

horses are hitched to the tongue and started, the large wheel revolves, and having two steel cutting rims which cut on each side of the drain; between these rims are iron spikes set at suitable distances, and of suitable form to carry the earth to the top of the wheel, where it is discharged through the spout at the top. The earth is cut at the bottom of the ditch by the point or shear, immediately at the back of the wheel, taking from two to four inches of earth at a time, depending on the soil. The point, or shear, is under the control of the driver and can be regulated at will. The driver stands on the platform, behind, and regulates the cutting of said point. If any large stone or obstruction is in the way, the machine will roll over it without injury; if only small stones, of the size of a person's fist, they will be thrown out with the earth.

This machine will work in any soil where horses can travel. This is no patent right humbug, as no patent rights are to be sold, although it is patented; the proprietors are only intending to have it made on royalty, at foundries, a suitable distance apart, in this country. They have patented it in France, England, Austria and the States. Canada may be proud of claiming the inventor as a Briton. These machines are offered to the public on such terms as no other machines are, namely: any person requiring one may have one sent to them in any part of the Dominion, and if it does not work satisfactorily it will be taken back. We willingly act as agents for the sale of these machines. Mr. D. Stewart, of Aylmer, is the general agent for Royalty. Mr. J. R. Hughes, of Aylmer, is the travelling agent; when required, he will go and put the machine in operation in any part of Canada, without charge to the purchasers.

We hope to see the inventor, during his lifetime, realize a good return for his continued perseverance and energy. He has devoted between four and five years in perfecting this machine, at the expense of FOUR THOUSAND DOLLARS. Frequent trials, and improvements have been made, and now he feels confident that success has crowned his efforts, and the only thing now wanting is to let the farmers know its real merits. This is one of the instances showing the justice of the Patent Law. The whole principle is entirely new, and cannot easily be infringed upon, and consequently will enable the inventor to reap the rewards of his labors.

Winter Management of Cattle.

The following is a brief detail of its mode of management, which has been found very successful on a farm on which Swedes are chiefly grown as a root crop, with a small quantity of mangold, and on which the produce of hay and clover is but limited. The

cattle are brought in from the fields pretty early in the autumn, before the rough and cold weather sets in. As stated, the hay and clover grown on the farm being limited, these are chiefly devoted to the calves, the cows which are out of condition, and to those which are sucking. The herd is generally fed upon straw, turnips, and beanmeal, barley, oats and oil cake. Each animal gets daily from two to four pounds of ground beans, barley, or oats, or a mixture of these and of oil cake, or the latter only, in quantity to be equal in feeding value to the other food. A plentiful supply of straw is also put into the racks, from which each animal can take it as it likes, it being found that it eats more heartily than when helped to it. One feed per day, consisting of cut straw, is given at the time when the ground meals above mentioned are being used, the meal and the cut straw being well mixed together. When the roots are plentiful they are given pretty freely but in reduced quantity when the opposite is the case. The quantity of ground meal given is regulated by the abundance or otherwise of the roots. As the time for turning the herd out to pasture approaches, a little extra food is given to the animals, so that they are in good condition, or fresh, when put to grass. This is found to be very beneficial. It is stated that the remunerative price of meal and the comparatively low price of wheat are producing a most important change. This will cause farmers to turn more attention to grazing, and in order to buy young cattle they should be turning their crops into money as fast possible.

Mr. J. Dunn, of Stratford, has a patent hand force pump, for which he got the first prize at the last Provincial Exhibition. We saw it in operation in this city a few days since. It can be worked by two or four men. It is a very useful implement for extinguishing fires. Work-shops that are not in the vicinity of fire companies where large engines are at hand, should procure one of them, as no one knows how soon a fire may break out on their premises.

SHAMEFUL!

We know of no person that has labored harder for the real interest of agriculture, than Mr. Jas. Cowan, of Galt; yet we see some journals clamorously condemning that gentleman because he has endeavored to act fairly to other parts of Canada, and voted that the Provincial Exhibition should be held at Ottawa. We well know the more money we can draw from all parts of the country, the better it is for the thriving cities in the more favored parts of the Dominion.

We believe that but few of our breeders or manufacturers would go to Ottawa to exhibit. That large section of country is taxed

to support the Provincial Exhibition, and we think it but fair they should have an opportunity of receiving the advantages of it. We do not doubt but it would be a loss to the Association to go there. That city has offered to supply ten times as much money as we in this county have done in the past season, towards defraying expenses. It would be of great advantage to the inhabitants of that section. There would be greater exertions to make our county exhibitions more attractive, as but few of our farmers would go there. In fact, when we were attending the Provincial Exhibition at Kingston, we did not see twenty people from London, nor west of it there; nor did we see twenty people that we knew, from Kingston, attending in this city. At the Montreal Exhibition we met but one person from this Western section that we knew, still there was quite as large an attendance as at any of our exhibitions, and all should have an opportunity of attending on those instructive and interesting gatherings. The object of the Provincial Exhibition should be what it was designed for, to do a general good. The Western Exhibition was designed to make capital, no matter at what cost.

ANOTHER EXPOSURE.

More Revelations of the Laxity of the Old Board of Agriculture.

The representative of Middlesex, at the Board, Mr. L. E. Shiply, Vice President, caused an enquiry to be made in regard to the fees charged for the registration of Stock in the Canada Herd Book, and it appears that no returns are made, that the secretary has been in the habit of retaining that money as a perquisite. We suppose it would amount to a nice little salary alone. The secretary receives his stated annual pay, independent of this. It has also just been discovered that he has—or ought to have—in his possession, \$700 that belongs to the Association. The New Board are evidently using their exertions to put the affairs in better order.

OIL BATHS.

It is worth knowing that there are occasions on which a bath in oil may be of valuable use; for it is the best of all remedies for serious burns. A German ballet girl, whose dress had caught fire, and who had been horribly burned in consequence, was put into a bath full of oil by the chief physician of the Leipsic Hospital. She was suffering atrocious agonies; but the oil caused her pains to cease almost immediately. She remained in the bath nine days and nights, the oil being renewed five times during that period; and her burns were then so far healed that she could be taken out without pain or danger. Three weeks after, she had completely recovered. This is an admirable form of cure, because it suppresses the intolerable tortures which do more to kill the victims by fire than the actual gravity of the wounds. Unfortunately, like most good things in life, it is a remedy beyond the reach of small purses.