THROUGH the HEART of the ROCKIES & SELKIRKS

By

M.B. Williams

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Foreword
CHAPTER 1

THE CANADIAN ROCKIES

"The Mountains are so kindly and so great that they reject none of those who turn to them, and they are good to all: to the men of science who come to study them; to the painters and the poets who seek an inspiration in them; to the sturdy climbers who zealously seek violent exercise, and to the weary who flee from the heat and the turmoil of the city to refresh themselves at this pure source of physical and mental health." Guido Rey.

The mountain ranges which combine sublimity and beauty in equal measure are few in number. Among these for centuries the Alps have stood pre-eminent. But in the last half century a new mountain region, equaling the Alps in mingled beauty and grandeur yet with a marked individuality and character of its own, has been opened to the world in the Canadian Rockies. It is a little more than thirty-five years since the completion of the Canadian Pacific Railway opened the long closed door to the Canadian mountains, but already their fame has spread to all parts of the world and each year sees an increasing stream of travel from every country under the sun coming to admire the wonders of these glorious ranges. But there is no danger of the Rockies becoming overcrowded. Their extent is so tremendous that they are capable of being the playground of almost unlimited numbers. A great part of them has not yet been really explored. Each year new trails are being opened up, new beauties discovered. One of the chief charms of the Rockies is that this is and will be for many years to come still a virgin land. One may travel through the heart of it in luxurious Pullmans and find accommodation equaling the best to be found on the continent, but half an hour's walk from the railway will take you into the wilderness where Nature is still as wild and solitary and beautiful as she was on the first day.
CANADA’S NATIONAL PARKS

In these wonderful mountains, seemingly designed by the Great Landscape Architect of the Universe for the perpetual pleasure and refreshment of man, the Canadian Government has set aside nearly 10,000 square miles to be preserved and maintained for public use and enjoyment as national parks. This is an area two-thirds as great as Switzerland and almost as large as Belgium. It ensures that the finest parts of Canada’s great mountain region, with all their native plant and animal life, will be forever preserved in their pristine beauty and wildness for the use and enjoyment of the Canadian people.

These great reservations, declares T. G. Langstaff, the eminent English alpinist and traveller, are destined to become “the playground of the world.” Nature, indeed, seems to have showered on this country every beauty in her generous apron. Imagine if you can a region where the sublimity of the scenery is matched by the beauty, where tremendous peaks lift their foreheads beyond the clouds and black canyons hide their feet in unimaginable depths, where those great leviathans, the glaciers, creep down from the frozen desolation of alpine heights and the black walls of precipices rise up so as to shut out the very light of day, but imagine these softened and balanced by luxuriant pine forests, by smiling green valleys “murmurous with streams,” by the airy veil of silvery waterfalls tumbling against black precipice or green forest, and tangling the rainbow in their folds, by the brilliance of alpine uplands sparkling with millions of flowers, and by innumerable magically tinted lakes—imagine these under a sky, “blue as the sky of fairyland,” changing from moment to moment and from hour to hour under varying light and drifting purple cloud shadows, glorified at sunrise and sunset into almost unearthly beauty and transformed by moonlight into a veritable palace of dreams—and you reach some idea of the Canadian Rockies. Add to all the above the glorious, life-giving mountain air, warm sunny summer days and pleasantly cool nights, and you have all the raw material for the perfect holiday land.

There are seven national parks in the Rockies: Jasper Park, in Northern Alberta, with an area of 4,400 square miles; Waterton Lakes Park, in Southern Alberta, 129 square miles, adjoining the United States Glacier National Park at the International boundary; four parks along the main line of the Canadian Pacific Railway through the Central Rockies and Selkirks—Rocky Mountains, Yoho, Glacier and Mount Revelstoke; and the new highway park established along the Vermilion-Columbia section of the Transmontane motor road, which is called Kootenay Park.

ADMINISTRATION. - Within the parks the Government takes charge of all administration, protecting them by eternal vigilance from the ever-threatening menace of fire, guarding the rich heritage of wild life, preserving and enhancing the natural beauty of the landscape, opening up the many attractions by roads and trails and making provision in every way for the convenience and comfort of visitors.

No land may be purchased in the parks, but sites for business or residential purposes may be secured for a nominal rental. There are no monopolies and no concessions. Equal opportunity for all is the policy of the administration. The various businesses which provide service for the tourist are regulated by a system of licenses. A health service for the tourist is provided by a system of inspection. A justice of the peace and inspector ensures cleanliness and sanitation. The Royal Canadian Mounted Police enforce law and order.

ROCKIES AND SELKIRKS

The four parks of the Central Rockies and Selkirks, with which this guidebook is concerned, are: Jasper Park, Yoho Park, Glacier Park, and Mount Revelstoke. They lie along the main line of the Canadian Pacific Railway and are, though not continuous, all within about 4,000 square miles. They are described in this book.

The parks are designated by the English equivalent they have since been known. Although this name has been loosely applied to the whole western mountain region, it properly belongs only to the first great range of the coast. The Canadian Cordilleras are comprised of three great ranges, which together make up a mountain area which covers, roughly speaking, about 250,000 square miles.

The name “Rocky Mountains” appears to have been of Cree origin. Long before the advent of the white man the Indians of the region, the Cree, or Assiniboin, were living here. They were called “Assin-ib-o-oin,” which is literally stony or rocky mountains. The name “Rockies” has been translated into French as “Montagnes des Rochez” and is used here. The name “Selkirk” is descriptive of a wide valley which extends from the Waterton Lakes to the Continental Divide, where it is joined by the New Highway. The name is from the lake known as the Kootenay, Columbia, Mistaya, and others which mark the division between the older mountains to the west.

The Rocky Mountains and Selkirks

Generations as they pass
Worship thee with bended knees:
Like a river roll away:
Thou remainest such—alway.

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The Canadian Rockies

Selkirk and the Rockies--Each of the four mentioned parks has a distinct individuality of its own. For dians Cordilleras, each range and section has its special characteristics which differentiate it from any other. Between the Selkirk and the Rockies, this difference is particularly marked. The Selkirk are much the older formation. Their snow-capped summits of the ocean's bed. In the course of centuries their harsh contours and time and though probably once the higher range they are now from lack, too, the sharp spires and pinnacles and castellated summits which make the Rockies so picturesque. But though the Selkirk are inferior in height, they are prominent in the wonderful luxuriance of their dark green forests and in the extent and mass of ice which lies upon their summits throughout the year. Precipitation in these mountains is extremely heavy, the average being 60-68 inches of which more than 75 per cent falls as snow. As much as 50 feet of snow has been recorded in a single season. This great mass of snow and ice melts but little from year to year and forms a thick cap over all the peaks reaching down practically to timber line. In fact one of the delights of almost every landscape in the Selkirk is the vista of dazzling white summits rising directly above the green forests against a brilliant blue sky. Everywhere these great snow masses are compressed and flow down the mountains in the slow rivers of ice known as glaciers. The number of glaciers in the Selkirk has never been computed but from some of the peaks in Glacier park over one hundred can be counted at once. All the other beautiful phenomena of an alpine world are also present--ice-caves, waterfalls, green valleys and uplands which are veritable gardens of wild flowers.

In the higher Rocky Mountains range there is a much lighter precipitations and Chinook winds remove much snow from the eastern slope which would otherwise go to form glaciers, so that their grey, sharp-pointed peaks often rise gaunt and bare several thousand feet above similar line. On the western peaks, however, beautiful glaciers and permanent snowcaps are to be found, and in the Lake Louise district and Yoho Park one finds every charm of an alpine world. Characteristic, too, of the Rockies is the countless number of beautiful lakes which have an infinite variety of colouring and setting such as holds the spectator almost breathless. The forests of the Rockies, while always beautifully green, are lighter in colour and less dense in undergrowth on the east. Tree growth rises to about 6,500 to 7,000 feet. The Rockies for the most part are formed of grey limestones with bands of purplish shales, while the Selkirk are composed of brilliantly coloured quartaries which add much to the beauty of the rocks.

Formation of the Rockies and Selkirk--As one travels among these great ranges inevitably the question arises: How were these mountains formed, by what Titanic forces, in what convulsive throes of the old earth were these enormous masses crumpled and folded and lifted miles into the air? To the geologist the story is as clear as print. Nature with a tremendous gesture has here laid bare the secrets of her history for millions of years. In the lines and markings and imprisoned life of the strata she can decipher the whole record. This ancient tale of the hills, as he tells it, is one of the most interesting of stories.

Long, long ago, he says, how many million years ago, even a geologist hesitates to say, but probably ages before the mollusk, the jellyfish and the crustacean were swimming in the Cambrian sea, the place where now the Rockies stand was the floor of an inland sea. Its western limit was a mountain barrier, of which the Selkirk formed a part, which rose beyond what is now the Rocky Mountain Trench: its eastern, probably the shield of the Laurentians cast from Hudson bay. Year after year through countless centuries, rocky dust from this ancient western range was carried down by wave and stream and laid on the floor of the ocean bed. Century after century, soon after soon, while Nature passed from invertebrates to vertebrates, while she populated the seas with fishes, shaped the land, the frog and the salamander grew her great forests of fern, the sedimentary process went on till layer upon layer, a bed 30,000 feet thick was formed. Then at some time in what is called the Carboniferous period, as the result of tremendous pressure exerted from the west, the floor of the ocean bed began to rise. Slowly it rose through millions of years until the waters became so shallow over a great part of the area that extensive swamps
The Canadian Rockies

and shallow bogs were formed in which the huge and ungainly dinosauers probably wallowed in luxuriant vegetation which flourished a luxuriant vegetation which later formed the rich coal-beds found at Canmore and Bankhead in the Rocky Mountains Park and elsewhere. At the close of what is called the Mesozoic period, or the Age of Reptiles, which lasted according to some estimates from 200,000,000 years ago to 90,000,000 years ago, another tremendous thrust occurred from the west which became so great that it lifted the whole rocky crust of this district and crumpled it into folds like a sheet of paper. "As the pressure continued, the folds became closed and overturned towards the east. Later the strata broke along the lines of least resistance and the rocks on the west side of the fault were pushed upwards and thrust over the rocks on the east side. In this way beds which were millions of years older were thrust over the tops of the younger beds. This fault or break occurred in the neighbourhood of Castle. The mountains in the eastern part of the park reveal clearly just how it happened. Many of the peaks show the characteristic "writing desk" break off on the eastern side in a steep escarpment.

