SF 971

.S5

J. B. SHOOK'S
PRACTICAL TREATISE
FOR SWINE AND
OTHER LIVE STOCK

F394

345

Yours, J. B. Shook

1884—1916

J. B. SHOOK'S

Practical Treatise on

Hog Cholera, Swine Fever, Pneumonia

and the Various other Diseases of Swine,
Poultry and other

Live Stock

With Valuable Information as to Cause, Treatment and Cure,
With Full Instructions.

Showing how to compound and use the Medicines
for all Live Stock made from the Receipts
Furnished with this Book.

WITH OTHER VALUABLE INFORMATION.

By J. B. SHOOK,
Author of Shook's Guide for Stock Breeders,
Standard Works of 500 pages
Published
1885—1887

F 971
S5

Entered according to Act of Congress, in the year 1917

By J. B. SHOOK,

In the Office of the Librarian of Congress, at Washington, D. C.

ALL RIGHTS RESERVED.

RECIPE WORK.

Entered according to Act of Congress, in the
years 1913, 1914 and 1917.

By J. B. SHOOK.

ALL RIGHTS RESERVED.

In United States of America and Canada.

✓

MAR 28 1917

©CLA 460069

200 1

REMARKS.

I am often asked this question, "Why do you sell your medicine recipes?" First, because the medicine for Diseased Hogs—Cholera, Swine Fever and Pneumonia, cannot be commercialized. Second, having quit practice, I adopted this method in place of selling my various medicines and remedies. Third, knowing that the best way to control the diseases of Swine is to Educate the Swine Raisers how to do so. Fourth, knowing a work of this kind was greatly needed. I concluded to give the Stockmen the benefit of my life work; believing it will supply a long felt want. Therefore, to the American Farmers and Stock Breeders, I respectfully dedicate this work. Devoted to their interest and service.

PREFACE

The object of the author in offering this work to the public is to furnish to American Stockmen a concise and reliable treatise of domestic animals and especially Swine, as the experience of the author has shown him that such diseases as Hog Cholera, Swine Fever and Pneumonia — those three fatal diseases that carry off the hogs of the country — are less understood by Veterinarians, as well as the owners, than any other diseases of Live Stock. I am well aware that there are persons who claim there is no such a thing as Hog Cholera and Swine Fever, that is caused by "Germs," but when I meet one of those kind, I try to avoid any controversy; because, "Two of a kind have met."

Being a Student and close Observer of the teachings of the most scientific men known, who have investigated the diseases of Swine, and having had over thirty years' experience in the treatment of these diseases, I therefore feel able to teach all who may wish to learn, what these diseases are. what causes them, how to avoid or successfully treat them, as well as the minor diseases.

Not Theories and Suppositions, but Facts

Eminent scientists, Doctors, Detmers, Salmen, Law and others of America and Europe, many years ago discovered that Swine Plague

—Cholera and Swine Fever, were “Germ” diseases, similar to Cholera, Typhus, or Typhoid Fever in the human family, and are contagious and capable of being transmitted in various ways.

It was through these men, by following their teachings and by observation, experiments and practice, I obtained my success, and I fully substantiate their teaching to be correct. Some may ask, “How successful are you?” In 1884, when I commenced to treat hogs for any one wishing my services, I always guaranteed to save 80 per cent. of a herd of hogs, under all conditions, or no pay, and cholera was the prevailing disease in those days. Some years later, I raised the per cent. to 90, and in treating 500 to 1000 hogs in a neighborhood, I would average from 95 to 97 per cent., and this, when they were in all stages of the disease and often had to be treated under very unfavorable conditions as to weather, etc.

Treatment in Book and Recipe Form

With this Book, but on a separate sheet, will be furnished my Recipes, showing how to make and use the Medicines which I used in my practice with hogs, and also other valuable ones for other stock.

All technical or medical names have been avoided as much as possible, and the information given in plain language, and the amount of each drug is given in both weight and measure, thus adapting it to the wants of the Farmer and Stockmen, so he can easily use them, thus filling a long-felt want, not only as to relia-

bility, but as to cost as well, being inexpensive and easy to use. In this work I do not recommend one medicine for all uses, as has to be done, as a rule, in a ready-to-use medicine, but explain the symptoms so one can tell as a rule what ails his stock; then show what to use to treat them, which is the most successful way it can be done. I do not claim it is the only medical treatment, which is the proper treatment, that will prevent or eradicate Swine diseases; but by far the most successful one that has ever come under my observation, and judging from what many others say, who have used it, or saw it used, in the past 28 years, this claim is fully substantiated.

Sold by Responsible Agents

For the protection of the Public, as well as the Author, this work will be sold by Reliable and Responsible agents, who will be furnished with proper credentials, so any one in buying it can rely upon getting it in its true and complete form.

CHAPTER I.

Investigation of Swine Disease by Dr. H. J. Detmers, James Law and Others — Their Discoveries — Germ Theory — Opponents of the Germ Theory — Proof Thereof — Why Summer is the Most Dangerous Season.

Investigations by the Government

In support of the practical experience of the author set forth in the preceding pages, I cannot do better perhaps than to give some extracts from Drs. James Law and H. J. Detmers, in their excellent report to the Commissioner of Agriculture of the United States, in 1880, upon the cause and effects of hog cholera, swine fever, or what they called hog fever or swine plague. In experimenting in this direction and others, Dr. H. J. Detmers and Dr. James Law, while investigating this disease in the fall and winter of 1879 and 1880, being a part of the commission as appointed by the government, made discoveries which I consider of great value, and I will give such extracts from their report as I think may be useful to the general farmer, in order to show more plainly the cause and effect of hog cholera or swine fever and its treatment. Dr. Detmers says: "When I first commenced my investigation, I had clear sailing, because an abundance of material was always available. The disease presented itself almost everywhere in its malignant form. I endeavored first to ascertain the nature and the cause or causes of the disease, the means and manner of its spreading, and

the working of its morbid process; secondly, to discover the means necessary to check its spreading and to prevent its outbreak, and to learn the most practical means of prevention, that is, such as would most likely be the least objectionable to the farmers, and prove both effective and easy of application; thirdly, to ascertain whether and to what extent an attack of swine-plague terminating in recovery is able to destroy further predisposition or to produce immunity from the effects of a subsequent infection. Hence, as it was my intention to find reliable means of prevention, and to subject the preventives to a severe test, it was not advisable to inoculate from any case of swine-plague that presented itself or was convenient. But I made my selections, and only used material from malignant and typical cases of swine-plague, also refusing to use any material from cases showing putrefaction; therefore, I am sure I have made no mistakes."

Its Infectious or Contagious Character

"When the disease has assumed a malignant form, it is the same as the Asiatic cholera, or typhus or typhoid fever of the human family, and being infectious or contagious, and capable of being germinated, propagated and transported in various ways, which proves it is a Germ disease."

"It has been a great mystery to the farmer how the disease spreads from place to place without apparent actual contact. It was like fighting in the dark to attempt to prevent it,

and many gave up in despair and saying, 'what will die, will die anyway.'

"There is no doubt but what the infectious nature of the disease may, under a predisposing condition of local causes, etc., take the contagious form, which is far more malignant, sweeping and fatal in character. That a few spasmodic cases may occur in a drove, which if neglected, may so increase in number and violence as to become highly contagious. This contagious matter is of a fixed character, and is present in the blood, the discharges, and of course in the place inhabited. It possesses great vitality, and will transmit the disease to well hogs, whenever they come in contact with these poisonous discharges, or where sick hogs have been."

Opponents of the Germ Theory

The Doctor, in support of his theory, says:

"The opponents of the so-called germ theory of disease, well knowing that a complete separation of the germs from the animal tissues and fluids is impossible, demand absolute proof, without offering any evidence whatever in support of their own 'theories' or even demonstrating the existence of anything akin to what they claim constitutes the cause and infectious principle of infectious diseases."

"As further proof that the swine plague germ and nothing else constitutes the infectious principle of swine plague, he offers the following: First, if one **Inoculates** a well hog with the **Virus** of a hog that has the swine plague, it will contract the disease, and this

virus can be retained for quite a while, and favorably cultivated in urine or other liquids and if healthy hogs are inoculated with it, it proves fatal. Second, if a portion of a hog that has died of cholera is fed to a well hog, it proves fatal, and healthy hogs will contract the disease if allowed to be where diseased hogs have been. Third, if one goes among sick hogs and then among well ones, the disease can be spread in this and various other ways. In warm weather, and especially if wet, the disease spreads from farm to farm, and much faster than in cold weather. All these things prove that the disease is contagious. Therefore any one should be careful and avoid anything that will convey or spread the disease."

Treatment Produces Immunity

Dr. Detmers says: "It can and may attack one and the same animal twice, and even three times, but if it does, the second and third attacks are always mild ones and not apt to prove fatal, unless complicated with other diseases. As a rule, however, the first attack, provided the animal recovers, produces immunity from the effects of a subsequent infection, at any rate for some time, and it may be for life. An interrupted attack, that has been prevented from causing serious morbid changes, by Medical treatment, as a rule, seems to produce Immunity."

How it Affects the Organs

"The morbid process of swine plague can have its seat in almost any organ or part of

the body. Yet it must be considered as characteristic of the disease, that the lungs invariably are more or less affected, and constitute in a large number of cases the principal seat of the morbid process, though the intestines and liver may, and in most cases do, show to be effected."

"The intensity of this contagious matter seems also to vary according to the form and malignancy of the disease. The period which elapses between exposure and the attack is not always the same, varying with the form the disease assumes, from a few hours to a few weeks. As we have stated before, an infectious disease may become malignant and contagious, and one form of the disease does not necessarily impart the same type to another, but depends more upon the primary seat of the malady in the patient. It may take the enteric form or the external carbuncular character. It may localize its attacks on certain organs with well defined symptoms, which are more prolonged in their results, or, it may affect the whole organization, and destroy life in a few hours."

When the Death Rates Increase

"The death rate in a herd of affected swine is increased or decreased respectively by the malignancy of the disease, which, it seems, depends largely, on the one hand, upon the rapidity with which the swine plague germs develop and propagate, and on the other hand, upon the size of the herd, the condition of the premises on which they are kept, the number

of diseased animals in the herd, and the mode and manner in which the animals are attended to.

Everything else being equal, the mortality as a rule, will be the greater, the more rapidly the disease is spreading from one animal to another, and the more abundant the infectious principle. This is easily explained. The larger the herd and the greater the number of animals diseased at the same time, the greater is also the quantity of the excretions from the bowels and urine containing the swine germs.

