

lemen, there is nothing like leather, of course, he wanted to sell what he had; but I say, farmers, there is nothing like clover—where you are short of manure—sow 8 or 10 pounds of clover per acre with your grain crop, to plough down in the fall, only one dollar per acre, and see how quickly you will renew your soil. And if your faith be strong enough, one dollar and a half of seed would do even better. But we must keep on agitating these reform: better roads, better clover, and then good bye hard times.

Yours truly,

PETER MACFARLANE.

July 21st, 1900.

NOTE.—We know well the effects of green-manuring; but, as we have often remarked in this periodical, ploughing-down clover, with our seven months of indoor feeding of stock, is only admissible where there is no stock on the farm to eat the hay made from it. Ed.

APPROACHING HARVEST.

The principal difficulty which threatens us is scarcity of labour, and we shall see a great increase in the use of self-binders. These useful implements have been brought to perfection noon to soon, and will prove invaluable to large farmers in a few weeks. Harvest is indeed nearer than this, for in a fortnight we shall be on its threshold in early districts of the South. The tendency has been towards early cutting of wheat and oats, and is sometimes over-recommended. We are liable to run to extremes, and the somewhat rash statement that *wheat cannot be cut too green* is obviously absurd. Wheat should be ripe like everything else when it is cut, although the precise stage at which it may be considered ripe is open to judgment. Ripening looked at scientifically consists in the gradual transference of the juices and their solid nutrient constituents to the grain. It takes place equally in the case of grains and cereals, and is the reason why grass should be cut young. It is also the reason why corn should be allowed to stand until the migration is complete. It is often argued that wheat will ripen in the shock, but this idea must be qualified by the consideration that severance from the ground must dry up the juices and impede locomotion within the tissues of the plant. Also it must be remembered

that the entire plant is involved in the process of migration of nutrient matter to the grain; that roots and stubble end, as well as the upper straw, give up material to the head, and severance puts an end to the upward passage of albuminoids and sugar towards the formation of albuminoids and starch in the grain. There is a right time to cut wheat, which is practically shown by a fairly firm condition of the grain. Wheat should be well filled and firm before it is cut. Barley, on the other hand, should not be cut till it is hard and over ripe. The ears should be bent down, and the straw should be dry and brittle. The two cases are instructive. Wheat is for grinding, barley is for malting; and these diverse objects lie at the bottom of the variation in practice in harvesting the two cereals.

An early harvest is not expected, but if the present forcing weather continues it will come sooner than has been anticipated. It will tread hard upon hay-making.

As to hay, the later crops are much better than the earlier clover and field hay. Water meadows and late cuts generally have thickened wonderfully, and I should say will prove satisfactory. The weather has improved, and as I write good crops are being carted in perfect order.

JOHN WRIGHTSON.

THE WEATHER AND CROPS IN MANITOBA.

During the past few weeks the weather has been all that could be desired. Farmers as a rule are feeling more hopeful as late crops all promise well, and, if the season keeps free of frost long enough, much of the late crop will be ripened. This would go to help out the effects of the drouth. The assurance of plenty of feed has greatly changed the situation with many. There will yet be plenty of hay. The rains came too late to make a good crop of the wheat. It has been greatly benefited, but the country must make up its mind for less than half a crop. There are individual fields here and there that will give a good yield, while some sections will give a fair average yield, but these are not the rule. Reports from the Edmonton and Prince Albert districts show that full crops are expected. At St. Louis, near Prince Albert, Dr. Fletcher, while on his recent institute trip, saw wheat as high as his shoulder. We