individual mutton carcasses in detail, is perhaps of less interest to the general public than to the exhibitors. If any exhibitor wishes to obtain a report on his own exhibit, he may do so by applying to Prof. J. B. Reynolds, O. A. C., Guelph.]

## Carriage Horse Breeding.

To the Editor FARMER'S ADVOCATE:

SIR,-When attending the Canadian fairs last summer and fall, I was very frequently asked the question: "What is the best way to breed a good carriage horse, one with size, substance, good conformation, all-'round action, combined with quality and a fair amount of speed, and a good temper: Having had some experience along these lines and a somewhat intimate knowledge of all the coaching breeds, I would say that a very useful and very salable horse can be produced by a Hackney stal lion and trotting-bred mare, more especially where speed is a consideration. The stallion should stand not less than 15 hands 3 inches high, with plenty of bone and substance, a clean head and neck well posed, good withers and deep, well-sloped shoul-ders and well-ribbed middle, a level top line, tail well set on and quarters round and full, supplemented by good legs and feet. He should be a good all round actor, have some speed, and be thoroughly bred in Hackney lines. The mares should stand from 15 hands 3 inches to 16 hands 1 inch high, have good heads and necks (the more length of neck the better), be good roadsters and line gaited, and free from any tendency to spread or sprawl behind, that very serious defect in gait being very frequently found in trotting-bred horses, and always very objectionable in the carriage horse, and will considerably reduce the market value of an otherwise useful animal. My reasons for preferring a Hackney stallion to all others for producing heavy harness horses is mostly on account of his well-known ability to transmit all-'round action, good carriage conformation, a rugged constitution, freedom from disease, either hereditary or acquired, and a happy faculty of keeping easy and maturing early. Horse-breeding along these lines will be found to give very satisfactory results, and if the produce on all occasions does not come up to the requirements of a high-class carriage horse, the owner will at least have the satisfaction of possessing a very useful general-purpose animal, and the waste material will be very slight. Excellent results will also be obtained in the production of heavy harness horses by the use of a good Hackney

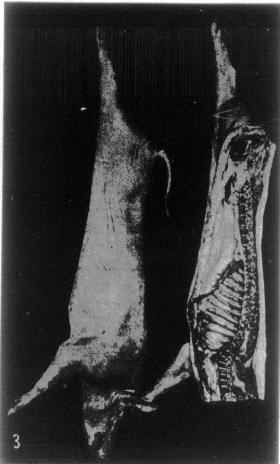


FIGURE III.—REPORT ON SWINE CARCASSES

A lean old stag. Quite unfinished, and quite undesirable. Rated by the packers at 4 cents a pound. Note:

1. The lean ham and coarse, scrawny head.
2. The side, long enough, but altogether too light and thin.

stallion and mares sired by either Cleveland Bay or French Coaching stallions. This is an exceedingly happy combination, and will be found very productive of good results; in fact, many of the finest types of carriage horses that I have ever seen have been produced in this way. Of course, the Hackney trotter cross will be productive of more speed, but horses of m jestic presence, beautiful proportions, grand heads and necks, high, graceful, all-round action, and the size and substance, without coarseness, that go to make up the perfect heavy harness horse of the type seen in London and other fashionable European capitals can be produced in this way. The production of the smaller type of harness horse

is much easier of accomplishment, namely, horses standing from 14 hands to 15 hands 2 inches high, and suitable for a brougham, Victoria, mail or park phaeton, dogcart or gig or any of the numerous runabout traps in use in the city. Nearly all sections of the country have on hand a supply of small mares that could be utilized for that purpose. I would suggest using trotting-bred mares with quality and speed, and if they should happen to possess some Thoroughbred blood, so much the better. Morgan mares are also well adapted to the production of this class of horse; in fact, as a breed I know of none better, as they possess all the requirements for mating with a Hackney stallion, in a marked degree, to produce the sort of horse that is always in demand and at remunerative prices. Horses thus bred will be found useful on the farm for all purposes, except that of heavy draft, and I may add that the finest farm team I every saw were sired by the Hackney stallion, Brown Fashion, and from an imported Percheron mare. These horses were 16 hands high, weighed 1,400 pounds apiece, with handsome heads and necks, and were models of beauty and strength. They were iron grays, and carried beautiful coats all the year. So that while the half-bred Hackney all the year. So that while the half-bred Hackney has especial fitness for the ornamental display re quired for park and city driving, he need not be onsidered by any means a drone in the industrial life of the farm, and need not eat the bread of idleness for any great length of time, as he will be well matured at 4 years old, but can be worked at 3 if given fair care. The war in South Africa has opened up another field of usefulness for horses of this type, and for artillery and transport purposes this type, and for artillery and transport purposes no better animal exists, while a good cavalry horse can be produced by the use of Hackney stallions and half-Thoroughbred and Thoroughbred mares. Of course, the war is happily now almost at an end, but the enormous number of horses used up in this campaign will leave a great shortage of horses in Great Britain that will have to be supplied from alsowhere and it is safe to assume that Ganada elsewhere, and it is safe to assume that Canada will be a large contributor, hence the suggestion.
Shelburne Farms, Vt. WILLIAM WEST. Shelburne Farms, Vt.

## Successful Pig Raising.

I have been extremely successful in regard to raising pigs, and often have been asked to what I attribute mainly my success. I answer: A multitude of things. First and foremost, I use common sense. Then, I read a great deal. I have always carefully studied the ADVOCATE. After I read, I keep thinking and apply in my own case what I have learned. Another way I learn is by watching how and why others fail, and avoid the same pitfalls. Yet, beyond this there are, of course, practical things one must do every day, particularly the day it is needed to be done.

