IDED 1866

crease the

few, if any,

a mixture

parley, and very good included.

ding upon

ndition of

leaned up Food is ned condi-

advantage

at of exer-

If we dis-difficulty,

ulturist

f the Kan-

Professor gricultural

ne Board's

Good and contained

be found cially for tion they

recognized

sheep, the

sidered by

many fea-

the latter turn clear

should be

ld be thick

deserving

dy should ribs back d, making nent and f a strong e that is pecially a so indicame reason head, the ng is the

ment the

often in-

never be

sh should

masses or ery apt to

e the ram lown pas-seless for

face, with nder and

ole in the bbed, and

he growking ew

ical of the

, and con-

ds toward

ge bodied,

condition

npair her

a rule, is

be evenly about the

o flabby good and re impor-

find, up

ed by in-

her form,

tem who

animals

. This is

ter term I I believe

ping and

me time

ir domes-

p would leading he flock. breeding,

wonder-

ection in

leficiency

alities of

le parts

e; while keep diseach ad-

these, h

ired. space as

The Fall and Winter Care of Pigs. BY D. LAWRENCE, OXFORD COUNTY, ONT.

reat deal has been said and written on the subject of how much exercise pigs require in order to most profitably grow and fatten. Some writers maintain that pigs should run at large until the last few weeks when they are finishing off. I kept one pen shut in all the time and allowed another pen to run out all day and gave both the same feed, those running out getting the benefit of anything they could pick up. And the result was that those pigs which were shut in all the time grew and fattened most rapidly. They were Tanayorth Park tened most rapidly. They were Tamworth-Berkshire hogs, and perhaps those which had liberty ran about too much for their good. Perhaps pure Berks., Chesters, or Duroc-Jerseys, being of a more indolent disposition, would not run so much, and might do better at large. It is only reasonable that if a pig runs about a great deal, it must take feed to keep up the wear and tear of its system. Our pens are about 9 feet x 12 feet 6 inches, and in my experience afford plenty of room for seven pigs.

For fall feeding I prefer pumpkins. I cook them in our cooking vat, and after the cooked mess has stopped boiling I put in a quantity of well-ground chop, and then with a hoe mix up much in the same way as the bricklayers' attendant mixes mortar. Take out enough at a time for a feed, and thin off a little with whey, milk or swill or water to about the consistency of thick cream. After this has been eaten, the pigs that are finishing off get all the peas or corn they can eat up clean. Unfortunately, our pumpkins were not good this year, and we had only a few vats full. I think if I had plenty of pumpkins that I could force pigs that weighed from 125 lbs. to 140 lbs. to gain nearly 2 lbs. each per day. By actual weighing we had one pen that made an average gain of 1½ lbs. each per day for a month. There is a great science in feeding just enough and the right kind of feed in proper proportions. And it does not do for first one and then another to be feeding the pigs. One man should attend to the feeding and make a study of the wants and tastes of the grunters, and the results will be much better than if any one on the farm runs in and throws the animals a little of whatever feed is handy by.

animals a little of whatever feed is handy by.
During winter I think pigs should have some roots, either pulped or cooked. Pulping is very good, but I think for the small pigs and for those finishing off, cooking is much better, especially if one has the proper appliances. We are now cooking small potatoes for the young pigs which are still getting at the sows over night. I think carrots and sugar beets are more suitable for pigs than mangels and turnips. In winter I have tried cut clover hay put in the vat and cooked with roots and chop added; and when one has really good clover hay, added; and when one has really good clover hay, well cured, I believe it is a profitable feed for pigs 70 lbs. and upwards. For chop, I prefer to mix peas, small wheat, barley and oats; of course, using a much larger proportion of the two latter than of the two former. When feeding chop without roots we soak in whey or water one feed ahead. But when feeding cooked pumpkins or roots, the chop is mixed with the cooked mess, as already stated. When feeding pulped roots, we find it an advantage to pulp one feed ahead and mix with the chop and a handful of salt. It then heats a little and the pigs relish it more. When cooking feed we never throw away any ashes, but when cold give a shovelful to away any ashes, but when cold give a shovenum to each pen, which is eaten up greedily. For vermin I use Little's Sheep Dip, weakened down in the sprinkling can, and treat piggy to a spray bath while he is eating his dinner. The old sows with long bristles are better to have it rubbed in by hand. Our boar's tusks grew long and protruded, so that he terreage growth he side. I got the man who he tore one sow on the side. I got the man who dehorns our cattle to take his clippers and clip off the offending tusks very neatly and I believe almost painlessly. This is a much better way than the old painlessly. This is a much better way than the old method of knocking them out with a cold chisel and hammer. We give some fresh straw every day and endeavor to clean out twice a week, and oftener when possible. I think it pays to use enough straw to soak up all the liquid. The manure made in the pigpen is worth something. We feed the first time before breakfast, then at noon, and again before retiring for the night. At the final fattening period I gradually reduce the roots and increase the grain ration until the last few days, when no roots are

