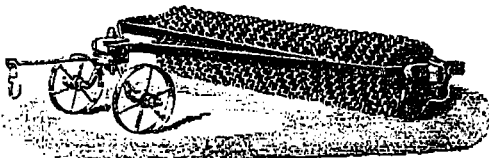


into pieces the size of a hazel-net, and sown broadcast, at the rate of 6 cwt. to the acre. The worms feeding greedily on these lumps, over-ate themselves, and perished wholesale by repletion, as many as five or six worms being found dead and attached to some of the pieces. Satisfactory enough, but, unfortunately, Miss Ormerod, the entomologist to the Royal Agricultural Society, tried the same plan in 1888, and it did not succeed.

In our opinion, and we speak from experience; there is no perfect cure for the ravages of this wretch but *pressure*. Did our readers never remark that when the rest of a field of oats, or other grain, has been thinned by the wireworm, the headland has been left uninjured? We have; notably, in 1886, or thereabouts, on a farm near Sorel.

In 1848, we had in Kent, England, a piece of oats, on lightish loam, severely punished by the pest immediately after the plant was above ground. We immediately sent to Messrs. Crosskill, of Beverley, Yorkshire, for one of their heaviest *clod-crushers*—weight, 25 cwt. gross—, and, on its arrival, passed it twice over the oats, lengthwise and across. The effect was magical! We tried the same process on our own and our neighbour's farms, wherever the crops were what used to be called, severely *grubbed*, and in every instance it arrested the ravages of the invader.



Crosskill's Clod-crusher.

The "clod-crusher" may be described as a roller composed of from ten to sixteen moveable discs, playing loosely on a spindle, each disc being *vandyked* on the periphery, and having blunt teeth attached to its sides.

If this implement is used to crush clods, we recommend farmers to pass it over the land *before* harrowing; otherwise, like all rollers, wheel or smooth, it will simply press the clods into the soil. The effects of the disc-harrow, in clod-crushing, are infinitely superior to the work of the "Crosskill," as it is familiarly called in England.

The fall-ploughing recommended by the Station

at Cornell can have no effect on the wireworm itself, as it remains in the ground all the winter without food; but it may be useful in destroying the pupæ in their tender state.

The only notice taken in pressure in the bulletin is: "as worms do not thrive well in compact soil, it is a good practice to roll the infested land in the spring." You may roll for ever with one of the *smooth* rollers, never mind how heavy, and the beast will only laugh at you. But try a *Crosskill*, or a *Cambridge* (wheel-roller), and it will tell a very different tale.

As to the manurial value of rape-cake, Lawes' analysis gives it, per ton of 2240 lbs., as:

Nitrogen	Potash	Phosphoric acid
48.0	13.2	24.6

COMPETITION OF AGRICULTURAL MERIT.

Report of the Judges.

No. 6.—M. J. B. RICHARD.

On the 25th of July we visited M. J. B. A. Richard's farm at Joliette. It contains 90 arpents, all in cultivation.

The soil is a very poor sand, but M. Richard has improved its fertility in a marvellous way by two methods:

First, by drying it by means of a peculiar system of deep water-furrows; a good lesson to those who think that sandy soils do not need warming-up; secondly, by laying on all the manure produced by the crops.

And by these means, this poor land has produced this season crops equal in every respect to those yielded by the very richest land.

There are 35 arpents—yes, we really mean 35 arpents—of fine tobacco; $2\frac{1}{2}$ of beans; $\frac{1}{2}$ of swedes; $\frac{1}{2}$ of potatoes; 1 of maize; $2\frac{1}{2}$ of barley; 16 of splendid oats, 5 and 6 feet high, etc., etc; with 28 arpents of fine meadow, with lots of clover.

Every year, M. Richard ploughs in a piece of clover, for the purpose of enriching the land with nitrogen (1)

The rotation is perfect, and there are no weeds.

Very little live-stock kept; M. Richard draws

(1) As he keeps no cattle, he does not need the clover for feed. Ed.