

thy, wheat and other grains are too commonly more or less mixed with the seed of weeds, from the foul state of the land on which they are raised, and the imperfect manner in which they are cleaned for market.

The wind is a powerful agent in propagating the growth of weeds, carrying sometimes to almost incredible distances winged seeds, such as those of the different kinds of thistle. It is a most fortunate thing that only a portion, and that perhaps a small one, of the downy seeds of the thistle, find sufficient covering on the earth's surface to vegetate and mature, or whole districts would be literally overrun with this destructive pest, which indeed is the case in some of the older settlements of this Province, particularly in the eastern section. The remedy, or what is better, the preventive of this monstrous evil is in the farmer's own hands. Such weeds should never be allowed to seed, whether they are growing in the highways or the fields. Of the most efficient means of extirpating thistles many valuable hints are to be found in recent numbers of this journal. But the principal thing the farmer has to do after he has once got his land clean and free from these unprofitable intruders, is to *keep it so*. This end can only be attained by a systematic course of thorough cultivation, the exercise of unscrupulous care in sowing only *pure* seeds, and vigilant attention to the pulling up of all descriptions of weeds wherever they may appear.

A prolific source of weeds in this country is often found in barn-yard manure. The seeds of weeds are too commonly brought into the barn with the crops, and in cleaning the grain go out into the yard with the straw, to be trodden into litter by the cattle. Unless the dung be put into mixers, and allowed to sufficiently ferment, the greater part of the weeds which it contains will be certain to grow wherever it is applied, particularly on arable land, and thus the evil becomes perpetually self-producing. If only a few neighboring farmers would resolve to combine for the extirpation of weeds, and vigilantly use the means for a few years, the evil might be kept down by ordinary caution, without involving any serious outlay, and the crops largely increased in quantity, and equally improved in quality.

One of the most common and troublesome weeds that propagate themselves by roots is Couch grass, *Triticum repens*; and familiarly known by the name of quick grass, scutch grass and *chien dent*, or dog's tooth and it is one of the most vivacious plants that grow. Where this plant has got a strong hold of the soil it can be extirpated only by a thorough summer fallow; the grubber is an excellent implement for bringing many roots to the surface, when they can be collected, placed into heaps, and burnt. In order to get thoroughly rid of couch grass, careful hand-picking will be sometimes found necessary, for the smallest root, not perfectly withered, when left in the ground, will be sure to vegetate, and in a congenial soil will rapidly extend itself in all directions.

Burning weeds ensures, of course, the destruction of their seeds; but this object may be attained by other means, and a larger amount of valuable manure secured. Collect the weeds and whatever vegetable matter can be obtained from the scouring of ditches, &c. into a corner of the field, mixing them alternately with layers of quick lime, and leaving the fibre to the process of decomposition, which the lime will tend to facilitate, as well as add to the amount and quality of the manure. Another method consists in placing the weeds in the centre or at the bottom of stable manure, at such a temperature to preclude the possibility of vegetation. This requires the strictest attention, lest the heat produced by the fermentation of animal and vegetable matter should fail to destroy the principle of vegetation; in which case the whole quantity of manure would be only so many stimulants, and abetting the couch grass in its future attempts to gain possession of the soil. By the treating weeds they may be made to minister to the wants of our cultivated crops, the soil kept clean, and its produce increased to a degree which to many would appear absolutely incredible.

Land Drainage.

We have written and published a good deal various times on the subject of land drainage, and it is hardly necessary now to insist upon the importance of the improvement, especially in situations where the land is of such a character