No sooner were the mountains uplifted than the forces of destruction began the work of tearing them down. Nature with her "hammer striation and carving it into sculptured forms. Water courses formed ridges. Then came the glacial period, during which Arctic conditions prevailed over the whole northern half of the continent. Year by year thick was formed, above which only the higher peaks lifted their frosty single green thing remained. For hundreds of years frost, silence and
death held the mountains in their grip. And yet there was life of a kind and motion. The glaciers were forming in the valleys and along the old water courses, pressing down from the heights with increasing force, scraping and tearing the rocks as they came. As the leads upon them grew heavier the great trunk glaciers in the valleys had to sink deeper in their rocky beds, hollowing out the V-shaped valleys into the form of a U. Then one happy morning spring once more came back to the land. The warm rains fell again, the winds blow softly, the sunshine fell in straight shafts into the frozen valleys, the Frost King was driven back to the Arctic, the tender green again appeared, the streams ran sparkling to the sea and all the mountain world was reborn in the dawn of the new day.

Much as they were then, subject only to the slow erosion and corrosion of natural forces, the Rockies have since remained. Avalanche and tempest, thunderbolt and flood have carved their lofty summits into ever-changing sculpture and graven new scars on their old flanks already scarred by ice-claw and frost-tooth, but their general form and features are believed to be unchanged. When one thinks of the dateless centuries through which these gaunt, grey peaks have looked out across the plains, the life of the individual seems as ephemeral as the butterflies fluttering over the windflowers on the slopes. In the tremendous eons of the mountains a thousand years are as one day and our little civilization as a watch in the night. Babylon and Assyria, Greece and Rome have risen and passed, but they remain. What life went on about their feet through all these centuries, one wonders, while the buffalo herds grew black upon the plains? The smoke of Indian campfires rose blue along the eastern foothills, but the Indians seem to have feared and avoided the mountains. Probably a few hundred years ago the Kootenays, seeking shelter from their hereditary enemies, the Blackfeet, from Montana to the fertile valleys of the Kootenay and Columbia west of the Divide. Later, possibly less than a century ago, the Stonies entered Bow valley, perhaps in search of game; the Shuswap's coming from the west to visit the Stonies built their half-buried dwellings at the base of Mount Rundle where now the tourist plays golf, but the Indians left few more marks of their habitation than the wild animals.

The discovery of the west by De la Verendrye in 1743 marked a new era. It meant the coming of the white man, restless maker of change. Fifty years later Sir Alexander Mackenzie, stubborn son of Scotland, overcoming tremendous toil and hardship, fought his way through to the Pacific, emerging at what is now Prince Rupert. In 1841, Sir George Simpson, Governor of the Hudson's Bay Company, and one of the most eminent pathfinders of the great Company of Pathfinders, led by Peechee, a Cree chief, penetrated the Bow valley and crossed the mountains by what is now called Simpson pass. A few years later began the determined search for the long dreamed of route to Asia through British territory. Sir James Hector, geologist with the British expedition under Palliser, following the Bow river to its junction
with the Vermilion, ascended that stream to the Divide and turning north reached the Kickinghorse pass. This was the first of the two keys needed to unlock the Rockies. The other was the discovery of Rogers pass by Major Rogers, Engineer in Charge of the Mountain Division of the Canadian Pacific Railway in 1887. Four years later at nine o'clock in the morning on the 7th of November, Sir Donald Smith, later Lord Strathcona, drove the last spike in the junction of the eastern and western division at Craigellachie and the Canadian mountains were open to the world.

CHAPTER 2

ROCKY MOUNTAINS PARK

"Farther than vision ranges,
Farther than eagles fly,
Stretches the land of beauty,
Arches the perfect sky.
Hemmed through the purple mists afar
By peaks that gleam like stars on stars."

— Pauline Johnson.

The Rocky Mountains Park is the oldest, second largest and best known of the Canadian National Parks. The first reservation was made in 1885, the year of the completion of the Canadian Pacific Railway across the mountains. With the discovery by railway engineers of the valuable Hot springs at Banff, the Government was at once confronted with the question: should it lease to private parties the rights to the springs or should it control and operate them itself? It decided in favour of the latter and a reservation of ten square miles was made to ensure that the surroundings should be in keeping with the Government's plan to make this a first-class resort. Shortly afterwards a special party of parliamentarians went over the new line. So much impressed were they with the beauty of the scenery and the wonderful possibilities of the region that it was decided to create a
national park of 260 square miles so that the public should always have access to this district. The debates in Parliament in 1887 when the first Rocky Mountains Park Bill was under discussion make interesting reading. They show that even then the future value of such a park had been realized.

In the year 1902 the park was enlarged to 5,000 square miles. Under the Forest Reserves and Parks Act of 1911 it was reduced to 1,800 square miles but for game protection purposes it was recently enlarged to its present dimensions of 2,751 square miles.

Typical View of Rockies from a High Peak

The mountains of Rocky Mountains Park reveal two distinct formations, the line of division occurring in the neighbourhood of Castle mountain. In the east the term "sea of mountains" is particularly appropriate. The ranges rise one behind the other in parallel lines, sloping gently up on the west and breaking sharply off at the crest of the range like the waves of a sea. They are formed for the most part of rugged grey limestones, the strata being sharply inclined or even turned almost on end. West of Castle station the rock has been lifted straight up in the air so that the strata lie horizontally and the mountains take on massive, block-like forms with pyramidal or dome-shaped heads.

The park contains three great groups of mountains, the Assiniboine group to the south, the Laggan group, centred about lake Louise, and the Howse or Waputik group along the crest of the Divide north of the railway.
from the plains: Devils Gap, a few miles to the north, Kananaskis Gap and the Bow Gap, a water gap, through which railway and motor road enter. A sharp turn in the road reveals the opening:

"A noisy cleft within the booming hills,
A narrow gateway to the mountain's heart."

You pass through the narrow passageway and are at once in the mountain world.

From the Gap to Banff.—Up to this point the river has been following a transverse valley cut across the ridges. Now it makes a sharp turn about the base of Grotto mountain and enters the long valley between the Fairholm range to the right and the Kananaskis to the left. The great peaks are already close at hand: Wind mountain (10,105 feet), Pigeon mountain (7,845 feet), and the Three Sisters (9,743 feet) standing out prominently as soon as you enter. Near the little mining town of Canmore one gets the first glimpse of the Hoodoos, those queer eroded pillars carved in the glacial silt, which are so hard that they will dull the sharpest pick. These natural monuments often take strange shapes and suggest the crude attempts of some savage artist to represent his primitive gods. They were regarded with much superstition by the Indians and to this day the Stony gives the Hoodoos a wide berth. Near Anthracite the Bow river flows through deep beds of glacial silt. Here there are a number of fine hoodoos. One of these, a British lion, couchant, on the left bank, is especially noticeable. A good view of it may be had from the bridge. From the top of the Anthracite hill one has a splendid panorama of the district. The grey old bulk of Cascade just ahead. Inglis Falls (9,685 feet) prominent to the right, and the long serrated spine of Mount Rundle (9,085 feet) to the left. A few miles farther on the road crosses the animal paddocks, fenced enclosures in which one may see the shaggy buffalo, deposed monarchs of the plains—statuesque elk, moose, deer, goat, and those long-haired holsteins of the animal tribe, the yak. A short run of a little over a mile brings one to the little town of Banff, headquarters of the park.
While none of the peaks are truly alpine in character several rise to over 9,000 feet, or more, than a mile above the valley floor. The mountains for the most part are formed of nearly pure limestone, the summits often bare or tabled for one or two thousand feet, the lower slopes covered with wint at a distance appears to be a green mess but which an closer inspection is seen to be pine forest.

It is hard to describe the charm of Banff but impossible not to feel it. It is a charm compounded of so many elements. The beauty of the scenery, the clear sunshine, the life-giving air, the glorious blue of the sky, the cosmopolitan atmosphere—all are part of it but yet they hardly explain the glamour and fascination of this "little town nestled among the hills." It has an atmosphere all its own—a sort of embalmed play-spirit to which we insensibly yield. It is as if we had entered a fairy gateway into an enchanted country. The scented coolness and amities have brought with us from out outside competitive world deep away like Christian's burden at the sight of the Delightful Mountains. We give ourselves up to the spirit of the place realizing that after all "living, not getting a living" is the true end of life. Every vista forms a harmony so perfect that it satisfies the most secret longing for beauty, for size and colour and line and mass. Beside the tremendous proportions of the mountains man is a mere insect, but instead of feeling his insignificance he realizes with a sort of exultation that this is his proper setting, that the mountains are no higher than his aspirations. Let symbols of his "Babylonian heart." It is perhaps one of the reasons why so many people love Banff is because they find there such a number of things to interest and amuse. Banff has an infinite variety of attractions and she knows how to please each of her lovers in her own way. For the botanist, geologist or student of wild life she offers the opportunities of an unexplored outdoor school. The sportsman finds golf, tennis, bathing, swimming, excellent roads for walking, riding, driving or motoring. For the lover of nature there are scores of infinitely lovely districts—more than he could possibly exhaust in a single season accessible by road or trail.

VIEW FROM BOW BRIDGE. One of the spots where everyone lingers at Banff is the bridge across the Bow. In early summer the river is tumbled with silt carried down by the spring floods, but as the season wears on this gradually disappears and the water settles to the wonderful greenish-blue shot with amethyst shadows. All around is the great circle of peaks which shuts in the valley. To the northeast may be seen Cascade mountain, sitting like a grim老 kid above the town with the silver chain of a streamlet falling to its waist. This mountain was formerly named Stoney Chief, while the smaller mountain to the left is Stoney Squaw. Beyond is Mount Norquay called after a distinguished son of Canada, a former premier of Manitoba who was among the first visitors to Banff. To the north is the rugged outline of the Sawback range. Far to the west stands out the snow-crowned head of Pilot mountain, the chief peak of the Massive range on which at certain seasons of the year the emerald figure of the on which at certain seasons of the year the emerald figure of the on which at certain seasons of the year the emerald figure of the...
of Robert Louis Stevenson, the Beloved Vagabond of the Out-of-Doors in all weathers might have been written of Banff: "In the rare air, clear cold and blinding light of Alpine winters, a man takes a certain troubled delight in his own existence which can nowhere else be equalled. He is perhaps no happier, but he is strikingly alive. He feels an enthusiasm of the blood unknown in more temperate climates. . . . You wake in the morning, see the cold upon the snowpeaks, become filled with courage and bless God for your prolonged existence. The valleys are but a stride to you. You cast your shoe over the hilltops. Your ears and your heart sing. In the words of an unverified quotation from the Scotch psalms, you feel yourself fit 'on the wings of all the winds to come flying all abroad.'