The chief cause of the disease spreading is by the well coming in contact with the discharges of the sick. Therefore, one can see how important it is to, at once, remove a sick hog from the herd when first noticed. Hogs in large numbers or diseased ones should not be allowed to sleep about old straw stacks, etc., because nothing is more apt to absorb the contagious or infectious principle, and to preserve it longer or more effectively than old straw, hay, or manure heaps, composed mostly of hay or straw for the contagion that is absorbed by or clings to such material will remain effective and be a source of spreading the disease for a long time." Material of this kind should be hauled out and spread over a field, where it will lose its poisonous nature.

Intestine and Lung Worms

"In my post-mortem examinations I frequently found worms in the stomach and intestines, also in the bronchial tubes and lungs. But these worms do not constitute the cause

of swine plague, and their presence is merely an accidental complication, well calculated, though, to increase the malignancy of the morbid process, because their presence necessarily weakens the constitution of the animal, and thus facilitates the operations of the germs. On the other hand, worms always thrive better in a diseased or declining organism than in a healthy animal."

Author—This is what I have tried to teach Stockmen for years, that "worms are not the cause of cholera," as advocated by some, but that they were injurious to hogs and should be removed, if the hog is expected to thrive as it should, and avoid other troubles. Also, as to the burning of diseased hogs that have died, for by so doing the danger of spreading the disease by allowing the dead lying around exposed is obviated, and the germs are entirely destroyed. This is much better than to bury them—no matter how deep—for the germs may be carried through some drain to a stream and in this way introduce and spread the disease.

Time Between Exposure and Attacks

The experiments of Drs. Law, Detmers, Salmen, Sutton, Budd, Osler and others, in inoculating sound hogs with the Virus (poisoned blood of sick ones), have shown the period of incubation to vary greatly, sometimes proving fatal the first day, and in other instances, not until the fifteenth day. Dr. Detmers gives the period, "from five to fifteen days, or an average of seven days." The author's experi-

ence and observation in having well hogs with sick ones, have placed the period of infection from three to thirteen days, but the majority of cases occurring in from seven to nine days.

“The intensity of this contagious matter seems to vary according to the form and malignancy of the disease. The period which elapses between exposure and the attack is not always the same, varying with the form the disease assumes, from a few hours to a few weeks. As we have stated before, an infectious disease may become malignant and contagious, and one form of the disease does not necessarily impart the same type to another, but depends more upon the primary seat of the malady in the patient. It may take the enteric form or the external carbuncular character. It may localize its attacks on certain organs with well defined symptoms, which are more prolonged in their results, or, it may affect the whole organization, and destroy life in a few hours.”

This information as given by the learned doctors who are as high authority as we have on the subject, will show why all hogs are not sick alike (symptoms the same), and that the time between exposure to the disease and its attack, depends very much on the health of the hogs; a strong, healthy one, as a rule, will resist the disease much longer than a weak one. It also shows that if hogs are inoculated with Virus (blood of cholera hogs), that it will transmit the disease and prove more or less malignant and contagious.

Suggestions Followed

Dr. Koch, an eminent German scientist and a standard authority on cholera in the human species, says: "Cholera will have but little effect among those who keep the digestive organs, and the kidney and liver in a healthful condition." Following this suggestion of Dr. Koch's, as well as those of Drs. Detmers, Salmen and Law, who says: "The system can be habituated to the poison and fortified against it, by a succession of doses of medicines, for if a germ is once introduced, though of mitigated fever, it may increase so as to develop to an altogether unexpected degree. Pains should be taken to supply and furnish them with proper remedies, for if administered in time, not only will the diseases arising from local causes be removed or prevented, but exposure of the herd to swine fever, cholera, however contagious, will not result disastrously."

The explanation given as to what Hog Cholera, Swine Fever is, what causes it, and how it is transmitted from one hog or place to another, is based upon scientific work by Drs. H. J. Detmers, James Law, Salmen and other Government experts and thoroughly tested in the field by the author and approved of. Therefore, I believe, they will be admitted to be correct when studied also that my method of treatment is correct and my remedies effectual when properly used.

CHAPTER II

Introductory Treatise on Swine—Assist Nature—Oxygen—Prevention—General Case—Medicine for General Use—How to Use.

Pork is King in America

And the channel through which our grain and grass finds a ready market throughout the world. In raising Swine the nearer we approach nature the better. This is more forcibly brought to mind when we remember **“nature never makes any mistakes.”**

Diseased hogs have caused the consumption of pork in this country to greatly decrease and has more to do with its refusal than any other cause. Once the American farmer learns to raise healthy hogs and quits sending diseased hogs to market (which is both wrong and unlawful), we can easily induce all foreign people, as well as our own, to use our pork, which from a financial standpoint as well as a healthful one, will be a great gain.

Never Abuse, but Assist Nature

Domestication should not be allowed to change the physical condition of Swine, and artificial means should be employed to supply what nature requires. Swine by nature are calculated to root for such things as their system requires, such as roots, insects, reptiles, earthly substances, etc., the natural excitants of the stomach, liver and bowels, and which have a tendency to keep the digestive organs and the kidneys and liver in a healthy condi-

tion. This is why cholera was unknown when Swine were allowed the wild range and to roam at will.

Domestication and the cultivation of the lands have deprived them of these natural antidotes, and made them an easy prey to disease, which is the cause of cholera (swine fever) and other diseases. Anyone can see how important it is to supply them with an artificial antidote that has the same medical properties as the natural one, which will overcome the evil effect of domestication, and so strengthen the system as to resist the attacks of the germs of disease when coming in contact with them and also prevent them from becoming sick from any local cause, as malarious poison, over feeding, etc., for if the hogs are in perfect health they are not liable to become sick from any local cause and if the parasites or **germs** of disease are taken into the system in any way they will not propagate (increase) in a healthy body near so rapidly as in a weak and unhealthy one; again, if the system is in perfect working order, these poisonous parasites or **germs** pass off through the natural channels, the bowels and urine, more rapidly than with an irregular one, thereby preventing the disease from becoming fatal.

Oxygen—Pure Air Necessary

It should be borne in mind that the hog requires more Oxygen (pure air) in proportion to its size than any other domestic animal. Nature has so constructed him that he carries his nose closer to the ground, thereby inhaling

more malarious poison, germs of disease, etc., sleeps in more confined places and in greater numbers than other domestic animals (therefore gets less **Oxygen**) which is one of the principal causes of disease. **To evade this** supply them with suitable sleeping quarters, not too many in a place, keep them out of old straw stacks, manure heaps, dusty barns, etc., and in cold weather bed liberally and keep their beds clean. Corn fodder, leaves and prairie hay is better than straw, as it does not become foul and damp so quickly.

This is something that should be borne in mind, and especially if sick hogs are confined in close hog houses, to not fail to have plenty of overhead ventilation, as the air becomes very poisonous and causes the disease to become of a chronic form, making it much harder to treat the sick or stop its spreading.

Prevention Better Than Cure

Remember the old adage, "an ounce of prevention is worth a pound of cure," and in no case is this more true than in Swine raising.

Having briefly enumerated the principal causes of Cholera (Swine fever), and how it spreads, in support of the germ theory, you will understand how important it is to look carefully after your hogs when there is any disease in the neighborhood or country, and upon the first indication of disease (if not before) give them attention.

Special Remarks as to Treatment—As a rule, it is the close observer and careful handler of stock that is the most successful; close ob-

servation and prompt action are two essential things (especially with sick stock); again, any one using medicine with stock, should remember that old or large animals require more than small young ones. Therefore read and study the directions herein given carefully, and do as directed, if you wish to obtain best results, as I believe they will be found correct and reliable if given a fair trial. I know there is no rule or advice that can be given that every one can, or will, follow to the letter; but if followed as near as circumstances will permit, I do not fear the results or criticism. One thing to remember, that is, just as soon as it is noticed that the hogs (are off) not doing well, it is best to give them attention at once. Delays are dangerous.

Directions as a Preventive

See Recipe No. 1—Take the amount of each Drug as given by each number, mix well and use as follows: Take one pint of the medicine and dissolve it in water and wet one bushel of bran, mill-feed, oats or use in ten gallons of swill (slop), for thirty to sixty head as to size (large hogs require more than small ones), at a feed. When feeding old corn, wheat, or on dry pasture, this remedy should be given as above, twice a week regularly, as such feed is liable to cause fever and constipation. Or when there is any disease in the neighborhood. At all times it should be used at least once a week; twice is better, and especially in the fall and winter when the hogs are off of grass, for that is when they need the most care.

This remedy will not only be found a reliable preventive against disease; but it will cause the hogs to take on flesh much faster than when not used, thereby saving time and feed. All hogs should have at least one feed of soft laxative food a week. That makes it so easy to give this remedy, and it should not be neglected, as it costs so little to use it. Another thing, remember "Water and Salt" are two essential things for hogs. The hog is the most feverish animal there is, therefore requires more water than others. This should be pure and fresh. Avoid stagnant pools. Give them salt every day or two, or keep soda salt by them.

How made. See Recipe No. 7—Or, add one pint of salt and one-half pint of soda to ten gallons of water, and soak the corn in it. Old corn treated in this way will put on much more flesh to the bushel than fed dry, as it aids digestion and keeps the system in order, so the full benefit of the food is obtained. It is not the amount of food a hog eats that pays, it is what it turns into flesh. The Remedy will aid greatly to do this by keeping the hog healthy and causing it to better digest its food.

Knowing that the main bulk of the hogs of the country are raised and fed off by the small farmers or feeders, these directions and treatment can be followed by most of them; but as there are cases where it is difficult to do so, I advise the making and use of the **Hog Tonic**, as advised in Recipe No. 5, also one of the Salt Tonics. See Recipe No. 7 or 8, so hogs can have free access to them at all times.

For Sows—Use the remedy No. 1 two or three days before and after farrowing. Dose, a level tablespoonful once a day. This will remove all fever and cause a greater flow of milk; then use it once or twice a week thereafter, which will keep both sows and pigs healthy, **providing** reasonable sanitary means are observed. Keep them out of old straw stacks, manure heaps or dusty barns, and stagnant pools in warm weather, and away from sick hogs, or where they have been. This medicine is all that is necessary to use as a preventative or when hogs are not doing well—off their feed—or in mild cases of sickness.

A Few Don'ts Dedicated to the Swine Raisers—If you have this treatise, don't expect it to protect your hogs unless you use it, for it won't. Use it as directed. If you are treating sick hogs, don't expect to cure all of them; that in most cases is impossible. Don't ship them, for some one will eat this diseased meat.

For information other than given, please examine other parts of the book, of the Recipe Work Furnished, or write, as any information wanted will be furnished those having the work.

Address,

J. B. Shook, Columbus, O.

CHAPTER III

Treatise on Diseased Hogs

Introduction.—Hog Cholera, Swine Fever, Typhoid Pneumonia and Their Symptoms.—Directions for General Treatment.—How to Mix the Medicine for Cholera and Other Uses.—Incurable Cases.

