

The Horse.

Production of Horses.

It is strange, but true, that the consumption of horses increases with every increase in the use of mechanical appliances which are intended as a substitute for the labor of horses. Many years ago the production of railroads and locomotive engines was dreaded by farmers as destructive of their business of horse-breeding. The demand for horses was expected to disappear, and the ordinary roads and canals were expected to become obsolete. But, contrary to this expected disastrous result, the demand for horses has grown steadily and as steadily grows, and the canal, at least in noteworthy instances, has become unable to accommodate the rapidly growing traffic. The wonderful expansion of industrial enterprise on every hand, made possible by the extension of railroads and the general use of the steam engine, both locomotive and stationary, has caused a necessity for horse labor that taxes to the utmost every source of supply. The new industrial formula, "Never use a man when you can use a horse, and never use a horse when you can use steam," is made operative in all mechanical pursuits, and if in the business of agriculture it finds the least development, it is because the poverty and not the will of the farmer consents. The farmer raises horses for others, and still mows and reaps by hand, and threshes and grinds by horse-power, because, as yet, his necessities are greater than his capital. But the constantly growing use of steam, and, as we must admit, the constantly growing use of horse labor, is one of the signs of the times of the greatest interest for farmers to study and duly appreciate.

This growing demand for horses is not at all likely to lessen or to cease, but to continue, and its development is not at all unlikely to cause a brisk export trade from America before long. Germany finds it necessary to forbid the exportation of horses; France seeks in vain an adequate source of supply for her needs. England at the same time is in such a straight that the legislature discusses the question of the supply of horses for the army, without discovering any way out of the difficulty. The imports of horses into England in 1873 amounted to 17,722, of a value of nearly \$3,000,000. These animals were brought mainly from Germany, and now that this source of supply is cut off, the English journals are enquiring what shall be done about it. At a price of \$165, English farmers find it unprofitable to breed horses, and were the price to be advanced considerably it would not remove the difficulty, for if horse-breeding should take the place of grazing and fattening, the price of meat, the British staff of life, would be raised to an alarming extent. Either beef or horse-flesh must advance, or both together, unless a foreign supply of horses can be reached. The question now is, can we furnish this supply? Can farmers who complain that raising corn and wheat for shipment abroad does not pay, produce horses for a foreign market with profit by consuming their grain and hay at home? This question involves some interesting considerations. Every horse raised to four years of age represents six tons of hay and 100 bushels of corn, or its equivalent in other grain, allowing only for its consumption during the earlier unproductive portion of its life. On the average, the money value of this would amount to at least \$150. A farmer will be recompensed for all the necessary attention given to an animal by its manure, and this return to the farmer will prevent the rapid exhaustion of the soil which would result from the shipment abroad of grain. For many reasons, well understood by farmers, it is better to raise live stock than to ship grain, and much land that is worthless for the plow is profitable under pasture. It is undoubtedly possible for many farmers now making small profits by raising hay and grain to sell, to double their income by breeding horses. It is not a costly matter to ship horses across the Atlantic, and if, as seems very probable, the demand will soon make it profitable to do so, it will certainly be done. In the meantime the demand increases at home, and we know from experience that to sell a yearling colt of common farm stock for \$75 is more profitable than raising twenty-five sheep or three yearling heifers for the same money. But the demand is also for good stock at better prices, and as it costs no more to feed a colt of this class than a poor one, the profit is the greater. What is needed is enterprise and skill, and if the first exists the second is soon learned.—N. Y. Times.

Cause of Megrim in Horses.

A correspondent of the *Veterinarian* says that he has been in practice as a veterinary surgeon for thirty years, and he has taken pains to ascertain the cause of megrims. On examining the horse's eye immediately after or during the attack, he has found it exceedingly convulsed and acted upon by spasmodic affection of the muscles, a symptom that could not be present if the disease arose from distension of the arterial vessels of the brain. He has never seen a saddle horse affected with this complaint, and all the cases he has seen occurred when the sun was shining brightly, or by moonlight when snow was on the ground.

He had a favorite pony which was subject to megrims. He removed the blinkers from the bridle and the pony never showed any symptoms of them afterward. It occurred to him then that the reflecting of the sun upon the blinkers falling directly on the optic nerve, was the cause of this extraordinary complaint. Since that he has had many patients affected with megrims, and in every case he has ordered the blinkers to be removed, or if they were not to have the horse's eyes shaded with a piece of leather three or four inches wide, extending in front from one winker to the other. In every case this treatment proved successful. He feels satisfied, from the symptoms he has always observed in megrims, that the brain is not the seat of difficulty.

Galled Shoulders and Backs.

During the hard work of seed time, farm horses are, in some seasons more than in others—in wet and warm seasons—subject to galled shoulders and backs, which, when not attended to, are apt to produce troublesome sores. The skin is not only abraded by the collar and saddle, but irritated and inflamed; and if the irritation is kept up, an ichorous discharge takes place, which is difficult to heal without giving the horse rest. When a saddle-gall is observed, the harness should be looked to, and the pressing points which have caused the sore should be relieved. A lotion should then be used to anoint the bruised parts every night, after they have been washed with warm soap-suds, and dried with a soft cloth. The following is a useful application: Take hot lime shells of the bulk of two quarts, and pour upon them two quarts of cold water; and after they have intimately combined, pour off the liquid into a dish. Add to this liquid five wineglassfuls of linseed oil and two ounces of fine powdered sugar of lead, dissolved in a little water. Stir them together, and then bottle and cork up for use. After the bruises have been washed in the evening, anoint them with this liquid with a feather until the wounds heal.