WINTER SPORTS

A carnival is held each winter which is attracting an increasing number of visitors. It needs only a little more organization to make Banff a winter sports resort equaling St. Moritz or Davos Platz. Of late years many Canadians who formerly spent their winters in the relaxing atmosphere of the South are beginning to realize that the tingling air of Banff sets the red blood flowing in the veins, tightens the slack nerve strings and builds up a resistance which only the North can give. Even when the temperature sinks to zero the cold is scarcely felt and all kinds of winter sports can be indulged in with enjoyment. Skiing, tobogganing, snowshoeing, ski-joring, ice-boating and skating, followed by a warm plunge in the ice-fringed open air swimming pool, make Banff, in the opinion of many, the finest winter playground on the continent.
the valley floor. And what a cosmopolitan crowd is that which gathers in the wide lounges or about the open fires in the hotel after dinner! One sees here distinguished scientists, travellers, explorers, statesmen, artists, sportsmen and visitors from practically every country under the sun. Tennis, water polo, swimming and diving in the warm sulphur pools, with dancing at night, add to the gaiety; the golf links are within easy distance; ponies and motors can be secured at a few minutes' notice, and when one is tired of mere strenuous enjoyment it is sufficient to sit on the broad veranda and watch the sun sparkling upon the wonderful green waters of the Bow to see the cloud shadows drifting over the peaks, the blue haze gathering in the valleys, or the little mist rising up the sides of Mount Rundle and rolling off as clouds into the interminable blue.

MUSEUM AND ZOO

Among the interesting things to be seen in the town itself are the Government Museum and Zoo. The former contains a very good collection of big game and smaller animals, as well as of the bird, fish and plant life of the region. Indian relics and examples of Indian handiwork, including some very fine embroideries, are also shown. All who are interested in the natural history and geology of the park are well advised to pay an early visit to the museum.

Along the banks of the river behind the museum is the zoo, where in large well kept cages may be seen a most interesting collection of wild animals, including black, brown and grizzly bear, lynx, martens, wolves, coyotes, foxes and other animals. Pete, the polar bear, and the monkeys are objects of special interest to children and the cages are always a centre of attraction at feeding time.

HOT SPRINGS

If Banff had not become famous for its beauty it must have become so for its hot springs, but the two combined, resorts on the continent. The springs it is said, were known to the Indians long before the coming of the white man and there is even a story that old and dramatic grizzlies had discovered that these warm waters recall the age in ancient basins. Be that as it may the existence of these springs was one of the first things discovered on the valley of these springs was one of the first things discovered on the valley of these springs was one of the first things discovered on the

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ably higher during the spring and summer it is calculated that the yearly outflow is in the neighborhood of 2,000,000 tons per year.

The Upper Springs.—About three miles from Banff by a road which winds up Sulphur mountain through straight lines of lodgepole valley. This is the warmest of the five springs, having a temperature of 115 degrees F., and it is here that most of the invalids seeking the benefits of the Banff waters come. In early days a rude sanitarium stood at the springs and one of the interesting sights on the hillside was the testimonials left by grateful sufferers as to the efficacy of the cure. Sometimes there were a discarded cane or crutch, sometimes a rough board bearing a record in prose or distich verse of the patient’s healing. Many of them read like the accounts of a miracle. “I had to be carried up to the springs,” said one of these, “and then I threw that away too.” “I had not walked for ten days,” says another, “before I began to take the waters.” “I climbed to the top of Sulphur mountain,” says another, “and with it were destroyed these unique and touching testimonials.

The open air hot sulphur pool is one of the most popular spots in Banff. The spring rises on the mountain side and the flow, which is over 800 gallons per minute, is carried down to the Government Bath-house about 100 feet below. The latter is a small but completely equipped establishment containing hot tub baths, steam-rooms, hot and cold shower baths, sweat rooms and a large swimming pool. The temperature of this pool is high even in winter and it is a common sight to see bathers enjoying a comfortable outdoor swim in zero weather while icicles hang thick about the sides.

The Kidney Spring.—A short distance away on the hillside is another spring of smaller volume which is known as the Kidney spring. Its waters contain bismuth and they are considered to have special therapeutic properties.

The Mount Springs.—A walk of about two miles up Sulphur mountain from Bow bridge by a good road brings one to the Mount springs. They are well worth a visit in the summer only for the magnificent view of the Bow valley which one obtains from this height. These springs have an estimated flow of about 6,000 gallons per hour and as yet are undeveloped. The water lies in natural rock pools, stained yellowish-white by sulphur and containing myriads of the tiny water plants known as algae. The vivid greens and purples of the latter give the pools an almost sinister look. The spirits who haunt these subterranean bomb holes, one feels, must be very different from those who guard the cold and crystaline lakes. One peeps into the narrow half cave from which the spring issues. Who knows? Perhaps it may be the haunt of the Under-water people whose drums are still heard by the Indians on spring nights. There is no sign of spirit habitation but all around the edge of the cave may be seen little piles of dry grasses. It is probable that these are the work of the Pika, or little chieftains of the mountains who are called the Haymaker from his habit of piling up grass to dry for food.

The Cave and Basin Springs.—The Cave and Basin springs are situated on Cave avenue about one mile west of the town. Here the government has erected one of the finest public bathing establishments in the world. The building is of reinforced concrete faced with native blue limestone, which harmonizes admirably with the surroundings. Two boulder caves roofed with red Spanish tile give the necessary note of colour.

The swimming pool, 150 feet long and 55 feet wide, is the largest of its kind in Canada. Dressing rooms capable of accommodating 32 persons extend along the south side of the pool, two wide terraces above, where visitors may promenade and view the pool. The north side is enlaced by massive plate-glass windows which serve to shelter bathers from the wind and at the same time afford charming glimpses of the surrounding peaks. For a mere nominal fee one may have the use of a dressing room, locker, bathing suit and towels in addition to a bath. A comfortable sunroom furnished with easy chairs provides a place to rest after the exertions of swimming. It is no wonder that this is one of the most popular attractions in Banff and that it accommodates hundreds of bathers every day. The temperature of the water is about 80 degrees F.
The Cave.—The southeastern belvidere forms the entrance to the Cave, the first hot spring discovered at Banff. The natural passage, eroded by the action of the escaping water through which one formerly crawled in half darkness to the cave has been considerably enlarged and is now lighted by electricity. Passing through this rocky hallway the visitor finds himself in a small chamber roughly circular in shape, about 50 feet across and 30 feet high. The walls are of porous limestone, covered in places with fluorescent crystals. A pool of greenish white water occupies a great part of the floor and the gas rising from it fills the air with a sulphurous steam. From an orifice in the roof a shaft of light falls through the darkness, with the effect of some medieval picture, dimly illuminating the cave and revealing the constant agitation of the pool. Although unattended by breeze or passing air, its waters are never still. Little waves coldly lap the rocky rim, tiny shoulders of water across its face. Great bubbles of gas tremble constantly up like sighs from its hidden depths. The water in the pool is from two to five feet deep but so clear that it seems as if every grain of sand could be counted in its bed. As the eye becomes accustomed to the half light, greenish bits of natural carving stand out on the walls—faces of geese and animals, a head which bears a strong resemblance to Joseph Chaselden, another which, tidy enough in this sulphurous atmosphere, takes the form of Neptune himself. Nearly 300 gallons of water per minute heated to a temperature of 85 degrees bubble up from the unseen source which feeds the spring. The overflow, which is conducted down the tunnel, serves to constantly renew the water of the large swimming pool in the baths.

The Banff Springs. Behind the cave is another spring flowing into an open pool about 25 by 40 feet, overhung by a rocky wall. This was the first swimming pool. The temperature of the water is 94 degrees, or 9 degrees higher than that of the cave which is cooled by the entrance of a stream of fresh water that drops down at the back. The floor of the basin pool is of black sand through which the water can be seen constantly bubbling up. The overflow from this spring also feeds the big swimming pool.

Golf Among the Clouds

The golf links at Banff have an altitude of about 4,300 feet and the surrounding scenery is so glorious that one is furnished with a perfectly reasonable excuse for not keeping one's eye on the ball. The links are owned and operated by the Government and their location is superb. They are situated just below the junction of the Bow and Spray rivers within ten minutes walk from the Banff Springs hotel. The great facade of Mount Rundle rises directly from the right and the tufa slopes at its base form the resting place of many a lost ball. High up on its ledge you frequently see a band of mountain goats, detached spectators, apparently, of the game.

The course was originally a nine hole one but in 1920 an extension of nine holes was laid out by Donald Ross, the eminent golf architect, who has designed most of the famous courses in America. A fact which is sufficient guarantee of the sportsmanship of the course. A small but comfortable clubhouse meets the needs of visitors and dispenses afternoon tea accompanied by the most delicious of homemade bread and jam. A professional is in attendance throughout the season. The clear bracing air of the mountains makes the game particularly enjoyable and tempts many visitors to linger on at Banff. On the wide terrace of the Banff Springs hotel a lady knitting, with a composure which does not belong to the three-day tourist, said in reply to a question, "Yes, we came to Banff two months ago to stay two days but John started playing golf and we are here yet." The Prince of Wales on his recent trip through Canada also fell under the spell of the Banff links and spent there the better part of two days.

RIVER TRIPS

Bow River near Banff. In some European galleries a mirrored topped table is provided so that one can study the wonderful frescoes high up on the walls and roof. Nature, with her unerring instinct for the beautiful, has provided a similar mirror at Banff. The quiet reaches of the Bow river from Banff to about eight miles above offer delightful opportunities for boating and one of the best ways of viewing the panorama of peaks on both sides of the valley. Rounding the base
of Sulphur mountain the river winds between low banks bordered with overhanging willows and poplars, affording constantly changing picture of the magnificent entourage of mountains mirroring their great grey faces in the quiet waters of the little stream. To the right can be seen the sharply serrated outline of the Sawback range and the slim spire of beautiful mount Edith; to the left are the rear slopes of Sulphur and the great bulk of mount Bourgeau and the two other great peaks of the Massive range, mount Brett and Pilot mountain.

The quiet restful beauty of this little trip makes it one of the most popular in the park. During the season launches leave the wharf west of the Bow bridge several times daily. Rowboats and canoes may also be rented by the day or hour.

Echo River and Shadow Creek. -Echo river and Shadow creek, the latter a tree-bordered shady waterway to the Vermilion lakes, offer pleasant opportunities for canoeing and a paddle up their road reaches at any time of the day makes a delightful excursion.

