

THE FARMER'S ADVOCATE

AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

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JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
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field examined, the struggle of the plant, under discouraging conditions, to reproduce itself was almost pathetic. Most of the fields were quite green, even with the few light showers, and would afford no little fall pasturage for the stock.

After "The Entrance" What?

Recently the newspapers published lists of the names of pupils successful at the recent entrance examinations. To the credit of the youth, the list was large, indicating that the boys and girls of the Ontario public schools are not idlers. The entrance examination is a somewhat severe one when examiners know their business and have the courage to do their duty.

What is to be the future of the country boy who has passed this examination? Has his success made him feel that he is forever done with the farm and its varied interests? Do his parents feel that his success proves that he is fitted for "something better" than farming, with its toil and slow rewards? In far too many instances it is to be feared that the boys and their parents thus feel. Already many a wardrobe is being fitted out for the son who is to be sent to High School this fall, in the hope that he may become a doctor, a lawyer, or a minister, and in this way enter, as they foolishly imagine, the ranks of men whose standing is far above that of the farmer. Against such folly, let the most earnest protest be entered. The average farmer's work is as good any day as that of any other man in the commonwealth. His toil is not one whit harder or more exacting or disagreeable than that of the men who do things in the professions or in politics or in merchandise, while the rewards of the average farmer are better and surer than the rewards of men in business or in the professions, time, labor and financial investment considered. Let no farmer or his son be deceived about this just now, when the boy's career is under consideration. To one who is not afraid to work and to put enthusiasm and hard thinking into his occupation, the farm holds out inducements that vie with any other business under the sun.

This is no plea for parents to insist that their sons be farmers. Still less is it intended to shut the door of the High School or of the university in the face of any boy. But it is a plea that the farmer's son should know the merits of farming before he leaves the farm behind him forever. The better education he has, the better farmer he

is likely to prove; but at no period of his High School or University course should a teacher belittle the farm or slur the farmer. Indeed, it should be treated as a serious misnomer for teacher or professor to discourage any boy from taking up the work upon which national virility and prosperity depend so largely. Before the safe and sure and wholesome life of the farm is abandoned as a possible career for the successful candidate at the entrance examination, parents and candidates alike should do some sober thinking.

J. M.

"Burning a Candle at Both Ends" SOME ASPECTS OF AGRICULTURAL CONSERVATION IN CANADA.

By A. Donnell, Assistant Editor, Commission of Conservation.

Agriculture will probably always be the most important of Canada's industries. Her vast areas of fertile lands, and her almost unequalled transportation facilities present opportunities for development and advancement such as are possessed by no other country. The methods followed in the utilization of these resources will, therefore, always be a matter of supreme importance to all Canadians. While the land is being used, it is essential that it should not be abused. There is no reason, other than selfish greed, to prevent the present generation of farmers leaving the farms of Canada to posterity in as good or better condition than they found them.

James J. Hill has said that, "the highest conception of a nation is that of a trustee for posterity." It would be fortunate, indeed, if this sentiment could be indelibly impressed on the minds of all Canadians, and especially of those who are engaged in the development and utilization of our natural resources. It is only too true that far too many Canadian farmers use the soil as if it had been given to them by a kind Providence for their benefit exclusively. Apparently, they have never even had a thought concerning the rights of future generations. What, for example, does the feverish haste to acquire large farms in the West result in? Frequently it results in the land being actually mined for all that is in it, and then the fields are abandoned to the weeds and the jack-rabbits. Every year sees an increasing number of these Western farmers—if the title is not a misnomer—leave the prairies to spend the winter in more congenial climates. For the most part, such men burn their straw, sell their grain, and keep little or no stock to assist in maintaining the fertility of the soil. It is a lamentable fact that considerable areas in the Canadian West, which a generation ago were amongst the finest wheat lands on the continent, have been abandoned as worthless. As a matter of fact, they are worse than worthless, as they have become overrun with weeds, and so constitute a serious menace to the lands bordering on them. Dr. Robertson, in an address before the Commission for the Conservation of Natural Resources, last winter, said: "There are some Western (Canada) cities that may follow the fate of Nineveh, smothered into oblivion from want of care in protecting the soil."

Fortunately, soil-mining has not been practiced to the same extent in Eastern Canada. From the first, conditions made general farming a necessity, and, as a consequence, fertilizers were always available. Further, the need for growing different kinds of grain led to the adoption of some form of crop rotation. But it goes without saying that more scientific farming in the East would make possible a greatly increased production. In referring to the results of the agricultural survey, begun by the Commission for the Conservation of Natural Resources in 1910, Dr. Robertson said: "If the farmers on the average throughout Canada would farm as well as the fifty best farmers whose farms have been surveyed, the result would be the doubling of the quantity of the field crops from the land now occupied in Canada within a period of three years." That is a sweeping statement, and one that should do much to awaken farmers to a realization of their opportunities. It is indeed fortunate for Canada that there are at least a few farmers who farm intensively, who make the proverbial two blades of grass grow where but one grew before, and at the same time, too, enhance the productive value of the soil.