The following treatise on diseased hogs is based upon practical knowledge and scientific principles, from work, careful study, experience and practice in the field by the author from 1884 to 1916. The marked progress made during the past years in the practice of treating diseased swine, and the demand for more information upon this subject from my numerous patrons renders a new volume upon these subjects indispensably necessary. Not that the principles of my medical practice have been materially changed, but greatly improved upon and simplified. I will in this edition give the added experience of those years of constant labor and observation in my only and chosen profession; and in presenting my works to the public, I feel confident that if the rules herein given are carefully carried out, that the most of any diseased lot of hogs can be saved, and the disease entirely eradicated or prevented on any farm or in any neighborhood, and hundreds of farmers and feeders that have tried it, testify to the same.

Symptoms Explained

The location of the internal organs are nearly the same in a hog as in a man, and as far as

practicable the treatment is about the same. **This I firmly believe.**

I do not cure every disease known to swine with one mixture of drugs, but explain in a plain way the different symptoms of the different diseases, so one can tell what ails the hogs, and therefore know what to do for them and not think, or be led to believe that every ailment the hogs may show, is **cholera**.

Drugs Plainly Described

The name of the drugs and the amount of each is given in a plain way, so any person of common capacity can understand and use it. Although I do not use the common drugs which are used in most proprietary hog medicines, or by farmers who have recipes of their own; such as copperas, sulphur, glauber salts, resin, saltpetre, or borax, yet the drugs which I do use are cheap, and as easily obtained and handled as those named. My mode of administering medicine to swine—in fact, the only successful way, is to mix it in their drink or wet feed. Being less manageable than any other stock they obstinately resist all attempts at coercion or drenching. If hogs are too far gone to eat or drink, the chances of recovery are against them, but by careful treatment even in this stage of the disease, very often they can be saved. In my treatment, as to the management and the administering of the medicine, I shall endeavor to make it so plain and practical that any person can read and readily understand it, and by its practice make the treating of diseased swine a success.

This treatise has been thoroughly tested by many of the best breeders and feeders of Ohio and other states, not only as a cure and preventive for the many local diseases, but as a cure and preventive for the swine plague in its most malignant and contagious form. It bears their unqualified endorsements. The testimonials used by me in any way are all bona fide, and from persons of good standing in their respective communities or professions.

And now, during my extensive practice in treating diseased swine, which has brought me in pleasant intercourse with many of the most prominent breeders and extensive feeders, and in sincere appreciation of their many courtesies and favors, especially in tendering their names and influence in commendation and endorsement of my system of treatment, or in testimony of services in the past, I respectfully subscribe this volume.

Treatment for Sick Hogs

Hog Cholera, Swine Fever, Pneumonia

I will first mention the three most fatal diseases known to swine, and their symptoms, and known all over the country as hog cholera—swine fever. With cholera, the symptoms are vomiting and purging, and often attacked by severe cramps, as with colic, run backwards, or turn in a circle and fall over in convulsions. Those thus attacked generally refuse to eat, but frequently the appetite remains good until death, which occurs within a shorter period of time than any other disease. At death, if not before, they turn red and purple all along the

underside of the body and at death, bloat more than with any other disease. If the nose, (snout) turns very blue, at any stage of the disease, or they bleed at the nose or ears, it is safe to say cholera, and it requires prompt treatment to save them for they then die quickly.

Treatment—Use the medicine as made from Recipe No. 1, using the amount of each drug as given. Then add to this the drugs Nos. 7 and 8 of Recipe 2. Mix well, then use a good pint of this medicine in eight (8) gallons of good laxative swill, use oil meal, ground oats or bran in the swill. Add to this the liquids as advised, Nos. 9 and 10, Recipe 2. Stir the swill well to dissolve the drugs; then feed the hogs at least twice a day for 2 or 3 days. As soon as they show recovery (getting better) then use the medicine No. 1 with 8 and 10; feed twice a day for a few days. This as a rule is sufficient, but there are sometimes, some hogs that will have to be kept under treatment longer, as they recover more slowly. Therefore, be patient.

One or two quarts of the food is enough as to size of hog. Feed until you see it has taken effect. This you can tell, as their passages will be free and regular.

Then use less remedy and more feed for a week or more, as they improve. Feed but little old corn or wheat, unless it is soaked in the swill, **soft food is best**, have plenty of troughs and keep them clean (to wash out the troughs with **carbolic acid**, a tablespoonful of the crude acid to one gallon of water is good), **separate**

the sick from the well and put the well ones by themselves in a clean lot, and the weak or small ones from the large, so they can drink when you feed them, as your success will depend very much on how carefully they are cared for; and it's the well coming in contact with the passages of the sick, that causes the disease to spread. Therefore it is best to treat them in an open lot, in mild weather, an orchard or wood lot, than in a pen. In warm weather give them shade and keep them away from water, unless they drink the swill when fed. As a rule a dry lot, without grass or water, is the best place for them. In cold weather bed well with corn fodder or clean straw, kept dry; old straw stacks, manure heaps and dusty barns must be avoided; when kept in pens, keep the pens clean and use lime on the floor freely; it is also very beneficial to use the carbolic acid water, to sprinkle the hogs iwth once a day for 2 or 3 days, especially the sick. If they show vermin, (lice) grease them freely with crude petroleum (common black) oil. This will rid them of the pests and is healing and beneficial in every way.

Note—Nos. 9 and 10 are the best agents known to Cure or Prevent inflammation of the bowels or intestines with stock, and should be used in cases of sickness as herein advised:

Hemorrhage—When the discharges of hogs are bloody, or they bleed at the nose or ears, use No. 10. Dose: One-fourth teaspoonful or less as to size of hogs, or 2 tablespoonfuls in 6 gallons of slop.

How to Make a Barrel of Slop for Sick Hogs

—For 45 or 50 gallons of slop (swill) take 2 bushels of bran, mill feed, or ground grain (except corn). Then add the amount of all the drugs as given in the recipe from 1 to 8. Then add one-half gallon of Oil, No. 9, and one-fourth to one-third pint of No. 10; then fill the barrel with water and sweet milk. Stir well so as to dissolve the medicine, and mix thoroughly. Always stir well when using, and add no more liquid until about used up. This is the better plan to fix the food when feeding many hogs, and will feed 100 head of average sized hogs a day. Feed twice or three times a day. Or will feed 100 head of large hogs once. When hogs refuse to drink the slop, sprinkle some food over it in the trough to entice them to eat, and keep them away from water so they will get thirsty and cause them to drink.

How to Drench—If the hog won't drink the swill, take a tablespoonful—or less, as to size of hog—of the remedy, dissolve it in oil or water, and give it as a drench. To do this, catch the hog and put a small rope around its upper jaw, take a small soft shoe, cut the toe off, put this in its mouth, then pour the medicine in the shoe and wash it down. In this way you won't injure it when it squeals. Or you can drench with a strong bottle if you press the tongue down with a stick. Do not run them or be rough, or give the medicine when squealing, or you will kill them; repeat the dose twice a day until they drink, then use the swill as for sick hogs.

For Sick Pigs—That are old enough to drink, should be treated in this way: Take a gallon

or more of the medicated swill prepared for hogs, then use the same amount of milk or good house slops, **and is better made hot** in cold weather, then mix the two, which is strong enough for pigs; or prepare swill for them and use only one-half as much remedy as for large hogs. Dose of medicine, a teaspoonful or less, as to size of pig.

For Any Diseased Hogs—This information as given can be applied to any herd of diseased hogs, except as to the Medicine. Except for Cholera hogs—I never use the drug No. 7, Recipe 2, and No. 8 only for 3 days, unless they are badly afflicted, but always use Nos. 9 and 10 and especially 10 with all diseased hogs. Even for coughing or wormy hogs it is beneficial when used with the medicine No. 1.

When Medicines Fail—When sanitary means are neglected, any medical treatment will fail. When hogs are allowed to pile up in rotten straw or bed in manure, either in or out of the stable, it is not worth while to give them any medicine; and disinfectants are of no avail. That cause must be removed.

SWINE FEVER, SYMPTOMS

Lameness, sluggishness, loss of appetite, with disposition to keep their bed, being Cold, Chilly or Feverish and as the disease increases, swollen ears and nose. Often Sloughing sores of the feet, nose, ears and body occur, showing Gangrene form, the same as with Cholera in the malignant (worst) form. Therefore, at times is difficult to determine, for the hog, with

either disease, when it is in the malignant form, may show Similar, or the same Symptoms, but not in the first stage or when attacked. But is just as difficult to treat as Cholera, and generally takes longer, as the disease is like Typhoid Fever, with the Human family, Lingering and Treacherous; therefore, prompt treatment is necessary at the first appearance of the disease, and as it is very contagious, those showing sickness should be at once put by themselves. As a rule it is best to move the well ones to clean quarters and leave the sick in the affected place. Then all should be put under treatment for others not showing any signs of the disease may show it in a few days and it is not near as hard to check it then as it is after it has attacked the whole herd.

Treatment—The same as Cholera, except I never use drug No. 7, Recipe 2 and No. 8 only for the first few feeds. Then the medicine No. 1 and 9 and 10 with it.

Pneumonia

Symptoms, the same as Swine Fever in its first stage, except it is accompanied by severe coughing and difficult breathing. As a rule this is quickly cured if taken in time. **Treatment**—The same as Swine Fever, or use medicine No. 1 and 9 and 10 with it. Prompt action is very necessary, as this disease kills five hogs of the country to where Cholera kills one and especially in the late fall and winter. Warm quarters for the hogs with good bedding is very necessary in bad weather. With those that have

difficulty of breathing, bathe their throats and chest well with coal oil and turpentine; use two parts oil and one of turpentine.

Sloughing Sores—Gangrene

Sores of the feet, ears or body often occur with badly diseased hogs. To cure this use any good turpentine liniment, or use turpentine one-half pint, spirits of camphor one ounce and carbolic acid one-fourth ounce. Shake well and bathe the sores once or twice a day; heals quickly.

Indications or Symptoms of Disease

A few of the symptoms indicating the presence of disease, which may develop into a fatal form unless removed, are as follows: Coughing, Costiveness, Leanness, Unthriftiness, Hair Rough and inclined to keep their beds are symptoms of worms or cold if nothing more. A few feeds of soft laxative food, bran or oats, with the remedy as made from Recipe No. 1 and No. 10, Recipe 2, will cure these cases, and save a great amount of food and anxiety. It is not the amount of food a hog eats that pays, it is what it turns into flesh. For severe cases of worms, see Recipe No. 4 for special drug to use, which I have had to use at times with bad or stubborn cases or when I wished quick results. Dose for a hog of 100 pounds or more, from 2 to 4 grains. Pigs, $\frac{1}{2}$ to 1 grain as to size. Or in its place (the drug advised) add 1 pound of powdered Worm Seed to Recipe No. 1, or 10 quarts of the mixed medicine, then use the same, one pint to 8 gallons of swill.

