

## THE HORSE.

### Young Horses.

It is an easy matter to teach young horses to submit quietly to having their heads handled. All that is required is to handle the head and ears occasionally for five minutes or so. Most young horses that have not been spoiled or rendered nervous by rough treatment do not naturally object to their heads being touched. If they do at first evince any objection, this is easily overcome by a little gentling and the exercise of some patience.

It certainly is desirable that young horses should be gentled about the head at an early age, because the longer this is put off the more likely are they to object to the head being handled. In most cases, where broken-in horses have the fault of refusing to let their heads be touched or to keep them steady, it is the result of mismanagement.

Probably one of the most frequent and potent causes is the application of the ordinary twitch, of which blacksmiths and grooms are so fond. The frequent use of this instrument is sufficient to make the most even-tempered animal shy about the head, and to cause him to resent it being touched. Once a horse has been spoiled in this way it takes a long time and requires a great deal of patience to make him steady about the head again. There is no question that the twitch is very greatly abused by ignorant men who have to deal with horses.—Live Stock Journal.

### How the Hoof Grows.

Poor feet in horses are abhorred by practically everyone, yet there are comparatively few who understand the hoof of the horse, and give it intelligent treatment. Many a good-footed horse has been spoiled by lack of attention to the growing hoof, or by careless shoeing. Smiths should use judgment based on knowledge when shoeing a horse, and farmers ought to watch the young horse carefully, using the rasp or chisel when necessary. Dr. John W. Adams, an authority on shoeing, prepared a treatise on this subject some time ago for the U. S. Government, and from it we quote in the following paragraphs:

All parts of the hoof grow downward and forward with equal rapidity, the rate of growth being largely dependent upon the amount of blood supplied to the pododerm, or "quick." Abundant and regular exercise good grooming, moistness and suppleness of the hoof, going barefoot, plenty of good food, and at proper intervals removing the overgrowth of hoof and regulating the bearing surface, by increasing the volume and improving the quality of the blood flowing into the pododerm, favor the rapid growth of horn of good quality; while lack of exercise, dryness of the horn, and excessive length of the hoof hinder growth.

The average rate of growth is about one-third of an inch a month. Hind hoofs grow faster than fore hoofs, and unshod ones faster than shod ones. The time required for the horn to grow from the coronet to the ground, though influenced to a slight degree by the precited conditions, varies in proportion to the distance of the coronet from the ground. At the toe, depending on its height, the horn grows down in eleven to thirteen months, at the side wall in six to eight months, and at the heels in three to five months. We can thus estimate with tolerable accuracy the time required for the disappearance of such defects in the hoof as cracks, clefts, etc.

Irregular growth is not infrequent. The almost invariable cause of this is an improper distribution of the body weight over the hoof—that is, an unbalanced foot. Colts running in soft pasture or confined for long periods in the stable are frequently allowed to grow hoofs of excessive length. The long toe becomes "dished"—that is, concave from the coronet to the ground—the long quarters curl forward and inward and often completely cover the frog and lead to contraction of the heels, or the whole hoof bends outward or inward, and a crooked foot, or, even worse, a crooked leg, is the result if the long hoof be allowed to exert its powerful and abnormally directed leverage for but a few months upon young plastic bones and tender and lax articular ligaments. All colts are not foaled with straight legs, but failure to regulate the length and bearing of the hoof may make a straight leg crooked and a crooked leg worse, just as intelligent care during the growing period can greatly improve a congenitally crooked limb. If breeders were more generally cognizant of the power of overgrown and unbalanced hoofs to divert the lower bones of young legs from their proper direction, and, therefore, to cause them to be moved improperly, with loss of speed and often with injury

to the limbs, we might hope to see fewer knock-kneed, bow-legged, "splay-footed," "pigeon-toed," cow-hocked, interfering, and paddling horses.

If in shortening the hoof one side-wall is, from ignorance, left too long or cut down too low with relation to the other, the foot will be unbalanced, and in travelling the long section will touch the ground first and will continue to do so still it has been reduced to its proper level (length) by the increased wear which will take place at this point. While this occurs rapidly in unshod hoofs, the shoe prevents wear of the hoof, though it is itself more rapidly worn away beneath the high (long) side than elsewhere, so that by the time the shoe is worn out the tread of the shoe may be flat. If this mistake be repeated from month to month, the part of the wall left too high will grow more rapidly than the low side, whose pododerm is relatively anemic as a result of the greater weight falling into this half of the hoof, and the ultimate result will be a "wry", or crooked foot.

