

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 20,000 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. HOBSON, Secretary.
Parliament Buildings Toronto, Ont.

Farmers' Institute Department.

Reports concerning the work of the Farmers' Institutes in Ontario will be published weekly under this head; also papers prepared for this department by Institute workers. Secretaries and officers having announcements to make are invited to send full particulars to the Superintendent.

PLANTING AND CARE OF SHADE TREES AND WIND-BREAKS.

BY ALP. BROWN.

Farmers generally do not take advantage of the very easy and sure way of adding value to their real estate by planting our native trees in neat lines along road-sides and lanes, around buildings and yards, in clumps on waste or unsightly places, or bluffs that are too rough for cultivation. These places planted with black walnut I believe will be as good an investment as the same area of apple orchard on suitable soil, although dividends will not be realized from the walnut timber as early as from the apples. American black walnut can be grown better by planting the nuts directly where the trees are wanted, as the walnut is a little difficult to transplant owing to the large tap-root and the absence of fibrous roots. This condition applies to most of the nut-bearing trees. The walnut begins to bear at Picton when planted from the nursery in about eight to ten years, and although the nuts are quite strong flavored they are relished by some people. For planting, the nuts should be gathered when ripe and not allowed to dry. They can be kept out-doors by packing in a box of sand, or may be planted directly where desired. Cover the nuts three inches deep, mulching lightly; keep down grass and weeds, and use plenty of manure. When once started the trees increase in diameter about half an inch every year. American sweet chestnut is grown for commercial purposes mostly in its natural state, but when planted in the clearance makes a good shade tree. The leaves are nicely serrated and glossy, giving the tree a beautiful appearance.

Hickory nuts have become quite popular in the markets, and in selecting for planting, only use from trees bearing good sized plump-meated nuts. These and the chestnut require the same treatment as mentioned for the walnut. Basswood, when planted in the clearance, forms a pretty compact

shaped head, and besides being valuable as a timber, shade and ornamental tree, it is a source of the best crop of honey produced by any plant grown in Canada, and as our forests are being destroyed it would be wise to have the basswood planted extensively for the encouragement of apiculture, for trees are valuable to fruit-growers and farmers as they insure fertilization of flowers. Basswood grows readily from seeds.

Sugar, or hard maple, our national emblem, should be planted broadcast everywhere where there is room for a tree, as it may be had in most localities for digging. It grows a symmetrical-shaped head when properly planted and pruned. The soft maple grows very rapidly and will succeed on a greater variety of soils than the hard maple. Trees in our yard planted eight years are six inches in diameter and give plenty of shade for the hammock. Maples can be dug best with a strong, sharp spade, cutting a circle around the tree 25 to 30 inches in diameter and lifting out the plant with what soil and leaves adhere to it. Cut off all branches and saw off the top not more than seven feet from the roots. The trees that have given us the best growth were one and a-half to two inches in diameter a foot from the ground when planted. When growth starts rub off all buds except a few at the top of the bare trunk to form a head.

Norway spruce is the best evergreen for practical use in Ontario, either as a windbreak or as an ornamental tree. It makes a dense upright growth of uniform shape and is very attractive planted alone or alternately with deciduous varieties. Keep trees well mulched which comes nearest to their natural condition. The writer does not favor planting trees any thicker than they are to remain, except where straight long trunks are required for timber, for it requires more courage than most men have to thin out a row of trees when once they are established. The farmers at the Institute meeting at Glen Allen, estimated a farm having 100 shade trees well arranged would sell for \$500 more than a similar farm along side, other improvements being the same. Where young trees can be found not more

than a mile from the place where needed, the 100 trees can be selected, dug, trimmed and planted for \$5, if the work had to be hired, but most farmers are strong handed enough to plant 100 trees every spring.

Possible injuries.—(1) Where planted too thickly so as to form a wind-stop, which is not desirable. A free circulation of air might be prevented and thus encourage insects and fungus growth. (2) Encroachment—adjacent crops will certainly be injured, but a good windbreak or line of ornamental trees are well worth the land they occupy.