Pigs with Scours—Often young pigs take the scours when sucking. In cases of this kind give the sow a dose or two of the remedy, and the pigs will get the effects through the milk. If they will eat or drink, take sweet milk and boil it, then mix mill feed and the remedy in it, and feed. This effects a cure quickly. Save the Pig crop, for the Hog crop depends upon this. No Pigs, no Hogs. Therefore take care of the Sows and Pigs. Use medicine made of Recipe No. 1.

For Thumps—Give the remedy twice a day, as directed for the sick, Medicine No. 1 and No. 10, Recipe 2, and apply turpentine or turpentine and coal oil over the heart and chest. For Kidney Disease, treat the same, except to apply liniment over the kidneys. For Sore Throat or a bad Cough, treatment as above (or give a dose dry) and bathe the throat.

Milk Fever often occurs with Sows. Symptoms, sow keeps her bed, refuses to eat, loses flesh, and gives no milk. Treatment, use the usual dose of Medicine No. 1, and other as advised in Recipe No. 3.

CHAPTER IV

Recipes, Explanation and Directions

Recipe No. 1. The medicine as made from this Recipe is for general use as a Preventative of Disease and Worms and even in mild cases of sickness as prescribed will be found reliable and also will cause hogs to thrive much faster than when not used; therefore, should be made and used as advised once or twice a week at all

times. A pint of the medicine is enough for thirty hogs or sixty pigs, as to size, at a feed, as it will be found as strong as any medicine bought that costs from 30 to 50 cents per pound; though it can be made for 15 cents or less, per pound in amount 8 1-3 pounds as advised in the Recipe, or about 8 cents, in amount of 50 pounds or more. For further information on how to make and use it, see Recipe 1 and 5, and Chapter II in Book.

The Drugs to make this medicine can be had by those owning the Recipe work at the following prices, 50 pounds, six times the amount of each drug as given in Recipe, each drug in a package, marked, name and amount, so there is no deception or mistake. Price \$4.00. Mix it Yourself. 100 pounds or more, 8 cents or less per pound, or can be got of a good druggist at prices named.

Notice—See Recipe 6 for Medicine for other Stock and it will show that drug No. 5, in Recipe 1 must be omitted (left out) and another drug used in its place to make this medicine for other stock than hogs. I call attention to that here for this reason: That any one wishing to make both medicines, can get 50 pounds of drugs of Recipe No. 1 and the amount needed of the drug in No. 6 for \$5.00. Then they can divide the drugs Nos. 1, 2, 3, 4, and 6, Recipe 1, in equal parts, using drug No. 5, in one mixture for Hogs and the extra drug, in the other, for other Stock or Poultry, and also use the Hog medicine to make a Hog Tonic, for to use in a Self Feeder, and the other medicine to make a Stock Food, as advised in Recipes No. 5 and 6.

Recipe No. 2—Used for Diseased Hogs, Cholera, Swine Fever, Pneumonia, see Recipe as to drugs to use with medicine, made of Recipe No. 1. Use drug No. 7 only for 3 or 4 feeds, as it is a strong emetic; causes them to vomit.

How to Make the Medicine—Mix drugs Nos. 7 and 8, using the amount of each one as given, with those of Recipe No. 1, as given, or take a gallon of the Medicine No. 1 and mix the other drugs, 7 and 8 with it. Then use a pint of this medicine in 8 gallons of good laxative swill, and add the amount of Nos. 9 and 10 as advised. For Treatment, see Chapter 3. Dose of this medicine, or of No. 1 is a level tablespoonful for a large (200) pound hog; $\frac{1}{2}$ tablespoonful for a 100-pound hog, a teaspoonful for a 50-pound pig (shoat). For pigs that will eat, a heaping tablespoonful in a gallon of swill is enough for 6 to 10 head as to size and age.

Recipe No. 3—For Milk Fever with Sows, which often occurs. Symptoms—Sow keeps her bed, refuses to eat, loses flesh and gives no milk. Treatment—add 10 to 15 drops of Nux Vomica, or 5 of Tincture of Aconite, to a level tablespoonful of medicine Nos. 1 or 6, and give as a dose twice a day for two days, then once a day if necessary. Avoid overfeeding or corn.

Recipe No. 4.—For Severe Cases of Worms, Symptoms—Hair rough, feed poorly, pot bellied, cramps, or spasms, often mistaken for Cholera, occurs more with fall or winter pigs. Treatment, see Recipe 4, what to use. This drug is very expensive and sometimes hard to procure; in case of this kind, use the medicine

as made of Recipe No. 1 in full; or 10 quarts of it, and then add to this one pound of powdered Worm Seed. Mix well and use the same as medicine No. 1.

Recipe No. 5—For making a Hog Tonic to be used in a Self Feeder, or can be fed as one may wish, as the hogs take it readily. A peck is enough for 50 or more large (200-pound) hogs, or 100 small ones at a feed. Mixed with ground grain. See Recipe for instructions how to make. The cost of 50 pounds of medicine No. 1 and other ingredients used to make 400 or more pounds of this Hog Tonic, will cost about \$12.00 and is a higher classed remedy than those sold by the bucket or barrel, that would cost, for that amount, \$28.00 to \$40.00; cannot any one afford to make it and save \$20.00. It is but little trouble to make it, can be mixed by hand in a wash tub, in half bushel or more mixtures, in two hours or less time.

Recipe No. 6—For Medicine for Other Stock and Poultry. By omitting the drug No. 5 (Poison) in Recipe No. 1 and using another drug instead. See Recipe 6—it makes a valuable medicine. For a Horse or Cow beast out of condition, give a tablespoonful as a dose twice a day for a few days, then once a day. A good teaspoonful at a dose for a colt, calf or 2 sheep. Mix with meal or oats, dampened, so they will eat it. A level tablespoonful for 20 chickens. When diseased, use twice a day for 2 days, then once a day. To keep them healthy use once or twice a week. Can be used for hogs in place of No. 1.

Recipes Nos. 7-8—For Medicated Salt for all

Stock. Two Recipes in one — Two ways to make it—No doubt it will be noticed that I do not recommend numerous drugs—often claimed to be used in similar preparations. The reason is, that no stock will eat enough salt at a time to partake of enough of the drugs claimed to be used, to be of any benefit; therefore, I only advise the use of such as are of the same nature as salt, or when taken will be beneficial; such as an appetizer, aid to digestion and prevent the food in the stomach from souring, or fermenting, causing gas, bloat or sickness; better than salt alone.

These Salt Preparations can be prepared either way as instructed and used the same as salt, or kept in a covered box or placed where stock can have free access to it at all times.

Special Salt Tonic for Hogs. Use a Peck of either one of the prepared salt preparations made as advised, to this add two pounds, one quart, of medicine No. 1 and keep where the hogs can have free access to it at all times. Some use this in place of the Meal Hog Tonic; but the hogs will not take it as readily; the same as any salt preparation.

Recipe No. 9—For a Stock Food for other stock (than hogs) make the same as for hogs, as to Meal, 25 pounds, one-half bushel, salt two quarts and Soda one quart, as advised. Then add four (4) pounds, two good quarts, of the medicine made of the Recipe No. 6. Use a pint for 4 horses or cattle or 16 sheep at a feed. If they refuse to eat it, mix it with any ground food. Used only as an appetizer, tonic, to tone the system and make stock thrive better, caus-

ing a greater flow of milk, etc., not as a cure of diseases, but is equal to those sold and can be made for about one-third what they cost. Knowing that some object to the use of Cotton Seed meal for hogs, I will say that when prepared as I advise in making the Hog Tonic, it is harmless. But in making the hog tonic or stock food either one, different meals can be used, Oil meal is best, or mix cotton seed meal and mill feed equal parts, or use any good meals to form a body.

For Stock, other than hogs, that is not doing well, loss of appetite, hide bound, coat rough, cough, unthrifty, etc., use the medicine as made from Recipe 6, as advised in tablespoonful doses twice a day for a few days, then once a day, then the stock food to keep the system well toned.

TREATMENT FOR VERMIN—LICE

For Hogs, For Lice or Scurvey, Petroleum Oil (common black oil) is not only the cheapest, but the best treatment to prevent or remove these troubles. Use the same as a Dip in a tank of water, or sprinkle or grease them once a month (does no harm) or set a post 2½ feet deep, leaving it loose so it will move when the hogs rub against it, that is what they like, wrap it with a heavy rope or old sacks or cloth, bound with wire and keep it oiled and the hogs will grease themselves. To kill nits, use gasoline. Grease of any kind, will kill lice.

THINGS WORTH KNOWING AND REMEMBERING

First, That no Medicine or Medical Remedies, can be made and sold through agents or dealers at a profit, unless sold at a price equal to four times the cost of making. Second, that the medicines made of Recipes No. 1 and 6 as advised, that can be made for 8 to 10 cents a pound, is equal to those sold for 30 to 40 cents a pound. Third, that a pound of either one of these medicines or our prepared medicine as described on another page, will go as far in use as 5 pounds of any remedy that is sold for from 7 to 10 cents a pound. Fourth, that the Hog Tonic, or Stock Food made as advised, which can be made for about 3 cents a pound, is equal to or superior to those preparations that are sold in bulk, buckets, barrels, etc., at from 7 to 10 cents a pound. Fifth, the way the farmer is deceived and induced to buy these cheap goods is, the agent as well as the maker of them, represent they contain no filler but are made of such and such drugs, naming those that cost, often, from 25 cents to \$5.00 a pound, thus making the buyer believe they are buying a Medicine instead of a Tonic or Condiment. Again they state they are "Licensed Manufacturers." This is another proof that they are not selling a medicine, for if they were they would not need any license.

J. B. SHOOK'S STOCK MEDICINE

For Hog and Poultry

This medicine has been extensively sold for the past twenty-seven years as a reliable Preventive of and Treatment for diseases peculiar to hogs and poultry, when used as directed.

It can still be procured by anyone, especially by those who do not have the Recipe work, in order to try before buying the Recipes.

This medicine is put up in 50c and \$1.00 boxes of one and two pounds respectively, shipping weight. You will find it a very strong preparation by reason of the absence of any filler or substance to make bulk, as it is made up entirely of only the necessary ingredients to make it most effective. You can readily see that it is also the cheapest to use owing to the small amount required for any given number under treatment.

We have hundreds of testimonials to prove the worth of this medicine.

Special prices on quantities: Three \$1.00 boxes for \$2.50; 7 for \$5.00; 15 for \$10.00 or 24 for \$15.00 f. o. b. Columbus, Ohio, promptly shipped to any address upon receipt of price.