Upper and Lower Reaches of Bow. For the expert canoeist two trips which offer fine scenery, excitement and excellent fishing are the upper and lower reaches of the Bow. For the first a canoe may be shipped by train to either Castle station or Eldon and the run made from this point to Banff. In high water the trip can be done in a day but to do it justice it is better to take two or three days. A stop over at Redearth creek enables one to see the whirlpool and canyon and affords a chance to capture a gamey Cutthroat trout. Below is the "white water" of the rapids, a run which will test the nerve of even an expert swift-water man. For the lower trip a canoe may be taken below the Bow falls and the run made to the junction of the Bow and Kananaskis rivers at Sperce. This also affords swift water and sufficient thrill, as well as opportunities for fishing at some of the best trout pools on the river. As has been said these trips are for the expert; anyone else should enlist the services of a guide.

One of the best ways of seeing any mountain district is on foot. In the Alps it has long been a favourite form of travel but in the Rockies until recently roads have been few and places of accommodation far between. The recent completion of the motor highway to lake Louise opens up new possibilities for the pedestrian and it is now possible to traverse the entire length of the park on foot and even to go on to Field and the Yoho valley. The Alpine Club of Canada is doing much to arouse interest in this form of travel. In 1920 it inaugurated a Walking Tour Camp, the first of its kind in the Rockies, near mountain Assiniboine, which attracted nearly 300 persons. The intention is to make this camp a permanent institution and if successful later to establish other camps at interesting points in the park. Such camps should do much to revive the healthful art of walking, much neglected in these motor age days, and to re-establish in the mountains that "ancient order of walkers" which, as Thoreau says, is a sort of Fourth Estate, outside church and state and people.

From Bow to Spray Bridge. - Long walks of this kind require that a person must be vigorous and in training. But there are many delightful short walks about Banff which can be enjoyed by anyone who is moderately active. Indeed one of the most delightful from the Bow to the Spray bridge— is only a mile long. To walk along this path early any summer's day, when the river is unravelling itself in the radiance of the morning and every poplar leaf is twinkling and glistening in the sun makes one glad of mere existence. Every few feet brings a new picture, dominated now by Cascade, now by Rundle, and each one is a surprise and enchantment.

Up Tunnel Mountain. Another beautiful though longer walk is up Tunnel mountain, a walk which will take from two to three hours. Tunnel is a wooded knoll between mounts Cascade and Rundle.
Geologists believe that it was once a part of the latter mountain, broken off in some cataclysm of nature. The road around the mountain climbs about one-fifth of the way up and from it a level path leads to the top. The road is open to motors but all who are fond of walking are advised to take it on foot or, as a second best suggestion, by pony-back. The views along the way and from the summit are magnificent and it is the most accessible point from which some conception of the glory of the mountain ranges can be obtained. The valley of the Bow as far as the Vermilion lakes to the west, the town itself, the slopes of Sulphur, the falls, the wooded valley of the Spray with Goat mountain in the background, the Bow valley to the east with a glimpse of lake Minnewanka and its surrounding peaks, all lie open before you. The broad-shouldered plateau at the top is a favourite picnic spot.

Sulphur Mountain. The walk through the woods to the summit of Sulphur mountain is also a favourite one. The distance to the top is about six and three-quarter miles and the return trip may be made in from four to six hours. If desired motors may be taken to the Upper Hot springs and the rest of the climb taken on foot, a distance of about four and a quarter miles, or ponies may be taken the entire way. The path winds through the pine woods, passing the Alpine Club-house and the Upper Hot springs. On the summit is the Government Meteorological Station, where observations regarding the weather are recorded. Here with lungs "filled with the winds of heaven" one gazes at a magnificent panorama, "the mountainous crag of a creation hurled," with the exception perhaps of the Little Beehive at lake Louise there is no point from which such an extensive view of the Bow valley can be obtained. From this point the wave-like, or "echelon" formation of the eastern ridges with their sharply upturned folds is clearly visible, as are also the great snow-covered peaks to the west. The wide valley of the Bow, carved through glacial deposits of from 200 to 300 feet thick, is visible for miles with lake Minnewanka, Fortymile creek and the Vermilion lakes set like bits of looking-glass in the jade green frame of the forest. All around is a magnificent array of peaks with thrilling glimpses of the great snow-covered summits massed along the Divide.

Cascade and Rundle Mountains. Good peaks also lead up Cascade and Rundle mountains and ponies may be taken part way. These climbs may be made in about six hours, but it is better to start in the morning, take a lunch with you and rest an hour or two on the summit. Mount Rundle affords a wonderful panorama of the whole district and especially fine views of the Fairholm range to the east and the Assiniboine group to the south with the white pyramid of mount Assiniboine out-topping the rest of the peaks. Cascade also makes a very fine trip and if desired ponies may be taken to timber line. Here there is a remarkable natural amphitheatre which looks as if it might have been formed for the sessions of the gods of the mountains. Indeed if these ranges have their presiding deities Cascade may well claim to be their Parnassus. A rather stiff climb takes one the remainder of the way up the summit.

Lake Minnewanka Drive. Lake Minnewanka is 4,800 feet.

Sundance Canyon, the Spray Valley road, lake Minnewanka, the Sun Dance canyon, and Mount Edith pass are also favourite objectives. The Spray road is reserved for the use of horses and riders, with the exception of the Spray valley road, all of these are open to motors. There is one of the most delightful spots for a gallop in the park. The reader knows the Spray river among beautiful pines, affording fine views of Assiniboine, Mount Rundle and Goat mountain. It is open for eight miles to the old lumber camp.

For the motorist with sufficient time at his disposal there are three fine trips: the motor highway to the eastern boundary of the park, a distance of about 30 miles; the same road west over Vermilion summit, a distance of about 35 miles; the same road west over Vermilion summit to the end of construction; and the extension road to lake Louise.

All of these trips should be taken if possible. There are also a number of drives about the town: up Tunnel mountain; the Loop about the golf links, passing the Hoodoo; the drive to the Upper Hot springs, a spot which affords a particularly fine view of the Bow valley; to the Cave and Basin and on to Sundance canyon; and to lake Minnewanka, passing the buffalo paddock.

Two places along the motor road west, Mount Edith pass and Johnston canyon are also favourite objectives, the latter being the most popular tally-ho drive in the park.

Sundance Canyon. Sun Dance canyon is a wild and romantic spot, about four miles west of the town. The origin of the name is uncertain. Some authorities claim that it is derived only from the Indians who have spoken of it as a place where the Indians held their sacred ceremony. In former times this was the site where the Indians held their sacred ceremony.

Lake Minnewanka Drive. Lake Minnewanka is 9,713 feet. There is a beautiful sheet of water lying in a deep valley between high mountains. The drive to the lake is a very pleasant one, passing the buffalo paddocks, skirting the base of Cascade mountain and passing through Bankhead, a small mining town distinguished by being the place where "briquettes"-a form of fuel much used in the west are manufactured. Mount Inglisbank (9,713 feet) is prominent.
to the right. Beyond, the road follows the gorge of the Cascade river, a capricious, mad-hearted stream which, after cutting a gorge through a veneer of morainal debris and 30 feet of rock, caps its way, guarded by flow into lake Minnewanka, only to flow out again within a few hundred yards.

The lake is what Scherzer calls a "leaf-shaped" lake. It is about 13 miles long, never more than two miles wide and is formed like the letter S. Its greatest beauty lies in the wonderful blue of its waters, a veritable bluebird blue that to many recalls the Mediterranean. Two small chalets provide accommodation for guests and a large launch makes return trips up the lake twice daily. This is one of the most popular fishing spots near Banff, famed as being the home of the "Minnewanka trout," the largest fish found in park waters, specimens of which have been taken weighing as much as forty pounds. Salmon trout, an introduced fish, may also be taken in this lake. Small boats may be obtained at the chalet as well as the services of guides wise in the knowledge of the best fishing spots.

The name "Minnewanka" is from the Stoney Indian word for "Spirit Water," and the legend connected with it says that when the Stonies first came to this district an Indian who was up on the mountain side saw the fins and back of a monster fish swimming in the lake. To get some idea of its measurements he took out his hunting knife and held it out in front of him as a gage. Both the head and tail projected beyond the knife. This would make the fish about a mile long, rivaling the famous sea-serpent. Naturally such an apparition must be due to the presence of spirits. Whether the monster was ever seen again history does not relate. Certain it is the lake has always been associated with stories of big fish. The Cree name for the lake is Muchimantiam-kwa-z'agin, literally "devil's lake," a name formerly in use but changed a number of years ago to the more euphonious Minnewanka.

Geologists believe that through the valley in which lake Minnewanka lies the Bow river once flowed out to the plains by way of the Devil's gap. When the front ranges of the Rockies were uplifted the river took the easier way of the Cascade trough. During the whole glacial period the valley was occupied by a huge glacier which has left the marks of its claws on the mountain walls and which gouged out the rocky basin some 300 feet deep in which the lake now lies. Traces of the tributary glaciers which filled the Bow and Cascade valleys are seen in the thick morainal deposit at the western end.

Lake Minnewanka
Showing "Caldara" rock to the right

The trail along the north side of the lake was once an Indian highway and there is no place in the park so rich in Indian associations as the surrounding district. This was a favourite hunting ground of the Cree and later of the Stonies, although the Indian seems to have regarded the whole region with a kind of superstitious dread. The Devils Head, that lowering summit, black throughout the year, which seems to stand in all directions, always gave him a certain uneasiness. In early days votive offerings consisting of pipes, beaded pouches, tobacco and tomahawks were to be found on its ledges. His Satanic Majesty, someone has said, appears to have had a pre-emption on this region. There is the Devils canyon at the west, the Devils Gap at the east, the Devils Head at the north, and the lake itself was also assigned if not consigned to the devil.

The south side of the lake is guarded by mounts Inglislandie and Girouard with mount Peeches rising up almost directly behind. To the north are mount Costigan and mount Aylmer 10,355 feet, the latter the highest peak in the Banff vicinity and one of the favourite climbs. A little more than half-way down the lake the trail branches off to Aylmer canyon, one of the most striking canyons in the park with walls ranging from 200 to 600 feet deep.

