Nature's Garden Across Southern Canada

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T IS August when we start from Toronto, but after a week has elapsed it seems spring in the mountains of Alberta and British Columbia, due to the activity of growth and the melting of snow from higher altitudes. We have to see America hurriedly, in true American fash-

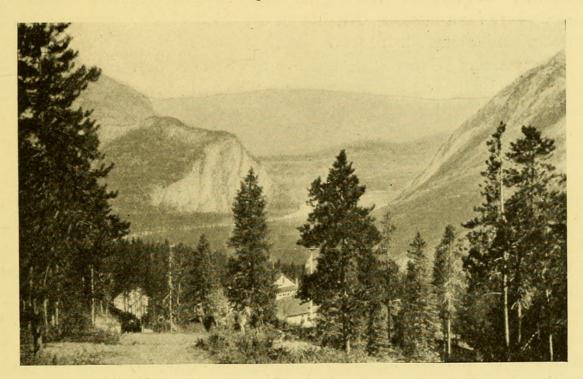
ion, consequently we merely have the opportunity to visit several of the beauty marks in the mountains of Canada. These remarks are, therefore, not those of a botanist, but of a tourist.

We chose to go by way of Georgian Bay, Lakes Huron and Superior, and from thence directly west through Manitoba, Saskatchewan, Alberta and British Columbia. Each mile of the distance proves interesting. To the traveler who has even a slight knowledge of plant life all trips are filled with interest. Every rock which weathers gives sufficient soil for some sort of vegetation.

On the Great Lakes, resigning ourselves to the luxury of the steamer, we enjoy feeding the sea gulls and gazing at the receding shore lines with their various shades of green. Finally islands come into view; islands which seem overflowing with tree and shrub life. No wonder the novelist writes of islands of enchantment for they seem to hold a secluded mystery. In Lake Huron the land gradually becomes farther and farther from our vision and we recall Washington Irving's sketch "The Voyage." The spirit of out-of-sight-of-land grows even more interesting when steaming through Lake Superior for here the water becomes rough, fogs gather, reports are received of boats run

ashore upon the rocks, and some even become seasick. It seems now as though we were really upon a body of water that would allow us to believe we are taking a voyage.

The end of our voyage is Fort William. Several hours are available to see this quiet Canadian town. We are particularly concerned with the aromatic atmosphere which is found to be due to the abundance of the Balm of Gilead (*Populus candicans*), a species of Poplar with resinous buds. New England grandmothers would need no explanation that the gum from this



VIEW FROM HOT SULFUR SPRINGS: VALLEY OF BOW RIVER

tree makes an excellent liniment. Never have we seen the annual flowers so prolific of bloom as here. The Lobelias are masses of flowers; the leaves being cheated of a space to get light.

Once aboard the train in Ontario, the only opportunity to see the vegetation is to snatch glimpses of trees and fleeting patches of color at the sides of the railroad tracks. A reddish purple flower which is abundant all through southern Canada is soon recognized as the Fire Weed (*Chamænerion angustifolium*). So soon as we know the name we wonder at it and find that it is not derived from the color of the flower, but from the fact that the 340

plant obtains a hold upon soil which has been recently burned over. After flowering, long seed vessels are produced which break open in four divisions, allowing fluffy seeds to escape.

I can best describe my impressions of this part of the country when I quote from a letter.

Today I have been riding along the shore of the Lake-in-the-Woods. The titles of post cards procured at Benora, the principal city, will give some idea of this wonderful lake. One reads, "There are hundreds of such channels," and another "Among the 10,000 islands." How I should like to stop here for a month. The islands are thick with evergreens; acres of Birches border our railroad track.

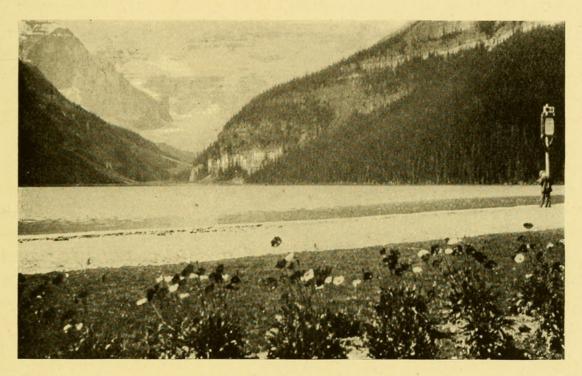
After passing Winnepeg we come to the vast prairies. Mile after mile we ride and neither see a person nor a village, but small shacks and log huts are scattered sparsely along through this boundless flat country. Reaching a city, however, the great beauty of the station grounds is surprisingly attractive for the flowering plants grow most luxuriantly.

