

TESTING HOGS FOR TUBERCULOSIS



Tuberculin Test for Hogs, Intradermal Method, Showing Enlargement at Seat of Inoculation Due to Positive Reaction.

(By JOHN R. MOHLER.)

Tuberculosis in the human family has been lessening materially during the past 15 years, but reports from the various meat-packing centers of the country fail to show the same encouraging condition regarding tuberculosis in hogs during the same space of time. It must be admitted that reports have come from several localities during the past four years showing a decrease in the number of tuberculosis swine sent to market, but a review of the collective records of the country at large shows an increase rather than a decrease in the number of swine affected by this disease.

The small amount of money required to begin hog raising and the quick returns on the capital invested make this industry an attractive one to the small farmer. The hog will make a pound of gain on less feed than most live stock, and will probably utilize waste food products of every variety if properly prepared for him. As tuberculosis in this species is chiefly acquired by indigestion, the significance of the latter statement is obvious.

The vitality of hogs or their powers of resistance to disease are necessarily lowered by the unnatural conditions which frequently obtain in hog raising, namely, the forced feeding for fattening and the small feeding pens in vogue in certain districts. When the enormous growth of a hog is considered, when it is realized that in the short space of 8 or 10 months its development is frequently 250 to 300 pounds—a proportionate increase of

weight unknown to any other species of domestic animals—the great metabolic changes which must necessarily occur can be appreciated. Such rapid development is very likely to take place at the expense of the disease-resisting powers of the animal.

When tuberculosis results, the lesions usually observed are discrete and of a chronic type, at times retrogressive and at other times slowly progressive, as manifested by calcareous deposits and fibrous encapsulation. It is not infrequent, however, that a more extensive and spreading disease is seen, and the lesions indicate a severe infection and rapid generalization of the bacilli, which in these animals may quickly follow the initial attack. And whether the disease assumes an acute, sub-acute, or chronic type, tuberculous growths may soon be found attacking lymph glands in widely separated parts of the body.

The intradermal method of testing hogs for tuberculosis has given excellent results. Two drops of tuberculin prepared by evaporating away two-thirds of the volume of the tuberculin previously prepared for the sub-cutaneous tuberculin testing of cattle, is injected into the dermal layer of the skin near the base of one of the ears of the hog. If the animal is not affected, no change in the appearance of the ear will result, but a positive reaction will at the end of 48 hours cause a swelling near the seat of their injection. This edematous enlargement may remain visible for 10 to 12 days after the injection in case the animal is affected with tuberculosis.

IMPROVING PIG CROP BY JUDICIOUS FEEDS

More Attention Given by Farmers to Rations and Care in Order to Secure Profit.

(By R. G. WEATHERSTONE.)

Many farmers have started out this year with the intention of doing better by their crop of pigs than they have in the past. By doing better, I mean giving closer attention to the feed problem, and the care problem, so that the pigs when mature will have made a favorable growth at a low cost, and at the same time have developed strong frames, especially in the case of those pigs which are intended to be kept for breeding purposes.

It will be well for every man who desires to bring his pigs through the season in good form and condition to calculate to supply some of those foods which are known to have a favorable influence on the development of the framework of the pig.

It is needless to say that corn alone will not serve the purpose. While it is true that corn in conjunction with good pasture makes a diet for the growing pigs which can hardly be improved on, it also often happens that the pasture contains little to attract the pigs.

In that case they are sure to lie around the yards and stuff themselves with grain in preference to seeking the grass and exercise in conjunction, which is so essential to the health and thrift of the animal.

The best bone building foods are those rich in protein and mineral matter. Skim milk perhaps stands at the head of the list, and it will pay to lay in some tankage, shorts and possibly some bone meal as well as some pure mineral matter.

It cannot be expected, however, that the feeding of foods bearing large amounts of protein and mineral matter, such as have been mentioned, will change the conformation of any part of the skeleton or, for example, make a pig stand straight.

This improvement will have to be made through selection, using no male or female that is faulty.

It might, too, be urged that if careful selection were practiced it would be unnecessary to consider the diet, since strong boned breeding stock would naturally impress these good points on their progeny.

On the contrary, it may be said that man has been trying for years to breed poor hogs out of their herds without giving attention to a balanced ration problem, and they are present only when they started.

He generally had that when men had little or no grain and do not know how to handle the growth of their hogs, the quality of the bone is generally satisfactory.

