

1910-11 was not quite so favorable. One carload of 33 head, bought at \$5.35, and sold at \$5.70, and a gain in weight from 896 to 1,196, gave a return of \$20.25. The rest were sold as butchers' at 5½, with a similar profit. As for this season, we have 40 head, costing an average of \$4.00, and 20 head at \$4.50. With grain at a cent a pound, and roots and hay in proportion, good, growthy 800 to 1,000-lb. steers can be fed profitably at a spread of 1 cent; but at the present-day prices of grain and hay, and the heavier investment, I do not think we would overreach in expecting a 2-cent spread.

Although Waterloo has given a good account of herself along this line in other years, she will be "minim" this season, except for the home yearlings as butchers, for the supply is cut to at least one-half. Very good offers are being held out at present for spring delivery by drovers, with an occasional sale beyond the 7-cent mark.

I have had a very little experience in buying feeds or grain, as Providence seems to have smiled our way. Crops in general this year, on account of the extreme heat in July, were cut in two, and I am buying corn to make up for that deficiency. Our rations at present are: Oats, 2 parts; feed barley, 1; black barley, 1; emmer, 1; corn, 1. With 5 pounds a day per head, and with roots, etc., they are doing exceedingly well.

The secret of success in this line is to be able to make the bulky fodders of the farm palatable, and thereby turn them into a finished product of value, and there is no better way than through a bunch of good, thrifty and growing two-year-old steers.

J. H. WOODS

Waterloo Co., Ont.

Dogs or Sheep.

Editor "The Farmer's Advocate":

Much has been said and more written upon the sheep question, but what steps have our legislators taken in the matter?

Let us ask ourselves the question, first, of what use are sheep to farmers of the Province of Quebec. I, as a sheep-raiser, as well as a general stock-breeder, am prepared to prove that there is more money in raising sheep than anything else on the farm.

First, the outlay is less than with any other class of pure-bred stock. Then, sheep will thrive in pastures where other stock will starve. Sheep will thrive in the winter upon the refuse that the farmer otherwise would not know what to do with. The offspring alone, if properly handled, will pay profit above keep of 10 per cent., besides the wool, which is a big item.

Now, readers, I have only begun to show you the profits on sheep. The Province of Quebec is overrun with noxious weeds, such as orange hawk weed or "devil's paint brush," and unless something is done to eradicate this evil, the farmer may as well give up; where this nuisance gets a start, one may as well sell out.

A field that has this weed, pastured to sheep one year, then plowed, sowed to rape and vetches, and pastured again, will be rid of this nuisance. Then plow, and sow to clover and orchard grass.

The ox-eye daisy is another weed that infests this Province. Pastured two years with sheep will kill this weed; and I might add that this weed is worth more per ton to feed sheep than timothy hay. After pasturing the ox-eye daisy for two years to sheep, plow and manure heavily with barnyard manure, as this weed will not thrive in well-manured and well-tilled soil.

Perennial sow thistle is perhaps the worst weed known in Canada, and the worst to get rid of, as the running rootlets are very hard to get rid of. But even this weed our friend the sheep can eradicate for us, but they require a little assistance. Pasture to sheep, and they will not kill it all the first or second year, but they will not leave very much. What is left must be cut twice the first season, as soon as the yellow flower shows. The third year plow deep, and sow to a good mixture for sheep, and the next fall plow and prepare the ground for turnips or potatoes, and this, if properly done, will eradicate this weed, and at the same time you are raising one of the most profitable crops of the farm.

But at the same time, there is very little use in your doing this, unless your neighbors do the same, as his foul seeds are blowing over your land.