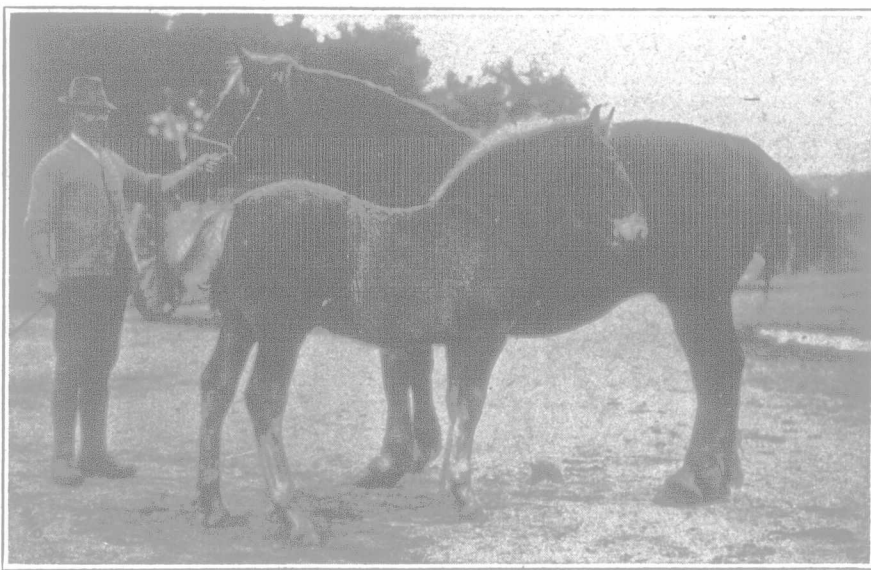
The colt should have abundant exercise on dry ground. The hoofs will then wear gradually, and it will only be necessary from time to time to regulate any uneven wear with the rasp, and to round off the sharp edge about the toe in order to prevent breaking away of the wall.

Colts in the stable cannot wear down their hoofs, so that every four to six weeks they should be rasped down and the lower edge of the wall well rounded to prevent chipping. The soles and clefts of the frog should be picked out every few days, and the entire hoof washed clean. Plenty of clean straw litter should be provided. Hoofs that are becoming "awry" should have the wall shortened in such a manner as to straighten the foot-axis. This will ultimately produce a good hoof and will improve the position of the limb.

## LIVE STOCK.

The lambs to be fattened and the ewes for breeding should be put on fresh pasture. Second growth clover or rape are excellent feeds for the flock.

The sows due to farrow this fall require a little more than grass to sustain them and to put them in condition



A Suffolk Mare and Her Filly Foal.

to feed a litter. Don't deprive them of exercise and green feed, but add grain to the ration. Have the sow in good condition at farrowing time.

We haven't heard of pure-bred breeders falling over themselves in an offer to replace a grade sire with a pure-bred, in order to advance the campaign to banish the scrub sire.

The wet spring followed by prolonged drought has resulted in this being a lean harvest so far as spring-sown crops are concerned. Every care should be taken to garner what there is in as good a condition as possible, and to save it from deterioration after it is harvested. Straw may be used to advantage, especially when fed with silage.

Supply and demand largely set the price of farm produce. Therefore, judging by the prices paid for pure-bred stock of all breeds, one may conclude that the demand has greatly increased the past few years. Monied men are prominent at many of the large auctions, and have helped raise prices by competitive bidding. However, the small land holder is also in the market for good stock, and is paying the price for the animals of quality and breeding.

The scrub and grade sires have become pretty strongly entrenched in Canada, and it will require more than talk to banish them from the herds. Action on the part of stockmen is necessary. If one would only stop to figure out on a dollar-and-cent basis the benefit to be derived from higher quality, commercial as well as breeding stock, few grade or scrub sires would be used next year. The breedy animal feeds better, looks better and sells better than the mediocre stuff.

