Practical Poultry

And How to Dress Fowl

See C. C. Smith, Practical Poultry Demonstrator, Dress
a Fowl in Eight Seconds. Learn How Yourself.

PRICE ONE DOLLAR

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PREFACE

The purpose of this book is to further the instructions and to give those points that time will not permit in my demonstrations. Therefore the book will not contain a lot of theoretical thoughts, but will only deal with accomplished facts by the writer.

Be sure when reading poultry literature that it is written by a practical man and not by one of our imaginary dreamers, of whom we have so many in the various branches of the poultry industry.

A certain amount of theory must be known in any form of business but theory alone will not enable you to put the knowledge to a practical use. You must also have a practical knowledge of that which you are doing. Therefore, what is the use of knowing anything if you do not practice it?

The same applies to this book. Don't miss anything and neglect nothing.

A poultryman's work is never finished; he can only find a place to leave off until tomorrow; he is but the junior member of the firm, the hen being "boss." As soon as you stop working for your poultry, just so soon will they stop working for you. But when you take up your task again will they respond so promptly? No: and perhaps never. For during such periods of neglect is the breeding season of vermin and disease.

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no 1.

Marketing Products From Producer to Consumer

There has been considerable inducement and influence used of late years, through different editorials, trying to get the poultry producer to sell direct to the consumer, therefore doing away with the middle-man's profit. This is a great mistake and misleads a lot of people, as you are not doing away with the middleman's profit even though selling direct to consumer, for in most cases you are doing away with at least three men's profit, and at the extra expense of the one who is obliged to make the most profit (the retail dealer). When shipping your poultry into the market it is usually first sold by the 5 per cent commission house to the jobber; from the jobber to the retail dealer and lastly from retail dealer to consumer. Therefore in order to make a profitable business from producer to consumer you are obliged to make considerable difference between your wholesale and retail price, as you are at a greater expense than either of any one of the men previously mentioned, owing to your facilities of serving the public and time and extra expense required. For instance, a man in my vicinity who believes in getting every cent possible out of his products, brings his broilers down to my slaughter house to have them killed and picked. For small orders I charge 15c per head for getting them ready to cook. The above mentioned party brought me four broilers to be dressed for one of his customers for which he was to receive 35c per lb. dressed. These broilers when dressed weighed 8 pounds; at 35c per lb., \$2.80. At that time I was paying 23c per lb. for live broilers, in any quantity, large or small lots.

His four broilers when alive weighed 9 lbs. and at 23c per lb. would have brought him \$2.07 without any other time or expense. His added expense by delivering to consumer is as follows:

Dressing four broilers, at 15c	60c
Parcel post rates	16c

As to the expense of parcel post boxes used for shipping these broilers I do not know. Total cash expense to my knowledge being 76c, or a loss of 3c had he sold them to me in the first place at 23c per lb. live weight. Should he have dressed them himself, he would have

saved my work which amounted to 60c, but would have likely consumed two more hours of his time (perhaps worth something and perhaps not.)

Another instance: A friend of mine living in a city near Boston buys guaranteed fresh henery eggs of a local producer, who lives just outside of the city limits; eggs delivered to his door in one or five dozen lots, as he wishes, for two to four cents per dozen less than the best wholesale houses in Boston were paying for the same grade eggs in any quantity. Now this lady imagines she is accomplishing great things as she has all the trade she can handle selling from producer direct to consumer. It requires one day's labor a week to **lose** two to four cents per dozen on her eggs.

In my demonstration work I meet people at most every place I go who are doing just as well as the two parties mentioned. Then again I meet people most every place I go who are doing well with their producer to consumer trade, and some are doing exceptionally well. Before looking for a retail trade from producer direct to consumer, keep posted on the market so that you may know what your products are worth. Take account of all expenses and time required in serving the public with your products, and find out what you are obliged to get in return to make your producer to consumer business profitable over the regular wholesale market price. Run your business yourself, do not let the customer run it for you. Better lose that customer than to loose time and money on him. A good customer realizes when he is being used well and will appreciate it. Always do your best to please him and give him 100 cents worth for every dollar. Under such conditions and such only have I seen from producer direct to consumer succeed.

