

THE FRUIT GARDEN.

Grapes for the Colder Parts of Canada.

Mr W W Smith Phillipsburgh, Quebec, writes that in all the Eastern Townships he is certain that grapes can be ripened in the open and his experience will be valuable to all those parts of Canada which are remote from lake influence. In his vineyard, the Adirondack is completely successful. Branches, large and long, shouldered and compact, berries large and round, nearly black, covered with bloom, skin thin, flesh melting, no perceptible pulp, possessing a most refreshing flavor; ripens, Sept. 1st. Rogers' Hybrid No. 3., Rogers' No. 33, are valuable and ripen, the former with the latter, a little later than the Adirondack. Hartford Prolific is successful and ripens a little later; with it ripens Walton, Martha, Rebecca. Concord is exceedingly vigorous and productive, and ripens Sept. 20th; with it the Delaware comes to perfection. Diana, Union Village, ripen a little later than the Concord.

Mr. Smith gives some brief directions for culture which will be especially acceptable to all whose land is not benefited by the modifying influence of large bodies of open water in winter. He says:—Soil, location, protection, and moderately rich black loam, with a sprinkling of gravelly limestone is, no doubt, the best, but any land suitable for wheat or corn will answer.

It must be naturally dry or thoroughly drained, with a southern, or south-western aspect, and a full exposure to the morning sun—and above all, thoroughly sheltered from the effects of our cold harsh winds—so disastrous to the grape. For this purpose a close board fence, on the north and north-west, say seven feet high, would form a good protection. Of course a wall would be better, but the former will answer a very good purpose. In our latitude (45 parallel), winter protection is also indispensable. Some of the above named varieties might escape being winter killed, but should they live, would likely be feeble and unproductive. Hence, the hardiest sorts should be laid down, just before the ground freezes up, and covered with a few inches of earth just sufficient to protect them from the changes of the weather.

We trust that none of our readers have been driven out of grape culture by the lowness of the price last season. Low as were prices then, they were compensated for by an abundance in quantity. We doubt if many growers actually lost money, had as the times were.

Pruning the Grapevine.

You can do almost anything with a grapevine if you understand it and apply the means; it is so susceptible to change of direction. Give it the proper soil and situation, and you can advance its growth amazingly. And you can direct this growth at will equally amazingly. You can grow wood, fruit, or both, of course with exceptions. But by growing the one you will lessen the other. You cannot grow fruit and wood largely at the same time—not generally. You can, however, grow a good crop of each with the proper knowledge and care, soil, treatment and climate suitable. The aim should always be, a balance between fruit and wood, as also an avoidance of excess and lack of growth. The medium course is found to be the true course. Then you get a fair to good growth of fruit of good quality, a good healthy growth of wood, and yearly growth of both wood and fruit, because the vigor is retained and continued all goes on like a perfect machine kept in good order without strain. In such cases you can bear, and indeed require, to have a good soil—not rich, necessarily, but one favorable to a good sound growth, which has reference to the mechanical, hygrometric, barometric, and other conditions of the soil, rather than to fertility—which in the main should not be great; expansion of the roots and a well aerated soil being of more account than high manuring, to connect quality of fruit with growth. Land cannot, therefore, be too deeply and thoroughly drained and disintegrated for the grape giving chance for its roots without danger from mouldiness or rot, or the evils referred to a wet soil.

Having, then, the proper soil, also the proper situation and climate—warm, dry atmosphere—there will remain only the task of directing the vine; and this is of equal importance with the provision for its roots. Let it go unchecked, and there will generally be little fruit. Cut close (the wood), and, with our American sorts, there will be disease and various mischief. The overgrowth of fruit will defeat itself, will hurt (exhaust) the vine, which will show the year following in lack, and perhaps failure of a

crop, the growth of the wood being suspended entirely in some parts of the vine, the frost of winter getting the credit. This is done by close pruning; especially summer pruning. It shows how easily the vine may be directed. If the shears had been withheld, there would have been an entirely different state of things—a large wood growth—a small, straggling fruit yield, lacking in quality and quantity, and good bunches; but the vine would have been healthy and remained vigorous; yet it would have defeated its purpose—fruit.

The course between would have remedied all. Excesses of all kinds must be avoided with the grape; it cannot bear them. Though the promoter of excess (intemperance), it requires moderation, care and delicacy of treatment, varying with some of the sorts, but generally the rule. There is a delicacy that cannot be overlooked; it must be respected. Then the vine will show a fine bloom and vigor; and then its wine as well as its clustered fruit will be what art and song have so fascinatingly described.—*Cor. Country Gentleman.*

THE FLOWER GARDEN.

Salpiglossis Pinnata.

