Through the Heart of the ROCKIES & SELKIRKS

CANADA'S NATIONAL PARKS

THROUGH *the* HEART *of the* ROCKIES & SELKIRKS

By

M.B.Williams

Published under the direction of
Sir James Lougheed
Minister of the Interior
1921

CONTENTS

25489—1½

LIST OF ILLUSTRATIONS

Foreword

THERE is a legend among the western Indians which relates the story of Ah-ka-noosta, mightiest of hunters, who, in spite of the passing of many winters, grew not old. His brothers, wondering, noticed that each year he disappeared from the tribe and came back always with the vigour and spirit of youth. At last they begged him to tell what secret magic he had discovered. But Ah-ka-noosta declared he had no magic; he had only been away in the mountains, living like the wild goat and the eagle among the high peaks, sleeping in the teepee of the pine forest and drinking the clear waters of the mountain springs. Although Ah-ka-noosta had told them all his secret the others did not believe him and the legend grew up that he had discovered in the mountains a magic lake whose waters were the Elixir of Life.

A good many centuries have passed since the days of Ah-ka-noosta, but we are just beginning to realize he had no secret that everyone may not share. We have only to leave the cares and anxieties of our ordinary occupations behind us and travel to the mountains, live among the great peaks and the forests, or beside the wonderful lakes and waterfalls in the pure life-giving air for a little while, to find out what a magical influence they possess. Getting back to the wilderness is indeed "getting home." "Is not the earth mother to us all?" says "A. E." "Is it not from Nature we draw life? Do we not perish without sunshine and fresh air?" In such surroundings we come again close to that Ancient Mother, Nature, who "alive and miraculous" alone keeps the secret of the perpetual springs of life. That the road should always be open for those who wish to follow Ah-ka-noosta's trail back to increased vitality and happiness, ten thousand square miles of Canadian mountain wilderness have been set aside in the name of the people for the benefit, use and enjoyment of all the sons and daughters of Canada and their friends from afar.

National parks are maintained for all the people—for the ill, that they may be restored, for the well, that they may be fortified and inspired by the sunshine, the fresh air, the beauty and all the other healing, ennobling and inspiring agencies of Nature. They exist in order that every citizen of Canada may satisfy his soul-craving for Nature and Nature's beauty; that he may absorb the poise and restfulness of the forests; that he may steep his soul in the brilliance of the wild flowers and the sublimity of the mountain peaks; that he may develop in himself the buoyancy, the joy, and the activity he sees in the wild animals; that he may stock his brain and his mind as he would a warehouse with the raw material of intelligent optimism, great thoughts, noble ideals; that he may be made better, happier and healthier.

J. B. HARKIN,
Commissioner.

Rocky Mountain Sheep

CHAPTER I

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 moral 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, equalling 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 equalling 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 veils 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 inspector ensures cleanliness and sanitation. A justice of the peace and the Royal Canadian Mounted Police enforce law and order.

PARKS OF THE CENTRAL ROCKIES AND SELKIRKS.—The four parks of the Central Rockies and Selkirks with which this guidebook is concerned cover about 4,000 square miles. They lie along the main line of the Canadian Pacific Railway and, though not continuous throughout, for all tourist purposes form practically one park. Rocky Mountains Park, 2,751 square miles, which stretches from the foothills to the crest of the Rockies, is the largest. Yoho Park, 476 square miles, adjoins it at the Divide and has its western boundary a few miles beyond Leanchoil station. After crossing the wide valley of the Columbia, the railway begins the ascent of the Selkirks and about a mile east of Illecillewaet station enters Glacier Park, 468 square miles, passing out of the park near Griffith station. Mount Revelstoke Park, 95 square miles in area, lies at the summit of mount Revelstoke and is reached by motor from Revelstoke station.

THE ROCKY MOUNTAINS AND SELKIRK RANGES

"Generations as they pass
Worship thee with bended knees;
Their unremaining gods and they
Like a river roll away;
Thou remainest such—alway."

