

Restoring the Fertility of a Worn-out Farm.

That a farm, no matter how impoverished it may be, can be made fertile, no one can doubt for a moment. The most beneficial elements of plant food may have been exhausted, but they can be restored. It only requires the expenditure of time and money. But the question to be answered is, Can a worn-out farm be brought up to a state of fertility without the cost over-balancing the profit. Draining, if necessary, subsoiling, summer fallowing, the application of costly fertilizers, without regard to the expenses, will, in a short time, make a farm fertile, no matter how impoverished it may have been. But the capital expended in these means of improvement may exceed the whole value of the farm.

There is, however, a more inexpensive method of bringing up a rundown farm. There is no cheaper mode of enriching the land than by growing clover. Its long taproots search deep into the store of mineral food, and its leaves attract ammonia from the atmosphere; but the farm may be too poor for clover: it requires soil in pretty good condition. If so, sow some other crop, buckwheat, or rye, not sown for the seed, but for green manuring. For this purpose two successive crops can be grown in one season. The plowing in the first prepares the soil for the second. Every crop used in this manner adds so much more vegetable manure to the soil. Meanwhile, collect and apply to the ground compost of every sort. If there is muck anywhere on the farm, use it for top-dressing. Earth from the headlands may be used in like manner. After a couple of crops, such as we have mentioned, the land will bear clover, and if the system of farming that had previously been practised, and that robbed the soil of its fertility, be avoided, there will be no longer the anxious enquiry of how to restore the fertility of a worn-out soil.

Breadstuffs for England.

From the latest reports of the imports of flour and grain into the United Kingdom we see the supply is short of the consumption. With 160,000 qrs. supply per week of foreign wheat, and 120,000 to 140,000 qrs. supply from the home deliveries of wheat, the weekly supply will aggregate 236,000 to 256,000 qrs., against the usual average weekly consumption of 400,000 to 423,000 qrs. This rate of supply will, if continued, rapidly diminish the stocks in granary.

The diminution of imports is attributed partly to the unusually light crops in the grain-exporting countries of the north of Europe, and to this is now added the anticipated closing of the ports of the Black Sea. The decreased imports are, however, more due to the short product of the United States, from which country so large a portion of the supplies of the United Kingdom was drawn in ordinary years. As the demand from England kept on increasing every year with her increasing population, the wheat production of America increased in at least equal ratio. The *American Miller*, referring to the increase of the production, says that in 1849 the whole wheat crop amounted to 100,000 bushels; in 1859 it reached 17,300,000 bushels, and in 1869 it was 287,000,000 bushels. This is owing, as an American says, to the opening of new territory to the pioneer, whose first crops could be made from wheat. The West, which is the greatest wheat-producing territory, suffered from unfavorable weather in the harvest; the year's crop throughout the country was short, almost without an exception. As a consequence of this, the exports of wheat fell short some \$2,200,000 as compared with 1875.

Were those nations that import so largely their breadstuffs from foreign nations dependent solely on one country for their supply, a famine might

seem imminent if the country of their supply were visited with an unfavorable season and short crops. Such a calamity cannot be expected now, though the imports from the Western Continent have fallen off so greatly. England imports her breadstuffs not only from America and the great granaries of the German and Russian Empires; her imports from Asia are large and every year increasing. In some of the fertile countries included in her Indian Empire, there was only wanted a means of transporting their produce to the seaboard, to enable them to supply Britain with all the breadstuffs she could require for her teeming millions. And that facility of transport to the ports for the growth of their luxuriant soil has now been afforded them. The great railway lines have developed the vast resources of the country. India is now known as a great wheat-producing and wheat-exporting country, and there can be little doubt that Great Britain's needed supplies of breadstuffs can be obtained from that country in a few years at farthest.

The Legislature of Massachusetts and the Agricultural College.

If we are to judge of the estimation in which Agricultural Colleges are held in New England by the value set upon the service of that one in Massachusetts, we would not think they were of much benefit to the commonwealth. The action of the Legislative body indicates that they are greatly depreciated in public estimation. In the Senate, the subject of the grant annually made to the Agricultural College has been reduced from \$10,000 to \$5,000; and this reduction was acquiesced in by the House. At a subsequent meeting of the Senate, the resolution of the grant that had been agreed to coming up in the orders of the day for engrossment, inquiry was made as to the amount paid to instructors, and the fact was developed that President Clark receives a salary of \$2,560 per annum during his absence in Japan. Several Senators expressed their disapprobation of this payment, and the appropriation under the resolution was cut down for this reason from \$5,000 to \$2,500. We do business in another way in the Dominion.