The *Salpiglossis Pinnata* is a Chilean plant half-hardy in this latitude. In its native home it is a perennial, but in cultivation here in the open air it is treated as an annual. The variety illustrated on this page is the *Hybrida*, the flowers of which are iron-brown and yellow, veined with



brown, and funnel-shaped something like those of the *Petunia*, but not so broad and more delicate. The plant grows from one and a half to two feet high. It should be started early in a hot bed and planted out in a mixture of loam and sand enriched with rotted horse manure and a little leaf mould. It does not succeed so well on rich soil. We are obliged to Mr. Rennie of Toronto for the cut.

Some Ferns Found near Toronto.

EDITOR CANADA FARMER.—I was pleased to see in your last issue an article on the ferns found on this portion of the North American continent. Now that you have directed attention to these most beautiful objects, the study of which is one of the most interesting branches of botany, I hope to see an interest shown in them similar to that now exhibited in England, and, *longo intervallo*, in some parts of the United States.

The increase in the interest taken in the hardy ferns in Great Britain is somewhat surprising. In the windows of the cottagers, in the artificial rockeries of the wealthy, in the shady corners of the middle class gardens, will be seen the delicate fronds of the ferns in their endless variety of shade and shape, atoning by the length of their season of

show for their being put out of countenance by more gaudy flowers during the brief season of the latter's beauty.

Canada, we are told, cannot by any means be called a country of ferns; but there are here many beautiful varieties that will not grow in England without artificial heat, and this atones for the absence of some varieties which require more moisture than our drier atmosphere will furnish. As an illustration, I will mention a few varieties which I saw within a few yards of each other, not three miles from Toronto, on the Queen's Birthday. These were.—*Pteris aquilina*, *Phegopteris dryopteris*, *Oncoclea sensibilis*, *Adiantum pedatum*, *Aspidium filix mas*, *Aspidium marginale*, *Aspidium spinulosum*, *Osmunda cinnamomea*, *Botrychium Virginicum*, *Aspidium acrostichoides*, *Cystopteris fragilis*, *Struthiopteris Germanica*, *Aspidium thelypteris*, *Asplenium thelypteroides*. This is pretty well for a country which is not a fern country, and I do not pretend to say that this was all that were there. No doubt there were more about, but the season is so late that they had not put forth their fronds. If I discover more, I will, if you approve of it, send you a list of them.

C. A. G.

Toronto, Ont.

We shall be glad to receive the names of ferns, or other plants found growing in any section of the Dominion. If our readers would like the varieties growing in their neighborhood named, we shall be happy to assist them. On receiving specimens we will assign them their proper epithets as nearly as we can.

Trustworthy Geraniums.

A friend asks for my opinion relative to the best varieties of the geranium for bedding purposes. After testing a very large number, I feel prepared to say that for a good scarlet zonal, I prefer the Gen. Grant. It is not perfect, either in the truss or individual flower, but the hotter the situation, it appears to me, the better will be the bloom. I like it because it is always brilliant with flowers under all circumstances. For a pink, nothing can surpass the Master Christine. It is a wonderful bloomer, covering the foliage with its beautiful trusses, and keeping up a succession all summer long. It flowers equally as well when potted, and continues this character during the winter. These two form the cream of the collection for show, but there are others that may make a name in the future; for instance, Jean Sisley is a brilliant scarlet with white eye, is perfect in form, blooms well, and has a prospect of "going up head." Among bronzes, I prefer Beauty of Calderdale, a very distinctly marked variety, bearing the sun well, and excellent for ribbon gardening. A golden variegated variety of great promise is the Crystal Palace Gem, which appears to withstand the effect of the sun better than any other of its class, a desideratum long looked for, and possibly now attained. I have nothing to say against the large list of choice kinds now being tested in this country, some of which are very beautiful, but the larger portion seem to lack in some important particular. I have as much faith in a new variety just introduced as any with which I am acquainted—the Jewell; it is a remarkably dwarf form, a profuse bloomer, very brilliant in color, very double, and beds out well, but whether it will retain all these characters as well in the future remains to be seen.—*New York Tribune.*

DOUBLE DAISIES.—The *Gardeners' Monthly* says: The English Daisy—Gowan of the Scotch poets—has been improved from time to time. Just now the "Victoria" strain is becoming popular in Europe. They are very beautiful in American spring gardening; but are somewhat difficult to get through our hot dry summers. Under the moisture of a hot bed sash, they got through very well, or in any similar place where they will not be subjected to a very dry summer air.

INSECTS AND FLOWERS.—In a lecture delivered a short time ago at the London Institution, Sir John Lubbock said:—"The observations commenced by Sprengel and recommended by Darwin seemed to have given to flowers an additional interest, and had shown that insects, and especially bees, had an importance previously unsuspected. To them we owed the beauties of our gardens and the sweetness of our fields. To them flowers were indebted for their scent and color, indeed their very existence in its present form. Not only had the brilliant colors, the sweet smell, and the honey of flowers been gradually developed by the unconscious agency of insects, but the very arrangements of the colours, the circular bands, and the radiating lines, the form, size and position of the petals, the arrangement of the stamens and pistil—all had reference to the visits of insects, and were disposed in such a manner as to ensure the great object which these visits were destined to effect."