Preparing Poultry for Market Purposes

Never feed poultry on the day of killing; keep fresh, clean drinking water before them at all times. Should the poultry obtain food in any way so that they would have food in their crop when dressed, open the crop by making slit on the upper part of the neck just forward of the wing. By shoving the crop to this place you will notice the skin is very thin at this point. Force the food stuff out from the under side of the crop. Any food retained in the crop after death will soon sour and ferment causing a gas with a very bad odor which passes through

Figure 1.

Figure 1A.

Figure 2.

Figure 2A.

the flesh giving it a strong taste. Poultry, eggs and butter are very susceptible to bad odor.

In preparing poultry for market purposes there are numerous persons who claim they have the proper method. But results obtained is the only proof for any man's method being the proper one. I have been in a number of picking contests, meeting all comers, not only locally, but in various states throughout the Union, and have to the present time defeated all competitors, including a contest staged for the Pathe's Weekly Film Corporation between Mr. Moses Bruce of Boston and myself, in which I defeated him. At the same time I also dressed a fowl in eight seconds by three official time keepers with stop watches. Up to the present date Pathe's Weekly nor I have heard of any man who has come anywhere near to the record I made with them, excepting that on a few occasions I myself have duplicated the record. Therefore by results obtained I claim my method to be the best. In securing this method I have worked in a number of the leading slaughter houses throughout the United States, and seldom found two who used the same method in killing and dressing poultry. And rarely will you find a slaughter house which will allow you to use your own method or the method you may be accustomed to. Therefore in travelling from place to place one is obliged to learn different methods. In putting my method together I selected those different parts from the various places I worked which would accomplish most with the least possible movements, in this way saving time and extra motion. In using a method, no matter which one it may be, always use the same routine, and do your work thoroughly as you go.

Preparations for Dressing Poultry

First, a good sharp sticking knife with a blade about three inches in length, narrow and tapering to a sharp point, straight on back of knife with the cutting edge rounded, and of very good steel, as the blade is obliged to be very narrow. Owing to the small cavity the knife must pass through to the brain, should it be a wide blade, it would fracture the skull before reaching the brain, therefore causing pain and contraction of the muscles, which will be referred to later. Second, a rope to hang the fowl on while picking. Third, an empty barrel to catch the body feathers in, should you want to save the feathers, (colored feathers are worth about 4c per lb.

and straight white about 15c per lb. on the wholesale market). Fourth, a barrel about half full of water at about the temperature of ordinary spring or city water, to throw the fowl into directly after picking, for the purpose of soaking out the animal heat before putting into ice water. Should you put them into ice water immediately after killing the extreme cold would not allow the animal heat to escape properly, causing the fowl to be dark and purple when cooled out.

Killing Poultry

Take the fowl by the thighs in the right hand, by the wings in the left hand. Strike its head against some solid object to stun it for an instant, so as not to feel the pain of the knife while sticking. First insertion of the knife is for bleeding, the second for braining. Fowl, the same as any living being, has two sections to the brain, nerve and mental cells, the nerve cell lying at the base of the skull, shown directly under the thumb in Fig. 2 a.

Piercing the nerve cell of the brain causes the nerves and muscles to relax, which in turn loosens the feathers. The feathers remain loosened until through loss of blood the reaction of the muscles again tighten the feathers. Therefore the quicker one can pick a chicken after it is stuck the easier it is done. As to any doubt of the bird suffering in this manner of killing, it has been proven by specialists in Boston, sent around by different societies to find out whether we were killing the poultry properly, after analyzing the heart and lungs, that the bird did not suffer. And after analyzing the brain they found that the bird could not suffer as the brain was paralyzed.