Fall and Winter Feeding of Pigs. To the Editor FARMER'S ADVOCATE:

SIR,—As the fall and winter season approaches there comes to every stock raiser and breeder a somewhat perplexing crisis when pasture begins to fail—how best to tide his stock over this critical period without too much expense? This is especially true where many hogs are kept, which is now the case on almost every well-regulated dairy farm, since hog-raising has become such a profitable feature in farming. Experience has taught us that there is wisdom in making a provision for this period. We all know that clover, green corn, and many of our natural grasses and stubble-gleaning furnish an abundance of succulent and other food during the appropriate and solve feel feeding.

during the summer and early fall feeding. One of the cheapest and best foods to begin with is a sufficiency of rape where the hogs can be turned on when the pasture begins to fail, which often furnishes succulent food till nearly the end of the year. Hogs are remarkably fond of it, and do well on rape and a little grain. When this is not provided, with roots or corn, ensilage must

necessarily take their place where profitable and successful hog-raising is carried on. For brood sows an outdoor run with proper shelter is best; whole roots, turnips or mangels, with a little grain scattered on the ground (peas are very good). The searching for the grain and the breaking up of the roots gives them good exercise. I find some succulent food is most valuable in all stages of pig life. It gives health and helps to promote growth. A very profitable way, and the most successful in my experience when roots are to form the main part of a winter ration for young shoats, is to pulp them. A very good way is to mix the meal and roots one meal ahead in the proportion of a peck of meal to a bushel of pulped roots. Very little sloppy food should be fed, and if fed, should be fed separate. There is enough water in the roots. I believe here is where great damage comes in, especially in cold weather. I have found equally good results with corn ensilage fed fresh in same proportion, where roots are not prepared as above. A ew roots (either whole or pulped) should be given where heavy grain rations are fed, or any ration. About six weeks before finishing for market the succulent food must be gradually withdrawn and more fattening food fed in place, but a few roots are very beneficial and are greatly relished, giving appetite and keeping the bowels regular.

Exercise is of great importance to health and makes firmer and better meat. The pens should be roomy enough to give every hog enough space for comfort, warm and free from drafts when shut up and weather cold. Where possible, outdoor pens about twice the size of the indoor are most helpful. When weather is not cold the pigs are out most of the time, which saves a great deal of labor and the pigs do much better. By keeping them well bedded it is surprising the amount of good manure that can be made and labor saved. Where no outdoor pens are provided an occasional run is very necessary. The pens must be kept very clean, well ventilated and dry or the hogs will not give the most profitable returns. A good disinfectant should be used every week where many hogs are kept, to kill disease germs. In regard to feed,



PAIR OF GRADE AYRSHIRES, BY ORPHAN BOY. Rena, three years, winner in grade dairy class at Ottawa, 1899, against all breeds, at fourteen months in milk.
 Snow-flake, two years, won first in same class, all breeds competing.

OWNED BY [H. J. WHITTAKER & SON, NORTH WILLIAMSBURG, ONT.

mostly all kinds of grain on the farm are good; oats, whole or fine crushed, are very good for young pigs. Barley is an excellent feed. For young pigs. Barley is an excellent feed. For finishing there is nothing better than peas. Corn is good, but must be fed cautiously and with other grains, or there will be a kick from the packers, and justly so, for it appears the British market does not want corn-fed hogs for the best trade, and it is our duty to supply the packer with what the market demands.

I believe a combination of the above grains, barley and oats first, and the heavier foods later on, gives best results. I feed large quantities of wheat, middlings and some bran to young pigs. One part bran to 3 of meal, and a little oil cake with a pinch of salt, soaked one meal ahead, is the best way to feed middlings. With other grains I find very little difference whether soaked or fed dry. Cooking roots, in my experience, does not pay. You can make food more palatable and make a nice mixture and pigs do well on it, but outside of this there is no west in it when cost of facilities. there is no profit in it when cost of fuel and labor is deducted. It is a good plan to take the chill off the feed for young pigs in cold weather. I feed three times a day, but vary the noon meal. Have had very little experience with clover in winter, but what I have fed has proved very satisfactory and I believe it could be fed with much profit. A. C. HALLMAN.

Spring Brook Farm, Waterloo, Co., Ont.

Winter Care of Pigs.