It is hot and the air so heavily laden with dust that our hair becomes like knife sharpeners. It is, therefore, a real pleasure to realize that after riding for several days we will awaken the next morning and be at the Gap of the Canadian Rockies. At four o'clock the porter informs us that we should rise. How bracing the air is! We raise the curtains, outside the windows we seen the Bow river, rapid, cool and green. The Rockies rise abruptly from the miles of prairie. The effect is startling. In a few moments the snow capped peaks of the Three Sisters come into view. At eight o'clock we arrive at Banff. Eagerly our luggage is deposited at the hotel and we set out to tramp among the mountains. Which are the most interesting, the mountains or the countless wild flowers? We admire the alpine plants at our feet and then when a vista opens up through the trees we look at the towering peaks about us or at the snake-like Bow river below.

The tree life is very abundant, but the species are rather limited. The main evergreen is the columnar White Spruce (*Picea Englemanni*). Like the Colorado Blue Spruce, the leaves vary in color from bluish green to steel-blue, but the White Spruce is not so stiff in growth and makes excellent specimens in cultivation. So deceptive is the distance and clear the air that the trees appear like coarse grass upon Sulfur mountain. These trees are often four hundred years old and grow about a hundred feet tall. Interspersed among the Spruces are the Balsam Firs, the commonest species being, no doubt, *Abies lasiocarpa*. Unfortunately this species does not grow well in cultivation.

Two pines are found, *Pinus contorta Murrayana* and *P. albicaulis*. *P. contorta Murrayana* is known as the Black or Lodgepole Pine, and grows in a rather pyramidal form often 150 feet high in the wild, although it is quite shrubby in cultivation. In its native haunts it is not found upon the higher altitudes. The White-barked Pine, *P. albicaulis*, is less common, but extends into the upper ranges, it rarely grows over 30 feet tall

At the edges of the most precipitous points stand the Lyall's Larches (*Larix Lyalli*), weather-torn, sturdy and resembling the picturesque trees admired by the Japanese. Its light airy branches offer no hindrance to our



LAKE LOUISE

view over the valley, but furnish a veil and frame to our vista. This tree has very brittle branches and is always asymmetrical because each year branches are broken by the struggles of the tree with the snows and strong wind.

Scattered through the forest we find huge specimens of the Douglass Spruce (*Pseudotsuga taxifolia*) adorned with their fantastic cones, each large bract of which has its midrib produced into a long rigid point. The finding of this tree is a surprise, for it is one of our popular introduced evergreens in the East. As a lumber tree it is said to produce more wood to the acre than any other species and is highly ornamental as well.

Compared with the abundant display of the conifers, the deciduous trees are of lesser importance. There are several poplars, namely, *Populus*

tremuloides, the aspen poplar and cotton-wood which grows along the banks of streams, which may be *P. Sargentii*. The shrubby Birch (*Betula* glandulosa) with its roundish leaves forms hugh clumps in valleys and in season causes the lakes to be covered with a yellowish scum due to the profusion of pollen which is shed. At least two other species should be found, namely, *B. occidentalis* and *B. fontinalis*, both of which are usually taller than *B. glandulosa* and with larger leaves. A species or two of Willow we see, but they are apt to be less than 20 feet tall. Salix argophylla and, especially, the glossy leaved *S. Sitchensis* are advised for ornamental planting.

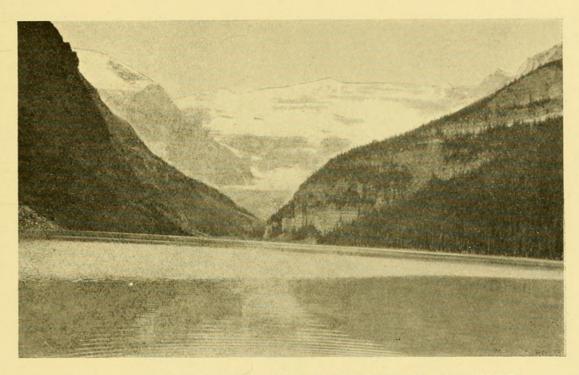
Growing all through the Mountains in bare, rocky places or in partial shade were the gaudy scarlet and orange-scarlet Indian Paint Brushes (*Castilleia*). It is interesting to know that these plants are saprophytes, deriving their nourishment from the roots of other plants. The flowers are inconspicuous, but are surrounded by brilliantly colored bracts. Miss Julia W. Henshaw, in her delightful book "Mountain Wild Flowers of America" describing this flame flower says it is the only Alpine wild flower that really rivals the scarlet geranium of our cultivated gardens, and no grander sight may be seen by travellers than where from the tree line. close to the eternal snows that enfold the towering mountain tops, down into the deep green heart of the valleys, the slopes and steeps are clothed with a marvelous mantle of vermilion and golden Castilleias. As the sunlight flames across these royal-robed hills every blossom blooms and burns with effulgent glory, until

> Earth's crammed with Heaven, And every common bush afire with God.

