DREAD CHICKEN MALADY AND HOW TO PREVENT IT

Some Authorities Claim White Diarrhea Is Transmitted Through Eggs.

IT CAN BE CONTROLLED

Scourge Already Is Being Stamped Out Among Scientific Poultry Husbandmen Who Have Studied It Long and Carefully.

BY. M. L. CHAPMAN,
Judge, Breeder and Writer.

Every year thousands of baby chicks are lost from the effects of a disease known as white diarrhea. From this cause alone the financial loss is so great that it has crippled many chances for success in the poultry industry.

For many years scientific poultry husbandmen have been studying the cause of this trouble in chicks, and have arrived at various conclusions, but they all agree that it is a very destructive condition to which baby chicks are susceptible, and, where it becomes prevalent, it is very difficult to eradicate.

Many observers are firm in their belief that white diarrhea is transmitted from a hen which has previously had the disease, and that the germs, lurking in her system until the laying period, are transmitted by the eggs. By this theory the chick is hatched with the disease, and must be put under treatment immediately if fatal results are to be prevented. Other authorities contend that the disease is a result of debility in the breeding stock; improper care of eggs intended for hatching, improper methods of incubating or brooding, chilling, overheating or improper feeding methods, insanitary, poorly ventilated and filthy quarters, musty or sour feed and many other causes of like nature.

From the standpoint of a practical poultryman it is freely admitted that it is possible that chicks may be adversely affected by any or all of these conditions, and, as a result, may exhibit symptoms of white diarrhea in stages of intensity. Any of the above conditions may so weaken or so debilitate the chicks that they cannot successfully withstand the infection of germs which would lead to a condition of diarrhea.

Disease Is Being Eradicated.

It is some satisfaction to know the cause of a disease and the manner in which it is transmitted, but, after all, what the poultryman most desires is instruction as to ways and means for its recognition, prevention and cure.

From the fact that the disease has not spread throughout the country, and that it is being stamped out on most farms, to a great extent, indicates that it is possible to guard against it.

Where the disease is transmitted through the female it is very difficult to stamp out on account of the uncertainty of detecting the particular hen which is affected. Where the disease is traced to any of the other causes mentioned above it is a matter which is in the hands of the operator.

Low vitality of the breeding stock, incorrect methods of incubating and brooding have more to do with the prevalence of diarrhea in chicks than any other factor, and if these conditions are corrected it only requires intelligent treatment to get rid of the "white plague" of chickdom.

Chicks affected with white Diarrhea exhibit several characteristic symptoms, but no one individual need necessarily exhibit all of them. The group of symptoms are manifest in a flock and each may be recognized in different individuals during the course of the disease.

Early Symptoms of the Trouble.

The first deaths may occur before the hen is taken from her nest, the chicks removed from the incubator or very shortly thereafter. At this time there are no manifestations of the disease nor its symptoms, and death is usually attributed to lack of vitality. The first symptoms to be observed is a condition of weakness, the affected chicks become listless and huddle together. They seem to be chilly and do not come from beneath the hen or the hover. The hover may be heated above normal temperature, but still the poor listless chicks crowd in an apparent effort to keep warm. They make little or no attempt to eat, the wings droop and the feathers are ruffled.

As the disease progresses the eyes are closed the greater part of the time and the little sufferers soon reach a point where they become indifferent to everything that goes on about them. They emit a plaintive peep, a chirp or shrill twitter. As the condition further progresses the peep becomes weaker until it is a mere gasp. There may be labored breathing and trembling before collapse. Death may occur at any time during the course of the disease, depending considerably upon the cause, but the greatest mortality usually occurs between the fifth and twentieth day. Practically all of the deaths occur while the chicks are under one month of age.

The general appearance of the chick is one of shrinking of the carcass. The body is humped, the legs become shrunken, the claws long, the beak long and narrow and the head appears smaller in size. Within a few hours there is a whitish discharge, somewhat resembling plaster of paris, though often it is streaked with green. The discharge is usually profuse and there occurs a condition known as pasting.

Never Breed From Afflicted Stock.

As a rule chicks which have had a severe attack of the disease and get well seldom develop into fully matured birds, and under no circumstances should they be kept for breeding stock. They are sometimes misshapen and have poor feather development, crow-like heads and are strikingly lacking in vitality.

