

DEPARTMENT OF AGRICULTURE  
OTTAWA

HEALTH OF ANIMALS BRANCH



# HOG CHOLERA

*by F. Torrance*

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Hog Cholera - Chinese Form.

Hog cholera is a disease of other species of swine, with a high death rate. It is common in the United States, and the disease appears to have been introduced into the United States by swine on their return from the East.

*The cause* of the disease is a bacterium which there can be no doubt is a filthy surroundings. The infection is introduced with great rapidity.

*The spread* of the disease is rapid, and actual contact with the diseased animal is not necessary for the spread of the disease, but it is common.

The disease is common and thus distributed in all parts of the world, and the disease is common in the United States.

Another source of infection is the wandering dog, which may feed in a pig's trough and thus introduce the infection on the pig's trough.

Another source of infection is the feeding of uncooked meat, etc., in the raw meat. In the United States many hogs are fed raw meat, and this is a hindrance to the disease. This is the case in the United States. This is the case in the United States.

The meat is often preserved as salted meat, and this does not destroy the disease. In the United States many country owners do not cook their meat, and this is a hindrance to the disease.

Infection is introduced by the flowing through of water.

The early stages of the disease are characterized by a fever, and the pig becomes restless and refuses to eat.

## HOG CHOLERA.

Hog cholera is a contagious disease of swine. It does not appear to affect other species of animals, and is characterized by extreme contagiousness and a high death rate. It is known in every part of the world and is prevalent in the United States to an alarming extent, causing enormous losses. In Canada, the disease appears from time to time in various parts of the country where the infection has been brought in some way or other, and it is to put the owners of swine on their guard and to tell them what to do in case the disease makes its appearance that this bulletin is issued.

*The cause of the disease* is a germ, and without the presence of the germ there can be no hog cholera. In other words, such things as neglect, bad feeding, filthy surroundings, have no power to produce hog cholera. But when the infection is introduced among hogs under such conditions, the disease spreads with great rapidity.

*The spread of the disease* occurs whenever the germs from a diseased hog gain access to the healthy one, and this takes place in many different ways. Actual contact of the healthy and diseased hogs is a sure way to spread the disease, but it can be conveyed in many other ways.

The diseased hog gives off the germs of the disease in his urine and manure, and thus distributes infectious matter throughout his pen, pasture, or the railway car in which he is going to market. Healthy hogs placed in such premises after the diseased ones have been removed will contract the disease.

Another way infection is carried is upon the feet of men or animals, including birds. Curious neighbors, wishing to see what hog cholera looks like, may easily take the infection home to their own hogs on their boots or clothing. Wandering dogs may also act as carriers, and the common domestic pigeons may feed in an infected pen, and fly to some neighbouring farm carrying the infection on their feet.

