place it on full feed, and if the herd is rather small for the diameter of the silo there is a danger that too little silage is removed at each feeding. Care should be taken to keep the top of the silage fairly level, but a little higher in the centre. Under no conditions should digging deep into the silage be practiced. This lowers the quality, and is just the condition favorable to spoiling of silage.

Winter Sows in the Barnyard.

In the old days when every barn-yard contained its straw stack for winter use the best place for brood sows was undoubtedly in this yard, where they made their nest in the straw around the stack, and where they got sufficient exercise to keep them in good breeding condition and the best of health. True, some of them were allowed to get altogether too low in flesh, due to the fact that they were not fed a sufficient quantity of feed, many rather careless farmers giving nothing but roots. In fact, we have seen sows of a good type come through the winter very well on comparatively little slop feed and plenty of mangels and sugar beets. The farm-yard is still the best place for the sow in winter but on the best regulated farms very little straw is blown into the yard, because here, a good deal of it is wasted under the best of conditions and farmers now-a-days believe it is much handier to feed the straw out of the barn, and besides, this practice saves a great deal of the straw from being lost through tramping in the manure. The loss of the straw stack from the yard should not, however, make it necessary that the sow be kept in a small cluttered pen, for it is not a costly undertaking to build a small pen in the corner of the yard out of any old lumber which may be lying around the place, or even of new lumber purchased for this purpose only. Such a pen serves to break the wind, and keeps the pigs from becoming chilled. A little straw thrown in it for a nest would make the brood sows just as comfortable as if they were in the permanent pen, and by leaving them out in such a place with the small door open all the time they have access to the yard, and will take the necessary amount of exercise to keep them in first-class health. If the pen is made large enough the feeding trough may be placed therein, and in fact this is good practice, as the pigs feed inside where it is not so cold as if they were exposed to the raw winds outside.

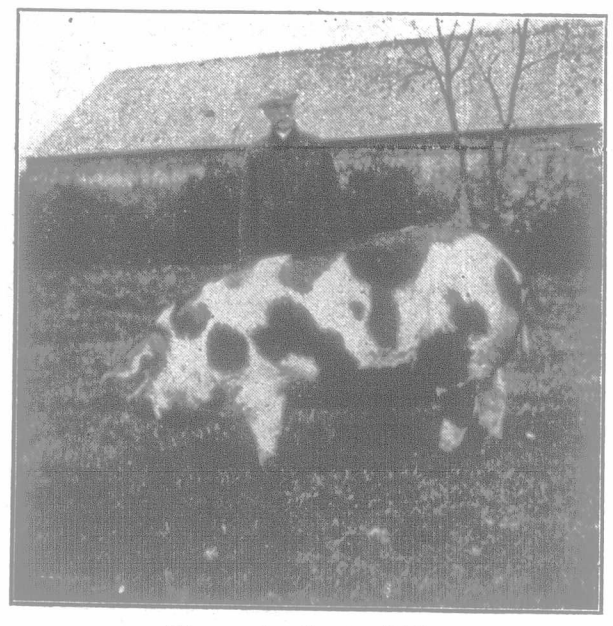
In feeding pigs so kept it is wise not to give too much thin slop. The grain, what little they require, should be fed in the form of a thick paste or porridge. Sows will do well on a comparatively small feed of this, and plenty of mangels and sugar beets fed either whole or pulped. The main thing in success with brood sows in winter is plenty of out-door exercise and not too much to eat. We do not mean, however, that they should be allowed to go down so thin in flesh that they might be mistaken for Arkansas Razorbacks. As a place to winter the sows, nothing has yet been found to equal the barnyard.

Building Up a Herd.

There is nothing nicer about a farm than a herd of pure-bred stock. It matters somewhat how it got there, for the man who stepped out to a dispersion sale and bought up a number of good individuals will not usually take as much pride in his herd as a breeder who improved his stock through the process of grading up. Every stockman's goal should be pure-bred animals, with the right kind of conformation, with character, and the different abilities that are looked for in his chosen breed or breeds. Many are in a position to purchase the best to be had, but the great rank and file of Canadian farmers do not feel like putting their hands in their pockets to buy pure-breds. Many are not justified in doing so, unless it be for a pure-bred sire to mate with a herd of grades, and this is wisdom in the last analysis. All the science, theory, practice and common sense of breeding commend the latter move, for it has been the practice that has made live stock husbandry the most important feature of mixed farming.

