

ing the *two poor cows*. Can you prove you haven't got them?

The time is now coming to control and supervise the service of the bull. Midsummer and dog days are the best time for the cows to be dry and preparing to calve. The winter is the best time to make milk. The product of four cows, fresh in the fall, has been found in actual practice to be equal to the product of five cows which calve in the spring.

THE WESTERN DAIRY SCHOOL.

The Dairy School at Strathroy will open again on the 24th of November, 1897, and will continue until the 8th of April, 1898. Short courses will be given in both butter and cheese-making by competent instructors. The equipment of the school is of the best, and farmers' sons and daughters should take one or more of the short courses. The courses are made short on purpose for them, in fact the school is the farmers' dairy school.

During the summer, milk from the surrounding country was received, separated and the skim-milk returned to the partons in a sweet condition for feeding calves. It was found to keep sweet for twenty-four hours. The butter commanded the highest price, both in Canada and in England. Application for admission should be made to the superintendent of the dairy school, F. J. Sleightholm, B.S.A., Strathroy, Ont.

QUESTIONS AND ANSWERS.

J. B.: "What are the distinctive features of the Hampshire Down, Suffolk, and Oxford Down sheep? From whom can reliable stock be had in Ontario and Quebec?"

[The Hampshire Down sheep are the heaviest of what are called the Down breeds, though truly speaking the Southdown is the only breed raised on the Downs. The original stock of the Hampshire Downs were the native sheep of Hampshire, Wiltshire and Berkshire, crossed with the Cotswold and Southdown. They thus possess the fine mutton and wool producing qualities of the Southdown combined with the superior size and stronger constitution of the original sheep and the Cotswolds. They mature early and fatten quickly.

They have perhaps the largest head of all the Down sheep, carried on a neck somewhat thick and particularly erect. The ears are long and inclined to fall slightly outward. The face, feet and shanks should be of a rich, dark brown color. They have a Roman nose, the head is well covered with wool, and the body is long.

The Suffolk sheep are descended from the old horned Norfolk sheep, improved with Southdown rams. They were first recognized as Suffolks in 1859. They are hardy, prolific, and mature early. They have black faces and legs, are hornless, and closely resemble the Southdown in character and wool, but are about thirty per cent. larger and proportionately longer in the leg. The head is longer and finer than that of the Southdown, a medium size with black ears and bright eyes.

The Oxford Down is the result of a blending of the Hampshire and Cotswold. They are very hardy and well

adapted to localities favored with only inferior herbage. They attain heavy weights at an early age, and produce a large crop of wool. The face of the Oxford Down is generally brown, and though sometimes inclined to be grey, should not be speckled. The legs are of a dark brown or smoky color. The head is longer, the nose thinner and more Roman shaped, and the fleece looser and more lustrous than that of the Shropshire.

The Suffolk and Hampshire sheep have not been bred in Canada to any great extent, in fact are only being introduced. The Oxfords are well established. A glance over the advertising columns of FARMING, and the breeders' lists in the columns of the *Agricultural Gazette*, will show who are the leading breeders of these kinds of sheep.]

PERMANENT PASTURE.

Editor of FARMING:

SIR,—I am thinking of laying down a large tract of land, say about one hundred and fifty acres, to permanent pasture. The land is very shallow, in some places there is not more than six inches of clay on top of the rock. I would like to get the experience of some one who has laid down land to permanent pasture.

Yours truly,

W. J. MITCHELL.

Kirkfield, Ont.

Editor of FARMING:

SIR,—In your issue of November 9th, Mr. MacLellan, of Quebec, asks for information re permanent pasture. I wish briefly to say that some fourteen years or so ago I laid down two fields, and have been well satisfied with the results. Of course I got soundly rated and laughed at by my neighbors, but I am used to that kind of thing. I followed corn with oats and seeded, and I am satisfied that more nourishment is now, and has been each year, produced, than would have been afforded by the land in ten years by the ordinary process of seeding. Of course it costs money, nearly all experiments are costly; but the results are what count. Although I sold the farm in 1889, I have closely watched those fields since until this last season, when I asked my son about them. He said that, though heavily stocked with shippers, a good crop of hay could be harvested. In September I saw those fields, and I am convinced that they will be all right for forty years longer if handled properly. I cannot remember the whole formula of seeds, nor is it necessary, as the climate and kinds of soil differ so widely in different localities that the seeds must be selected, having in view these two things. I left it to the seed merchant to supply the suitable kinds, and was satisfied with the mixture. Some of the names were as follows: Timothy, red top, and Kentucky blue grass; alsike, white dutch, red and trefoil clovers; sheep fescue, oat grass, perennial rye grass, cock's foot or orchard grass.

There may have been others; but to these or any of them suitable for Mr. MacLellan's soil I would add lucerne, providing the land is properly underdrained. It sends down an enormous taproot that will reach moisture any season, but it will not stand too much surface moisture, and it will

last, too, under proper conditions. The formula as above given would require to be varied for clay soil. The seedsman will attend to that.

Yours truly,

E. J. YORKE.

Alvinston, Ont.

CORRESPONDENCE.

The replies to the questions on the care and management of swine are continued this week; also a number of letters on the management and feeding of dairy stock.

(1) What is your method of housing pigs during the winter?

(2) Do you allow pigs to run out during the winter for part of the day, or do you prefer to keep them inside all the time?

(3) What is your method of keeping the piggery and pens clean?

(4) What kind of feed has given you the best results for the winter feeding of pigs for the market?

(5) If grain is fed, do you feed it wet or dry?

(6) Do you feed turnips to pigs, and if so, in what way?

