

is the "Ground Pine," which grows like a diminutive tree, and has the spores in a spike at the top of the "tree." Another species known as "Ground Cedar" has a tree-like habit, but has the leaves laid almost flat along the stems. The last three species are those most used in decorations at Christmas-time.

Would you look for Club-mosses? Then go to a piece of woods where you know hemlocks grow, and there you are likely to find them. I have noticed that in Southern Ontario they are most often seen trailing beneath these trees.

HORSES.

It is estimated that from January first to August 1st, 1912, there were sold on the five largest horse markets of the United States 256,321 horses, and mules, a decrease of 15,314 as compared with the number sold in a corresponding period last year. The heavier type of farm machinery requiring more horses, is given as a prominent cause in the falling off in numbers offered.

A South Carolina farmer who has used sweet potatoes for several years as feed for horses, mules and cattle, reports to the United States Department of Agriculture that he has found them a fine feed. Of course, he says, it is better not to feed them exclusively. He feeds one meal per day of corn, and two meals of sweet potatoes. He uses a vegetable cutter to chop the potatoes, and finds that five or six quarts sprinkled with one pint of rice meal makes a good feed, which is readily eaten by stock.

Believes In-breeding Dangerous.

Editor "The Farmer's Advocate":

Being a regular reader of your valuable and instructive paper, I am very much pleased to see in the issue of Oct. 31st, that special notice is taken of "Scotland Yet's" remarks in reference to in-breeding. I am quite sure as far as Clydesdales are concerned—and in fact all animals—that the system won't do, and in my opinion, Mother Nature will step in shortly and checkmate that short-sighted and unnatural game. Of course breeders can do with Clydesdales what poultrymen do with fowls, have two classes—one for show animals, and another for utility animals, but then, I fear, the draft horse will have to change his name Clydesdale to something else. A draft horse, to my idea, must get his weight more from width than from great height, and should, to use an old Scotch saying, "be near the grund."

If I were to begin again to breed draft horses I would just follow my old method of selecting the best mares I could procure possessing substance, size, quality and balance, and of course, sound and true movers, and of a good color. I would then breed them to a Clydesdale Stallion to suit them—avoiding near kinship.

To mate judiciously is where the art in horse-breeding comes in. This has been my experience, at least, and I have had a fair share of success.

The thick, lowset, draft horse, with strong thighs and arms will soon, I fear, be a relic of the past.

I wonder "Scotland Yet" did not say something in his letter about the close mating of Sarcelle. He says she is sure in foal to her own grandson, and if a colt or filly got by his or her own mother's grandson is not in-bred, I fail to know what to call it. Perhaps the Editor of the Stud Book could help us out of the difficulty.

DARNLEY'S RAISER.

Importation and Transit of Horses in Great Britain.

New regulations for the importation of horses, asses and mules into Great Britain will come into force on April 1st, 1913. Any horse, ass or mule brought to Great Britain from any other country except Ireland, the Channel Islands or the Isle of Man, shall not be landed, otherwise than under the authority of a license granted by the Board and subject to any conditions imposed by the license, and a license shall not be available as an authority for the landing of a horse, ass or mule, unless the animal is accompanied by a certificate of a veterinary surgeon to the effect that he examined the animal immediately before it was embarked or while it was on board the vessel, as the case may be, and that he found that the animal did not show symptoms of disease. Where the Board grant a license authorizing the landing of a horse, ass or mule, the Board may impose and insert in the license such conditions as they may think necessary for regulating the isolation of the animal, for prescribing and regulating veterinary examination of the animal, for regulating the movement of the animal, and generally for the prevention of the spreading of disease.

Where the landing of a horse, ass or mule is not authorized by license granted by the Board, the landing must be authorized by an officer of customs and excise, and the port must be authorized by the Board as a port for landing horses, asses and mules. The animal must be removed direct to a place of detention to remain until released by permit of the inspector, such permit not being granted until the animal has been examined by a veterinary inspector and found free from symptoms of disease. The mallein test is to be applied in every case except those where the animal shows clinical symptoms of glanders. These detention places must be kept thoroughly cleaned and disinfected. Any horse found diseased and not required to be slaughtered, may be moved by permission of the inspector to a vessel in port for exportation. The officer of customs or excise, may, if he suspects disease, seize and detain the animal, and report the matter to the commissioner of customs, who may order the destruction or further detention as deemed necessary.

