

**Freeman's Manures.**

In a late issue we promised to give particulars concerning the different brands manufactured by Mr. Freeman at his Hamilton works.

**FREEMAN'S SURE GROWTH.**

In writing of this brand, the manufacturer says:—

It is a general fertilizer for all soils and crops, and has always proven to be the very best fertilizer in the market for all kinds of grain, root, grass and garden crops. It is made of the very best materials that can be used in the manufacture of fertilizers, and has for its basis bone, blood and potash.

It is not a stimulant, but adds permanent value to the land; is adapted to all soils, and not only yields immediate results, but is also lasting in its effects. Not only does it give the growing crop a vigorous start, but it will greatly increase the yield and give more perfect grain.

No better article can be manufactured for the general use of farmers, gardeners and fruit growers. Special care will also be taken to have it furnished to farmers in the very best condition for drilling.

For grain and general crops this manure cannot be surpassed, as hundreds have already tested its superior qualities, and each succeeding year use more largely of it.

In applying it to grain crops, it can be used in the drill or sown broadcast at time of sowing at the rate of from two to three sacks per acre. The results will be seen throughout the season, giving the plant an early start and more vigorous growth, and maturing a superior quality of grain.

This manure is also intended for top dressing in spring, for all kinds of grass lands, pastures, mowing lands, lawns, etc. Use one to three bags per acre, broadcast, by hand or machine. On poor land use three bags per acre. Pastures, timothy, etc., apparently worn out, have been brought up into good condition by a single application.

May also be used in the fall. Also for top-dressing, in the spring, grain crops, wheat, rye, etc., which have suffered by winter exposure. Crops that otherwise would have returned little, if any, more than the seed sown, have been made, by a single bag scattered evenly over the surface in very early spring, to bring a fair crop and greatly improved growth of the timothy.

**FREEMAN'S PURE GROUND BONE.**

Every farmer knows that bone is a good fertilizer, and in using it he is only returning that which has previously been removed by crops, which in turn have been consumed by animals. Of this brand Mr. Freeman writes:—

We guarantee our ground bone to be a strictly genuine article. It is made from clean, dry bones. We recommend it chiefly for grass and land used for feeding purposes. It is, however, under all circumstances and for all crops an excellent fertilizer, but does not give as quick results as our Sure Growth, Bone and Potash, or Potato Manure.

Pure ground bone will restore to the soil that carried away in the milk and in the bones of the young calf. Use finely ground bone at the rate of 400 to 600 pounds per acre, and the effects will be seen for years. It is better to double the productiveness of a pasture than to double the area of it.

In laying down grass, finely ground bone, harrowed in at the time of laying down at the rate of from 500 to 1,000 pounds to the acre, will be found to be an excellent manure and a lasting one.

Particulars of other brands will be given in next issue. In our last article we requested subscribers who have used artificial manures to put the results of their experience on record. Since last issue we have received the following letter:—

TRENTON, ONT., 6th August, 1892.

FARMER'S ADVOCATE, LONDON, ONT.:—

In your July issue you invite communications in regard to using W. A. Freeman's fertilizers.

Finding it difficult and expensive to make or buy sufficient barnyard manure to raise paying crops, I decided last spring to buy from W. A. Freeman, Hamilton, four tons of his best fertilizers, mostly Sure Growth, Potato Manure and Dissolved Bone.

On my potato ground, which had not been manured for years, I put at the rate of 1400 pounds Potato Manure to the acre, about one-half of which I broadcasted on the ground before harrowing, and the balance I thoroughly mixed with the earth in the drills. The potatoes came up quickly and grew rapidly, and my neighbors say nothing can equal them in the county. So remarkable was the growth of tops that in five weeks after planting I examined the bottoms and found plenty of tubers as large as hens' eggs. They are the White Star, Beauty of Hebron and Early Sunrise, and I expect a large yield.

I put fertilizer on nearly everything I grew this season, and the beneficial result is very gratifying. It looks as if I should get double or treble the cost of the fertilizers in extra crops, besides improving the soil. I have one acre of onions, the equal of which I never saw anywhere, and I attribute their extra stand and advanced growth principally to the fertilizers used. I believe in supplying proper and abundant food to all plant growth, and have heretofore scraped up more barnyard manure than most farmers of the soil during the same period, but never before obtained the crops that I am likely to harvest this season, and think I shall never again undertake to raise crops of any kind without commercial manures, and believe Freeman's are the best.

Yours truly, THOS. FULLER.

Several similar letters have been received, all of which expressed entire satisfaction with the result obtained. We invite these parties, and all others who have tested commercial fertilizers, to send us a complete record of cost and production, as soon as harvesting is completed and the exact results known.

**Ontario Agricultural College.****NOTES AND COMMENTS.**

DEAR SIR,—In compliance with your request, I venture to submit a few notes and comments on the recent work and present prospects of this institution.