The name "Rocky Mountains" appears to have been of Cree origin. Long before the advent of the white man the Indians of the plains, gazing at that glistening line of peaks which stretched across the West, had called them the "Shining Mountains." Legardeur St. Pierre in his journal, 1752, states that among the Crees they were called "Assin-wati," which is literally stony or rocky mountains. He translated the name into French—"Montagnes des Roches"—and 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 on the east. The Canadian Cordilleras are comprised of three great parallel belts each of which includes several mountain systems and which together make up a mountain area which covers, roughly speaking, about 250,000 square miles.

The Rockies system is the greatest both in area and in the height of its peaks. It extends from the eastern foothills west to what is known as the Rocky Mountain Trench, the great intermontane trough now occupied by the waters of the Kootenay, Columbia, Mistaya, etc., which marks the division between the older mountains to the

west and their comparatively youthful descendents, the Rockies. The Selkirks are one of the three principal ranges of the Interior system. They lie within the bend of the great Columbia which, rising in the Kootenay lakes, flows north not far from the Athabaska pass and then making a wide detour again flows south to the International boundary. Within the curve of this elbow the Selkirks lie like a rocky fortress encircled by a moat. Their length from north to south is about 300 miles.

General Character of Rockies and Selkirks.—Each of the four mentioned parks has a distinct individuality of its own. For while there is a general resemblance throughout all parts of the Canadian Cordilleras, each range and section has its special characteristics and charm of scenery which differentiate it from any other. Between the Rockies and Selkirks this difference is particularly marked. The Selkirks are much the older formation. Their snowcapped summits towered over the western world ages before the Rockies were lifted from the ocean's bed. In the course of centuries their harsh contours and upper summits have been rounded and worn down by the thumb of Time and though probably once the higher range they are now from 1,000 to 2,000 feet lower than their more youthful neighbours. They lack, too, the sharp spires and pinnacles and castellated summits which make the Rockies so picturesque. But, though the Selkirks are inferior in height, they are pre-eminent 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 56·68 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 Selkirks 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 Selkirks

Among the Selkirks
The beautiful Illecillewaet valley from Mt. Cougar, near Glacier, B.C.

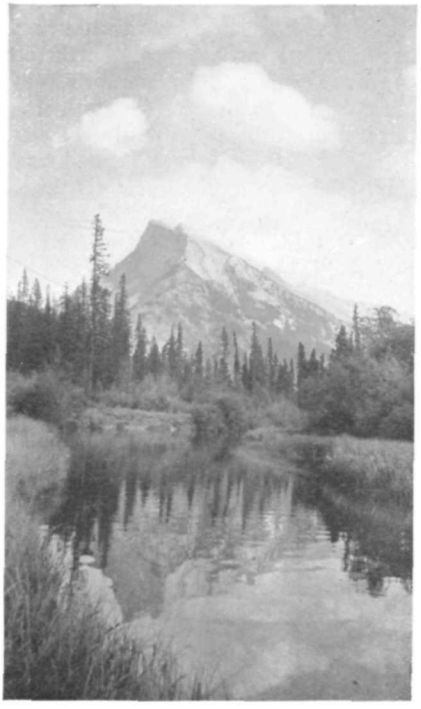
has never been computed but from some of the peaks in Glacier park over one hundred can be counted at once. All the other beautiful phenomena of an alpine world are also present—ice-caves, waterfalls, green valleys and uplands which are veritable gardens of wild flowers.

In the higher Rocky Mountains range there is a much lighter precipitation 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 timber line. On the loftier 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 Selkirks are composed of brilliantly coloured quartzites which add much to the beauty of the rocks.

Formation of the Rockies and Selkirks.—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 many millions of years. In the lines and markings and imprisoned life of the strata he 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 mollusc, the jellyfish and the crustacean were squirming in the Cambrian slime, the place where now the Rockies stand was the floor of an inland sea. Its western limit was a mountain barrier, of which the Selkirks formed a part, which rose beyond what is now the Rocky Mountain Trench; its eastern, probably the shield of the Laurentians east 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, aeon after aeon, while Nature passed from invertebrates to vertebrates, while she peopled the seas with fishes, shaped the toad, the frog and the salamander and grew her great forests of fern, the sedimentary process went on till, layer upon layer, a bed 50,000 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

and shallow bogs were formed in which the huge and ungainly dinosaurs probably wallowed in luxurious content. About these shores 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 30,000,000 years ago to 9,000,000 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" formation, ancient grey limestones sloping gently from the west and breaking off on the eastern side in a steep escarpment.