The open meadows near the lower end of the lake were formerly an Indian camping ground and here Sir George Simpson and his party, the first white men to enter the district, rested after passing through the Devil's gap. Among the stories told him at that time by the Indians Sir George relates the following:

"The defile through which we had just passed had been the scene of an exploit highly characteristic of savage life. One of the Cree, whom we saw at Gull lake, had been tracked into the valley, along with his wife and family, by five youths of a hostile tribe. On perceiving the odds that were against him, the man gave himself up for lost, observing to the woman that they could die but once. They had better make up their minds to submit to their present fate without resistance. The wife, however, replied that, as they had but one life to lose, they were more decidedly bound to defend it to the last, even under the most desperate circumstances; adding that, as they were young and by no means pitiful, they had an additional motive for preventing their hearts becoming small. Then, suitting the action to the word, the heroine brought the foremost warrior to the earth with a bullet, while the husband, animated by a mixture of shame and hope, disposed of two more of the enemy with his arrows. The fourth, who had by this time come to pretty close quarters, was ready to take vengeance on the courageous woman with uplifted tomahawk, when he stumbled and fell; and in the twinkling of an eye the dagger of his intended victim was buried in his heart. Dismayed at the death of his four companions, the sole survivor of the assailing party saved himself by flight, after wounding his male opponent by a ball in the arm."
Motor Road West to Johnston Creek. Leaving Banff the road crosses the railway in the vicinity of the station and turning to the left, skirts the beautiful Vermilion lakes with Mount Rundle's familiar raddish-like peak reflected in their calm waters. To the northeast is the massive bulk of Cascade mountain, formerly called Stoney Chief, with Stoney Squaw humbly at his feet and Mount Norquay a little to the left. The road follows the Bow valley, affording glimpses of the river which is here a quiet, tree-bordered stream. On the right the mountains rise bare and lofty forming a jagged knife-like crest, so sharp that it seems to have been cut out of pasteboard. About four and a half miles out the graceful head of Mount Edith appears looking over a shoulder of the Sawback range. Near this point a flock of Big-horn sheep frequently disputes the right of way, affording excellent opportunities for the camera. Across the valley may be seen the rear slopes of Sulphur and the impressive bulk of Mount Bourgeau, one of the three great peaks of the Massive range. Soon on the right Hole-in-the-Wall mountain appears with what seems to be a window in its side.

This is a natural cave about 150 feet long and 50 feet in diameter at its mouth, carved in the mountain 1,500 feet above the valley. A few years ago a Masonic lodge conferred its degrees in this awe-inspiring spot. Soon the striking outline of Castle Mountain looms up ahead dominating the vista to the west in the centre of the valley. Two miles before reaching Johnston creek the road passes through the Hillsdale hills, a beautiful park-like area with low grassy hills, a favourite haunt of deer. Far away to the left on the Vermilion summit, showing between Copper and Pilot mountains, we catch a thrilling glimpse of Mount Pall over on the Continental Divide, with its gleaming helmet of snow. Directly in front is Pilot mountain, so called because its curious thumb-like peak is a landmark for miles in all directions and was the guide of many an early traveller in the days before the railroad. Coming in from the right almost opposite Pilot mountain is Johnston creek.

Along the Motor Highway

Leaving the motor the trail is taken up the canyon, a walk of a little over half a mile. So many persons visit the spot during the season that each year the path is worn away by their feet. Below tumbles the little stream, its waters so crystalline clear that they reveal every pebble on its lawny, sun-flecked bed. The trail crosses and recrosses the canyon by means of flying rustic bridges. In some places the rocky walls are over 100 feet high and less than 20 feet apart. Potholes, high up on the sides, reveal the immense number of years the water has been in action. At the upper end of the canyon the stream plunges in a charming fall into a rocky basin called the Twin pool. Above the entrance to the little natural tunnel which gives access to the pool is a curious bit of nature's carving. It is the head of a dog sculptured in the rock and apparently guarding the cave, the Cerberus of the canyon.

The Banff-California Bee Line. West of Johnston creek the motor highway proceeds to Castle station and, one mile beyond, crosses the Bow river. Turning to the left it ascends the Little Vermilion valley for nine miles to the summit and thence down into British Columbia. The Vermilion pass, which is the lowest in the park, has an altitude of 3,214 feet, with an easy grade on both sides. A climb
of 600 feet is made in the nine miles. Storm mountain on the east and
Boosn on the west guard the pass, with mount Whyper, named in
honour of the hero of the Matterhorn who has also done some climbing
in the Rockies, showing through the gap.

A few miles over the summit there is a fine canyon resembling the
famous canyon of the Maligne in Jasper Park only on a smaller scale. It
is a box canyon of about 300 feet wide and 1000 deep cut down by the
waters of Tokumm creek which drains Prospect valley. A stratum
of marble running through the rock gives the canyon its name, “Marble
Canyon.” At the upper end there is a fine fall of from 60 to 70 feet.

About ten miles of road are open on the western side of the Divide
and the Government is now constructing the 32 miles which will
link up the highway with the road from Golden through the Colum
Lena valley. This is the last link necessary to open the motor road across the
Rockies. As soon as it is completed motorists will be able to get
through to Spokane, Vancouver and California by a direct route. It
will also make possible an extension of the United States National
Park-to-Park Highway from Glacier National Park north to Leth-
National Park—with an extension to lakes Louise and Moraine—and
over the summit to the Columbia valley. From this point the motorist
will have the choice of returning via the Crownest route to Lethbridge
and linking up with one of the through American highways. Either
route constitutes a tour of absolutely unrivalled interest and scenic
beauty and thousands of motorists are impatiently awaiting the com-
pletion of this section.

CASTLE-LAKE LOUISE HIGHWAY.—This extension of about 17
miles from the main highway from Castle was opened at the close of
1920. Leaving Castle the road follows the Bow valley, with the im-
mensely more of the mountain from which it derives its name standing
out as the chief feature of the landscape. Castle mountain practically
named itself. It is a giant fortress with walls a mile high on a founda-
tion 8 miles long, complete with turrets, bastions and battlements.
High on its rocky wall a natural drawbridge, portcullis and gateway
can be clearly seen and it needs little stretch of the imagination to
believe that the mighty doorway might be rolled back at any moment
and a troop of medieval knights and ladies come riding forth. There
is a legend that this mountain is the home of the Chinook wind, the
little blind daughter of the South wind, and that she has been seen
sometimes stealing down from its battlements to the prairies seeking
her lost parent and leaving spring behind her wherever her feet have
tried. An interesting and little explored region containing a vast
amphitheatre of ice lies on the other side of the mountain.

West of Castle is the line of demarcation between the eastern and
younger formation of the Rockies and the western and older. Here the
“writing desk” mountains like Rundle, or the sharply serrated peaks such
as the Sawback, give place to the massive “block” type. The outline
of many of these masses is magnificent. They suggest sublime archi-
tectural creations as if some celestial Michael Angelo or Christopher
Wren had wrought into stone the dreams of a thousand years.

TILEMOUNTAIN.—With each mile the scenery grows more
impressive as the snow peaks draw near. We are approaching the
magnificent entourage of peaks along the Divide known as the Laggan
group, a royal company of peers, the majority over 11,000 feet in
height. Soon between Gothic roofs you catch a glimpse of the blue-
green of glaciers and the gleam of perpetual snow. The Bow valley
widens out to several miles and through its green floor the river “winds
abound and in and out,” rushing down from the Divide apparently in
a terrific hurry to get to the plains. Towering up to the left is sublime
mount Temple (11,626 feet), out-topping every other peak in the park
with the exception of Assiniboine. Seen from the Bow valley it is
difficult to realize its tremendous proportions but perhaps as you look at
it a drifting stratum of cloud high above will float lazily across it,
whirling it to your amazement only shoulder high and leaving its
beautiful cone, whiter by several shades than the vapoury cloud skirt,
suspended in and heavens as if by some magician’s wand. But to
grasp properly the scale of dimensions upon which the Architect of the
Universe has laid out the plan of this structure you must go to the
valley of the Ten Peaks and view at close hand those tremendous walls
carved into huge buttresses, or from the summit of Saddleback look
down the 2,000 foot abyss to its base. As you gaze at its great walls,
over 7,000 feet high, and the wonderful dome of glittering snow which
covers it, the noblest edifice erected by man seems a mere toy. Old
when the temples of Greece and Jerusalem were unthought of, it still stands, seemingly indestructible, a building "not made with hands, eternal in the heavens." Mount Temple was first climbed in 1894. The ascent is not particularly difficult and the panorama it affords is of the most magnificent in the Rockies. Moraine Lake is soon visible to the left and just before reaching Lake Louise station you catch a glimpse of the lofty summits of Victoria and Lefroy. From the station the road ascends via the carriage road to lake Louise itself, "Pearl of the Canadian Rockies." This spot alone would be sufficient lure to bring a motorist many scores of miles, but the road has still other beauties to offer. An extension of nine miles more takes one to the wild and lovely Moraine Lake in the wondrous and impressive valley of the Ten Peaks, and from this point the visitor may explore on foot the neighbouring Paradise and Consolation valleys, two of the loveliest valleys in the park.

**MOUNTAIN CLIMBING**

"What does he know of mountains who only the valley knows."

"It is becoming more apparent every year," says Mr. W. D. Wilcox, the American author and climber, who has done much valuable exploration work in the Rocky Mountains Park, "that this part of the Rockies is not only a great field for Alpine climbing in its strictest meaning, but undoubtedly the most extensive and interesting field presented by any readily accessible range in the world. That men as Collic Stufield, Woolley and Whyper have come over from England several seasons to climb here, that the Appalachian Mountain Club represented by Abbot, who lost his life on mount Lefroy, Fay, Weed, Thompson and others, and expert climbers such as Outram and Eggers, have found climbs that tested their powers to the utmost, or repelled all attacks, even under the leadership of expert Swiss guides, tells much about the real nature of the climbing.

**Trips from Banff**

**CLIMBS AT BANFF.** While Lake Louise is the centre for true Alpine climbing, Banff offers a splendid field for the amateur and a good training ground for those who seek to do more ambitious work.

**TRAIL TRIPS FROM BANFF**

The visitor who leaves without having taken a trail trip has missed one of the chief joys of the Rockies. The traveller by the railway goes away believing that he has seen the parks whereas his touch has passed over their most remote fringes. Range after range of mountains as beautiful as those he has seen from stretch away to the confines of the park, hiding equally wonderful valleys, canyons, lakes and waterfalls. These can be reached only by trail and for those who wish to know the real heart of the mountains you have to go off alone and live and camp among the mountains as everywhere else. "Pan does not come for them in the mountains, as everywhere else." He will seldom consent to show himself to a crowd of tourists. But if you put on the pilgrim's habit of khaki and corduroy trousers and travel to the holy land of the wilderness you are practically certain to find him. There are nearly 700 miles of trails in Rocky Mountains Park, a large part of which radiate from Banff. More than a score of trails may be taken and practically everyone will find good fishing, wonderful scenery and a glimpse into the heart of nature which will
be worth more than many books. A list of licensed guides who will outfit a party for an expedition of any length and supply the necessary equipment may be obtained from the Government Information Bureau, Banff.