In time this practice of grading up will establish a herd that for general purposes is pure-bred. They are pure in so far as the blood or breeding is concerned, but to safeguard the industry breed associations have placed barriers around their herd books that will not allow short-pedigreed animals within. Some stud books are more approachable, but the general class of stock must trace back sire after sire and dam after dam through a long line of ancestors to the foundation stock, and all down the line they must be recorded. This is what gives a value to registered stock over and above what they are actually worth as animals for slaughter, but the average farmer who is keeping stock from which to raise heifers and steers for the feeding stalls, will often get as good results in the way of feeders from a herd that has been graded up as from the actual pure-bred herd with the extended pedigree.

Readers should not infer from this that interest in pure-breds should be lessened, but those stockmen who have discouraged of ever acquiring a herd of pure-bred animals might put their minds at ease, for few there are who cannot afford a good pure-bred sire to mate with the herd, and by this system only a few years are required to make a very considerable showing. The Central Experimental Farms now have under supervision several herds which are being graded up in the way we have just suggested. The females used in the experiment are what may be picked up in any community where that particular breed ex-



Gloucester Spotted Pig.

An old breed of pig being revived in England.

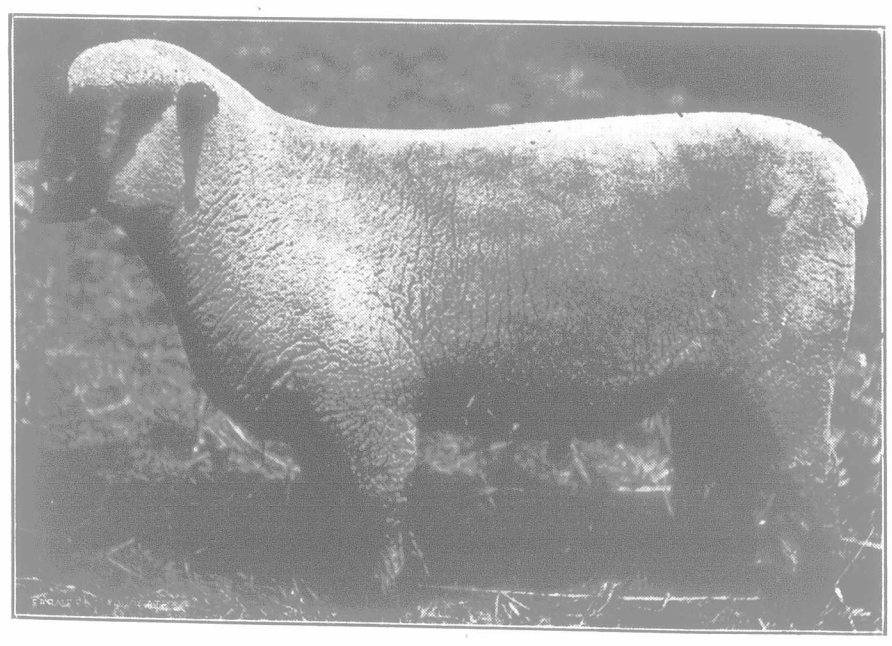
ists, but they are mated with a good male and the outcome of these crosses is gratifying indeed, not only do they show improvement in type and character but their ability to produce, in the case of dairy cattle, is very marked, and after a few more years the figures and facts as well as the herds themselves which have been established in this way by the Central Experimental Farm will be a good object lesson to those who lack faith in this principle.

What is Silage Worth?

Will you kindly advise me through the columns of "The Farmer's Advocate" as to what you consider the actual value in dollars and cents of one ton of silage corn of average quality for feeding cows or steers?

Victoria Co., Ont. A. A. K.