Mt. Rundle, Banff
A "writing desk" type of mountain

No sooner were the mountains uplifted than the forces of destruction began the work of tearing them down, Nature with her "hammer of wind and graver of frost" splitting up the rock along the lines of striation and carving it into sculptured forms. Water courses formed along the transverse cracks and in the valleys between the parallel ridges.

Then came the glacial period, during which Arctic conditions prevailed over the whole northern half of the continent. Year by year all moisture fell in the form of snow until an ice-cap thousands of feet thick was formed, above which only the higher peaks lifted their frosty heads. The desolation of that period appals the imagination. Not a 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 carving and tearing the rocks as they came. As the loads upon them grew heavier the great trunk glaciers in the valleys had to squirm 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 blew 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-varying 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 calendar 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 those 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, fled 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 Shuswaps 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 the world over. 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 1881. 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.

Stoney Indian

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 star on star."

—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. To 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 in the air so that the strata lie horizontally and the mountains take more 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.

APPROACH TO ROCKY MOUNTAINS PARK

"I break the spirit's cloudy bands,
A wanderer in enchanted lands,
I feel the sun upon my hands;
And far from care and strife
The broad earth bids me forth, I rise
With lifted brow and upward eyes,
I bathe my spirit in blue skies,
And taste the springs of life."

—Archibald Lampman.

Undoubtedly the best way to approach the Rockies for the first time is from the east. The dramatic glimpse of that far-flung line of blue after the vast expanse of level prairie is an experience never to be forgotten. Leaving Calgary, the ancient valley, through which the milky green, glacier-born waters of the Bow tumble down to the plains, is the route for both motor road and railway but the traveller by the former obtains the finer views. From Calgary itself or any of the high hills surrounding it you may see, if it is a clear day, far away to the west, hung among the clouds and quivering in the warm summer air, a long irregular blue line, sharp as a knife blade, with a glistening white crest. It is the Rockies, eighty miles away. Remote, dim, ethereally lovely, they hang among the clouds, unsubstantial as the clouds themselves. Contrasted with the work-a-day scenes about you they seem to belong to another world, like the vision of the celestial city seen by the Dreamer of Patmos. Even so, one thinks, must they have appeared to Pierre de la Verendrye, the first white man to look upon the Rockies in 1743. With what a "wild surmise" must he, who had thought to find the China sea, have looked upon that ragged sky line stretching all across the west. Romance and adventure beckoned to him from the blue distance as they do to us to-day, but owing to the defection of his Indian guides, he had to turn back leaving them unexplored.

With every mile you travel westward the mountains grow bluer, the snowpeaks whiter, the sense of enchantment deeper. Soon you leave behind you the great ranching country and are among the rounded grassy knobs that form the foothills, approaching the great front door of the Rockies. Slightly inclined from east to west rises the massive barrier which for so long shut off communication between the Pacific and the plains. One strangely shaped peak stands out prominently to the right. It is the Devils Head (9,175 feet), one of the guardians of lake Minnewanka. A few miles before you enter the Rocky Mountains Park you come to the Morley Indian reserve, home of the Stonies, whom you may see later in wonderful fête dress at their annual games at Banff.

Now the great grey escarpment of the mountains, 2,500 to 3,000 feet high, rises before you naked as a wall. The eye searches in vain for any opening in the barrier. There are, in fact, three gateways

from the plains: Devils Gap, a few miles to the north, Kananaskis Gap and the Bow Gap, a water gate, through which railway and motor road enter. A sharp turn in the road reveals the opening—

"A mighty cleft within the bosoming hills,
A narrow gateway to the mountain's heart."

