the list of great shows.

BIG MONEY for agents selling our Fumigating nest egg. Pollard & Conaway, Bloomington, Ill.

DARK BRAHMAS, the best of all the large varieties, for roasters, capons and winter eggs. Hardy, bear confinement and one of the handsomest Eggs bred by me. Balance of the season, \$2 per 13, \$3.50 per 20, \$4 per 40. A few choice breeders to spare. N. R. Nye, Leavenworth, Kansas.

BARRED P. ROCK Bradley & Thompson W. Wyandottes, Duxton's Buff Cochins, Harems fine young Barred P. Rocks for sale. Eggs for hatching in season. Write for prices. J. Dammell, No. 19 So. 5th st. Keokuk, Iowa.

CHEAPEST, best, 25 leading varieties, Felch, Upson, Bond, Hawley, Latham, Snipe, Abbott, Nugget, Cook, Rowlands, Jackson, and other great English and American strains: Brahmas, Cochins, Langshans, Shaws, Orpingtons, Wyandottes, Rocks, Game, Leghorns, Ducks. Catalogue free. W. E. Hicks, Ponchaot, La.

BUFF LEGHORNS. First prize winners at Chicago Breeder's Exposition. Eggs of the finest ever. Stock for sale. Circulars free. Chas. L. Thayer, 7030 Union Ave. Chicago, Ill.

BUFF and BARRED Rocks, Buff Leghorns, Black breasted Red Games, Pekin Ducks, Fanciful Bantams. Eggs from fine stock. Get price list at once. Satisfaction guaranteed. The Utz Poultry Farm, Esterville, Ia.

Commercial Poultry, than I could in the Poultry Investigator, for the reason that some might have construed my little write ups as boomers to selfishly advance our own incubator interest. By the way, have you noticed the fairness shown our competitors in the Poultry Investigator? The question often confronts me as to whether they would do the same by us if we had changed places. No doubt some of them would and others would not.

During the summer and fall months I am going to write a book on poultry raising. The name of this book will be Sure Hatch Catalogue. It will be ready for mailing about Christmas time. I hope every poultry raiser will want a Christmas gift. I will try to have enough books to go around. Talk about poultry guides and such things, mine will not be that kind. It will be catalogue unanously, but it will have enough honest poultry information to entitle it to a front seat. It's not going to copy anything or anybody; it's going to be itself and if I know where I am at, this book will be the kind that the people will keep for the good there is in it.

Now about incubators. We are going to put out the best and suit ourselves and our patrons on prices, will do this regardless of all the nations on earth. We are getting rid of side issues for the express purpose of being on hands when the ball opens.

Yours truly,

M. M. JOHNSON.

This will be the last issue of the Poultry Investigator under the present name and ownership, as the paper has been sold to the Draper Publishing Company of Chicago and will be merged with Commercial Poultry.

The Poultry Investigator has been heartily supported during its entire life, and we feel confident that this support will not be withdrawn now that it is to become a part of the most widely circulated poultry paper in the world. The Draper Publishing Company will carry out all our subscription contracts, and our readers will receive two numbers of that paper every month for the same length of time that their subscriptions to the Poultry Investigator are credited, thus getting twice as many papers as they would have received under the old arrangement. We ask for Commercial Poultry the same support and friendship that has been accorded to us.

POULTRY INVESTIGATOR CO.

The most graceful pigeon that walks—the White Fantail.

WHITE LANGSHANS.

Being a breeder of the White Langshans for seven or eight years, I will describe them as I have found them.

I have had some experience with most breeds of poultry, but have yet to see the fowl that will beat the White Langshans for utility. I do not claim that they are the best all-purpose fowl in existence, but one of the best.

The Langshans are natives of the extreme northern part of China and were first introduced into this country in 1878. The White Langshans variety has not been bred so long, but have gained rapidly in popularity.

As a general purpose fowl they have no superior and as winter layers they have stood without a rival. They are one of the hardest fowls in existence. Have smaller bones than any other large breeds and the flesh is juicy and tender; are gentle in disposition, bearing good setters and mothers; keep confinement well, but if given their liberty are great foragers; are not lazy like most Asiatic breeds.

They are a handsome fowl in appearance, being pure white in plumage, therefore free from those objectionable black pin feathers. At the great dressed poultry and egg show in December, 1898, held under the auspices of the Board of Agriculture, a pair of White Langshans took first prize for dressed poultry, also first prize for brown eggs.

They have bright red combs, wattles and earlobes, shanks slate color; bottoms of feet and skin between toes, pink, producing a combination of colors not possessed by any other breed of fowls. They are a very handsome fowl and a flock of White Langshans look beautiful on a green lawn.

The White Langshan is a good breed for either fancier or farmer. The young chicks when first hatched are a blue or mole color, but moult white. I think the bluer the chick when hatched the bluer the blood, the whiter the chick will be when matured.

I have had my customers write me saying, "The eggs I bought of you have hatched, but none of the chicks are white."

But in a few days their little wings begin to grow and show white feathers, so of course by this time they have seen their mistake, their fears have vanished and they are pleased.

With a fair and unprejudiced trial, the White Langshans will establish itself as one of the best of the utility and fancy breeds.

They have had no great boom, as most other breeds, but have come gradually to front on their own great merits.

MRS. L. MUMPOWER.

Chillicothe, Mo.

BUSINESS CATCHERS.

MAMMOTH WHITE Pekin Ducks exclusively. Eggs for hatching, 21 per 11. Fred Gruenewald, Rear 347 Lowry st. Allegheny, Pa.

PARTRIDGE WYANDOTTES and Single Comb R. I. Reds. Eggs from as good as the best. Partridge, \$3 per setting, Reds, \$2.50 per setting. One third off after June 1st. Otto B. Cannon, Elsberty, Mo.

WHITE FACE BLACK SPANISH exclusively. Brood them 40 years on free range. Eggs will hatch. Eggs 90 cts. per 13 \$1.50 per 26. John Bennett, Sunman, Ripley Co. Ind.

YOU'LL NEVER REGRET it if you get a setting of my Barred P. Rock eggs at \$1.50 and will live in prices, \$1.50 per 13. They will please you. W. F. Crigler, Nevada, Mo.

LEGHORN EGGS from the greatest laying strain on earth. S. C. Brown, and White Leghorn eggs, 75c per setting, per 100. W. P. Chamberlain, Kirkwood, Mo.