The foregoing is a form of question which we frequently get at this office, and one which is very difficult to answer definitely. Each year



The Hampshire Winner at the Royal.

prices of the different feeding stuffs vary, and upon these only can be based the actual value of corn silage. It is also almost impossible to state what is good average corn silage. One man will grow a piece of corn, well-matured, but containing few ears, will ensile it and call it the very best of silage. Another will mature his corn just as well, but will put forth an effort to have it very heavily cobbed, and the corn practically at the glazing stage when cut. This is ensiled and the feeder believes he has first-class silage. Just what the difference in the feeding values of these two classes of silage is, has not yet been finally determined by our experiments. Some work has been done on this in the United States, but there is a great opportunity for agricultural experiment stations in Ontario and other parts of Canada to get busy on this problem.

Some years ago the general estimate placed on the value of corn silage was $2.00 per ton. This we always believed to be rather low, and when timothy hay was selling around $10.00 per ton at the barn, our estimates on the value of good silage ran around $3.00 per ton. Jordan, one of the best authorities on the subject, valued silage at $2.62 per ton when timothy hay was worth $10.00 per ton. Suppose we take this valuation,, good timothy hay in the country is worth at the present time anywhere from $12.00 to $15.00 per ton. At the latter figure, silage would then be worth, according to Jordan's estimate, $3.93 per ton, or at $12.00 and Jordan's estimate, silage would be worth $3.14 per ton. We are not sure whether Jordan's estimate is high enough. Some good feeders have claimed that silage was worth $4.00 per ton when hay was worth $10.00, this was then thought to be a high estimate, and others at that time were figuring the silage at $2.00. From some figuring which we did in connection with the growing of silage corn at Weldwood, we arrived at the conclusion that it costs in the neighborhood of $1.25 per ton to grow and ensile silage. If it is a profitable crop, and we believe it is, the grower must get considerably more than this amount of money out of it again, and we feel sure that doubling the cost price would not be an unduly large return in the crop. We would be inclined to value good silage this year at anywhere from $3.00 to $4.00 per ton. We do not think it is hardly fair in all cases to base the valuation of silage corn on the current prices for good hay. For instance, hay might be a big crop and an over-supply of this feed be held in the country, while at the same time there might be poor crops of roots and grain feeds which would increase the value of these materials appreciably, and so make silage, in comparison with hay which would be cheap on account of the plentitude, worth more money. This is a difficult question as we stated before, and we are throwing our columns open for a discussion of it. We invite all those who have had experience in the feeding of silage to discuss this feed and give their estimate of its worth per ton for feeding dairy cattle, steers and other classes of stock.

The White Plague in Live Stock.

Although the prevalence of tuberculosis has been somewhat reduced in the human race, it has continued to make inroads into the live stock of the country, which our veterinarians have found hard to combat. Chiefly in cattle and hogs it is still serious, but poultry, we believe, suffers even more severely from the ravages of this disease. It would be hard indeed to suggest the percentage of poultry that is suffering from infestation, but it is extremely large and greater than their owners have any conception of. Tuberculosis of hogs is closely associated with the same malady in cattle. The reason for this is apparent when one considers the close relation of these two species of domestic animals upon nearly every farm. The means of spreading contagion there is very pronounced, whereas the cheese factories and creameries throughout the dairy districts are one of the most fruitful means of spreading infestation. In such cases skim-milk from the creameries is generally mixed together in a vat, and each farmer takes back with him his pro rata of skim-milk which is most likely to be produced by several herds of other people's cattle, hence the skim-milk of but one tuberculous herd is liable, as a result of this practice, to contaminate the entire product of the vat into which it is placed.

It is compulsory in many districts to have this whey or skim-milk heated to a point that will ensure the destruction of the germ, but this does not always take place and oftentimes contagion results. The tuberculin test was heralded in with the expectation that it would, in a short time, eliminate the great majority of diseased cattle, owing to the fact that experimenters declared that animals affected with the disease could be detected easily and isolated from the remainder of the herd or destroyed. Year after year investigation has been carried on regarding the results of this test. Investigators claim that