Fig. 1a shows proper location for bleeding. With the sharp edge of the knife next to the bone of the neck as location of knife is shown in Fig. 1a, where the main artery branches to either side of the head, shoving the knife all the way through to give air circulation to carry off the flow of blood. Fig. 1 shows position for holding bird while sticking.

Fig. 2a shows proper location for braining. Insert the knife just below the corner of the eye and run back to the center of the back of the head, directly under where thumb is shown in Fig. 2a; at the same time giving a slight twist. In this course the knife travels through a narrow passage in which the nerve cell of the eye travels to the brain. Fig. 2 shows proper position for holding bird while braining.

As soon as the bird has been stuck commence picking as you will see in Fig. 3, holding the bird by the wings in the left hand, grasping the tail in your right hand, a slight twist with a light pull will remove the tail feathers. Next, as you will see in Fig. 4, running your hand up through the feathers on back, grasping hold and a slight jerk backward removes the back feathers. Next, as you will see in Fig. 5, stripping the thighs. By catching thigh in hand and shoving upward, draw down, allowing the flesh to pull through your hand but holding onto the feathers. Repeat same on other side, removes feathers from the thighs. The fluff, as you will see in Fig. 6. Running your hand through the feathers forward grasp feathers and draw back, removes the fluff. Fig 7, hanging fowl on rope to complete picking. This method of hanging is devised to save time and is the most secure one. It consists of a piece of window cord swung from the ceiling with a wooden button attached to the lower end. This button is made of wood circular in form, about 2 inches in diameter and $\frac{1}{4}$ inch thick with a hole in the center just large enough for the window cord to pass through, and the tie knot, on the lower end of rope to keep from slipping through button. Place fowl's shanks, as shown, against rope about three inches above button, rope on opposite side of shanks from you; bring rope up and over shanks; drop button down between feet and rope. Allow bird to hang head down and it will be secure. From here all remaining feathers are removed toward the head. Grasping the breast feathers in your hand, give a slight twist and pull forward. Strip neck feathers with thumb and four fingers extended around the neck; pull downward. For the wings, as you will see in Fig. 8, grasp the wings with the back of your hand toward you; give slight twist and quick jerk back, removing quill feathers. For stripping wings, as you will see in Fig. 9, extend forefinger around butt of wing, holding body with other hand; strip toward you alternating the movement with either hand until wing is stripped. Repeat same on other wing. Should the fowl have pin feathers the longer ones may be removed by brushing lightly with the hand; the shorter ones require a pinning knife, which should have a rather wide but thin blade, not sharp but very durable. Starting at the top of the shanks with the bird still hanging by the feet pin downward, taking everything clean as you go until you come to the wings. Then take the wing in your left

hand with back toward you. Start pinning at tip and pin cleanly to the body. Then fold the wings as you will see in Fig. 10 and pin the neck down to the head as you will also see in Fig. 10. The bird is now ready for the first cooling water in which it may be left for an hour or for a half day as the case may be, so long as you have enough water in the barrel to keep your fowl covered at all times. When taken out of this barrel, place in an empty barrel or hogshead as to quantity dressed, pour just enough water on to cover poultry. Then put on a large piece of ice, if to be kept over night. Cover ice over with several layers of burlap to hold the cold in and keep the air out. The following morning you will find that your poultry is just as cold in the bottom of the barrel as it is just under the ice. Should there be no water in this iced poultry the cold would not travel down enough to cool out the poultry in the bottom of the barrel, therefore the poultry would heat and turn green.