In view of recent research made by experts in poultry husbandry and as a result of many years of practical experience it seems safe to offer some suggestions relating to the practical methods of combating this so-called "white plague."

It naturally follows that all hens suspected of being infected with the disease should be reserved for the butcher and not allow to become members of the breeding flock. Only hens with strong constitutions, excess of vigor and vitality should be considered. In this connection it is strongly emphasized that the successful hatching and rearing of chicks depends, in a large measure, upon the vitality and vigor of the breeding stock.

Since the development of the chick during the first six to ten weeks of its life is a fair index of its strength and vigor the watchful poultryman will be rewarded if these strong chicks are marked to become candidates for the breeding flock. All that have any taint of disease should be sent to the butcher as soon as the laying season is passed. By this simple means there is an opportunity of eliminating the diseased stock and incidentally build up a flock founded upon a strong parentage.

Filth Encourages Disease.

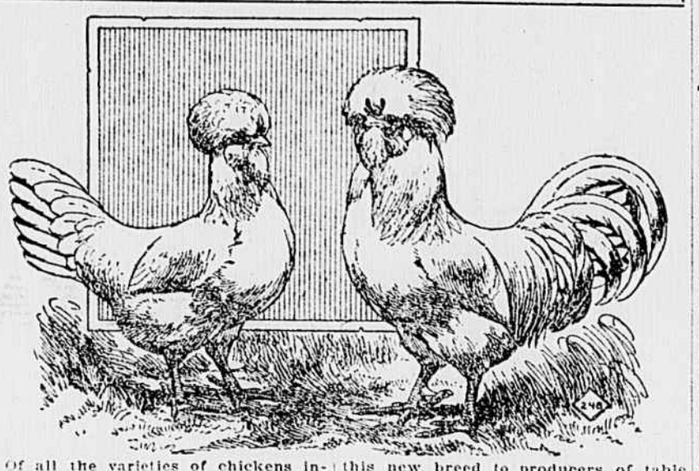
Incubators, brooders and all other appliances used in hatching and rearing chicks should be cleaned and disinfected frequently. Always bear in mind that filth is the hotbed for propagating disease.

Remedial measures have practically narrowed down to preventive treatment and using every effort to keep the disease from becoming an epidemic. A favorite practice and one that is meeting with universal favor is that of feeding the chicks sour milk for their first feeds. The chicks are given the sour milk forty-eight hours after hatching. Along with the sour milk they are given a feed of fine oyster shell meal to act as grit.

Where chicks show a disinclination for feeding on this first meal of sour milk, it is often given by forcible methods. A medicine dropper is used for this purpose and a generous meal is given at the time the chicks are being transferred from the incubator to the brooder. It is not enough to merely place the fountain containing sour milk before the chicks, but thy must be induced to drink it and the larger the quantity they consume, within reasonable limits, the better will be the results. Sour milk should form the bulk of the diet for several weeks, especially until all danger of the disease has passed.

Lice, mites and other pests are the poultrymen's most troublesome enemies. Vermin and germs must be consistently fought, especially during warm weather. Every farm, large or small, should have its sanitary schedule. In next week's article whitewashes, sprays and disinfectants are made the subject matter.

White Houdans



Of all the varieties of chickens introduced to the poultry raisers in the last half-century, none has been presented so nearly perfect as the White Houdan.

The originator worked on these fowls for seven or eight years before any were offered for exhibition or for sale; consequently the first exhibit was striking. White Houdans are equally as good in shape, size and laying qualities as the dark variety.

The greatest drawback to the dark variety as a table fowl has been its dark pin feathers, which is entirely eliminated in the new variety. This feature alone is sufficient to commend this new breed to producers of table poultry for particular markets.

The Houdan is an old French breed. It has been well known for centuries, and always held in high esteem as a wonderful layer and table fowl of superior excellence. It remained for an ingenious fancier to change its plumage from black and white to white, and thus make the Houdan even more valuable.

White Houdans give good results either on free range or in limited quarters. When full grown the females weigh five and a half to six and a half pounds, and males six and a half to seven and a half pounds. They are docile and easily confined.

SIMPLIFIED LESSON ON PROPER CARE OF AUTOS

(Continued from Seventh Page.)

tell me if it is due to the carburetor not being adjusted properly, or carbon on the spark plugs? Also please inform me if giving the carburetor more air produces a lean or rich mixture. W. A. A.