Disease is taken to mean glanders (including farcy, epizootic lymphangitis, ulcerative lymphangitis, dourine, horse-pox, sarcoptic mange, psoroptic mange, influenza, ringworm or strangles).

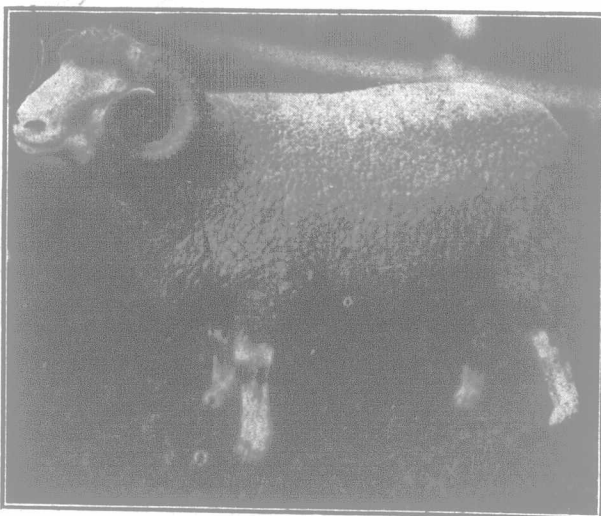
A New Bridle Bit.

Editor "The Farmer's Advocate":

I have long thought that something better than our iron bits in the horses' mouths might be had. Three objections always come to mind when I think of them: 1. The frosty bit in cold weather must be warmed, or it will take the skin off the horse's mouth. 2. The slobbers, so sure to fall on the hand and sleeve, soiling clothes. 3. The discomfort it must give the horse constantly, but particularly when the reins are jerked or carelessly handled.

Having to stay in bed for nearly a month this fall, I had plenty of time to think of several things, and the objectionable bit came in for its share. When at last I was pronounced well enough to be up, I had the plans for a new bit ready. It was planned to be very easy on a well-behaved horse, but, at the same time, ready to control the other kind.

I had the blacksmith make me two steel straps $\frac{1}{4}$ inch wide and 1-16 inch thick. He made them



Dorset Ram Lamb.

First in his class, and champion ram of the breed at Toronto. Owned by R. H. Harding, Thorndale, Ont.

a little thicker, but that thickness is enough; one piece 8 inches long, the other 6 inches long, and both bent U-shaped to fit over the nose and under the jaw. The longer one was placed between two straps of leather $\frac{1}{4}$ -inch wide, which were stitched together, and a $\frac{1}{4}$ -inch ring stitched on each end, making a nose piece 12 inches long inside of the rings. The chin piece was made the same way, except that the outside strap was continued at each end through the two rings of the nose piece and a ring the same size put on each end of it. This strap is about 18 inches long, but must be made to fit the horse in question. To these rings the reins are snapped (or buckled). The cheek straps are buckled into the rings in the nose piece, which is kept in position by a light strap from the buckle in the crown piece and divided half way down the face and stitched to the nose piece.

To test this bit I put it on my 3-year-old standard-bred mare (which had stood in the stall for six weeks and was feeling real gay). She had been driven only two months before that. She was sure she was going to turn around when she approached some sewer tile on the street, but instead she went past and did not manage to leave the road. Three different times she started off to make a speed record, and as often she had to stop still before going two rods. It was a curb bit for the time being, and, if pulled strongly, would have brought the standstill in a length. I drove about the streets for an hour, and the bit responded to every test. Since then it has remained on the bridle. The total cost of it was seventy-five cents, but I used nickle rings, and that made the cost a little higher than it would be with X C rings. I think, if made in quantity, they should not cost more than fifty cents. This bit has at least four advantages over any other bit that I have seen:

1. It is clean.
2. It is frost-proof.
3. It is handy.
4. An over-check cannot be used on it.

Not only is it for the roadster, but it should be a very satisfactory team bit. Get your harness maker to make one and try it. It is not a good bit to tie by,—to a gate or post, but neither is any other bit. Tie your horse with a halter.

