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### Breed and Type of Saddle Horse Parentage.

Among the salable horses of the present day the high-class saddle horse holds a prominent place. He has much in common with the English or Irish hunter, including the qualities of strength, elastic gait, intelligence and courage. The breed par excellence for the saddle is the Thoroughbred, which when sufficiently strong cannot be improved upon by the introduction of any other blood; in fact, when strength is sought to be introduced by using the blood of any other breed the results are as a rule unsatisfactory. With the best of breeding there are usually too many misfits, and when one departs from pure blood in either sire or dam he in a corresponding degree courts failure in securing a certainty of type in the offspring. So long as we deal with pure-bred animals alone, whether they be horses, cattle, sheep or hogs, we may breed to type, but directly we come to crossing one breed with another we are at once uncertain as to what the result will be. We may breed a Thoroughbred horse to a strong saddle mare of mixed breeding and the produce may be worth several hundred dollars or it may be fit for nothing more than very ordinary work.

In breeding for the saddle the sire should be thoroughbred or practically so, possessing the conformation desired in the offspring. Graceful bearing is of prime importance. A clean, bony head and fine arching neck are among the first features to attract a horseman, especially a moneyed man who rides for pleasure. It goes without saying that a short, strong back, high at withers, a good girth, and powerful, well-laid shoulders are also among the desirable possessions. The strong arm and well let down knee will indicate strength, and well let down knee will indicate strength, safety and durability. A long, deep and muscular hind quarter, with well let down, flat, strong hocks, are also marks of superiority in the saddle sire. Fine elastic pasterns of medium length are also desirable. It is not necessary that he should have won races; in fact, most of the turf winners have too little substance to commend them as sires of salable saddle stock. Even if he be somewhat of the "cobby" order he should not be objected to so long as his shoulders are well placed and his back and

The breeder cannot too soon realize that the choice of a suitable sire is only one step towards breeding a saddle horse. It is of paramount importance that the dam should be equally good in her way. A mistake too often made is to breed from undersized or wornout mares. A lightweight saddle horse suitable for a lady may, if first-class, sell for a good figure, but the chances of obtaining a remunerative return are much in favor of the

greater weight carrier. What kind of a mare is most likely to produce a selling saddle horse is a question which it is practically impossible to answer. A mare which to outward appearance is just what a saddle mare should be, if descended from a generation like herself, is almost certain to produce a similar offspring from a similar sire. It is well then to know something of a mare's pedigree before setting her to the task of reproducing her kind. When her family connection cannot be traced, if she rides lightly and gives one the idea of being well bred the chances are she will not throw back to anything coarse on her own side. The texture of the coat, too, is somewhat of a guide to her fitness as a brood mare.

Strength she must have in the form of both hone and muscle, and she should not be less than 15 hands and 2 inches in height nor should she exceed 16 hands. While size generally means power, it does not follow that a tall horse is necessarily up to weight. Various experiments have been tried with the object of combining strength with fashion. Thoroughbreds have been crossed with heavy mares, and the fillies so produced have been again put to the blood sire and so on, but the results have scarcely been satisfactory, and after the second cross the progeny have come out in all sorts of shapes. What we require is an upstanding, big-boned, roomy mare got by a Thoroughbred horse and with as few admixtures in her pedigree as possible. The writer has upon several occasions visited the stables of Mr. Adam Beck, of London who for several years has won notoriety for his green hunters up to good weights at the New York and other horse shows. As was noted in the ADVOCATE, he won at the last N. Y. show all the money offered in the class for green hunters. It may be mentioned just here that Mr. Beck's entire saddle exhibit was made up of horses possessing three or more Thoroughbred crosses, and the best of them might well be taken for pure Thoroughreds

from their entire conformation and way of going. As a general rule we can go no further than to say that the saddle brood mare should possess size, strength and breeding, and even when we have these requisites there is still an element of uncertainty as to the character of the offspring, though possibly reduced to a minimum. She should also have youth about her, and not formerly have been bred to a hackney, coach or heavy draft sire, as the tendency to throw back to the male with which she was at some time mated is more to be feared than we are usually led to believe. While mares of the correct type are far from being plentiful, there can occasionally be found such dams, which should under ordinary circumstances be put into breeder of saddle stock to visit the Canadian Horse Show, Toronto, he would receive valuable object lessons in the type to produce.