Too much importance cannot be attached to this question, especially with small pigs just weaned or yet with their dam. They should be kept warm, yet with their dam. They should be kept warm, dry, and clean. I have found that nothing will stunt the growth of small pigs more than running in the wet and mud in chilly weather. Give plenty of fresh air and dry bedding. There is no feed that can be used with as much profit in wintering hogs as mangels or sugar beets. For young pigs I mix to a nice thickness two bushels of pulped mangels to one bushel of shorts (mix with skimmed milk or water). This I feed twice a day to twelve pigs 90 to 100 lbs., about five pails full night and morning. For noon feed, three pecks of pulped mangels, with six to eight quarts of dry shorts, and one to two

pails of swill or thin drink. I cook them for night and morning in very cold weather, and I am of the opinion that it would be to a good profit to cook all the time. But as yet have not seen any cooker that is quite suitable for cooking extensively. Perhaps some of your readers could suggest a good safe, reliable cooker, at a price that ordinary farmers can purchase. We need something that will keep the pen fairly clear of steam. An occasional feed of corn or peas at night with a thin mixture of drink will make them relish feed better. Ashes or charcoal, or both, with a little sulphur once or twice a week, will help to brighten pigs up and make them thrive well. For final fattening take away mangels morning and night; add more shorts or a little corn meal, or pea chop added will hasten them for market. I feed very little feed but shorts and mangels for winter, and believe it to be the most perfect hog feed there is.

As to yard and pen room most suitable for profit, pails of swill or thin drink. I cook them for night

As to yard and pen room most suitable for profit, have as yet made no tests in this matter, but have I have as yet made no tests in this matter, but have found my pens to be very convenient for my use; pens are thirteen feet square. I feed from ten to twelve pigs in the pen. Yard to each pen is 16 x 30. Growing pigs run out all the time. When weather is fine always go out every day, no matter how cold. Even fattening pigs go out a little every day. I clean the pens every day without fail. By feeding as stated above and keeping pigs clean and dry, I have had very few sick or weakly ones.

All being well, I shall test hot and cold feed this winter. Have had no experience with clover hay. Oxford Co.

WM. J. WHALEY.

Timely Pointers Where Fodder is Scarce.

AN EXPERIENCED DAIRYMAN REVEALS HIS METHODS-CAUTIONS AT CALVING TIME.

To the Editor FARMER'S ADVOCATE:

SIR,—Where the supply of fodder is short, as it is in many quarters this fall, I would advise running all fodder through the straw cutter, as there is then no waste, which is the first consideration under all fodder through the straw cutter, as there is then no waste, which is the first consideration under such circumstances, and there is no doubt that a given amount of fodder will go much farther by being chaffed. If one has ensilage, I would cut straw and hay and mix with the ensilage if possible twenty-four hours before feeding, and add what chop stuff I wished to feed. When fed to the cows, you can then give each cow the amount of grain you want her to get. Where one has roots and no ensilage, I should pulp all the roots, and follow the same plan as with the ensilage. In both cases I would add a little salt. Feed prepared in this way is more appetizing, and will be eaten up clean by the cows. Whereas, every farmer knows that a large part of the dry fodder, such as cornstalks, straw, and poor hay, is always thrown out under foot and wasted. Where one has plenty of rough feed, this is not of so much importance; but with the prospect before most of us this winter, we must either economize our feed or sell some of our stock.

As to what change I would make in feeding when a cow goes dry, the condition of the cow at the time would be my guide. If low in flesh I would feed liberally to get her as strong and hearty as possible without getting fat, as it will all come back into the milk pail if she is a good cow, and we cannot afford to keep any other kind.

Just before parturition I stop all grain food, except perhaps a little bran. Care must be taken at this time to keep the cow loose in the bowels, and, if necessary, would give a dose of salts. After parturition feed no grain for some days and give

if necessary, would give a dose of salts. After parturition feed no grain for some days and give warm water to drink, as a chill at this time must be carefully guarded against, and all cows are very likely to get a chill at this time which will affect them years seriously if not fetally. them very seriously, if not fatally.
Wentworth Co., Ont.
R. S. STEVENSON.

Gratifying Progress in the Great West.

The Director of the Experimental Farms, Dr. Wm. Saunders, has returned to Ottawa after an absence of nearly seven weeks. He spent about ten days of the latter part of August in attending the meetings of the American Association for the Advancement of Science, at Columbus, Ohio, and in visiting the experiment stations in Minnesota and North Dakota. From thence Dr. Saunders proceeded to Southern Manitoba, arriving there at the time the wheat crop was being harvested. He also visited the noted grain-growing localities in the central parts of Manitoba, and found the crops everywhere satisfactory.

EXPERIMENTAL FARM, BRANDON.

At Brandon, the Director inspected the various lines of work in progress at the branch Experimental Farm. The crops of cereals there were unusually heavy. Some of the most productive varieties of oats have given from 100 to 112 bushels per acre; the best varieties of barley from 40 to 45 bushels; while the different sorts of wheat have varied from 30 to 45 bushels per acre. Indian corn and millets have given lighter crops than usual; but the returns from turnips, beets, and carrots will be about the average. The potato crop, although good, is not likely to be above an average yield.

The crops throughout Manitoba are very good, and from the returns already received from the threshing, it is generally believed that the wheat crop will average about 22 bushels per acre. Threshing is progressing rapidly.