**The Mountain Pony.** When one comes to the question of trail trips the mountain pony deserves a word to himself for, if the camel be only means of access to some of the most enchanting districts and let us hope he will long remain so.

The "cayuse," as he is familiarly called, is guaranteed to be "wise to the mountains and fool-proof." Born and bred in the mountains he is wayward, inquisitive and about as far removed from altruistic "own neck that you soon learn to trust him with yours. He can travel along a perilous ledge over a thousand foot precipice with a superb nonchalance that compels respect, admiration and at last confidence. He can climb like a mountain goat and slide down a mountain side like an equestrian toboggan, landing nine times out of ten without a scratch.

**Spray Lakes.** One of the most popular trips from Banff, on account of the splendid fishing it affords is that to the Spray lakes. The trail starts from Banff, following the wooded valley of the Spray to its fork. Here the trail divides, the right branch leading to the foot of the lower Spray lake, the left, over White Man pass between Goat Range and the Three Sisters to the upper and lower lakes. The scenery along the way is fine and the fishing at the lakes excellent. Cutthroat and Dolly Varden trout run to a good size and practically everyone who goes in secures all that the law allows him to take, namely, fifteen fish per day. This trip can be made in from four to five days. The round distance is about 60 miles.

**Kananaskis Lakes.** An extension trip of about 23 miles takes one on to the beautiful Kananaskis lakes. These lakes are situated near the eastern boundary of the park and have long been noted both for their scenery and their fishing. The Kananaskis river unites them halfway between the two there is a lovely waterfall. The upper lake is a beautiful body of water dotted with wooded islands and encircled by high peaks down which hangs the airy veil of a silver waterfall 1,000 feet in height. The lower lake is noted for its big trout, the largest and finest cutthroat in the mountains being obtained here. This trip takes about ten days.
Mount Assiniboine, 11,860 feet high, is the loftiest peak in the Banff park. From the top of Sulphur mountain on a clear day its beautiful pyramidal form may be seen towering shoulder high above the surrounding peaks and losing itself in the clouds. It was named after the Assiniboine tribe of Indians by Dr. Lawson, the distinguished Canadian geologist, who first saw its pleasing form in 1883 from White Man pass. The name Assiniboine in Indian signifies “stone boiler” from the practice of the tribe of cooking by means of hot stones dropped into a vessel of water. But it is less the actual altitude than the difficulty of ascent which has given it its reputation. Its similar formation, the prevalence of sudden storms and the numerous dangers of those who sought to climb it have caused it to be known as the “Canadian Matterhorn,” though it has not such black list of fatalities to its credit as the Swiss peak.

It is believed that it was first visited by white men in 1893. Two years later a party including Walter D. Wilcox, the American author, and other distinguished climbers led by Bill Peyto, a well known Banff guide, made a circuit about the peak and decided that it could not be climbed. In the three years from 1899 to 1901, several parties accompanied by Swiss guides made the attempt only to be defeated. At last on September 3, 1901, Rev. now Sir James Outram, Bart., an enthusiastic English climber, accompanied by two Swiss guides, made the top after six hours and twenty minutes very hard work. In his delightful book, “To the Heart of the Canadian Rockies,” Sir James says:

“One at a time the other two securely anchored—we crawled with the utmost caution to the actual highest point, and peeped over the edge of the huge, overhanging crest, down the sheer wall to a great, shining glacier 6,000 feet or more below.

The view on all sides was remarkable. Perched high upon our isolated pinnacle, fully 1,500 feet above the loftiest peak for many miles around, below us lay, unfolded, range after range of brown-grey mountains patched with snow and sometimes glacier-hung, intersected by deep chasms or broader wooded valleys. A dozen lakes were counted, nesting between the outlying ridges of our peak, which proudly stands upon the backbone of the Continental, and supplies the head-waters of three rivers the Cross, the Simpson and the Spray.

The Ghost River Valley.—This is a trail trip which deserves to be taken much oftener than it is. The motor road is followed to Lake Minnewanka and then the trail leads round the right shore of the lake, passing Aylmer canyon and out through Devils Gap to the Ghost river, a distance of about 17 miles from the lake. The scenery is exceptionally beautiful and the curious feature of it is that the stream itself, like some of the fabled rivers of old, descends for a time to the lower regions, reappearing some 12 miles below. After the spring freshets the bed of the main river is entirely dry, the water following some subterranean channel for almost a dozen miles. The neighbourhood is also rich in fossils.

Several explanations have been given for the name “Ghost river,” but the Indians themselves say it is due to the fact that many years ago there used to be a wild horse running among these hills and though they tried repeatedly they never could catch him. They decided therefore that he could be nothing but a ghost. Those who know the Stoney’s ability as a hunter are inclined to agree.

To Mount Assiniboine.—Another deservedly popular trip is to Mount Assiniboine. This is the most famous peak in the park and the goal of all ambitious climbers. It may be reached by three different trails: by Spray valley and Assiniboine pass, by Healy creek and Simpson pass, or by way of Brewster creek and Assiniboine pass. In 1920 the Alpine Club of Canada held its first Walking Tour Camp at the base of Mount Assiniboine and it is the intention to continue the camp from year to year.

Upper Kananaskis Lake

Mt. Assiniboine
Far away to the northwest beyond mount Ball and the Vermilion range, we could descry many an old friend among the mountains of the railway belt - mount Goodisir and the Otter-tails, mount Stephen and mount Temple, with the giants of the Divide, mounts Victoria, Lefroy, Lhuigasibe, and a host of others, a noble group of striking points and glistening glaciers.

To Simpson Pass.— Another good trip is that to Simpson pass, along the historic trail followed by Sir George Simpson on his journey around the world in 1841. The route leads in a southwesterly direction past the Cave and Basin, along the Bow river to Healy creek and along the creek to the summit of the pass. The altitude of the pass is 6,913 feet, or 2,380 feet higher than Banff. It is a beautiful alpine tableland famous for its myriads of wild flowers. A souvenir of Sir George Simpson’s famous journey was found here a few years ago by Mr. James Brewster, of Banff. This was the letters “C.S., 1841,” carved on one of the trees in the vicinity of the pass. The letters were weather-worn but still plainly decipherable and a section of the tree containing them forms part of Mr. Brewster’s interesting collection at Banff. This trip may be made in three or four days.

To Twin Lakes. A short trip, which is deservedly popular, is to the Twin lakes. These beautiful little mountain tarns lie hidden among the peaks which guard the Continental Divide, in twin rocky basins carved out by the action of prehistoric glaciers. The scenery is wild and beautiful and the fishing is all that can be desired. The trail branches off from the Castle-Vermilion motor road about one mile past the Castle bridge. The trip to the lakes can be made in one day from Banff or three days for the round trip allowing one day for fishing.

The Red Deer Country. A longer trip which requires from three weeks to a month is that up the Cascade trail to the Panther and Red Deer rivers, returning via the Pipestone to Lake Louise. This is a delightful trip through one of the wildest and least known parts of the park. An extension may be made to the beautiful Clearwater lakes at the northern limit of the park.

CHAPTER 4

THE LAKE LOUISE DISTRICT

Lake Louise.— From Lake Louise station (5,032 feet) an electric tram or a good carriage road runs three miles up through the forest tram or a good carriage road runs three miles up through the forest.
The mountain is so placed that for the greater part of the day it catches the full glory of the sun, névé and glacier standing out in a dazzling whiteness which is reflected in the blue lake below.

Lawrence Burpee, in his "Among the Canadian Alps," says of Lake Louise: "Year after year you may revisit lake Louise, and wander about its shores through all kinds of weather; you will never exhaust the variety of its charms. It changes from day to day, from hour to hour from moment to moment. It responds instantly to every subtle change of cloud, wind or atmosphere; it has one glory of the sunshine and another of sunset; it offers you one picture under the brilliant noonday sun, another under heavy clouds, another through driving mists, or rain or snow; but always incomparably beautiful, and always indescribable."

Connoisseurs in beauty place Lake Louise among the seven most perfect landscapes in the world, but when such a height of excellence is reached comparison becomes valueless. The true lover of beauty finds something to admire in almost every landscape but sometimes nature does the thing so perfectly and on so grand a scale that even the dullest have "to pause and looke and wonder," feeling dimly that Being inter-fused. "Beauty itself among beautiful things," which lies at the heart of the world. She has done this at Lake Louise. It has that pre-eminent quality which places it forever among the shrines of the earth.

Lake Louise is about a mile and a quarter long and less than half a mile wide. It was originally called the "Lake of Little Fishes," a name given to it by the Indians with a singular lack of imagination. In 1881 it was named Lake Louise in honour of the Royal Princess, wife of the Marquis of Lorne, then Governor General of Canada. Among the first visitors to its shores was Mr. Walter D. Wilson, whose book "The Canadian Rockies" has done so much to popularize the district. For several years a primitive chalet housed the few guests who visited it, but as the fame of its beauty spread the accommodations were extended, culminating in the erection of the present magnificent Chateau with its 300 rooms. The lake lies in what is known as a "hanging" valley, the bed, ages ago, of a glacier which flowed down into the more deepened valley of the Bow. The basin is of great depth, soundings which have been taken reaching nearly 250 feet. A thick layer of ancient moraine obstructs the valley's outlet, through which a little creek cuts its way. The temperature of the water is extremely cold, reaching only about 20 degrees above freezing point even in the height of summer. The intense colour of the lake is said to be due to its depth and to the presence of minute particles of rock dust carried down from the glacier. In early summer the water is a clear robin's egg blue, but in August and September it takes on wonderful tones of mingled green and blue suggesting the wing of a dragon fly. The character of the enclosing walls also deepens the colour.

The peaks encircling Lake Louise from left to right are: Saddleback 7,893 feet, Fairview 9,000 feet, Lefroy 11,220 feet, Victoria 11,435 feet, White 9,776 feet, Big Beehive 7,430 feet, Niblock 6,794 feet, St. Piran 8,681 feet, Little Beehive 7,700 feet.

Boating, tennis, riding and climbing fill the days at Lake Louise. The days are warm and sunny but even in August the nights are cool enough to make the log fires burning in the large lounges very grateful.
About these the guests gather in the evenings comparing experiences and relating the adventures of the day.