Bruce Co., Ontario. A. D. CAMERON.

Note.—The old metal bit has its faults, but it has had no better horse ruler and conqueror in ages. While it has been in use for centuries, this does not mean that it is beyond improvement. This new bit, as it is called, may be less severe, but with an unruly horse, where severe pressure is brought upon the jaws, it would be quite severe enough. If interested give it a trial, and let us know the result.—Editor.

LIVE STOCK.

Suffolk Sheep in England.

Editor "The Farmer's Advocate":

A sheep that is just now enjoying a large share of popularity in Britain and the colonies, is the Suffolk, a breed which, in its native element, gets a very large part of its keep off land where no other animals but rabbits and hares could thrive. The ranging and foraging capabilities of the Suffolk are undeniable. The breed was evolved by crossing Southdown rams on the old Norfolk ewes. The old original Norfolkian type had a long and slender body, rather longish legs, but a short fine fleece. Both sexes had horns, those of the ram being large, rather long and spiral. They were defective in fore-quarter, but their mutton was well flavored. They were very active sheep. Arthur Young, with 26 years of experience behind him, introduced Southdowns into Norfolk in 1784, and by 1790 had a flock 350 strong. At Reddlesworth, a Devon had a flock of 600 Southdowns, and one of 600 Norfolks, and he was crossing the two breeds. The result was a black faced sheep, the dark coloring there and on the leg being what S. R. Sherwood calls "a valuable heritage." The horns of the old Norfolk gradually disappeared in the newly evolved breed. However, there are still some sheep born with "spud horns." The modern ram has a bold free carriage, and displays much masculine character in all his outline. His head is well set back into the neck; the back and loins are strong, wide and firm. The hind legs are exceptionally well-filled.

The fecundity of the ewes is undeniable. Mr. Sherwood, the noted breeder, tells us that one of the merits of these ewes is that while they have the ability to earn a living on poor pasture when empty or not far advanced in pregnancy, they are capable of converting a large amount of food into milk when suckling their lambs. The statistics for 1910 show that 5,459 ewes from registered flocks were in the county competition, and the average number of lambs weaned for each 100 ewes was 145.58. In 1909, with 6,681 ewes competing, the fall of lambs was 153.67 per each 100 ewes. In this competition once there is a record of 310 ewes yielding 183.23 per cent. of weaned lambs. The record losses among the ewes, from time of turning in the rams till weaning is practically 2.5 per 100 ewes mated.

The breed has been exceptionally successful in the carcass competition at the London-Smithfield Show. Statistics show that wether lambs (under 12 months old) have during four seasons averaged 141.2 lbs. live weight and 88.8 lbs. carcass weight. Fat has averaged 8.8 lbs.; pluck 4.8 lbs.; skin 13.8 lbs.; the average percentage of dressed carcass to live weight being 62.91 lb. In the case of wether sheep (under 22 months old) the live weight has been 179 lbs., and the carcass weight 117 lbs. Fat has been 12.6 lbs.; pluck 5.4 lbs.; skin 13.8 lbs., and the average percentage of dressed carcass to live weight 65.35 lbs. The champion prize for the best carcass in the show has been won at Smithfield five years in succession, and reserve for some six years in succession. First prize in short-wooled lambs has been won ten years in succession. The breed always realizes goodly prices, and 761 dollars was once paid for a ram lamb.

Suffolks have crossed well with Lincolns and Cotswolds and have improved the mutton qualities of those long-wooled sheep. The Southdown-Suffolk cross produces a compact carcass, a great favorite with English butchers. The Cheviot cross is affected in Northern England with much success.

London, England.

G. T. BURROWS.