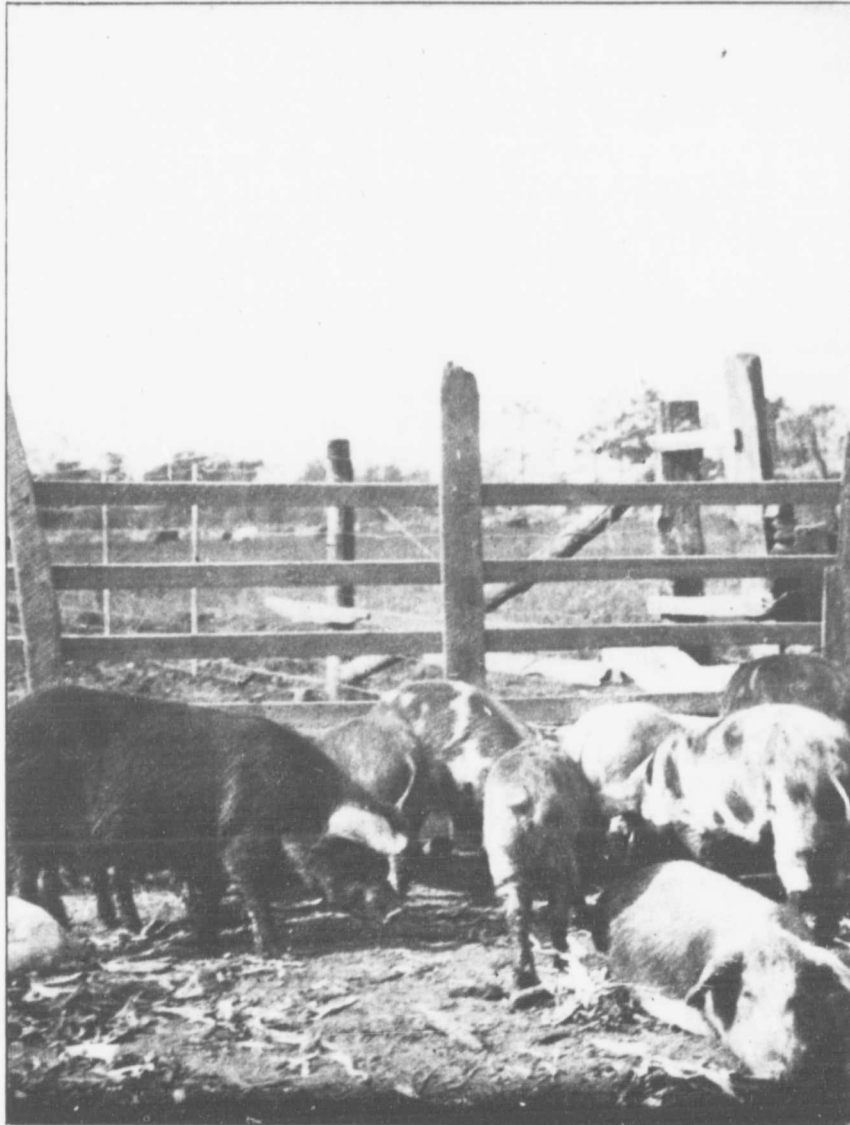
Another mode of infection has recently come to light and is responsible for many outbreaks of the disease in Canada. This takes place through the feeding of uncooked garbage and swill containing scraps of pork, bacon rind, etc., in the raw state. The explanation of this lies in the fact that in the United States many hogs are sent to the slaughter house when in the early stages of hog cholera, and are killed, turned into pork and consumed for food without hindrance. This is possible because there is a lapse of some days between the time when the hog becomes infected and the time when he shows symptoms of it. This is known as the period of incubation, and hogs killed during this period may, and often do, show no symptoms to the meat inspector that anything is wrong.

The meat from such hogs contains the germs of the disease, and such processes as salting, spicing, or smoking, do not destroy these germs. Cooking does destroy them, and as a quantity of United States pork is consumed in this country owners are cautioned not to feed kitchen refuse to hogs unless it has first been cooked.

Infection may also be carried from farm to farm in the water of a stream flowing through an infected pasture or pig-pen.

### *Symptoms.*

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a definite opinion to be formed. The hog loses his appetite, partly or altogether, is sluggish, disinclined to move, and if compelled to do so may cough. These symptoms occurring among hogs in the vicinity of an outbreak of hog cholera, should be viewed with suspicion and the nearest veterinary inspector should be notified at once.

The sick hogs soon become thin and weak, walking with a staggering gait, especially with the hind legs, but hogs may die in a few days, before they have had time to lose much flesh.

The skin frequently becomes red in patches, the colour turning deeper and more purplish as the disease advances. These patches usually occur inside the legs, under the body, or behind the ears, but may be seen anywhere.

The eyes discharge mucous secretion and the lids may be gummed together by it.

The bowels are generally loose, and a profuse diarrhoea may occur, although in some cases there may be constipation.

