For example, compare the fine hard feet and horn of the thoroughbred, the narrow straight foot of the mule, and ass, with the large flat soft feet of the heavy draught breeds, and we find that the small feet are more durable and less liable to injury.

Much as the feet suffer from neglect in early life, it is trifling when compared with the destructive processes to which they are subjected when once they are submitted to the operations of the farrier, (for the purpose of furnishing them with a defence against the friction and concussion of the hard road), assisted by mismanagement and neglect in the stable.

When we enquire into the abuses of horse's feet by the groom and the farrier, we shall not wonder that this marvellous contrivance, this most perfect mechanism, which, as an adaptation of a means to an end, is not excelled in the whole range of the Creator's works, does in many instances give way, and becomes so altered in form and so weakened by disease as to be incapable of performing the locomotory functions without suffering; and lameness, (which is but an expression of pain) incapacitates the animal for work, and reduces enormously its value.

Mr. Lawes, Rothamsted, still persists in his calculation, that the crop of wheat in England is equal to an average of 30 bushels an acre. This, at present prices, would, as compared with last year's yield, make a difference to the farmer of £3. 10. 9, that is to say, 2 quarters at 49s. would equal £4.18, and 3 quarters 6 bushels at 45s. would bring £8. 8 9.—Good news for the landlords, as whoever goes without, they won't.

A. R. J. F.

THE POTATO DISEASE.

A select Committee of the House of Commons in England, has been investigating the question of the potato disease. Many of the largest growers have been examined, and the following are a few of the statements made by them.

Mr. Charles Rintoul farms 700 acres, partly in East Lothian and partly in West Lothian: soil, a mixture of clay and loam, but free working land, thoroughly drained. It would not pay to grow potatoes if the land were either wet or insufficiently drained. He begins his rotation with potatoes, then wheat, turnips, barley, grass for two years, and oats, two fallow crops in the seven years, and a sufficient interval of time between the main crop of the farm, the potatoes.

The land is deeply ploughed after harvest, grubbed in the spring, and the planting begins as early as possible. The manure, 40 tons of horse and cow dung, with 10 cwt. of mixed animal and mineral superphosphate, with guano for the nitrogen, is put in the drills—cost about $180 *per acre!* Mr. Rintoul thinks the land cannot be made too rich for this crop, if planted early, as they will be out of the ground and sold, before the disease attacks them. Planted in March, they are fit to dig by July 1st, and generally yield, at that time, from 100 to 200 bushels an acre; later on, in August, from 350 to 400 bushels, but the smaller quantity pays best, as *young* potatoes fetch a very high price, compared with those that are fully matured.

He is very particular as to his seed, sending selected specimens to late districts to be planted for him. Seed is changed in this way every second year. "Every year would be better, but every second year it *must* be done."

Champions Mr. Rintoul considers to be the best late sort grown, particularly in a wet season, as it is proof against the disease. In a dry season it does not crop as well as the Regent; but frequently the latter is cut down and the Champion resists.

Potatoes grown from seed take three years to develop, and are not at their best till the fourth year. Cutting for seed improves the quality of the crop; and the finest, starchiest tubers always suffer most. The witness thinks it a bad plan to plant small whole potatoes; "coarser stuff will be had if you do not grow from cuts every alternate year."

Mr. John May, Farningham, Kent, a very old acquaintance of the writer, stated: "I grow about 200 acres of potatoes a year, on good strong land, with a chalk subsoil. I grew Champions, 120 acres, first in 1877, with a few Regents and Victorias. The two last were nearly all bad, but the Champions resisted the disease. I get some fresh seed every year. I consider they do best with us growing our own two or three years, but I like to have fresh seed. One potato crop follows another in about five years. Mr. Nicoll, gardener at Arbroath, N. Britain, raised the Champion from seed. They have been good, as far as my observation goes, all over the country. Last year, the worst ever known since 1845, I do not believe there were 3 0/0 bad all over the United Kingdom.

The cultivation of this root does not so much affect its immunity from disease, as the variety grown. I believe in the theory, that a variety degenerates after a certain number of years. Potatoes that I recollect fifty years ago are now quite out of cultivation. When the Regent first came out it kept as well as the Champion does now, from which I deduce the conclusion, that the Champion in process of time will keep getting worse. I do not believe the best thing would be, for Government to do anything, but for the Royal Agricultural Society, of England, and the Highland Society, of Scotland, to offer valuable prizes for the introduction of n sorts grown from seed; it might be done by Government, if you like, but I should think it would almost be more likely to be done by the Societies. There is no doubt it would be a trouble some sort of business; and good judges must be appointed. For instance, supposing you were to start a dozen people growing them, and they all raised their own varieties, they might be exchanged from one place to another. Supposing, for example, that I raised nine or ten varieties, and you did the same, another man did the same, all over the country. In the next spring, about planting time, we might exchange, and then the best sorts would soon be found out. A good discrimination might be made in the third year.

I give the diseased potatoes to bullocks and pigs. It is a well known fact that the diseased potatoe has as much starch in it as a sound one, and it would be a folly to burn that. My experience is, that diseased potatoes are better for cattle than sound ones."

The evidence of the well known chemist *Dr. A. Voelcker* is more theoretical than practical—at first sight; but I think we may glean from it the following hints for our guidance.

There is no known means of avoiding the attacks of the disease: that is to say, you may apply any sort of manure, farm yard or artificial, and still the crop will be affected. The experiments instituted by the Royal Agricultural Society (England) a few years ago were quite decisive on that point, but at the same time, good cultivation and early planting will, with a proper supply of the necessary food of the plant, help it to resist the attacks of the disease. An early supply of manure is a great assistance.

When the dung &c is applied in the beginning of spring, and well worked in, so that it becomes part and parcel of the land itself, the effect is superior to what it is when the same manure or mixture of manures is put in later. So, autumn