

be valleys, and not far from rolling lands you will find flat areas. The explanation of this lies in the action of the glacier, and the erosion of the stream. In by-gone days the ice from the far north came down along the line of Hudson Bay. Exerting a pressure of 40 pounds per square inch, ice a hundred feet in thickness would have tremendous crushing power. If the thickness were ten times a hundred what a pulverizing process there would be. Sometimes there would be sufficient resistance on the earth's surface to impede the progress of the ice in the glacial period. Then, through melting, hills would be formed, and rivers would be produced. Streams would make their way along lines of least resistance. Erosion would take place. Land would be eaten into. Deposits would be formed. A hundred varying conditions of earth surface might be found within an area of less than half that many square miles.

The history of soils starts questionings about the handling of soils. The gardener in Essex and Kent is no unfailing guide for the gardener in Stormont, Dundas or Glengarry. Across the line fence may be a field on the neighbour's farm that requires treatment different from the field on my farm. And the garden at the other end of the town may call for handling different from that which you are

accustomed to at your end.

Canadian people require to think things out in order to cope with Canadian conditions in the soil. It is inspiring to hear about what they do in England, and in Denmark, and in Pennsylvania; but we are not living in any of these places. We live in a better country, some of us think. And while we read and learn about what they get from the soil in these places we have to learn how to make the most of our little section of soil in Canada, to show the outside world that we have begun at the foundations in our gardening.

Moving ice in years gone by, moving water then and now, winds, and gravity, and variations in temperature, effects of organic matter, the action of animals and plants, the chemical action of air and water are factors with intelligent gardeners in determining the nature of their possession.

In some parts of the British Isles the vegetable mould on a single acre of land represents ten tons of earth that has passed through the bodies of worms. The worm is in many places the gardener's best friend.

If during February and March all people who expect to do something with soil during the coming season would note three things well, we would have real incentive in Canadian gardening:

1. If they would realize that soil has history, and then read, mark and inwardly digest soil record, there would be a quickening of intelligence that would get vent in improved gardening. Then the finding out of the how and why of doing this and that next May would lead on to increasingly satisfying results in September.

2. If every one who is possessed of one area of soil were conscious that he is possessed of that area multiplied by three he would then realize a sense of substantial riches. This consciousness is obtainable as the man or woman understands that under the soil is a subsoil that ministers its richness to garden growth, when the surface soil is intelligently handled. And, further, above the surface is God's atmosphere that imparts not only ozone to the breath of life, but also nourishment and vitality to every well-tended plant.

3. And if it were kept in mind that in the preparation of soil, and more especially in the cultivation of it, after the seed has been committed to it, the triple ambition should be to secure aeration, to conserve moisture, and to perfect drainage, there would be increasing pleasure in the most historic employment of man, and multiplied reward from the labour of the tiller's hand.

Wholesome Vegetables and Their Culture

Good Vegetables are Much Sought For in Canada, and Advice Upon the Best Ways of Growing Them

By GEO. BALDWIN

NONE of the products of the garden have a greater value than vegetables, if these are cooked and eaten while fresh; if, however, their transit from the garden to the table is delayed, as inevitably it must be when the vegetables have to pass through the hands of several dealers before they finally reach the consumer, they lose some at least of their good qualities. There is no comparison, either as regards their palatableness or health-giving qualities, between vegetables freshly gathered and those that have passed through the hands of the grower and the wholesale salesman and are finally bought from the green-grocer. Every one, then, who has a garden, should devote at least a part of it to the cultivation of vegetables; he will be the gainer thereby in more ways than one. While the value of fresh, home-grown vegetables cannot be too strongly impressed upon the public mind, it must not be forgotten that they are easily spoiled by bad cooking.

As a rule seed catalogues, and, in fact, writers on the above subject, will tell you that you must have a certain soil for this vegetable and another for that, but as the average city back gardener is not in a position to get a hundred loads of loam (at from \$1.25 to \$2 per load) put into his back yard, he must make the best use of what he has got.

If you have a heavy clay soil it will pay to get two or three loads of sand, and a couple of loads of manure, or if it should be of a sandy nature, try and get a few loads of loam and all the manure possible. The next thing is to cultivate deeply, which, if possible, should be done in the fall, for the reason that root vegetables, such as Beets, Carrots, Parsnips, Onions and Potatoes, prefer soil that has settled itself, whereas such vegetables as Peas, Beans, Lettuce, Cabbage and Corn prefer soil that has recently been turned over.

During the winter months plan your garden on paper, and in the early spring get the seed catalogue, pick out and order early what varieties you require, and if you are fortunate enough to have a small hot-bed, so much the better, for then you will be able to have earlier as well as better vegetables and will be able to have a succession of crops.

If you have a hot-bed, get it in shape and ready for planting seeds on April 1st, putting in such as Lettuce, Onions, Beets, Tomatoes, Cabbage, Cauliflower, Celery and Melons, all of which take kindly to transplanting, providing the plants are strong and sturdy. Be sure to give the frame abundance of fresh air on fine days, and do not let the seedlings dry out. If you have not time to bother with a frame, sow the seeds in the garden, or buy the plants from one of our seedsmen. Where possible, run the rows north and south, and from fifteen to eighteen inches apart, according to requirements, and a good plan to follow is to place low-growing vegetables, such as Lettuce, Radish, Cucumbers, Beets, Carrots, etc., nearest the house, followed by those that grow a little taller, such as Celery, Potatoes, Peas, Beans, Cabbage, etc.; then come the Tomatoes and Peas growing up sticks, and finally the Corn at the bottom of the garden.



Density in Vegetable Growing in a Small Suburban Garden. A Prize Was Taken on Every Vegetable Produced in This Garden.



Showing How to Cover an Unsightly Fence With Tomato, Squash and Grape Vines.