The sick hog generally goes off by himself, and is found lying in a quiet corner of his pen. If compelled to get up, he does it unwillingly, stands with his back arched and his belly drawn up, or moves in a weak, staggering manner and may fall over.

A sick hog seldom shows all of the symptoms described above, and in many cases it requires an expert to decide what is the matter. Usually one or two of the symptoms are well marked, such as coughing and rapid breathing, or diarrhoea and tucked up appearance, or redness of the skin and discharge from the eyes.

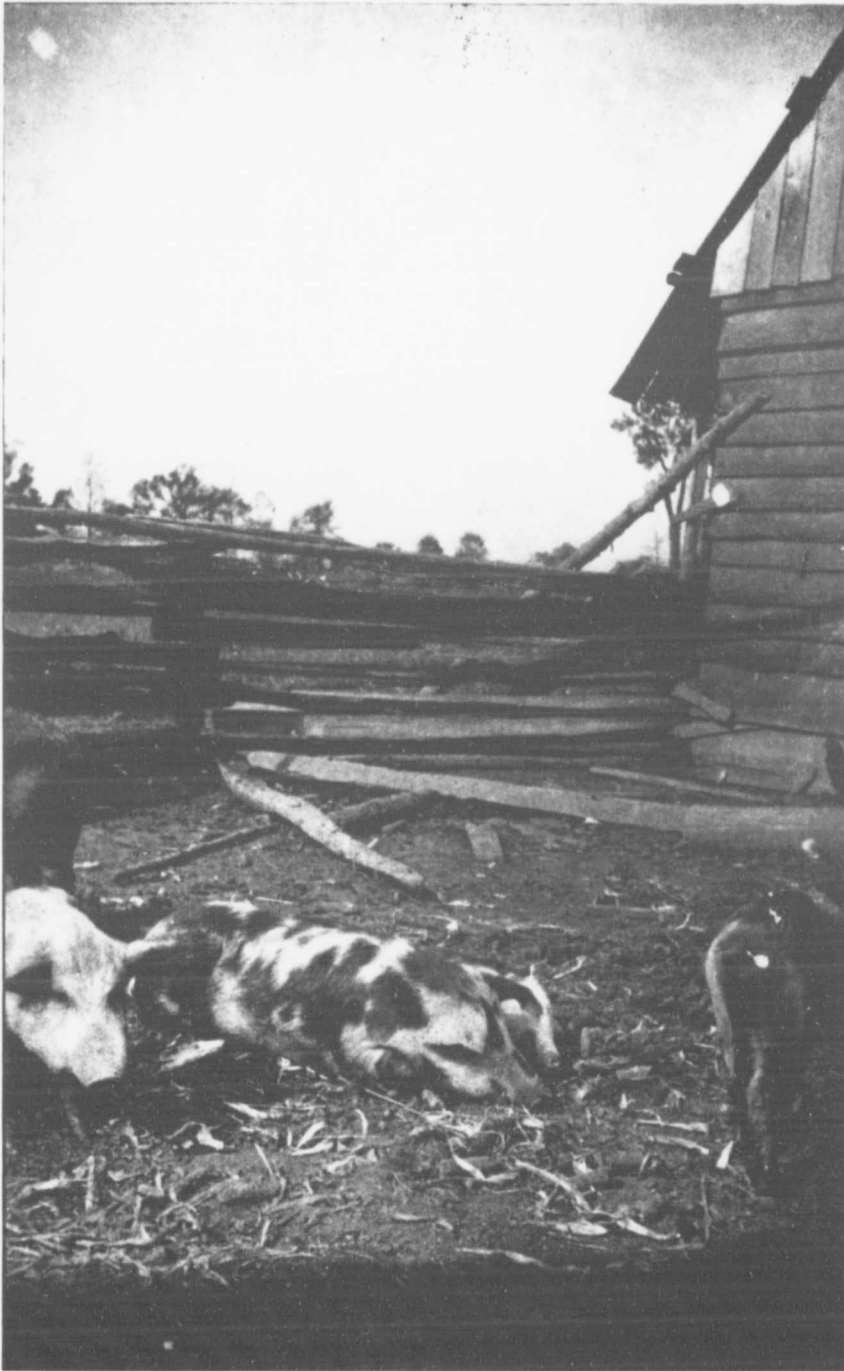
The symptoms have been described at some length, so that the farmer may be on his guard if any of them are noticed, and call in the Inspector before the infection has time to spread.