For shipping dressed poultry a barrel, such as flour and sugar barrels, make most desirable containers. Removing the top hoop place a piece of paper in the bottom of the barrel lining the sides by using strips of wrapping paper with one end down to bottom of barrel and the other end extending up and lapping over top of barrel for a few inches. After lining the barrel all the way around in this manner place the hoop back over top of barrel and edges of paper. This will hold the lining in position while packing. Give yourself plenty of time to pack for shipping. Take your poultry out of cooling barrel and place on some desirable object to drain. For packing set the poultry down in bottom of barrel with back outward and feet toward the center, packing them side by side all the way around, after which fill in the center in the same manner. Start another layer and fill out likewise, and continue until barrel is about level full, after which place a piece of ice, about twenty or thirty pounds, on top of poultry. Lift up your top hoop, place some wrapping paper over the ice and a piece of burlap over that, allowing it to extend over the edge of barrel all the way round. Place hoop over burlap and hammer it to its regular position on barrel, nailing it firmly in place. Trim off burlap to about two inches to hoop, so that it will be neat but not pull through.

Place your invoice of the net weight and number of head and description of poultry, whether fowl, roasting chickens, or whatever it may be, on back of shipping tag

Figure 3.

Figure 4.

which is to be tacked on side of barrel, just below the second hoop, and keeping a copy of the invoice yourself. When this shipment of poultry arrives at the wholesale house, before it is even opened, the shipping tag is removed from the barrel to see if the invoice is on the back. Poultry cooled and packed in this manner will keep from twenty-four to forty-eight hours, depending on conditions of heat. When this barrel of poultry arrives at the commission or wholesale house the merchant at once knows that it has been properly picked, cooled and packed, and by seeing the invoice on the back of your shipping tag realizes immediately that you are a practical poultryman. He can rely on your goods and wants to hold you for a regular shipper, and will therefore do all in his power to give you the best of results.

Forced Feeding of Poultry

In regard to forced feeding I have noticed articles of various sorts. For instance in one article in a well known poultry journal that various slaughter houses in Boston were making several hundred thousand dollars annually on fattening up half fed poultry that came from the farm to their establishments. This I know to be absolutely false in every word, for I have worked in most every slaughter house in Boston and am well acquainted with their customs. And there was not one place in Boston that was doing this business successfully. They had most all tried it at various times and found it not to be profitable. At the time of the writing of the above article there was but one slaughter house in Boston that was trying forced feeding and that was their second season. The first season was a complete failure. While the second was giving some better results, it had not yet been found profitable. That was one of the imaginary dreams previously mentioned. Forced feeding should be done at home to be made profitable, for there only a man knows the conditions and customs of his poultry. Only the strong and healthy birds can be forced-fed profitably. In selecting birds to be forced fed, select strong and healthy and vigorous birds, those growing nearest to standard of their respective breed in type and development. Using a standard breed enables one to tell whether or not the poultry is strong and healthy if it shows proper development and rapid growth. The following is one of the experiments of mine with which I have had

best results, considering cost of food consumed and amount of grain:

Fifty-three broilers, live weight, $81\frac{1}{2}$ lbs., at 28c per lb. were worth \$22.82 on July 5. At time of killing, July 16, 53 broilers, live weight, 116 lbs., at 26c per lb. amount to \$30.86. Dressed and shipped to market I received returns for 104 lbs. at 38c per lb., or \$39.52, less express of 84c; net \$38.68. Total gain, not including labor, \$12.71. Owing to the routine of labor it would be difficult to give accurate figures. The consumption of food and cost of same were as follows: 105 quarts of milk at $1\frac{1}{2}$ c, \$1.575. 105 lbs. dry bread at $1\frac{1}{2}$ c, \$1.575. Total cost of feed \$3.15.

In the above forced feeding I used slatted coops, slatted all the way around, and slatted bottoms, left set in the open under a shade tree with drop boards under coops which were scraped off once a day, and feed prepared in advance at all times consisting of equal parts of sour milk and dry bread, one pound of bread to one quart of milk. Fed at intervals four times a day. First three feeds to be what they will clean up in about 5 minutes' time and the last to be all they will eat till going to roost. Fed in troughs outside the coops, and kept fresh, clean water before them all the time. The amount of gains in profit would naturally vary at different parts of the season, as the price of poultry reduces later in the season and the price of grain increases. The gain in dressing this poultry over shipping live weight was \$8.66, allowing 16 18-53c per head for picking.