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

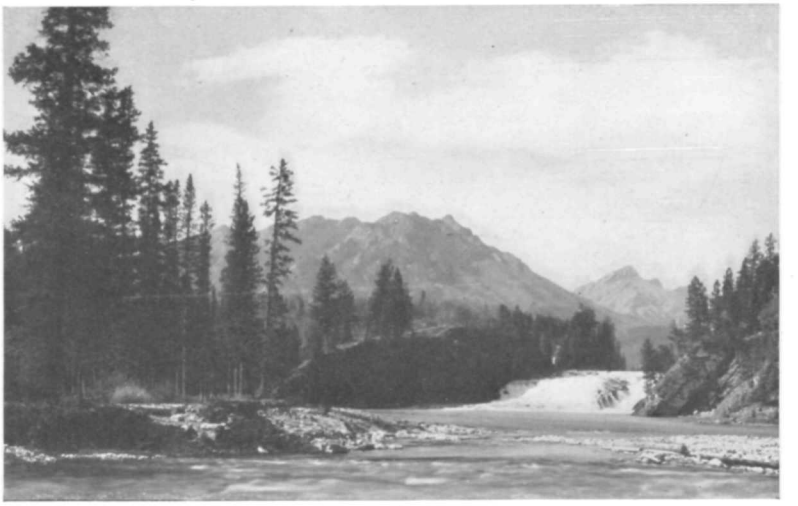
FROM THE GAP TO BANFF.—Up to this point the river has been following a transverse valley cut across the ridges. Now it makes a sharp turn about the base of Grotto mountain and enters the long valley between the Fairholme range to the right and the Kananaskis to the left. The great peaks are already close at hand, Wind mountain (10,100 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 Stoney 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, Inglismaldie (9,685 feet) prominent to the right, and the long serrated spine of mount Rundle (9,665 feet) to the left. A few miles farther on the road passes 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 bolshevists 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.

Hoodoos near Banff

BANFF AND THE BOW VALLEY

"There is a land of dream,
I have trodden its golden ways;
I have seen its amber light
From the heart of its sun-swept days;
I have seen its moonshine white
On its silent waters gleam—
Ah! the strange, sweet, lovely delight of the valleys of Dream."
—Fiona Macleod.

Banff has been synonymous with beauty in the hearts of nature lovers for many years. Few places are so ideally situated. It nestles in the green valley of the Bow in a wide circle of lofty and beautiful mountains. The Bow river, after frisking madly down from Castle in a series of rapids, quiets down a few miles above Banff into the sedatest of streams, widening out into little lakes and flowing with so leisurely a motion that its waters hold in their mirror-like depths another and even more beautiful mountain world. A little past the Bow bridge the river quickens its pace and, breaking into a series of rapids, runs between a narrow rocky gorge for about half a mile, then leaping in a beautiful cloud of spray, it falls 50 feet almost opposite Banff Springs hotel. Turning to the east it sweeps around the base of Tunnel mountain, takes the darker waters of the Spray into its embrace



The Bow River Falls, Banff

and, trailing their mingled volume like a blue scarf about a little wooded island floating frigate-wise in the middle of the stream, it winds eastward to the plains.

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 pearly-grey limestone, the summits often bare of timber for one or two thousand feet, the lower slopes covered with what at a distance appears to be olive-green moss but which on 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 these 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 embodied play-spirit to which we insensibly yield. It is as if we had entered a fairy gateway into an enchanted country. The sordid cares and anxieties we have brought with us from our outside competitive world drop away like Christian's burden at the sight of the Delectable 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 heart's 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 aspiration—fit symbols of his "Babylonian heart."

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 his own way. For the botanist, geologist or student of wild life she offers the opportunities of an unequalled outdoor school. The sportsman finds golf, tennis, boating, 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 turbid with silt carried down by the spring freshets, but as the season wears on this gradually disappears and the water settles to a 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 old idol 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 recumbent figure of the Duke of Wellington may be clearly descried. The wooded slopes of Sulphur mountain wall in the whole valley to the west, while the great mass of mount Rundle closes the arc. This latter mountain, inseparably associated with all memories of Banff, was named in honour of that first missionary to the Stonies, who did so much to raise their standard of living and who is still cherished in their hearts. "Poor he came among us," they say, "and poor he went away, leaving us rich."

