

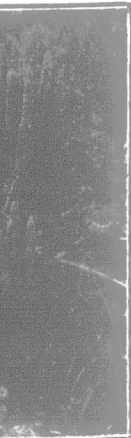
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These plants are also called "Ground-pines," "Staghorn-mosses," "Running-pine," and "ground cedar."

Probably the most abundant species is the one called the Common Club-moss, which is shown in Fig. 2. It grows in woods and also on dry heaths. The main stem often reaches a length of ten feet or more. At the growing end it is usually above ground and covered on all sides with the green leaves; at the opposite end it is more or less hidden under an accumulation of dead vegetation, and the stems and leaves are yellowish. Here and there, throughout its length, single, stout, cord-like roots are given off, which extend downwards until they enter the soil, where they usually branch once or twice. Frequently the main stem is branched, and these branches, like the axis from which they spring, maintain a course parallel with the earth.

At short intervals along these stems other branches are produced which extend upwards. During the first year they are from one to three inches long and are simple, but at the next growing-season they add to their length and at the same time put out short branches. This continues for several years until the older branches are several times branched, with occasional roots springing from the portions nearest the earth.

The leaves are evergreen and persist for several years. They are arranged on the stem and branches in about eight longitudinal rows, and so close in the rows as to overlap. They are about a quarter of an inch long, very narrow, and each ends in a long soft bristle. The old leaves are dark green in color, but the new growth is light, silvery green, and very noticeable in the early summer.

About midsummer the plant begins to put up its fruiting spikes, which are always borne at the tips of the branches of the previous year. The spores ripen in early autumn, and are bright yellow in color. The lycopodium powder of the drugstore, which is used to dust pill-boxes to keep the pills from sticking together, consists of these spores.

This species is one of the most widely distributed of the genus. It is common in the Arctic and Sub-Arctic regions of both hemispheres, and has also been reported from tropical America, Brazil, Cape of Good Hope, Madagascar, India, Java, New Guinea, the Hawaiian Islands and Eastern Asia. In North America it ranges from the Arctic Circle southward to Oregon, Iowa, Michigan, and New Jersey, and also occurs in the mountains of North Carolina.

In Fig. 3 is shown another common species of Lycopodium, known as Ground Cedar or Ground Pine, the former name appearing to me by far the most appropriate. Like the Common Club-moss, this species has a long, running main stem which may reach a length of from eight to ten feet. The branches are erect, those of the season being from two to five inches long and consisting of a short main branch terminating in a bud-like point with a pair of opposite fan-like lateral branches just below it. The leaves of this species are of two kinds. Extending lengthwise of the branches on the underside is a row of very short, pointed leaves, in a similar row on the upper side is a series of larger leaves with the leaves closely appressed.

The Tree Club-moss (Fig. 4) is well named,

and its tree-like aspect is heightened by the fact that the main stem is deeply underground and the branches arising at some distance from one another seem to be different plants instead of several branches of one individual. The spikes of fruit are borne singly on the tips of the old branches, often as many as fifteen spikes on a main branch.

Our Club-mosses are the diminutive descendants of the giant, tree-like forms, known as Lepidodendron, which flourished in the Carboniferous period. Recent investigations have shown that the great bulk of coal is made up of the spores of these extinct plants.

THE HORSE.

Be kind to the horses.

Good care is doubly repaid.

Brood mares often stock; exercise and laxative feed are needed.

Read "Whip's" article in this week's issue and care for the horses accordingly.

The big horse sells for the big price. Do not lose sight of this fact in breeding and raising colts.

Nights are growing longer, colder, and damper. Horses outside must feel the need of shelter at this season.

Do not pamper the colt. Feed him well, but let him take care of himself outside in daytime, unless too stormy.

When the colt is brought in from the pasture field, if he has not already been halter broken, do it at once. Tie him securely and teach him to lead, but plan after he yields to let him loose in a box stall.

There is little to be gained by letting the foal run with his dam this late in the season if he has reached four or five months of age. Especially is this the case where the mare is working daily or is again with foal.

