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Editor "The Farmer's Advocate":

MARCH 29, 1906

Although I have seen a number of articles in your paper on Canadian immigration, I think that a great deal more may still be said on that subject. As an Ontario farmer, I am greatly interested in the future of that pursuit.

With such vast tracts of untilled land in the West, the Canadian Government is seeking a means whereby to subscribers may take up this question and give us their end is encouraging immigration to Canada from Great for discussion at almost any time or place in this part Every year great numbers of immigrants come to Canada from these countries, but I wish to speak only of those who intend to make farming their occupation for some time at least.

Most of these prospective farmers take train for Winnipeg and the West as soon as they arrive in Canada; but some come to Toronto, from which place they scatter over the whole Province of Ontario. When they get to Toronto, they go to the Immigration Office, where they get jobs as farm hands at a small wage, until they learn the ways of farming in Canada. Many, however, who come here with the intention of farming, when they find that they cannot get as good pay as they expect, refuse to take jobs as farm hands, and if they are not too lazy, try to get jobs in the city; but those who do get work, do not find farming so much of a "snap" as they expected, and do not stay at it more than a year at most. All do not do this, of course, but the majority, in my experience at least, do. Those who go to the West are differently situated. They O take up homesteads, and if they happen to have a little capital, buy a team of horses and a plow, and begin farming at once. But if they do, they do not understand the methods of farming in Canada, and cannot practice them. They try to bring foreign methods into Canada, and if there is anything which hinders the prosperity of a country, it is not conforming to the ways which suit that country.

Besides, what kind of citizens will great numbers of the immigrants (from Eastern Europe especially) make? The riff-raff of all those half-civilized countries come \mathfrak{t}_0 Canada, and when they get here they are given 160 acres of the finest land, which they hold till they get full possession of it, and then sell out, in order to make a little money.

If this land were sold to immigrants instead of given to them, only those who have some money could buy it, and people with a small amount of capital, who buy land, are the kind who make good farmers and citizens; because, if they invest their small capital in land, they apparently want to keep it. This would prevent the West from becoming a community of paupers, who neither understand farming nor are willing to learn it; for those who are too lazy to work in their own lands will certainly be too lazy to work in Canada. Besides, the selling of the land would bring in considerable S revenue to the country, and that is not unneeded. We, as citizens of Canada, are anxious to see our country become settled as quickly as possible, for it is only when a country is settled that it prospers in the highest degree; but we wish to see it settled with the right kind of people. Some of the Eastern Europeans are not fit people to settle in this fair Dominion. If their native countries want to get aid of them, we certainly do not want them here. Thinking that all patriotic Canadians will agree with me in wishing to see Canada settled with good citizens, I remain,— READER. Bruce Co., Ont.

Assessment Law and Farm Property.

Editor "The Farmer's Advocate":

We have read with interest, as well as with profit, a good many discussions which have been appearing of tate in "The Farmer's Advocate," notably that on the hog question, from both the packers' and the producers' points of view; also the exemption of wood-lots from taxation, taxing bachelors, etc. But there is another question which $\bar{\mathbf{I}}$ would like to see taken up and threshed out, as I think it might yield results which would redound to the general welfare of this fair country, or, more especially, to the industry of agriculture. I refer to our assessment law, or, rather, to the taxation of improvements on farm property. We have read considerable of the Henry George theory, and have heard quite a lot about single-taxers, but we will discard all neories in this letter and try to get at a few of the acts as they affect the farming community here in Oxford County, Ontario. I may say that it seems to me absurd, and a tax on industry to raise a farmer's assessment for every board he sticks on end in the shape of a building, or any other improvements on the farm, for does not a farmer depend on the production of his land for his revenue? Although some farmers may see fit to put up expensive buildings, there is no corresponding increase in their earnings, although it certainly goes to make the country attractive, and should be encouraged rather than taxed. It seems to me that the buildings on a farm are on a different plane altogether from buildings on town or city property; as in cities the buildings are either the main source of revenue, or Deople live in dwelling houses to earn their incomecertainly not to produce it from the soil. The point I wish to make is that if the farmers of this country would take up this question in as capable a manner as they have dealt with the hog-profit question through The Farmer's Advocate," they might achieve results

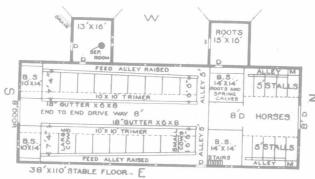
which would go a long way to solve the question of how to interest the boys in the farm, and also make the rural districts of this country much more attractive and prosperous. Since commencing this letter I understand or have learned that the taxation of real estate values is to be one of the features of Campbell-Bannerour country, especially in the future of the profession of ment Act under revision at Toronto, I think our legislators might with profit give this question a thorough investigation, with a view to the exemption of buildings of Ontario, I will close, with best wishes for an extended circulation to "The Farmer's Advocate."

R. Caskey's Barn.

FARMER.

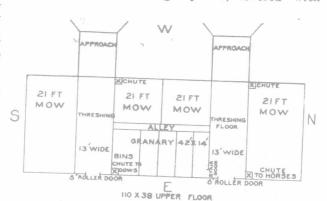
Editor "The Farmer's Advocate"

The accompanying plans show a 110 ft. by 38 ft. barn, built by J. S. Alyea and L. Wallbridge for R. Caskey, Hastings Co., Ont. Basement walls and floors are of Portland cement; frame of



Basement Plan of R. Caskey's Barn, Hastings Co., Ont.

sawed timber, hemlock and pine, using 2×10 -in. plank for joist, laid crosswise of the building, supported by two 10 x 10 trimmers running over each row of stalls, and studded with 4 x 8 cedar posts betwen each stall. The side posts are 18 feet, with self-supporting hip-roof, covered with



Upper-floor plan of R. Caskey's Barn, Hastings Co.,

corrugated iron sheets. Feed mangers are run on slant to accommodate long or short cows; can be varied to suit herd. The 4 x 8 stude form back post of stalls. SUBSCRIBER

Alfalfa Requires Drainage and Lime.