There is no use expatiating upon the value of the dog, as his is only an imaginary value. The man who is a dog-fancier can well afford to pay a good dog tax, and be made to keep his dog at home. By imposing a dog tax, the Government is doing a charitable deed, ridding the pauper of a luxury he cannot afford; and it is usually the poor man's dog that does the damage. One of my neighbors lost six valuable lambs in one night, and there were sheep and lambs killed all over the country. Now, when sheep are such a valuable asset to the country, I think that it behooves the Government to protect them by putting a very heavy tax on the dogs. Agriculture is the leading industry in this country, and it should have the first consideration on the part of the Govern-

ment. The Government is urging us to raise more sheep, and holding annual sales of pure-breds to help farmers to start right, but, I say stop the dog nuisance first, and then the farmer can afford to purchase high-class sheep. Let every agricultural society insist that its members push this question along.

J. H. M. PARKER.

Sherbrooke Co., Que.

Weight of Marketed Hogs Drops.

According to the report of the United States Secretary of Agriculture, the average weight of hogs marketed in recent years is much lighter than in former years. In the decade, 1870-1879, the average weight of hogs killed during the winter months in Western packing centers was about 275 pounds; in the decade 1880-1889, about 257 pounds; from 1890-1899, about 239 pounds; and in the last ten years, about 219 pounds. In other words, hogs marketed between 30 and 40 years ago averaged one-fourth heavier than those marketed in recent years. The average weight of hogs received at Chicago in 1911 was 228 pounds; Kansas City, 204 pounds; Omaha, 249 pounds, and at Sioux City, 250 pounds.

From this it would seem that the day of the heavy, thick-fat hog is soon to pass into history. From decade to decade, the demand for lighter pork must be increasing, or else there must be more profit to the raiser in producing the lighter hog. Either or both these conditions, likely both, are operating toward the reduction in weight. With corn as the basis of the ration, the American hog-feeder will continue to produce the fat hog, but will market him at an earlier age and greater profit.

The weight of cattle marketed at Chicago in 1911 averaged slightly over 1,000 pounds, and that of sheep slightly over 80 pounds.

A Mineral Condiment for Hogs.

As a mineral tonic for hogs, Wallace's Farmer recommends the following: "Bone meal, two bushels; charcoal, three bushels; wood ashes, one bushel; salt, eight pounds; air-slaked lime, two quarts; copperas or iron sulphate, one and one-half pounds. The iron sulphate is dissolved in warm water, and then thoroughly mixed with the other ingredients. This mixture acts as a bone-builder, an aid to digestion, and as a worm preventive. The bone, wood ashes and slaked lime furnish materials which pigs use in bone-building; the charcoal aids digestion, and the iron sulphate keeps out worms.

"Lime can be fed alone to hogs. When this is done, the lime is generally dissolved in water, to make milk of lime, and then added to the slop. We would much prefer, however, giving the lime in the mixture, as advised in the foregoing. Such a mixture should be placed where all the hogs can always have free access to it, but where it is protected from the rain."

THE FARM.

Canadian Seed Growing.

(Concluded.)

THE SECRETARY'S WORK COMMENDED.

The address of Hon. Martin Burrell, Minister of Agriculture, at the evening session of the Canadian Seed-growers' meeting, in the Railway Committee Room, House of Commons, made a favorable impression. He commended the excellent work that the Seed Association was doing, and complimented in warm terms the efficient secretary, Mr. Newman, upon the admirable address covering the work, given by him before the Agricultural Committee of the House, and referring to the address of the President, whose educational programme meant a better living from the farm and a better chance for the children. He said Dr. Robertson never spoke on any subject without giving illumination and inspiration.

C. C. James, Deputy Minister of Agriculture for Ontario, outlined the problem of Canada, which is the problem of agricultural development, in which Mr. James has well demonstrated his growing capacity for leadership.

CAMPAIGN FOR FEWER VARIETIES.

Mr. Raynor submitted a report recommending the discouragement of multiplying varieties of grain and promoting the growth of the best kinds (1) by the formation of two committees, one for Eastern Canada and one for Western Canada, to consist, in each case, of Superintendents of the Experimental Stations, the Agronomists of Agricultural Colleges, the District Representatives of the Seed Branch, with power to add to this number other representative men dealing in seeds, or growers, from time to time; and (2) that each committee select three of its members to form a central committee, to meet at Ottawa once a year to confer with the secretary-treasurer of the Association, who shall act as chairman to lay before the Asso-

ciation such recommendations as may be desired. This was adopted, and Prof. C. A. Zavitz was made chairman of the Eastern committee, and Prof. S. A. Bedford, of the Western committee. Several speakers endorsed the view that there had in the past been great waste of money and energy on the farms by the craze for new varieties.