WHITE WYANDOTTES. At Macomb, Shaner, judge, 1st, 2nd 3d chicks, 95¢, 93¢, 93¢; 1st, 2d 3d pullets, 95¢, 95¢, 95¢; 3d 4th 5th, 95¢, 95¢; 1st pen, 1st for 10 best birds in American class, 95¢; 2nd, 95¢; 3rd, 95¢; 4th, 95¢; 5th, 95¢; 6th, 95¢; 7th, 95¢; 8th, 95¢; 9th, 95¢; 10th, 95¢; 11th, 95¢; 12th, 95¢; 13th, 95¢; 14th, 95¢; 15th, 95¢; 16th, 95¢; 17th, 95¢; 18th, 95¢; 19th, 95¢; 20th, 95¢; 21st, 95¢; 22nd, 95¢; 23rd, 95¢; 24th, 95¢; 25th, 95¢; 26th, 95¢; 27th, 95¢; 28th, 95¢; 29th, 95¢; 30th, 95¢; 31st, 95¢; 32nd, 95¢; 33rd, 95¢; 34th, 95¢; 35th, 95¢; 36th, 95¢; 37th, 95¢; 38th, 95¢; 39th, 95¢; 40th, 95¢; 41st, 95¢; 42nd, 95¢; 43rd, 95¢; 44th, 95¢; 45th, 95¢; 46th, 95¢; 47th, 95¢; 48th, 95¢; 49th, 95¢; 50th, 95¢; 51st, 95¢; 52nd, 95¢; 53rd, 95¢; 54th, 95¢; 55th, 95¢; 56th, 95¢; 57th, 95¢; 58th, 95¢; 59th, 95¢; 60th, 95¢; 61st, 95¢; 62nd, 95¢; 63rd, 95¢; 64th, 95¢; 65th, 95¢; 66th, 95¢; 67th, 95¢; 68th, 95¢; 69th, 95¢; 70th, 95¢; 71st, 95¢; 72nd, 95¢; 73rd, 95¢; 74th, 95¢; 75th, 95¢; 76th, 95¢; 77th, 95¢; 78th, 95¢; 79th, 95¢; 80th, 95¢; 81st, 95¢; 82nd, 95¢; 83rd, 95¢; 84th, 95¢; 85th, 95¢; 86th, 95¢; 87th, 95¢; 88th, 95¢; 89th, 95¢; 90th, 95¢; 91st, 95¢; 92nd, 95¢; 93rd, 95¢; 94th, 95¢; 95th, 95¢; 96th, 95¢; 97th, 95¢; 98th, 95¢; 99th, 95¢; 100th, 95¢; 101st, 95¢; 102nd, 95¢; 103rd, 95¢; 104th, 95¢; 105th, 95¢; 106th, 95¢; 107th, 95¢; 108th, 95¢; 109th, 95¢; 110th, 95¢; 111th, 95¢; 112th, 95¢; 113th, 95¢; 114th, 95¢; 115th, 95¢; 116th, 95¢; 117th, 95¢; 118th, 95¢; 119th, 95¢; 120th, 95¢; 121st, 95¢; 122nd, 95¢; 123rd, 95¢; 124th, 95¢; 125th, 95¢; 126th, 95¢; 127th, 95¢; 128th, 95¢; 129th, 95¢; 130th, 95¢; 131st, 95¢; 132nd, 95¢; 133rd, 95¢; 134th, 95¢; 135th, 95¢; 136th, 95¢; 137th, 95¢; 138th, 95¢; 139th, 95¢; 140th, 95¢; 141st, 95¢; 142nd, 95¢; 143rd, 95¢; 144th, 95¢; 145th, 95¢; 146th, 95¢; 147th, 95¢; 148th, 95¢; 149th, 95¢; 150th, 95¢; 151st, 95¢; 152nd, 95¢; 153rd, 95¢; 154th, 95¢; 155th, 95¢; 156th, 95¢; 157th, 95¢; 158th, 95¢; 159th, 95¢; 160th, 95¢; 161st, 95¢; 162nd, 95¢; 163rd, 95¢; 164th, 95¢; 165th, 95¢; 166th, 95¢; 167th, 95¢; 168th, 95¢; 169th, 95¢; 170th, 95¢; 171st, 95¢; 172nd, 95¢; 173rd, 95¢; 174th, 95¢; 175th, 95¢; 176th, 95¢; 177th, 95¢; 178th, 95¢; 179th, 95¢; 180th, 95¢; 181st, 95¢; 182nd, 95¢; 183rd, 95¢; 184th, 95¢; 185th, 95¢; 186th, 95¢; 187th, 95¢; 188th, 95¢; 189th, 95¢; 190th, 95¢; 191st, 95¢; 192nd, 95¢; 193rd, 95¢; 194th, 95¢; 195th, 95¢; 196th, 95¢; 197th, 95¢; 198th, 95¢; 199th, 95¢; 200th, 95¢; 201st, 95¢; 202nd, 95¢; 203rd, 95¢; 204th, 95¢; 205th, 95¢; 206th, 95¢; 207th, 95¢; 208th, 95¢; 209th, 95¢; 210th, 95¢; 211st, 95¢; 212nd, 95¢; 213rd, 95¢; 214th, 95¢; 215th, 95¢; 216th, 95¢; 217th, 95¢; 218th, 95¢; 219th, 95¢; 220th, 95¢; 221st, 95¢; 222nd, 95¢; 223rd, 95¢; 224th, 95¢; 225th, 95¢; 226th, 95¢; 227th, 95¢; 228th, 95¢; 229th, 95¢; 230th, 95¢; 231st, 95¢; 232nd, 95¢; 233rd, 95¢; 234th, 95¢; 235th, 95¢; 236th, 95¢; 237th, 95¢; 238th, 95¢; 239th, 95¢; 240th, 95¢; 241st, 95¢; 242nd, 95¢; 243rd, 95¢; 244th, 95¢; 245th, 95¢; 246th, 95¢; 247th, 95¢; 248th, 95¢; 249th, 95¢; 250th, 95¢; 251st, 95¢; 252nd, 95¢; 253rd, 95¢; 254th, 95¢; 255th, 95¢; 256th, 95¢; 257th, 95¢; 258th, 95¢; 259th, 95¢; 260th, 95¢; 261st, 95¢; 262nd, 95¢; 263rd, 95¢; 264th, 95¢; 265th, 95¢; 266th, 95¢; 267th, 95¢; 268th, 95¢; 269th, 95¢; 270th, 95¢; 271st, 95¢; 272nd, 95¢; 273rd, 95¢; 274th, 95¢; 275th, 95¢; 276th, 95¢; 277th, 95¢; 278th, 95¢; 279th, 95¢; 280th, 95¢; 281st, 95¢; 282nd, 95¢; 283rd, 95¢; 284th, 95¢; 285th, 95¢; 286th, 95¢; 287th, 95¢; 288th, 95¢; 289th, 95¢; 290th, 95¢; 291st, 95¢; 292nd, 95¢; 293rd, 95¢; 294th, 95¢; 295th, 95¢; 296th, 95¢; 297th, 95¢; 298th, 95¢; 299th, 95¢; 300th, 95¢; 301st, 95¢; 302nd, 95¢; 303rd, 95¢; 304th, 95¢; 305th, 95¢; 306th, 95¢; 307th, 95¢; 308th, 95¢; 309th, 95¢; 310th, 95¢; 311st, 95¢; 312nd, 95¢; 313rd, 95¢; 314th, 95¢; 315th, 95¢; 316th, 95¢; 317th, 95¢; 318th, 95¢; 319th, 95¢; 320th, 95¢; 321st, 95¢; 322nd, 95¢; 323rd, 95¢; 324th, 95¢; 325th, 95¢; 326th, 95¢; 327th, 95¢; 328th, 95¢; 329th, 95¢; 330th, 95¢; 331st, 95¢; 332nd, 95¢; 333rd, 95¢; 334th, 95¢; 335th, 95¢; 336th, 95¢; 337th, 95¢; 338th, 95¢; 339th, 95¢; 340th, 95¢; 341st, 95¢; 342nd, 95¢; 343rd, 95¢; 344th, 95¢; 345th, 95¢; 346th, 95¢; 347th, 95¢; 348th, 95¢; 349th, 95¢; 350th, 95¢; 351st, 95¢; 352nd, 95¢; 353rd, 95¢; 354th, 95¢; 355th, 95¢; 356th, 95¢; 357th, 95¢; 358th, 95¢; 359th, 95¢; 360th, 95¢; 361st, 95¢; 362nd, 95¢; 363rd, 95¢; 364th, 95¢; 365th, 95¢; 366th, 95¢; 367th, 95¢; 368th, 95¢; 369th, 95¢; 370th, 95¢; 371st, 95¢; 372nd, 95¢; 373rd, 95¢; 374th, 95¢; 375th, 95¢; 376th, 95¢; 377th, 95¢; 378th, 95¢; 379th, 95¢; 380th, 95¢; 381st, 95¢; 382nd, 95¢; 383rd, 95¢; 384th, 95¢; 385th, 95¢; 386th, 95¢; 387th, 95¢; 388th, 95¢; 389th, 95¢; 390th, 95¢; 391st, 95¢; 392nd, 95¢; 393rd, 95¢; 394th, 95¢; 395th, 95¢; 396th, 95¢; 397th, 95¢; 398th, 95¢; 399th, 95¢; 400th, 95¢; 401st, 95¢; 402nd, 95¢; 403rd, 95¢; 404th, 95¢; 405th, 95¢; 406th, 95¢; 407th, 95¢; 408th, 95¢; 409th, 95¢; 410th, 95¢; 411st, 95¢; 412nd, 95¢; 413rd, 95¢; 414th, 95¢; 415th, 95¢; 416th, 95¢; 417th, 95¢; 418th, 95¢; 419th, 95¢; 420th, 95¢; 421st, 95¢; 422nd, 95¢; 423rd, 95¢; 424th, 95¢; 425th, 95¢; 426th, 95¢; 427th, 95¢; 428th, 95¢; 429th, 95¢; 430th, 95¢; 431st, 95¢; 432nd, 95¢; 433rd, 95¢; 434th, 95¢; 435th, 95¢; 436th, 95¢; 437th, 95¢; 438th, 95¢; 439th, 95¢; 440th, 95¢; 441st, 95¢; 442nd, 95¢; 443rd, 95¢; 444th, 95¢; 445th, 95¢; 446th, 95¢; 447th, 95¢; 448th, 95¢; 449th, 95¢; 450th, 95¢; 451st, 95¢; 452nd, 95¢; 453rd, 95¢; 454th, 95¢; 455th, 95¢; 456th, 95¢; 457th, 95¢; 458th, 95¢; 459th, 95¢; 460th, 95¢; 461st, 95¢; 462nd, 95¢; 463rd, 95¢; 464th, 95¢; 465th, 95¢; 466th, 95¢; 467th, 95¢; 468th, 95¢; 469th, 95¢; 470th, 95¢; 471st, 95¢; 472nd, 95¢; 473rd, 95¢; 474th, 95¢; 475th, 95¢; 476th, 95¢; 477th, 95¢; 478th, 95¢; 479th, 95¢; 480th, 95¢; 481st, 95¢; 482nd, 95¢; 483rd, 95¢; 484th, 95¢; 485th, 95¢; 486th, 95¢; 487th, 95¢; 488th, 95¢; 489th, 95¢; 490th, 95¢; 491st, 95¢; 492nd, 95¢; 493rd, 95¢; 494th, 95¢; 495th, 95¢; 496th, 95¢; 497th, 95¢; 498th, 95¢; 499th, 95¢; 500th, 95¢; 501st, 95¢; 502nd, 95¢; 503rd, 95¢; 504th, 95¢; 505th, 95¢; 506th, 95¢; 507th, 95¢; 508th, 95¢; 509th, 95¢; 510th, 95¢; 511st, 95¢; 512nd, 95¢; 513rd, 95¢; 514th, 95¢; 515th, 95¢; 516th, 95¢; 517th, 95¢; 518th, 95¢; 519th, 95¢; 520th, 95¢; 521st, 95¢; 522nd, 95¢; 523rd, 95¢; 524th, 95¢; 525th, 95¢; 526th, 95¢; 527th, 95¢; 528th, 95¢; 529th, 95¢; 530th, 95¢; 531st, 95¢; 532nd, 95¢; 533rd, 95¢; 534th, 95¢; 535th, 95¢; 536th, 95¢; 537th, 95¢; 538th, 95¢; 539th, 95¢; 540th, 95¢; 541st, 95¢; 542nd, 95¢; 543rd, 95¢; 544th, 95¢; 545th, 95¢; 546th, 95¢; 547th, 95¢; 548th, 95¢; 549th, 95¢; 550th, 95¢; 551st, 95¢; 552nd, 95¢; 553rd, 95¢; 554th, 95¢; 555th, 95¢; 556th, 95¢; 557th, 95¢; 558th, 95¢; 559th, 95¢; 560th, 95¢; 561st, 95¢; 562nd, 95¢; 563rd, 95¢; 564th, 95¢; 565th, 95¢; 566th, 95¢; 567th, 95¢; 568th, 95¢; 569th, 95¢; 570th, 95¢; 571st, 95¢; 572nd, 95¢; 573rd, 95¢; 574th, 95¢; 575th, 95¢; 576th, 95¢; 577th, 95¢; 578th, 95¢; 579th, 95¢; 580th, 95¢; 581st, 95¢; 582nd, 95¢; 583rd, 95¢; 584th, 95¢; 585th, 95¢; 586th, 95¢; 587th, 95¢; 588th, 95¢; 589th, 95¢; 590th, 95¢; 591st, 95¢; 592nd, 95¢; 593rd, 95¢; 594th, 95¢; 595th, 95¢; 596th, 95¢; 597th, 95¢; 598th, 95¢; 599th, 95¢; 600th, 95¢; 601st, 95¢; 602nd, 95¢; 603rd, 95¢; 604th, 95¢; 605th, 95¢; 606th, 95¢; 607th, 95¢; 608th, 95¢; 609th, 95¢; 610th, 95¢; 611st, 95¢; 612nd, 95¢; 613rd, 95¢; 614th, 95¢; 615th, 95¢; 616th, 95¢; 617th, 95¢; 618th, 95¢; 619th, 95¢; 620th, 95¢; 621st, 95¢; 622nd, 95¢; 623rd, 95¢; 624th, 95¢; 625th, 95¢; 626th, 95¢; 627th, 95¢; 628th, 95¢; 629th, 95¢; 630th, 95¢; 631st, 95¢; 632nd, 95¢; 633rd, 95¢; 634th, 95¢; 635th, 95¢; 636th, 95¢; 637th, 95¢; 638th, 95¢; 639th, 95¢; 640th, 95¢; 641st, 95¢; 642nd, 95¢; 643rd, 95¢; 644th, 95¢; 645th, 95¢; 646th, 95¢; 647th, 95¢; 648th, 95¢; 649th, 95¢; 650th, 95¢; 651st, 95¢; 652nd, 95¢; 653rd, 95¢; 654th, 95¢; 655th, 95¢; 656th, 95¢; 657th, 95¢; 658th, 95¢; 659th, 95¢; 660th, 95¢; 661st, 95¢; 662nd, 95¢; 663rd, 95¢; 664th, 95¢; 665th, 95¢; 666th, 95¢; 667th, 95¢; 668th, 95¢; 669th, 95¢; 670th, 95¢; 671st, 95¢; 672nd, 95¢; 673rd, 95¢; 674th, 95¢; 675th, 95¢; 676th, 95¢; 677th, 95¢; 678th, 95¢; 679th, 95¢; 680th, 95¢; 681st, 95¢; 682nd, 95¢; 683rd, 95¢; 684th, 95¢; 685th, 95¢; 686th, 95¢; 687th, 95¢; 688th, 95¢; 689th, 95¢; 690th, 95¢; 691st, 95¢; 692nd, 95¢; 693rd, 95¢; 694th, 95¢; 695th, 95¢; 696th, 95¢; 697th, 95¢; 698th, 95¢; 699th, 95¢; 700th, 95¢; 701st, 95¢; 702nd, 95¢; 703rd, 95¢; 704th, 95¢; 705th, 95¢; 706th, 95¢; 707th, 95¢; 708th, 95¢; 709th, 95¢; 710th, 95¢; 711st, 95¢; 712nd, 95¢; 713rd, 95¢; 714th, 95¢; 715th, 95¢; 716th, 95¢; 717th, 95¢; 718th, 95¢; 719th, 95¢; 720th, 95¢; 721st, 95¢; 722nd, 95¢; 723rd, 95¢; 724th, 95¢; 725th, 95¢; 726th, 95¢; 727th, 95¢; 728th, 95¢; 729th, 95¢; 730th, 95¢; 731st, 95¢; 732nd, 95¢; 733rd, 95¢; 734th, 95¢; 735th, 95¢; 736th, 95¢; 737th, 95¢; 738th, 95¢; 739th, 95¢; 740th, 95¢; 741st, 95¢; 742nd, 95¢; 743rd, 95¢; 744th, 95¢; 745th, 95¢; 746th, 95¢; 747th, 95¢; 748th, 95¢; 749th, 95¢; 750th, 95¢; 751st, 95¢; 752nd, 95¢; 753rd, 95¢; 754th, 95¢; 755th, 95¢; 756th, 95¢; 757th, 95¢; 758th, 95¢; 759th, 95¢; 760th, 95¢; 761st, 95¢; 762nd, 95¢; 763rd, 95¢; 764th, 95¢; 765th, 95¢; 766th, 95¢; 767th, 95¢; 768th, 95¢; 769th, 95¢; 770th, 95¢; 771st, 95¢; 772nd, 95¢; 773rd, 95¢; 774th, 95¢; 775th, 95¢; 776th, 95¢; 777th, 95¢; 778th, 95¢; 779th, 95¢; 780th, 95¢; 781st, 95¢; 782nd, 95¢; 783rd, 95¢; 784th, 95¢; 785th, 95¢; 786th, 95¢; 787th, 95¢; 788th, 95¢; 789th, 95¢; 790th, 95¢; 791st, 95¢; 792nd, 95¢; 793rd, 95¢; 794th, 95¢; 795th, 95¢; 796th, 95¢; 797th, 95¢; 798th, 95¢; 799th, 95¢; 800th, 95¢; 801st, 95¢; 802nd, 95¢; 803rd, 95¢; 804th, 95¢; 805th, 95¢; 806th, 95¢; 807th, 95¢; 808th, 95¢; 809th, 95¢; 810th, 95¢; 811st, 95¢; 812nd, 95¢; 813rd, 95¢; 814th, 95¢; 815th, 95¢; 816th, 95¢; 817th, 95¢; 818th, 95¢; 819th, 95¢; 820th, 95¢; 821st, 95¢; 822nd, 95¢; 823rd, 95¢; 824th, 95¢; 825th, 95¢; 826th, 95¢; 827th, 95¢; 828th, 95¢; 829th, 95¢; 830th, 95¢; 831st, 95¢; 832nd, 95¢; 833rd, 95¢; 834th, 95¢; 835th, 95¢; 836th, 95¢; 837th, 95¢; 838th, 95¢; 839th, 95¢; 840th, 95¢; 841st, 95¢; 842nd, 95¢; 843rd, 95¢; 844th, 95¢; 845th, 95¢; 846th, 95¢; 847th, 95¢; 848th, 95¢; 849th, 95¢; 850th, 95¢; 851st, 95¢; 852nd, 95¢; 853rd, 95¢; 854th, 95¢; 855th, 95¢; 856th, 95¢; 857th, 95¢; 858th, 95¢; 859th, 95¢; 860th, 95¢; 861st, 95¢; 862nd, 95¢; 863rd, 95¢; 864th, 95¢; 865th, 95¢; 866th, 95¢; 867th, 95¢; 868th, 95¢; 869th, 95¢; 870th, 95¢; 871st, 95¢; 872nd, 95¢; 873rd, 95¢; 874th, 95¢; 875th, 95¢; 876th, 95¢; 877th, 95¢; 878th, 95¢; 879th, 95¢; 880th, 95¢; 881st, 95¢; 882nd, 95¢; 883rd, 95¢; 884th, 95¢; 885th, 95¢; 886th, 95¢; 887th, 95¢; 888th, 95¢; 889th, 95¢; 890th, 95¢; 891st, 95¢; 892nd, 95¢; 893rd, 95¢; 894th, 95¢; 895th, 95¢; 896th, 95¢; 897th, 95¢; 898th, 95¢; 899th, 95¢; 900th, 95¢; 901st, 95¢; 902nd, 95¢; 903rd, 95¢; 904th, 95¢; 905th,