AGRICULTURAL ORGANIZATIONS.—Massachusetts is paying annually \$18,000 to keep her agricultural organizations afloat; \$600 is given to each society, and that, in some cases, is not enough to pay the interest debts contracted for buildings which are going to decay, and for "tracks" which may not be worth a tenth of their appraised value for any purpose whatever. And all with her chairs at the College vacant for the want of funds to pay for the services of men to teach the boys how to keep an animal healthy and how to treat one when sick—one of the most important branches of learning which a young farmer can acquire.

A Model Farm for Nova Scotia.

We have in this Province a Model Farm in connection with the Ontario School of Agriculture. It is becoming well known to the taxpayers. It may be well to take a look at what they purpose doing in this line in a sister Province. We turn from the estimates of the Province of Ontario to the prospectus of the Nova Scotia Agricultural Association in the *Journal of Agriculture*. The Secretary of the Central Board of Agriculture read a communication from Mr. Hendry, of Halifax, in which he pointed out the great facilities for live stock raising in Nova Scotia, and gave an outline of a scheme for organizing an association to be called the Nova Scotia Agricultural Association. The special object of the Association will be the managing and working of a stock and dairy farm in such a manner as will best advance the agricultural interests of the Province of Nova Scotia. The Model Farm is to consist of at least a thou-

sand acres, managed by a superintendent, under the direction of five gentlemen, to be elected by the shareholders. Capital, £5,000; in shares of £50 each. An annual sale will be held regularly after the second year's operations of the Association. The subject is submitted to the consideration of the Board, in the hope that they may be induced to take an active part in starting the scheme. If the Board would do so, Mr. H. has no doubt that one hundred gentlemen in Halifax would readily take an interest to the amount required.

The Chairman of the Board in his address referred to the propriety of introducing into the Legislature a general Act for the Province, giving counties the power, if they desired to exercise it of erecting exhibition buildings. He likewise alluded to Mr. Hendry's proposal to establish a joint-stock dairy farm, to Mr. Dupe's application for a vote to assist in the establishment of another farm and other measures. After consideration it was resolved, that they will bring the matter under the notice of the Agricultural Committee of the House of Assembly, with the view of ascertaining whether substantial encouragement can be offered, in any way, to promote the establishment of such a joint stock farm as the one contemplated.

Millet for Soiling and Hay.

Of all the products of the farm none is more certain in its return. Whether grass seed be sown in autumn or in spring, there is an uncertainty of getting a good catch; and even if that be obtained the young grass may be cut off by the early or late frosts. Nor is this the only risk; a dropping May is necessary to give anything of a good pasture or meadow, and a dropping May is not of frequent occurrence in this climate. Some plant is needed to meet the shortcomings so frequent in the hay crop, as well as in the summer feeding of cattle. Whatever the merits of other forage may be when fully tried, there is none so much liked, for an extra crop, in America, as Millet.

This excellent grass will produce a fair crop on almost any soil. A soil may be light and impoverished, and yet produce a paying crop of millet. A very poor lot will, if well prepared, yield a ton of hay, and, in proportion to the state of the soil, will produce two or three tons. If cut for soiling when green it may, under favorable circumstances, bear another cutting. For hay, also, it is better to cut it before it is quite ripe. By this means the hay will be relished by horses and horned stock. There are several varieties of millet; some of them, as the Italian and the golden millet, have been said to excel the old favorite, the common millet. This last, however, we have found a very valuable forage plant. It is earlier than the Italian or the golden, and this is in its favor, and it has abundant foliage, rather coarse, but well liked by cattle. It may be sown broadcast, though we much prefer drilling it in. The produce from the quantity of seed sown is very large, as it tillers abundantly. The seed is used in feeding fowls, but allowing the seed to ripen depreciates the value of the hay very much—if ripened it is little if any better than other straw. A plot of ground in good tilth, and moderately fertile, will, under millet, pay as well as with any other crop, allowing for the labor of both.

Hungarian grass, another variety of the same species, is by some preferred to millet, producing heavier crops, but it grows coarser, and on that account is not so much relished by cattle.

THE RINDERPEST IN ENGLAND.—Several herds of cattle have been slaughtered to prevent the spread of the disease. In one instance it has been introduced by imported bone manure.