

Essays on Swine Breeding and Management Criticised.

BY MR. J. C. SNELL, BEFORE THE DOMINION SWINE BREEDERS' ASSOCIATION, AT GUELPH.

(Continued from page 4.)

A HINT FOR THE PACKERS.

I have only words of commendation for the paper of Mr. Wm. Davies, of Toronto, on "How, When and Where to Market Hogs." I have more than once in the past felt it my duty, in the interests of the farmers of this country, to antagonize Mr. Davies when he undertook to teach them "how to breed hogs"; but when he writes of how to dispose of them, he is at home in his work, and knows what he is writing about. It is all right for the butcher or the packer to point out to the farmer the quality and condition of product most desirable for the demands of the market; but when he undertakes to give advice on the science of breeding, he goes outside of his proper sphere, and is liable to lead inexperienced men astray from the best paths.

THE BATTLE OF THE BREEDS.

My friend, Capt. Young, of Tupperville, Ont., has, I think, in his paper, come far short of settling the question of "the best breed of swine." That is a problem with which mighty men have been wrestling for centuries, and to all human appearances, it is as far from being solved as ever it was. In Old England, the home of most of the breeds, there is as much difference of opinion upon the subject as there is here; and in the United States, where several very useful breeds have originated, the battle of the breeds which has been waged for many decades is still going on. The home-made breeds—Poland-Chinas, Chester Whites, and Duroc-Jersey, (the black, white, and red)—are as fiercely as ever contending for the ascendancy, while the Berkshire, with characteristic quietness, dignity, and conscious superiority, is steadily gaining ground and making friends in all sections of the American Continent. Capt. Young seems to think that because the majority of the farmers of the Western States favor the Poland-Chinas, that must be the best breed; but he seems to have overlooked the fact that they have been bred and built especially for a section of the country where corn is cheap and plentiful, and where a wasteful system, or want of system, of feeding it to cattle is followed, where the corn is thrown upon the ground for the cattle, unshelled and unground, and the hogs are allowed to follow as scavengers, gathering up what grain is left, and later on selecting from the droppings of the cattle the undigested corn which has passed through them. It is here that the careful observer sees the object in breeding hogs with ears so arranged as to protect his eyes, for when a steer raises his tail, there will a Poland-China hog be anxiously intent on the plums in the pudding. Capt. Young evidently pins his faith to the majority; but let me remind him of the fact that the majority is generally wrong. If that were a safe rule to follow in the matter of breeds and breeding, the "scrub" would be found to have it by a large majority.

The writer remarks:—"Do not the Americans buy our horses and sheep, and everything we excel in? Then, why do they not buy our hogs?"

I have a very pleasant experience that they do buy our hogs, and pay good prices for them, too. There is scarcely a week in the year that I do not ship hogs to—not one section, but to all sections of the United States, from the sunny South to the far West; but they are not Poland-Chinas. Progressive Americans are always looking for something better than they have, and they are not likely to come to Canada for Poland-Chinas.

What we want is a cosmopolitan hog,—one that will give a satisfactory account of himself under a variety of circumstances, suiting himself to the extremes of climate; active, yet strong in constitution; capable of early maturity, and making the best returns in quality of meat and in money for the food consumed. Given such an animal, it is to the average farmer of little consequence of what breed he is. Let each man decide for himself which is the best breed for him, the most suitable to his tastes and preferences, to his farm and his market, and then by careful observation and experiment seek to improve the breed he has, by selecting the best, those nearest to the type which the market demands, and he is tolerably sure to make a success.

FEEDING FOR FAT AND LEAN.

Mr. Alfred Brown, in his paper raises a point which is worthy of consideration; that is, the effect of different feeding stuffs upon the quality of meat in producing fat or lean. This is a matter which can probably be best dealt with at our Agricultural Experiment Stations, and it is important that a continued series of experiments should be made, and the results published, so that farmers may be informed as to the best methods of feeding to produce the kind of meat required by the market. The experiment quoted by Mr. Brown, from the report of the Wisconsin Station, certainly tends to show that the quality of meat is largely affected by the kind of food, but the cost of production is not given, and that is an important consideration.

PORK VERSUS GRAIN SELLING.

Mr. D. E. Smith, in his paper deals intelligently with the question, "Can a pig be fed profitably on grains?" and gives a rule which seems to have been fairly well tested at the different Experiment Stations, by which any farmer may ascertain

whether he is getting a better price for his grain by converting it into pork than by selling it on the market; and at present low prices of grain, with judicious management in feeding, this is a matter that hardly admits of a doubt. It is well that the farmer may know that in this way he is largely independent of the grain buyer, and may find another and a better market for his grain, and at the same time enrich his farm.