There is a great difference in the severity of the disease in various outbreaks. Sometimes it is of a severe or virulent type and rapidly fatal. In other outbreaks the type is mild and recovery frequent. The latter type may be considered just as dangerous to the community as the former, as it is more difficult to detect, and the recovered hogs are apt to spread the disease far and wide before it is recognized.

The duration of the disease is uncertain. A hog may die in a very few days, or may live for some weeks. Death does not always follow an attack of the disease, and a small number of hogs would survive an outbreak of the disease if it were thought wise to permit them to do so. Such hogs, however, are carriers of the disease. The germs exist in their blood, although producing no active effect. The hog is immune, but can give the disease to other hogs that are not immune. For this reason it is bad policy to attempt to cure the disease. The more recoveries you get, the more chances of getting fresh outbreaks of the disease as soon as new hogs are brought into the neighbourhood. It is far better to stamp out the disease by killing all the diseased hogs and disinfecting the premises.

*Examining a hog after death from hog cholera.*—It is often necessary to examine a dead hog to make sure of the nature of the disease, and the following appearances may be looked for:—reddening of the skin; bloody red spots on the surface of any of the internal organs such as lungs, heart, bowels and stomach; a peculiar speckled appearance of the kidneys when the outer covering is stripped off, something like a turkey's egg; ulceration of the inner lining of the large bowel, especially near its junction with the small intestine; redness of the lymph glands; enlargement of the spleen; inflammation of the lungs (pneumonia). The examination should be made by an expert if possible.

*What should be done when hog cholera is suspected.*—Notify the veterinary inspector without delay. The owner or person in charge is bound by law to do this, and, if he fails to do so, may lose his compensation for any animals slaughtered under the Act, besides being liable to a heavy fine for his neglect.



HOG CHOLERA. CHARACTERISTIC ATTITUDES.

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*How the disease is dealt with in Canada.*—The veterinary inspector, upon making sure of the existence of hog cholera, will have all the hogs on the premises slaughtered immediately. Those actually diseased are then destroyed by burning them up completely, or else deeply burying them in the ground. Hogs which were not sick but had been in contact with the diseased ones, and are in fit condition for food, may be dressed under the supervision of the inspector. If a careful examination shows them to be healthy they are allowed to be sold as dressed pork. The inspector assesses the value of the hogs slaughtered, and if the owner has not been guilty of any neglect or infraction of the law, and carries out the instructions of the inspector regarding the disinfection of the place, he will receive compensation for his losses up to two-thirds of the assessed value.

The premises occupied by the diseased hogs are placed in quarantine until thoroughly cleaned and disinfected to the satisfaction of the inspector, and no fresh hogs are allowed on the premises for a period of at least three months afterward. The inspector then revisits the premises to make sure that the regulations have been complied with, and, if satisfied that such is the case, will recommend to the Minister of Agriculture the release of the premises from quarantine. The Minister is the only person authorized to grant this release, and he grants it on the recommendation of the inspector.

The following are the OFFICIAL RULES for the cleansing and disinfecting of premises after outbreaks of hog cholera:—

After infected hogs have been slaughtered the carcasses should either be completely burned or buried at a depth of at least eight feet; if buried they should be covered to a depth of several inches with quick lime.

In most cases it will be found safest and most profitable to remove and burn the floors, partitions and lining of pens previously occupied by infected hogs, as also any rails, loose boards or other lumber to which such hogs have had access.