This medicine can be bought of dealers. If they do not have it or will not get it for you, write direct to us.

The opposite page shows a fac-simile of the (green) wrapper on the front of a \$1.00 box. This will help acquaint you with the genuine, so that you cannot be deceived with a substitute.

Address

J. B. SHOOK'S STOCK MEDICINE CO.

Columbus, Ohio

TRADE MARK

J. SHOOK'S

Registered.

IMPROVED REMEDY

For HOGS and POULTRY

Is a Reliable Cure, and a Positive Preventive against all Diseases. ♣ ♣ It purifies the Blood, regulates the Kidneys, Liver and entire system, thus effecting a Cure and promoting perfect Health, if used as directed. ♣ ♣ ♣

.. Price, \$1.00..

Six for \$5.00

BEWARE OF IMITATIONS

The Shook Stock Remedy Co., Columbus, O.

Vaccination—Treatment for Hog Cholera.

Government Offer—For Cholera Cure

As I am so often asked these two questions; first, does "Vaccination treatment of hogs prevent disease: Cholera." Second, "Why not sell your treatment to the Government," it offers a large sum of money for a cure for Hog Cholera. I will here give my views as I have learned from years of observation, inquiries and experience as to these two questions. Vaccination of hogs for cholera was first suggested by Dr. Koch, an eminent German scientist, and tried out thoroughly by the German Government, then abandoned and laws passed forbidding it, as it introduced and spread the disease instead of eradicating it. This was probably due to the fact that the "Germ" that caused the disease, could not be found and cultivated. like the "smallpox germ." Later the Canadian Government tried it with the same results and passed laws forbidding it, or even shipping vaccinated (immunized) hogs for breeding purposes, into the country.

It was tried in this country many years ago and proved disastrous, and was then abandoned for some twenty years. In the past few years it has been practiced extensively again in many parts of the United States; but to judge by what four-fifths of the farmers of the country who have tried it, or seen it tried, say of it, it has proven as much of a failure here as in other countries.

I know from observation in localities where I have examined, that often with herds of hogs

that were vaccinated, a larger per cent of them died than in similar herds in the same locality did, that were not vaccinated, and from these treated hogs, the disease spread over a large area, causing a great loss to others. I have also known many herds of hogs that were examined by those who claimed to be experts, and passed on as well hogs, then vaccinated, which in a short time later, many of the hogs died from the effects of the treatment. Now that is not uncommon; but is very common, and the only treatment I ever knew that would spread the disease or give it to the animal treated. Now does that show success? But vaccination of hogs, like any other "Theory," if talked about enough, will find advocates of it and may finally cause some one to discover a more successful method than now known. Vaccination of hogs is not claimed to be of any use except for "Cholera." (The same as vaccination for Smallpox with the human family.) I know from years of experience that not to exceed five per cent of the hogs that die of disease, die of Cholera, except in those herds or districts where vaccination is practiced. In other words where disease occurs, otherwise than by vaccination, more hogs die of Pneumonia by far, than of Cholera, and twenty to one with swine fever, and other diseases, than by Cholera. Now any one can draw their own conclusion, as to whether it pays to vaccinate hogs to save five per cent of them (as not to exceed 5 out of 100 the country over would die of Cholera if not treated) and take the chance of introducing the disease for these reasons. First, it is an

expensive treatment to start with. Second, if the treatment takes effect as it should, so as to be effective, the hogs invariably lose flesh enough from the effects of the treatment, to equal the cost of the treatment. Third, even if they recover, for some time thereafter, no vaccinated hogs will take on the same flesh with the same feed as hogs that were not treated. These are well-known facts and acknowledged by those who have tried it, or those who have given it close observation.

For the benefit of those who advocate it or may want to try it, I will say, treat the pigs when 4 to 8 weeks old and before weaning them. It costs less then than with larger hogs. Then if they die, the loss is also less. Again, if treated young, the poisonous matter may be expelled from the system by the time they mature so they are fit for use. By inquiry, for years, I learned that not one farmer in ten that vaccinated their hogs, ever used them for their own meat, unless it was those treated while young. Vaccination is neither scientific practical or common sense; but is still simply an experiment. The State Serum farms are called "Experiment Stations," very rightly named. The eminent men, whose teaching I tried to follow, never claimed it was a success; if it had been or was now, I most likely would follow it, for it is the best method in the way of treating hogs I know of, to "part the owners from their money" and not be held responsible.

As to the other question, which I find a great many people believe, that the Federal Government or some state offers a

large sum of money for a "Hog Cholera Cure." I will state that I never knew of such an offer, nor could I ever find any official that did know it; though I have thoroughly investigated the matter. I do know from experience though, that such an offer is not likely to occur unless it is some method that will give a great many, other than the hog owners, work to administer it. That is just what vaccination does, it gives a great many men public jobs, to both make and administer the material used. That is one reason why it is advocated so by a certain class of professionals and others.

It may be I will be criticised for these remarks, but any public teacher or writer on any subject may expect criticism, and as I am already criticised by another class, those who make to sell, "hog remedies" of another class, than "serum"; for selling my work the way I do, to the farmer, so a few more won't make any difference. Therefore, I invite all honest controversy.

CHAPTER V

Veterinary Department for Horses, Cattle, Sheep and Poultry.—Introduction.—Treatment of the Various Diseases, and Injuries to Which They Are Subject.—Formulas for Medicines.—Miscellaneous Information.

Introduction

In discussing this subject I propose to depart from the usual method adopted by other works of this kind and instead of discussing at length the different treatments of all diseases or ailments of stock, with a long article relative to pathology, symptoms and diagnosis of each case, which causes delay and tends to weary the reader without conferring any lasting benefit, to proceed, and give in as brief a way as possible the treatment for some of the most common and frequent ailments of stock, first among horses, and then cattle, sheep and poultry. In this part of the work, as well as in all other parts, it is my object to be useful rather than offend, or appear learned, and in offering to the public the information herein given, I shall do so with candor. I do not claim to be the originator of all the treatments given, but have in many instances tested them, and know them to be of value. As medicines are only used to assist nature to effect a cure, those methods that will assist the most should be used, and my experience is that for internal treatment, the proper medicines administered in small doses, is far better than a heavy

dose, and a proper application externally in most cases is far better than severe blistering or firing. Kind treatment in the way of good nursing will do more toward restoration of a sick animal to health, than so much strong medicine.

Medicines, powerful in their nature, for good or evil, are often administered in large doses, when little or none is necessary, and such treatment is often prescribed by those not knowing what ails the animal, or without any knowledge whatever of the effect that such a mixture may produce upon the system, and strongly urge that it be administered, simply because somebody else had used the like, and the animal did not die. This is all wrong. The first business, when called to a patient is to ascertain the cause of trouble. Think for yourself, uninfluenced by the opinion of so many others, and give the patient prompt attention as is thought best, when such cases occur that are not properly understood and cannot be properly treated by the inexperienced, promptly employ some practical veterinary to attend to it.

How To Observe Diseases

The question is often asked: How to tell what the disease is that this or that animal is affected with, as it cannot speak. To this question I might repeat nature has put one set of weights and measures and these only should be used. Thus, if a horse or other animal has corns or an injured foot, they will be as sure to go lame as they would with an ordi-

nary sprain. The uneasy eye, the anxious expression, and the sharp peculiar look, tell its tale of suffering, and the description is so plain and true, that every one should learn to interpret them. Often the suffering can be told by the pulse, which is felt on the inner angle of the lower jaw, as being the most convenient place, the state of the pulse tells the condition of the heart, whether the disease is of an exalted or depressed character or whether sickness is at all present. The pulse is more frequent in the young than in old animals. In the full grown and healthy horse, it beats from 32 to 38 in a minute; in the ox or cow, 35 to 42; in the sheep, 70 to 75. For inflammation and fever the frequency of the pulse is increased, in the debility and depression it is slower, but sometimes quicker than natural. As the pulse varies so much it takes some practice to determine and understand it. A healthy horse breathes once to three of the pulse beats. When the breathing is not natural it indicates disease, but both the pulse and breathing can be quickened by exposure to heat, or the hot sun. Hence the advantage of placing animals in a cool and airy place when unwell, as it assists nature to cast off the disease.

TREATMENT OF DISEASED AND INJURED HORSES

Colic. — Spasmodic and Flatulent. — Colic with horses is not an uncommon thing, and most every person who is in the habit of handling them, is acquainted with the cause and

symptoms of this disease. Cause—a change or excessive amount of food or water, or some similar unknown cause, which is the result of acute indigestion. Symptoms—rapid breathing, uneasiness, pawing, lying down and rolling. With spasmodic colic the pain is more severe, and death occurs quicker than with flatulent colic,

Treatment—Take tincture of aconite and Belladonna, equal parts mixed—bottled—Dose for a horse, give thirty (30) drops, well back on the tongue. Colt, twenty (20) drops. If not relieved repeat the dose in twenty (20) minutes, and it may be necessary in a severe case, to give the third dose; but I never had that to do but twice. An ounce of each drug, a small bottle of it, should be procured and kept on hand, carefully marked as to what it's for. Another good remedy, is laudanum and ether, equal parts. Dose for a horse, sixty (60) drops—a teaspoonful—given the same way. Never resort to heavy drenching or violent exercise; avoid too much feed or cold water. If cold weather, blanket well, and it will be found beneficial to give a few doses of the medicine of Recipe No. 6 to tone the stomach and system while recovering.

Botts—Symptoms and treatment the same as Colic, except to give as a drench, a heaping tablespoonful of the medicine No. 6, dissolved in a half-pint of hot water, to which add one-half tablespoonful of turpentine, providing relief is not obtained after giving the second dose of colic medicine; this gives relief quick-

ly by toning the stomach and will cause the bowels to move, both very necessary. Otherwise, if one is afraid to treat the animal, call a veterinary at once.

Inflammation of the Lungs

Pneumonia. — This is a common and fatal disease with horses, and is caused very often by abuse and neglect which causes them to take cold. By riding or driving a horse until very warm and then stopping them in a cold draft to cool out, or by leaving a window open in the stable during a cold and sudden change, are some of the most fruitful causes.

Symptoms: The first attack is rather slow, the breathing is more or less laborious, and the patient dejected and down spirited. The coat is rough, the body and legs cold, and bowels constipated, the patient stands with head and ears drooped and legs apart as if to prevent falling. On examination, by placing the ear against the side of the patient, over the lungs, a grating or tearing noise can be heard as the patient breathes, then prompt treatment must be given.