We will suppose that the critical time is over and that the farmer has a litter of good, healthy pigs, of well-bred stock, a few hours old. He thinks all is well. He congratulates himself that, having escaped the dangers that are so thick at the time of farrowing, he should have no further trouble. Every pig is lively and well-developednot a runt amongst them. The mother pig shows no disposition to eat them and is careful not to overlie them. All should be well, but there are still always two great dangers right raiser. Into these dangers he may very ignorantly run, but if he thinks a bit he can easily avoid them Millions of pigs die annually because of these mistakes. The first is overfeeding the sow with rich, heat-producing feed. There is no one cause in the whole of hogland that occasions so much loss as overfeeding. Make it a firm and fast rule to always feed sparingly, if any, of corn for the first week. Corn is a great heat-producer. A failure to pay close attention to the matter of diet at this time will often result in fever. This fever dries up the milk, the insufficiency of which actually starves the pigs to death. Perhaps the pigs will not really die, but the result is nearly as bad. The sow loses appetite, runs down rapidly in flesh, the little pigs live but do not thrive. They keep dwindling down, and before weaning time the sow herself is like a skeleton. Instead of feeding corn, feed for the first week house slops and bran and just a little corn for a relish—perhaps one ear at a meal. Then, in the second week gradually increase, so that by the third week you may feed as heavily as you please, provided the sow and pigs have ample

The next great mistake is lack of exercise for the young pigs. If the sow is kept in a close pen and proves to be a good suckler, it is often the case that in two or three weeks the little pigs become too fat, take congestion and die. Oftimes I have seen a farmer with a valuable litter of pigs. He sees them fat and healthy-looking, yet they die one after the other until the whole litter has disappeared. He had no idea what was the matter. He did not realize that want of exercise in the close, shut-up pen and lots of rich milk was causing the fatal disease. Guard against this by letting the sow and pigs have more room.

Still another point in the raising of wee pigs is cleanliness. They want a clean bed. This is very important. If allowed to sleep in dust they are quite liable to die of thumps, and if a wet place or a manure pile they get mangy or contract colds and die.

But, we will suppose that the farmer has had forethought and has guarded against all these dangers, and the first four weeks are safely passed. The pigs are a fine lot and the mother is in good condition and having a good appetite. It is now time to begin to prepare for weaning. Make a pen near where you feed the sow and arrange it so the pigs can go in and out at pleasure, but let it be not accessible to the sow, and begin feeding with milk and soaked corn. The quantity must be very small at first and only what they will eat clean. Increase gradually, and by the time they are eight weeks old they will be eating enough so that they

can be weaned without checking their growth. If,

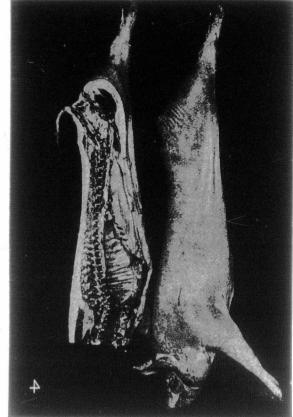


FIGURE IV.—REPORT ON SWINE CARCASSES

A prize carcass. The sweepstakes for all breeds. Note:
1. The long, tapering ham, quite fat enough, as is shown by the left half of the figure.
2. The long side, and comparatively light crown.
3. The evenness and proper thickness of fat over the back.
4. All that need be said of the head is, that it is typical of the breed.

as is often the case, there are in the litter two or three pigs that are not quite up to the average, it will be good, both for the sow and them, to let them run with the mother a week or two longer than the

others which are larger and better developed.

After weaning, feed liberally for four months.

No matter what is to be the future destiny of the pigs, feed liberally just the same. Do not aim to make them fat, but aim to get all the development of bone and muscle that you can. The food should not be corn exclusively, for we want more of the flesh-forming foods, and they should have the run of pasture and be fed on bran chop with the corn. Exercise, a varied diet, with part bulky food and

not too much corn, will give a profitable hog. One great fault in the management is to keep oo many hogs together in one shed or enclosure. From want of proper protection in the way of housing, hogs are very apt to crowd together in bunches during cold weather, and coming into the sheds wet and dirty, and being obliged to lie either on old and filthy straw bedding or on a wet and damp floor, their sweating and steaming soon produces a foul atmosphere, and the bedding, not eing removed at proper intervals, gets rotten and adds to the contamination of the air. Being thus packed together in the building, the hogs, in a warm and perspiring condition, are next exposed to the influence of cold winds and wet weather by being turned out in the morning hours to run in the field among grass wet with cold dew or from rain or hoarfrost, or to be fed from troughs in the yard. Among the common consequences are congestion, cold or catarrh, and if the so-called hog cholera happens to be prevailing they are almost certain to contract that disease, as their systems, under such management, are rendered predisposed or susceptible thereto. ROB. RICHARDSON. Norfolk Co., Ont.

## Curing Hams.

An exchange recommends the following recipe for curing hams: To 100 pounds of pork use 2 quarts coarse salt, 2 ozs. black pepper, 6 ozs. sugar and half oz. saltpetre: dissolve saltpetre in pint of hot water: mix all in a vessel large enough to lay one ham in, and rub each piece thoroughly, partic ularly where the leg was cut off; let lay on table three days, then rub again with the mixture; pack in a box; let lay from 12 to 14 days, then smoke. Light salted as they are, these hams keep well in summer if put up in tight, heavy paper bags and hung in a dark closet, or packed in bran or oats.

yea ing

and

alm

Here

close

hors

stall

his

his

that shou letti feed shou som shou is or roon alwa and fron

shou env. Ho

aga repo ligh bran part hour four thes eat old, only incr read almo

gain prod of fe her udde was agai I wi