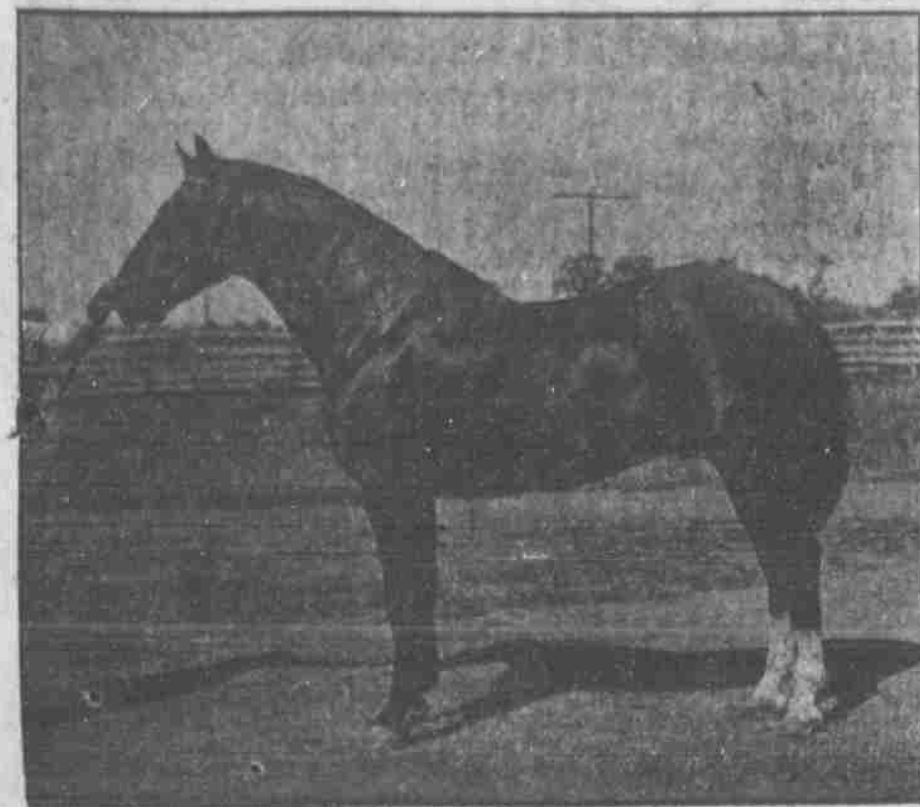
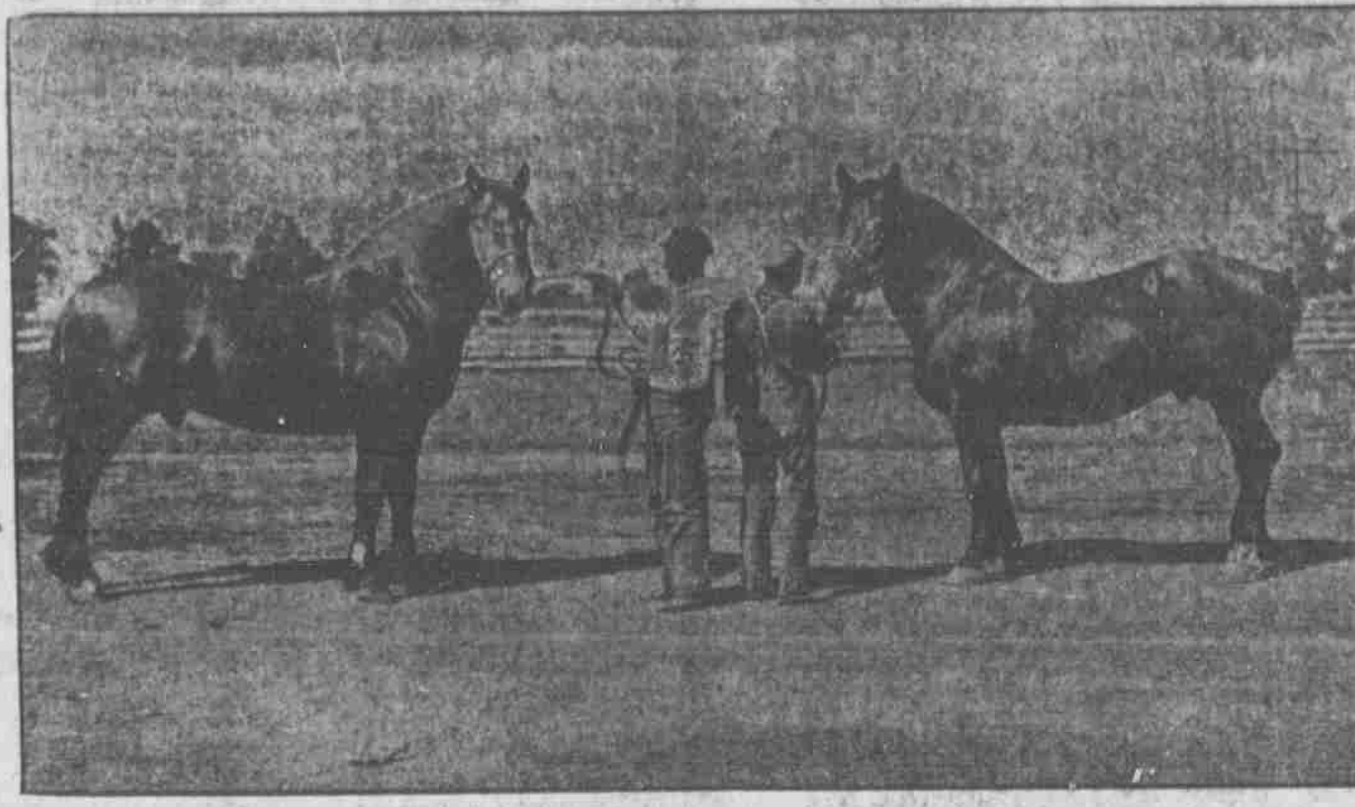