#### Views on Breeding Horses. BY MANITOBA BREEDER.

The man who watches his neighbors rush their horses off to market, and hears them declare that their mares will not be bred this season, all because horses are low in price, has studied the history of stock or grain production to little advantage if he does not set about to cull his mares and secure the does not set about to cull his mares and secure the services of the best stallions that are available. It is easy to go with the crowd. Nothing is so contagious as a panic. The thoughtful man needs no prophet to assure him that there is a future for horse breeding. The croaker sings about the coming of a time when electricity will make horseflesh "lag superfluous on the stage." Old men have heard such fairy tales before. The advent of the railroads was to have utterly wiped out horse breeding, but, as a matter of fact, with their development of new territory they created more demand for horses in a territory they created more demand for horses in a day than a decade would have brought about with out railroads. Electricity has supplanted the cheapest and least useful class of horses. The 1897 crop of colts will, however, be raised, broken, and mar-keted a long time before electricity puts an end to the demand for horses, so that there is no occasion for immediate alarm and no excuse for neglecting to mate the mares with the highest-class stallion within reach. It is certainly time to stop raising street car horses. The thrifty breeder should aim at a higher market—the breeding of drafters, gen-tlemen's drivers, high-steppers, carriage horses and saddlers. In times past, anything that wore hide and hoofs, if imported or pedigreed, was good enough to breed to. But two lessons of the market-place are stern and lasting, viz., weight without quality and shape without action go begging for bids. Never was there a time when the men who remain in the horse business should look more remain in the horse business should look more critically to character of the sires they patronize. If farmers who are rightly situated and adapted for the business will cull out their scrub mares, stock up with good ones, and go into breeding in earnest, breeding only to first-class stallions, they will find in a short time they have hit on the right thing at the right time. But all farmers are not adapted to the business, and some are not situated so they can breed and raise horses to advantage; all such should keep clear of the business. keep clear of the business.

The present condition of the horse market is due to the fact that men all over the country have been breeding and are now breeding to horses that have not the first qualification. Ignorant of the principles of breeding, a lot of riffraff has been produced that no intelligent buyer will take at any price. The low prices obtained for this class of horseflesh are advertised all over the country, to the discouragement of those who have good horses for sale, and so prices in general are depressed.

In the States during this period the craze for trotting speed took possession of men of wealth and leisure everywhere, and immense breeding farms have been established all over the country, and every doctor, lawyer, and merchant that owned a fairly good mare became possessed of the idea that he could breed a Dexter, a Goldsmith Maid, or a Maud S., and so, with the rage for breeding a phe-The present condition of the horse market is due

Maud S., and so, with the rage for breeding a phenomenal trotter, lawyers, merchants, farmers, and manufacturers turned to horse breeding, either on a large or small scale, and behold the result!

Is there one farmer or breeder in Manitoba who is foolish enough to think that he and the country are not losers by this deplorable state of things For do not all know that breeding a real "trotter is a chance result—a bit of gambling luck, a fortunate ticket from a lottery whose wheel in revolu-tion throws out a hundred blanks to one numbered card. Now and then comes a prize that trots in the "twenties" or below, and the press of the whole country heralds his fame and that of his breeder or owner; but the press, I notice, does not tell the story of the many failures; of the thousands of dollars, the years, the study that were spent in the effort to produce the one trotter, and a landscape full of colts and horses that could neither trot in "twenty" or anywhere else.
As a result of this trotting-horse craze, the indi-

vidual loss, heavy although it has been, is as nothing to that which has fallen upon the country at large. This is not a cheerful outlook, but I believe it is a plain statement of the conditions with which horse breeders are now confronted. We have too many scrub horses—that's the plain English of it. We can't eat them or export them in large num-We can't eat them or export them in large numbers and thus reduce the surplus, as we do with cattle, sheep, and swine. We must reduce the supply by ceasing to breed from any but the very best mares and stallions. Our breeding must be upon definite lines, for a definite purpose, and definite purpose, and a knowledge of how to directed by intelligence and a knowledge of how to breed to fit the market. It is no longer a question of how many foals can be raised, but how to breed a foal that will be worth the raising. The business will soon right itself, but it is the part of wisdom to adapt ourselves as speedily as possible to exist-ing conditions. There was a time when it paid to raise any sort of a horse, but that time has gone by and the present generation of breeders will not see it again.