THE TOWN ITSELF.—Banff has a permanent population of 1,500, which is increased during the summer to about 6,000. Owing to the fact that it is a government townsite it possesses many advantages not usually found in a town of its size. The streets are broad, well kept and well lighted. It has a fine hospital, three churches, a good school and the best water supply in the Dominion. It has two banks, a newspaper, a theatre and a number of stores. The office of the Superintendent of the park is in the Museum building on Banff avenue at the north end of Bow bridge.

CLIMATE

"It is impossible not to dilate and expand under such skies. One breathes deeply and steps proudly and if he have any of the eagle nature in him it comes to the surface then."—Burroughs.

Banff, with an altitude of 4,486 feet above the sea, enjoys a climate that is in many respects ideal. The rarity and purity of the air has an effect as exhilarating as wine. Exertion of all kinds is easy but walking especially is a delight. There is little moisture and less wind. Electric storms occur infrequently and are not especially severe. There is a short brilliant spring which begins about the first of April, followed by a three months summer full of warm sunshiny days and pleasantly cool nights, with the long northern twilight which lasts till nearly ten o'clock. Although unfortunately few visitors remain for it, autumn is one of the most delightful of all seasons in the mountains, the air with a tang of frost in it, the roads in perfect condition for walking or motoring, the hills gay with the bright yellows of the larches and poplars and the brilliant reds of the shrubs. Winter usually sets in about the middle of November and lasts till the middle of March, but even the winter at Banff is delightful. The mountain world, held like a sleeping beauty in the spell of the Frost King, seems to many lovelier than in summer. Clear sharp frosts followed by chinook winds create a veritable fairyland. Huge snow stalactites hang from the spruce trees; great snow mushrooms, 10 feet across, sprout from the stumps; snow wreaths of exquisite beauty gather in the still air on every bush and tree. The great peaks, snow-clad from head to heels, shine in the dazzling sunlight like the towers of some Celestial City, so that the eye can hardly bear to look upon them. The dry, windless atmosphere and sparkling sunshine make it a joy to be out-of-doors. The delightful description

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 stingingly alive. He feels an enthusiasm of the blood unknown in more temperate climates . . . . You wake in the morning, see the gold 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 equalling 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. Ski-ing, tobogganing, snowshoeing, ski-joring, ice-boating and skating,

Ski-joring, Banff Winter Carnival

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.

ACCOMMODATION

Banff offers hospitality calculated to suit every purse and every taste. In addition to the large Canadian Pacific Railway hotel there are several smaller hotels in the town, comfortably furnished, modern in equipment and reasonable in price.

A large number of furnished cottages are also available during the summer months. These contain all the necessities for housekeeping with the exception of linen. Rents range from about $50 per month up.

The Alpine Club House, the headquarters of the Canadian Alpine Club, is the rendezvous for climbers during the season. Situated halfway up the wooded slopes of Sulphur mountain it commands a beautiful view of the Bow valley, and its friendly atmosphere and excellent chef are gratefully remembered by all who share its hospitality. In addition the club holds each year an annual camp which serves as a base for climbing and walking expeditions. For those who are athletically inclined this is one of the most delightful ways of becoming acquainted with the mountains. Particulars as to rates and membership can be secured from the Secretary of the Club at Banff.

GOVERNMENT CAMPSITE.—The Government campsite at the junction of the Bow and Spray rivers is popular with those who prefer to live under canvas. The camp is connected with the town water supply. A camping permit may be secured from the Superintendent for a merely nominal fee.

THE BANFF SPRINGS HOTEL.—"The finest scenery in the world," says Leslie Stephen, "is improved by a good hotel in the foreground," and the saying is certainly true of the Banff Springs Hotel. It is one of the finest and most luxurious on the continent, equally noted for the comfort of its appointments and the excellence of its cuisine. Its site, a European visitor recently remarked, is "sheer genius." Perched on a sort of eyrie above the Bow valley, it commands one of the most glorious views in the world. Wide tile terraces lead down to two outdoor pools, the inner one of hot sulphur water, the outer a perfect half-circle of fresh water inserted in the bright green of a lawn which drops away into sheer space. Below lies the wonderful Bow valley, magnificently framed between the wooded slopes of Tunnel mountain and the huge wall of mount Rundle, the latter towering up a mile from

Banff Springs Hotel, Bow Valley

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 more strenuous enjoyments it is sufficient to sit on the broad terrace and watch the sun sparkling on 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 mists rising up the sides of mount Rundle and sailing off as clouds into the interminable blue.