CARE OF LITTLE CHICKS

By Mrs. L. Mumpower

Yes, we like the Investigator, the name is appropriate and it fills a long felt want. We really did need a western poultry paper with articles written by practical people who have investigated the subject about which they are writing.

We don't like theoretical poultry culture unless we find it also practical in our every-day work with our chickens.

For ourselves, we have raised and sold chickens for some twenty years in four different states, both on a farm with unlimited range and on a village lot where they were necessarily yarded in small pens. We have had many "up and downs," been bothered with many pests and "varmints," including rats, skunks, minks, hawks, snakes, wolves, pet cats, hogs and the most discouraging of all, the midnight thief who comes and steals our best by the dozens, and leaves no clue whereby he may be caught.

What we have written, and what we may in the future write about the poultry business in any of its branches, will be from our own experience or of some near friend. Our best and most expensive teacher has been experience, and we hope that we may be able to keep some of the readers from having any very great loss.

We have never had an entire failure of the chicken crop. We have passed through two entire crop failures with the accompanying drouth, but there has not been any year in all our experience that we have not had eggs and chickens to sell, and when our account with the hens has been counted up, they have each year been a source of profit.

But there are many things we do not know and we are always willing to learn. We make mistakes sometimes, and try to learn a lesson from each and every one. We learn some new things each year, either from our own observation or from the experience of others given in the various poultry papers that regularly reach our table.

A good supply of poultry literature is almost indispensable in the profitable handling of thoroughbred poultry.

You have, no doubt, been advised many times "how to begin," but my advice is to begin right. Don't think you can learn it all in one season. Begin at the bottom and climb up, for if you try to begin at the top you are very apt to climb down and at a faster pace than

you may desire. If you can only care for and have room for 100 chickens, do not try to raise 300 or 400 and lose most of them by disease and overcrowding.

Little chickens must have good care and they must have sweet and clean food of the proper kind, and they absolutely must have a mother, either natural or artificial.

The isn't any use to hatch out chickens by the hundred to die by the hundred, because you cannot take care of them, it is foolish and cruel. We know of two men, brothers, who intended to go into the poultry business on a large scale; intended to raise and keep a thousand hens. They bought two 400 egg incubators and set them both. When we were there they had out 750 little chickens and the incubators set again. It was in August and they thought brooders were not necessary such warm weather. They had small coops and one yard for all of them on a village lot. They fed them various things, but all to no purpose. Of those 750 poor motherless little chickens they raised not one. Of the later hatch we did not hear, but we know they borrowed a brooder from a friend, and last spring one of their incubators was offered for sale at a reduced price. They told us they had found out by experimenting that there wasn't any use hatching out a lot of chickens unless they were prepared to take care of them and one incubator would hatch more than they could take care of with their present conveniences. How much better if they had only profited by some one else's experience and saved the lives of those 750 poor little helpless chickens?

The main thing is to keep them warm and dry. Make good coops with board floors and tight roofs, and have them set so the rain cannot blow in the open front. We have a board for each coop and we close them every night and when the rain comes up, until they are well feathered or at last.

We have always raised our chickens with hens. While she is setting we dust her with lice powder and again when we put her in the coop with her babies, and again when they are two weeks old. If it is very cold we put some straw or hay in the bottom of the coop and put an old piece of carpet or some sacks over the top of it for a few days.

This is for You!

Owing to my jodeling engagements for season of 1923, will be unable to show my birds and will hereby reduce the price of eggs from \$3.00 to \$2.00 per 15. I have S. C. Brown Leghorns, Black Leghorns, Barred Plymouth Rocks, (Violet Strain)

David Larson,

Wahoo, Nebr.

It's Up To You

To get 5,000 new subscribers. We will send the Fanciers' Guide, an up-to-date Poultry and Hare paper 6 months for only 10 cents. Special ad rates to P. I. readers. 1 inch 3 months for 1 dollar. 30 words broader notice, 3 months, 50 cents. Try it now in egg season.

Fanciers' Guide, Montpelier, Indiana.

R. C. and S. C. B. ORPINGTONS.

Won firsts at Lincoln, Nebr., Red Oak and Osceola, Iowa.

Eggs for Sale.

Mrs. J. A. LASH, Osceola, Iowa.

Eggs \$1.50 per setting, from my prize winners at Kansas and Nebraska State Poultry Shows 1901 and 1902. Partridge Cochins, Buff Cochins, S. S. Hamburgs, Barred Plymouth Rock and Light Brahms. Write for winnings.

DeWitt Yates, Fairbury, Neb.

O. MO. HUN. DRO.

Breeder of Prize-Winning

IMPERIAL WHITE P, ROCKS.

Stock for sale at all times, Eggs in season.

E. B. OMOHUNDRO, Bowling Green, Mo.

Barred P. Rock

Exclusively farm raised. Stock sold. Eggs from ch ice matings, \$1.50 per 15 for balance of season. All breeding stock scored 90 to 92½. Look for fine stock in xt year. Send your orders early and secure your choice.

Mrs. A. P. Rodgers,
Bowling Green,

Mo.

IT BEATS ALL.

The Natural Hen Incubator beats the old way of setting hens ten times over. 100 per hatchery costs only \$22. 94,000 sold principally by agents. We want 5,000 active men and women agents for the new season. Special terms with you—a large margin of profit. 100 egg formula and catalogue sent free, if you write today. Territory may be gone tomorrow.
NATURAL HEN INCUBATOR CO., B. 11, COLUMBUS, NEB.

Mrs. Jacob Hughes, Rock Port, Mo., breeder of White Langshans.

We put the little chickens in a basket or box, covering them with a cloth, heavy enough to keep them warm and carry them to their home with their "mammy." We shut the coop up until evening and then if they run out and act hungry, we feed them, be they 12 hours or 48 hours old, but first, we place a rock near the coop and on this we pound up some broken white dish into a fine grit which they eat readily, after this we feed them most anything we happen to have, Kaffir corn, millet seed, wheat, oatmeal, bread crumbs or corn-bread. When we first raised chickens years ago, we fed them raw wet cornmeal, because our mother and our cousins and aunts told us that was the proper feed, and we buried more chicks than we raised. We never feed wet feed now and seldom feed soft feed. Chickens have gizzards made on purpose to grind their own feed and it is a saving of time and chickens to feed only dry, natural grains. We have fed boiled eggs and potatoes, but they always caused more or less bowel trouble, so we have them off our bill of fare for baby chicks. We do sometimes feed them cornmeal, but we put it down perfectly dry.

Do not kill them with kindness by feeding them too often and too much, baby chicks are like baby boys and girls, when the eat too much they suffer. Keep pure water before the little chicks all the time then they will never drink too much.

We seldom feed oftner than four times a day the first week; three times a day the second week, and after that only in the morning and evening. We have feed coops made of lath and in these we put feed in the evening and they come and eat all they want and go to roost. In the morning we put in

more than they will eat and they eat all they want; run get a dring and then go to the fields bug hunting till night. If they do not find enough to satisfy them, they come back to the feed coop; eat a little more, run get a drink and off to the fields again. Since adopting this plan, we are not bothered with little chickens running after us every time we happen to go out of doors, and they grow so fast and are healthy.

After all your care if they do get bowel trouble, bake some corn bread just the same so you do for your own dinner, dampen it with a little cold boiled milk, or even water mixed in enough Venetian red to color it, and feed it to them for a few feeds, alternating with dry grains again.

We feed some corn chops after chicks are two weeks old, but we are very partial to Kaffir corn, which we think an ideal chick food. We grind in the coffee mill for the first two or three feeds, after that they can swallow the whole grains easily, and as it is constipating in its action they will never have bowel trouble unless caused by something other than the feed.

This season we have to pay \$1.75 per bushel for Kaffir corn, but we must have it as the chicks we can save by using it as a part of their feed will more than pay the bill. Last year out of about 400 hatched, we did not lose one by disease. We accidentally killed seven or eight by letting a board fall on them, and we got careless and let the lice kill several. We had some late late ones hatched that all died. The weather was so hot and dry that the ground got unbearably hot that the little chickens feet and legs actually shriveled up. We had shade, but they would not stay there—they were bound to run out in the hot sun until they would give up and die. I saw several come to the water dish, drink like they were famished and immediately die. These were small chicks not yet fully feathered. The older ones came through all right.

SAVING—ECONOMY. (By Percy W. Shepard.)

Many men have made their way into the world and have built up fortunes from a start with nothing but willing hands and energy. They began at the bottom and worked their way up. Did they save what they earned aside from the natural and necessary expenses of life? Yes, certainly they did. They were willing to economize and saw the wisdom of it. These early savings are what resulted in a fortune in after years.

A poultryman just starting out in the poultry world is in the same way start-

Incubators.

Built on entirely new principles and the only machine made that will allow the chicks when hatching to come out of the machine in the pure, fresh outside air at their own will, just exactly the same as they do when hatching under the hen. Guaranteed to imitate nature closer and to hatch equal to any machine on the market. For further particulars address with stamp.

L. P. MEISTER, Troy, Mo.

Winning White Wyandottes.

WE WIN East and West. At the great Chicago Snow, 1902 in hot competition, we a class of 64 White Wyandotte cockerels, the finest ever seen, our

birds were given two prizes out of five, winning the 3d and 5th prizes. We have 4 pens of high scoring females headed by prize birds. Eggs \$2 per 13.

GEORGE GETTY, Syracuse, Kan.

FLEASANT HILL POULTRY FARM.

Barred Plymouth Rock. Rose Comb Brown Leghorn.

Having disposed of all my surplus stock and mated up my pens, am prepared to book orders for eggs. Write at once for prices.....

J. H. TROUGH,
Minden, - - - Nebr.

Silver Wyandotte and White Langshan

Eggs \$1.50 per 15.

Guaranteed to hatch.

A. E. GRIMES,
Decatur, - - - Ohio.

Bonniedale Poultry Farm!

Eggs to Hatch.