## Parasitic Diseases of Sheep.

### External Parasites—Sheep Scab.

The mite of sheep scab is a nearly round, light-colored parasite, the female measuring about 1/40 of an inch in length, and the male about 1/50 of an inch. By placing the mites on a sheet of black carbon paper and holding this in strong sunlight, they can be seen. The life-history of these mites is interesting. After mating, the female deposits about a dozen eggs at the base of the wool fibers. These eggs hatch in 3 or 4 days; in about a week the young mature, and in 3 or 4 days more they will have mated and the female laid her eggs. It is estimated that the entire life cycle is completed in about 15 days. Using these figures as a basis for calculation, it has been estimated that the progeny of a single pair of mites may attain to about 150,000,000 in about 4 months.

**Symptoms.**—When a sheep becomes infested with one or more mites, small inflamed zones occur where the mites pierce the skin to obtain food. This is soon followed by itching and the formation of papules, and, as the mites multiply in numbers, the area of inflammation rapidly increases. Serum oozes from the papules, and it is during this stage that the disease is usually noticed. The infected animal shows symptoms of intense itchiness and irritation, bites or rubs the body against anything with which it can come in contact.

The wool soon becomes taggy and commences to fall out, crusts form on the skin from the dried exudate. It is under the scales or crusts that the mites live. In proportion to the severity of the infection the disease progresses more or less rapidly until the patient appears to be in continuous agony. It becomes thin; the wool falls out in patches, usually along the back, flanks and shoulders; larger and larger areas of the skin become inflamed and covered with crusts; other sheep become infected, until the whole flock is involved.

**Differential Diagnosis.**—More or less itchiness and the loss of wool in patches may occur from causes other than scab. In cases caused by mammitis or to exposure the skin of the denuded areas is soft and normal in appearance. There is nothing but a "bald spot" with no pimples, vesicles, papules or inflammatory zones. The exposed skin, due to the loss of wool from the various types of eczema, shows a reddening of the skin without the thickening that accompanies "scab."

**Treatment.**—It is wise, in all suspicious cases, to suspect "scab" and act accordingly. It is compulsory for the owner or the veterinarian in attendance to immediately notify the Health of Animals Branch, Department of Agriculture, Ottawa, Ontario, and a member of the government staff of veterinarians will be sent to take charge. Failure on the part of the afore-mentioned renders the same liable to a heavy fine.

In the mean-time, it is wise to adopt curative treatment. Dipping with any of the commercial sheep dips, according to instructions, gives fair results. Of course, all infected sheep must be isolated, or all the non-infected moved to non-infected quarters. The latter plan is the better.

The "lime and sulphur dip" has been the mainstay for years where the disease is common. The official dip is prepared as follows: Take of unslaked lime 8 pounds, flower of sulphur 24 pounds, water 100 gallons. Of course, lesser or greater quantities can be made in the same proportions, according to the quantity required. The lime is placed in a water-tight box or bucket, and sufficient water added to slack it and make a thin paste. The sulphur is then slowly sifted in, mixing the mass until it is of about the consistence of mortar, which is put into a kettle containing 30 gallons of water, and boiled for two hours. Water should be added as needed, to keep the quantity up to 30 gallons. While boiling it should be kept well stirred, else the paste will cake in the bottom of the kettle. After being boiled for 2 hours the liquid to be transferred to a barrel to settle. The barrel should have a bung hole 4 or 5 inches from the bottom in order that the sediment may settle below it, and not escape when the plug is removed, as its presence in the dip will injure the wool, or may harm the eyes of the sheep.

When ready to dip, the clear liquid is drawn off into the dipping vat, and 70 gallons of water added. The mixture should be warmed to about 100 to 103 degrees Fahr.

The size of the vat should depend upon the number of sheep to be treated.

In dipping, the head of each sheep should be ducked once, and the animal kept in the solution for at least 2 minutes. In cases where the scabs are extensive they should be hand dressed to soften the crusts.

To eradicate scab from a flock of sheep, each animal should be dipped two or three times at intervals of 3 or 4 weeks; kept under close supervision, and at the least symptom of its recurrence, re-dipped. The vitality of the mite is so great that it is not considered wise to expose sheep to quarters that have been infested within a year.

WHIF.

Pigs running out of doors require shade; a neglected orchard makes a suitable refuge, but a board or brush shelter can be quickly and cheaply constructed.

Allow the boy to fit something for the fall fair and show it himself. It will be good experience in feeding, and likely to awaken a keen interest in live stock.