Black Bear in the Zoo, Banff

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 handicraft, 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, wolverines, 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, together with its clear and bracing air, make it one of the finest health 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 rheumatic grizzlies had discovered that these warm waters eased the ache in ancient bones. Be that as it may the existence and value of these springs was one of the first things discovered on the opening up of the mountains. In 1880 the attention of surveyors who were locating the line near Banff was attracted by a column of steam rising from the mountain on the opposite side of the Bow valley, now known as Sulphur mountain. Crossing the river by a rude raft of trees, they found that the steam was issuing from a vent in the mountain side large enough to admit the body of a man. A rough ladder of pine poles was hastily constructed and squeezing down the narrow passage the most adventurous descended into the steaming darkness below. A lighted torch revealed a cave about 40 feet across, the floor of which was occupied by a natural pool fed by a subterranean spring which had worn an outlet through a small tunnel at the side.

The discovery of the Cave spring was soon followed by that of the Basin and Upper springs and later by the Kidney and Middle springs. These five springs are all hot springs as distinguished from thermal springs, that is they issue from the ground the year round with a temperature of over 90 degrees F. The chief constituents of the waters are calcium sulphate or gypsum, calcium bicarbonate and magnesium sulphate, while sodium and potassium chlorides and sulphates, strontium and iron bicarbonates occur in smaller quantities. They are thus very similar in composition to the famous springs at Bath, England. Greater interest, however, attaches to the fact that the Banff springs have been found to possess a high degree of radioactivity. As is well known in recent years scientists have begun to consider whether the presence of radium in mineral waters is not the most important factor in their therapeutic value. It was observed that many springs exist which are famous for their healing qualities which yet contain no unusual constituents which might account for their beneficial effects. Artificially prepared radioactive waters on the other hand were found to cause a multiplication of the red blood cells, stimulation of the digestive processes and increased elimination of uric acid. This appeared to give a clue to the possible source of the therapeutic value of many well known springs. Prominent scientists, among whom were Sir James Dewar and Sir William Ramsay, who investigated the historic Bath springs, demonstrated the presence of helium, argon, krypton and zenon, the rare gases of the atmosphere and showed that they were the richest in radium and radium emanation of any spring in Great Britain. An analysis of the Banff springs made in December, 1916, by R. T. Elworthy, B.Sc., of the Department of Mines, demonstrated that the composition of the gases in the Banff waters was practically identical with the Bath springs, although the radioactivity was not quite so high. The Banff springs are among the most important in this respect to be found on this continent.

The total flow of the five chief springs at Banff was found by this test to be about 40,000 gallons per hour, or approximately 1,000,000 gallons per day. As the test was made in winter and the flow is consider-

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

THE UPPER SPRING.—About three miles from Banff by a road which winds up Sulphur mountain through straight lines of lodgepole and jack pine is the Upper spring, situated about 500 feet above the 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 was erected at the springs and one of the interesting sights on the adjacent hillside was the testimonials left by grateful sufferers as to the efficacy of the cure. Sometimes these were a discarded cane or crutch, sometimes a rough board bearing a record in prose or doggerel verse of the patient's healing. Many of these read like the accounts of a miracle. "I had to be carried up to the springs," said one of these, "could not bear even the motion of a carriage. I had not walked for two years, and every movement was an agony. In three weeks after coming here I walked down to Banff, and in five I ran a foot race. Praise God." "I threw away the crutches I had used for four years," said another of these testimonials to the healing of the springs, "after I had been here ten days. I walked with a stick for two weeks, and then threw that away too." "A month after I began to take the baths," says another, "I climbed to the top of Sulphur mountain. For five years before then I had not been able to walk without a crutch." Unfortunately this early sanitarium was burned down several years ago 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 lithia and they are considered to have special therapeutic properties.

