they are full grown.

for feeding these early ent the milk ration. A street the corner of the paraccess to a feed trough ewes.

aned that counts rather the heavy losses in the relessness on the part of hils during gestation, at ter is on the sow.

rowing time it is a good he pen. They will keep to the pen for a feet pigs get strength and the bsides the pigs and their kirly well.

ave attained in feeding by be secured by other, and stick-to-it-ive-tes, and willing to pay this they prefer, to go with tream.

led by the Live-Stock er of head of stock per 1919; cattle 1.12; sheep' a land as Canada there nimals kept. But, then ase until consumers who ving are willing to lend a's practically idle acre.

## the Calves.

e more attention to the ing things. The calves k, dismal corners of the as a chance to send its not kept as clean as they er that the calves do not ed that a neglected call individual when mature, fact, any of the young o undermine the success and cleanliness are two any part of the stable that part for the young better, but the feeder certaining each day the youngsters. Large box vailable, and the mangers ged that they can easily sy reach of the animals ery good plan to have a oncentrates. This may the side of the partition asily be dumped into the tock. There is nothing ngs against their feed so manger. They want it ep the pens clean. An eats and is not good for

awe a run in the barnny kind of stock is nots should not be exposed
ts. Close housing prenal which has been kept
uch more easily than one
a run in the yard on fine
the calves out when the

development. Not only of feed, but it should be for the first three or four d: some will claim that di t pays, owing to the cure. Tempt the young le bran, or with a choice The sooner they can be



taught to eat, and the more they will eat, the more rapid the growth and the better the condition they will keep in. When the calf is on skim-milk, corn and oil cake, along with rollled oats and bran, make a good concentrate ration. The milk supplies protein, which is necessary for development, and it is important that the fat removed from the whole milk be made up in one way or another. It can be done very well with the concentrates above mentioned. Commercial calf meals have given good results. Some use a home-made calf meal, such as finely-ground oats two parts, cornmeal one part, and ground flaxseed one part. This may be fed dry, or scalded and mixed with the skim-milk. Cleanliness is essential, as regards pen, mangers and feeding utensils. If you would have mature animals with size and capacity, look well to the care of the calves and do not allow them to get a setback from the time they are dropped until

## Castrating and Docking Lambs.

Although the advisability and advantages of castrating and docking lambs have been set forth time and again there are yet many sheep owners who neglect these two operations and as a result suffer a financial loss when marketing their lamb crop. Lambs destined for the block will make more economical gains if castrated than if left entire and lambs several months old that are not docked are a sign of poor shepherding. The following paragraphs from the Ontario Department of Agriulture Bulletin 274, written by Professors Toole and Sakville of the O. A. C., set forth the advantage of castrating and docking and outline the proper way to proceed with the operations:

The importance of docking the lambs and castrating all male lambs not intended for breeding purposes is being appreciated more and more each year. However, a visit to any of the larger market centres in the autumn will reveal the fact that there is still considerable neglect in this regard. Very few farmers would consider marketing their hogs and beef animals entire, and yet on the same farms no thought is given to castrating the lambs. Not only are buck lambs discounted in price, but they will not settle down and feed as contentedly as wethers. When the lambs are from ten days to two weeks old is the best time to perform this operation. They are then strong enough to withstand the slight shock, and there will be less danger and suffering than if left later. Collect the lambs to be castrated in a pen by themselves which is well bedded and clean. The operator should make sure that his hands and the castrating knife are The use of a few drops of carbolic acid or other disinfectant in the water is a safe precaution. The lower end of the scrotum should be cut off which will expose the testicles. These should then be drawn out one at a time with the entire cord attached. The cord should not be cut off, but drawn out. The testicle of the young lamb is soft and pulpy and some difficulty may be experienced in pulling the testicle and cord with the fingers. Pinchers may be had which will perform the operation in a satisfactory manner. Another common method is for the operator to grasp the testicle with his teeth, in this way the cord can be drawn out without any danger of breaking. Those who have followed this method for some time are agreed that it is the safest and most safisfactory of any. It is well to apply some disinfectant after the operation. It will hasten healing and prevent any bad effects from dirt getting into the cut.

