

### Fall Feed.

Owing to the severe drought adverted to in our last, and which still continues at the date of this writing, a scarcity of fall feed appears to be inevitable. Working horses and milch cows can only be kept in good condition already, by giving them well nigh the winter's allowance of dry feed. Short supplies of winter fodder during the coming season are foreseen, and, as a consequence, hay has risen in price, and farmers are selling and killing off an unusual proportion of stock. Economy in the care and use of hay, straw, and winter forage generally, is the lesson of the hour. Straw should never be wasted, least of all in a season like this. It will be good policy to use other material for bedding stock during the coming winter. Dry muck, forest leaves, saw-dust, and various things possessed of soft and absorbent qualities, may take the place of straw as bedding, and leave it to be employed for food. Clean, well-saved straw is as good fodder as much of the hay which comes into the market. Chopped fine in a cutting-box, and mixed with bran or meal, it makes a palatable and nutritious feed, on which horses can work hard, and yet keep in prime order. Corn-stalks, chaff, turnip-tops, the small potatoes, fallen apples, pumpkins, and whatever stock of any kind will eat, should be taken care of, and fed out with judicious economy at such a time as this.

It may be that late rains and an unusually fine, long fall may improve the winter outlook, and afford a prospect of greater plenty than we have at present. But it will be wise to prepare for the worst, and take all possible precautions. The autumn is now advanced, and even though growing rains should visit us, early frosts will be apt to check the growth of grass and other herbage, so as to keep the forage supply scanty. Whatever may be the character of the remainder of the season, it will be good policy to husband all resources, and dole them out, not indeed with pinching parsimony, but with judicious care. Let it not be forgotten, amid other points of good management, that stock well kept in the fall, winter easier and better than if let go down in flesh; and last but not least, that comfortable, warm stabling is a great means of lessening the consumption of winter feed, and also every way promotive of the welfare of animals.

### The Clover Crop.

Probably no other crop is so badly managed as the clover crop, none is put in the ground in a more careless manner, and none is used so hardly, for it is pastured in the spring, up to the moment, then cut for hay, and then again for seed, and again pastured in the fall, until winter stops its growth, when it is left to be frozen and thawed and exposed to every change of weather until spring comes again, then it is pastured until it is time to plough the soil, or what is left of it, for corn.

It is not at all strange that when this crop is so used its full value is not appreciated, although the fact that it survives all this, and finally, in its last stage, helps to make a crop of corn, is not the least of the many proofs we have that its value is greatly underrated. Again, its mismanagement does not stop here, but when it is cut for hay it is very rarely that this is done in such a way as to secure the full value of the crop.

When clover is in full blossom it is at its point of greatest value for feed. It then contains a much greater amount of nutriment, and much less of indigestible matter than when fully ripe.—*N. Y. Times.*

**EFFECT OF PLASTER.**—It has been shown that at the Michigan Agricultural College a single bushel of plaster added a full ton of hay to the yield of an acre of ground in the five, most of it in the four mowings that followed—two crops being taken off the ground each of the two years succeeding the sowing of the plaster.

## Agricultural Implements.

### Machinery for Land Reclamation.

In the CANADA FARMER of the 1st inst. there appeared, under the head of "Steam Cultivation," a short article from the *Farmer (Eng.)* relating to the work of land reclamation now going on at Lairg, under the direction of the Duke of Sutherland; and as most of our readers will no doubt feel interested in a description of the machines and appliances used in accomplishing the wonderful results therein stated, we offer no apology for returning to the subject.