The situation is not without some compensating advantages. We Manitobans have a good supply of the best specimens of all the desirable breeds of the stud to produce a class of horse for which there is a much greater demand than the present supply can satisfy. Were it possible for every would-be

breed up with a definite purpose in view, and I predict that the next quarter of a century will witness as great an increase in the average quality of our horses as that just past has witnessed in num-bers. Every fact connected with the industry of horse breeding, every market report, every thoughtful man's judgment indicates that the demand of the hour is for skillful mating of the better class of brood mares to stallions of outstanding superiority.

#### Sows Eating Their Pigs.

Seldom if ever does a spring pass without one or more sows in every neighborhood devouring their newly-born offspring. The cause of this is not far to seek when one considers for a moment the food to seek when one considers for a moment the food and treatment the sow has had and the demands upon her system during the time of her pregnancy. Where such a calamity occurs it will generally be noticed that the sow has been closely confined and fed upon food lacking in muscle and blood-forming substances, and these are especially demanded at this time to supply the growth of the litter within her. Corn and water are easily fed, and are often to blame for the unnatural condition, and even if some roots are added to such a diet the trouble will be little if any less liable to occur. What is wanted is a protein diet, and bran or shorts are as nearly the correct food as one can readily obtain. The eating of her offspring is due to an unnatural craving for something the system requires, and during the fevered condition of farrowing she insanely begins to feast upon the struggling mass of

during the fevered condition of farrowing she insanely begins to feast upon the struggling mass of her generally scrawny and ill-nourished litter, the first taste of which gives her the impression that she has before her what her needs demand.

Sows or any other pregnant stock should have plenty of exercise. Let them have the run of a yard, an old clover sod or other pasture. Feed plenty of laxative food, such as oats, mill feed and the like fed in slops. Pigs will then come strong and healthy at birth, the sows will be quiet and gentle, giving a good flow of milk of bone and muscle forming qualities. A condiment of salt, charcoal and ashes within access also tends to keep the sow in perfect health. Never allow a sow to farrow where she cannot get a drink of cold fresh water. water.

# FARM.

## New Method of Planting Potatoes.

New flethod of Planting Potatoes.

With a large number of farmers potato growing is not a profitable branch of agriculture. Successive failures in procuring crops have led them to despair of making the line a success, and indeed if it were impossible to have better results than some have they might well be justified in their opinion. Yet if equal care were taken with this crop as with many others, despite the low price of potatoes it would, I believe, bring better results than some other lines which now have the preference.

Potatoes cannot be grown successfully on poor ground. Perhaps the all around best plan for the immediate crop and the enriching of the ground for future crops is to have the manure rotted and mixed through the ground. In this way the strength of the manure is not wasted as it is when put in the rows only. This plan is endorsed and practiced by the Guelph Experimental Farm. A common way in some localities is to open up the drills or hills and then drop the seed and then cover, first with manure, then with earth. But reshare the least tried plan is the one which I will common way in some localities is to open up the drills or hills and then drop the seed and then cover, first with manure, then with earth. But perhaps the least tried plan is the one which I will here describe. Instead of dropping the seed on the hard ground in the bottom of the rows, we have for the last ten or fifteen years made a practice of half filling the rows with manure, then dropping the seed and covering. This method has paid us well from the start. We never plant more than an acre of potatoes and always have a yield of from two to three hundred bushels notwithstanding years of drouth, floods, and rot. When grown in this way the potatoes are uniformly large and free from scab. The roots of the plants easily penetrate the manure and find immediate nourishment; and the potatoes find an easy growth in the soft bed where they would otherwise have to press their way in the hard soil. In very wet weather the manure drains off the water, and in dry, unless it be very coarse and strawy, retains the dampness and nourishment. Also in plowing out the crop few of the tubers are cut with the plow, being chiefly in or above the manure. Try this plan, farmers, and you will have the pleasure of digging a plentiful crop of large potatoes.

Grey Co., Ont.

Practical Points in Turnip Growing.

# Practical Points in Turnip Growing.

To the Editor FARMER'S ADVOCATE: SIR,—In last ADVOCATE, in an article by G. C. Mowbray on root culture, I think there are one or two points that might be improved on. I think it is a mistake, when conditions for growth are favorable, a mistake, when conditions for growth are favorable, to sow 1½ lbs. turnip seed per acre. We have grown about 10 acres per year for a number of years, and we find from ¾ to a pound plenty. We think his methods of working turnip land all right up to the last plowing. That should be done and rolled down several days before sowing, when it will allow weeds to germinate. On the day before sowing, by means of the cultivator and harrow, get the land in fine condition and roll ready for drilling. By following above course we find one man will thin out double the quantity he would under Mr. Mowbray's system of thick seeding and