MAINE HEN HOUSE IS ADVANTAGEOUS

Feature of Structure Is Closet Form for Protection in Cold Weather.

In the curtain-front type of poultry-house used at the Maine experiment station a feature of the original plan on which considerable stress was laid was the canvas curtain front of the roosts. This curtain, together with the back wall of the house and the dropping board under the roost, formed a closet in which the birds were shut up at night during cold weather.

When the curtain-front house was first devised, it was thought essential to provide such a closet to conserve the body heat of the birds during the cold nights when the temperature might be well below zero. Experience has shown, however, that this was a mistake. Actual test shows that the roosting closet is of no advantage, even in such a severe climate as that of Orono.

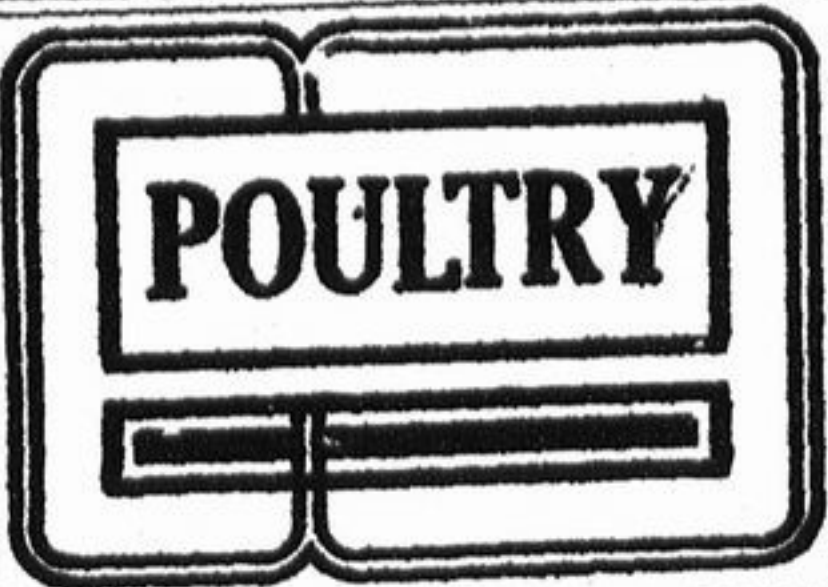
On the contrary, the birds certainly thrive better without the roost curtain than with it. It has been a general observation among users of the curtain-front type of house that when the roost curtains are used the birds are particularly susceptible to colds. It is not hard to understand why this should be so. The air in the roosting closet when it is opened in the morning is plainly bad. The fact that it is warm in no way offsets physiologically the evils of its lack of oxygen and excess of carbon dioxide, ammonia vapors, and other exhalations from the bodies of the birds.

For some time past it has been felt that the roosting closet was at least unnecessary, if not in fact a positive evil. Consequently the time of beginning to close the roost curtain in the fall has been each year longer delayed. Finally, in the fall of 1910, it was decided not to use these curtains at all during the winter. Consequently they were taken out of the house, or spiked to the roof, as the case might be. The winter of 1910-11 was a severe one. On several occasions the temperature dropped to 20 degrees below zero. During the winter the mortality was exceptionally low, and the egg production exceptionally high.

In view of this experience the station has decided to discontinue the use of the roost curtain. It would seem to be generally undesirable, or at least unnecessary.

Observe Stand Age Well.

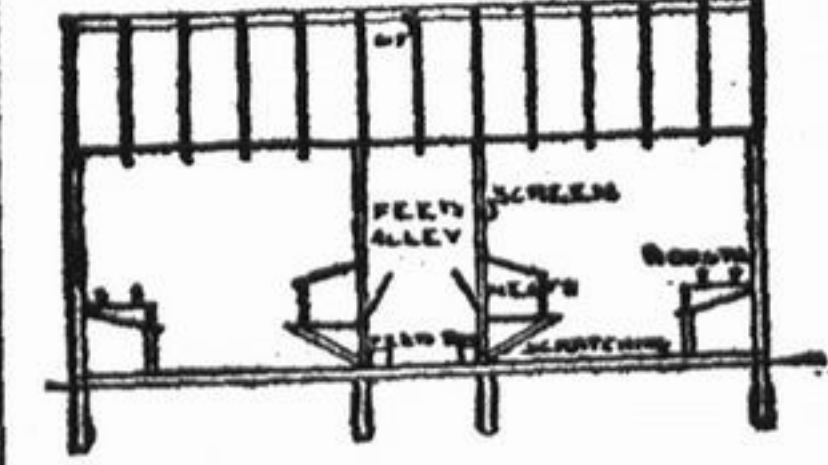
The fourth year after a cherry orchard is planted it will begin to bear, and by the time the orchard is ten to twelve years old it is safe to say we can pick from three to four crates of cherries off each tree. For the next ten or twelve years they are equal to a gold mine.