The question naturally follows, what, then, can be done to make such methods of farming as general as possible? The Department of Agriculture for Ontario is making progress in the solution of the problem by what might be called personal agricultural instruction. Under the direction of C. C. James, C. M. G., the Department maintains well-trained, resident instructors in a number of counties (the number is steadily increasing) of the Province. By actual demonstration on the farms,

these instructors make plain what exact knowledge, backed up by common-sense management, can do to increase the productiveness of the soil. This appeals to the farmer, because it helps him to do work on his own farm, by which he increases his profits. It may be noted, in passing, that this method has been in vogue for some years in a number of the Southern States, where it was introduced by Dr. Seaman A. Knapp, and where it has proved an invaluable boon to farmers.

In addition to this work, the Lands Committee of the Commission for the Conservation of Natural Resources is at present making a survey of the farms in each of the Provinces of the Dominion. The purpose of this survey is to ascertain, as far as possible, the methods followed by Canadian farmers. Such questions are asked as: "Is a systematic rotation of crops followed, and to what extent? What uses are made of fertilizers and manures? What is being done to combat the plant and insect pests that attack the various crops? What is being done to check the growth of weeds? To what extent is selected seed sown, etc.?" Work along these lines was commenced during the summer of 1910, and is being continued during the present year. Over one hundred farms in each of the Provinces were visited last summer, and the data obtained is not very reassuring. Of the nine hundred farmers visited, only about nine per cent. follow any intelligent and effective system of crop rotation. In some sections, as many as fifty per cent. of the farmers use good rotations, but in a number of other districts not a single farmer was able to report any systematic rotation whatever. Many farmers take rotation to mean any order of sequence for one crop to follow another. Instead, it implies that, during each year, while the crop is growing, the soil is being carefully prepared for the succeeding crop, by the preservation of the fertility of the soil and the keeping down of weeds.

The use of manures in fair quantities is general in the Eastern Provinces, and many farmers use commercial fertilizers, as well. With regard to the latter, in many instances they are wasted, owing to the lack of knowledge of how to apply them properly. On about sixty-two per cent. of the farms in the Western Provinces manure is used for gardens, and in some cases for root crops. As but comparatively little stock is kept, only small quantities are available, and the amount used is quite insufficient to maintain soil fertility. Thirty-eight per cent. of the Western farmers visited used no fertilizer of any kind.

In every Province but Alberta, plant pests, such as grain rust, smut and potato beetles, were reported. In the Maritime Provinces, especially, these cause serious losses every year. Very little is known by the farmers of the best methods of combating these pests, and comparatively little grain is treated for smut. Weeds are plentiful in all the Provinces. Prairie farmers, however, regard wild oats as the most dangerous. All the farms visited in Manitoba were infested with this weed. In Saskatchewan, seventy-one per cent. of the farmers reported wild oats, and in Alberta only three per cent. Evidently, this weed is moving steadily westward. As yet, the number of varieties of weeds found in the West is not as large as in the Eastern Provinces. In Manitoba, only thirteen varieties were reported, while in Nova Scotia thirty-nine were reported, and in New Brunswick thirty-three.

The farmers of Quebec, too, are face to face with serious weed problems. The most dangerous variety apparently being the Russian thistle. Sixty-three per cent. of the farmers visited stated that they were troubled with it, and thirty per cent. claimed that it was getting worse.

In the matter of seed selection, less than ten per cent. of the farmers visited throughout the Dominion use carefully-selected seed grain. A considerable number use the fanning mill, but in very many instances not even that precaution is taken. Comparatively few farmers realize the great importance and value of using only seed that is free from weeds, and that possesses sturdy germinating powers.

So far, the survey has been of value mainly in proving the existence of careless, ill-advised methods on many farms. While the soil was virgin, slipshod methods gave the farmer a fair living, and in some cases even a competence. But that is fast passing. In the older districts, it is already an impossibility. The tremendous economic waste that has gone hand in hand with North American agriculture is a disgrace that can only be wiped out by the prevention of further soil depletion. But, it may be asked, what purpose does an agricultural survey serve? Obviously, such a work merely points out where the conditions are that need remedying. It is a great deal to be able to place a hand on the sores and to say, "thou ailst here and here." Diagnosis is of first importance, for unless it be right, the remedy that may be applied is likely to be all wrong. Judging by the results already obtained, it would seem that a system of education such as has begun in Ontario, would go very far towards preserving for future generations of Canadians an unimpaired soil.