In dealing with the question, "How many hogs may be kept on a 100-acre farm?" Mr. Smith shows from statistics that in 1892 the average number of hogs in Ontario was not more than five to each one hundred acres of assessed farm lands. It is safe to say that this number might profitably be doubled, and instead of exporting little over half a million dollars worth of swine products, we could easily make it a million, and if we exported in proportion to population, as our neighbors in the United States, we should bring to our country six and a half millions of dollars for products of the hog.

"THAT TIRED FEELING."

The last chapter in our report for 1893 deals anonymously with "that tired feeling" manifested by so many of the hogs seen at the fairs and in feeding pens. As a rule, if the mother has had rational treatment, the little pigs are not born tired, and if they become so in later life it is well to inquire into the cause of such a condition. The writer very properly says: "No matter how fleshy a hog becomes, he ought to be able to stand up on his pins." Now, this will depend largely upon the way he is fed and brought up. Quality of bone is something which demands consideration, as well as quality of flesh, and we believe may be largely affected and controlled both by breeding and by feeding. It is not the coarsest bone that is the strongest, and coarseness of bone indicates coarseness of flesh and a slow feeder. It is the medium-sized bone that has good stuff in it that should be sought after in breeding, and this should be supplemented by an active life, by avoiding close confinement, by giving, and if necessary, compelling exercise, and by feeding such foods as are calculated to promote growth and strength of bone, all of which tends to produce a good constitution and a healthy and profitable animal.

[NOTE.—The rule referred to is as follows:—"It is safe to say that four pounds of mixed meal will produce an increase of a pound in live weight up to 150 or 160 pounds; beyond that weight it may require more. Then if, by way of illustration, we mix one bushel of peas, one bushel of wheat and one bushel of barley, we should get one-fourth their weight, or forty-two pounds of pork, live weight. If we sell the pigs at \$4 per hundred, we would get 60 cents a bushel for wheat; if we obtained \$5 a hundred, we would get 75 cents a bushel for our wheat, and if \$6 a hundred, it would come to 90 cents a bushel for the wheat. With peas and corn it applies just the same. For barley, if pigs sold at \$4 a hundred, we would obtain 48 cents a bushel; at \$5, 60 cents, and at \$6 it would be 72 cents a bushel. Of course we have our trouble, but if we consider that our farms are being enriched by feeding the grain on them, then we think the trouble is balanced and our figures still hold good."—Ed.]

Canadian Jersey Breeders Organize.

A meeting of Canadian Jersey breeders was held in Toronto, on Friday, December 28th, and an organization was effected, to be known as "The Canadian Jersey Breeders' Association." The officers elected for the ensuing year were: President, A. McLean Howard, sr., Toronto; Vice-President, J. C. Snell, Edmonton; Secretary-Treasurer, Capt. Rolph Markham. Delegates to Industrial Exhibition Board, Toronto—Messrs. Howard and Rolph. Delegates to Western Fair, London—R. Gibson, Delaware; Mr. Humpidge, London. Board of Managers—Messrs. Smith, of Smith & Son, Highfield; W. D. Reesor, Markham; D. Duncan, Don, and Geo. Smith, of Smith & Son, Grimsby. The membership fee was fixed at \$1. A constitution was adopted, consisting of nine articles: Name, Object, Membership, Officers, Elections, Annual Meeting, Board of Managers, Expulsion of Members, also a set of By-laws. A very interesting letter was read by the Secretary from Mrs. E. M. Jones, Brockville, approving of the formation of the Association and suggesting for consideration a number of valuable ideas.

It is confidently expected that in the making up of prize lists for the larger shows this year prizes more commensurate with the Jersey interests will be offered. Those in attendance did not favor the idea of starting a register for Jerseys in Canada; at all events, not for the present. The annual meeting is to be held in March each year hereafter.

Jottings from England.

The close of the year in England finds us in good spirits, and our flocks and herds in as healthy a state as we remember; but the prevailing scarcity of money is not confined, we expect, to either side of the Atlantic.

A recent slight outbreak of foot and mouth disease was easily stamped out, owing to the vigilance of the authorities, whose rules are most severe; even fox-hunting was stopped in the affected areas, lest the disease should be spread. All local markets were also stopped, but this only lasted a few weeks, and a completely clear bill of health was secured.

We have been shipping sheep to New Zealand, and there has been a good demand at current prices for the autumn season.

