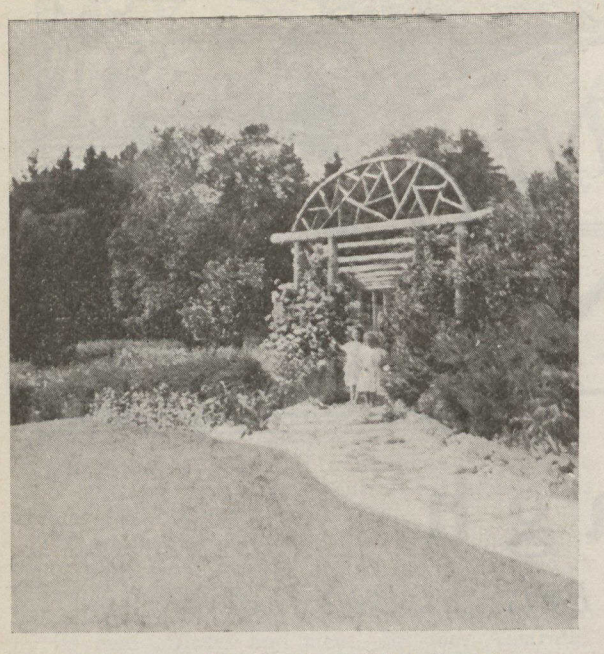
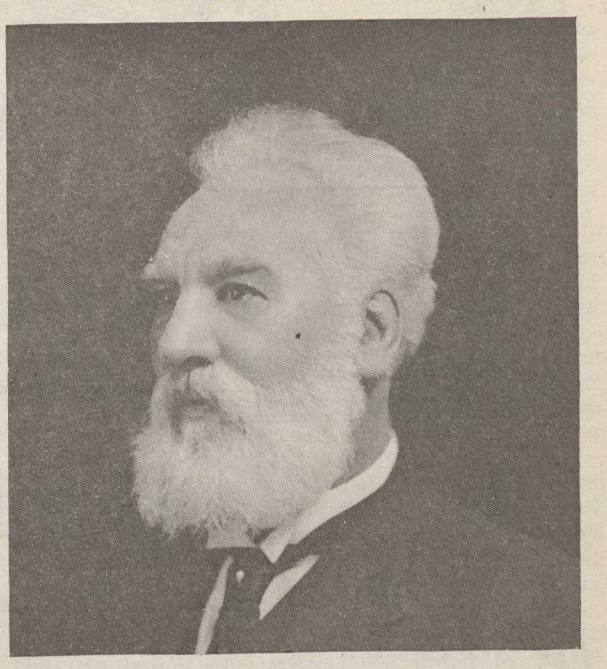


Entrance to Rose Pergola at Beinn Bhreagh.

the place, greatly appreciated by its most thoughtful citizens. This is one among many instances of the influence farming and horticulture have upon the great minds of the world, who seek quiet and rest for the furtherance of great developments in their life's work. Such a country home surrounds Beinn Bhreagh, and the words of Shakespeare in "As You Like It" are recalled to mind when sauntering in this veritable paradise of flowers:

"And this our life, exempt from public haunt,
Finds tongues in trees, books in the running brooks,
Sermons in stones, and good in everything."

This is a home, in the best sense, of one of the most foremost figures in the Dominion, and though a certain wild beauty exists, which is appropriate and welcome, the highest keeping is manifest, the wild and the cultured going hand in hand towards the realization of a perfect art. This sumptuous beauty has not been brought about without the exercise of a thoughtful mind, and therefore in the making of an estate there is a wholesome recreation from the great problems that beset the leaders in the world of science or any other engrossing pursuit. A few hours' ramble in such lovely gardens as this are hours never to be forgotten. They remain one of life's pleasantest memories, these hours amongst the flowers, rare and beautiful.



Dr. Alexander Graham Bell, Physiologist, and Inventor of the Telephone.

The Foundation of All Gardening

By A. H. SCOTT, M.A.

President Ontario Horticultural Association

TO write on gardening at this season of the year might seem to some Canadians to be getting to business rather early. But readers of the CANADIAN COURIER will call to mind that we had begun with the first issue of the new year. "Horticulture and the New Year," in the fourth of January issue, was not a day before the right time.

This article is written so that one bird may set others chirping. We know how it will be in the morning, shortly. About the time that the morning star in the firmament will be making the announcement that the sun is to appear you will hear a tuneful note from one bird in the branches. The mate of number one will respond. Then it will appear as if competitive song were begun between the two. This rivalry will mark the prelude for a bestirring of every wing, and listening man will hear the winged minstrels as they make the grove vocal.

