

spring. As I explained in my article in last June's number of the Journal, the cultivation is the simplest thing possible. 20 lbs. per acre sown broadcast on well prepared land, well manured; barley, wheat, or oats, may be sown with it. Harrow the ground lightly in the autumn after the grain crop is carried, to destroy the weeds, and again in the spring. The next autumn it will bear any amount of dragging, as the roots will then be so deeply fixed that they will defy eradication. Mr. Brown says, in the "Report of the Ontario School of Agriculture," that "Lucerne broadcast gave one third more than the drilled. Five cuttings were made, but, owing to the too great tenacity of the soil, the yield was small." Why then sow on land too stiff? Every body ought to know that Lucerne prefers a light sandy loam.

Cheese.—There seems to have been a general failure in the specimens of this article. "English, very inferior, unless the tenant farmers who make cheese at home pay more attention to its manufacture, so as to secure fine quality, they will be forced out of the market by the Americans."—*Judge's Report.*

Of the celebrated *Roquefort* cheese, the first prize was awarded to Mr. Etienne Coupiau, of Roquefort, Aveyron, for a really good cheese. The manufacture of this highly flavoured cheese affects beneficially upwards of 50,000 people of all classes. About 700,000 sheep are kept to furnish milk and their produce realises annually 20,000,000 francs, or \$4,000,000. The average value of the milk has risen from 21 francs in 1867 to 30 francs in 1877, and the production of cheese from 320 tons in 1830 to 1000 tons in 1840, and 6,500 tons in 1878!

Much of this wonderful increase is due to the unwearied energy of M. Coupiau, who is president of the Society of the *United Caves* of Roquefort. I think I have proved my case.

ARTHUR R. JENNER FUST.

Education of the Farmer.

There is no class in the community so much interested in education as the farmer. They are the most numerous part of the population; the farmer has more at stake in the country than any other class in the community. In fact, the farmer is the foundation upon which the prosperity of this country will depend.

Professional men, merchants, and others among the non-productive classes, may change their business, pursuits or residence at pleasure, readily become naturalised to any situation, in which they happen to be placed, carry their goods, talents and capital with them, and soon take root wherever they chance to fall. Not so the farmer. His farm is immovable, he is a fixture to the soil, he cannot if he would, separate himself from his country, and all his interests are involved in its welfare and condition. Real property, the farm, the capital of the farmer; that remains fixed and exposed, without the possibility of withdrawal, or concealment, or shelter, to all the changes of the political sky. All that he calls his own is fastened by an invisible chain, for weal or for woe, to the destinies of his country. To what class in the community is it so important that they should understand their rights, that they should have a just perception of the true interests of their country, and that they should be well qualified for the intelligent discharge of their duty as citizens of this rising country, who must always have the deepest interest in its destinies and fortunes, and who, so long as our free constitution is sustained, must have its government and condition within their control? Nothing can effect this much for them but education. This only can secure to them that respectable standing in the political community, to which they have a just claim, and enable them to exert properly and successfully the important influence which belongs to them.

Education is most important to the farmer as a matter of interest. I mean as a matter of interest and profit in their own art. I am not unaware of the great importance of practical knowledge and personal experience in an art so practical as agriculture. Yet I have no hesitation in saying, that there is no art which, for its improvements and success, owes more to science than this. I admit that some of our most successful farmers, and merchants, have been men of very imperfect advantages, and limited information. But although they have been men of few of the public and ordinary advantages of education, yet such men have never, unless in some very extraordinary and accidental case, been other than what are called, self taught men, men of great natural shrewdness and intelligence, who have anxiously availed themselves of all the advantages within their reach, and obtained all the information in respect to their particular profession and art, which it was in their power to obtain. And have they not invariably themselves felt and lamented the want of education? And would not their labour have been more efficient, their improvement greater, their efforts made with superior success, if, to the native energy, and perseverance, and good judgment, and skill, for which they have been remarkable, had been added the knowledge and information, which superior earlier advantages of education would have afforded them? But produce as many of these cases of extraordinary success on the part of uneducated men as can be found, and on the other hand, of the ill success of the theoretical man, literally, book-farmer, who, without any previous knowledge, has undertaken to manage and cultivate a farm, solely by information gathered from treatises on agriculture; and the advantages will be on the side of the book farmer. Yet, if these cases were a thousand times as numerous as they are, would this overthrow the established principle of the universal value of knowledge? and if, in every other art, even the most humble, knowledge is so important, as the source of power, and an essential means of success, can we in the great art of agriculture, involving so many relations to be guarded, so many operations to be performed, so many materials to be operated upon, and so many instruments with which to operate, be guilty of the flagrant absurdity of supposing that, here, science is of no avail? Much rather is it as obvious to any reasonable mind, as the light of the sun to any clear eye, that knowledge must be valuable and important everywhere, just in proportion to the greatness of the art to which it is to be applied, and the many subjects of action or use which that art involves; and I may perhaps excite general surprise, when I state, that no art bears so close a relation to so many branches of science as agriculture. Am I wrong then in saying that the agricultural class is the most important part of our population? And can we, in respect to this class, possibly overrate the importance of education? Should not our government do more for the agriculturist than they are doing, by the increase of the grants to our Agricultural Colleges? There are about 800,000 able bodied men in the Dominion, 600,000 of whom are farmers, leaving 200,000 for all other occupations. Agriculture is the most fruitful source of the riches of a country, and of the welfare of its inhabitants, and it is only as the state of agriculture is more or less flourishing, that we can judge unerringly of the happiness of a nation, or of the wisdom of its government. The prosperity which a country derives from the industry and skill of its artizans, may be but a passing gleam, that alone is durable, which has its rise in a good cultivation of the soil. These facts ought to be constantly present to the mind of the Government, and to influence all its measures, and every exertion should be made, to give the farmer such a knowledge of his profession, as will enable him to produce three fold what he now does.

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