ricts, the practice of me ot-cultivator instead of e summerfallow has been or egadicating perensially sow thistle. The idea ets hold the underground The cultivator is set a t each operation so that in solid earth each time they cut off the stalks operation the cutting is th the weed never gets its surface. Finally it gives e and dies of starvation with this method of sumat the college show that ivation is required than is plowed. "One thing hasized, and that is that o keep the cutting knives Mr. Ellis, as we discussed a is implement. "It is no bem as thick as a bull's ig tool has got to have a otherwise the operation is with a dull razor. ow was plowed this year five strokes of the cultiessary. Where no plows six strokes were gives eason. This stirred the oth of about four inches, ound that it is pretty hard leeper, although we have s where farmers got down six or seven inches. In any re to go deep enough to to cut against each time. e to cultivate is after a e soil is just dry enough et will not clog. The land after each cultivation."

as a Weed Exterminator

n found that when the ivator is made to take the plow on the summerfallow, following matures a little rule, though this does not v. The method is as good for perennial weed control. not quite so rank, and this the slight advantage in This method, however, d at the top as far as prods are concerned. vere secured when the falwed, packed immediately ed, and harrowed after-Summerfallow necessary. his way was successful in f weeds. When the packer from the above operation also were obtained; but it and that in a dry year conpisture is lost unless the ed after the plowing. When was omitted and the sumandled with the duckfost yields obtained were lower ither of the two foregoing Vhen the duckfoot cultiva used at all it was found istle and other weeds were so well controlled.

of the duckfoot in controllistle is clearly seen in the r was all that was necessary On the plots where the had been omitted a sturdy thistle was showing up. it had been used scarcely a

discernible. Continued on Fage 34



very phase of field crop work.

The Percheron Horse

The Grain Growers' Guide has asked meto contribute an artcle on the history development, and characteristics of the Percheron horse. Inasmuch, as a comprehens ive work on this subject, published last year, entitled "A History of the Percheron Horse,

consists of pages, it is at once evident that what may be said here must be very much

Briefly, exhaustive enquiry made in France during the past seven years re-France during the past seven years revealed documentary evidence relating to Percheron history which has been of incalculable value in disclosing facts relating to the history of the breed. This documentary proof, contained in the archives of the Prench government, has definitely established that as long ago as 1820 to 1830, the Percheron horse was known as a distinct breed, was similar in type size and characteristics. was similar in type, size, and characteristics to the present-day Percheron, and that it differs in certain distin-guishing characters of the skeleton from other large breeds of horses found in Europe. It also seems likely from the evidence so far revealed, that the Percheron has always been a distinct type indigenous to the district of La Perche, France, and that such changes as have occurred have come through careful selection exercised by French breeders.

The evidence found shows conclus ively that the breeders have guarded, jealously, the purity of the breed. Prepotency, or the ability to transmit its own characteristics with a high degree of certainty to the common stocks with which it has been crossed, has long been known to be possessed by the Percheron breed to an unusual extent. This strength of blood is due to purity of breeding, and is one of the leading reasons for the popularity of the breed.

Percherons in America

Percherons date their real start in America to 1851, when three Percheron stallions, "Normandy 351," "Grey-Billy," and "Louis Napoleon," were brought over. The second horse named went to New York State, and did not contribute materially to American Percheron history, but the others did.

"Normandy 351," better known as "Normandy 351," better known as "Pleasant Valley Bill," went to the central part of Ohio and remained there in service until he died in 1874. He achieved a splendid reputation, begetting amazingly numerous progeny. Of this horse his owner, the late Thomas Jones, said as follows:—

"It is safe to say that he averaged 60 colts a year for 18 years, and that they sold at three and four years of age for an average of \$200, many of them having brought \$500 each, and some as much as \$1,000. It was when the United States government began

scouring the country for good horses during the war of the rebellion that the seal of fame wasset upon "Pleas-ant Valley Bill" for all time. His get readily brought from \$50 to \$125 more than the common stock of the country where stood. The general belief was that those having "Bill's" colts to sell to Uncle Sam received on an average \$80 per head more than was paid for other kinds."

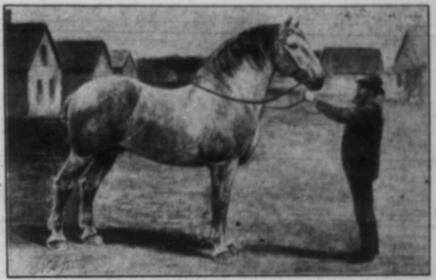
His get were wonderfully uniform' and the fact that they sold for much higher prices than the get of other stalOrigin, History and Characteristics of the Great French Drafter .-- By Wayne Dinsmore, Secretary. Percheron Society of America