Breeding Poultry and the Proper Breeds to Breed

First, be sure that you have a standard of perfection and study well the characteristics of the particular breed or breeds which you prefer, selecting one of those which suits your fancy, for utility qualities, both in egg and flesh production. In selecting a breed for any man, the breed which appeals to him most will always give best results, for that is the breed which will receive the attention and proper care to give results. One of the main objects in breeding standard bred poultry is that when a man gets a fancy to standard bred poultry he will give it the care and attention that no man has ever been known to give a common old flock of mongrels.

Secondly, if there is any surplus stock to be marketed there is always a market for it far above that of the mon-

grel, giving him a great advantage there, saying nothing of the better results of the egg basket, and those extra pounds of flesh with a less amount of feed, accounted for by the care and attention which your poultry has received.

As to success with breeding poultry I should say that 90 per cent of success depended upon cleanliness alone. All poultry houses should be so constructed as to have plenty of sunlight and fresh air without drafts, therefore the open-front house is my preference, without being in too long sections, without partitions. A long open-front house without partitions will oftentimes have a draft through. I should never prefer a house more than 40 feet to a section between partitions. Dampness, lack of sunlight and fresh air in a house are the greatest inducements of vermin and disease. The house should be constructed so as to have sunlight both summer and winter, with shady runs attached which the poultry should have access to during the summer months. For laying hens, excepting breeding pens, I have never found it profitable to have very large runs. In regard to using litter in your poultry houses, I have always had best results with a good deep layer of clean, dry sand. Have the houses thoroughly cleaned and disinfected by putting in sand, and have the sand in the houses long enough to be thoroughly dried out before putting in your pullets in the fall of the year. When housing my pullets I have always found it profitable to use a small pinch of potassium permanganate to each bucket of water to prevent colds or any other likely ailments which pullets at the age of maturity are very likely to contract, for at this age they are subject to most any disease of poultry, their susceptibility to disease being greatest at this time. I have always found that the ounce of prevention beats any man's pound of cure. Never house any pullets that show symptoms of weakness or improper development. The market is the best place for such, whether dressed or shipped in alive. Such poultry I would never advise any breeder to advertise and try to sell, as pullets, to some one who wants to keep over, if they consider their business worth anything in the future. Should you wish to get a little more than market price out of them there are always plenty of places buying up such poultry and advertising cheap pullets for sale. Therefore the best thing to do with those pullets is to coop them up and ship them in to one

of these houses and let them allow you whatever they make. You will usually get more than the market price for broilers or roasting chickens. So it is not up to you whether they dress them off or how they sell them.

Keep plenty of fresh, clean water before your poultry at all times. Keep dry mash in hoppers in each compartment of poultry houses, that the fowl may eat of it whenever they choose. They will never eat too much dry mash. Properly balanced, dry mash is also cheaper than grain, regardless of its necessity, therefore your poultry will not require so much of the more expensive foods.

I get good results with a dry mash that I mix, for my fowl, consisting of the following:

Wheat bran	100 lbs.
Fine middlings	100 lbs.
Ground oats	60 lbs.
Shredded wheat waste	100 lbs.
Gluton feed	100 lbs.
Beef scrap	100 lbs.
Salt	1 lb.

Place all in a heap together and shovel over until thoroughly mixed.

Keep oyster shell, grit and charcoal before your poultry at all times.

Give plenty of green food, or vegetation to substitute, in winter time.

Never give grass in long lengths to poultry, such as cut or pulled grass, as they have no means of breaking the grass, therefore it will be swallowed in long lengths, which often times get crosswise the passage from the crop, causing the bird to become crop-bound.