Pens, other buildings and fences with which affected hogs have been in contact, are, when possible, to be thoroughly gone over with hot steam or boiling water before being coated with fresh lime wash, each gallon of which should contain a pound of carbolic acid, creolin or other germicide of equal strength.

The surface soil of pens and yards should be removed to a depth of at least six inches and well mixed with fresh lime, which should also be freely applied to the surface of the newly exposed soil. Ground so treated should receive over the lime a fresh coating of earth or gravel. Fields, orchards and gardens to which the diseased hogs have had access are to be ploughed as soon as possible.

Every precaution should be taken to prevent the conveyance of infection from one place to another by means of the clothing or shoes of persons who have been in contact with or otherwise dealing with diseased hogs.

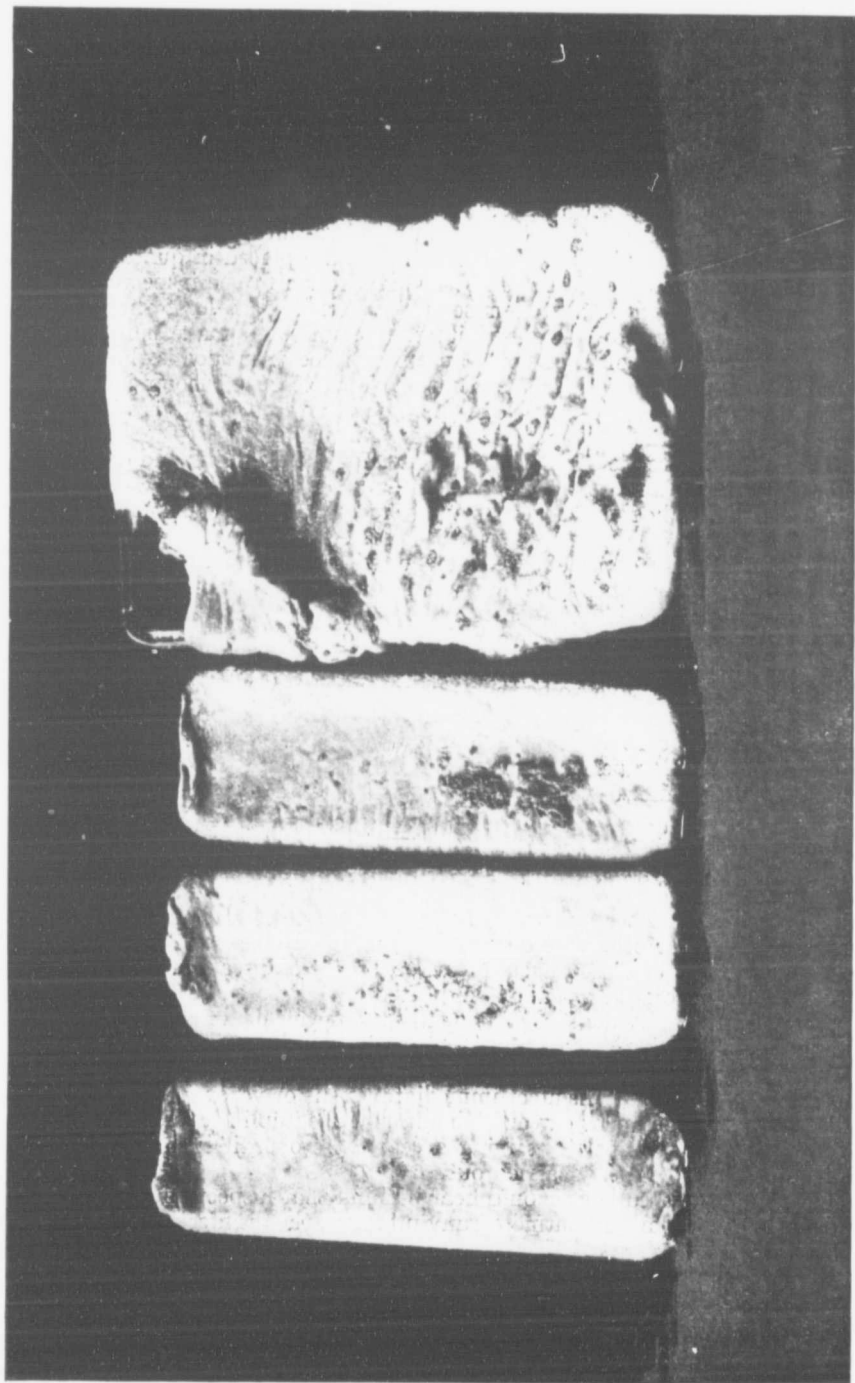
Visitors should be discouraged during outbreaks of disease or until cleansing and disinfecting operations as above indicated have been completed.