No words can describe the brilliant beauty of such a scene. Every color, every shade from coral pink to cardinal, from canary tint to tangerine, is growing and blowing on either hand, with here and there a single snowy spike to emphasize the splendid conflagration of color.

Had you been with us as we walked up the side of the mountain to Sulfur Springs you should have been dared by some cotraveler to taste several sorts of greenish hot-spring water. Besides this, you should have marveled at the beauty of the nodding bells of the white Rocky Mountain Rhododendrons (*Rhododendron albiflorum*) which bloom twice a year, in June and August.

You would also have noted other shrubs covered with clustered yellow berries. When the bison roamed the mountains in great numbers they fed upon these attractive fruits and they have since been called Buffalo Berries (*Shepherdia argentea*). Banff still maintains the largest herd of the American Buffalo. Growing near the Buffalo Berry is usually found a shrub which has silvery grey leaves, branches, flowers and berries. It is appropriately called the Silver Berry (*Elæagnus argentea*). Both of these shrubs are in cultivation.



LAKE LOUISE LOOKING UP AT VICTORIA GLACIER

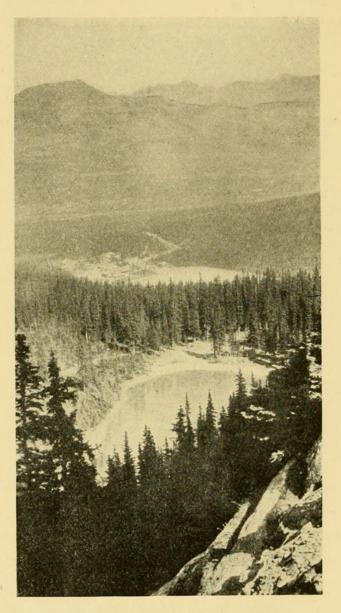
The eastern eye accustomed to seeing a low-growing species of Wood Betony, will find here on shady grassy slopes one of gigantic proportions, with yellow flowers, called the Tall Lousewort (*Pedicularis bracteosa*). There are several species rather common with pink flowers. They do not seem to persist in cultivation. Bailey suggests that they may require a particular host plant in the same way that the Indian Paint brushes live upon other plants.

Several Spiræas grow abundantly along the roads up the mountain. One of the most attractive is the Birch-Leaved

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Spiræa (S. lucida) which has corymbs of creamy colored, downy flower heads. We notice huge patches of plants only a few inches tall bearing blooms resembling the Flowering Dogwood and are surprised to realize that it is a dwarf Dogwood known as the Bunch-berry (Cornus canadensis), so named because the



VIEW FROM LAKE AGNES

flowers are followed by small red berries. Blueberries and Mountain Cranberries are also found. A most attractive ground cover, the Mountain Cranberry (*Vaccinium Vitis-Idæa*), produces dark red, acid fruits larger than currants and it is said to be used for food by the trappers and Indians of Canada.

Just off the pony path is Kidney Springs. This is an interesting nook where the gaudy Blanket Flowers (*Gaillardia aristata*) grow abundantly. These are cultivated and prized highly in the borders of our gardens. It is interesting to speak with an old gentleman who has gathered a bunch of Self Heal, or *Prunella*, saying that it is good for affections of the heart and is a most lucky plant to have growing in one's garden. Self Heal is hardly considered a wild flower with us, but a weed.

When we have returned to the hotel at the noon hour the word "lunch" sounds interesting. We can hardly finish our meal before we become aware of the fact that the coach is leaving for Lake Minnewanka. Sitting with the driver you ask him the names of some of the flowers. He is clever and never fails you with a fanciful name for each plant.

He who has not seen great patches of the blue Harebell (*Campanule rotundifolia*) such as cover the sides of the small ravines leading to Lake Minnewanka can hardly appreciate the lines of Dr. L. H. Bailey:

There is a ferny dell I know Where spiry stalks of harebell grow. It is a little cool retreat Of bosky scents and airs complete. There is a maze of fragile stems That hang their pods above the hems Of mossy fountains crystal clear 'Mongst webby threads of gossamer And filmy tints of green and blue A-strung in beads of fragrant dew. A tiny stroke the blue-bell rings As on its slender cord it swings, And if you listen long and well You'll hear the music in the bell.