S. DOTTES: Very choice pen, \$2 per 15. Over 30 hens on different farms. Good pure stock. Eggs \$1 per 15, \$4 per 100. BARRED ROCKS: Strictly standard system. 60 flp. hens and pullets, 4 extra large, stately crows, scoring from 90 to 94 by Judges Russell and Straubough. Eggs \$2 per 15, \$3.50 per 30. C. I. Games. Good pure stock on separate farms. Eggs \$1.50 per 15. ROUP CUKE: Our make. 50 cents, postpaid. Circulars free.

MRS. MAY TAYLOR, HALE, MO.
LOCK BOX 176,

Chicle Eggs

For hatching from fine B. P. Rocks and big Buff Cochins. Eggs \$1.50 per setting from healthy stock.

IDA M. KESLER,
Woburn, Ill.

For Sale - -**FOX AND WOLF HOUNDS**

Of the best Kentucky and English blood. Write for circular. Also Red Fox, Grey Fox, Wolves and all kinds of pet stock. Write me for prices.

F. D. PAGE,

Milfordale, - Missouri.

RINGLET B. ROCKS

The kind that win the Cockerle Mate.

Ben Hur, 1st cockerle at Lincoln Show 1902, at head of our cockerle breeding pen. No females in our pullet breeding pen scoring less than 90, mated to extra choice pullet breeders. Stock all sold, eggs reasonable. Write for prices.

C. M. Hurlburt, Fairbury, Neb.

R. C. W. LEGHORNS,

Imported males scoring 91½ and 95; females to 85½. After June 10th, 15 eggs \$1.00; 39, \$1.50; 100, \$3.00. **Barred Rocks:** 12 hens scoring 89 and 90, and pullet mating, line bred, Russell and Headle male and 12 of their pullets, closing out sale, **25 Birds for \$15.00.** Mrs. S. P. ROGERS, R. D. O. Pleasanton, Ia.

Standard Poultry Book.

Just from the press. Over 2000 copies have been sold. Contains 100 pages, 90 illustrations. The most complete book on poultry ever issued for the price. Just the thing for the novice. Send for it today. Price 25 cts.

CHICAGO BOOK CO., 3642 S. State St., Chicago.

Bargains Did You Say?

You can get a good start in Barred Rocks from Pinkerton & Co.'s prize winners the balance of the season at half price. Remember Pinkerton & Co. keep nothing but the pure E. B. Thompson strain.

PINKERTON & CO, Clay Center, Neb.

ing at the bottom and ready to work his way up. It is mainly the beginner who needs to save what he can. The one who is far advanced in the work does not need such advice, as he knows his own "business." But the beginner is apt to fail to work it properly and keep himself from getting along as rapidly as he might do. A young breeder needs to save feed and save his fowls from disease and save money by watching the markets and selling just when the most profit can be realized; also save in other ways.

Now, in saving feed—lots of people don't know how to save feed. They really don't and you can see it by the way in which they care for the fowls. In the first place a fowl must have enough feed to repair the waste tissues of the body, furnish heat and form eggs from. In winter the most feed is used to keep up the warmth of the body. It is in this point that lots of people fail. They do not realize that a fowl living out of doors most of the time and roosting in an open shed needs more food to keep it warm than it does when kept in a warm house. So one way to save feed is to keep the fowls warm. A fowl in a warm building does not need so much food as one half frozen all the time. Another way to save feed is to give such as will make the fowls lay plenty of eggs. Corn as an exclusive ration for the hens in winter will not cause them to lay much. While if you had feed some different feed at a slight additional cost you could get them to lay enough to pay for the feed and a profit besides.

Still another way to save feed. Are you feeding several million of lice along with your hens? Do you allow lice to swarm your hens and coops, or do you keep them in check? It costs to keep lice. A hen covered with lice will not keep in good condition on the same amount of feed as would make her fat if she were free from them.

Saving from disease. Of course this is economy. A fowl lost by disease represents a profit varying from part of that of one hen to that of several hens, according to the value of the fowl. Besides, a sick fowl, if it gets apparently well, loses much time that might be profitable were it kept well, and also after it gets well it may never amount to much afterward.

Practically speaking, it is economy to get the most profit from the fowls. And it is a loss to allow them to be idle at any part of the time. It is this kind of work that makes the people say there is no profit in fowls. They fail to care for them and a loss results.

Same in all the ways that you can. Be economical at least during the time

Rules of the Cock Pit

A neat little book of pocket size, well bound in tough tape-board. Contains all the rules of the United States, Canada, Mexico, Cuba, England, Belgium and France. Also has comprehensive chapters on Hens, Handling, Nursing and everything relative to the royal sport of cocking.

By Dr. H. P. CLARK, Indianapolis, Ind.

The Recognized Authority.

PRICE, 25 CENTS.

Address the Publisher of this Paper.

Rules of the Cock-Pit and Poultry Investigator one year

For 25 Cents.

Address, THE INVESTIGATOR Clay Center, Nebraska.

Give Your Breed-
ing Does

Rabicare

During gestation and while nursing their young it will enrich the blood. Improve the appetite, increase the flow of milk, thereby making the young strong and healthy.

Give RABICURE a trial and you will never be without it, 50c a box postpaid.

Vermont Belgian Hare Co.
Lyndonville, Vt.

We Don't Want a Cent

Of your money unless you get value received. THE ESSEX CHOLERA-CURE AND CONDITION POWDER is absolutely pure and free from poison and all other injurious substances and positively CURES AND PREVENTS chicken cholera, roup, gapes and all diseases of the flock. It regulates the bowels, blood, digestive organs, and produces bone, muscle, feathers and larger fowls. Nothing on earth will MAKE HENS LAY like it. No matter what kind of food you use, mix with it daily, the Essex Condition Powder. Thousands Use It. Price, 60 cents a box by mail, 75 cents. 6 boxes for \$3.50. Write for special prices on ten pound lots. Manufactured by

John J. Kautzmann,
590 Bergen St. Newark, N. J.

Old Homestead Brooder.

The best on earth. All your chickens can be saved in the Old Homestead Brooder. Try one. Write for prices. Address **Old Homestead Brooder Co., Middleboro, Mass....**

BUSINESS CATCHERS

MRS. E. M. DOWNS, Bartley, Nebr. Barred Rocks, well marked, extra large birds, both cockerel and pullet, mating pens. Eggs 2.00 for 15, 3.50 for 30, general flock, 4.00 per 100. White Wyandottes, Normal, and Coflin strains direct, 2.00 for 15, 3.50 for 30.

S. C. W. LEGHORNS, three pens headed by 1st and 2nd cicks and 2nd cock Knapp strains, 1.00 per 15; 4.00 per 100 this season. Booking orders now. M. B. Plymott, Watatoune, Pa.

EGGS for hatching: White Plymouth Rocks and White Wyandottes, 15 for 1.75. S. C. White and Brown Leghorns, 1.25. Belgian Hares for sale. S. S. Dunn, 4550 Chicago Ave., Minneapolis, Minn.

WHITE WYANDOTTE females that are strictly pure white, mated to a 94-5-6 point cockerel, large and pure white. Hares, 1.50 per 15. No stock for sale. Write for wants. C. W. Brehm, Grand, Nebr.

WASHINGTON PRAIRIE Poultry Farm, 13 varieties of thoroughbred poultry. Eggs for hatching from 60c to 1.25 per setting. Write for particulars. O. O. Logan, Decorah, Iowa.

WHITE PLYMOUTH ROCKS, pure Fishel strain. Pen headed by 25c cock, every bird a top-notch. Eggs 2.50 per 15. Your chance to get the best White blood in the world. H. C. Nichols, P. M., Spearville, Kan.

EGGS That will hatch. From Silver Laced Wyandottes, \$1.50 per 15, \$2.50 per 30. Known as I. X. L. Poultry Yards. Satisfaction guaranteed or money refunded. Mrs. W. J. Barnes, Topeka, Kansas, Sta. B.

MAAMMOTH LIGHT BRAHMAS, prize winning stock coming from 90 to 95 points. Eggs \$1.50 per 15. Mammoth Pekin Duck eggs \$1.50 for 11. No stock for sale. Mrs. Alice Allen, Clay Center, Nebraska.

O. I. C. SWINE for sale from one of the best herds in state of Illinois. Booking orders now for pairs, single, pairs and trios. A. A. Ed. Noakin, Prices within reach of all. Also eggs from large, growling Light Brahma and B. P. Rock chickens for sale at \$2.00 per 15 or \$3.00 per 30. Address Chas. Griffith, Woburn, Ill.

FOR SALE. Two 300 egg size Sate Hatch incubators. In first class condition will sell very cheap. White Rock Farm, Wap 110, Iowa.

COMB SINGLE Comb Brown Leghorns Regular egg machines. Stock direct from best eastern breeders. Eggs for sale 1.00 for 15. W. E. Combs, Julian, Neb.

WHITE PLYMOUTH ROCKS. Farm raised. Eggs 75 cents per 15. Strawberry plants 60 cents per 100. London Red Raspberry plants, 50 cents per 12. Mrs. Lydia Beebe, Coryville, Pa.

EGGS. Barred Rocks (Thompson strain) White Rocks (Emile) White Wyandotte (Buston) Silver Laced Wyandotte (Goette) Light Brahma (Felix) 13 for 1.25. Also a few light cockerels. M. Whitaker, 385 east Rubie St., Paul, Minn.

BLACK LANGSHANS. Partridge Cochins Silver Laced Wyandottes, Rose Comb Brown Leghorns. Stock and eggs for sale. Prices very reasonable for quality of stock. If you want some good write at once. C. F. Kurtz, Lawrence, Neb. Have fine English Berkshire hogs.

BELGIAN HARES. 25 young does bred to fine bucks scoring 94% at \$3.00 each, or 2 does and a buck for \$7.00. All first-class stock. J. S. Markel, Wahoo, Neb.

PARTRIDGE COCHIN ONLY. A few choice heavily feathered pullets for sale. Eggs \$1.50 per 15. Pen headed by 2d cki. Nebr. state show, 1902. Satisfaction guaranteed. H. E. Bowman, Lawrence, Neb.

WHITE WYANDOTTES. My stock is first choice and my prices right. I have spared neither time or expense to get the best stock. Scores from 92% to 95%. Eggs for sale, \$1.50 per 15, fair hatch guaranteed. Circular free. E. E. Bowers, Bradshaw, Neb.

P. NEWCOMB, of Cedar Rapids, Iowa, has the largest lot of fancy pigeons in the west to select from, having all the leading colors in English and Bohemian Pouters, Fancials, Archangels, Speedy Homers, English Carriers, Tumblers, Jacobins, Swallows, Magpies, White Brainer Pouters and Turbits for sale. DAINY FOLDER FREE telling all about our noted strain of White Plymouth Rock, and why I sell 15 eggs for \$1.50. Geo. F. Stanton & Sons, Box F, Hennepin, Ill.

DON'T YOU TELL if we sell you White Plymouth eggs from a strain that others are selling for \$3 to \$5 dollars a setting and we charge but \$1.50 per setting. Our novel folder free. Geo. F. Stanton & Sons Hennepin, Ill.

before you have reached an independent business. By this, I mean that you should be more economical when you are struggling to get a business built up. After you have got your business well started and paying exceedingly well, then you can waste more than you could at the start and not make a serious loss.

Yet after your business is well built up you cannot lose anything by being economical then.

CARE OF YOUNG CHICKS.

Oatmeal is often recommended as a feed for young chicks, but is rather expensive in most localities.

I have found bread crumbs and cornmeal, slightly moistened with sweet milk or water, a good feed; also millet seed and the timothy and clover seed that is wasted on many barn floors.

Some hemp seed may be given for a change and as soon as they can swallow whole wheat it may be given for the evening feed. Never make the food wet enough to be slopped, and provide plenty of clean water in clean, shallow drinking vessels. Sardine or the square, flat cans that raw oysters are put up in are very good if one hasn't a drinking fountain. Give them warm coops on cold nights and cool ones on warm nights, by having boards or screens for doors. Keep the coops clean and dry. Scald once a week to kill any vermin that may have found a hiding place. Diarrhoea is the most common of all complaints among chicks, and may be caused by cold, lice, raw food and hard boiled eggs.

Should this disease appear and no lice are present, make a complete change in the feed. A good remedy is to break a raw egg into a cup of boiled milk, after cooling, and thicken with dry bread, adding a pinch of ginger.