Animals, especially dogs, are frequently the means of conveying the disease and should, wherever possible, be prevented from entering infected premises.

When, owing to severe weather or other unavoidable cause, it is found impossible to cleanse and disinfect immediately pens or yards formerly occupied by diseased hogs, such pens or yards should be closed up in such a manner as to prevent persons or animals obtaining access thereto until such cleansing and disinfection can be properly carried out.

Owners of diseased hogs should bear in mind that inspectors cannot recommend the release from quarantine of any premises, the disinfection of which has not been carried out in a satisfactory manner.

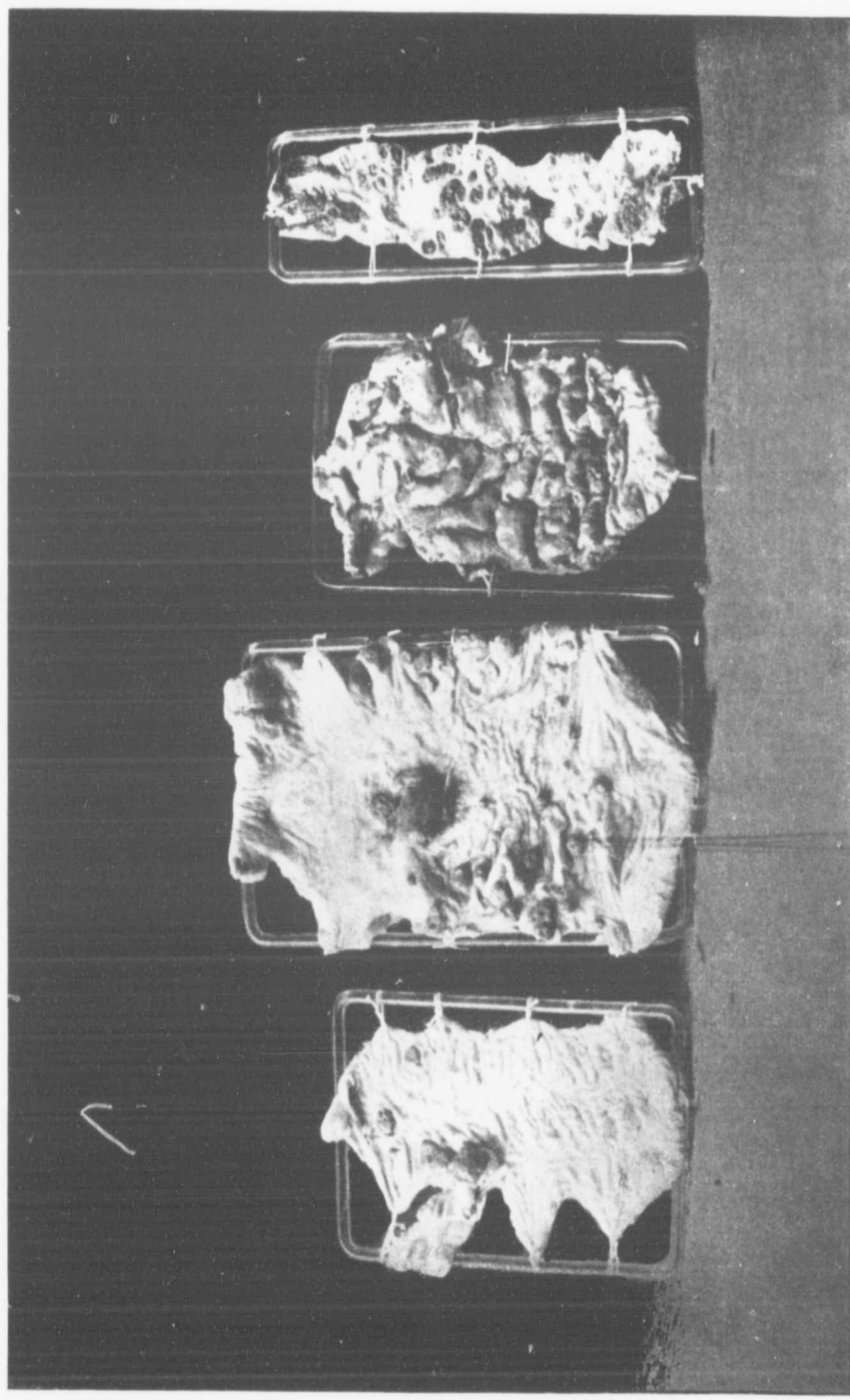
F. TORRANCE,  
Veterinary Director General.