Docking.—This is a comparatively simple operation and should never be overlooked. A bunch of lambs that have been docked present a much more attractive, uniform appearance than those left with their tails on. There is less trouble with dung locks and dirty wool collecting on their hindquarters when the tails have been removed. Later on in the season when the weather is very warm and the grass wet there is danger of lambs becoming infested with maggots in the region of the tail, due to the collection of dirty wool. This is greatly ewe lambs may be docked any time after they are a week old, provided they are strong and nursing well. The shock will not be so severe if done while the lambs are quite young, and any time from one to two weeks after birth is best. In the case of male lambs that have been castrated, it is safer to wait for a week or ten days before docking. The tails may be removed by means of a sharp knife, first find a joint about one and a half inches from the body, then shove the loose skin covering the tail up towards the body so when the tail is removed this loose skin comes down and covers the stub. Now place the knife on the under side of the tail where it is to be removed and with the other hand holding the loose end, the tail can be severed making a clean cut. Special pinchers may be had which, when heated, will remove the tail. These pinchers are quite blunt and the operation is one of searing the tail off rather than cutting. There is probably less danger of bleeding by this method and many prefer the pinchers rather than the knife. In case of severe bleeding following the use of the knife a string tied tightly around the butt of the tail will prevent any great loss of blood The docking should be done on a comparatively cool morning; there is less danger of bleeding when it is cool, and in addition the lambs may be watched for several hours afterwards, which is not so likely to be done it performed in the evening. It is well to keep in mind that cleanline the matter of docking is important, and some good sinfectant applied to the wound will be beneficial. It the docking is done later, when the flies are liable to cause trouble, there is nothing better than ordinary pine tar for this purpose.

Dual-Purpose Shorthorns.

No matter what type of cattle a man is raising he must have an intelligent conception of the character and type of animal he wants to produce. The stockman who aims at producing the highest quality beef animal devotes his time and energy towards the perfecting of the body form so that it will produce the largest possible percentage of high-priced cuts. The man who aims at heavy milk production secures an animal that is descended from a strain of milking stock, and besides securing type and character wants the machinery for the production of milk. There is the specialist in beef raising and the specialist in dairy cattle, but between these two there is a large class of farmers who wish to pursue a medium course. They desire cattle whose progeny will make profitable butcher stock at two years or under and heifers that will give a profitable flow of milk. By following this course there is a monthly or semi-monthly cream or milk cheque to meet current expenses, and a lump sum coming in once a year from the sale of steers to pay interest on investment and help reduce the mortgage. The specialist in beef animals and the specialist in dairy animals are necessary, but we must not ignore the men on mixed farms who wish to secure two sources of revenue from the stock kept. The Shorthorn breed has proven that it is capable of meeting the farmer's needs, as well as that of the beef There are some who would go so far as to have the Shorthorn compete with the dairy breeds as a milch cow, but in striving for this there is grave danger of the herd becoming wrecked. While the Shorthorn is capable of producing a good flow of milk, why spoil a good beef breed when there are already in the held highly specialized dairy breeds? It stands to reason that if milk production is intensified, the animal form must suffer. It is almost impossible to keep that deepfleshed, attractive form, so peculiar to the beef Shorthorn, in the animal that is in heavy milk, and so we find that the cows which are giving a reasonable flow of the lactic fluid cannot be made to appear to as good advantage in the show-ring as their sisters which have been bred for enerations along strictly beef lines. With all breeds of cattle the utilitarian excellency must be kept in mind. The dual-purpose Shorthorn cannot be expected to be as good a beef animal as the top-notch beef Shorthorn, nor yet as good a milker as the top dairy animal. This intermediate cow does exist and is to be found on many of the Canadian farms. As her form is not as beautiful

breed. One must be very careful in mating his stock. Beef must not be entirely sacrificed or the breed's greatest asset is gone, and milk must not be ignored or much of the utility of the breed is lost. Care must be taken that neither meat nor milk is over-developed. A cow that will produce seven or cight thousand pounds of milk, and a calf each year that will grow into a good bullock at a reasonable age, might well be called a dual-purpose animal. To aim at a much higher milk record than this brings the Shorthorn near the danger zone.

than this brings the Shorthorn near the danger zone.

There are cows of both the Bates and Straight Scotch families which, while true to type and form produce upwards of eight thousand pounds of milk in a lactation. One must not conceive the idea that in order to be dual purpose the Shorthorns must be thin. True a heavy producer will not be as fleshy as a poor milker, but the cow should flesh up when dry and her progeny should be easy keepers. Remember that "like begets like". The thin, narrow bull will not leave stock of pleasing lines no matter what his ancestors have done. Intelligent mating, and a sane idea of what constitutes a utility animal is needed by breeders of dual-purpose Shorthorns

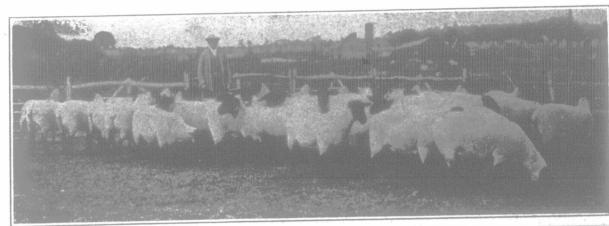
## The Neglected Pig.