A laxative is seldom needed, but may be given in the form of corn milk or bran.

If the chicks are kept housed or yarded, some green food, such as lettuce, cabbage, kale, turnip tops, etc., must be given. Also keep fine gravel or broken dishes pounded quite fine, sand and charcoal where they can always get it.

The mother hens must have wood ashes or dust. This is a great help toward ridding them of vermin.

JESSIE L.

To those who wish to join our State Pigeon Association we will say the membership fee is one dollar. This amount includes your dues for the first year. You pay one dollar a year into the treasury each year thereafter.

White Plume Poultry Yards

will sell W. P. Rock eggs from prize winners at \$1.50 per 15 or \$4.00 per 45; incubator eggs at \$5.00 per 100.

White Wyandotte eggs at \$1.25 per 15 or \$3.00 per 45.

White Guinea eggs \$1.25 per 16 or \$2.00 per 30.

Guinea Pigs for sale.

Mr. and Mrs. H. E. CLARK,
Dallas Center, Iowa.

BARRED PLYMOUTH ROCKS,

(Exclusively.)

Farm Range. Good Stock
Eggs that will hatch, \$4.00 per 100.
\$1.00 per 15.

Adam Weir, Clay Center, Nebr.

White Wyandottes Exclusively . .

Pullets Scoring as high as 93%, by Green. Pen headed by cock scoring 94 by Myers, the Pan-American Judge. Eggs \$1 per 15; \$3. per 50. Orders filled promptly.

G. T. Karges, Fairbury, Neb.

WHITE FANTAIL PIGEONS

No show birds for sale now, but have a lot of nice pets (good breeders) at 75c, \$1 and \$1.50 per pair. Can spare a few pairs of YELLOW ANCIENS, the beautiful German Toy Pigeon at two dollars per pair. Watch for my fall sale announcement of fine poultry and bantams.

G. D. McCLASKY,
Judge and Breeder, Papillion, Neb.
627 Sec'y Treas. Neb. Pigeon fancier's Ass'n.

NOW IS YOUR TIME to get a start in pure White P. Rocks, 30 eggs for \$1.00 balance of season. They are good as the best. F. J. Kolasa, DuBois, Neb.

BOSCOBEL, WISCONSIN, Poultry Yards, High scoring Buff Cochins, Black Langshans a specialty; cockerels \$1.30; trills \$3.50, pen 25; Eggs \$1 per 15; \$1.75 per 30. Satisfaction Guaranteed. D. R. Walker, Boscobel, Wis.

EGGS HALF PRICE—Barred Rocks, Hawkins Strain, 30 for \$1.00, \$2.50 per 100, bronze Turkey eggs \$1.50 per 15; pedigreed Belgian Hares, Catalogue. Elmer Gimlin, Rosemond, Ill.

A. STRANSKY, Chilton, Wis. Breeder of Black Langshans, Buff and W. P. Rocks, W. Golden and Buff Wyandottes, S. C. Brown and Buff Leghorns, W. and B. Minorcas, Houdans. Eggs, 1.50 per fifteen. B. Turkey eggs, 1.50 per 15. Pekin and Rouen ducks 1.50 per 15. Red Tumblers, 1.00 per pair.

FOR SALE. Light Brahmas, I. K. Felix strain none better. Single birds or breeding pens. Eggs from stock birds scoring 92.3% by Russell, 1.50 per fifteen. Albert von Bergen, Petersburg, Neb.

PINE BROOK Poultry Farm. Barred Rocks, winners at the big Ft. Wayne show; first cki, first, second and third pullets; first pen, W. Wyandottes, Buff Rocks, 1. R. Ducks, eggs 2.00 per setting. W. P. Smalley, Napoleon, Ohio.

HOUDANS exclusively. Winners at Pan-American, Cleveland, Dayton, Detroit, Chicago, etc., wherever shown. Eggs only 2.00 per 15 straight. Stock reasonable. No birds will not disappoint in breeding pen or show room. S. D. Lance, Troy, Ohio.

WHITE PLYMOUTH ROCKS exclusively. Eggs fifteen for 2.00, from my best pens. Pure white, good yellow legs, low combs. You are sure of prize winners. P'nel stock. Only a few settings to spare. A. E. Cunningham, Ada, Ohio.

B. P. Rocks.

Descendants from winners. Eggs \$1.00 per 15, \$5.00 per 120. Tonlouse Geese eggs 50¢ per 9. Satisfaction insured.

Ludwig Uehling, R. R. 1. Hooper, Neb

The Best

BUFF WYANDOTTES in the world are to be found at Shushan N. Y. Have some of them. Forry of this years breeders for sale at \$2.00 each. Eggs balance of season \$1 per 15.

J. F. Day, Shushan, N. Y.

After May 10th I will sell my B. P. R. breeding Stock at very low figures. These birds have brought me pullets that scored 90, 92½ and 93. All these birds will be as I represent them. Eggs after the 10th of May will be \$2.00 per 15, or three settings for \$5.00.

Wm. Metzmer, Independence, Ia

FOR SALE! Light Brahmas.

Felch Strain. None better. Eggs from stock scoring 92 to 93½, \$1.50 per 15. White Wyandotte eggs \$1.25 per 15.

Albert Von Bergen, Petersburg, Neb

EGG REDUCTION . . .

We are done hatching and have turned our breeding pens together on range—egg—\$1.00 per 15; \$1.50 per 30. From flocks on other farms \$1.00 per 100. Now, as always, first class White Leghorns.

PRACTICAL POULTRY FARM,

R. R. French, Mgr. Box 47, Ford City, Mo

BARRED PLYMOUTH ROCKS

WINNERS Nov. 26th, 30th, 1901—194
FOR PAST SIX YEARS B. P. Rocks in class at Red Oak, Ia., won 1st Cock, 1st Hen, 2d Pullet, 2d Cockerel, 1st Pen. At Osceola, Ia., Dec. 3d-6th, won 1st Cockerel, 1st Pullet, 1st Hen, 1st Pen. Eggs \$2.50 per 15.

H. R. McLean,

Osceola, Iowa

It is next to impossible to raise poultry, even a small flock on a city lot to say nothing of a large flock on a poultry farm or plant, without the aid of a trained

Fox Terrier Dog.

Our dogs are taught to parade the place night and day. Write, Nevada Foxterrier Kennels, Nevada, Mo.
Males \$10.00; females \$5.00.

Eggs From prize winning Golden Wyandottes, \$2. per 15, scoring from 90 to 93½, by Shellenberger.

J. Gordinier, Keota, Ill.

Cornish Indian Games

Our poultry papers are filled with the praise of Plymouth Rocks, Wyandottes and other attractive birds, but we seldom see the Cornish Indian Games mentioned or hear their praise. Yet they are gaining popularity very rapidly and bid fair to take the lead as a general purpose fowl in the near future. Having moved to our new home at Belton, Mo., I have resolved to devote my entire time to the caring for and breeding of my fowls, to try to meet my customers' demand for stock and eggs.

Eight years ago I began breeding thoroughbred fowls. I tried twelve different varieties, but soon discarded all but the Cornish Indian Games, and have never had cause to regret my choice. I have bred them exclusively for six years. As egg producers, games rank with any of the ordinary breeds. I have had hens three years old lay as well as pullets, and this in January, too.

The eggs of the Cornish Indian Games vary in color from very light to a dark brown. I am a little partial to a nice brown egg, therefore am selecting nice brown eggs to set, and when I get my strain established they shall be known as the brown egg strain. As mothers they are excellent, setting well, and as protectors of their young they have no superiors. They will attack dogs, cats, and almost any of the depredaters of the chicken yard. The yare not clumsy, and do not step on and crush their chicks, as do many of the large breeds. They stand confinement well, but are the best of foragers if allowed to roam. Give them free range and I will guarantee they will not starve if there is a single bug or worm on the farm, for they will find him. Their chief delight is to work.

The Cornish Indian Games have more admirers among the fanciers and breeders for broilers than any other breed, being noted for a very delicious flavor of meat. They dress excellently, having a nice yellow skin and legs, which is a quality admired very much in market poultry.

While I am not in favor of breeding for beauty alone, I think it should not be entirely ignored. What fowl is more beautiful than a well-bred Indian game hen, the bright brown shaft and glossy green lacing making a beautiful contrast. In them we have a fowl for the farmer, the broiler raiser, the egg producer, and the fancier. Anyone who has handled game fowls is aware of their deceptive appearance. While slim in outline and small in stature, their weight, when compared with birds of the same size, is generally one third

High Hill . . .**Poultry Yards**

Bronze Turkeys and Buff Rocks.

Turkey-are bred from prize winners and are winners, making almost clean sweep wherever shown. Young Toms \$5 each; Pullets, \$2.50 to \$3.00 each. My Rocks-are noted for shape and orange colored legs. 90 point Co. Cockerels \$2.50 each; 91 to 92½ point Cockerels \$3.00; each Pullet not scored, \$1.00 each.

Mrs. Wm. Rogers, Box 74, Sled, Mo.

**CROWELL'S
Buff Orpingtons.**

Win at St. Paul Show. Cockerels 1st and 2d, pullets 1st, 2d, 3d, 4th and 5. Hens 1st, and 2d. 1st Pen. Eggs, \$3.00 per 15, \$5.00 per 30. Two trios Indian Runner Ducks at \$5.00 per trio. Eggs \$2.00 per 15. Satisfaction guaranteed.

F. A. Crowell, Granger, Minn.

Silver Lace Wyandottes
White Wyandottes : : :
Buff Leghorns
Pekin Ducks...

All first class stock. Eggs for sale.

MRS. W. E. TIBBITS,
Imperial, Neb.

**Barred Rock Eggs,
—For Hatching.—**

Fertile eggs and big healthy chicks is What you want. Try mine this year. \$1.50 for 15, \$2.50 for 30, \$3.00 for 45.

A. B. Evans, Heartwell, Neb.

Buff Orpingtons
Bronze Turkeys

We keep nothing but the choicest stock. Eggs for sale. Write for prices.

C. E. BROWNING,
Fairbury, Nebr.

Black Minorcas.

No. 1 stock, up to weight and the best of color. Eggs \$2 per 13. No stock for sale.

Mrs. Ella Patrick, Clay Center, Neb.

DON'T SET HENS the same old way when our new plan bears it 10 times better. 5000 acres raised for 1901. One year's experience. Write today. Natural Hen incubator Co., B 11, Columbus, Neb.

BUY STOCK AND EGGS from high scoring WHITE LANGSHANS and BUFF ROCKS. Fine winter layers. Cheap for quality. Eggs \$1.50 per 15. Mrs. L. MUMPOWER, Duroc Jersey Pigs. W. L. MUMPOWER, Chillicothe, Mo.

greater.

This is a noble breed, and is destined to become one of the leading varieties when once their merits are better known.

MRS. E. CORDER.

Grand River Valley Poultry Farm,
Belton, Mo.

Each season we learn something new and maybe several things—that is, it is new to us. For a number of seasons I have operated from one to three incubators during the season and several different makes, and yet I don't know it all about running an incubator—lact. One thing is, that with an incubator which has a nursery underneath the egg tray it is unnecessary to open the machine from the time the first egg is piped until the hatch is completed. If there are any chicks that cannot get out of the shell alone, they better be left in, for they will never be worth anything anyway.

And now about that "moisture question?" We run our incubator all last season and have took off two good hatches this season without the use of moisture. One hatch this season we had 87 chicks from 89 tested eggs. Our incubators are not supposed to be non-moisture and are fitted up with moisture pans, etc.

Query, if we can make good hatches without moisture in a dry season, how much moisture must we use during a wet season?

R. R. FRENCH.

Ford City, Mo.

The Richmond County Poultry Association will hold its third annual show at Olney, Ill., Jan. 7, 8, 9 and 10, 1903. Chas. McClave, judge. The officers are H. I. Morse, president; Mrs. E. E. Edwards, vice-president; Geo. B. Hall, assistant secretary, all of Olney; Edw. E. Dalton, secretary-treasurer, Parkersburg, Ill.

EDW. E. DALTON.

Troy, Mo., March 20, 1902.