Decided advantages.—Evaporation is lessened and the moisture in the soil assimilated by growing crops instead of being hurried in the air by heavy winds. For illustration of this point, refer to Prof. Panton's experiment in the Report of the Superintendent of Farmers' Institutes for 1895-6, page 60, which shows that wind hastens the moisture out of the soil. (2) Protection of bloom from cold, rough weather will ensure a good crop, which might from exposure result in a light yield. (3) Snow and leaves are retained and help to retard fruit bloom in localities subject to late spring frosts. (4) Less injury is sustained from wind when trees are loaded with ice which ruins so many fruit trees; also the loss from windfalls is reduced. (5) Erect growth in fruit trees is difficult without protection from prevailing winds. (6) Encouragement of insectivorous birds. This advantage alone is worth the land and care required to have a good windbreak where the birds will build their nests and bear their young largely on insects that destroy our crops. These birds and their nests should be protected by legislation, including the extermination of the English sparrows which are driving useful and friendly birds out of the country by destroying their eggs and taking possession of the nests for their own use. (7) A farm beautified by shade trees is enjoyed both by the travelling public and by the farmers themselves.

Ontario Agricultural College.

Announcements concerning the College work will be published weekly under this head.

FRUIT GROWING AT GUELPH.

By H. L. HUTT, B.S.A. Horticulturist.

The climatic conditions at Guelph render this section far from being what might be called a fruit section. For this reason the results of fruit tests made here will have a wide application, as what will succeed at Guelph may reasonably be expected to succeed in almost any other part of the province.

In the horticultural department at the college an effort is being made to ascertain what may be done there in all possible lines of fruit growing. An orchard was set out last year made up of apples, pears, plums and cherries, which contains all of the leading varieties, and many of the newer ones which

may be expected to be of value. In the course of a few years this orchard should become the source of much valuable information to the farmers and fruit growers of the province, and particularly so to those in the less favored fruit sections.

In grape growing it has already been proven that only the earliest ripening varieties may be expected to properly mature in the average season. Varieties ripening with, or later than, the Concord, cannot be depended upon in one season out of five. A new vineyard will be put out this spring, made up of all the earliest varieties that can be obtained, in order to find out by practical test which of these will be of most value for those parts of the country where the Concord is too late.

With the small fruits, however, there is hardly a section of the province in which the most of these, such as strawberries, raspberries, currants and gooseberries cannot be grown in great abundance. Large collections of the different varieties of these are already under test at the college, and will be reported upon from year to year in the annual report. In the report just issued is given the results of last year's tests with 150 varieties of strawberries, as well as a report on the first crop of a large number of varieties of raspberries, currants and gooseberries.

TUBERCULIN.

By F. C. HARRISON, Bacteriologist, O.A.C., Guelph.

The tuberculin manufactured by the Bacteriological Department of the Ontario Agricultural College is now sent out either concentrated or diluted. Those applying should state whether they require the concentrated, which possesses good keeping qualities, or the diluted, which does not keep so well, but is ready for immediate use. To veterinary surgeons the cost is ten cents per dose, diluted or concentrated, but to farmers desirous of testing their own cattle the tuberculin is free. In all cases the applicant is asked to fill out a blank form arranged for recording temperatures, and return it to this department. No name or address is asked for, simply the record of the test.

The department has recently purchased a large incubator, or fixed temperature chamber, where a temperature that will not vary a degree in months may be maintained as long as desired. With this addition it will be possible to manufacture a much larger amount of tuberculin.

The manufacture of mallein, a substance similar to tuberculin, but used for diagnosing glanders in horses, has also been started, and in two or three weeks' time a supply will be ready. During the last three months 853 doses of tuberculin have been sent out to farmers, and sixty-three doses to veterinary surgeons.

Trees pruned in the spring when growth is active heal most rapidly.