American Horse the Heritor of All the Equine World's Best Blood



FRENCH COACH STALLION, DEBUTANT.



PERCHERON STALLIONS, RIBERAC AND VIOLET.



TYPE OF CARRIAGE STALLION.

THE AMERICAN horse has become an important factor in the horse world. Each year seems to add some new evidence of the superior advantages that the climate, soil and feeds of this western continent are able to exert in building up a horse of great energy and endurance. The American horse dates back in his origin to the discovery of the country by Christopher Columbus, when it is said this country was entirely horseless. The progress in horse population and horse improvement which has followed the introduction of civilization has been in proportion to the needs and demands of man in his work of improvement and cultivation.



PROBABLE SIRE OF BLUE RIBBON WINNERS.



PERCHERON STALLIONS, EKANSAN AND COMBER.

The American horse in blood and breeding has been subjected to conditions of expediency that did not admit, in all cases, of the present day type and breed adherence that many horse breeders and fanciers regard as valuable in the offspring. The crossing of breeds and the intermingling of blood of the various types indicating great variation of breeds has been a common practice with the American breeders. The heavy horse of the draft type has been, for generations, used in building up more size to the smaller kinds of horses, the little animals that are below the utility size. This system of plan of breeding up has been carried on almost from the beginning of the horse raising industry in America.

found in the country, and thousands of these animals, were it not for the brands they carry, would go into the eastern horse markets, broken to saddle and harness, at the top prices. They have a confident, ambitious movement and bold carriage that gives them a dignified bearing that attracts the eye of buyers. The brand on these horses gives them away to the prejudice of the uninitiated and they are estimated as wild and vicious bronchos, horses not to be trusted and dangerous to handle.



FINE TYPES OF DRAFT HORSE.

The introduction of the Mexican pony into Texas and the southwest was the source of much annoyance to the horse industry of the states, and especially the western country. While the diminutive animals of the horse kind were in a measure only an apology for a real horse, they multiplied and increased on the range and to their credit it must be said, furnished the basis for the present range horse of the western country. By the introduction of stallions of more size and distinct breeding character these little animals were made to produce fairly good saddle horses.

In the last twenty-five years we have had more or less experience in breeding and handling what is known as the western range horse, and in justice to this much abused and slandered animal, must say that we have had some of the most tractable, gentle, safe horses out of the wild range bred herds that we ever owned of the horse kind. Horses that were perfectly safe for children to ride or women to drive, horses that were put to all kinds of farm team work and never were known to be in the least faulty. The range horse as a class is prized for his spirit, his disposition to never give up, but to go to the end of the road with a seeming will and interest in the task, even if he drop dead from exhaustion when his work is finished.