At the suggestion of J. O. Duke, the Association empowered the directors to encourage the formation of local or district associations, such as the Ontario Corn-growers' Association, which has achieved such marvellous results, in order to promote the growth and disposal of improved grains of other kinds.

Prof. L. S. Clinck gave a technical but lucid exposition of the method of improving cereals pursued at Macdonald College. One of the greatest chances of error with farm plots, he said, lay in the treatment of the soil.

COMMON SENSE IN CULTIVATION.

J. H. Grisdale, Director of the Central Experimental Farm, dealt with cultural problems on which an extended series of experiments had been inaugurated. Good seed was essential, but the danger was to pay altogether too little attention to drainage and cultivation. The time for relying on "any old method" of cultivation had passed. Slipshod and temporary methods would negate the possible benefits of good seed. Under average conditions, the best and most certain results are obtainable by firming the well-pulverized seed-bed soil by frequent rolling or packing. Harrowing the surface afterwards is beneficial. This process is not so necessary on lighter soils. Time was needed to get the results from tile drainage on heavy soils.

A Committee on Common-sense Methods of Cultivation, with Prof. Grisdale as chairman, was a suggestion by Dr. Jas. W. Robertson.

"Vocational Education for Boys and Girls," was comprehensively treated by Rufus W. Stimson, of Boston, special agent for agricultural education in Massachusetts, where, by an extension of the Ontario District Representative idea, the work of schooling in agriculture was followed to the home. Mr. Stimson made a powerful plea for the merits, even from a cultural point of view, of vocational education.

"We overrate books and underrate affairs."

"The loss of a child is a blow to the universe."

"Vocational education is the conservation of the nature and activities of the child."

"To do is better than to see, and to see better than to be told."

"In farm schools, however excellent, there are liable to be too many spectators and too few participants."

Dr. Chas. E. Saunders, Cerealist, in describing the modes of seed distribution at the Central Experimental Farm, indicated that dishonesty, laziness and greed were at the bottom of many applications for free trial samples, and it was a more serious problem to get good farmers than good seed.

Geo. H. Clark, Seed Commissioner, described the inspection of seed crops by officers of his Branch for the Association, in addition to their work in relation to the commerce in seeds.

Dr. Jas. W. Robertson was re-elected President, and practically the old board of directors, with Mr. Newman as Secretary-Treasurer.

A Chance for Renters.

Editor "The Farmer's Advocate":

I cannot resist the temptation of writing you once more, especially as I read some of these letters on labor problems and the cause of depopulation in our fair Province. I offer no remedy, but I have tried, like the writer of "Why he goes West," to secure a good fertile farm to rent, with the option of buying, here in Ontario, but cannot. I don't need the start these writers need, as I am a pure-bred progressive Canadian, and have worked into the possession of a full equipment to run a good farm successfully. I can rent farms, but what are they? So far run down, and asking so much rent, that a man certainly would be taking big chances to come out even at the end of the year. I will sign an agreement with any farmer who will rent his farm to me at a reasonable rent to increase its fertility, instead of decreasing it. I believe in the dairy cow, alfalfa and corn, and anyone who knows a little about these three, loves the workings of nature, has a fertile farm to start on, can surely add to its fertility. And another thing: I could buy a suitable farm, but, like our friend, I couldn't make the large payment down that is always required. Why is not a man's past progress and his managery enough guarantee to the man who will rent to give such a fellow a chance to make good.

Well, I am glad that I am not just like one writer, that I can still stay in fair Ontario, and make good on my light land; but some day if I get tight like the saving farmers do, I may have that little heap of dough that these owners