Some Common Fall Ailments of Horses.

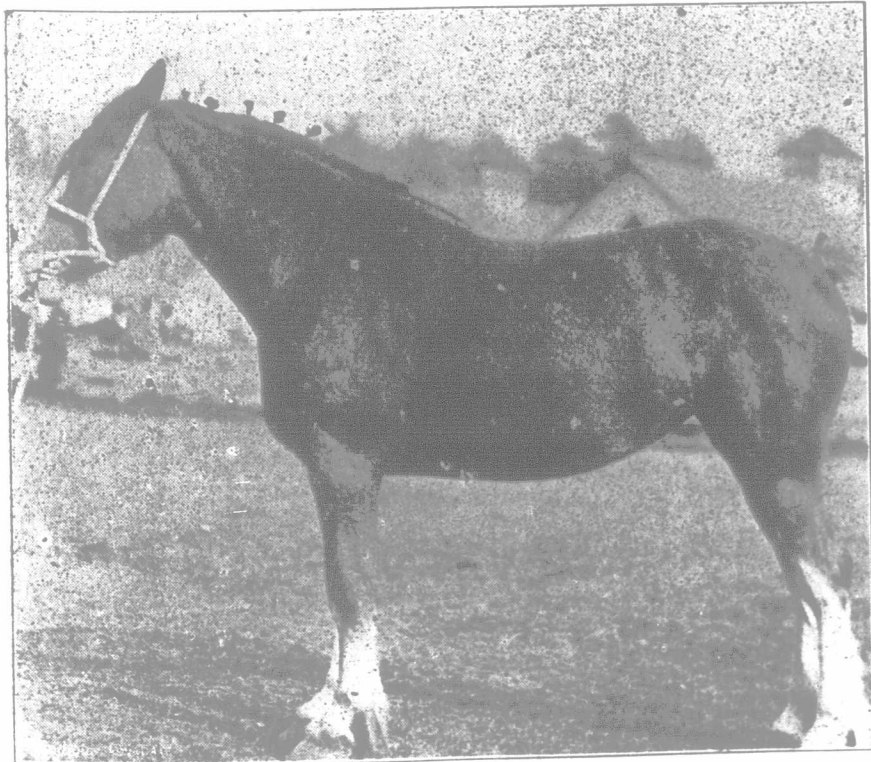
Change of weather, change of surroundings, change of food and change of usage are often responsible for derangement in the health of horses.

Swelling of the limbs, commonly called stocking, may appear in any horse from some of these causes. It appears in colts and horses that have spent the summer and fall months in idleness on grass as well as in horses that have been regularly worked. It is due to sluggish circulation in the limbs. The general health of the animal is not usually noticeably interfered with; one or more limbs from the knee or hock to the foot be-

come swollen; there is practically no soreness to pressure and no lameness. Exercise dissipates the swelling in most cases, but after a night in the stable the swelling has re-appeared. This condition is usually confined to horses that have usually spent the nights on pasture, but is not unknown in horses that have been stabled all the time. In the former cases, regular work or exercise and moderate feeding on laxative food will, after a time, usually result in a cure, but in any case a cure is hastened by treatment. The animal should be fed nothing but a little bran (either dry or moist) for about 12 hours, then a purgative of 6 to 10 drams of aloes (according to size) and 2 to 3 drams of ginger should be given, and nothing but bran be given to eat until the purgative begins to act, when hay and grain in small quantities should be given until the bowels have regained their normal condition, after which daily exercise should be given, and when the animal is brought to the stable after exercise the limbs should be well hand-rubbed and bandages applied with only slight pressure. This tends to keep the limbs warm and stimulates circulation, but the pressure of the bandages should not be sufficient to cause too much pressure if slight swelling should take place. In addition to exercising and bandaging the patient should be given a heaped teaspoonful of Epsom salts in his food twice daily until the tendency to swelling has disappeared, and should be fed on food of a laxative character. A few carrots or a turnip or mangel once daily tends to keep the bowels in a healthy condition when no grass can be fed. Pregnant mares in many cases appear to be particularly liable to stocking. In such cases it is wise to avoid drastic purgatives. A pint of linseed oil may be given as a laxative and the other treatment the same as above. If the horses are idle, good health can be retained only by seeing that they get daily exercise, either in harness, saddle, on the line, or in a paddock. A horse that stands untied in a roomy box-stall will take considerable voluntary exercise, hence can stand idleness and high feeding much better than the idle horse that stands tied.