Treatment: First make the patient as comfortable as possible in a good warm box-stall, well bedded, if in winter, well blanketed, and kept dry and clean if in the summer. Then give on tongue 15 drops of tincture of aconite, and in half an hour the following medicine as a drench; Afracan ginger, two tablespoonfuls, capsicum one-half teaspoonful, calomel 12 to 15 grains, to tone the stomach and move the bowels. Then repeat the aconite every hour

in 15 drop doses, until 4 or 5 doses are given. Feed soft food, oats, with oil meal or mill feed mixed and two doses a day of the medicine No. 6 with it, and keep the patient quiet. A mustard solution, well applied to throat, chest and over the lungs and covered iwth a blanket, is very beneficial. To produce perspiration use Tincture aconite, in fifteen to twenty drop doses every twenty minutes. Clothe warm. This is one of the cases, where a practical doctor may be necessary.

Note.—Every farmer should keep a bottle of aconite in the house for immediate use, for you will see by this work that it is very valuable, not only for diseases with horses, but for milk fever with swine, cattle and sheep, and hoven when used as prescribed.

Dysentery or Scours

This is something that occurs frequently with horses, and especially with road horses or colts.

Treatment: If where no other remedy can be procured, take wheat flour, one pint to a gallon of water and give it as a drink, where they will not drink use one-half pint of flour to a quart of water, to which add one fresh egg, and use as a drench. If it can be procured, to this add one tablespoonful of ginger, and from fifteen to thirty drops of laudanum or a gill of whisky. Give every two hours until relieved, give light food, such as oats, bran, and sweet hay.

Profuse Staleing—Kidney Trouble

This is something horses are troubled with often.

Treatment—Use the medicine of Recipe 6 twice a day and give one dose, one ounce, two tablespoonfuls of Tincture of Bucha to a horse, and one-half this amount to a colt, which will cause staleing.

Foul sheath.—All horses are troubled more or less with foul sheaths, and they should be looked after and cleaned by washing in warm water and castile soap, then oiled with fresh lard or sweet oil. Either of these troubles can be told by the difficult staleing.

Colds and Distemper

These two diseases are of frequent occurrence with horses, but neither one at all dangerous if promptly attended to. Colds occur more with matured horses than colts, and are caused by exposure and neglect. Distemper is a colt disease, but frequently old horses are troubled with it.

Treatment: For colds—give the medicine, recipe 6, in soft food twice a day and in bad cases smoke, by putting pine tar or woollen rags in an old shoe, with the toe cut off. Burn and hold under the nose, thus smoking the patient well, which will cause a free discharge. For distemper, give the same treatment, smoking every day until a free discharge from the nose is started, then occasionally to keep them running free, if they gather under jaw open with knife, as soon as ripe, which is as soon

as the lump becomes soft. To hasten the gathering, apply under the jaw or throat a poultice of hops and bran. If this simple treatment is effectually carried out, using good sanitary means to keep the patient warm and dry in the winter, and feeding soft food with the condition powder, and in summer allowing free access to grass. The chances are that you will not lose one horse in a lifetime with these diseases.

Epizootic—Pinkeye

This is a contagious disease. That occurs once in a while in an epidemic form through the country, and kills or injures a great many horses.

Symptoms: The attack is usually sudden and the horse soon drops its head and ears, and stands with back arched and braced legs as if to bring relief. These symptoms are always accompanied by a hoarse dry cough, rapid breathing, scanty, high colored urine, and hard mucus covered dung.

Treatment: Give one-fourth pint of medicine No. 6 and 15 grains of calomel to move the bowels. Then use the medicine No. 6 in tablespoonful doses twice a day in soft wet food, placed low down so as to cause the horse to keep its head down while feeding, or turn out on grass and give on tongue twice a day aconite in 10 drop doses. This disease being very contagious it is well to keep the effected animal away from others and disenfect all stables.

Fistula and Poll-Evil

These terrible diseases of the horse are of frequent occurrence, and very annoying and hard to cure, but the treatment given here can be relied upon, or at least it has been successfully used in many instances, and highly recommended.

Fistula appears at the top of the shoulder blade, and Poll-evil occurs on top of the neck just behind the ears. Both these diseases are caused by a bruise.

Treatment—When they first make their appearance they can be observed by a swelling and soreness, and up to the time that matter begins to form, the corrosive liniment will be found very effectual to drive it away. (See prescription, how to make it.) This is a powerful medicine, and in using it the horse must be fastened so he cannot rub or bite the afflicted parts, as it will burn for a minute or two. Apply every morning with a small mop, (not the finger) for some three days, and then take old lard, or wagon grease, and grease the part well and let go three days, and repeat the treatment over again three times. If this fails to check it, the treatment will have to be changed and one used to cause heavy suppuration. For this purpose use May apple liniment. (See recipe.) A thin coating should be spread over the afflicted part every morning and carefully washed at night with castile soap and hot water and then greased. This treatment should be continued until matter forms, and as the pus begins to ooze out, increase the amount of liniment and the length

of time between dressing up to two days, but not longer, always washing well before dressing. After three weeks treatment, cleanse the wound thoroughly, and apply internally until healed, the Dexter Liniment, see recipe.

Ring-Bone and Curbs

Ring-bone is a bony substance or growth that appears just at the top of the hoof, and extends clear around. It is caused by a strain and if neglected makes the horse very lame, and soon becomes hard and hard to remove.

A curb is a long bony substance on the back part of the leg just below the hock, and the same may be said of it as of ring-bone.

Treatment: For ring-bone the same as for curb.

For a curb if the afflicted part is feverish, first reduce the fever by applying the cooling lotion, (see receipe,) then use the corrosive liniment, bathe once a day, then wash with soap and hot water—home made soft soap is best—continue treatment for a week, then leave go a week, if necessary repeat. This same treatment will remove any splint or callos.

Scratches and Grease Heel

These are two of the dreaded diseases of the American horsemen, although similar in their characteristics, grease heel is the most obstinate to cure. They appear on the back part of the leg, extending from the heel of the foot to the fetlock, and in extreme cases often reaches up to the knee or hock. The scratches begin

with a scabby covering of the skin, coming in patches and continuing to spread until the leg is one mass of sores.

Grease heel commences by the flesh bursting open, and an offensive matter oozing out. If neglected it spreads rapidly and becomes very sore.

Treatment: Wash clean with soft soap and dampen afflicted parts with Dexter liniment for three days and then grease with lard and sulphur. This will cure any case if kept out of the water and mud. Dry snow makes no difference, it is good to help to reduce the fever. In all cases turn on grass or feed soft food, and the medicine No. 6, to cleanse the blood and system.

Another good treatment is to take one-fourth pound of blue vitrol and dissolve it in a quart of ammonia, or cider vinegar and use as a wash, apply daily once or twice.

Thrush

This is a disease of the foot caused by neglect, damp filthy stables, and also by a bruise or injury of any kind. It often becomes very bad before the inattentive owner or groom notices it, which is observed by a very offensive smell.

Treatment: Clean out and pare away all the diseased part of the foot, then use the Dexter liniment. (See Recipe.) Apply twice a day for two or three days and keep the foot dry and clean while under treatment. This will soon effect a cure, or clean out and apply salt and wet blue clay as a stuffing.

Dressing to Soften Feet

Sliced onions, one pint; oil meal, one quart; charcoal, one half pint; boiling water, sufficient to form a stuffing; stuff the feet and fasten in with a cloth poke if you have no boots. This is excellent for feet either sound or unsound, is valuable in case of founder.

Injured Feet

In case an animal injures its foot with a nail or snag of any kind, examine the foot carefully and if possible find and remove the article, then clean out the foot well and apply peroxide to remove the poison, then apply turpentine to the wound, cover with a tarred rag, and be sure to cleanse and dress every day so as to keep the wound open, after two or three days use the Dexter liniment in place of the turpentine. In case of graveled foot, keep the foot encased in a poultice made of oil-meal, bran and warm water in a sack until open, then cleanse with soap and water or peroxide and apply the Dexter liniment until healed.

Founder—Corns

For Founder.—Bleed freely in the small warts under the posturn joints. Give 10 drops of aconite twice a day for three days and use the medicine No. 6 in oats and bran mashes in absence of grass, and apply the onion dressing to feet for a few days.

For corns, pare out the foot well and apply the onion dressing or foot oil until all soreness is removed.

Saddle or Harness Galls, or Boils

These are so frequent and annoying to both horse and man that the proper treatment for them is of value.

Where the horse can be allowed to go idle it should be done until well, but where this can not be done, then other means must be resorted to. First, the saddle or harness should be so padded as to take the bearing off the afflicted parts. Then wash clean with warm salt water, and bathe with Dexter liniment and meat fryings, equal parts, which will heal any common gall, or paint over with white lead. Where a large collar boil has formed, cut it open and cleanse it out with warm water, then bathe it internally and externally with the Dexter liniment, by the use of a feather.

A cheap application for bruises and galls, and to reduce external inflammation is a decoction of smart weed, two parts, and strong vinegar, one part. Make hot, pour over bran, and apply as a plaster, as hot as the horse will bear.

Valuable Eye Remedies

How to make and use.—Take tincture of arnica, one ounce, laudanum one-half ounce, sugar of lead one-half ounce, bathe several times a day will remove inflammation or soreness caused by a blow or otherwise, or where the inflammation has caused the haw to appear, what a great many call hooks, and what ignorant pretenders cut out, claiming it

is a disease. To remove slight inflammation take cold salt water and bathe the eye, or belladonna, one part, water three parts, make fresh each time, will soon remove it. To remove dirt, etc., from the eye, insert flax seed. To remove film, finely powdered burnt alum, or equal parts honey and hen's oil, applied with a feather, is excellent.

Worms With Horses

Treatment: Use medicine of receipe 6, to this add one pound of powdered worm seed, and use in tablespoonful doses, once or twice a day. Note, the reason I recommend this medicine of Receipe No. 6 in all cases where a medicine of this nature is required, is, I know it is as valuable as any other when made as prescribed or changed as needed, to be more effective in certain cases as advised. Then those having this work no doubt will most always keep it on hand, and especially when they make it in quantities of 25 pounds or more, as it is cheap to make—10 cents per pound. Ten quarts of the mixed medicine equals the recipe as given.

Abortion with Cows.

Abortion, or premature birth among cattle, is considered a contagious disease, and every precaution should be taken to prevent its spreading. The calf is invariably lost, and not unfrequently the cow. If the cow survives, she is almost sure to drop her next calf at about the same period. Some have great faith in preventing this, and contagious diseases

with horses and cattle by keeping a goat about the barn. I have more faith in medical treatment. A month before the expected return time, and in case one cow loses her calf, it is well to give other ones that are heavy with calf some attention, for where this occurs, very often it is on account of some local trouble and calls for a change of food and care. The affected animal should be removed from the rest of the herd as soon as she slinks her calf, as well as should be all evidences of the trouble. Then thoroughly clean up the stable and use lime freely on floors, and white-wash all walls. Then use once a day at least, if not twice, for a few days, the following treatment. Take a gallon of the medicine as made from Recipe No. 6. The prescription as given makes that amount or more. To this add one-half pound of powdered asafetida, mix well and use in tablespoonful doses for a week. Then twice a week for a month. Those that show sickness or fever, give one dose of ten drops of tincture of aconite daily for two or three days.