NEAT LITTLE POULTRY HOUSE

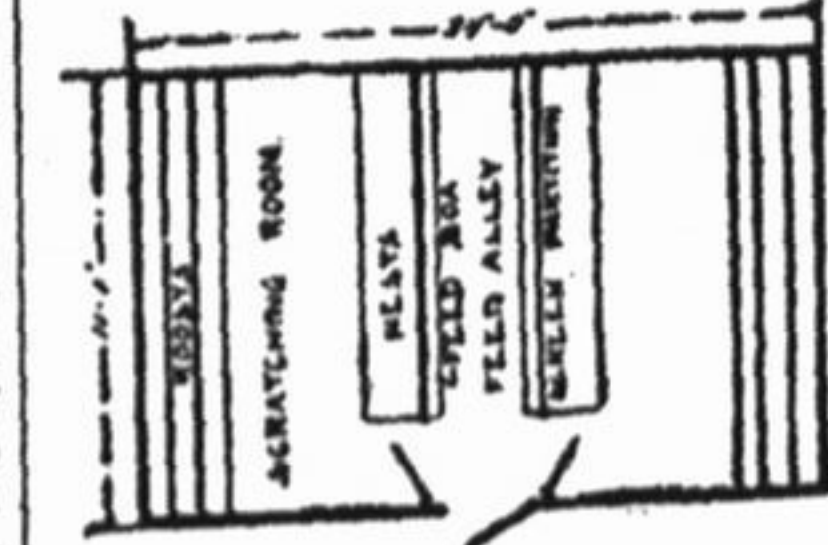
Concrete Foundation Makes Building Rat Proof—Both Inside Partitions Are of Wire.

A neat poultry house is shown in this plan. The house is 16 feet wide, 24 feet long and 8 feet high, to the eaves, with a hallway in the center 4 feet wide, making each poultry room 10 by 16 feet, writes W. A. Radford



End Section.

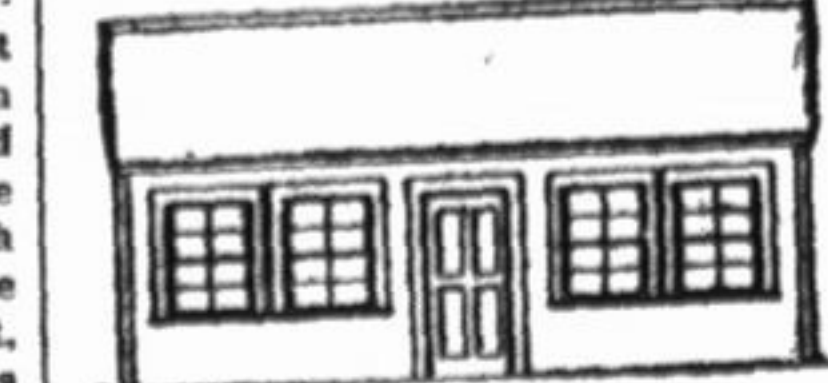
in the Farmers' Mail and Breeze. Dropping boards extend along the outer sides the full width of the building, and they are high enough up to leave scratching room underneath. The roosts are all on a level above the dropping boards. Rows of nest boxes extend along the partitions, so the eggs may be gathered without going in among the hens. Feeding troughs are set along the floor in the feed alley so the hens can reach through for feed and water. The back end of the alley is used for storage.



Floor Plan.

A concrete foundation makes the house rat proof. The concrete is covered about a foot deep with earth and the earth is supposed to be covered about a foot deep at all times with straw.

Both inside partitions are wire and there are wire doors in these partitions opening into the different apartments. Loose strips reach across from one plate to another and the space above these strips is filled with straw to secure ventilation without draft. This is helped by windows in each gable covered with thin cotton cloth. Twice during the winter season these strips are pulled down, the straw all taken out and fresh straw



Front View.

put in. This is done on a mild day when the fowls can be left out in the yard.

MILK FED TO THE CHICKENS

Liquid Contains All That Beef Scraps and Green Cut Bones Do, But in Diluted Form.