Long grass seldom causes crop-binding to birds running on range as there the grass is secure at one end, giving the fowl a chance to break the grass off before swallowing.

Give fresh ground bone at least once a week in winter time, when same may be obtained, all that they will eat up clean in about five minutes. Do not allow any to remain over any length of time, as so exposed it becomes unfit for poultry.

When purchasing ground bone for poultry be sure that it is fresh and has not been heated. Green ground bone in any quantity will soon heat and start turning green, from which a number of diseases start.

DISEASES AND PARASITES

Parasites and diseases are invariably due to filth. Keep houses, litter, drop boards, nests, feed hopper and drinking fountains clean and disinfected so that parasites and germs cannot exist. Should any birds become sickly remove all sick birds, spray houses and nests with whitewash and some good disinfectant.

CANKER. A cheese-like formation and sores around the mouth, frequently caused by birds fighting or getting their mouth hurt in some way. A sure preventive and a good cure: Swab mouth with equal parts of hydrogen peroxide and water.

ULCERS. Occasionally found on head or throat. Kill and burn all birds affected.

GOING LIGHT. Caused by filthy conditions and diarrhoea. Allow affected birds their freedom and feed sparingly of dry, clean food.

BUMBLE FOOT. Enlarged and inflamed ball of the foot. Caused by jumping onto hard floors from roosts that are too high. Wooden or concrete floors should never be used in a hen house. Cure: Thoroughly clean the foot with warm water; sterilize a sharp penknife by dipping it into a weak solution of carbolic acid, and then pierce the abscess. Work out all the matter and bathe foot with weak solution of carbolic acid in water. Wrap the foot up and keep the bird on clean, dry bedding until the wound heals. Do not breed from a male bird which has or has had Bumble Foot.

CHICKEN POX. Symptoms: Light colored specks on the comb or face that grow rapidly into warts of various size; dark brown in color. Cause: This disease is caused by a fungus growth. It is prevalent in damp, cold weather and is very contagious. Cure: Color the water with permanganate of potash. The birds that have warts should have the covering of each wart removed. The under parts that bleed should be cauterized with silver nitrate or caustic potash. The knife used for scraping the warts should be sterilized after each operation. The combs, wattles and heads of all the birds in this flock should be rubbed with carbolated vaseline twice a week.

until all symptoms of the disease disappear. Put one tablespoonful of sulphur to each quart of dry mash or wet mash, as it may be, add a small amount of epsom salts in the drinking water once a week. This is one of the diseases that may be prevented by properly housing in the first place and by using a little potassium permanganate in the drinking water; likewise is the disease to follow.

COLDS. Symptom: Watery and swollen eyes; or mucus from the nostrils. Cause: Drafts, dampness, crowded quarters and becoming heated at night and getting out into the dew in the morning while so heated. Cure: Squeeze out nostril and wipe off well with clean cloth, add one drop of solution of potassium permanganate (light blood red in color) in each nostril and the slot in the roof of the mouth. Add a pinch of potassium permanganate to each bucket of drinking water which should be renewed three or four times a day. Consider well your housing conditions.

CONSTIPATION. Symptoms: Ineffective and strenuous efforts to make a passage. Sluggish and listless appearance; lack of appetite. Cause: Unbalanced ration. Clotting of matter after diarrhoea and lack of green food. Cure: Remove any external obstruction, by first soaking with a little warm water. Give one tablespoonful of castor oil or epsom salts. Give plenty of green food, and be sure that your rations are properly balanced.

EGG BOUND. Symptoms: The fowl returns frequently to the nest and does not lay. Later the wings and tail begin to drop. Cause: Too much fatty foods in their ration, and insufficient exercise. Cure: Give the hen one tablespoonful of castor oil and inject sweet oil into the egg passage. Place the fowl, head toward you, with back on your knees, place the thumb on each side just forward of the egg and force the egg out, or as many fully developed eggs as may be accumulated there. Prevention: Well balanced ration and plenty of exercise.

