

Principles are learned by study and reading; but without the application we have not the instruments to the department of labor.

Farmers, as well as other classes of professional men (for I class farmers among the professions), may elevate themselves and their social standing as tillers of the soil by more reading and study. For instance, a lawyer should read law, histories of famous cases, the eloquent speeches and pleas of famous counselors and pleaders, and biographies of leaders in his profession; so the physician, and the minister, and the artist, must each read in his own lines; the merchant should read of the commerce, manufacturers and leading merchants, and learn by their failure and success. The farmer must read books on farming, on soils, on domestic animals, and horticulture, and in choosing his periodicals or magazines let him as much as possible subscribe for and read and exemplify those who devote their time, pen and interests exclusively to the advancement of agriculture, and then will our yeomanry flourish and progress. I don't follow all I read; I use my own judgment and experience; nor would I, like a fool, decry "book farming," because nowadays all that is worth knowing has got into print, and he who does anything worth the doing is following, whether he knows it or not, what is contained somewhere in books.

The circumstances of all those pursuing farming are not such as will allow of them sending their sons to agricultural schools; therefore, I would propose a step in advance of that taken in our public school system. Who are truly now the good and great men as statesmen of our country? Who in our conflicts for independence and national honors and rights have caused their names to be written on the scroll of fame? Mostly the sons of the tiller of the soil! If in coming years the honest sons of our honest yeomanry, with a sufficiency of natural and acquired talents, are placed in our halls of Legislature, in our Cabinet Councils, and on Benches of Justice, we need not apprehend but that the glory of our Dominion to generations unborn will be the admiration of the civilized world. We should have nothing to fear from such men who, together with their families, are identified with the greatest interests of our country. They would consider our interests their interests, our advancements their advancements, and would have no motive to neglect either.

But you ask, "how are these things to come about?" We have law schools, medical schools, and theological seminaries, but how few are our agricultural schools? Is it not a fact that two-thirds of our common schools in this Province are supported by farmers? Then why not educate more in the interests of agriculture? There is scarcely a particle of the instruction given in them specially or particularly bearing on the interests or usages of agricultural science. Attend one of these quarterly or annual examinations or rehearsals at the public schools, and you would not suspect that these children knew they were the sons and daughters of farmers, that all their interests and anticipations were blended with the simplicity and unpolished realities of rural life; save the elements of education which are common to all classes, they are no more instructed

in the art and mysteries of their own particular sphere of life than though they were the red men of our western wilderness. I contend that this is fundamentally wrong, and it is caused by a want of interest on the subject, for the farmers are the ruling majority. To introduce into our public schools one or more treatises on agriculture, I think is a step in the right direction. When we see our future yeomanry, our future mechanics and the other producing classes of our country wanting in this kind of wisdom, let us advocate such a system, and not allow political paupers, demagogues, and political gamblers to occupy the administration of our government for a protracted number of years, or we shall be compelled to inscribe upon the arches of our political temples in the sublime language of the prophet Daniel, "Mene, Mene Tekel Upharsin." My ideas of social and agricultural elevation can at this point be blended with that of Mr. J. S. Pearce, in his essay on "How can public expenditures for agricultural purposes be turned to the best advantage?" for I think this great and necessary improvement might be brought about by "industrial education."

In conclusion, let me say, farmers, fathers and mothers, beautify your homes. I hear so many complaints that farmers' sons and daughters do not want to stay at home, "they hate the farm" and want other occupations; the girls would be mantle-makers or clerks in towns and cities, rather than help the mother make butter or assist in the garden; the sons want to try their fortune at mercantile business, and instead of their children being their help and comfort in their old age, they are an expense, caused by business failures. Teach them that the tilling of the soil is the sure source to independence and wealth; and do not allow them, for the want of a few home comforts, to indulge in a mad zeal of speculation and then repair to the towns and cities to hunt up a hasty fortune, for ninety-nine out of every hundred cases, where fortunes are quickly acquired, they are as quickly lost.

So let us strive to elevate the agricultural and social interests of this Dominion by taking a step to introduce some treatises on agriculture in our public schools, and let our legislation be progressive in industrial education, for this is the germ of a new life.

Massachusetts landowners are planting worn pastures with chestnuts, both for timber and the nuts. A Sudbury farmer thinks that such land can be put to no better use.

It is said, says the National Stockman, that the experiment of milking cows three times a day at the Iowa Agricultural College, did not increase the milk flow sufficiently to pay for the labor and expense of the extra milking.

A new scheme to swindle farmers has been worked in some of the southern counties of Michigan, says the Philadelphia Press. A man comes round buying straw stacks for paper mills. He gives his note for the sum, and asks for a receipt to send to the mills to show what he has bought. It is only the old dodge to get the farmer's signature to a paper which afterwards turns up a promissory note at the bank, left for collection.

Garden and Orchard.

Papers for Amateur Fruit Growers.

BY L. WOOLVERTON, GRIMSBY, ONT.

No. V.

THE APPLE—VARIETIES FOR THE COLD NORTH AND NORTHWEST.

As the apple tree is the most widely distributed of all fruit trees, we will begin with a list of those varieties which are best suited to endure the rigorous climate of our most northern settlements. By the cold north I shall include such sections as Muskoka, Parry Sound, Manitoulin Islands, Renfrew, Carleton, and southern Quebec, and by the Northwest, portions of that country in which the thermometer seldom falls lower than 40° below zero.

Through the industrious efforts of such men as Mr. Charles Gibb, of Abbotsford, P. Q., Prof. Budd, of Iowa, and Mr. A. A. Wright, of Renfrew, an energetic member of the F. G. Association of Ontario, a lasting boon is being conferred upon our cold sections by introducing and testing such hardy Russian apples as will bear a very considerable amount of cold.

Leaving aside the many varieties of promise that are yet only partially tested, I give a list of those few kinds which have been conclusively proved to be hardy, even for the regions above referred to. Of course, it must be understood that in such a climate there are ordinary precautions which must not be neglected, as, for instance, protecting the roots artificially when the covering of snow is insufficient to answer the purpose.

First in the order of ripening is the *Yellow Transparent*, a Russian variety which is to be distributed to its members by the F. G. Association of Ontario, next spring. This apple is likely to prove an acquisition everywhere, being earlier than the *Early Harvest*, fully as good in quality, and without its faults. It is a regular bearer, and the fruit is clean and of a waxy appearance. It ripens early in August, but continues improving until the end of September, all the time growing whiter and whiter, until almost like ivory. In size it compares favorably with the *Fameuse*.

The *Tetofsky* is also an attractive early apple, and equally hardy with the former, but not so desirable, for while the fruit of the *Transparent* will hang on the tree almost indefinitely, that of the *Tetofsky* drops very badly before time for picking. The color is yellow striped with red.

Whitney's No. 20 is an excellent fall apple of the best quality, which originated in Illinois. It is of the Siberian Crab family, but as large as the *Wagner*, similar in shape, and striped with red. Its chief fault is that it decays rapidly when ripe.

The same fault is found with the *Peach Apple*, of Montreal, which, however, is remarkably hardy, and may be relied upon for fruiting.

The *Duchess of Oldenberg* is a magnificent apple, which in many places is taking the lead of all summer and fall apples. It is of medium size, as grown north; as to color, streaked with red on golden ground, and its time of ripening is early in September. This apple is just a little less hardy than the kinds previously named.

The *Wealthy* stands at the very head of the