**FARMERS' EXCURSIONS.**

I think we may fairly claim to have the honor of entertaining a larger number of visitors than any other educational institution in the Dominion. We have quite a run of callers from day to day throughout the year, and in this respect are like other public institutions; but between seed time and haying our experience is exceptional. At that time of the year our special friends and constituents, the farmers of Ontario, visit us in very large numbers. In the month of June last we had over twenty farmers' excursions, varying in numbers from 300 to 2,500 each, and making a total of between 12,000 and 15,000 people. These excursionists examine very closely what we are doing; and I think I can truthfully say that they nearly all return home well pleased with the work and equipment of the institution. Many of them look on the Ontario Agricultural College and Experimental Farm as peculiarly their own institution; and they are beginning to feel an honest pride in it as one of the strongest and best institutions in the country.

**NEW BUILDINGS AND EQUIPMENT.**

For years we pleaded in vain for additional buildings and equipment. At length most of our requests under this head have been granted. We now have a complete set of farm buildings, sufficient for all requirements in the live stock department. For the last five years we have had a first-class laboratory, furnished with everything necessary for our work in chemistry; and within the past year two large buildings have been erected on the College campus—a spacious convocation hall, for farmers' excursions, and a large botanical laboratory, with a complete set of new greenhouses, provided with every appliance for the most thorough and extensive work in botany and horticulture. This advance is largely due to the determined efforts of the Minister of Agriculture; and in consequence of his enlightened policy and wise liberality we shall soon be able to offer special inducements to students in botany and horticulture.

**EXPERIMENTS WITH GRAINS, ETC.**

Owing to largely increased grants and special efforts in this department, a marked advance has been made within the last few years. Mr. C. A. Zavitz, our experimentalist, under the control of the Professor of Agriculture, is working with great energy and much anxious thought in testing varieties of grain, methods of cultivation, different dates of seeding, the effects of special fertilizers, the results of cutting grain at different stages of maturity, methods of improving grass land, etc.

The following statement will give some idea of the work which is being carried on in this department at the present time:—

**FIELD TESTS.**

Variety Tests on Large and Small Plots—Winter wheat, 68 varieties; spring wheat, 63; peas, 61; oats, 116; barley, 67; fodder corn, 76; potatoes, 118; carrots, 22; sugar beets, 10;

mangels, 35; turnips, 63; millet, 10; clover, 20; grasses, 40; and rape, 3—making a total of 770 varieties on 942 plots.

Different Methods of Cultivation—Potatoes, corn, turnips, mangels, carrots and rape, on 233 plots.

Tests of Fertilizers with winter wheat, oats, potatoes, turnips and rape, on 60 plots.

Sowing at Different Dates—Spring wheat, oats, peas and barley, on 48 plots.

Cutting at Different Stages of Maturity—Spring wheat, oats, peas and barley, on 24 plots.

Methods of Improving Old Grass Land—Harrowing, re-seeding, using special fertilizers, and top-dressing with farm yard manure, on 38 plots; also a number of tests of different methods of preparing potatoes for planting, etc., and valuable live stock experiments on the feeding of steers, cows, calves, and sheep.

**CO-OPERATIVE EXPERIMENTS.**

In addition to the Station experiments, a considerable amount of co-operative work is being done throughout the province. At something over 700 places in Ontario twelve experiments are being made under the direction of our Experimentalist, with a view to test the value of certain fertilizers, and the adaptability of our most promising varieties of grain and roots to soils and climatic conditions which differ more or less from what we have at the College.

**CROPS THIS YEAR.**

The crops on our plots this year are fairly good.

Winter wheat.—Rusted quite a little, but producing a large amount of straw and an average of 42.6 bushels per acre of fairly good grain, which weighs 60.5 per bushel.

Spring wheat.—A large amount of straw, slightly rusted, and an average yield of fairly good grain, but not nearly so good as last year's crop.

Barley.—Slightly rusted; straw abundant; grain, a good yield of more than average quality.

Oats.—Rusted to a very considerable extent; grain, not quite up to the average yield and of rather poor quality.

Peas.—Not a very good crop.

**SPECIAL COURSE IN DAIRYING.**

It is our intention to commence a special course in dairying on the 1st of February next, to give theoretical and practical instruction, by the best teachers, in butter and cheesemaking. This course will last till the end of March, and will be open to all, but is intended especially for Ontario farmers' sons and daughters, and for factory and creamery men throughout the province. We shall have the very best teachers in this country, and, if need be, we shall import some.

We have made large additions to our dairy buildings and appliances within the past year, and we think we now have nearly everything necessary for the most advanced and thoroughly practical instruction in both cheese and butter-making.

The Minister of Agriculture has decided to make the terms as easy as possible. No entrance examination will be required, and, to residents of Ontario, there will be no charge for tuition. The only payment required by the College will be one of \$5 for incidental expenses; and board in the neighborhood of the College or in the city of Guelph will cost from \$3 to \$3.50 per week. We cannot accommodate more than fifty students in this course the first year, and our intention is to take them in the order of their application.

**EDUCATIONAL OUTLOOK.**

Our educational outlook never was brighter than at the present time. We are rapidly gaining the confidence of the farmers in all parts of the province; the College farm is in better shape than at any time in the past, and our equipment in all the departments is very much better than ever before. Hence, we are hopeful and confident as regards the future. We are looking for a large attendance of students, and expect to commence work on the first of October with increased vigor and enthusiasm.

JAMES MILLS,

President O. A. C., Guelph, Ont.