A. An overheated motor will groan as does yours. Here are some of the causes of overheating: water not circulating properly, because of pump not functioning, or to an obstruction of some kind in the piping. The inside of the hose may be rotted so that loose pieces of the rubber act as a check valve. You will probably be able to feel this by squeezing the hose. By taking off the filler cap you should be able to see how the water is circulating. A loose and slipping fan belt is very often, perhaps mostly, the cause of overheating. Remedy: tighten and treat with a little castor oil. Lime scale on cylinder walls of water jacket, or in radiator, is also often the cause of overheating. Remedy: drain off the water and then fill with water in which soda in the amount of about a handful to the bucket has been dissolved. Run engine about fifteen to thirty minutes, drain off and wash out thoroughly with a number of fillings of fresh water. Poor lubrication may be the cause. The oil should be drained out of the crank case about every 1,500 miles, and replaced by fresh oil. If this is not done the oil, which is used over and over again, is constantly being heated and cooled, and into which a certain amount of gasoline will find way through the piston rods, will lose most of its lubricating properties. The poor lubrication may be due to the oil pump not working properly or to the oil strainer being so dirty as to prevent circulation of the oil. The overheating may be due to running too long on retarded spark. Spark lever at the bottom of the steering column, which is often only held by a clamp, may have slipped. Carbon and too rich a mixture will also cause overheating. The stalling may be due to a weak spark, too late spark, or to a poorly adjusted carburetor. Also lack of compression. Adjusting the carburetor so as to give more air makes the mixture cleaner.

Q. I have a 1917 Ford, Model T, touring car. Low does not seem to give the car much forward motion. Bands seem to be good. Car has not run 300 miles. When using low I have to speed the engine considerable before car can get moving fast enough to use high. Engine often stalls on low. On reverse car will back for a few yards, then will give a jerk with noise of gears meshing, often stalling. Plugs are O. K. and set at 1-32. If I apply the foot brake when car is standing and in natural with engine running slow I can hear a moaning inside, often sounds like a gear. The bands seem to fit in their proper places. Is there anything except the brake band working on to the slow speed drum that could cause this noise? Can you tell me what causes the car to spring and jerk when I close the throttle and again upon opening it? I cannot slow up for a corner but this springing and jerking will be felt. The rear brakes are O. K. Lots of clearance when in neutral. The car smokes a lot at times and more on low than on high. Oil is about midway between the cocks. Valves ground about two months ago. Compression seems good. D. M. McL.

A. I believe that practically all of your trouble is due to the newness of the car. A car seldom gives proper service before it has been run about 3,000 miles. Outside of something radically wrong having been done in assembling the transmission (the gears may not have been put together with the punch marks in place), the adjustment of the bands and clutch could be the only thing which could cause the car to act as does yours when it has been "run in." The smoking is due to leakage of the oil past the piston rings, which probably have not been "run in" yet. I believe the smoking will disappear as the car is run a little longer.

GOES MILE IN 38:10 SECONDS

Joe Dawson Makes Record-Breaking Run on Atlantic Beach, Jacksonville.

A Chalmers stock chassis, with fan removed, now holds the highest mile record in the 230-cubic-inch class. Joe Dawson, hero of Indianapolis speed contests and winner of national records, who is now a member of the Chalmers experimental department, piloted the stock chassis in the record-breaking run on Atlantic Beach, Jacksonville, Fla.

This new highest mile record was made in 38:10 seconds, under the observation of Joseph Tracy, technical representative of the American Automobile Association. Fred J. Wagner, starter of national fame, timed the event. This new record is a surprise to the racing fraternity, as it is an unusual performance for a car of such piston displacement.

Not only is this new time a record for the 230-cubic-inch class, but it is faster by 2.2 seconds than the previous highest record in the 450-cubic-inch class, made on the same course.

California's Auto Revenue.

The California motor vehicle department already has received $2,282,217.27 for registrations for 1917. There have been 217,245 registrations of motor cars, 10,397 of chauffeurs and 1,863 of dealers.