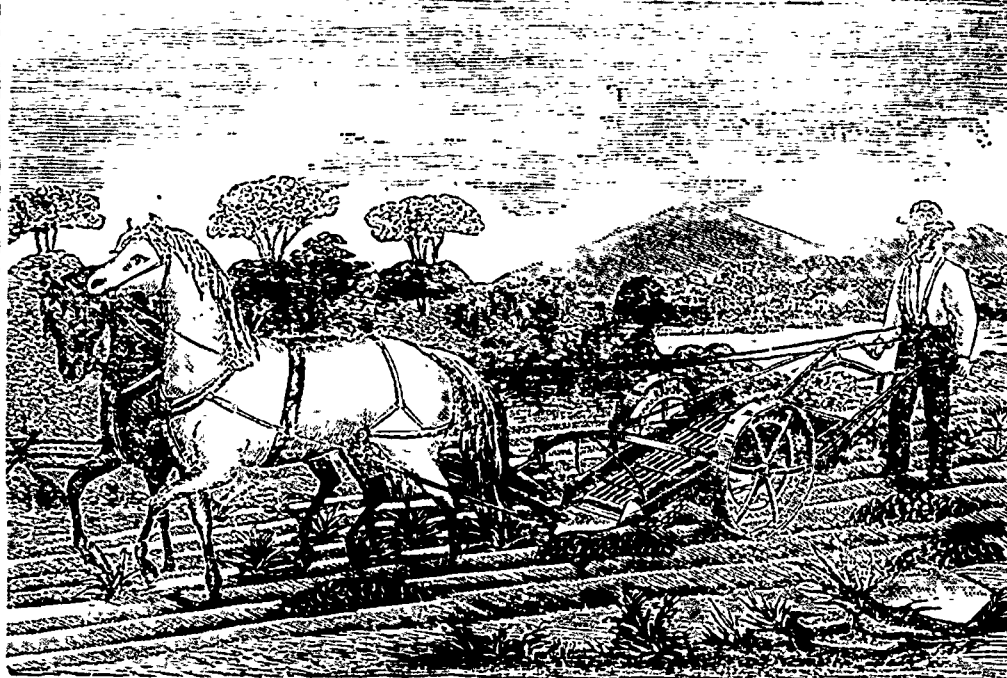
It has already been stated that the land operated upon is a vast moor, and the first operation is to clear the same of trees, where those happen to exist. This is done by steam power. A chain attached to the rope belonging to the steam engine, and composed of steel wire, is fastened round three or four trees, which are then torn up, roots and all, by the engine, and taken away with as much ease as a man would pull up mushrooms. "Nothing we had previously seen," writes a visitor, "gave us such an idea of the stupendous power of steam—though, of course, the trees were not very large, nor their roots very deeply fixed." The plough used in breaking up the soil has

The work was well done, though once or twice it was observed that in soft places the soil was pushed along for a short distance in front of the plough, instead of being turned clearly over.

After the plough followed a number of laborers to pick the stones out of the open furrow and throw them back.

Another very simple, but most useful implement was the machine for gathering the stones off the land, also worked by the steam engines. It is something like a box without a lid, covered in at the ends, open in the middle, and slightly curved, like the rockers on a rocking-chair. This is dragged over the land upside down, and collects a large number of stones underneath it. It is then turned over by steam power; the stones are thrown into it by hand, and it is then dragged away, and discharges its load where stones are required for fencing or building.

Wide, open drains are being made, as main drains, in various places by manual labor, to carry off the water; whilst an implement, again worked by steam, is used to assist in making the sub-drains. This is also something like an anchor, with two small wheels in front, and by bringing it along the same line twice, the soil is loosened to a depth of about three feet. The rest of the cutting and the throwing out of the soil is done by laborers. The rock



a sort of double share, with one breast, turning on a hinge, so that it can work both ways. At each end, in front of the share, there is a large steel wheel which cuts through the turf or heather, and makes a lip in which the share follows; in addition, at each end, behind the plough, there is a drag—something like a ship's anchor which pulls up the stones, and also acts as a subsoiler. The plough has four wheels (two on each side), perhaps three feet broad, which prevent it from overtaking, and one of which acts as a presser on the furrow after being turned up by the plough. This presser is on the whole necessary and advantageous, as it consolidates the land, and keeps in its proper place the enormous furrow, one, we should say, 18 inches broad by 10 inches deep, which might otherwise fall back again. The plough is said to be able to turn up about 1½ acres per day, which we think probable, because, although the pace does not appear much greater than that of an ordinary horse plough, the furrow is considerably broader

"It was wonderful," says a correspondent of the *Mark Lane Express* "to see the plough going over stony ground, turning up many large stones, and passing over, without any apparent damage to the machine, the rocks that were too large for it to move.

and roots of trees, which are too large to be taken out by steam power, are blasted by dynamite.

The cost of the works, including clearing, ploughing, draining, building, fencing and road making, is estimated at from \$115 to \$125 per acre. The crops on the land which was cultivated last year are very good, both oats and turnips, and some of the land where the turnips were growing appeared of a very nice mixed soil. The land which is at present under cultivation varies much in character and quality; some of the stuff which is turned up is clayey, some mixed with a sort of a weak whitish sand, some peat (which, by-the-by, is burned in the engines), and did we not know by experience that such land is sometimes much better than it appears, we should say that a great deal of it would scarcely pay for cultivation."

### Potato Digger.

The illustration given above is that of "McCallum's Potato Digger," manufactured by Messrs. Rosamond, Miller and Scott, of Almonte, a specimen of which is now, we understand, on exhibition at the Guelph Fair, and which will also find its way, no doubt, to the Provincial Fair here, next week. It is highly spoken of as being at once simple, durable and cheap, and, best of all, an implement that does its work well.