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HOG CHOLERA. (LESIONS SHOWING THE CHRONIC CHARACTER OF THE DISEASE.)



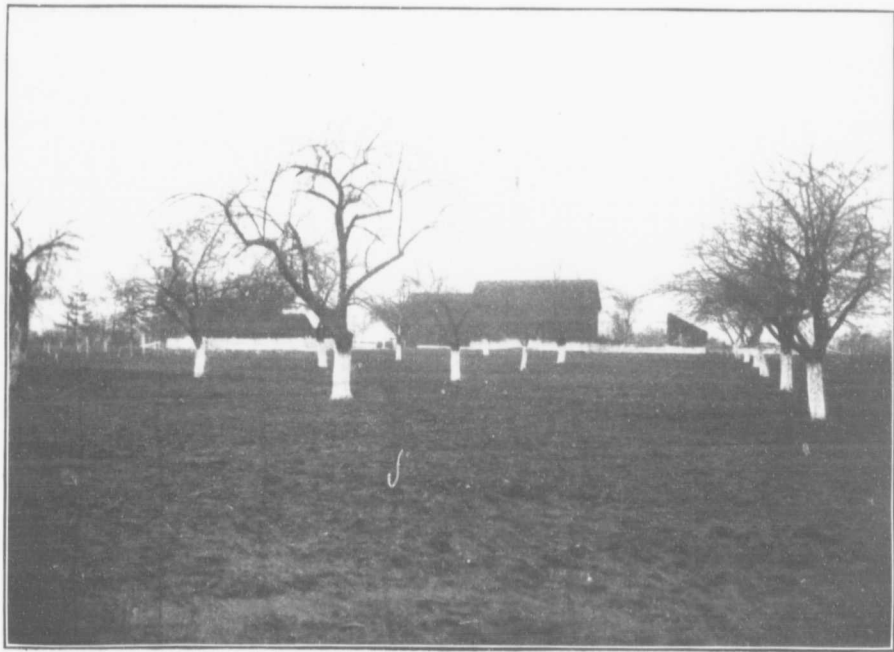
HOG CHOLERA—CHRONIC FORM.



HOG CHOLERA—CHRONIC FORM.



HOG CHOLERA. (LESIONS BELOW THE ILEO-CECAL VALVE.)



DISINFECTION OF PREMISES. NOTE PLOUGHED GROUND, WHITEWASHED TREES AND FENCES.