Bloat Hoven with Cattle.

For Bloat Hoven with cattle, take a half pint of powdered charcoal; one tablespoonful of turpentine; and if at hand, 10 drops of aconite; stir in a quart of water and give as a drench. Hold the mouth open with the hand and the wind will escape.

Milk Fever or Garget.

Garget (caked bag) is one of the most com-

mon diseases among cattle, often occurring in the spring, just after calving, or it may be induced by high feeding at other times, or even when running on good grass later in the summer, and it may be induced by efforts to dry off a cow too rapidly. Symptoms and treatment:—The udder is hot, swollen and very tender. First one teat will become hard, then the others. The best remedy is to bathe the udder frequently with hot vinegar and salt, rubbing it gently with the hand, then make a fire with corn cobs or chips in an iron pot, take a large cloth, and put one end around the udder, letting the other end hang down around the pot, thus smoking it well. One or two applications will give relief. Give one pint of Epsom salts in a quart of water as a drench to move the bowels. Then give the usual dose of medicine No. 6 twice a day for two days, and one or two doses of aconite, 10 drops. Keep the milk well drawn.

Foot and Mouth Diseases.

Frequently cattle are troubled with sore feet and mouths, and become very lame or weak, and, if allowed to go uncared for, soon depreciate in flesh or milk, and in that way prove a loss to their owner. With sore feet, the animal is generally attacked in the hind feet first, and they become very sore between the hoofs, and can be observed by the animal shaking the feet and refusing to stand upon them.

Treatment: Clean and keep dry and apply a strong solution of blue vitriol and tobacco,

very hot, for a few days, the same as for foot rot in sheep. Or run hot pine tar into the sore, repeat every day until well.

Treatment for sore mouth, the same as for sore mouth with horses.

There is a foot and mouth disease that is considered to be contagious. Therefore, if any one has cattle thus afflicted, and the treatment here given tried and not successful, it would be well to call a practical doctor and have them examined.

Scours with Calves or Lambs.

To check this trouble, take sweet milk, put it over the fire long enough to come to a boiling heat. Let it cool; to one gallon of milk, add a cup of wheat flour, one teaspoonful of ginger and one fresh egg, and give as a feed for a calf.

Grub in Sheep.

An intelligent shepherd gives the treatment for this trouble, which he guarantees to work, if the sheep are not too far gone: Pour a few drops of turpentine in their ear will remove the grubs, and to prevent this trouble, every year about the first week in June, tar their noses well, and give them a spoonful internally. Repeat the operation in July, August and September. If this advice is followed out there will be no trouble with grubs.

The Maggot.

The maggot, so called, is a formidable enemy of the sheep. The eggs that form them

are deposited by the common blue fly. When sheep are wounded by accident, or are allowed to become filthy when troubled with diarrhoea, the eggs or larva are deposited in vast numbers. The maggots soon become active, and spread from their quarters and attack the skin, which they irritate and cause to secrete a serious fluid. In time the skin is pierced, and the flesh suppurates and wastes away, being devoured by the multitude of maggots which crawl upon it. In wet seasons the mischief is greatly increased. To prevent them it is necessary to carefully remove the wool from about the tail so that filth may not gather to watch for any accidental wound; and in warm, wet weather, for any dirty tags of wool upon which the flies may deposit eggs. In case any maggots are found, there is no better application than common crude petroleum and turpentine, both of which are repulsive and fatal to fly and maggot. A sheep that is "struck" with maggots will remain separate from the flock, and may be lost sight of unless the flock is counted and the straggler found. Weaning time, when the ewes may suffer from caked udder, is an especially critical period, and then extra watchfulness is called for, and the udder should be bathed with lard and camphor.

Hide-Bound.

With a poor and dilapidated, or hide-bound cow brute, treat same as for a horse in the same condition. Feed well with rich, soft food, and use twice a day the medicine of Recipe

No. 6 to cleanse the blood, tone the system and aid the digestive organs. Use for a few days, and then the stock food regular. If in the winter or early spring, a good, warm, dry stable will be found to be very beneficial.

Urinary Trouble

Cows are just as much subject to urinary trouble as horses, and can be observed the same way, by their repeated efforts to stale, but unable to do so. To treat this give as a drench sweet spirits of niter, one ounce; water one pint, and then use the condition powder in soft feed or the stock food, or stock feed.

Egat, Indigestion or Murrain.

These diseases are of frequent occurrence with cattle, and often prove fatal, either by permanent injury or death. In the corn-growing districts they occur more frequently in the fall of the year than any other season, and the probability is that nineteen out of every twenty of such cattle so found dead died from one or both of two prominent causes. One of these is the gorging of the animals' stomachs with an enormous quantity of highly stimulating food, much of it difficult of digestion, directly after their having been kept on meager, frost-bitten pasturage, which was to tide them over from grass to such time as the corn would be out of the field. Such a sudden and violent change could scarcely do otherwise than demoralize the entire digestive system; and death, equally sudden, violent and unlooked for, ensues. The other prominent cause

is the eating largely of dry frosted grass, or the woody, fibrous cornstalks and shucks—more especially the latter, in eating shredded fowder as now used, and insufficient water is taken to soften and float it up as it must be before the processes of digestion can be completed; the mass comes to a stand-still, owing to impaction, forms a sort of blockade in the manifolds or third stomach, inflammation sets in and the animal becomes very sick and often past help.

Treatment: As soon as the trouble is observed, which can be told by the animal separating from the herd, becoming restless, lying down, then arising and moving slowly about, standing with a staring look, suddenly starting forward, and in doing so, often fall upon their knees. Something must be done immediately if you wish to save the animal. The first result to be obtained is a physic. This can be obtained by giving lard, one quart; raw oil, one pint; or brewers yeast, one quart, or epsom salts, one pint, dissolved in a quart of warm water. Given as a drench, one pint of raw linseed oil I consider by far the best. If the animal seems to be suffering with much pain, give the usual dose of aconite, 10 to 15 drops at a time, and repeat in 30 minutes. In case there is any suspicion that others are affected, give the medicine No. 6 in soft, wet food, twice a day for a day or two to prevent any further trouble, or change their food. As this trouble occurs with horses and sheep as well as cattle, the same treatment can be used by regulating the dose given. For sheep, use a small dose of

the drench, and only five drops of the aconite. This treatment used in time will save many an animal.

RECIPES FOR VARIOUS USES.

Cooling Lotions.

Chloroform, alcohol and Golard's Extract, each two ounces; mix, take one-third the amount in a quart of rain water, bathe twice or three times a day. This is very cooling, and is used by a great many horsemen in rubbing out race horses, or on receiving a bruise to prevent callouses. Another one is Oil of Spike, Oil of Camphor. Oil of British, each one ounce; Liquid of ammonia, one pint. Another good and cheap one is, copperas, one-half pound; rain water, one gallon; use twice a day. Will remove fever and soften the skin.

Valuable Eye Washes.

Take three fresh hen eggs and break them in a quart of cold rain water. Stir until a thorough mixture is effected. Boil over a slow fire, stirring occasionally, adding one-half ounce of sulphate of zinc (white vitriol) to the mixture, remove and the curd will settle to the bottom, and the liquid rests on top. This liquid strained, makes a valuable eye wash for man or beast. The curd applied to the eye will draw the inflammation out. The liquid, if strained free of any sediment and bottled, will last a long time. The curd can be applied to the eye of the horse by making a hood so it fits tight over the eyes, or one eye.

Or take tincture of arnica, one ounce; laudanum, one-half ounce; sugar of lead, one-half ounce, mix and bathe the eye twice or three times a day, will remove inflammation or soreness.

To Remove Callouses.

Strong hickory ash soft soap applied once a day, washing with hot water before each application, will remove most any callous or splint. For a hard and long standing case, use the soap and corrosive liniment. See corrosive recipe. A good general liniment to remove callous is, Dexter liniment; apply once or twice a day, and wash off with hot water and soap. The hotter the water the better, it softens the skin and opens the pores.

Corrosive Liniment.

Take one-half pint of turpentine, one ounce of finely pulverized corrosive supllimate, and one ounce of gum camphor. Let it stand for a week, shaking every day, when it will be ready for use. Always shake well when using, pour in an earthen vessel and apply with a swab, never the finger, and keep it out of the way of children, and when using, tie the horse so it cannot reach the part when applied. Used to remove all callouses, curbs, etc.

May Apple Liniment.

Make a strong syrup of May apple roots, while boiling add one-fourth as much strong lard as syrup, keep stirring all the time to prevent burning, cool and put away for use. This

is used for poll evil or fistula in their second stage; when matter has formed, it will draw it to the surface. May apple roots can be bought of any druggist.

Foot Oil.

Oil of cedar, oil of hemlock and sweet oil, each 2 ounces; American oil, one gill; Neats-foot oil, one gill; Barbadoes tar, two gills; organum oil, one ounce; apply to frog and foot; will promote health and growth.

Dexter Liniment.

Oil of spike, oil of camphor, oil of stone, oil of British, oil of America, oil of opodeldoc, each an ounce; turpentine, one pint. This is the best general liniment I ever knew, either for man or beast, as it is invaluable for healing galls or sores, either fresh or chronic cases, removing collar boils, callouses, etc., with horses, and all cuts or bruises, chapped hands, burns, etc., with the human family. Will also remove the soreness of corns or chilblains, and a great benefit with rheumatism or weak back. In using it for chapped hands, burns or fresh cuts, take liniment one part, sweet cream, fresh butter or vaseline, three parts. Or to make for family use, use alcohol in place of turpentine.

Canker-Sore Mouth Wash.

Treatment: Take sugar of lead, bole ammoniac and burnt alum, each one pound, four ounces; good cider vinegar, three quarts; mix

and use as a wash twice a day. Good for any sore-mouthed animal.

Healing Powder.

Burned alum, one-half ounce; powdered chalk, one ounce; pulverized gum camphor, one drachm; mix. Sprinkle on sore; will heal quickly, and is good to remove proud flesh.

Sweating Liniment.

Take two gallons of mullen leaves and one gallon of water. Boil until half gallon of juice is obtained; strain; to this add one quart of cider vinegar, one-half pint salt, two ounces oil organum; apply hot. This is one of the best preparations for injured whirl-bone, or deep-seated strains I ever tried; also for caked bag (garget) with cattle or sheep. When applied, dry by smoking. See garget treatment. The mullen, liquid vinegar and salt alone is good for swelled or inflamed udders.

