

The Ontario Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders' \$1; Sheep Breeders' \$1; Swine Breeders' \$2.
BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale, are published once a month. Over 6,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 9th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

F. W. Hopson, Secretary.
Parliament Buildings Toronto, Ont.

ATTENDANCE AT MEETINGS.

The following is the average attendance at meetings, reports of which have been received since the last list published:

Algoma, East.....	106
Bruce, Centre.....	138
Bruce, North.....	35
Grey, North.....	69
Haldimand.....	213
Middlesex, East.....	166
Norfolk, North.....	175
Ontario, North.....	41
Oxford, North.....	150
Peel.....	64
Perth, North.....	233
Perth, South.....	171
Peterboro', East.....	121
Peterboro', West.....	70
Prince Edward.....	78
Renfrew, North.....	38
Simcoe, East.....	382
Union.....	125
Waterloo, South.....	108

The following is a list of the members received since the last list published:

Algoma, East.....	51
Bruce, Centre.....	19
Bruce, North.....	2
Frontenac.....	3
Grenville, South.....	95
Haldimand.....	47
Halton.....	234
Leeds, North and Grenville, North.....	1
Middlesex, East.....	84
Norfolk, North.....	135
Ontario, North.....	76
Ontario, South.....	61
Oxford, North.....	21
Perth, North.....	84
Perth, South.....	115
Peterboro', West.....	25
Prince Edward.....	192
Renfrew, North.....	4
Simcoe, South.....	2
Union.....	46
Welland.....	6
Waterloo, South.....	57

There is no breakers ahead of the man who is already broke.

AN ABRIDGED REPORT OF AMERICAN EXPERIMENTS WHICH ARE OF VALUE TO CANADIAN FARMERS.

(Continued from last issue.)

When to apply lime.—The Rhode Island Station recommends that lime be applied by sowing after plowing and then thoroughly incorporated into the surface by means of a harrow. It is best not to lime just before growing a crop of corn, rye or millet, as lime when first applied is usually more or less caustic, and in this state is liable to injure the crops, especially when the soil conditions induce rapid nitrification of the soil nitrogen or the nitrogen applied in natural and artificial manures. If, however, the soil is very sour and nitrates are not employed, then the use of lime immediately before these crops may prove of great service. Under all circumstances lime should be harrowed in immediately or it is liable to cake with the soil, and then will not yield the best results. It has been found that for vegetables lime may be applied to great advantage in the spring.

Quantity of lime per acre.—The quantity of lime to be applied on light, dry, sandy soils is given as $\frac{1}{2}$ to $1\frac{1}{2}$ tons per acre, and on heavier soils as 1 to 3 tons. One application during a rotation lasting from 5 to 7 years is considered sufficient. In 124 instances during an experiment lasting four years at the Rhode Island Station limed soil was more productive, and in 33 cases less productive, than unlimed soil.

CAN FARMERS MIX THEIR OWN FERTILIZERS ECONOMICALLY?

A number of experiment stations have for some time been studying this

question in conjunction with their official inspection of fertilizers, and have unanimously decided that, under certain conditions, it is quite practical and economical for farmers to buy the different fertilizing materials in the crude state and mix them on the farm.

When farmers combine and purchase their supplies in large quantities or cash and make their own mixtures, they secure their fertilizers at a greatly reduced cost. The New Jersey Station investigated this subject in 1895 and found that a number of farmers in that State purchased over 1,000 tons of fertilizers in the crude state which cost them on an average \$28.62 per ton. These ingredients at the valuation made at the Station were worth \$31.68 a ton, and would have cost if purchased mixed at the factory \$43.12 a ton. Here there was a saving of \$14,500 on the whole amount.

Such a saving as this is well worth looking after. It can only be secured by farmers buying in bulk for cash. The market prices of the fertilizing materials, bought in small quantities, are frequently so high as to render home mixing impracticable, but Institutes could buy by the carload and thus secure the full advantage of reduced prices for purchase in bulk.

How to mix fertilizers. Fertilizer mixtures, uniform in quality and equal in every respect to the best factory-made fertilizers, can be made on the farm without milling machinery. A tight barn floor, platform scales, screen, shovel and hoe are the only utensils needed. The materials having been weighed, screened, and lumps pulverized, the most bulky stock is spread in an oblong pile from six to twelve inches deep; upon its levelled top the next material is placed, and so on until all have been added like layers on a layer cake. Commencing at one end, the pile is shovelled over, the operator reaching clear to the bottom every time. The pile is then levelled up and the operation repeated three times. The mixture may then be screened again if desired.

In thus mixing his fertilizer the farmer knows definitely what he has purchased. Each ingredient can be tested by itself if desired, and inferior materials are not so likely to be palmed off on him. He can also vary the proportions of the ingredients to suit the requirements of varying soils.

SEEDING WITHOUT GRAIN.

Experiments conducted at the New Jersey Station as to the practicability of securing a good stand of grass with-