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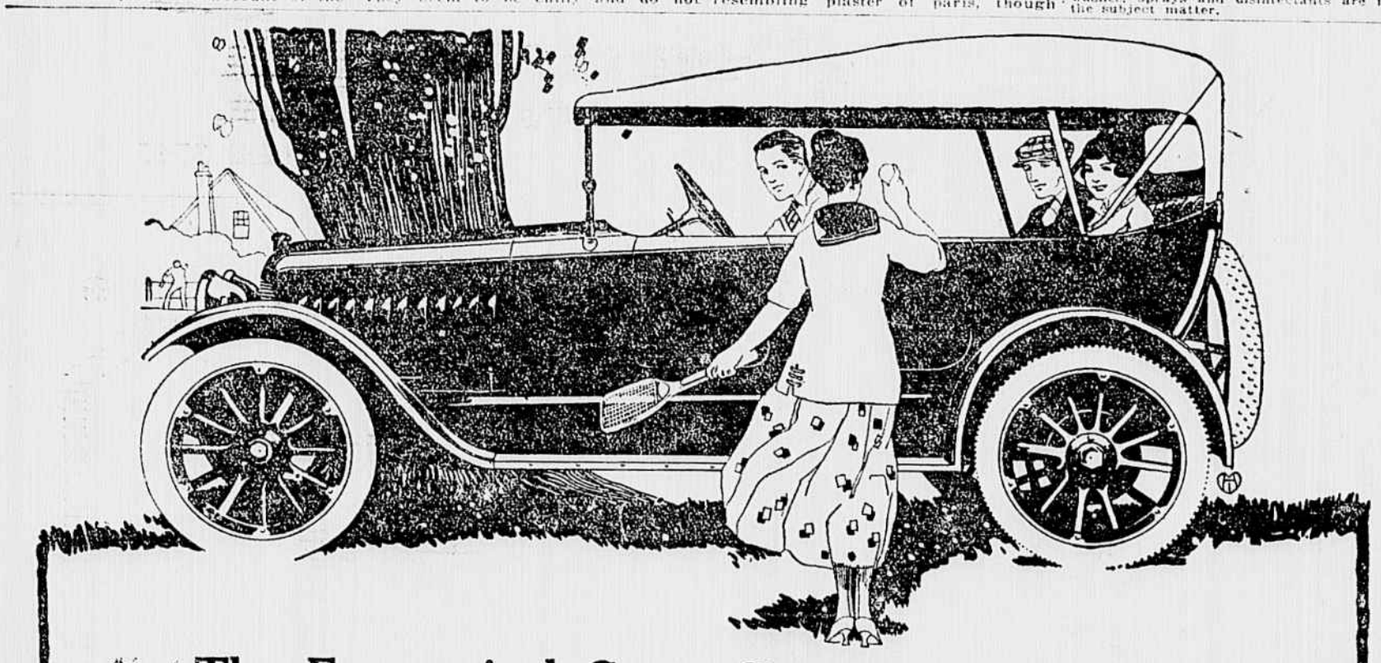

The Economical Grant Six
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THE most significant development of the past year or two has been the amazing increase in the demand for light, sturdy, economical cars like the GRANT SIX. This demand will continue to grow.

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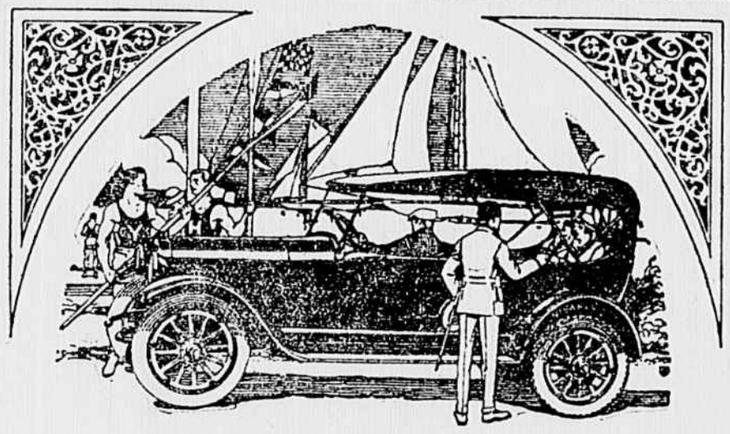

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Limousine	"Six-51"	seven-passenger, $2750 f. o. b. Detroit
Sedan	"Six-51"	seven-passenger, $2300 f. o. b. Detroit
Sedan	"Six-39"	five-passenger, $1775 f. o. b. Detroit
Town Car	"Six-51"	seven-passenger, $2750 f. o. b. Detroit

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