The Lakes in the Clouds. -Rising to the right of the lake is a quaintly shaped peak appropriately called "The Beehive." Looking up from the lake one sees a bit of red fluttering from the summit. It is the flag on the top of the little tea-house, perched like an eagle's nest nearly 1,500 feet above. A good trail leads to the summit and for those who are incapable of making the climb on foot, saddle mountain ponies are waiting to carry even the most inexperienced safely to the top. This is a favourite afternoon's excursion with delicious tea and cakes served above the clouds at the end of it, but to the more energetic this is recommended as one of the finest spots in the park from which to see the sun rise. On the way Mirror lake (6,650 feet) and Lake Agnes (6,875 feet), called by the Indians the "Goat's Looking-Glass" from the herds of wild goats which formerly frequented its shores, are passed. These little lakes are among the best examples of cirque lakes in the mountains and lie actually "above the clouds."

View from the Little Beehive. -The view from this point is beyond description. Says Mr. Wilcox: "I have never seen this glorious ensemble of forests, lakes and snowfields surpassed in an experience on the summits of more than forty peaks and the middle slopes of as many more in the Canadian Rockies." Strange as it may seem, it is only from an eminence that one gains a true appreciation of the magnitude of the mountains and from this height the massive peaks of Fairview and Lefroy opposite enlarge and spread themselves to titanic proportions. Behind rise other giants, huge in outline and crowned with tremendous caps of eternal snow. Beyond lies the broad U-shaped floor of the Bow valley visible from Mount Hector to Castle station for over 30 miles, with the river, a mere twisted thread of silver, embroidering its green. Below, down the shattered cliffs of the Beehive, is little Mirror lake, and nearly 1,000 feet farther down, Lake Louise, a slender sapphire on the floor of the valley, with the Chateau set like a pretty toy at its end. It is a sight almost overpowering in its immensity and one which once seen remains emshrouded in the memory forever.

From Mirror lake a trail of about half a mile also follows round the foot of the Beehive to Lookout point, or one may take another little trail from lake Agnes to the summit of the Beehive or mount St. Piran. From Lookout point there is also a trail of about one mile and a quarter along the mountain side which joins the lower Glacier trail about the right side of the lake.

Climbs at Lake Louise. -Two good climbs which may be made at lake Louise without a guide are to the top of mount Fairview and of Saddle mountain, the two peaks which guard the left side of the lake. A good trail leads to the summit of each and both afford superb views, the former of the Bow valley and Bow range, the latter of Paradise valley, Mount Temple and the fine group of peaks converging at the head of Paradise valley and the valley of the Ten Peaks. Each of these requires a good half-day.

For the experienced alpinist there are at least a score of peaks in the immediate neighbourhood of first-class importance and interest: Victoria, Lefroy, Hunkabee, Temple, Pinnacle, Deltaform are all fine climbing, representing practically every form of rock, ice and snow work, and there are many others to choose from. Full particulars as to routes and distances may be obtained from the Swiss guides who are stationed at the Chateau during the summer.

Moraine Lake and the Valley of the Ten Peaks. - One of the most delightful short drives in the park is that to Moraine lake, nine miles from lake Louise. The return trip can be made by motor in three hours, though it is worth devoting a day at least to this enchanting region. There is a tiny chateau at the lake where luncheon or afternoon tea may be obtained as well as limited sleeping accommodation. This is an excellent centre from which to explore the rich surrounding district but as the list of applicants often exceeds the accommodation, it is well to make reservations in advance.

Leaving Lake Louise the road winds through the forest on a high shelf above the Bow valley, affording fine views of Saddle and Lefroy mountains to the
right and the Bow range, mount Hector and the wide Bow valley to the right. Seen the massive outlines of mount Temple come into view and a little farther on the trail to Paradise valley is seen branching off to the right. Skirting the base of Temple the road swings round to the right and the tremendous semicircle of the Ten Peaks is seen closing the head of the valley. A mile or two more brings one to the lake itself. The combined beauty and majesty of this landscape cannot be put into words. In front lies the lake, exquisitely tinted in colour, its crystalline waters sometimes so still that they reflect every twig above its surface, or shattered into a million facets of light by some passing catspaw of breeze. Across its mingled sapphires and emeralds fall wide diagonal bands of shadow cast by the encircling peaks, shot through by the white gleam of reflected glaciers. The right shore is low with long swamp grass and willows and bright with flowers. The lower end is obstructed by a thick band of morainal deposits left by the ancient glacier which once filled the bed of the lake. To the left, rising abruptly from the water and sweeping round the head of the lake as far as Paradise valley, is a tremendous semicircle of rugged peaks with the Tower of Babel standing as a sort of outpost at their head. The Ten Peaks are named after the ten numerals of the Stone language. From left to right they are: Wa-si, Nume, Yarnni, Tong-sa, Sapta, Shakpi, Sa-gog-ah, Shak-no-ra, Nam-chu-wag and Wi-chim-na. Number 8, the highest among the ten, 11,225 ft., is now known as mount Deltaform from its resemblance to the Greek letter Δ. Between 9 and 10 is the Wenkchemna pass, the route to Prospector valley, Tokumm creek and Vermilion river. Projecting down into the valley is the tongue of Wenkchemna glacier, one of the five principal glaciers of the park.
far below us. Throughout a broad expanse of meadows and open country many streams were to be seen winding, clearly traceable to their various sources in glaciers, springs and melting snowdrifts... This beautiful scene opened before us so suddenly that for a time the cliffs echoed to our exclamations of pleasure, while those who had recently been most depressed in spirit were now most voluble in expressions of delight.” The name Paradise valley seemed the fitting expression of their feelings and it was so christened at once.

The valley is broad and U-shaped, about six miles long, carpeted throughout with flowers and scattered groves of spruce and the beautiful Lyall's larch. On the northwest the lofty sides of Mount Saddle and the black cliffs of Mount Shool, a mile above the valley, rise up like a crenel walk. On the southeast is the great bulk of Mount Temple with its wonderful, glittering cone. To the south is Pinnacle mountain, its summit carved into numerous spires and pinnacles as exquisitely slender as those found on the roofs of a Gothic cathedral. Sweeping across the head of the valley at the base of Mounts Hungabee and Yukness, is the great Horseshoe glacier. To the west is the Mitre, shaped like a bishop’s hat. Through the green floor of the valley run crystal streams, born of the virgin glacier, seemingly “begotten for music and joy” which unite to form Wastach brook. Halfway down the valley the stream tumbles in a beautiful cascade over a series of steps in the underlying strata, forming a natural stairway which is known as the Giant’s Steps. At the base of Mount Temple, like a blue flower dropped from the battlements of heaven, lies little lake Annette, a sheer mile from the lofty summit above. Myriads of wide-eyed anemones and purple asters spangle the meadows and add to the beauty of the picture while a stray chickadee flits among the spruces trilling his cheerful little song. The whole expression is one of unsullied beauty and innocence, “like to the valley, that on the finest day of the happiest springside of the universe, received the first man.”

VICTORIA GLACIER AND ABBOT PASS. A good trail skirting the right side of the lake leads to Victoria glacier. Leaving the trail a scramble of about a mile over thick moraine, brings one to the glacier’s snout, a small ice cave from which a little stream drips to the lake. The glacier itself begins at Abbot pass at the crest of the Divide, flows due north for a mile between Mount Victoria and Lefroy, then turns sharply to the northeast and flows two miles to lake Louise valley between Mounts Aberdeen and Whyte. Its greatest width is half a mile. The height of the enclosing walls gives the express of ice and fallen debris an impression of extreme desolation. Several times in an hour avalanches, which from the Chateau look like white exploding puffballs but which are in reality masses of ice often as large as apartment blocks weighing thousands of tons, break off from the overhanging cliffs and shatter themselves on the glacier’s back. From the frequency of these avalanches the pass between Victoria and Lefroy is known as the “Death Trap” though it can be safely traversed during the early part of the day before thawing begins.

Abbot pass (9,800 feet) was named after Philip Stanley Abbot, a distinguished member of the Appalachian Mountain Club, Boston, the victim of the fatal mountaineering accident on Mount Lefroy in 1896. This is the gateway to Cataract valley, which Sir James Outram declared the most beautiful he had ever approached in interest, variety and charm on the continent of North America yet within the capacity of the ordinary walker.

CATARACT VALLEY AND LAKE O'HARA. This is one of the most delightful trips which can be taken from Lake Louise. While it can be done in less time it is well to allow three days so as to permit of a whole day at the lake. The trail leads from the Chateau over Victoria glacier and Abbot pass to tiny lake Osha, a little tarn which is frozen over eleven months of the year. From this lake Cataract brook drops down through an enchanting fairyland tumbling at last in an exquisite basin into Lake O'Hara.

LAKE O'HARA. Although this little lake is only about three quarters of a mile long and half a mile wide it is one of the most perfect gems in the Rockies and has been declared by John S. Sargent, the famous artist, to be superior to Lake Louise both in colour and setting. The waters are of a remarkable blue colour, so intense and yet so transparent as to suggest nothing but jewels while the curiously shaped peninsulas of the Wiiwix peaks and mount Schaeffer form a superb background.

LAKE McARTHUR. Two miles south of Lake O'Hara, between Mounts Biddle and Schaeffer, is Lake McArthur, named in honour of J. J. McArthur, one of the Government surveyors, who has done wonderful pioneer work in Canadian mountaineering. The desolate and barrenness of this lake present a marked contrast to the enchanting scenery of Lake O'Hara. It is almost entirely surrounded by large rocky walls, down which a white glacier creeps to thrust an icy hand into the cold blue waters frozen for a great part of the year. There is no visible outlet but a swirling motion at one place on the surface indicates the existence of a subterranean channel along which the waters drain.

The return trip can be made either to lake Louise or to Hector following Cataract brook to Wapta lake.
Pipestone Trail.—Lake Louise is the starting point for the north as the great trench valleys running parallel to the ranges permit of an almost straight route. There are two main passes, the Bow and Pipestone. The latter is the highest pass in the park (8,364 feet). It is reached by way of the Pipestone river and from the summit trails lead down the Siffleur river to the main Saskatchewan and the Kootenay plains, the latter in the early days the meeting place for the exchange of furs between the Indian trapper and Hudson Bay agent. This trail also gives access to Mount Molar, a peculiar tooth-shaped mountain (9,914 feet), to Cataract peak (9,444 feet) and to the Clearwater and Fish lakes, both good fishing grounds. Both these passes lie on the northern limit of the Rocky Mountains park as does also the Clearwater river, which rises a few miles east of Pipestone pass, and marks the boundary for the rest of the distance.

Bow Trail.—A few miles west of Lake Louise station the railway leaves the main valley of the Bow following one of its tributaries to within a short distance from the Kickinghorse pass. A trail, however, follows the main valley to the headwaters of the Bow, Bow lake and Bow glacier, and it is one of the most interesting in the park. This is the gateway to the great Freshfield group, including such giants as Mount Bryce (11,660 feet), Mount Athabasca (11,900 feet), Mount Saskatchewan (11,500 feet), Mount Alberta (12,000 feet), Mount Columbia (12,740 feet), as well as to the great Columbia icefield covering over 200 square miles, and the headwaters of the North Saskatchewan. It is also the route for big game expeditions in the rich hunting district in the vicinity of Wileox pass and the headwaters of the Brazee.

