

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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THE DOMINION.

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### Government Aid in Tree Planting.

Elsewhere in this issue appears a report of the organization of a Manitoba branch of the Canadian Forestry Association at a meeting held in Winnipeg. The meeting was an interesting one and attended by a goodly number of representative men. Mr. E. Stewart, Superintendent of the Forestry Department, gave some interesting and instructive information regarding the importance of our forest areas and also the advantages to be gained by the forestation of treeless districts. He outlined a scheme whereby it is proposed to assist the settler to surround his home steadings with shelter belts. The scheme sounds feasible enough if properly carried out, but it is just a question whether the farmer who gets his trees for nothing will appreciate them or care for them as well as the man who pays for them out of his own pocket. It is human nature to put a greater valuation on that which is acquired by personal effort or sacrifice than for that which costs nothing, whether it be a package of trees or a pure-bred bull. Still, so vastly important is this question of shelter belts that the experiment seems worth trying; but, to insure any degree of success, such a scheme as indicated by the Forestry Superintendent must be administered without reference to politics—inspectors and inspectors must receive their appointment on their expert knowledge and experience of tree-planting, not of party politics, for the blight of rust or canker worm would not be more deadly than that of politics to this tree-plantation scheme.

WILFRED T. HARRISON, Myrtle Grange, Myrtle, Man.:—"It gives me great pleasure to acknowledge the receipt of your Christmas number. It is about better than last year's, and will be hard to improve upon. I have been a pretty constant reader since 1887, though not a subscriber, and I find it one of the most interesting and useful papers I have ever read. I also enjoyed the various large fairs, January 18th, 1901."

### Preservation of Soil Fertility.

The question of the preservation of soil fertility is one of perennial freshness, a question that will become of ever greater importance as the country grows older, as the vast stores of fertility that have been gathering for centuries in our virgin prairie lands become exhausted by continual cultivation and constant cropping. The past season was an exceptionally trying one, and yet the inconveniences that, as a result, have to be endured by many may not all be in vain if the majority of our settlers are made to think and study out the conditions which surround successful farming, and which must be understood to make farm life all it should be—not only a profitable business, but an independent and enjoyable life.

On most of the heavy, strong lands, failing crops are not due to a lack of fertility so much as to a bad mechanical condition of the soil, whereby the fertilizing elements become locked up and unavailable for food of growing plants. Even when land is ordinarily well worked, well plowed, and frequently summer-fallowed, results show that it has lost much of its productive power. This in large measure is owing to the lack of vegetable matter, humus, in the soil, constant cultivation having worn it out. Humus (see extract on this subject elsewhere in this issue, from Prof. Shutt's report) is essential to both light and heavy soils. It assists in retaining and storing moisture, in preventing soil drifting, in opening and warming stiff clays and preventing them baking and drying out, and in making the fertilizing elements in the soil available for plant food. The most available source of supply in this country is grass and manure, and this opens up a wide field for discussion as to the most practical methods of providing this essential ingredient of the soil, the most suitable varieties of grass, preparation of the land, quantity of seed per acre, seeding, whether with or without nurse crop, and then what use should be made of the grass crop. Manure being only a by-product of stock-raising, its production, application, etc., furnish ample subjects for thought and study. This is an opportune time to take up this matter, and we invite discussion.

### Improve the Poultry in Manitoba.

The condition of the poultry industry in Manitoba is anything but what it ought to be. Farmers have been awakened to the necessity of improving their horses, cattle, pigs, etc., but the poultry on the farm have mostly been thought to be too insignificant to bestow much attention upon. In the United States this branch of farming has assumed enormous proportions, so much so that its value is greater than that of wheat and corn combined. That the industry has assumed such proportions is not to be wondered at when we read that numbers of poultrymen raise yearly from 5,000 to 30,000 birds of various kinds, and also that the price of breeding stock ranges from \$5 to \$200 and over. The largest if not the most profitable branch is the broiler and green-duck trade. In this there are establishments with investments from \$10,000 to \$30,000, turning out up to 35,000 birds per year, which sell at prices ranging from 15 to 40 cents a pound. Now, to come to the main subject, "Poultry in Manitoba." What a contrast we find! Most farmers think there is no profit in it, which is quite true when carried on the way it is. A look into the village butcher shops tells a disgraceful tale. Birds of every known and unknown breed, dressed any shape and of very inferior quality, are mixed up without any attempt at sorting into uniform lots; consequently, prices realized are so low that there is no profit. The main cause of the poor quality of poultry in this Province is the penny-wise custom of using scrub males for breeding. The utmost that is generally done in that line is to change eggs with the neighbor whose fowls are usually just as bad as his own. Now, a few dollars spent every year for cockerels or eggs from a reliable poultryman, would be found a profitable investment. For a general-purpose fowl, the Plymouth Rock is to be recommended, and the different varieties of that breed, Barred, White, and Buff, are equally good. Wyandottes are somewhat lighter, but also suitable for the farm. One dollar a year per hen is not unreasonable to expect, so with 100 hens, \$100 can be added to the income, which would be a welcome addition. It has been proved in the United States that the poultry industry can not be overdone; the better the quality, the greater the demand, and also a better price per pound. I have noticed in the papers that a company is doing business in Ontario, buying chickens from the farmers, fattening and dressing them for the English market, and paying a higher price for them than is usually paid for dressed poultry. The birds are then properly fattened and dressed the way the customers want them, and they are sorted and packed each size by itself, which should be done in everything of that kind. That the ADVOCATE is paying more attention to this branch of farming is to be very much commended.