THE MIDDLE SPRINGS.—A walk of about two miles up Sulphur mountain from Bow bridge by a good road brings one to the Middle springs. They are well worth a visit if 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 algæ. The vivid greens and purples of the latter give the pools an almost sinister look. The spirits who haunt these subterranean born waters, one feels, must be very different from those which guard the cold and crystalline 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 chief hare of the mountains who is called the Haymaker from his habit of piling up grass to dry for food. With his usual sagacity, he seems to have discovered that this little steam-heated apartment makes a comfortable home.

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 on the continent. The building is of re-enforced concrete faced with native blue limestone, which harmonizes admirably with the surroundings. Two belvideres roofed with red Spanish tile give the necessary note of colour.

The swimming pool, 150 feet long and 35 feet wide, is the largest of its kind in Canada. Dressing rooms capable of accommodating 132 persons extend along the south side of the pool with two wide terraces above, where visitors may promenade and view the pool. The north side is enclosed by massive plate-glass windows which serve to shelter bathers from the wind and at the same time afford charming glimpses of the encircling peaks. For a merely 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 85 degrees F.

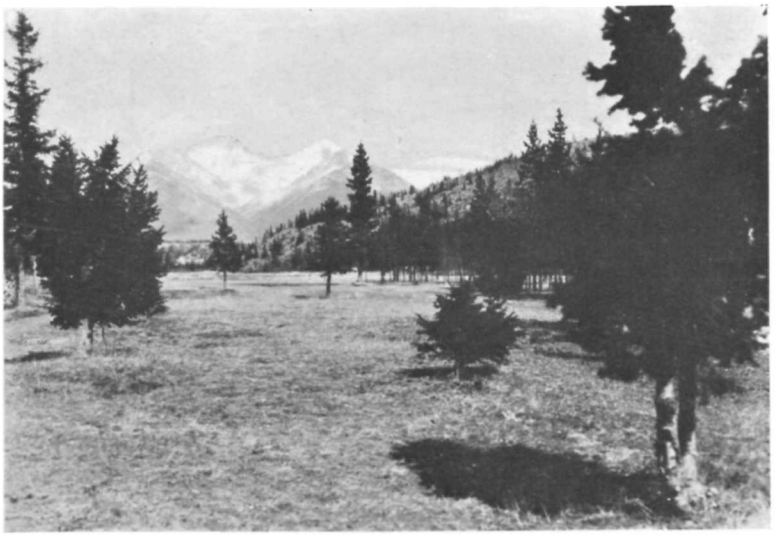
THE CAVE.—The southeastern belvidere forms the entrance to the Cave, the first hot spring discovered at Banff. The natural passageway eroded by the action of the escaping water through which one formerly crawled in half darkness to the cave has been considerably enlarged and is now lighted by electricity. 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 florescent crystals. A pool of greenish white water occupies a great part of the floor and the gases rising from it fill 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 mediæval picture, dimly illuminating the cave and revealing the constant agitation of the pool. Although unstirred by breeze or passing air, its waters are never still. Little waves ceaselessly lap the rocky rim, tiny shudders run 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, freakish bits of natural carving stand out on the walls—faces of gnomes and animals, a head which bears a strong resemblance to Joseph Chamberlain, another which, fitly enough in this sulphurous atmosphere, takes the form of Mephistopheles 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 BASIN SPRING.—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 4,500 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 talus slopes at its base form the resting place of many a lost ball. High up on its ledges 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



On the Banff Golf Links
View from Clubhouse showing snow capped Inglismaldie in distance.

sufficient guarantee of the sportiness 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 mirror-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 pictures of the magnificent entourage of mountains mirroring their great grey

Mt. Rundle and Vermilion Lakes, Banff
"Imaged in a watery glass."

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 cool 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 Seebee. This also affords swift water and sufficient thrills, 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.

A Mountain Pass

CHAPTER 3

WALKS, DRIVES, CLIMBS AND TRAILS ABOUT BANFF

WALKS

"It requires a direct dispensation from Heaven to become a walker."—Thoreau.

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 for 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 mount 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 car 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 unrolling 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 knob 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 two-thirds of the way up and from it a bridle 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 bowl-shaped 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 wrack 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 uptilted 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 trails 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 Fairholme 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 to the summit.