The range bred horse is much like the farm raised horse in diversity of temperament; there is a great difference in disposition, one will be easily handled, while another will be stubborn, vicious and not to be trusted. From the latter disposition comes the "outlaws," the "bucking bronchos," the exceptions, which have given the range horse a bad name by the publicity given from the exhibitions of horsemanship by the cowboys, who help to make the horse an ungovernable saddle just for the purpose of displaying their skill in riding.

their saddle horses in the herds on the range. The recent demand in the east for polo ponies and the filling of this demand from the small western range horses, is of itself evidence of the recognized quality of these animals, not only in their desirability, but in their ability to receive training. The South African war would have been struggling on or lost to Great Britain had it not been for the American range horses that were bought here by British army agents and shipped to their armies in Africa. Recall the services these range horses performed in the Spanish-American war, whereby in their great achievements in cavalry service they were pronounced one to be equal to three of the ordinary farm-raised horse in durability and average army life. It was only when the army demand exceeded the available supply of the ordinary horse stock of the country that Uncle Sam's agents were driven to the expediency of cutting down the size qualification and the inspection requirements made to fit the western range horse

that this greatest of equine composition, quality and endurance was introduced into military service. It was in this new role of the war horse that the American broncho achieved its victory over all other breeds, types or nationalities of the equine race.

Why, the western range horse is an animal of great endurance, alert, bright and ready to go at a moment's warning. From the time he is a colt he makes his living on the range summer and winter. He is a rustler in the truest sense of the term. If he failed in this one quality death would soon claim him. There are no apologies or excuses for disease or infirmities with the range horse. Where the range horse occupies the open range he carries his own life insurance, and this is in the ability of his legs, at all times, to carry him away from danger and to places of safety.

When the mare drops her colt on the range, the youngster is at once started in his beginning lessons of learning how to take care of itself. When but a few days old the colt is found with the herd and able to keep with its mother, even when the herd is put to a good speed in getting away from approaching danger. It is this constant exercise, the life of freedom and activity that the colt grows up under that makes his bones solid and his muscles hard and elastic.

Owners of range herds are authority for the statement that it is not an uncommon thing for a pack of gray wolves to start the herd of horses and follow them for fifteen or twenty miles, or until some of the weaklings or cripples fall out of the chase and are killed. This system of weeding out the inferior is responsible, as much as anything else, for the great endurance and the lasting qualities of the range horse. They are not only well bred, by the introduction of the best bred horse stock in the country, but they are fed upon the most nutritious grasses, watered from the purest of streams, trained by instinct to guard themselves by fleeing from their enemies, thus they grow up under conditions of life that tends to strength and activity.

The future of the western horse is a bright and shining light before the horse world, and while from necessity must be somewhat modified in method of bringing up will continue to be that of constantly increasing quality and higher standard of blood and breeding. The conditions for producing the soundest and best horses for service are permanent, and lasting, and from this time forward better horses will be found coming from the western herds.

The market for good horses of all kinds has never been in a more healthy, encouraging condition for the breeder and horse handler than now. The evidences on all sides points to a shortage in the supply of horses, such as are required to carry on the necessary horse power of the business and commercial affairs of trade in every-day life. It is folly to think that the time is near at hand when horse power will be dispensed with, because better and cheaper means of service can be substituted.

The horse is the safest, surest, most economical power to use in the short haul and local transfer of merchandise that can be had. The changing and moving of horse chandler and all lines of goods in and about cities and towns to freight storage centers and long-distance shipping depots is such that the horse and wagon cannot be dispensed with for a day even. The big, sturdy, reliable draft horse accommodates himself to all kinds of conditions that are possible to come up in the line of labor in which his lot is cast. It is very seldom he is disabled or required to go to the shop for repairs. He is not being outclassed, and every year rendered valueless by some little improvement or patent gotten out that aids in operation and application of power. He can be converted to many uses when he ceases to be active as a driver of heavy loads. His whole life is one of service and value to his owner.

The opening up of railroads and the building of transportation lines of the various kinds only add to the demand for the draft horse. The more business the commercial world, the more horses it will require to carry on that part of labor that cannot be successfully handled by machinery. As time moves on, as improvements come and go, the draft horse will become more and more a necessity, a fixture in the operation of trade.