Hector Lake.—This beautiful lake near the headwaters of the Bow, a favourite camping ground along the Bow trail, lies at an altitude of 3,694 feet and has an area of about four square miles. The waters are of an exquisite blue and the green verdure of its shores and grand sweep of encircling peaks form a delightful picture.

Turquoise and Margaret Lakes.—Southwest of Hector lake and draining into it are two beautiful turquoise gems, lakes Margaret and Turquoise. They are fed from the Balfour glacier. Lake Margaret is a beautiful little sheet of water, while Turquoise, in the words of the Rev. C. L. Noyes, one of the first to scale Mount Balfour, is a "joy forever."

Bow Lake.—At an altitude of 6,420 feet, and a short distance from the height of land, lies Bow lake, the source of the Bow river, which flows down through the park to become the main source of the South Saskatchewan and so into Hudson bay. The lake is about three miles long, its glacier green waters gleaming against the lofty cliffs which bound the Waputik snowfield from which myriads of glacier tongues precipitate towards the valley. At the head of the lake is the Bow glacier, broken into innumerable scree, the ice cold waters descending through a steep and narrow canyon to the lake.
APPENDIX I

VEGETATION AND WILD LIFE OF THE PARKS

TREES

"We grow on mountains where the glaciers cry,
Infinite sombre masses of us stand
Below the snow peaks which defy the sky,
We know no man, our life is to stand staunch.
Singing our song against the avalanche."

Forests of the Rockies. The forests of the Rockies form one of the most beautiful features of the landscape. For the most part they are coniferous and their myriad tall, straight trunks and pointed spires harmonize perfectly with the towering peaks. The prevailing tree is the Lodgepole pine, an instance of the survival of the fittest, as its hard cones and long-lived seeds enable it to persist in the face of very adverse conditions. The most enduring species climb to about 6,500 to 7,000 feet on the east slope and slightly lower on the west. Along the river flats near Banff are seen Balm of Gilead and the graceful coppery holes of the mountain birch.

The white spruce (Picea canadensis) has three habitats of varying altitude. "In the Bow valley, westward of Banff, it occupies marshy flats associated with willows and sedges. Between 4,500 and 7,000 feet it covers rocky slopes almost bare of soil and clothes the steep sides of the smaller lateral valleys opening out of the Bow valley into the Sawback range and often occurs as a narrow band above the pine forest." It is abundant too, on the floors of deep valleys, such as Healy creek and mount Edith trail.

The Englemann spruce is found as a forest only near timber line. Its heavier outline and yellowish bronze foliage distinguish it even at a distance from the darker green of the white spruce. In July or early August its reddish-purple cones are an exquisite sight.
The balsam fir and the Alpine or Lyall's larch grow only in the higher altitudes, at the last outpost of tree growth. The latter is one of the most beautiful of trees. Like the eastern tamarack, which it resembles, its foliage is deciduous, turning in late September to a bright lemon yellow which, contrasted with the green of the pines and the red of the smaller shrubs, makes the forest in autumn from the valleys look like a brilliant Afghan thrown over the peaks. Specimens of this beautiful tree may be found along the shores of Lake Louise and at the summit of Simpson pass. Scattered individuals of the Douglas fir are found throughout Rocky Mountains Park. A fine specimen may be seen in the grounds of the Administration Building.

It is impossible to look at these mountain forests without a certain feeling of sympathy. They show such hardihood and courage. From the valleys the pines seem like battalions charging up the slopes. They climb up the rocky walls to the heights like armies storming a citadel, clinging desperately to the tiniest foothold, taking advantage of every crack and crevice to get a firmer grip for their roots. And what a constant battle is their existence in these upper solitudes! As they creep higher the cold and winds grow more desperate until they cannot even stand upright but crouch tormented, twisted and tortured but yet unconquered. And always they are threatened by the menace of fire. While this may be caused by lightning, as a rule man is their most dangerous enemy. A half-burnt cigar, a careless match, the coils of a smouldering camp fire, may destroy miles of the green beauty which it has taken so many years to create, leaving only the desolation of blackened rampikes and sometimes destroying even the humus, so that for years no tree will grow.

The Selkirk Forests. The vegetation of the Selkirk is more luxuriant than that of the Rockies and possesses many species not found in the more easterly range. Among the trees are the Giant cedar which often grows to ten feet in diameter; the cottonwood; and two species of hemlock, Tsuga Mertensiana and Tsuga pumila, the latter more graceful with larger cones. The Douglas fir, which grows from 100 to 300 feet high in these mountains, is also found in great abundance.

In the valleys and on the lower slopes the shrubbery and undergrowth is almost tropical in its rankness. Among the shrubs the traveller soon makes the unpleasant acquaintance of one in particular, the Devil's club, "the lion in the way of every man who would blaze a trail through the Selkirk valleys." It grows in the form of a tall cane with wide spreading leaves and a bunch of bright berries at the top. The stalk is covered with villainous looking thorns which break off in the flesh and cause painful fevers and the shrubs grow so closely together that it is practically impossible to force a way through without an ax.
Professor of Geology, University of Toronto, says: "It seems strange to trace the brilliant colours of mountain waters to the effect of glacial mud, yet the cause of the usual intense blue is probably to be found in particles of mud so fine that they remain suspended in the water after the heavier sediments have fallen. If these particles are very minute, they reflect only the shorter, that is the blue rays of light; if a little larger the green waves are reflected also. With these colours, due to the finest mud particles, there are sometimes mingled in shallow water the yellow of sand beds or the richer green of aquatic plants, giving a considerable range of beautiful tints. Some tarns surrounded by muskegs have quite a different set of colours, however, ranging from dark brown to yellowish tones according to the amount of dissolved peaty matter. They suggest amber or zircon, while the other lakes, which are much more common, suggest turquoise, aquamarine or emerald: all gems of rich colour in splendid setting."

FISHING. - Many of these mountain lakes are teeming with fish, including the Cutthroat, the gameiest trout of the mountains, and the Dolly Varden or Bull trout, which run to twelve pounds in weight. Lake Minnewanka is the only lake containing the Lake trout, a fish which runs as high as forty pounds. All the best fishing lakes are being constantly re-stocked from the Government hatchery at Banff, so that the fishing is growing better every year. One or two varieties not native to the park waters have also been introduced, including the Salmon trout which can now be found in lake Minnewanka.

WILD LIFE

"The wild woods things unbeding us."

One of the greatest attractions of the parks, rivalling even the scenery, is the large numbers of wild life. This entire area is a game sanctuary. Within its borders no trap may be set, no gun fired. It is a paradise for wild life, guarded on all sides by flaming swords, but by the eternal vigilance of an administration which loves and is determined to protect the wild life heritage of this beautiful domain. The response which their efforts have met with bears out the truth of Dr. Hornaday's words that "it is men, not the animals, who are wild."

The value of sanctuaries has perhaps nowhere been better established than in the Canadian National parks. Within two years of the enforcement of an adequate protection the wild life began to come back. Bighorn or Rocky Mountain sheep, the Mountain goat, Black bear, moose, elk and Blacktail or Mule deer may now be seen in large numbers and rapidly losing all fear of man.

It is noticeable that the animals follow the roads and trails into the park, and, since the construction of the new motor road into the Kootenay district, large numbers of game have come in from British Columbia. From Exshaw to the Gap is a sheep country; elk and deer are found from the Gap to Banff, and deer, sheep, goat, moose and elk in the country west of Banff. During July and August many of the larger animals keep fairly high up on the slopes to avoid the flies, but with the first touch of autumn, with the exception of the goat and
Another animal, of which the visitor who goes out along the trails is sure to make the acquaintance, is the Hoary marmot (Arctonyx columbianus). His shrill call, "like an intermittent steam whistle," is very startling in the mountain silences and has given him the name of "Whistler." Sometimes, too, you may catch a glimpse of a black bear rambling off through the forest and five or six of these may usually be seen in the evening about the garbage grounds at Banff. The fretful porcupine is a frequent night visitor to camps, where he is apt to carry off any stray bacon or leather articles he can find. Smaller animals include the Pacey's or Lesser marmot, the marten, muskrat, beaver, the pika or little Chief hare—known as the Haymaker from his habit of piling up grass—the squirrels who live among loose rocks at the bottom of the slopes and higher up chipmunks. The Grizzly (Ursus horribilis) is seldom seen in the Rockies but he is a more common denizen of the Selkirks.

**BIRD LIFE**

It is a popular saying that "there are no birds in the mountains," but the fallacy will be speedily disproved by anyone who knows how to use both eyes and ears. The bird life of the parks numbers many species though one needs to be a careful observer, it is true, to find birds in the heavy evergreens. Many species, however, such as the grouse, are more readily seen because they are never disturbed and so have lost their fear of man. In fact there is one bird which practically every visitor who goes out along the roads or trails is sure to see and that is the Franklin's grouse, generally called the "Fool-hen" on
account of his lack of intelligence. He seems to have no sense whatever of danger and will fly down in the most stupid way right in front of your motor car or under your pony's feet. Another bird characteristic of the mountains though not peculiar to them is the Whiskey-jack, or Canada jay, a large grey bird about 11 inches in length whose Indian name “Wiragatchak” has been corrupted into “Whiskey-jack.” Two or three of these birds will sometimes fly along beside you as you drive through the woods, inspecting you from every angle and apparently as much interested in newcomers as any village gossip. Whether it is another instance of giving a bird a bad name or not, the Whiskey-jack is an inveterate thief, so bold that he will even steal pieces of bacon hot out of the pan. The Richardson's grouse, White-tailed ptarmigan, several species of sandpipers, a rare Golden eagle, the ever-cheerful chickadee and the Mountain bluebird, which closely resembles our beautiful Eastern bluebird except that the red in the latter's dress is replaced by blue, are also likely to be seen.

The Continental Divide forms the dividing line between the eastern and the western species but some adventurous western species have crossed the height of land and will be found on the eastern side especially as you approach the divide. Then, too, it must be remembered that different species will be found at different levels and when you have tired of the birds of the valleys it is only necessary to climb to a higher altitude to make a whole new group of bird friends. Sometimes these mountain birds drift down to the lower levels and in the autumn it is a common sight around Banff to see true birds of the heights like the Leucosticte drifting down in flocks from their summit homes to escape the first snowstorms.