The most successful poultrymen feed some kind of animal food to their chickens of all ages and conditions. In the wild state birds secure both vegetable and animal foods. Bugs and worms supply the animal food, and seeds and other vegetable growth the vegetable food. The animal portions of the foods is always a necessity for normal maturity and good egg laying.

So essential is animal matter in the poultry feeds that the packing firms manufacture and sell large quantities of prepared beef scraps and ground bone, which are sold very widely over the country. Those who use them find that it pays very well. It has been found both experimentally and by practical tests that sweet milk, sour milk, buttermilk—in fact, milk in any form—contains all the elements found in other forms of animal matter.

Milk contains all that beef scraps and green cut bones do, but in a more diluted form, and it is highly digestible, and no digestive troubles arise from either old or young chickens consuming large quantities of it.

Every one who keeps cows and poultry on the same farm will find it profitable to reserve all the milk for feeding the flock, and dispose only of butter fat. It is the best animal food that can be given to them. Give all the chickens all the milk they will drink. It will do them no harm.

Nest for the Hen.

Everything from a nail keg to a grocery box may make a hen's nest. The hen is not a sentimental bird and does not care for fancy frills and contraptions. Give her a box or a barrel, filled with the right nesting material, soft bruised straw, and the whole properly darkened, and she will do her share in trying to keep it supplied with eggs.

VALUE OF THE LITTLE BIRDS

They Labor Incessantly in Fields, Destroying Many Injurious and Destructive Insects.

The birds are the best friends that the farmer has. Why? Because they labor daily in the farmers' fields, destroying the insects that destroy or feed upon the tender plants of the fields. Have you a friend that will labor in your fields daily destroying these insects just for his board and clothing? No, indeed; you cannot place your eye upon but one friend, that will do this for you. That is, the little birds which are being slaughtered by you in large numbers. Why do you not try to protect these friends who are so faithful to you, when they ask you for no pay for services rendered you in your fields, destroying insects that injure your plants, simply because you have not stopped to think over the matter as you ought to. Do you not realize that they are worth hundreds of times more to you as insect destroyers than their flesh is worth to you in a bird pie or in some other way?

Farmers, it is time to wake up to the fact that these little bird friends must have better protection. Why? Because they are needed more and more every year. As people increase and the clearing of more lands increases, the insects are bound to increase very rapidly, because they feed mostly from the farmers' fields. As insects increase, why should not the birds increase also? Simply because they haven't had the protection that they ought to have had. Some of the species of birds that used to be found in large numbers are now very seldom found at all, simply because they have not received any mercy from the hunter, and because the laws are not strict enough on this one special thing.

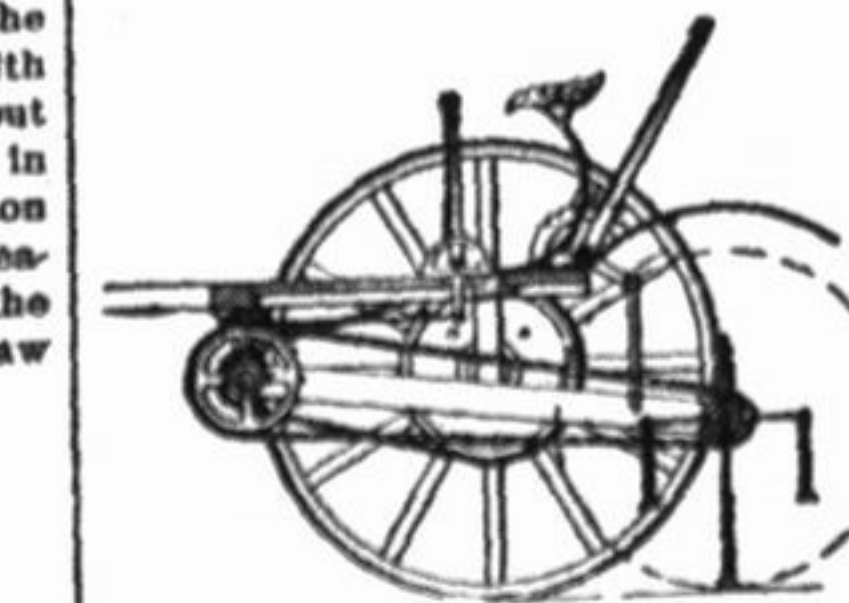
Every farmer should feel it his duty to urge his lawmaker to do all in his power to pass a law that would give his little friends in feathers better protection. A law should be passed in states having no such law, prohibiting the killing of these birds under a heavy penalty and imprisonment for violation thereof. If this were done, you would see a great improvement in crops and fewer insects. Good enforcement depends largely on farmers.