lions in that part of Ohio added greatly to the popularity of the Percheron

Influence of One Sire

"Louis Napoleon" stood in central Ohio, in '51 and '52, but few mares were bred to him. In the spring of 1853 he was sent to a point near Dayton, Ohio. He did very little better there than he had done during the previous season in Union County, but early in the summer of 1853 the few colts that he had begotten in Union County during the previous season began to show signs of that remarkable excellence that was destined to make the breed famous throughout the West. He was accordingly returned there and stood at an increased fee in 1854. In the fall of 1854 he was taken to Illi-nois, where he stood in 1855 at Waynes-

breeding. Numerous horsemen determined that stallions that could increase the value of the common stock as rapidly as these horses could were worth importing. By 1870, 90 stallions and 21 mares had been brought to the United States from France. Many of these were brought over during the latter part of the '50's and most of the others during the '60's. During the years 1871 to 1880, inclusive, 874 stallions and 152 mares were imported, and the general distribution of these Percheron horses, the high prices realized for their off-spring, and the fact that even their half-blood sons were prepotent enough to materially increase the value of the common horses with which they were mated, popularized Percherons in America as nothing else could possibly have done.



"Pleasant Valley Bill." One of the good old Stree of the Breed.

ville. He was not popular in that season, nor in succeeding seasons, until his colts had begun to show their worth. By 1860 enough of his colts had developed as threes and fours to demonstrate to the Illinois farmers that he was a more valuable sire than any other they had, and from that time on until he was no longer available for use in the stud the number of mares annually tendered for breeding was greater than could possibly be accom-modated. The colts sired by him were so excellent in fact that practically all of the stallions were kept entire, and his half-blood colts sold at prices ranging from \$500 to \$1,000, and some at even higher prices.

The ability of these two horses to beget progeny that would sell for far higher prices than the get of any other stallions then known in America gave tremendous impetus to Percheron

Records Established

In 1876 the first record association for the registration of pure-bred draft horses was established. This was the American Percheron Horse Breedors' Association, which was formed be-fore stud books were established for any of the British or other draft breeds. The thorough-bred stud book alone precedes it.

About this time, Mark W. Dunham,

About this time, Mark w. Dunnam, Dillons, and numerous other operators, came actively into the importing field, with the result that there was an extraordinary period of expansion in Percheron importing and breeding in America during the '80's. In 1880 only 45 breeders were producing Percherons in America. By 1890 the number had increased to 593. During this period of expansion, 4,988 stallions and 2,566 mares were imported, and 1,920 stallions and 2,089 mares were bred in



America. The rapid expansion of the Percheron business in the United States was due entirely to the fact that the American farmers had definitely concluded that the Percheron suited their requirements better than any other draft breed. All other known draft breeds were being introduced to America during this same time, but their colts out of the ordinary stock found in the United States did not suit American farmers as well as the Percheron grades. The net result has been that Percheron horses have steadily increased in popularity in the United States. States.

In 1917, the official reports of 20 stallion boards, including all important horse-producing states, showed in end figures, that 66 per cent. of all the pure-bred draft stallions in use in these 20 states are Percheron, the other five breeds combined making up the other 33 per cent. In breeding stock 'females and young stock) the proportion is fully as high, or a little higher.

If space permitted, we might up into

is fully as high, or a little higher. If space permitted, we might go into the details of this historical development of the Percheron horse in America; might tell of the tremendous influence welded upon the breed by Mark W. Dunham, the Elwoods, and many other men who have contributed greatly to popularizing the breed and to improving it in its valuable characteristics. But any attempt to do this would require altogether too much space for the limits of this article.

Percheron Characteristics

Stallions range in height from 16-1 to 17-3; mares, from 15-3 to 16-3, ocean-sionally 17 hands. In general, breeders consider that a sire worthy of using on pure-bred mares should stand 17 hands, or 17-1; should have depth of chest equal to one-half his height, and should be well proportioned throughout and weigh from 1,950 to 2,000 pounds, in breeding condition. Mares most proferred are those standing around 16-2, with depth of chest equal to one-half their height, well proportioned, and heavily muscled throughout, weighing around 1,850 to 1,850 pounds in ordinary breeding condition. It must not be forgotten, however, that some very good brood mares have been slightly smaller, and there are some larger mares that have been excellent producers. Some stallions are much larger.

One of the most noted sires now in

One of the most noted sires now is use in the United States stands 17 and weighs over 2,200 pounds in breeing condition, but these unusually large stallions are exceptions to the generical, and the type mentioned, standis around 17 hands and weighing approximately 1,950 to 2,000 pounds in breeing condition, is the type most generally sought for.

Aside from the executial characterical

Aside from the essential characteristics, height and weight, the Perchero possesses the characteristics which all good draft horses should have: good-sized clean-cut head; heavily-muscled neck of good length; sloping shoulders; well-set withers; short strong back; heavily-muscled, short-coupled loin; deep) chest; full breast; hind ribs well set down giving a deep fiank; a long fairly level crop; and wide, heavily-muscled hind quarters. These characteristics of conformation accompany great weight and strength, and are to be looked for in all instances. The set

Continued on Page 31



A Characteristic Form Scene at La Perche, Pronce, the Home of the Percheron Breed.