(7) Have you any special way of caring for and feeding stock boars and brood sows during the winter?

PREFER CARROTS OR MANGOLDS.

Editor of FARMING:

SIR,—(1) The fattening pigs are confined in pens in a frame building, with the temperature at about 45° in cold weather. The breeding stock live, for the most part, in a shed with earth floor, where they have plenty of exercise and can go in and out at will.

(2) The breeding stock get more or less exercise every day, and any that are intended for pork are kept shut up in the pens after they are three months' old.

(3) The pens are cleaned every day with a wheelbarrow and clean straw added.

(4) (a) A mixture of half oats and half peas with four or five pounds skim-milk per head per day.

(b) Or the following: one-third shorts, one-third barley, one-third corn, with four or five pounds skim-milk per head per day.

(5) In all the experiments so far the grain has been fed wet.

(6) We fed a few turnips (boiled) to all our pigs, but they always prefer carrots or mangolds.

(7) We try to give the boars and brood sows plenty of exercise all the year round, with a variety of food containing plenty of material for bone and muscle. Care is always taken to keep them in good, thrifty condition, but not fat.

R. R. ELLIOTT,

Herdsmen.

Central Experimental Farm,
Ottawa, Ont.

PRACTICAL EXPERIENCE THE BEST TEACHER.

Editor of FARMING:

SIR,—(1) In pens of wood, brick or stone constructed in such a way as to be free from drafts, I think there is no floor more easily kept clean or warmer in the winter than one made of planks, with enough clean, dry straw to keep the animals comfortable. If possible, not more than six pigs should be kept in a pen, and they of equal size.

(2) I allow the pigs the choice of yards in which to exercise at their own pleasure.

(3) The frequent use of fork, hoe and shovel, with fresh straw every time for beds.

(4) Pea meal, with twelve hours' soaking in kitchen slops, milk or water. It will be all the better if it can be fed warm, but not cooked.

(5) Wet every time.

(6) Yes. Pulped turnips, mangolds or sugar beets (they are all good). Mix with them peas, corn or barley meal or middlings, or an equal quantity of all. Feed enough to keep the pigs improving every day. This is a splendid ration for growing pigs.

(7) No special way of caring for them other than such care and feeding as will keep them in the best condition for the purpose for which they are kept. Don't have them too fat, but in healthy active condition.

It is very important to keep sleeping quarters dry and free from drafts. Feed three

times a day, at regular hours as nearly as possible. Feed enough, but not more than they will eat up clean. If they have free access to a mixture of charcoal, ashes, salt, and sulphur, all the better. There is no profit in the pig if you do not care for and feed it in such a way that at 200 days old it will weigh at least 200 pounds. For every phase of hogology there is no better school than practical experience, directed by good judgment and the reading of our best agricultural papers. Wishing FARMING, our splendid agricultural weekly, great success, we remain, respectfully yours,

THOS. BROOKS & SONS.

South Brant Stock Farm, Brantford.

TURNIPS MY STANDBY.

Editor of FARMING:

SIR,—(1) My method of housing is not one that I like myself, but one that is not very expensive. It, to be plain, is in hovels of poles and straw covering, warm and dry for the breeding stock, and part of the bay in the barn for fattening hogs.

(2) Breeding stock have their own way; can run in or out as they choose.

(3) Dry bedding, often removed.

(4) Corn and oats; corn and middlings.

(5) Generally speaking, sloppy.

(6) Turnips have been my standby for breeding stock, but I like sugar beets. They are better pulped.

(7) Nothing very special. Breeding boars get but very little corn during winter, unless an extra cold snap is on. No mangels for sows with pig, and but very little corn. I think there should be a more general use made of linseed meal among swine breeders and feeders. It will pay every time.

I notice quite a few feeders keeping a pig nine or ten months to get a six months' growth, and then they generally sell at a time when prices have fallen. For instance, this year I know of some feeding March pigs now (in November), when they should have been sold last August or September at 1½c. or 2c. more per pound.

I do not believe in wintering little pigs; for one reason, I have not the suitable conditions, that is, housing; and even then I think, unless you get an extra price per pound, it is a debatable question whether it pays or not.

Yours truly,

Simcoe, Ont.

J. H. SHAW.

PULPED ROOTS.

Editor of FARMING:

SIR,—(1) I like a moderately warm pen for pigs, with plenty of dry straw for bedding.

(2) If convenient, I would let them run out when they feel disposed; there is no danger of pigs taking too much exercise. If not convenient to have them run out when they like, they would be better to be out part of every fine day.

(3) If there are many pigs together it is best to clean the pen every day, as I think there is less danger of disease when the pens are kept clean.

(4) I am not in the habit of feeding pigs for the market. I sell all the pigs I raise to breeders; but if I were feeding for pork I would feed principally on grain, with a few pulped roots; and, as to the kind of grain I would feed, it would depend on the prices of the different kinds. I always feed grain ground, and for young pigs I think ground barley and shorts mixed make a very good feed.

(5) I have always fed grain wet, unless fed with pulped roots.

(6) Pulped and mixed with meal of some kind; for young pigs, if convenient, steam the roots until soft, and mix with the meal while hot, and allow it to stand till cool enough to feed.

(7) I generally feed stock boars and brood sows on pulped roots and meal, but I think it better not to feed too many roots till sows are in pig.

Yours truly,

Concord, Ont.

THOMAS TRASDALE.

MANGOLDS AND CARROTS FOR PIGS.

Editor of FARMING:

SIR,—(1 and 2) I like to give my breeding pigs all the freedom possible, only keeping them closely housed during very severe weather.

(3) In moderate weather we clean out the piggery frequently, but when very cold prefer