

The Hield.

Sowing Fall Wheat.

There will probably be a large area of winter wheat put in throughout Ontario this year, and it may be well once more to repeat the oft-told tale of those principles which the farmer should ever keep in view ere he commits any seed to the soil.

There are three essentials to be regarded-1st, good seed; 2nd, good land; 3rd, good cultivation.

Good Seed .- There are four varieties of wheat now generally sown. greatest breadth we may place the Treadwell. This is rather coarse, a good straw wheat, and appears to stand the winter well. We find that its yield this year has not been commensurate with its appearance in the field.

The Deihl is a pretty white wheat, and is a great favourite with all our millers; apt to be short in the straw, and to be winter killed; generally threshes out better than we should expect from its appearance in the field. It is a far superior sample of wheat to the Treadwell.

The Soules. -- We should be sorry to advise the growth of this wheat, but we think it will revive very much this year in the favour of our farmers. It has a beautiful flour berry.

Old Red Chaff.-We see that some of this has been again sown this year; it has been the king of Canadian wheats; but we are afraid it has too much degenerated to be again the leading sample.

First, then, let us consider carefully which wheat we prefer, and obtain that kind. Let us then get good seed, clean, bright, plump, and sweet. We saw a large field this spring, so thin that it had to be ploughed up for barley. This was owing solely to the carelessness of the farmer in procuring musty seed that had heated during the autumn. The senses are not sufficient to trust in the matter of seed. We should prepare our seed.

If you were about to plant potatoes, would you not discard one that was rotten at every eye? Even so, discard every grain of wheat whose germinating power is gone.

Soak your wheat in a brine made of salt and water sufficiently strong to float an egg. Leave it for from four to six hours in the pickle; skim off all that rises to the top; then spread upon the barn floor evenly, and sprinkle with plaster of Paris. There are other steeps, but we consider the above to be the safest for general use. The object of this steeping is twofold-to bring the light grains to the top, and to destroy all germ of smut.

Experiments are recorded as having been made in England upon Lord Chesterfield's farm in Derbyshire, amongst which we find the following :-

The trial was made on a peck of very smutty wheat, one-half of which was sown in the state in which it was bought, and the other half washed as clean as possible in three waters, and then steeped during two hours in brine strong enough to carry a new-laid egg, and dashed over with lime. The result was that two-thirds of the wheat grown from the unwashed wheat was smutty, while that produced from the steeped seed was a full crop, without a single car of smut.

Change your seed. Seed will deteriorate when grown too often successively upon the same soil. Get your seed from a heavier soil if your farm is light, and from a light if your farm is heavy. If possible, get seed wheat from poorer land than your own.

Good Land .- To attempt to raise crops off poor and impoverished land is a throwing away of time, labour and money. Nature's laws are immutable. A good crop of wheat cannot be raised upon poor or unsuitable land. The best wheat land is such as possesses a certain amount of consistency; therefore clays are the soils best adapted for fall wheat. Although good crops are often raised upon the lighter soils, yet the crop is uniformly good and weighs heavily to the bushel

and properly cultivated. Indeed, we may trace nearly all failures of the wheat crop upon our heavy soils to imperfect drainage and partial cultivation. Clay land should, however, contain at least 15 per cent. of lime; and if such be not found in the soil, it will pay well to supply it.

We have seen clay land apparently rich in humus, so stiff as to be almost unfit for the plough, made friable, and yield a heavy crop of wheat by the liberal application of lime. Indeed, we think that upon many clay farms lying in the neighbourhood of a limestone ridge, it would pay the owners to burn their own lime for the sole purpose of application to and incorporation with the soil.

We would not here enter into a discussion of those arguments which may be adduced either in favour of or against the practice of summer fallowing. However strenuous may be our opposition to this system as a principle or regular course in rotation, we cannot but be aware that, owing to great tenacity of soils or great foulness in the land, such a course does become necessary in certain fields; nor can we shut our eyes to the fact that a field thoroughly summer fallowed seldom yields anything but a good crop of wheat. It must rest on the judgment of each farmer whether it is necessary that he lose a year's crop upon his land for the purpose of making certain of a good crop of wheat, or whether by a proper system of rooting to clean and clovering to enrich his land, he may not with equal safety risk his wheat immediately after a stubble or young clover ley.

Often in the rotation of crops, and especially has it been the case this year, our clover seed misses upon barley. The quickest way in which to again seed down to clover is undoubtedly to put fall wheat upon such land; but it must be borne in mind that nutriment has been drawn from the soil by the preceding crop, and the farmer must endeavour to restore that nutriment ere he call upon the resources of his field to yield a crop of wheat. Barn-yard manure, where practicable, is undoubtedly the most effectual means for this upon clay, supposing such to have been well | purpose; and in default, we have known a