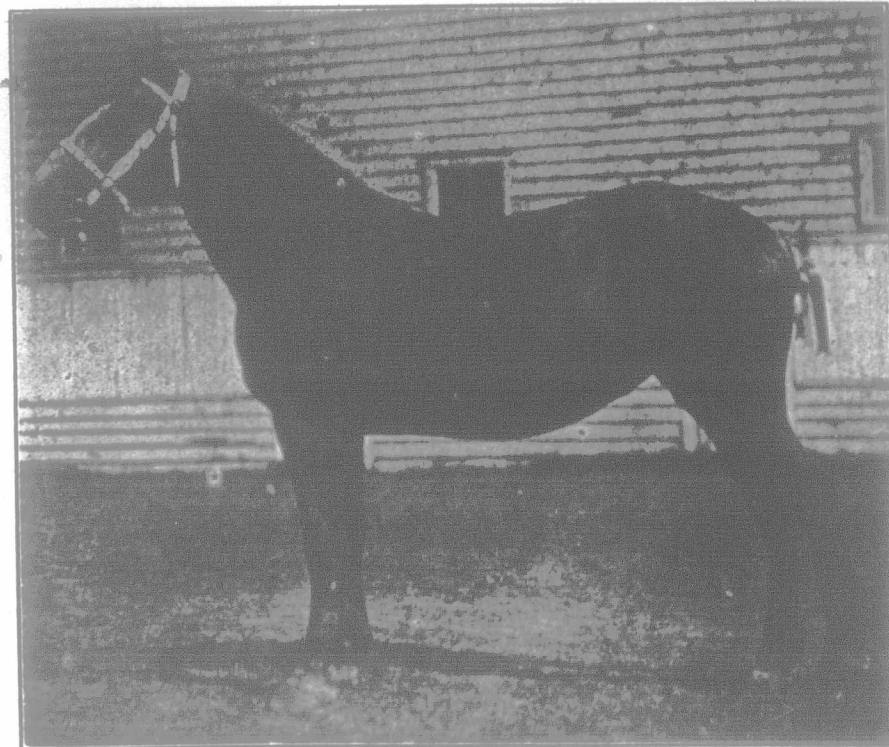
Scratches or cracked heels frequently appear. Some horses are pre-disposed to this trouble, especially those with heavy or meaty, often called "round" legs. Stocking is often the exciting cause, but standing in damp stables, frequent wetting of the legs and a failure to rub them dry and groom properly are also direct exciting causes. In cases where scratches are about to appear the stocking is accompanied by increased local heat and tenderness to pressure and usually by lameness for a few steps when taken out for exercise after standing for a few hours. After a variable time the skin becomes very tender, and cracks or eruptions, which exude a moisture, in greater or lesser quantities, appear and the general symptoms become more marked. If the exciting causes continue and treatment be neglected the case becomes worse, the cracks become deeper, the exudate more plentiful and foul smelling, and, of course, lameness becomes more marked.

Treatment.—Before eruption takes place the treatment advised for stocking along with care to avoid exciting causes will usually be sufficient. When cracks or exudation of fluid be noticed, in addition to the above treatment the parts must be kept as clean as possible by careful rubbing—



Lady McTaggart (imp.)

Clydesdale mare, grand champion at Ottawa, 1913. Owned and exhibited by Robt. Ness & Sons, Howick, Que.



Laheuviniere.

Two-year-old Percheron filly; first at Toronto and London, 1913. Exhibited by T. H. Hassard, Markham, Ont.