The Lincoln County Poultry Association will hold its next show at Troy, Mo., Jan. 13-15, 1903. The officers are as follows: President, Geo. S. Townsend; secretary, Stuart L. Penn; treasurer, J. L. Shafer; supt., Jno. Kemper; Judge, J. W. Wale. Please put us on your list of show dates. Yours truly,

STUART L. PENN, Sec'y.

Viola, Ill.

Anna L. Pinkerton, Clay Center, Neb.

Dear Madam:—Received the 25 lbs. Chick Food, and I cannot praise it too much. Have not lost one from my last hatch. I never saw chicks grow so fast. I give your food the entire credit.

Yours respectfully,

Mrs. Gilbert Churchill.

Free Barred Plymouth Rock

Circular telling about my superb Barred Rocks. Yards headed by cockerels direct from E. B. Thompson yards' prize winners from prize winning ancestry. Eggs \$2.00 per 15, 3 settings \$5.00.

PHIL MAURER, Beaver Crossing, Neb.

eat easily with it. A 25 pound sack goes a long way with young chicks. It is far more economical than oatmeal and far more successful. Try a dollar sack of this food.

M. M. JOHNSON, Inventor Sare Hatch Incubator.

Price 25 lbs. \$1.00; 50 lbs. \$1.50; 100 lbs \$3.00.

Address **MRS. ANNA L. PINKERTON,**
Clay Center, - - - - - Nebraska.

HIGH CLASS BARRED P. ROCKS

(MILES STRAINS.)

BLACK LANGSHANS

We are selling all our this year's breeding hens at a bargain. Write us for description and prices.

... BIG BARGAINS ...

MR. and MRS. A. UPTON & SON,
Former address Fairbury, Neb. **MOHASKA, KAS.**

Eggs.

BUFF ROCKS.

W. WYANDOTTES.

BARRED ROCKS.

LIGHT BRAHMAS.

Only \$3.00 per 50 or \$5.00 per 100 from our white breeds. \$4.00 per 50 or \$7.00 per 100 from our best pens—Hawkins, Dustin, Felch strains. Bred to win and to please. We guarantee our eggs to be as good as the best and positively thoroughbred of the best standard. The above low offer is for this season only. Catalogue free. Member of American Buff Rock Club.

JAMES Q. MYERS,

Oaks, Pa.

These Eggs Will Hatch White Plymouth Rocks.

chicks that have rich yellow legs and snow white plumage.
(Fishes strain direct) Eggs from pen No. 1, \$1.50 per 15, from pen No. 2, \$1.00 per 15.

Mrs. M. C. Downing, Elk City, Kan.

LARGE PIGEON RANCH.

According to recent reports published in several poultry and pigeon papers and in several of the leading magazines of this country, the largest pigeon ranch in the world is located near Los Angeles, Calif. About fifteen thousand pigeons are kept on this ranch, which we believe is the only establishment of its kind in America.

The pigeon ranch covers about eight acres of sandy ground and there is plenty of running water on the place. The main building is sixty feet in length and twenty feet high and contains five or six thousand nests. There are five other good sized pigeon houses on the place. At any time of the day these houses are literally covered with birds.

The owner of this ranch sends about forty thousand squabs to market annually. The price per dozen for the birds is generally about \$3.00, but sometimes it runs up to \$10. The gross income is estimated at about \$9,000 per annum. The expense of keeping the enormous flock of pigeons averages \$5.00 a meal, the birds being fed three times a day. The amount of food consumed daily is about twelve sacks of screenings, eight sacks of wheat and a large amount of boiled meal.

Once a week the houses and nests are thoroughly cleaned and disinfected, and the thousands of birds appear to be perfectly healthy.

We would like to see some of our Western fanciers take up the breeding of Pigmie Pouters. These little fellows are one of the most interesting breeds we have.

GLEN RAVEN EGG FARM NOTES.

Written for The Investigator.

The thorough poultry industry is a great and growing enterprise. The country is covered with fanciers of many classes. Selling eggs for hatching is one of about the best paying branches of the business, and one of about the most vexing. There is a great deal of disappointment experienced in this part of it. So many breeders of limited range yard their fowls entirely too close, the stock become overfat and worn out of their prison that their vitality is worn out and they are "done for" for a life time. All the attention possible will not bring such stock back to their former health and vigor. This applies more to the heavy breeds than the light ones, but it can be found true of both classes. We all know full well that it is no more difficult to get a good hatch from the eggs of the

W.C. WILKINS

POULTRY INVESTIGATOR.

Barred Plymouth Rocks.

EXCLUSIVELY.

Drop me a postal card today asking for description of matings and price of eggs for hatching.

W. S. RUSSELL,

Box 1, Ottumwa, Iowa.

OAKES Lamp and Regulators
are the standards for others.
Oakes' Hydro Safety Lamp 75c to \$2.70.
Oakes' Imp. Wafer Thermostat, \$1.25.
Oakes' New Aluminum Regulator.
All kinds of incubator and brooder fixtures. Write for free catalog and special circulars.
L. R. OAKES, Mfr. No. 12 6th Street, Bloomington, Ind.

WE MAKE THEM HATCH

SURE SEE THE 1902

Noxall Incubator

IT HAS many new features, the Regulating, Ventilating and Moisture system is perfect, lowest price. And ask how to get one FREE. Our catalogue gives remedy for every known poultry disease. 4c. for postage circular and price list free.
Noxall Incubator Co., Quincy, Ill.

These are white, fine Wyandotte shape and heavy winter layers. Score 92 to 95 by Rhodes. Eggs from Neb. State Show winners, \$2.00 for 15. Fair treatment insured. Eggs at reduced prices balance of season.

CHAS. C. WILSON,

Holdrege, Neb.

Brown's Roup Remedy.

For Fowls, horses and cattle. A wonderful antiseptic, soothing and healing, reliable safe remedy for roup, cankered mouth, chicken pox and cholera. Invaluable for horses and cattle. Quickly heals galls and prevents and removes proud flesh. Price 35c per package. Sole proprietor and manufacturer. Agents wanted in all the principal cities of the U. S.

Robert Brown, Port Richmond

Richmond Borough, N. Y.

A BARGAIN...

I have two pens of Barred Plymouth Rocks each containing one male and eight females. E. B. Thompson stock, will sell at . . .

.. \$15.00 PER PEN ..

if taken soon as I am obliged to move and cannot take them. The cockerels cost \$10.00 each. All one year old,

PINKERTON & CO.,
Clay Center, Neb.

Grant's Practical Brooder.

Prevents piling up, and overheating of chicks. Complete specifications, telling how to make and operate, with privilege of making all you want for your own use, for \$1.00. These brooders work out doors or in; can be cleaned in two minutes, are cheap and will last a life time. They have a floor space of 2x6 ft. Give this brooder a trial, if not satisfied you get back your dollar.

I have some Extra Fine S. C. B. LEGHORNS. Pen No. 1. is headed by the cock which headed 3d prize pen at Boston, 1900. Pen No. 2 is headed by 3d prize cockerel at Chicago, 1901. These birds are mated to some of my choice females (circular giving full particulars free.) Eggs, pen No. 1, \$1.00 per 15. Pen No. 2, 75c per 15. Incubator eggs, \$5.00 per 100.

D. W. GRANT,

Almena, Kan.

THE PERFECTION STRAIN OF BUFF PLYMOUTH ROCKS

Are better than ever as they have farm range. Have 280 young and 30 old ones to draft from the coming sale season. Was winners of all firsts and part second in state show the last two years, also have been winning for customers in strong competition. Satisfaction guaranteed. Prices reasonable. A share of your patronage solicited.

FRANK PATTON, Surprise, Nebr.

Buff Orpingtons.
Exhibited at four shows, 1900-1901. Won 39 regular premiums. Eggs and stock in season. Satisfaction assured.

G.B. CLARY Fairbury, Nebr.

When you write mention the Investigator.

..... The New
Standard of Perfection
 Revised Edition, 1900.

This work is issued by the American Poultry Association. It is a book of over 250 pages, cloth cover, and contains the only official descriptions of the several varieties of fowls. It is on this Standard that all poultry judges base their awards. Every experienced fancier has a copy of this book and every poultryman needs it to learn the requirements to which his stock must be bred.

The Standard of Perfection

—AND—

The Poultry Investigator

One Year, for.....\$1.00

Address,
 POULTRY INVESTIGATOR,
 CLAY CENTER, : : : : NEBRASKA

**White
 Langshans
 Exclusively**

Eggs from stock scoring from 90 to 95 points, \$1.50 per 15; \$2.75 per 30; this season only. Some

good Ckls. for sale with score cards by Ben S. Myers.

All Stock Farm Raised.

MRS. JACOB HUGHES, JR.,
 Rock Port, - - Missouri

When you write mention the Investigator.

Rose Comb White Leghorns!

Made a clean sweep at Mitchell winning 5 firsts, 5 seconds, 4 thirds, and 4 specials, birds scoring to 92. At three shows in last two years won 11 firsts, 6 seconds, 6 thirds and specials. Cockerels for sale. Eggs \$1.50 per setting

J. F. Reinekt, - - Tripp, S. Dakota
 - Vice-President State Association, -

Buff Orpingtons, Barred Rocks, S. C. W. Leghorns, W. Wyandottes.

Eggs from the four best breeds in the country, at \$1.25 per setting for next 30 days. Can furnish B. Orpingtons and B. P. Rock egg in 100 lots. A few trios of B. Orpingtons for sale.

KING & KING, Fairbury, Neb.

Black Langshans. . . .

Of 30 of my prize-winning Black Langshans entered at State Fair and Neb. State Show the past 2 years, I won 25 1st, 3 2d, and 1 3d. Eggs \$2.00 for 15, \$3.59 for 30.

JA Johnson, Holdrege, Nebr.

A RARE CHANCE . .

To get a start in W. P. Rocks from as good stock as can be found in America. I will sell eggs from my noted prize winners the balance of the season for half price. Don't miss a bargain.

M. L. Canfield, Belleville, Kas.

EGGS \$2.50 for 15 \$4.50 for 30
 My aim, fertile egg, hardy duck, bred to win best to lay.

STOP!
 75 ROSE and SINGLE, "66 Rhode Island Reds, Buff Leghorns. Winners wherever shown. Only strong robust stock in my pens and you will not regret it if you send your order for eggs to
Eric Aurelius, Perry, Lake co. Ohio

If you want

Belgian Hares

Call on or write to

OLD ORCHARD RABBITRY,
 Old Orchard, Mo.

Or 2003 Clark, Ave., St. Louis, Mo.,

WM. G. STEINICKE, Mng'r.
 100 Hares to choose from.

**Buff Orpingtons
 AND
 White Wyandottes**

No better Stock
 Raised.

I never have failed to win in largest shows. Birds score from 90 to 95½.

C. ROCKHILL,
 Harvard, Nebraska.

heavy breeds than of the light ones. I have purchased eggs from the leading fanciers of the heavy breeds and I know how I came out, using "mother hen" all the time as an incubator. There are few of the leading fanciers of today who live with their fowls. If they trust the care of them to hired help it may be well in some cases, but I venture it is poor attention in many instances.

Most every one knows how to mate fowls, but how many make it their individual business to see to it that all conditions are favorable for best results in the hatching and the progeny of their stock. Most everyone who has lived on a farm and paid any attention to fowls know that the farm range hens' eggs will produce a better per cent of chicks from the same number of eggs than the fanciers who yard their stock close year in and year out. Then if we would bring about best results we must so yard our breeding stock that they will have ample range to exercise, as does the farm hen. They don't need all outdoors for this purpose, but they do require room enough that they don't feel confined, and so that when a strange person enters the yards they can get out of the way, and not fly out of the pens. The grass should support the fowls, or, in other words, when the yards are kept bare all summer they are overstocked. I have known this a long time. I have tried both kinds of yards and have noted results. I have ample room to spread (although our land is worth \$400 or \$500 per acre) we are spreading out in the business about as fast as our business requires, our land is planted to fruit and our yards are in the orchards. Pears, cherries, plums, etc. The fowls are a benefit to the trees and the falling fruit the same to the fowls.

We are running three incubators, one (lamp) brooder, and three hot water jug brooders at this writing. Keep five lamps burning all the time and 500 eggs in process of incubation, and it may be of interest to mention that we have one hot air and one hot water and one hot air and hot water combined incubators at work. We don't have much time to play marbles or go out pleasure seeking.

Giving the stock more range means more steps each day for the attendant, but there is a whole lot of comfort in it to know that when we set or sell eggs that there will be a satisfactory hatch come off.

