

brood-mares, with, I was told, ten foals at foot! Mr. Henderson, of Petite Côte, supplied the stallion.

**Implements.**—The land was evidently well worked, and the ploughs and harrows were of the right sort. A heavyish roller, with the box-frame well filled with large stones, adding, I should say, some 5 cwt. to the weight of the cylinder. A piece of potatoes, lately planted, had the finest skin on it I have seen for a long time. I, on seeing it, asked the lad who showed me round—a very intelligent fellow from Hampshire (1)—where the chain harrows were, and he soon found them lying under the fence. The use of this implement should be universal. The old saddle back harrows, that keep the drill raised up to its original height, was all very well in the undrained condition of the farms in the north of England and in Scotland forty or fifty years ago, but in this dry climate, the sooner after sowing or planting the drills are levelled and the middle worked up, by the action, first of the chain-harrow, to be followed by the horse hoe, the moment the rows are perceptible, the better.

**Apples.**—Mr. Doran's apple orchard seems to be very prolific. Last year, 2,000 barrels were sold and carted into Montreal. Price, one dollar a bushel, the purchaser, I presume, gathering, packing, and finding the barrels; Mr. Doran carting to town at 12½ cts a barrel. Price seems low—all dessert fruit—compared with what the retailers charge.

**Grain crops**—A tremendous flush of straw all about Lachine, owing to the dripping weather in June. All the root-crop land grubbed up—June 20th—at Dawes' farm, and fodder-corn sown by drill, in rows 7 inches apart. There will be an immense lot of silage for the winter. (2) Land ploughed last November, and never touched since, being sown with fodder-corn—sowing machine could hardly work for the weeds, which will probably beat the corn. Potatoes look splendid, cultivation perfect, both with hand hoe and horse-hoe. About ½ an acre of swedes on the Cross farm shows a fair plant—all the rest of the three-acre piece vanished.

**Hay.**—On Thursday, June 28th, the hay-harvest began on the Dawes' farm. Tares sown May 14th, in blossom July 4th, just seven weeks and three days.

#### The Rot in Potatoes and Tomatoes.

Many investigations have been made to find a remedy for the disease which has affected the potato for so many years, and which, in certain seasons, and in certain districts, has completely destroyed that invaluable tuber.

In proportion as the cultivation of the tomato has become general, so the potato-disease has attacked that allied plant, both being of the family of the solanaceae. In some places, the tomato rots as much as the potato, though it has been observed that the disease does not attack the tomato until it has done its best to destroy the other, which is a sign that the disease attacks the potato more frequently than the tomato.

An almost infallible remedy against the rot is supposed to have been discovered. Experiments, both in France and in the United States, have given excellent results. It is true that the experiments we speak of were made on vines, but, on the other hand, it has been proved that the fungus which causes the rot or mildew in the vine is perfectly similar to the one that affects the potato and the tomato, so that it is fair to expect that remedy which cures the disease in the one will cure it in the others. The following are the processes for prepar-

ing the several dressings, the application of which is recommended:

**Liquid dressing.**—Blue-water, or the Andoynaud mixture. —Dissolve a pound of sulphate of copper in 3 or 4 gallons of hot water; when the mixture is cool, add three half-pints of the liquid ammonia of commerce, and pour it into a wooden vessel in which have been placed 22 gallons more water. Apply this liquid in a still time with a *spraying nozzle*, in quantity enough to sprinkle the plant thoroughly without drowning it. Apply it first when the plants are coming into flower, the second time eight or ten days afterwards, and, if the weather seems to favour the development of the disease, add a third and even a fourth sprinkling, at about the same intervals.

**Copper mixture of the Gironde.**—Dissolve 4 lbs. of sulphate of copper in 16 gallons of water, and in another vessel slake 4 lbs. of lime in a gallon of water. When the latter mixture is cool, mix it slowly and carefully with the other, stirring continually. This should be prepared some days before being used. The sulphate of copper should be ground, as it mixes much better in the powdered than in the crystalline state.

This dressing, which, owing to the lime, will be rather thick, should be applied with a small broom made of twigs. Plunge the broom into the mixture and shake it over the plants so as to wet them thoroughly. This is a troublesome and not very cheap method, and any one who has a good deal of land to go over would do well to buy a pump with a spraying nozzle. The essential qualities of a good pump of this kind are ease and rapidity of working, together with economy in the use of the application. The rules for using this form of remedy, are the same as those for using the former one.

**Powder-dressing. Sulphatine;** mix 2 lbs. of anhydrous sulphate of copper with 20 lbs. of flowers of brimstone and 10 lbs. of air-slaked lime.

**Another way. Blight powder.**—Mix 3 lbs. of sulphate of copper with 97 lbs. of flowers of brimstone. This is sufficient for five acres of potatoes.

In powder, these remedies are more convenient to carry and apply than in a liquid form, and consequently should be thus used, if they are shown to be equally efficacious.

The best way of applying these powders, which should always be used in calm weather, when the leaves of the plants are covered with dew, or after a shower, is to put them into a gigantic sort of pepper-caster, with a metallic bottom pierced with holes, and to shake this over the plants. Too much of these powders, especially of the sulphatine, would burn the plant; just enough of them should be given to be visible on the leaves. The powders should be applied to the under as well as to the upper side of the leaves, and the best implement for this purpose is a blower or bellows with an extension tube.

To obtain the best results from these different mixtures, they must be well prepared, applied at a favourable time and with judgment, the atmospheric conditions must be suitable, the dressings sufficiently frequent, and the ingredients used of the best quality.

The other means of fighting the rot described in the circular whence we have drawn these hints, are change of seed, and the invention of new kinds, the selection of varieties which are less subject to attacks of this disease, and the choosing of light, well-drained soil for their cultivation.

(From the French.)

J. C. CHAPAIS.

#### OUR ENGRAVINGS.

*Scotch Prize Clyde Stallion, Prince Lawrence.*—This is a portrait of the first prize winner at the last Highland and

(1) Not perceptible from his tongue! I believe that in 10 years, even the West-Riding people will speak good English! A. R. J. F.

(2) But watery stuff, of course. It is five times to thick.

A. R. J. F.