There are two worlds that I know full well The world of men and the petal bell.

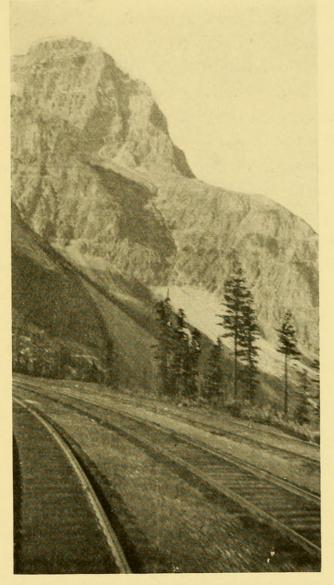
Growing with this dainty beauty are the Mountain Larkspurs (*Delphinium Brownii?*). We see many other interesting plants on the road, but we can not think of the flowers so soon as as we board the little tug, called the "Mother of Peaks." The jolly captain, standing on the bow steers the boat with his feet and keeps up a continual patter of serious and semi-comic talk, telling us the history of each spot and points out the usual resemblances of the rock formations to animal shapes. The little lake winds in and about jutting promontories like a silver ribbon and at each mile one feels that the end of the lake is in view.

Let us leave Banff, not that we have seen all the plants, but we are taking a mere glimpse. The railroad continues along the Bow River and climbs through a beautiful valley bordered high above us with snowy ledges. Suddenly ahead appears Castle Mountain, like a fairy castle of our dreams. For eight miles it extends with its turrets and walls and we are sure it is an unreality, like a spectacle in a play.

Each mile we climb, we feel more and more the grandeur of the mountains. The train stops for we are at Laggan. Before we can get our sense of direction or decide what we will do, we find ourselves hustled into a small mountain car and are on our way to the Chalet of Lake Louise. We have heard that Lake Louise is America's most beautiful picture. Dare we look, just for a second, before claiming our reservations at the Chalet? Yes, we will look. The picture is perfect. A robin's egg blue lake surrounded by tree clad mountains framing the immaculate Victoria glacier—a study in blue, green and white or should we express it as a picture painted with turquoises, emeralds and pearls. We pause for a time and are very quiet.

It is only after persons promise us that equally charming views may be enjoyed by visiting the Lakes-in-the-Clouds that we arm ourselves with knapsack-lunches and climb the pony path. It is impossible to make record climbs if one finds interesting plants at each step. We cannot take a step without catching a color or a fragrance which draws our attention. When we step into a quiet hollow just off the bridle path we breath deeply for there is a most delightful perfume in the air. It proves to come from a most insignificant pinkish blue flower,

the Northern Twin Flower. Its delicate charms were enhanced by remembering that it bears the name *Linnæa*, so called because the great Linnæus, godfather of Botany chose this flower as his crest. Each person picks a small posy to wear, the men for their buttonhole and the ladies for their corsage. If one's



TUNNEL MOUNTAIN

interest leads them to admire the beautiful, even if it be in miniature, other plants will be noted, namely: the White and Pink Flowering Shin-leaves or Wintergreens (*Pyrola secunda*, *chlorantha* and *elliptica*, the greenish white sorts; *P. asarifolia*, the pink species). These sorts when moved with a ball of earth may be used in the rockery. Here we find also the *Mo*- neses, or the One-flowered Wintergreen, the translation of name from the Greek means "single delight" and aptly refers to the dainty pink or white drooping flower borne single upon its slender stem. In cool spots where water trickles we look for the Saxifrages and find the yellow sort (Saxifraga aizoides). Of the taller Saxifrages two are common, S. Nutkana and S. Lyalli, the former is the taller and has leaves rounder than the S. Lyalli. Both have white flowers. The Anemones or Wind flowers have finished blooming, but are showing their wooly heads. We find the Pearly Everlasting, (Anaphalis margaritacea) with its furry leaves and immortelle flowers. It is so white in appearance that it seems a patch of snow.

We reach Mirror Lake, a tiny mirror truly, tucked into the mountainside, tree margined and unruffled. Towering above it is the Beehive, the name is well chosen, we should have named it such ourselves. Huge masses of the False Hellebore (*Veratrum viride*) tall and of a springlike green are growing with their stately spikes of greenish flowers. Nearby is seen the White Heliotrope or Valerian (*Valeriana sitchensis* or *sylvatica*). The flowers are very fragrant and frequently have a rosy tinge.