E. W. GEER.

Farmington, Mo.

WHITE, PLYMOUTH ROCKS.

Now is the time and David City, Neb. is the place to buy eggs that will start you right. Eggs are catching good. Our birds were prize winners at the Nebraska State Show, 1902. Write for prices.

J. W. HALL, David City, Nebr

QUEEN CITY**BUSINESS COLLEGE.**

One of the leading schools of the west. Large attendance. Great demand for its graduates. Expenses low. Address

H. S. Miller, Pres., Hastings, Neb

Reference: Sure Hatch Incubator Company

BARRED PLYMOUTH ROCKS

The kind that win and lay eggs. Satisfaction to all. Circular free,

H. SHIVVERS, Knoxville, Ia.

Lock box 500.

BARGAINS IN BARRED P. ROCKS.

Edson's Registered Strain, from a long line of prize-winning ancestors; have made them a specialty for 19 years. Now offering fine exhibition and grand breeding stock of both 1890 and 1900 hatch at moving price if taken soon. Send for illustrated circular with half-tones of meritorious birds. Address,

M. L. EDSON, Jacksonville, Ill.

Pan-American Houdan Yards,

Wauseon, Ohio.—

Breeder of fine exhibition Houdans. Breeders score from 92 to 95½. Headed by cock 94½. Prices reasonable.

Henry Weichmann,

Box 94. Wauseon, Ohio.

Eggs Thoroughbred Barred P. Rock eggs two dollars per setting of fifteen. Golden Sebright Bantams, two dollars per setting of fifteen. Colored Mascov ducks, two dollars per setting of eleven. My stock are all strong and vigorous and have farm range. All eggs shipped will be strictly fresh.

Mrs. D. T. STONE, DeKalb, Mo.

Clover Ridge Poultry Farm, Route No. 2.

Black Langshan,

White P. Rock, S. C. Buff Orpington W. Holland Turkeys, Mammoth White Pekin Duck, E. E. Smith strain. Eggs from \$1.00 to \$2.50 per setting. Won at Lincoln and Kansas State Shows. 15 ribbons from 1 to 5. Poor hatches duplicated at half price.

Mrs Henry Shrader, Berlin, Neb.

EGG ORDERS. Book now for Houston.

B. P. R 2 matings, score from 90 to 93½. Eggs \$3. per 15, \$5 per 100. * Buff Orpingtons, 4 yards; 2 yards solid buff wing and and tail, eggs \$3 per 15, \$5 per 30 Buff Orping: ton; 1 yard. eggs \$3 per 15, \$5 per 30 Buff Orpingtons, 1 yard eggs \$2 per 15, \$5 per 40.

Winners wherever shown. Won more first and seconds than any other man. Guarantee good hatches, true to name and fresh.

A. L. HOUSTON, Red Oak, Ia.

Please Let Me Tell You

My Buff Cochins have again won their share of the ribbons at the McCook Show. To make room for my breeding pens I will sell trios, pens and singles at bargains for the next 30 days. Also a few R C B Leghorns. Eggs in season.

Mrs. Ida Bard, Imperial, Nebraska.

Blue Barred Plymouth Rocks

Eggs \$1.50 per 15, \$3.00 per 50, \$5.00 per 100. Our stock is first class.

P. J. SCHWAB, Clay Center, Nebr

My Buff Orpingtons

At Nebraska State Show, 1902, made 8 single entries and took 1st ckl, 2d ckl, 1st and 5th hen, 3d and 4th pullet. If you are going to buy eggs send for my circular. Orpingtons and (Thompson) Barred Plymouth Rocks.

JOHN A LING

Harvard - - Nebraska

Black Langshans---

Tho winter layers, of standard weights, good colored plumage and eyes, well feathered shans no scrub among them. Score 93 to 97. Eggs \$2.00 per 15,

C. M. Hurlburt,

Falbury, Neb.

SILVER WYANDOTTES

MY BIRDS have been on exhibition at the last eight State Shows and many other large shows, winning more premiums than all other competitors of this variety combined. Good birds for sale. Eggs from prize pens 15 for \$3. 30, \$5. From standard bred stock, farm range, 100, \$4.

Mrs J. W. GAUSE,
Emporia, Kan.

Buff Rocks
Pekin Ducks
Toulouse Geese
Bronze Turkeys.

MRS. FLORA
SHROYER,

Perry, O. T.

Formerly at
Clay Center, Nebr.

The Michigan Poultryman...

Only Exclusive Poultry
Paper in Michigan.....

All the practical poultrymen contribute to its pages. Expert poultrymen will give its readers free such information as they may ask for.

All the news of the poultry world. Well illustrated.

Michigan Poultryman,
Ithaca, Mich

Cherry Hill Poultry Yard

BARRED P. ROCKS, Exclusively.

Eggs \$1.50 per 15. 100 for \$6.00.

Mrs. Eva J. Glugrich, Aurora, Neb.

Satisfied People.

That's the kind that run the

MARILLA

Incubators and Brooders.

If they are not satisfied we refund their money. Larger batches, perfect system of regulating temperature, moisture and ventilation. All these points explained in our catalog. Send for two sample.

MARILLA INCUBATOR COMPANY, BOX 97, ROSE HILL, N. Y.

IF WE KNEW your address we would mail you our 20TH CENTURY CATALOG yet this morning. A book that will enable you to get the best results from your hens. We give this book. It will give you a line on the chicken business that we have been years in acquiring. Address: BELIEABLE INCUBATOR & BROODER CO., Box A25 Quincy, Illinois.

Poultry Supplies

Ideal Leg Bands 15c per dozen, \$1 per 100.

Smith Seal Bands 25c per dozen, \$1 per 60.

Standard of Perfection each \$1.

Spray Pumps each 75c.

Liquid Lice Killer, gallon can 75c.

Conkey's Roup Cure 50c (and 1.00 a box).

Chamberlain's Chick Food \$2.50 per 100 pounds.

J. D. W. Hall's Guaranteed Roup Cure 50c and \$1 a box.

Reliable Spring Punches each 25c.

Midland Poultry Food at factory prices.

Humphrey Bone Cutter F. O. B. Clay Center, \$12.

Oyster Shells F. O. B. Lincoln, Neb. per 100 pounds \$1.20

Lime Stone Grit and Mica Grit F. O. B. Lincoln, per 100 lbs \$1.00

Bone Meal, Raw Bone, Beef Chops, Blood Meal, as cheap as the cheapest.

Sure Hatch Poultry Co.,

Clay Center, Nebr.

For Sale.

All kinds of fancy pigeons. Prices reasonable.

Toulouse geese eggs 20c each. Rouen duck eggs 18 for \$1.00. White Holland Turkey eggs, \$1.50 for 9. Also Houdans, Golden Sebright, Bantams, Buff, Brown and Black Leghorns, S. S. Hamburgs, C. I. Games, Buff Cochins, Pearl Guineas, Buff and Silver Laced Wyandottes. Poultry eggs, 15 for \$1.00. Yards score from 90 to 94½ points. Satisfaction guaranteed.

D. L. BRUEN, - Oldenbusch, Neb.

If you Succeed You must have a Pull!

Get it by buying eggs from Pinkerton and Co's Ringlet Strain of B. P. Rocks. Winners who ever shown. Eggs per setting, \$2.00. Two settings for \$3.50. Address

PINKERTON & Co. Clay Center, Neb.
Lock Box 24.

Barred Plymouth Rocks

Stock for sale. Prices reasonable. Eggs 1st yard, \$2.00 per 15. 2d yard, \$1.00 per 15, \$4.00 per hundred d.

Mrs. A. B. Jones,
Abilene - - - - - Kansas.

POULTRY CUTS at OUT PRICES

CATALOGUE FREE
Harper Eng. Co., Columbus, C

Morning View Poultry Yards.

....HAVE....

..Barred Plymouth Rocks..

Extra large heavy bone, finely barred, full above the eyes.

Eggs in Season. \$1.50 per Setting.

James M. Perkins,
RAVENWOOD. . . : MISSOURI.

Buff ORPINGTONS LEGHORNS and Brown Leghorns

Young or old stock, first class birds cheap
Hundreds to select from. Eggs all the time
M. & F. HERMAN.
Box 178, Hinsdale, Ill

Conkey's Roup Cure

all others. One 50 cent package makes 25 gallons of medicine. Directions with every package. If it fails to cure money refund. Postpaid, small size 50c, large \$1. Conkey's Louse Killer never fails to kill. Try it. 25 cents per package, and 15 cents extra for postage.
Conkey's Egg Food and Poultry Tonic will keep your fowls in perfect health, and produce more eggs than any similar preparation. 25 cents per package and 15 cents extra for postage.
C. E. CONKEY & CO., Cleveland, O.
Pacific coast agents: Petaluma Incubator Co., Petaluma, Cal. Eastern wholesale office: No. 8 Park Place, New York City and S. H. I. Co., Clay Center, Nebr. For sale by all poultry supply houses.

Cure Guaranteed!

THE only remedy positively known to cure roup in all its forms as long as the fowl can see to drink. For Canker, especially in pigeons, this cure excels
Agents wanted.

UNION LOCK POULTRY FENCE.

For Poultry, Rabbits, Orchards, Gardens, etc.

All main strands are two wires twisted together.

Pickets 3 in. apart. Cables 1½ in. apart at bottom.

Stronger and closer spacing than any other make. Our Union Lock Hog, Field and Cattle Fence, Union Lawn Fence Gates, etc., guaranteed first class.

Your dealer should handle this line—if not, write us for catalogue free.

UNION FENCE CO., DE KALB, ILL., U. S. A.

FRANK MYERS,
Free Port, Ill., U. S. A.
Box 20.

Breeder of
Barred Plymouth Rocks

They are Barred Right and good size. Eggs 15 for \$2.30 for \$1.50, 50 for 4.00, 100 for 7.00.

Also manufacturer of
Ideal Aluminum Leg Band : : : : :

The acknowledged leader. 12 for 15c, 25 for 30c, 50 for 50c, 100 for 75c. Samples and circular of Barred Rocks mailed for stamps.

W. J. Cheney,

Breeder of
Thoroughbred Poultry.
BOX 68—CUBA, MO

Varieties. - B. P. Rocks, Light Brahmas, W. Wyandottes, Partridge Cochins, S. C. B. Minorcas, S. C. W. Leghorns, S. and R. C. B. Leghorns, Pekin Ducks. Eggs for hatching, \$1.00 per setting, \$3.00 for 50.
Write for my new illustrated poultry catalogue. Describes leading varieties of thoroughbred poultry, quotes prices on eggs and fowls. Tells you all about The Cheney Poultry Farm. Catalogues free.

W. J. CHENEY.
Crawford Co, -CUBA, MO

Printing for Poultrymen

We are prepared to do all kinds of printing for poultrymen. We have the highest grade machinery and new material; all work guaranteed first-class. Free use of standard poultry cuts to patrons. Write us your wants and get our prices on your work. Address,

Poultry Investigator
Clay Center, Neb.

.....Scott's Cure

For **Chicken Cholera**.....

Guaranteed to cure Chicken Cholera or money refunded. Testimonials on application. Reference: Rising City Bank.

B F SCOTT, Rising City, Neb

Clubbing List

By taking the advantage of the following combinations you can get two papers often at the price of one. Look at these offers:

	Price with Regular price.	Investi- gator.
Poultry Tribune.....	50c	50c
Poultry Herald.....	50c	50c
Poultry Gem.....	25c	35c
Commercial Poultry.....	50c	50c
Western Poultry News.....	25c	25c
Poultry Success.....	50c	40c
Poultry Topics.....	25c	25c
Poultry Gazette.....	25c	25c
Nat'l Poultry Journal... 50c	50c	50c
Farm Poultry.....	\$1.00	\$1.00
American Poultry Journal 50c	50c	50c
Feather.....	50c	50c
Nebraska Farmer.....	\$1.00	\$1.00

..Just Think of It..

Farmer and Breeder, price.....\$1.00
Any 50c paper you choose above... .50
The Poultry Investigator..... .25

Total\$1.75
We will send the three to you for \$1.00.

Address,

POULTRY INVESTIGATOR.

NOTICE—We do not send samples of other papers.

POULTRYMEN

Your stationery won't look well unless **PRINTED** neatly. I do it it is well and use good cuts. Send for samples and prices.

