ment, the embryotomy shears, which is better fitted for digging postholes than to be used in delicate, easily injured tissues.

A good dressing for the foal's navel is,-ten grains corrosive sublimate to eight ounces of water, or a five-per-cent solution of carbolic acid. or a solution of bluestone, three drams to eight ounces of water (the first mentioned the best). The dressing to be done as soon after birth as possible, and four or five times daily afterwards, until the parts are healed, in order to prevent that almost surely fatal disease, known as joint or navel ill, to which colts are very liable.

#### Some Hackney Lore.

EDITOR FARMER'S ADVOCATE:

Seeing a few letters recently concerning the Hackney horse, I think it might be interesting to some of your readers if I give them a small portion of the history of the Hackney mare Phenomena. She was bred in the year 1788 by Sir Edward Astley, Bart., at Melton Park, Norfolk. Her sire was Othello, whose sire was got by a Thoroughbred out of a Hackney mare, bred by Mr. Crofts, a Norfolk squire: Othello was a famous trotter is his day. After several trotting performances between the years 1794 and 1798 Phenomena changed owners. In June, 1800, the mare being then twelve years old, her new master, Mr. Joseph Robson, of Little Britain, backed her to trot seventeen miles within the hour on the road between Cambridge and Huntingdon; she did the task in fifty six minutes: her next performance was on July 22, 1800. Mr. Robson backed her £400 to £200 to trot seventeen miles in fifty six minutes. She did it under fifty three minutes. Her owner than offered to trot her nineteen and a half miles within the hour but his confidence that she could do it was so generally shared that nobody could be found to accept the offer. At twenty five years of age Phenomena came into the possession of Dr. Astley, Mile End, London, and remained in his hands until she died.

In 1901 the Live Stock Journal made the following remarks: "We are fortunate in still possessing the strain of blood to which so wonderful an animal as Phenomena belonged. In nearly all the Hackney pedigrees of to-day the foundation sire will be found to be the Darley Arabian, who begat Flying Childers, the fleetest Thoroughbred upon the English turf. It was through the introduction of the race horse Blaze, the son of Flying Childers, that the county of Norfolk became pre-eminent for the Hackneys. Blaze was the sire of Shales, foaled in 1755, out of a Norfolk mare. For 100 years before the mare Phenomena and the stallion Phenomenon was foaled the Hackney was full of Thoroughbred

The Americans were quick to discern the value of the breed; and began to import Hackney stallions soon after the year 1800, but it was not until 1822 that the great improvement was made in the trotting powers of the American horse by the importation of Bellfounder.

As in America, so it was and continues to be, in the horse breeding countries of Europe: Germany, France, Hungary and Russia recognize the value of the Hackney; they began to import stock from England over a century ago, and have bought annually ever since. Continental breeders have proved by long experience that the Hackney sires improve their native stock.

I could say more about the Hackney but I think there is enough said to prove to Mr. G. Bradshaw that he made a great mistake when he looked upon the Hackney as the non-horse-man's horse. Man. EDWIN JACOBS.

A well-known Clydesdale importer admitted to us the other day that when it came to mares the Shire men had them beaten to bits; but they yet held their own with the stallions, and if this year's London Shire show was a criterion of the direction in which English breeders were moving —would continue to do so.

The Ontario men are becoming aroused over horse breeding and look to their Minister of Agriculture to do the right thing. One thing must be observed whether the government helps out or not, and that is, no mixing or mingling of types by attempting to blend the blood of drafters and

Railroad building may cause a very keen demand for oats, and a consequent appreciation in after seeding. Remember your own horses' next harvest and for the fall plowing, and lenty by you. New oats are unsatisfactory and the steam for the motive power is decline if new oats are the fuel relied upon. 50,000 animals. They are recorded from more ing the board to relieve the company from the

# STOCK

### Utility Must Be Considered in Breeding.

Every breeder should ask himself why he is breeding the animals of his choice. Is it to humor the whims of the few, or to meet the demands of the many? If his work as a breeder is to be a success, he must never lose sight of the requirements of the man who produces the market hog for the money that is No matter how pure the blood, or how perfect the type from the breeder's standpoint, if the hog does not meet all the requirements of the packer, if it is not suited to paying the rent, and lifting the mortgage when placed in the hands of the average farmer, of what avail have been all the efforts that have been put forth in producing this type of animal? In short, the watchword of the truly successful breeder must be utility.

Utility is the touchstone upon which each breeder's work will be tested. If his work stands the test, it will surely meet with recognition; if it fails in the test, it will ultimately disappear and be forgotten. In setting up an ideal, therefore, utility is the first great requisite. In establishing a type, nothing must be admitted that will detract from utility. In selecting breeding stock, it must always be the main consideration. When he studies pedigrees, the breeder must ask himself how much the blood lines represented in the pedigree under consideration are likely to enhance the utility of the stock he is breeding. Every step in the breeder's operations must be dominated by this one great consideration, and if he ever loses sight of the importance of utility, he need never hope to achieve distinction in his calling.