Shorthorn cattle have realized an average of over £1 per head above last season, and many more have been sold, and enquiries for dairy cattle are coming from South Africa, which is importing many varieties of stock this season.

Wishing you and your readers the compliments of the season, "W." London, W., Eng.

Fattening Lambs.

[Paper read by Mr. C. A. Zavitz, B. S. A., before the Dominion Sheep Breeders' Association.]

When thinking over the subject of "Fattening Lambs," I was forcibly impressed with the many sources of information regarding this subject, as well as many others, which it is our privilege to enjoy at the present day. The man who is going to make the greatest success in the handling of live stock in the future, is the man who will take advantage, not only of his own experience, but also of the experience of others. The day is not far distant in Ontario when a man's knowledge of live stock matters did not extend very far beyond his own personal experience. How different we find it now. The Agricultural press, the Live Stock Associations, the Experiment Stations, the Agricultural Colleges, etc., all have the tendency to make the experiences of a few the property of all. Wise is the stockman who lives up to his privileges of the present day, and indeed foolish is he who allows these precious gems of thought and of experience to remain unutilized.

If we hope to reach success in producing mutton at a fair profit, we must turn our attention closely to the different requirements of the work. A close study of the needs of the animal, the feeding values of foods, and the demands of the markets are of the greatest importance. The cheapest foods, which will produce the greatest weight and the best quality of mutton in the shortest time, are, of course, the ones to be procured when possible.

The lambs must be properly fed and cared for from the time they are born till the time they are placed on the market, if the best results are to be obtained. Lambs gain in weight rapidly when young, and experiments go to show that in nearly all cases, as the age advances, the daily increase in the live weight of the animals becomes less, and the cost of producing each pound of increase becomes greater. This is a fact which every man who is feeding lambs for the market should keep constantly in view, and knowing this to be true in regard to the fattening of lambs, it is plainly seen that early maturity and financial profit are very closely connected. Let us now endeavor to ascertain some of the methods of feeding which would help to bring about the best results.

It has been the custom in the past among some farmers to depend entirely upon their pasture lands as the source of food for their ewes and lambs during the time from which they leave the winter quarters until the time the lambs are weaned. Does this show the greatest economy in feeding either the ewes or the lambs? I feel inclined to say that in the majority of cases it does not. The question as to the advisability of feeding grain to lambs during the summer months has been looked into very carefully at the Wisconsin Experiment Station. Prof. Craig conducted experiments in 1891-2 and 1892-3 with ewes which were kept for their lambs and wool, and for the purpose of ascertaining the effects of different kinds of treatment both upon the ewes and the lambs.

A comparison was made of feeding grain to unweaned lambs, to ewes, and to both ewes and lambs, and of feeding no grain. The trial, which lasted for fourteen weeks in 1892-3, was with four groups, with ten ewes and fourteen lambs in each group. The conclusions from this experiment are given as follows:—

1. "It pays to feed the lambs before they are weaned all the grain they will eat, when on good blue grass or clover pasture with their dams. This conclusion is endorsed by a previous trial."

2. "When the ewes have been properly fed during the winter, so as to be in good condition at lambing time, it does not pay to feed them grain when on pasture with the object of securing more rapid and profitable gains in the lambs."

In no instance was there any apparent benefit to the lambs from feeding grain to their dams; there was a marked advantage in feeding the grain directly to the lambs. The value of the grain-fed lambs was three-fourths of a cent per pound higher than those receiving no grain.

It is an excellent plan to have some supplemental food for the sheep in order that a large number of animals can be kept upon a certain area of pasture land, and at the same time have no danger of any lack of succulent food material of the best kind, when the pastures partially fail. Several different crops are grown for this purpose, such as corn, tares, and mixtures of grains. During the past three years, oats, wheat, peas and barley have been grown in various combinations at the Agricultural College. Of all the mixtures used, the heaviest average yield per acre was obtained from growing peas and oats in combination. These have been grown in varying proportions, and it has been found that one and one-half bushels of oats and one bushel of peas have given the most satisfactory crop. This mixture gives a green fodder of excellent quality when cut before reaching maturity; and if allowed to ripen, the grain can be threshed and fed as a winter ration, to good advantage. A number of varieties of peas and of oats have been grown in mixtures, and the Joannette oats and Grass peas have been found to produce a fodder which would be well suited for lambs, as each variety produces a fine quality of straw.

As autumn feed for lambs, I believe there is nothing that can nearly equal the rape crop. While there are some of the leading breeders who have grown rape to a large extent for several years, yet I am surprised that not a greater number take the