N. K. MENDELS, Grand Rapids, Mich.

WE WILL CONSIDER...

IF PANDEMONIUM

Reigns supreme in your brooders and the chicks die wholesale you can positively check the mortality by using **PURITAN CHICK FOOD**, a readily assimilated and scientifically balanced ration. Use it under positive guarantee.

FREE—Our new and beautiful 64-page catalogue. Finest ever issued. A mine of information. Send at once to America's largest plant

PURITAN POULTRY FARMS,
BOX 357 A. STAMFORD, CONN.

MR and MRS C A BLANCHARD,

—BREEDERS OF—

White Plymouth Rocks, White Holland Turkeys and Pekin Ducks.

At Nebraska State Poultry show 1901 we won 1st pen, 1st hen, 1st cock, 3d cockerel, which was a prize on every bird entered. At the Nebraska State Fair, 2d to 6th of Sept., 1901, we won 1st pen chicks, 1st hen, 1st pullet, 1st cockerel—a first prize on every bird entered.

We have a fine lot of young stock for sale.

FRIEND, - - - NEBRASKA.

BARRED ROCKS.

BRADLEY BROS. New York winners
is what my flock is built from. Winners at the Columbus show, 1901-2. Eggs \$2.50 per 15. Stock for sale.

J. R. Henderson,
Sta. B. Route 1.
Columbus, O.

Hines' Liquid Lice Killer.

Will destroy all animal vermin. Keeps poultry healthy and vigorous when used in conjunction with **Hines' Poultry Food**. Pays for itself in the egg basket. Directions for making 25c each. Barred Plymouth Rock eggs \$1.00 for 15. Mammoth Bronze Turkey eggs \$1.00 per 9.

Mrs I. W. HINES, Walnut, Kan.

Golden Wyandottes.

Highest Grade, Healthy Vigorous, Stock, from careful Matings.

S. P. VAN NORT, OLD ORCHARD, MISSOURI.

1st, 2d, and 3d pullet and 3d c'h'l at St. Louis Show, Jan., 1901. Score 94-92½-91½ and 91½ by Butterfield. 3 seconds at same show 1900. 1st and 2d on pair at St. Louis fair. Eggs for hatching, \$2 per 13. Stock or sale. Write for full information

Meyer's Langshans

Won At Kansas State Show

80 good ones to sell.

1st and 2nd cock; 1st and 4th hens; 1st 2nd and 4th cockerels; 1st 2nd and 3rd pullets; 1st pen. Score 189½, Rhodes and Harris, judges. At N. E. Mo. show in a class of 82 Langshans all good ones, tied 1st cock, won 2nd and 3rd; tied 1st hen; won 2nd and 3rd; 2nd cockerel; 2nd pen and tied 3rd; pullet. Eggs \$2.00 per 15, \$3.50 for 30, \$5.00 for 45, from winners. Records of other big winnings in catalogue.

L. E. Meyers,
Bowling Green, Missouri.

You can raise Chickens Silver Laced Wyandottes.

—If you use—

Pinkerton's Perfection CHICK FOOD.

It contains everything that is essential to the chick's life. Not a pound of material in it that is not the best the market affords. It is equal to any chick food now on the market.

Price 25 lbs \$1.00. 50 lbs \$1.50. 100 lbs \$3.00

Manufactured by

MRS. ANNA L. PINKERTON,
Clay Center, - Nebr.

GREER'S PEDIGREED BARRED PLYMOUTH ROCKS

are in my breeding pens for 1902
eggs get eggs from the same hens I

Poultry Exhibits Properly Judged.

Eggs from my birds never fail to produce Prize Winners. The best place to buy eggs is from a breeder who makes a specialty of one variety. "Blue Bird," "Lady Blue" and the best I have raised for three years. Every bird a beauty and barred to the skin. My customers use for myself. Send for booklet of matings.

O. P. GREER, Bourbon, Ind.

BUFF ORPINGTONS.

Write for Circular.

H. H. CAMPBELL,

Osceola, Nebr.

Winners 1, 5, pullet, 2 and 3, hen, 2, and 4, ckl, and 2, pen at Nebr. State Show, 1902 against red hot competition. Eggs 1st pen, \$4.00 per 15, 2nd, pen, \$3.50 per 15, 3rd pen, \$1.50 per 15.

Eggs for hatching. \$3.00 per 26
pure bred. Price for 2 pullets \$4.
Fine scoring

Albert Lisius. Lake Mills, Wis.

When you write mention the Investigator.

Nebraska Queen.

'First Prize Hen. Weight 9 lbs.

Highest score any B. P. Rock at the late State Show Judge Myers said she was the best one he had seen this year. I won 8 regular premiums at the above show. 20 years a breeder of this variety exclusively. Write your wants. A dress

F. C. HINMAN, Friend, Nebraska.

When you write mention the Investigator.

BUFF WYANDOTTES,

EXCLUSIVELY. Our Buff Wyandottes are bred from best strain obtainable and in ilpe. We breed the pure golden Buff, not the dark red. They're prize winners.

E. W. ORR, Clay Center, Neb.
Chester White Hogs for sale

When you write mention the Investigator.

BEST FRUIT PAPER

Western Fruit-Grower is the best paper treating of all kinds of fruit, and nothing but fruit; monthly; illustrated; 16 to 48 pages; 50 cts. a year, 10c for three months' trial subscription.

THE WESTERN FRUIT GROWER.

Box 13, St. Joseph, Mo.

When you write mention the Investigator.

CALVIN E. BARNEY, - - Kearney, Neb

Breeder of Light Brahmas Exclusively.

Now is the time to beautify and improve your yards. I can help you. Eggs \$2. for 15. \$3.50 for 30. Some choice pullets for sale.

When you write mention the Investigator.

Light Brahmas!

—First and 2d cock, hen, cockerel, and pullet at Interstate Poultry Show at Red Cloud, Neb., also winning sweepstakes and grand sweepstakes. 1st, and 3d pens 5 ckl's 4 pullets at Neb., state show at Lincoln. Stock and eggs at reasonable prices.

J L SMITH, Cadams, Neb.

When you write mention the Investigator.

If your hens do not lay try our **Crits**. We have several tons that **MUST BE DISPOSED OF** and we will ship you at our ton rates F. O. B.: 100 lbs. Pearl Mica Crit, 75c; 100 lbs. Oyster or Clam Shell Grit, 75c; 100 lbs. Limestone Grit, 65c; or all three to one address, \$2.00. At this price you can ship 1000 miles, as they go fourth class freight. Our Pearl Mica will make your egg shells perfect—a great thing when you ship eggs long distance.

THE TIFFANY COMPANY, Lincoln, Neb.

DON'T Set Hens the Same Old Way, and let lice kill them on the nest. Tiffany's *Sure Death to Lice Powder* will kill all vermin, and your hen will bring her brood off free from lice. Tiffany's *Paragon Lice Killer "Liquid"*, guaranteed to kill all lice and mites. Instantly kills lice on colts, calves, and hogs. By using our *Sprayer* a very little goes a great way. Penetrates all cracks. Spray bottom of house for spider lice. It is a *powerful disinfectant*. \$1 per gal. can; 65c 1/2 gal. One gallon and *Sprayer*, \$1.50. Can get it free where no agents by a little work for us. THE TIFFANY CO., Lincoln, Neb.

PETALUMA INCUBATOR

WHY IT HATCHES

...HIGH PER CENTS...

Success in an incubator depends upon two things: the right principle and the right construction.

The uniform success of the

Petaluma Incubator

is not a mere "happen so." It hatches 100 per cent of fertile eggs because it's built on the right principles; it is scientifically correct, and because the very best skill and workmanship obtainable are put into its making. It is built right; it does its work right. We put a guarantee behind it which means something. It is not air machine, and has demonstrated that its regulation of heat, air and moisture is perfect. Made in four sizes—from 54 to 324 eggs. We pay the freight anywhere in the United States. It will pay you to send for our attractive free catalogue. Address nearest office.

PETALUMA INCUBATOR CO.,

Box 58, Petaluma, Cal., or Box 58, Indianapolis, Ind.

We will consider it a great favor if you will mention THE POULTRY INVESTIGATOR when writing to advertisers.

CHAMBERLAIN'S PERFECT CHICK FEED.

BEYOND COMPARISON.

WORLD'S CHICK FEED OF TO-DAY.

CHAMBERLAIN'S PERFECT CHICK FEED, like everything else that has merit, has its imitations. DON'T BUY TROUBLE, insist on having the only Original Dry Feed. Stamped on each sack "Chamberlain's Feed, Kirkwood, Mo." All others are worthless imitations. Nothing "Just as good."

GOOD MORNING SISTER

I am ready for Chamberlain's Perfect Chick Feed. DRY AND ALWAYS READY FOR USE. LITTLE GOES LONG WAY.

No Bowl Trouble when Chamberlain's Chick Feed is properly used. It is the fine mixture in Chamberlain's Feed that has made the name famous. For incubator chicks, for all chicks until 5 months old.

FACTORY PRICE, 100 Lbs. \$2.50. 50 Lbs. \$1.50. 30 Lbs. \$1.00.

For the Breiler Man, the Fancier and the Farmer. Saves Time and Money.

Chamberlain's Hen Feed will make your hens Lay, 100 Lbs. \$2.00.

Factory and Shipping Depot, 302 N. Commercial St., ST. LOUIS, MO.

Freight charges added to factory price at all distributing points. Order from your nearest agent and save time and freight.
FOR SALE AT \$2.75 PER 100 LBS. BY Sprague Co., Chicago, Ill.; J. A. Will Seed Co., Milwaukee, Wis.; R. A. Pike & Co., Minneapolis, Minn.; E. A. Peele Co., Grafton, Ill.; Alexander Seed Co., Augusta, Ga.; Norton Poultry Yards, Dal. in Neb.; Hunting & Pace, Indianapolis, Ind.; Kinley Hardware Co., Agents for St. Louis Mo. 11 friends of my feed in the east have trouble getting my feed, write direct to me for prices. **W. F. CHAMBERLAIN, KIRKWOOD, MO.**

Our Motto, "Virtute non Astutia"

HARES BY THE HUNDREDS

IMPORTED - AND - DOMESTIC

From such Fashionable Strains as the following Champions:

Fashoda, Edinboro, Guinea Gold, Nonpareil, Unicorn, Dash, Climax, Grimsby's Star, Priory Prince, Malten Mystery, Palace Queen, Lord Britain, Etc.

Our Stud Bucks are:

Fashoda Star

Score 96 by Judge Almond, imported, son of Ch. Fashoda.

Viscount

Score 95 by Judge Finley, imported.

Lythedale

Score 94 by Judge Finley, imported

Sir Crabtree

Score 93½ by Judge Crabtree, and other domestic bucks that will score 94 to 96.

RUFUS RED BELGIAN HARES

At prices ranging from \$1 to \$75 per head.

red market stock, good color and size, \$2 to \$3 per pair. Hardy as nk Belgians (good to use pairurse does) at \$3 to \$5 per

High scoring pedigree stock at moderate prices. Will refund money pay return express charges if hares purchased are not as represented. Write for free booklet and further particulars. Rabbitries at Maplewood and Fayette.

MISSISSIPPI VALLEY BELGIAN HARE COMPANY,

1317 Chemical Building,

ST. LOUIS, MISSOURI.

A Book Beautiful.

Don't you want the most beautiful catalogue ever issued by an incubator Co. The **Prairie State Incubator Company** have it. 60 full page tinted plates, 8 beautiful original paintings, over 700 half-tone illustrations. We send it free. Write at once. Ask for enclosure No. 129. The last incubator and the last brooder on sale by the **Prairie State Incub. Co., Homer City, Pa.**

Smith's Mammoth Pekin Ducks and White Wyandottes Win.

Thirteen 1st, 52nds, at Nebraska state, Kansas state, Missouri state, Des Moines Iowa. Clean sweep in four states. I entered 12 W. W. in Neb. state show and won 8 premiums; 1 ck, 1 hen, 1 pullet and 5 others. See circulars for report of the champion flock. Get eggs for hatching from the winners.

Lincoln, Neb., Box 456

E. E. SMITH

We will consider it a great favor if you will mention THE POULTRY INVESTIGATOR when writing to advertisers

LIBRARY OF CONGRESS

0 002 840 455 4