

stated in a paragraph elsewhere in this issue, which honor was credited to another.

J. C. S.

Disposition of Tuberculous Animals.

The following article is taken from the report of a sub-committee of the Commission appointed by the American Veterinary Medical Association to deal with Bovine Tuberculosis. This sub-committee consisted of Hon. W. C. Edwards, Dr. J. R. Mohler, and Dr. Frederick Torrance, and had for their especial study the question of the disposition of tuberculous animals:

"Having removed the exceedingly dangerous cases from the herd by slaughter, the balance of the tuberculous herd may be treated by the Bang system, which consists of the establishment of two herds of cattle, one containing the animals which react to tuberculin, and the other those that proved to be healthy. Each class of cattle is kept entirely separate from the other, in different stables when possible, and under the care of separate attendants, using separate utensils. The calves born of the diseased cows are removed from their mothers at birth, and placed in the stable with the healthy animals, where they are reared upon the milk of healthy cows or upon other milk which has been properly pasteurized. In this way, the healthy portion of the herd constantly increases, while the diseased animals are disposed of as rapidly as may be deemed necessary, until finally all of them are gone, and the remaining herd is composed entirely of healthy cattle. The tuberculin test is applied to the healthy herd at regular intervals, annually or semi-annually, in order to detect any cases of latent tuberculosis or recent infection which may appear.

"A modification of the Bang system is Oster-tag's method of suppressing tuberculosis. This system demands only a clinical examination of the original herd, with the elimination of all open cases of tuberculosis. The calves from the remaining cows are immediately removed and brought up on pasteurized milk in the same manner as in the Bang system, and a new herd is thus established from the young stock. Healthy nurse cows could be used for these calves, instead of feeding them on pasteurized milk. The tuberculin test is applied to this new herd at stated intervals, in order that any cases of tuberculosis which may develop therein may be discovered promptly. Neither of these systems, however, has met with much favor in this country, as it required a considerable length of time and care to create a herd free from tuberculosis by either of them. Nevertheless, the inauguration of Bang's or Ostertag's method in herds of valuable animals, whether they be dairy or beef breeds, is unquestionably of an economic value, and in such cases either of these systems should be encouraged. On the other hand, in ordinary beef or dairy herds, the practice of Bang's or Ostertag's method in this country has not met with much encouragement, owing to the extraordinary supervision, time and labor, as well as the loss of market milk from the reacting cows, which it involves.

In such herds, the best ultimate results have thus far been obtained by the obligatory disposal of all the clinically-affected cows, and giving the dairyman the alternative either to pasteurize the milk from the remainder of his herd, or to be forced to refrain from selling the raw milk from the infected herd at all. In case he adopts the former method, the herd composed of diseased and healthy cattle should be placed in quarantine, under the supervision of sanitary authorities, and no sales should be permitted from the herd, except for immediate slaughter. The alternative method will compel him to dispose of his tuberculous animals in case he refuses to pasteurize the milk. The suppression of tuberculosis could be greatly facilitated, and the co-operation of many of the herd-owners could be gained, by a provision by which a certain percentage of indemnity could, at least for a term of years, be paid for the condemned animals. The scale for such an indemnity should be arranged in accordance with the final disposition of the carcass under competent inspection.

"Another method of eradication should receive serious consideration as being of value in some localities. This is known as the Manchester system, which is either the Ostertag or Bang system applied to localized areas, or even individual farms, from which centers the work progresses to surrounding or neighboring districts and farms. Inasmuch as the animals affected with clinical tuberculosis are the greatest sources of danger in the dissemination of the disease, compulsory reporting of such cases should be inaugurated by the State, as is now done in many places in the control of human tuberculosis. Mandatory reporting of these cases, and their prompt slaughter, are very essential, as only by the elimination of these exceptionally dangerous cases can it be hoped to take up all the other details by which a successful control of bovine tuberculosis can be accomplished.

"In conclusion, your committee, having regard to the disposition of pure-bred cattle, or valuable

animals kept for either breeding or dairy purposes, would strongly recommend a system requiring the removal of all clinical tuberculous animals from the herd, the segregation of all calves from the remaining cows, in order to establish a new, clean herd, the use of tuberculin-tested nurse cows or pasteurized milk for these calves, and the periodic application of tuberculin to this newly-established herd, as the only thoroughly reliable one."

The Ram at Breeding Time.

There are two factors at this season of the year, the proper control of which determines largely the profit or loss resulting from the flock for

this, the ram should be well fed upon rations that are invigorating, but not fat-producing, for some time previous to the mating season. The ram should be kept in a lot away from the ewes, though, if he can have a wether or ram lamb for company, he is usually more satisfied. The lot would be more suitable if containing grass and shade. From this lot there should be access to a darkened box stall or small shed, as a retreat from the sun and flies. When left in this lot without much company, the ram is likely to fail to take sufficient exercise. For this reason, shepherds frequently use a pasture well removed from the barns, keeping the ram up in the day time and turning him out at night. Some method must be adopted to insure the taking of exercise, if the ram appears to be getting lazy and fat. For this purpose, watering and feeding at the farther end of the lot helps.