As the days begin to lengthen, and the sun already gives indications of coming heat, these lines would court the blessings belonging to the bird that leads the choir.

It is quite true that one can cross the water from Montreal to Liverpool without an understanding of the mechanism, in the steamship's hold, that drives the screw. At the same time it will add to the intelligence and profit of travel if one knows a little about ice-bergs, and the gulf stream, and the ocean chart, and the mariner's compass. We can get a wireless message to our friends in Ireland without either an introduction to Marconi or detailed knowledge concerning the towering structure at Glace Bay. But it will make us more comfortable in the presence of intelligent people, and more satisfied with ourselves, if, in using the new agency of the times, we understand something of the air, and the currents of the air, and the provision made by Providence for aerial communication between man and man.

If a man has been growing forty bushels of wheat upon an acre of his land, and, after he has kept cropping constantly, he finds that that acre will now produce no more than five, or six, or seven, the intelligence of the day has little sympathy with that man if he says that he cannot explain why such a change has come about in the productivity of his ground.

If a person has a piece of land that, ten years ago, would grow little but weeds and nettles, but now furnishes everything requisite for the table of a cultured household, the explanation of that change, apart from the intelligence of the gardener, comes largely from altered conditions in the soil.

The foundation of all gardening is the soil. They told me in Holland that some of the pile-based structures went as deep underground as their tops rose above the surface. And it is a common saying that there is as much of certain trees under, as above, ground. At any rate there must be deep foundations if there are to be high walls, substantial rooting if there are to be great growths, and proper soil as the foundation for successful horticulture.

It may be that a considerable percentage of those who have a practical interest in the soil are as unable to tell what are its chemical constituents as they are to discourse upon the internal mechanism of a Waltham watch. But there is no one who would be a successful tiller of the ground but would be improved in every way by having a good understanding of that thing which we call "Soil," into which he commits his precious seed, in expectation of a return.

It is coming far short to define soil by saying that it is dust, when it is dry; and when wet, mud. It is often shooting far beyond the mark to define it in the highly technical terms coined by science.

Window Boxes and Flower Border Artistically Combined to Decorate the Window of a Railway Station. This Photograph Was Taken Last Autumn at the C.P.R. North Toronto Station.

Science has its language that is not understandable to many a one who knows more about producing from the soil than the average scientist does. But true science, like good sense, is fond of simplicity.

If we were saying that "soil is rotten subsoil," and that "subsoil is rotting rock," we would be giving a scientific definition that the most of men who have an interest in soil could and should understand. To get to the past of some things is to beget interest in the present and future of more things. Generally speaking, our bit of soil is that top layer of material in our field or garden, say seven inches thick, into which we cast our seeds or tubers, and expect that they will take root, and ramify, and derive properties that will cause them to develop into fruitage and harvest.

I have a friend who is a geologist. I said to him one day—"If I were asking you to tell me, in about five minutes' speaking, how the soil in your part of America was furnished for the market gardeners and farmers, who operate there, what would your answer be?"

The answer indicated that my friend knows theology as well as geology, and confirms a view that I have long entertained, that unless a man gives God first place in his thought he is not a safe man to conduct us through any branch of science or industry.

These are not his sentences verbatim, but this is his trend and the substance of his reply:

"You remember," he said, "that in the beginning God created the heaven and the earth." That is a great, isolated, majestic statement. It is the first sentence in literature. And the next sentence in literature expresses a thing that may be millions or billions of years separated from this great, first, independent declaration. There came a period when creation assumed chaotic form. Heat produced molten matter, molten matter was accompanied by gases. This planet of ours, in the course of convulsion, was driven from the heat, and the cooling process produced rock-crust. Time and conditions made that crust thicker, as frost and winter conditions make ice thicker. When the crust became so thick that the internal heat was prevented from working through it, and when water would be retained on the outside of it, conditions became favourable for plants to grow upon it. The growths of those primeval times may not have been the growths of our times, although the conditions that then obtained paved the way for conditions that obtained later. Every thing in soil has come from rock, or air, or both combined. Rocks change into soils. Soils, as in the case of sandstone and conglomerates, change back into rocks. The crushing of rocks, primarily or secondarily, is the beginning of usable soil. Usable soil is not always crushed rock alone. Threshed wheat is food, but food is not threshed wheat alone. For food we must have the miller and the cook; and for soil that will bring forth fruit we must have what is commonly termed the agencies of nature.

My friend went on to tell me that his home was in a rolling district, say, between three hundred and four hundred miles south of Port Arthur and Fort William. Where there are hills there are sure to