WO STANDPOINTS FROM WHICH TO VIEW UTILITY. Utility must be viewed from two standpoints, The butcher requires an animal that will give him the largest proportion of valuable meat, and the farmer requires an animal that will reproduce its kind in profitable numbers, and make rapid and economical gains. There would be little use in aiming to please the butcher if the animal did not meet the requirements of the farmer; neither must the butcher be left out of consideration if a really useful animal is to be produced. In breeding operations, therefore, both these men must be kept in view, and the breeding, feeding, and killing qualities must each receive a due share of attention. This point may be illustrated by a reference to the breeding of swine for bacon production. One important feature of a bacon hog is the length of side, but it is only one thing out of a number of requirements. Some men, however, have allowed this one point to run away with their judgment, and in their effort to secure length they have sacrificed constitution, feeding qualities, muscular development and general quality. It is regrettable, also, that there are judges who will hang the first-prize ribbons on these slab-sided, narrow chested, long-legged, coarse-boned, quality-lacking brutes, simply because they possess length. Then there are men who run to the other extreme, and hink that in order to have an easy feeder they must have a fine-boned, short-bodied, fat-backed, heavy shouldered, thick-necked, tubby little pig, utterly useless for bacon purposes. It is not difficult to see how both these men have lost sight of utility. The first has sacrificed nearly all that the feeder requires, and a good deal of what the packer requires; whereas, the other has sacrificed nearly all that the packer requires, and a good deal of what the feeder requires, because a really desirable bacon hog is also a good feeder's hog. There are breeders, however, whose feeder's hog. view is broad enough to take in both sides of the question, and who are producing hogs eminently well adapted to the requirements of the feeder and the packer. Such men are truly successful breeders and their work is bound to stand, because it is built upon a sound foundation, the bed-rock, utility.
—From "Swine": Prof. G. E. Day.

## A Study of Breeds of Swine.

DUROC-JERSEY.

The American Duroc-Jerseys are apparently the outcome of the union of two classes of swine -the Durocs of medium size and bone, bred for many years in Saratoga county, New York, and the Jersey Reds, larger in size and coarser in bone, bred in New Jersey for the last sixty years. The origin and early development of this breed is not apparently well known. As with nearly all American breeds of swine, the improvers of the Duroc-Jerseys have been farmers in certain neighborhoods who sought to improve the porkproducing qualities of the animals they fed. The history of the amalgamation of the two original branches of the breed does not appear to have been clearly written.

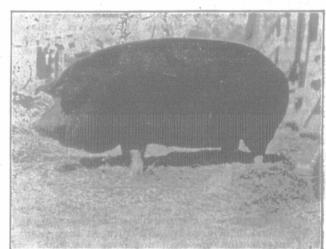
Two leading associations, viz., the American Duroc-Jersey Swine-breeders' Association, and the National Duroc-Jersey Record Association, have been organized in the interests of the breed in the United States. The former of these was organized in 1889, and the latter in 1890. The two associations named have recorded over

than half the States, and from most of the Provinces of Canada. A record of the breed is maintained under the National Record Board at Ottawa, of which Mr. J. W. Nimmo is at present Registrar.

As to their leading characteristics, it may be said that, though not quite equal to the Poland-Chinas in size, they bear some resemblance to them in form, though differing form them radically in color, which in the Duroc-Jersey is a solid cherry red. Having strong bone and wellplaced legs and good constitution, they are well adapted to sections where good rustling qualities are important; when heavy corn feeding is the rule, they are very suitable. Their grazing qualities are good, and their early maturing qualities are equal to most of the medium-sized breeds. In prolificacy, they stand relatively high among the American breeds, and the young

pigs are fairly hardy.

The standard calls for a head small in proportion to body, wide between the eyes, face slightly dished (about half-way between a Poland-China and a Berkshire); ears medium size, pointing forward and downward, and slightly outward; neck short, thick and deep; shoulders moderately broad; back and loin medium in width, straight or slightly arching; sides very deep, medium length between shoulders and hams, and full down to line of belly; ribs long, and sprung in proportion to width of shoulders and hams; belly and flanks straight and full, and carrying well out to the line of sides; legs medium in size and length, strong, well set apart; pasterns short and strong; tail medium large at base, nicely tapering, and rather bushy at point; hair moderately thick, fine and straight; size large for age and condition. Boars two years old should weigh 600 pounds; sows, same age, 500 pounds; boars and sows, six months old, 150 pounds. Disposition very quiet, easily handled or driven.



DUROC-JERSEY.

## Damages for Stock Killed.

Of late we have received numerous letters inquiring into the status of the law relating to the killing of animals upon the railway tracks. Difficulty seems to have been experienced in following the intention of the amendments to the railway act in 1903. In order that our readers might better understand the present regulations we took the matter up with the railway commission and have received the following letter from Mr. Justice Killam, chairman of the board.

EDITOR FARMER'S ADVOCATE:

I enclose herewith a memorandum showing the difference in legislation between the Railway Act of 1903, and the previous statutes.

The acceptance of a hide as evidence of a right to compensation, must have been a method adopted by the railway companies. It was not provided by any legislation of the Dominion parliament.

As to whether there was any attempted legislation of such a kind in the Northwest Territories, or what would be its validity or effect, am not in a position to express an opinion.

The most important change introduced by the Act of 1903, was the addition of the clause forming sub-section 3 of section 199. It has appeared to the board that the clause, as now upon the statute book, is too indefinite in shape and we have suggested to the government that parliament should be asked to amend the clause, either by fixing some distances along and from the railway, or some other limits, for the purpose of defining the locality, the unimproved or unsettled locality, referred to, or that there should be substituted for the clause a provision authoriz-