LEG WEAKNESS. Symptoms: Sitting down while eating, and staggering and limping while walking, and sometimes getting so that they cannot walk at all. Cause: Improper housing, hard floors, insufficient out-door ex-

ercise, ill balanced ration (chiefly lack of animal food). Cure: Plenty of green cut bone, well balanced rations and proper housing.

GAPS. Symptoms: Gapping, wings drooping and seemingly trying to swallow. Cause: A worm-like parasite that becomes attached to the lining of the wind pipe. This disease is most frequently among the chicks from four to five weeks old. It is very reducing to the vitality and oft times causes death. Cure: For affected birds, extract parasites. Take a hair from the tail or mane of a horse, form a loop in the center, dip the loop into turpentine; holding chicken in one hand with mouth open, with the loop in the other hand extending three or four inches below the fingers, insert into the chick's mouth a short distance and twist loop around in your fingers; take loop out and redip in the turpentine and repeat the same operation two or three times, going a little farther each time until you have reached the chick's crop. Put a very little turpentine or camphor in drinking water, and remove yard to fresh ground. As the ground has become affected it should be dug up and seeded, or well sterilized with air slacked lime.

FROZEN COMBS. Do not thaw combs quickly. It is best to thaw them out by rubbing them lightly with snow. When beginning to thaw put on vaseline and rub gently.

HEAD LICE. This greatly reduces the vitality and often causes death. Symptoms: Droopy and a bare appearance on the head. Treatment: Dust the chicks with some good lice powder, also mother hens if brooding by hens. Clean out coops and scrub with some good disinfectant.

RUPE. Symptoms: Peculiar and unpleasant odor issuing from nose and mouth. Lumps swollen on side of mouth or eye. Cause: Improper housing or care. The first case is always contracted from a cold, after which it may be transmitted to healthy fowl. Cure: The axe and a brush fire. Take out any affected birds that you may find. Disinfect premises, sterilize drinking fountains, and add a little potassium permanganate to the drinking water to kill any germs that may have been

transmitted to the mouth of other fowl through the old drinking water.

FEATHER EATING: Symptoms: Fowl plucking feathers from one another's back or body. Cause: Idleness, insufficient exercise, too close confinement, leaving feathers in yard during molting season, ill balanced rations, lack of animal matter. Cure: Remedy or remove the cause.

SOFT SHELLED EGGS. Caused either by lack of shell-forming ingredients in the food or by over fat condition. Preventive: Plenty of oyster shell and exercise.

WHITE DIARRHOEA. Cause: This disease is caused by a germ. Chicks weakened by chills and improper feeding, such as a wet feed for chicks under five weeks of age. It is both hereditary and contagious. Also it is often caused by musty feed, too much fresh meat or green ground bone. Foods being left over from one meal to another and becoming sour in the coops or runs as the custom of feeding may be. Cure: Change of ration. Be sure that housing conditions are proper. Give sour milk either skimmed or butter milk. The lactic acid helps to kill the germs. Prevention: Never use for hatching purposes an egg that has become spoiled in the least. Never use fowl in breeding pens which have been infected with white diarrhoea as baby chicks. Use for breeding purpose the most vigorous only. Avoid birds that mature slowly; they are for market purpose only, as they yield only a small egg production and hatch out chicks that are subject to disease and a weak constitution, making them slow to develop and never profitable. Proper housing of baby chicks also has a great deal to do with white diarrhoea. Plenty of fresh air, sunlight and no drafts, with shade accessible, as you will see in proper brooding.

Figure 5.

Figure 6.

Proper Brooding and Care of Baby Chicks

Brooding with Hen.