A leaflet, embodying some suggestions relative to alfalfa-growing in Ohio, states that the alfalfa area in that State, though not large, is quite rapidly increasing. Drainage, natural or artificial, is the first essential in its successful culture. While alfalfa will stand an overflow of several days' duration at certain seasons of the year, it will not thrive where the water-level is close to the surface, or where the water does not drain off readily. Next in importance to drainage upon other than limestone soils, is lime. At the Experiment Station at Wooster, on a sandstone soil, no application of fertilizers or manure, no treatment of the soil as regards inoculation, has given results at all comparable with an application of a ton of lime per acre, though, at a test farm in another section, on a limestone soil, an application of lime has given no beneficial results. of which goes to show that alfalfa and alfalfa soil is a subject to be studied and experimented with by each farmer. It should be mentioned, however, that some soils resting on a limestone rock are badly in need of lime for alfalfa culture. It does not do to take anything for granted with alfalfa. It is a peculiar plant, but an invaluable one.

A Necessity.

Have taken your paper for two years. Like it well. As a farmer, I could not afford to do without it. THOMAS BONSFIELD. Wentworth Co., Ont.

Fertilizers and Their Place in Agriculture

Under natural conditions a forest or prairie soil increases rather than decreases in fertility. The elements taken from the soil are returned to it on the decay of the plants, or on the death of the animals which feed on the plants; thus the surface soil becomes rich in organic matter and in ash constituents, which have been collected from the subsoil and left in organic combination at the surface.

As soon as the land is cultivated, oxidation of this organic matter commences, the amount of water percolating down through the soil is increased, and along with it the plant food which has been rendered soluble. Furthermore, the vegetable and animal produce of the land are consumed off the soil on which it was grown. A partial return of the plant food is made by the application of farmyard manure, but the sale of grain, animals and animal products, and the loss of fertilizing constituents from the manure before it is applied to the land, all tend to make the return of plant food to the soil incomplete.

Some soils are naturally rich in the elements of plant food, and when the crops are so rotated as to economize this natural wealth of fertilizing constituents, it may be a long time before the soil needs any artificial manures; but if the soil is naturally poor, and if special crops of like nature have to be grown year after year, it may soon need some special manuring to replace those constituents constantly removed in the plants. On our comparatively new lands, where judicious rotation of crops is followed, in which the clovers have their due place, and where the grain is fed on the farm and the manure is properly cared for, it may not be necessary to use commercial fertilizers. However, the increased cost of production and the consequent need of producing maximum crops, and the growing demand for market-garden products and fruits is causing many farmers and market gardeners to seriously consider the advisability of using some form of the so-called chemical fertilizer, and more and more frequently we are being asked if it will pay to use these substances.

It must be confessed that it is well-nigh impossible to give a definite answer to this question. To intelligently and economically use fertilizers, it is essential that the farmer understand the needs of his soil. He must be acquainted with the special characteristics of the crops he is growing, their power of gathering the essential plant food constituents from the soil, whether the object is to produce an immature plant for early market, and artificial growth demanded, or whether maturity is required when the development must be normal in all directions. He must also understand the nature of the fertilizers being used. These substances are expensive, and unless they are intelligently applied on well-drained and well-cultivated soils, they cannot be expected to give remunerative results; they can not and will not take the place of cultivation. In fact, their best results can be secured only when the physical condition of the soil is right, and when the object for which they are applied is clearly understood.

As a rule, fertilizers should be looked upon as adjuncts to farmyard and green manures, and should be applied to make up some deficiency in the soil, or to supply some constituent specially needed by the crop to be grown; consequently, in general farm practice, one element may be all that is required, as, for instance, nitrogen for cereals and mangels, potassium for legumes, and phosphorus for turnips. Reference was made in a previous article on the "Function of Plant Nutrients," showing why these substances are required for the crops named. Just here let me say that, owing to the wet fall and mild winter, it is probable that there has been an unusually large amount of nitrates removed by drainage, and that, consequently, many fields of fall wheat may make a poor start, especially if there is cold weather and slow growth in the spring, and a light dressing of nitrate of soda judiciously applied where the crops apparently need something may have a very beneficial effect. The same may be true with all crops sown in the early spring.

Among the ordinary farm crops, the ones most likely to give remunerative returns are those which require a great deal of labor in their cultivation. If a maximum crop of mangels or turnips is not less than if there is only half a crop, and, frequently, if all the other conditions are right, a dressing of one or two hundred pounds of nitrate of soda to the former, and two to four hundred of superphosphate to the latter, will make a wonderful difference in the crop.

With reference to the crops of the market gardener and fruit-grower, who may not have an abundance of farmyard manure, it is more essential that he use what is termed a mixed fertilizer; that is, one which contains the three most important constituents of plant food for "quality" in many of his crops, produced by a vigorous and continuous growth. But he must not lose sight of the fact that he cannot get good results without an abundance of humus in the soil, and if it cannot be supplied from manures, it must be from green crops, preferably clovers, plowed down.

Space will not allow a detailed discussion of the special characteristics of the fertilizers for the various crops of the market gardener, but, in general, it may be stated quality depends upon, or is measured by, both appearance and palatability; and that palatability in determined by succulence and sweetness of the vegetable, or its freedom from bitterness, stringiness, and other undesirable characteristics which frequently exist, and which can be largely eliminated by providing