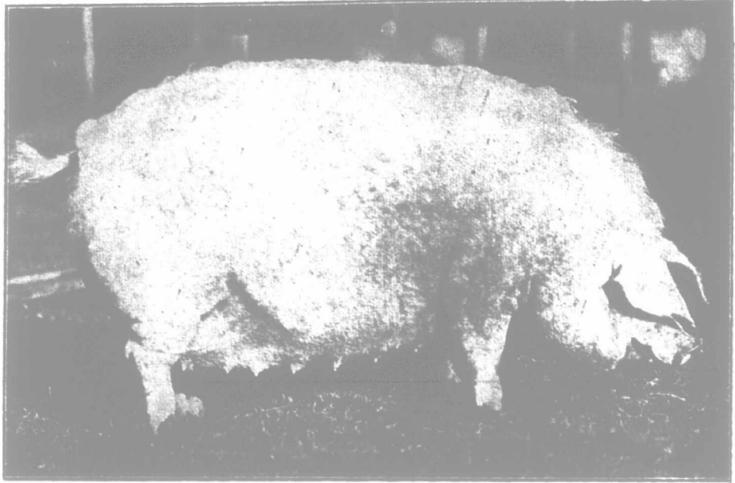
Feeding should be regular. If grass is short, fresh clover hay, or peavine hay, rape and cabbage, are greatly relished. Oats, bran and a little oil meal, make a good grain ration; barley or corn should be avoided. When the mating season is well on, the rations should be increased somewhat. When mating begins, the flock should be brought to the sheep shed every night, and kept in until morning. The ram may be turned in with the flock, and in a half hour he will find if any are breeding. But it is preferable to use a teaser, and thus spare the ram any unnecessary

worry. For teasing, a shearing or other common ram, well aproned, will serve. The breast of the teaser should be marked daily. As the teaser finds the breeding ewes, they may be removed from the flock to a separate pen. If more than two turn up of an evening, it is preferable not to breed all of them that night, reserving part till morning; but it frequently happens that two have to be bred at the close of one day. Such services should be preferably an hour apart, and the ram should be allowed to serve one ewe but once. The teaser should be put with the flock again in the morning, before the ewes go to pasture, to make sure none were missed the night before. In this way, one good ram may attend to a flock of nearly a hundred sheep, getting as large percentage of lambs as he would when running with only thirty in the pastures.

Cost of Making Pork.

Editor "The Farmer's Advocate":

I have been greatly interested in the article by "Perth Co. Farmer," in your issue of Sept. 8th, under the title, "Cost of Pork Production." I will leave to other correspondents for discussion that part of the subject dealing with the treatment received by the farmer at the hands of the packers, contenting myself with the statement that I believe present prices for pork give the feeder of the right class of hogs an opportunity for making a fair profit. But his figures on the cost of bringing a hog to the weight of 200 pounds are somewhat of a puzzle to me. If I have figured correctly, his hogs required 1,260 pounds each of grain to carry them to 200 pounds. To me, this seems an extraordinary amount for "good doers" to require under the conditions he names. I am now feeding ten that I have been classing as somewhat below the ideal as feeders. They are 5½ months old, and would average perhaps 160 to 170 pounds, one of them being a "runt." They have the run of three-quarters of an acre of rather indifferent pasture. They can milk and buttermilk from two cows in



Breed-study Contest: What Breed is This Pig, and Why?

The above is the picture of a pure-bred registered pig. Replies will be received until noon Saturday, October 8th, under the same conditions as the previous subjects of our Breed-study Contest.

the entire year. One of these is the proper management of the ewes; the other, and the one to be discussed here, is the management of the ram during the breeding season.

Where the farm flock consists of from fifteen to forty-five sheep, one ram will take care of them all, even when allowed to run with them in the field. If the flock consists of from more than fifty to sixty, by careful management, one ram will still take care of them; but if the usual practice of letting the male run in the pastures with the sheep is followed, it will be best to split the flock into two groups, and put one male with each flock. For it must be remembered that by the system of flushing, nearly all the ewes will breed inside of three weeks, though a few will run over. If the



Velozia of Giamis.

Aberdeen-Angus cow. A Royal champion.

ram is allowed to run in the field with the flock, he is likely to be partial in his attentions, making a greater demand on his energies than is necessary, limiting his serviceability, and rendering his services during the latter part of the season much less reliable. However, with a small flock of ewes, such a method may be followed, with fair success, and it has the merit of eliminating much trouble.

Where a man has a valuable ram whose energies he does not wish to have unnecessarily overtaxed, or, where there is a flock of considerable size, and the owner wishes to avoid the purchase of two good sires, by proper management the services of a well-managed ram may be made to go twice as far as they would at first. To do