No other country in the world has so great and diversified a horse breeding industry as the United States, and no other country can produce a horse that will show more endurance and a better confirmation for the purposes that the horse was originally created for. In business, in the commercial world, the more horses it will require to carry on that part of labor that cannot be successfully handled by machinery. As time moves on, as improvements come and go, the draft horse will become more and more a necessity, a fixture in the operation of trade.

Government's Efforts to Develop an Exclusive American Type of Carriage Horse

(Continued from First Page.)

but there should be uniformity in conformation, style, quality and finish, thus establishing a marked type, at the same time keeping in mind the varying demands of the six-runabout, breughian, landau and country carriage.

In order to ascertain what the commission had in view when it purchased the foundation stock at Fort Collins, it is not amiss to take a look at five or six of the mares that seem to conform most closely to the type desired. Martha Washington is probably the finest type of heavy carriage horse. She is burnt chestnut in color, with fine, long, clean out head and neck, short, strong back, long, full and well-rounded quarters, sloping shoulders, with high, frictionless and graceful action.

Virginia is considered the finest type of carriage mare in America today. She is from the stables of Judge Moore, and has faultless style, finish and substance. She is capable of taking a carriage at twelve miles an hour with an endurance that will cover sixty miles a day without lagging or showing signs of weariness. In this mare is found in perfection one of the points so noticeably lacking in American trotter families, and so essential in a carriage horse—the perfect stifle and hook action characteristic of the English hackney.

Kentucky Belle is coal brown, resembling Martha Washington in graceful neck and carriage, being similar also in action, with slightly more finish.

Wisconsin Queen is a beautiful bay, with short limbs, exceptionally fine head, neck and shoulders, combining manliness with quality and speed. She has been shown successfully as a single, as one of a pair and as one of four in a coach.

Illinois Beauty, donated by W. F. Brown, of the Vanderbilt system, is a striking black, with great finish, and in of the road and runabout type, possessing grace and beauty of action.

Colorado Countess was successfully shown at Madison Square Garden in New York. She is from the ranch of George D. Rainsford of Wyoming, and her lung and heart power, and quality of bone and hoof, taken with her wonderful endurance, bear out all that has been claimed for the Rocky mountain country as the natural breeding place for perfect horseflesh. Four of Mr. Rainsford's remarkable mares were purchased at half their market value, and those interested in the government experi-

Two Omaha Saddle Ponies That Will Be Seen at the Show



Experimenting in Artificial Diamonds

The production of artificial diamonds has long been a dream of the experimenter. The conditions under which diamonds are produced in nature are pretty well understood, and on a small scale they have for some time been duplicated in the laboratory and even—though here quite unwittingly—in the workshop. Nothing more is necessary than to reduce carbon—a bit of coal or graphite or lampblack—to a liquid condition, combine it with a solvent and maintain it under great pressure until it cools, when crystals of the pure carbon will form just as do crystals of quartz or sugar or salt under like conditions—and these crystals of carbon constitute true diamonds. But the difficulty lies in the extreme reluctance with which carbon assumes the liquid state. Under pressure, to be sure, it will liquefy; but the pressure required is about fifteen tons to the square inch. In the depths of the earth such a pressure may be applied by the weight of geological strata; but how may it be attained in the laboratory?

A most ingenious answer to this question was found by Prof. Henri Moissan of Paris. It is based on the well known fact that the metal iron has the property—which it shares with a few other substances, including water—of expanding instead of contracting as it passes from the liquid to the solid state, combined with the further fact that liquid iron absorbs or dissolves carbon, much as water does sugar in increasing quantity with increasing temperature. Moissan fills an iron receptacle with pure iron and pure carbon obtained by calcining sugar, closes it tightly, and rapidly heats it to the highest temperature attainable in an electric furnace, bringing it to a degree of heat at which the iron furnace begins to melt and the iron volatilizes in clouds.

The dazzling fiery receptacle is then lifted out and plunged instantly into cold water until its outer surface is cooled and hardened, thus forming a shell of iron that holds the interior contents with an indestructible grip. As this molten interior matter cools the carbon separates from the iron solvent in liquid drops, and under the almost unimaginable pressure of expansion of the solidifying iron, these drops become solid crystals of diamond—Everybody's Magazine.