MACHINE TO KILL SPROUTS

Apparatus Invented by Missouri Man to Destroy Second Growth in Very Effective Manner.

The Scientific American, in describing a vehicle adapted for use on land cleared of timber, says:

This invention pertains to agricultural machines, and the aim is to pro-



Sprouts or Growth Destroyer.

vide a growth destroyer more especially designed for use on land that has been cleared of timber, to destroy the sprouts or returning second growth in a very simple and effective manner. For this purpose use is made of a wheeled vehicle adapted to be moved over the ground and provided with a revolvable beater, having flexible arms adapted to forcibly strike and cut off the growth at or near the ground surface. The illustration shows a sectional side elevation of the apparatus.

GARDEN and FARM NOTES

Rush the plowing. Prepare for the fall rains. The onion thrips is a bad pest. Slack fence wire is slack farming. Rhubarb is an easy crop to grow. The crop of potato bugs was light this year.

Potatoes infested with rot are a poor holding proposition. Joint grass may be killed out in the best fields by clean cultivation.

As a rule, we do not make as good use of our pasture lands as we might. It is important that an alfalfa field where seed is grown be free of weeds.

It will pay to batten the cracks in the barn before coming of cold weather. The state and county agricultural fairs are of value to every farmer in the country.

If the pasture is not available, silage or a good soiling crop will be absolutely indispensable. Before you fill your stove silo it should be painted on the inside with coal tar thinned with gasoline.

Improvement in the quality and condition of wheat is not the only benefit derived from stacking the crop. Farmers who do not have silos should not let a large percentage of the corn crops' value go to waste.

The potato digger works best in a loose, mellow soil and the ground should be free of stones and stumps. The cutting of an alfalfa seed crop is usually done with an ordinary mower, which may or may not have a bunching attachment.

One of the first things the farmer needs to look after is water-tight stalls and gutters and the use of enough bedding to absorb all the liquids.

A SAFETY-DEPOSIT BOX FREE

There should be a safety-deposit box key in every Du Page county home. Think of the losses and complications that would ensue upon the destruction by fire of all the deeds, wills, insurance policies and other like papers that are now exposed to that danger—tucked away in trunks, desks, and dresser drawers!

Every head of a family owes it to himself and those upon whom such a loss might fall to protect his valuable papers.

And we feel that it is a duty we owe to this community to make such protection so cheap and so convenient as to utterly eliminate this danger within the sphere of this bank's usefulness. Therefore,

Every new patron renting a box in our vault for the year 1913 will be given free rental for the remainder of the current year. Boxes from \$2 a year up.

FIRST NATIONAL BANK OF DOWNERS GROVE

Mertz & Mochel

HARDWARE COAL and FEED

Poultry and Field Fencing Paints, Oils, Brushes, Etc.

GOLD MEDAL FLOUR

36 South Main Street

TELEPHONE 29

It's There—Even if you Can't See It

Wear alone will prove the sterling worth of our shoes to you. We don't talk cheap shoes to anyone—neither do we talk high priced shoes—but we do talk quality shoes.

Shoes that the manufacturers guarantee—shoes that we can guarantee.

It will pay you to investigate our claim before you buy

MODERN SHOE REPAIRING

CHAS. L. JOHNSON

44 N. Forest Avenue

CENTRAL HOTEL

(Formerly THE PARK HOTEL)

Remodeled and Refurnished under New Management Rooms and Board: Transients, \$1.50 a Day Regular Boarders, \$6.00 a week.

MEALS AT ALL HOURS

MRS. T. STAHL, Prop.

14 Warren Ave., near Main St., opp. the Depot

Winter Is Coming On

The material for your

Fall Clothing

ought to be in your possession now. We have been holding it here for several days. It's time for a change of ownership.

Likewise, your Footwear should undergo the same change. Whenever you are ready to make the transaction we will show you some very special values in

Fall and Winter Wares

In speaking of wares, you should see our Underwear before purchasing elsewhere.

B. E. KEHLER

Dealer in General DRY GOODS and GROCERIES

56 South Main Street, corner of Curtiss

TELEPHONE 48 W