WALTER KING.

### The Northwest (Canada) Entomological Society.

The second annual meeting of the Northwest (Canada) Entomological Society was held at Lacombe, Alberta, on the 16th January, 1901. It was a meeting essentially in the interests of farmers. At request of the President, the chair was taken by Mr. F. H. Wolley Dod, of Calgary, who was supported by the Vice-President, the Rev. M. White, and several well known farmers in the district. Letters in support of the objects of the Society were read, including letters from Mr. C. W. Peterson, Deputy Com. of Agriculture, Regina; Prof. C. C. James, Dep. Min. of Agriculture, Ontario; Dr. Jas. Fletcher, Dom. Entomologist; and the Right Rev. the Bishop of Calgary and Saskatchewan.

The President of the Society, Percy B. Gregson, on being called upon, explained that the object of the Society was to instruct and interest the farmers of the Northwest regarding the insects that affect their crops—to bring home to them individually the principles which underlie the treatment of insect pests, so that they can deal with them in time, without waiting, as so many do, till their crops are destroyed before applying for advice. Mr. Gregson stated that farmers are beginning to appreciate the value of the study of insects, and this was evidenced by the fact that a number of agricultural societies had during 1900 become active supporting members of the Northwest Entomological Society. Mr. Gregson impressed on the farmers the importance of careful observance of the habits of the insects that came under their notice, such as their time of appearance, method of feeding, the nature of their food, etc., or that they may understand what remedies are applicable. There is always a reason for every remedy recommended, and by observation farmers can readily learn the general principles which govern them. Some insects, for instance, such as beetles and caterpillars, feed by nibbling their food. Poison, therefore, should be placed on their food, so that when consuming their food the insects will also consume the poison with it. Other insects, such as plant lice, pierce through the outside of the leaf and suck juices by means of a trunk-like beak, and poison therefore will not reach them. As, however, insects breathe through little openings in their sides, they can be suffocated by anything which clogs up their breathing valves, such as coal-oil emulsion or tobacco fumes. Other insects hatch out in the spring, and then lay their eggs, so that timing seeding operations till after the date of hatching will avert attacks.

Farmers should not imagine that because this is a new country, there is freedom from insect pests. There have in very many places in the Northwest in 1900 been serious ravages made by insects, and the list of injurious insects now in the Northwest is getting very long. Insects always follow cultivation, and we must, therefore, as the country gets cultivated, expect arrivals of fresh insects. There are very many ways by which insects are always liable to be imported into a new country. They may come in clothes, lumber, domestic animals, packing substances (such as hay, straw or grass). It was probably in packing substances that all the grass-stem maggots common to Europe and America have reached us, including the Hessian fly, the wheat-stem midge and wheat-stem sawfly.

At the close of the meeting the officers for 1900 were re-elected to serve for 1901.

### An Experiment in Dehorning.

During last winter an experiment was made on the Experimental Farm at Braddon, to ascertain whether the operation of dehorning when performed on fattening steers was beneficial or not. Fifteen Shorthorn grade steers were selected for this purpose; three of them were three years past and the balance two years old. They were divided as evenly as possible into three groups of five each. One lot was dehorned and tied in stalls with chains. The second group were also dehorned, but were fed together in a loose pen 10x28 feet in size. The horns were left on the third lot, and they were tied up in stalls.

The dehorning was accomplished in the following manner. A strong stanchion was built and the animal firmly fastened in, the head was then pulled down to a ring in the floor, and the horns were then removed close to the base with a saw; they all bled freely, but the wounds soon healed without any offensive odor.

All were fed six months on identically the same food, and each lot of five made the following gains in that period:

Horns left on—gained in six months	2,968 pounds.
Dehorned—fed in loose stall—do	2,964 pounds.
Dehorned and tied up in stall—do	2,350 pounds.

As the greatest difference between the gains of any of the above groups is 18 pounds, the result of this test would lead us to the conclusion that neither dehorning nor feeding in a loose pen has any advantage over the usual plan of feeding steers in stalls, with the horns on. This experiment will be repeated during the present winter, and at its close the result will be published.

S. A. BEDFORD.

TOMAS BRONSON, Goyser, Man.:—"I like the paper so well that I would not be without it." January 14th, 1901.