How comes it that after two thousand years of keeping pigs in these islands we are less sensible in our treatment of them than Gurth the Swineherd? He at least knew the habits of the animals he tended, and acted upon them, and we all know that this goes a long way towards right management and profit. Apply this test to the pig of to-day, and what do we find? Little or no exercise, green meat or other natural food, and generally no mineral food, which all pigs crave for.

Can this be right, and is it not responsible for many of the ills to which porcine flesh is heir to, to say nothing of lessened profits? Take number one. The pig being nearer to nature than most domesticated animals in his habits, clearly tells us that he is a rover, and thrives on it, and that in the process he loves to deal with all sorts of vegetable and mineral matter, and does not disdain insects and small fry of every description—in fact, he

is omnivorous, and loves a mixed diet beyond all things.

Why, then, deny him all this? If he can deal so well with roots, nuts and other seemingly indigestible food, why spend time and money on cooking his victuals till they are in some respects less digestible than they were before? Exercise may not be desirable after a



A Flock of Suffolk Ewes.

These forty-two ewes and four rams were presented to the farmers of France by members of the Suffolk Sheep Society of England.

as her straight, beef-bred sister she was for a time more or less forsaken by many farmers, but to-day there is a turning towards the animal that is capable of giving a

double revenue. There are danger points, however, which must not be lost sight of. Unless care is taken there are some breeders who, we are afraid, will wreck their herds, owing to their great desire to obtain high milk records. It is only a few years ago that the more or less wedge-shaped Shorthorn, with a reasonable amount of flesh but good udder development, sold for little more than grade prices, while the thick-fleshed animal brought a handsome figure. While the latter still maintains the ascendency from a price standpoint, the demand for the former is creating remunerative prices. The R. O. P. records made by cows under test are showing the real value from a utility standpoint, but it is found that where exceptionally high records are made the animal takes on a thin, wedge-shaped form almost as pronounced in dairy type as the Holstein, Ayrshire and Jersey. We hear of breeders boasting of their Shorthorns giving twelve or fifteen thousand pounds of milk. This is very creditable, indeed, but there are grave fears in our mind that the Shorthorn with this record is on the verge of slipping into the dairy class. Unless the breeders are careful, they will find that as a heavy flow of milk is produced the flesh gradually slips from the ribs, she becomes more wedge-shaped, and does not compare favorably with her sister in higher condition, which is not giving as much milk. There is a tendency for Shorthorn men who have their cows in the Record of Performance to work for high milk yields. This is all very well, but some in order to further intensify the milk production in the progeny will breed that cow to a bull that has more or less of the dairy type. The heifers from this mating may give a heavy flow of milk, but in nine cases out of ten they will be poor Shorthorns in nine cases out of ten they was be poor Shorthorns from a conformatical and quality standpoint. If such mixings are carried on year after year, the beef end of the dual purpose standard is obliterated, and a person might just as well have started with a specialized dairy

certain stage of growth, but with young pigs it has been found to take the place to some extent of flesh-forming food, and to encourage the development of lean meat, exactly as it induces muscle in human beings. Pigs are said by an out-door advocate to increase at least ten times as fast as sheep, though probably not in sties. Grazing insures exercise and fecundity, and it is, moreover, cheap (if the fences are all right). Why not "give" the pig its head" where this is at all possible?—Live-Stock Journal.

## Hornless Calves.

Each year a considerable amount of damage is done by one animal goring another. Nature provided certain breeds of cattle with horns to be used, no doubt, in self defence. With our domesticated cattle, which, to a large extent, are confined in small quarters, run with other classes of stock, and are handled by humans, there is not the same need for this protection as there was when the animals ran wild. It is not an infrequent occurrence to hear of a man being gored or of an animal being ruined by one which has become more or less infuriated. It must be admitted that with some breeds of cattle horns are attractive, and for this reason comparatively few breeders of pure-bred stock have their animals dehorned. Rowever, with commercial herds it is a somewhat different proposition. In fact, with any herd "safety first" should be considered. When an animal is a year and a half or two years old the horns may be taken off with a saw or dehorning instrument. This is somewhat painful to the animal at the time, and the stub of the horn is left. When the calf is quite young the horns may be prevented from growing and the animal will grow up a mooley. little caustic potash rubbed around the scurs when the calf is a couple of weeks old will destroy the horns without causing pain to the animal, provided that care is taken in using the caustic. This material can be bought in sticks from any druggist, and in handling it care should be taken that it does not get on the hands. After