Louse Killer for Fowls.

This powder was formulated by R. C. Lowry of the New York State College of Agriculture, Columbia University, and is said to be exceedingly effective. Most anyone can make it. It is prepared as follows: Take one-fourth pint of crude carbolic acid, mix with three-fourths pint of gasoline and thoroughly stir into two and one-half pounds of plaster of paris; force through a sieve to break the lumps. It is then allowed to dry in the air, and when dry put in a tight tin can or bottle, and it will remain ef-

fective indefinitely. To apply this powder, use a tin shaker or make holes in the top of a tin can and use as a shaker. Hold the fowl by the legs, head down; ruffle the feathers down so the powder can be worked into the skin. It is especially good for setting hens. Repeat every ten days to kill the lice that may hatch. It is not often necessary to dust all the fowls of a flock. The best way to keep them free from lice is to spray the perches and supply them with a dust ash wallow. A sheep penned in the house of nights will carry the lice away, as they get in the wool and die or can't get out; the same with fleas. This powder can be used on lousy horses or cattle. Any kind of grease, lard or black oil, butter or sweet cream is good to use with fowls, especially small chicks. Grease them around the head, neck and under the wings. Dust the hen or brooder with the powder and spray the perches with the liquid—lime and sulphur wash.

A Lime and Sulphur Spray.

Take ten pounds of stone lime, five pounds of sulphur and one and one-quarter pounds of caustic soda for fifteen gallons of water. Slake the lime by pouring water over it. Make a thin paste of the sulphur and pour it in with the lime while slaking. Keep stirring. Dissolve the caustic soda in water, pour it into the lime water and keep stirring. It makes a wash that will burn the fingers and eyes, but kill all lice and insects when applied to wood or trees. Therefore very useful, not only to kill lice or

insects, but as a disinfectant for stables, hog and poultry houses.

Diseased Poultry—Symptoms and Treatment.

All kinds of poultry, especially chickens and turkeys, are subject to diseases similar to those of the hog (known as cholera and roup), and is as infectious or contagious with them as with hogs. This view of the matter suggests the propriety of adopting such measures with the first cases in a locality as shall prevent the spreading of the disease in any way. The diseased, in any case, should be kept apart from the healthy ones until they have well recovered, and upon the appearance of the disease should be cared for immediately. Fowls show signs of sickness immediately after they are attacked. Perfect health with poultry is best shown by the bright scarlet color of the comb, their cheerfulness and elasticity of step. As soon as the fowl feels unwell the comb changes color, at first pale and then purple, and they refuse to eat or leave the roost, often remaining there until death.

Cholera or Roup with Fowls.

Symptom of Cholera.—The discharges at first are yellowish green, or like sulphur and water, becoming thinner, greener and more frothy as the disease goes on. The breathing becomes heavy and fast, the crop fills with mucus and wind, the food is not digested, the eyes close, and in a few hours the fowl dies. There is weakness, sometimes extreme.

Treatment: Separate the sick from the well ones, and thoroughly renovate, as far as practi-

cable, the roosting places, by removing all the manure and hauling it away, and whitewashing the roosts and houses, and sprinkle the floor with water and carbolic acid or lime, and use the medicine as made of Recipe No. 6, a tablespoonful, in soft feed for twenty chickens; feed twice a day for three or four feeds. Those too sick to eat, catch and feed them.

Roup.—During damp weather the roup sometimes makes its appearance, even when the fowls have received the best care that can be bestowed. There are many forms of roup, and it becomes contagious in flocks when allowed its way unchecked; but the mild form is usually a cold, the symptoms being a stoppage of the nostrils, which gives the well-known hoarse breathing, with the mouth opened. It sometimes appears also as a disease of the throat, and other times the eyes and head are affected, in all cases attended by general debility, loss of appetite and depressed spirits. Treatment the same as for cholera, and grease their heads and throats with coal oil and lard.

Rough Food for Fowls or Stock.

In absence of grass or other green food, all live stock, and poultry as well, should be supplied with a substitute food to take its place. For this purpose, good clover or alfalfa chaff, or hay run through a feed cutter. Then put in a barrel or tight box and pour over it sufficient boiling water to wet it good;; cover up tight and warm to hold the heat. Let stand some

hours and it will be found a splendid rough food for all stock or poultry. This can be improved by adding some mill feed or meals with it, but will be relished and eaten without.

In Conclusion

I will say if this work meets the approval of those who have tried it, I would request that they introduce it to their friends or neighbors, as by that means it will be more universally known and used. Active agents wanted in every county in any state. Liberal terms offered.

Address: J. B. SHOOK, Columbus, O.

REFERENCES.

Jamestown, O., Aug. 21, 1884

To Whom It May Concern: This is to certify that in addition to my law practice, I ran a large farm and have had considerable experience and observation in the use of Shook's Hog Cholera Remedy, and can say that if the directions are followed, it will do just what is claimed for it, and that Mr. J. B. Shook is a gentleman in every sense of the term.

W. A. PAXSON, Attorney-at-Law.

Wichita, Kans., April 22, 1885.

MR. J. B. SHOOK. Sir: Your medicine for swine received and given a trial with sick hogs. I am much pleased with it as it seems all you claim for it. The following June, Mr. Johnson writes: Your medicine as a preventive is a success.

ALFRED JOHNSON.

Flint, Mich., Feb. 6, 1883.

MR. J. B. SHOOK. Dear Sir: Having thoroughly tested the medicines I bought of you, both for diseased hogs as well as the preventive, I will say I am well satisfied.

J. W. FOSTER.

Plain City, O., Aug. 20, 1884.

Mr. James Mitchell, in paying me for over 100 hogs I treated for him, and Mr. John Dodge, for 40 or more, said: We are well satisfied with your work, and that you understand your business.

REFERENCES.

Ashmore, Ill., June 16, 1884.

MR. J. B. SHOOK. Sir: Enclosed find \$1.00 for which send me the worth of in your hog medicine. The other I got proved very reliable. GEO. W. OLMSTEAD.

Piper City, Ill., Dec. 4, 1884.

To Whom It May Concern: This is to certify that J. B. Shook of Ohio came here to treat our 1000 head of diseased hogs. He was highly recommended to me by responsible parties of Ohio, and his work proved so satisfactory that any guarantee he makes here I will be responsible for. JOHN A. MENTELIUS.

Venice, Butler Co., O., Oct. 3, 1884.

To Whom It May Concern: This is certify that J. B. Shook has been making his headquarters here for some three weeks for the purpose of treating diseased hogs. He has been able to make his word good in doing all he claimed he could do, and myself and the people hereabout are well satisfied that he understands his business. FRANK OCH.

Sater, O., Sept. 24, 1884.

MR. J. B. SHOOK. Sir: My hogs are now all right. Out of the 150 I treated under your directions, I only lost two small pigs. Please call and see me before you leave Venice. H. W. SCOTT.

Isaac Reigel, Cedar Hill, O., who feeds from \$10,000 to \$20,000 worth of hogs a year, says: Mr. Shook: I have used your hog treatment for the past 28 years and have no use for any other.

REFERENCES.

Lexington, Ill., Feb. 10, 1895.

MR. J. B. SHOOK. Dear Sir: A test of the hog medicine I bought of you, by myself and the owners, on over 5000 head of diseased hogs here in Moultry County saved better than 93 per cent. of them, and my sales of the medicine now will be good, as people are coming long ways after it.

Meyers Bros., Sullivan, Ill., wrote in 1898: Mr. J. B. Shook. Dear Sir: Send us at once by express the amount of your Stock Remedy for the within enclosed draft, as we are feeding quite a lot of hogs and do not want to be out of it, having learned from years of its use, its value, being reliable in all cases either as a cure or preventive.

Testimonials from hundreds of other first-class farmers or feeders who have bought this swine treatment could be furnished if necessary.

INDEX.

	Page
Remarks—Why I sell this work.....	5
Preface—Not Theories, But Facts.....	6
How the work is sold	7-8

CHAPTER I.

Investigation of Swine Diseases, by Government Experts, Drs. Detmen, Lay and Salmon	9
Infectious or Contagious	10
Germ Theory—Opponents.....	11
Affects the Organs—Immunity.....	12
Death Rates Increases	13
Worms—Intestine and Lung	14
Exposure and Attacks	15
Suggestions Followed.....	17

CHAPTER II.

Preventive Treatise on Swine.

Assist Nature	18
Oxygen—Pure Air Necessary.....	19
Prevention Better Than Cure	20
Directions—Preventive Treatment.....	21

CHAPTER III.

Treatise on Diseased Hogs.

Symptoms Explained	24
Drugs—Explanation	25
Treatment for Sick Hogs, Cholera.....	26
Swine Fever, Symptoms	30
Pneumonia	31
Indications—Symptoms of Disease	32

INDEX.

CHAPTER IV.

Recipes, Explanation and Directions.

	Page
Recipe No. 1	33
Recipes Nos. 2, 3 and 4.....	35
Recipes Nos. 5, 6, 7 and 8.....	36
Special Salt Tonic for Hogs, and Recipe No. 9.....	37
Things Worth Knowing	39
Medicine for Hog and Poultry	40-41
Vaccination of Hogs	42
Government Offer	44

CHAPTER V.

Veterinary Department for Horses.

Cattle, Sheep and Poultry.....	46
How to Observe Diseases.....	47
Colic—Botts, Treatment.. ..	48
Pneumonia—Lung Trouble.....	50
Dysentery—Scours	51
Profuse Staleing—Cold and Distemper	52
Epizootic—Pink-Eye.....	53
Fistula—Poll Evil	54
Ring-Bone—Curbs, Scratches, Thrush.....	55
Foot Dressing, Injured Feet, Founder.....	57
Galls and Boils, Eye Remedies.....	58
Worms with Horses, Abortion with Cows.....	59
Hoven, Bloat, Milk Fear, Garget.....	60
Foot and Mouth Disease	61
Scours with Calves or Lambs, Grub in Sheep, Maggots	62

INDEX.

	Page
Hide-Bound, Urinary Trouble.....	63
Murrain, Indigestion, Egat	64

RECIPES FOR VARIOUS USES.

Cooling Lotions, Eye Washes.....	66
Callouses, Corrosive Liniment and May-Apple Liniment	67
Dexter Liniment, Mouth Wash, Foot Oil.....	68
Healing Powder, Louse Killer.....	69
Lime and Sulphur Spray.....	70
Cholera, Roup with Fowls.....	71
Rough Food for Fowls or Stock.....	72

H 274 84

HECKMAN
BINDERY INC.

AUG 84

N. MANCHESTER,
INDIANA 46962

LIBRARY OF CONGRESS

0 002 839 998 4