Liniment for Horses.

R. S. Steele writes to the *American Farmer's Club*:—"Some time ago I was a good deal worried with a couple of horses which had sore backs. I tried various remedies without success, and was beginning to despair when the following receipt came to my notice:—"The inner bark of white oak bark boiled down in an iron kettle (never use a brass one) until it is as black as ink; while boiling drop in a piece of alum about the size of a hen's egg. This liniment is to be applied with a sponge, and is good for any sore or bruise; in fact it is a safe thing to keep in one's barn ready to use when occasion requires. As I found this so useful, I venture to send it for the benefit of others who may not be in the possession of anything as good. I think it is also an excellent plan in warm weather to clean the collars often with Castile soap."

Fish in Canada.

A great improvement has taken place within the past few years in Canadian fisheries. The trout streams have been kept free from impurities, and unlawful fishing has diminished. Through the enterprise of Mr. S. Wilmot, of Newcastle, Ont., the lakes and streams are now becoming plentifully supplied with fish. The Commissioners of Fisheries have recently suggested that the salmon in different rivers are too numerous, and that means should be taken to lessen them. Since 1868 the salmon fishing in the Province of Quebec has yielded an increase of nearly 300 per cent. The vast increase throughout the entire Dominion is simply due to wise inspection and discriminate fishing. Canada thus possesses a great source of wealth in rivers and lakes, and every year their value is increasing.

The Apiary.

To Make Bees Swarm in a Particular Place.

When the apiary is where there are no natural conveniences, it is best to provide something for the bees to cluster on. Bushes six or eight feet high—evergreens are preferable—with the ends of the branches, except a few near the top, cut off, can be used with good effect. Secure the whole with strings, to prevent swaying in ordinary winds, and make a hole in the ground deep enough to hold them, and so large that they may be easily lifted out. The bees will be likely to cluster on some of these; they can be raised out and the swarm hived without difficulty. A branch of dry mullein tops, tied together on the end of a pole, also makes a very good place for clustering, as it resembles a swarm, and often deceives the bees themselves. I have known them to leave a branch where they had begun to cluster, and settle on the mullein tops when held near them. When bees cluster on high trees, where the branches cannot well be cut off, I have gone up a ladder and turned the hive bottom up, directly under the main part of the cluster, and then had an assistant shake the branch sufficiently to dislodge the bees. Most of them fall into the hive. Or, if one hesitates to go up the ladder, have ready two or three light poles of suitable length, with a branch or fork at the upper end, large enough to support a bushel basket. Raise the basket directly under the swarm, and with another pole dislodge all the bees. When you have secured nearly all, throw a sheet over them, to prevent their escape. They will soon become quiet, when they may be hived. A bag, if preferred, can also be set up among the branches in the same way. Swarms sometimes alight in places where it is impossible to jar them off, as on the trunk of a tree. In this case, I place the hive near, take a large tin dipper and dip it full of bees; with one hand turn back the hive, and with the other put the bees into it. Some of them will discover that a home is provided and set up a buzzing, when others will soon join them. Hives painted some dark color will become intolerably hot in the sun, and are often deserted. The smell of newly painted hives of any color often causes bees to leave for more pleasant quarters elsewhere. The question is often asked, which is best for bees, a wet or a dry season? I have studied this point closely, and come to the conclusion that a medium between the two extremes produces the most honey. Of the two extremes I think a wet season the worst. Another question of interest is, concerning the distance a bee will travel in search of honey. There is an old saying that bees go seven miles from home, but I think it difficult to prove that they will go three miles. From all the evidence I have, they certainly do not go further than that. I have my bee yards from two and a half to five miles apart. The largest apiaries should be separated at least four miles.

Bees and Bee Culture.

As soon as the workers find out that the queen or mother is gone, which will generally be in less than half an hour after her removal or death, they usually become very much excited, and run about the hive, as if they knew that some great calamity had befallen them. Some of them even take to the wing and fly out and in and about and leave no place unsearched, as if in the greatest distress. If there be no newly laid eggs in the hive, or bee worms less than three days old, the excitement soon ceases; for instinct tells them that they have the means to supply their loss by the production of a young queen, and they immediately calm down and go to work, as if nothing of material importance had happened. It will be seen, from what is here stated, that the loss of the queen from a hive is not necessarily fatal to the stock. Indeed, it is sometimes of very great importance to the welfare of the stock to remove the queen; and it sometimes happens that her accidental death is of service to the stock. But, if her removal should be effected when there are no eggs in the cells, or worms under three days old; or, if she should die at the season when there are no eggs; or, if eggs, no drones for the fertilization of the new queen, as may happen in the winter time, the colony is sure to go to ruin, unless the apiarian perceives and remedies the difficulty. These facts are all of the first importance to the practical apiarian, and should be carefully remembered by him.—*Rural World*.