We climb a bit farther by a very winding path and reach Lake Agnes. We gaze over the valley of the Bow. Several hundred feet below lays the crystal Mirror Lake and a mile straight down is Lake Louise, like a spot of the sky. In the far distance is a background of the snow-capped peaks of the Sawback. We have a cup of tea and cakes at the tea house, and fear that we shall never persuade ourselves to leave. We climb the base of the Beehive and find a red lichen which causes the rocks to appear painted in spots. Here also we note patches of a plant which reminds one of the Heather, it is the Red and Yellow False Heath (Bryanthus or Phyllodoce empetriformis, the red or white and B. glanduliflora, the yellow), it is fully as beautiful as its Scotch cousin, but without the sentiment of its associations. Draped over the ledges of the Beehive is a lycopodiumlike plant bearing small pinkish bells and four-ranked, keeled leaves, it is Cassiope, or White Heath (C. Mertensiana). In cultivation this plant succumbs immediately to dry air and

drought but here the cool glacial water gradually seeps through the shale rock and it is attractive. We look under a small cascadill of the Bridal Veil Falls tripping from Lake Agnes to Mirror Lake and find what we first believe to be a gentian, but it is the bluish Purple Beard Tongue (*Pentstemon Menziesii*). In the small chinks of the rocks and spreading like a mat, grows the Alpine Avens (*Dryas Drummondii*). The flower is small and, as Miss Henshaw suggests "meekly droops its head as if conscious of its lack of good looks." The plumed seed heads are the attractive parts. Before maturing they appear as silky curled tassels. The leaves are white beneath and contrast with the blue-green upper surface.

It is growing dark when we descend the mountain. The thorough tiredness which follows such a day is welcome for it is soon lost in perfect slumber.

The next morning we set out again upon our journey ever westward. We catch sight of a mountain goat, but are told by the experienced persons that imagination is always ripe in the mountains, that bears, goats and other animals range the mountains, but patches of shubbery and rock formations miles away, do resemble goats.

We pass the sign which designates the Great Divide which marks the point where the streams separate to join either the Pacific Ocean or Hudson Bay, then we make a figure eight through the tunnels of Cathedral Mountain and Mount Ogden and after crossing and recrossing the Kicking Horse River several times, we arrive at Field, a town nestled at the base of Mt. Stephen. On we speed to join the Columbia River where the tree life seems dwarfed by the towering mountains. We soon reach Glacier and looking up at the huge snow field we feel an impending danger. But glaciers move slowly and it is over two miles to Illecillewaet Glacier which is not coming toward us, but receding. Above us, towers Mt. Sir Donald at a height of 10,808 feet. The grounds about the hotel are a fresh green and the Spruces are the finest specimens seen upon our journey. In this region we also note groves of White Cedar (Thuya gigantea). Our train speeds on along the Thompson River, finally joining

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the Fraser, tumultuous and foaming. In this romatic spot it seems fitting to see Indians fishing for salmon along its shores, but we wonder how they manage to travel these precipitous ledges.

Large specimens of the Western Yew (*Taxus brevifolia*) are here noted. Dr. G. M. Dawson even records trees eighteen inches in diameter in this region. Hemlocks, Spruce and Pine also abound. The Western Hemlocks (*Tsuga Mertensiana*) attain a height of 200 feet.



VICTORIA FROM PARLIAMENT BUILDINGS. THE PUBLIC GARDENS

And so we hasten to the coast, Vancouver and Victoria. At Vancouver we are impressed with the primeval forest of Stanley Park and see some truly big trees. In Victoria we are again interested in the perfect development of the garden flowers, especially the Dahlias which are gigantic in growth and size of bloom.

Our journey through Canada is at an end. We traveled too hurriedly. Perennially there occurs to us all the wish to see

more of this entrancing country. We must return and bring back for cultivation many of these alpine beauties, many of which we have found are not readily transplanted. Seeds must be collected and carefully sown after making accurate notes of their natural environments. Perhaps a few of the more common plants seen by the tourist are here noted, and some one will enjoy the vegetation more fully. We found hundreds of persons interested in the names of these plants, inquiring right and left. When one knows even a few of the trees and flowers by name, he is not alone in the mountains, but among intimate friends whose habits and charms he will soon come to know.



Hottes, Alfred Carl. 1918. "Nature's Garden Across Southern Canada." *Journal of the International Garden Club* 2(3), 338–351.

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