

## The Farm.

### The Hired Man.

None of our essayists on the above subject—24 in number—have succeeded in conjecturing our main object in selecting the hired man as a theme for a prize essay. Mr. S. A. Leidman, the prize essayist, has covered the ground very well. He modestly informs us that he just thought he would see what a country boy could do with such a thing as an essay. Well, the "country boy" has made his mark the first go, and we hope his example will induce other country lads to follow his example. We frequently find that farmers' boys and girls surpass professional writers in handling practical questions, proving that there is a latent vitality of great power in this class of our community.

These are stormy times amongst the working classes of Europe and America, although, Canada has as yet escaped with comparative impunity. According to the strain of our essayists, all heartily sympathize with the views which Mr. Leidman has expressed with reference to the treatment of farm laborers, and we ourselves endorse his views. If all farmers would follow his advice, our farm laborers would be a happy and contented class of people, and there would be no danger of their organizing and striking for greater rights. We believe that farmers, as a rule, treat their laborers better than the "bosses" do in other industrial pursuits, there being an exhibition of greater social equality amongst employers and employes in the country than in our cities, which gives rise to greater contentment.

Our columns are welcome to hired men who wish to express themselves on the subject. Unquestionably, there are some hired men who are not fit companions for the families of some farmers; but it is not charitable to say that such men should not be tolerated about the premises. The dismissal of such men is a casting of the burden on your neighbor, who may possibly be less able to bear it. Should the farmer not take pride in attempting to elevate them up to his standard? The happiest family we ever saw embraced two hired men employed from year to year. The best dairy literature was placed into the hands of the one, and, instead of working those unsufferably long hours, he was given ample time to peruse it, and was consulted on all dairy matters. Field literature was placed into the hands of the other laborer, and he was consulted on all matters pertaining to his department. A stranger entering the house, and hearing discussions on the plans of operation, could not ascertain who was the "boss." This is as it should be; the hired men feel proud of the confidence reposed in their learning and judgment, and they are being trained to work farms on their own account. Why should the hired man not be taught to employ himself to the best interest of his employer, which conduct must ultimately redound to his own advantage?

In our observations and experience, the greatest grievances of the hired man are (1) the long hours, and (2) unsuitable diet. The long hours are chargeable to the system rather than to the farmer. The system could profitably be changed, distributing the work more evenly over all the seasons of the year, instead

of compressing it into a few months when very few hands can be had at any price. That the average farmers' summer diet is a disastrous failure cannot be controverted. If we advocated greater expense in this respect, we would be open to censure, but his diet can be made less expensive, less laborious in the methods of preparation, and at the same time more delicious, wholesome and nutritious. Substitute the various products of a model garden, aided by delicious small and large fruits, in various combinations, for the proverbial "bacon and potatoes." No laborer should expect that every farmer can have fresh meat at all times during the sultry months, and such is more a habit than a necessity. There are productions of the vegetable kingdom which contain a higher nutritive value than those of the animal, pound for pound, and their cost is very much less. Eggs and the various products of the dairy are concentrated animal foods, and should be utilized to a greater extent than ordinary custom demands.

### Do Good Farmers Summer-Fallow?

The question of summer-fallowing has been debated for centuries amongst practical farmers, and many appear to be as far from a conclusion as ever. There are arguments for and against the practice; indeed, all depends upon circumstances, and as soon as the varying conditions become clear in the farmer's mind, he will have no difficulty in arriving at sound conclusions.

The main conditions are (1) the chemical and physical conditions of the soil; (2) its condition with regard to weeds; (3) the drainage; (4) the season; (5) the system of rotation.

The main objects usually are to clean the land and to prepare it for fall wheat. Now the good farmer controls many of those agencies by which weeds are propagated, and by thorough cultivation year by year, as well as by a skilful system of rotation, he obviates the necessity for summer-fallowing. With regard to preparing the soil for wheat, this should be the object of every other crop in the rotation, instead of putting it off till the last season. Soil is prepared for wheat by conserving the nitrogen—the active principle of humus—in the surface soil. The application of barnyard manure supplies this humus; but, instead of supplying it only once during the rotation, a small portion can be added mostly every year, chiefly by plowing under partially grown green crops, and by thorough tillage of root or corn crops during the season of growth, whereby ammonia is absorbed from the atmosphere. These remarks, however, only apply to soils which are deficient in vegetable matter or humus. Soils rich in decayed vegetable matter have great absorbent powers for water and ammonia, and owing to their dark color, they favor soil warmth, and so produce earlier crops.

Some farmers summer-fallow in order to give the field a rest. There is no use in giving anything a rest unless it recuperates. If a rested soil increases in fertility, this may be a cheap method of manuring, but let us again examine into the conditions. To say that a soil increases in fertility is very indefinite; for it may increase in some constituents of plant food and decrease in others. This brings us to the effects of tillage, especially the extra tillage

which the field gets while being summer-fallowed. The effects of tillage are not the same in every soil. Its effects on a clayey soil are to disintegrate the rocky particles, making the mineral plant-food more soluble, the vegetable matter in the soil becomes rapidly decomposed by frequent exposure, and the carbonic and humic acids which are given off aid in the disintegration of the particles of rock, the nitrogen or fertilizing element being retained in the form of nitrates; that is, nitric acid combined with some base, usually lime. The action of tillage on the organic matter, whereby the plant food becomes increased, only takes place at summer temperatures, a certain quantity of moisture also being required. It will now be seen that all kinds of plant food are greatly increased by summer-fallowing, but the question yet remains, Does all this nutritive material remain in the soil? If so, surely summer-fallowing must be an advantage, providing the plant food produced be not too great for the requirements of the coming crop. If the soil is rich in vegetable matter, it is easy to create an excess of nitric acid, which might be more exhaustive on the soil than the production of a crop; and if the soil is of a clayey character, the previous winter having been open and frosty, there may be an excess of mineral plant food produced; for frost is a greater liberator of the mineral constituents of plants than tillage. In a retentive soil, such as a clay or a clay loam, the mineral plant food is retained, and any excess unlocked by means of tillage will be held in reserve for succeeding crops; but by an unlucky provision of nature the nitric acid obtained from the vegetable matter will be washed away in a wet season. If the land is underdrained, part of the nitric acid will sink into the subsoil, and will come useful for deep rooted plants, say fall wheat, and part will be washed into the drains, as has often been found by analysis of the drainage water. If the land is not drained, especially when it is undulating so that the water will run off freely, the situation is still worse, for the water which washes over the surface will carry the nitric acid with it, possibly away down to the sea. It will now be readily seen that in sandy soils, where the mineral plant food is scanty, and cannot be appreciably increased by tillage, manures must be cautiously applied in order that they may not be wasted before the growing crop is rank enough to appropriate them. In a dry season, however, all the constituents of plant food will be retained in the soil, and in a retentive soil all but the nitrogen will be retained even in a wet season. No excess of plant food can be produced by tillage so long as there is no waste in the soil, and all the constituents are properly balanced for the requirements of the crop.

We think these explanations are in sympathy with the practice of our best farmers, and they do not give much encouragement to the advocates of summer-fallowing. However, when a field is excessively dirty, the practice is a good one, even if some elements of fertility are lost; for, by repeated cultivation at different depths, weed seeds are brought to the surface by every operation, where they germinate and are destroyed, the land thus being cleaned at once, and many years of annoyance are spared. Under ordinary circumstances it is folly to lose a year's crop by means of the summer-fallow