Coops should be of three sides tight, half open front, preferably a small opening in each side of front open from top to bottom. One side may be screened up while the other may have a door to close at night or on stormy days. There should be a solid portable floor, about two inches from bottom of coop that may be taken out and scraped and scrubbed with a disinfectant, with a small portable yard attached to each coop. Put slats across the unwired door to prevent fowl coming out in yard, but sufficiently wide apart to allow the younger chickens access to the run or coop until they are large enough for the mother hen to be taken away, after which the slats may be removed. Before taking the mother hen away from the chicks the portable yard around the coop may be removed, allowing the entire range of the poultry yard to the chicks. The mother hen should be kept in all the time until being taken away from the chicks, which should be done as soon as the chicks are large enough to be comfortable without her. Consider the season of the year as to size of chicks before weening them.

Feeding Baby Chicks.

Do not feed until from twenty-four to forty-eight hours old. For first feed give hard boiled eggs, boiled about six hours. Mash up in dish, sprinkle over about 20 per cent of clean fine grit and crumble all well together. Feed and fresh water for the first time, after which for the first two weeks they should be fed from five to six times a day lightly with a good commercial chick feed or scratch feed, just what they will clean up readily. Should any food stuff be left over it becomes trampled and undesirable, causing a loss of appetite and oft times bowel trouble. Dry mash should be kept before them at all times. There are a lot of dry mashes and growing feeds prepared by different poultry food supply houses which give good results, although there are others which I could not recommend and especially in dry mashes, as there is liable to be any amount of impure food in the mash without one being able to detect it very readily. I have good results with the following mixed feed:—

Bran	100 lbs.
Fine middlings	100 lbs.
Sifted ground oats	50 lbs.
Gluton meal	100 lbs.
Shredded wheat waste	100 lbs.
Chic chuk	23 lbs.

Mix thoroughly until you can see no streaks or spots of any one kind of feed. Keep charcoal and grit before them at all times, and plenty of fresh, clean water and sour milk if available.

For those not acquainted with CHIC CHUK I may mention that it is prepared ground fish and I have always found it to be fresh and odorless and pure. I use CHIC CHUK in preference to beef scrap to get a desirable concentrated animal food for at times it is difficult for me to get a desirable beef scrap, therefore I feel more safe in using CHIC CHUK.

For Brooding by Artificial Heat.

The method of brooding with artificial brooders would depend entirely upon the particular brooder which you are using. Makers of brooders always supply a pamphlet with each sale with instructions as to the use of that make of brooder. The writer has found that a great preventive of white diarrhoea and leg weakness is using a mat directly under the brooder, such as sewing two thicknesses of burlap together to hold compact and to keep the chicks from crawling between the layers. Spread same under brooder and cover lightly with sand. This prevents the chicks from scratching the sand or litter away and getting on the bare floor, which is oft times cold or chilly and causes bowel trouble and leg weakness. By having a few extra mats of this kind they can be frequently changed by taking out the first mat and dusting off. Dip in a bucket of disinfectant, hang up to dry, and then it is ready for use in the next cleaning. Also give sanitary sleeping quarters at all times. Do not be afraid of your little chicks getting into the snow in the early spring. Have your run so that they can get on the ground when two weeks old and no later. Keep them confined only when rain or snow is falling. Should there be snow on the ground shovel a space off as best you can; what little is left will not hurt them. Young chicks are obliged to have outdoor exercise in order to thrive.

NOTICE.

After demonstration I answer all questions that the audience wishes to ask. There are always questions asked as to the best firms to deal with in the various branches of the poultry business.

All the advertisers in this book are people with whom I am personally acquainted, either through business transactions in the past, or having been in their employ.

I have permitted only such advertisers in this book as I would gladly and safely recommend when such questions are asked at my demonstrations.

C. C. SMITH.

I cooperate with Advertisers and Patrons of this book and am glad to give any assistance which I may be able to give. Therefore it is always advisable in all transactions to mention this book—C. C. Smith's Book on Poultry.

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Figure 7.

Figure 8.

Figure 9.

Figure 10.

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