Sundance canyon, the Spray Valley road, lake Minnewanka, the Ghost River valley, and Mount Edith pass are also favourite objectives for walks and there are many more extended trips which can be taken, especially if the party numbers two or three, by the addition of a pack-pony to carry supplies.

DRIVES

Nearly 200 miles of roads radiate from Banff and, with the exception of the Spray Valley road, all of these are open to motors. The Spray road is reserved for the use of horses and riding ponies. It is one of the most delightful spots for a gallop in the park. The road skirts the Spray river among beautiful pines, affording fine views of 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 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 Hoodoos; 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.—Sundance 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 sparkling of the sunshine on the leaping water, while others say that in former times this was the site where the Indians held their sacred festival, the Sun Dance, the ordeal of courage through which the young braves were initiated into the tribe.

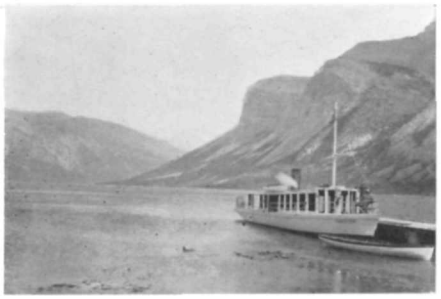
The canyon is a huge crack in the limestone formation through which the stream, half-hidden at times beneath enormous boulders, finds its way, leaping in little cascades from step to step but never attaining the dignity of a waterfall. Ralph Connor, the novelist, who once filled a pastorate at Banff, refers to this spot in one of his well-known books, and the wild charm and lonely beauty of the place make it a favourite resort with all who come to know Banff well.

LAKE MINNEWANKA DRIVE.—Lake Minnewanka (4,800 feet), about eight miles from Banff, 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 as being the place where "briquettes"—a form of fuel much used in the west—are manufactured. Mount Inglismaldie (9,715 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 waywardness by flowing 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 blue-bird 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 guage. Both the head and tail projected beyond the knife. This would make the fish about a mile long, rivalling 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 *Muchimanitou-sa-gi-agun*, literally "devil's lake," a name formerly in use but changed a number of years ago to the more euphonious Minnewanka.



Lake Minnewanka
Showing "Gibraltar" rock to the right

Geologists believe that through the valley in which lake Minnewanka lies the Bow river once flowed out to the plains by way of the Devils 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.

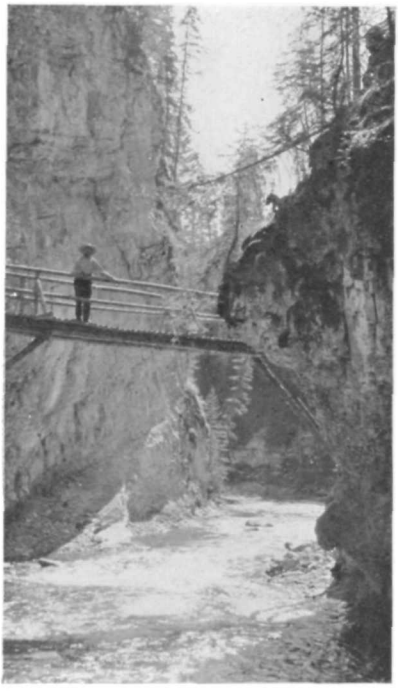
The trail along the north side of the lake was once an Indian highway and there is no place in the park so rich in Indian associations as the surrounding district. This was a favourite hunting ground of the Crees and later of the Stonies, although the Indian seems to have regarded the whole region with a kind of superstitious dread. The Devils Head, that lowering summit, black throughout the year, which seems to gaze 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 Inglismaldie and Girouard with mount Peechee rising up almost directly behind. To the north are mount Costigan and mount Aylmer (10,335 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 Devils 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 Crees, 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, as 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, suiting 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 saddleback mirrored 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 knifelike 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 Bighorn 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 Ball 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.



Johnston Canyon

Leaving the motors 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 tawny, sunflecked bed. The trail crosses and recrosses the canyon by means of flying rustic bridges. In some places the

Along the Motor Highway

"In that clear invigorating mountain air we dined with an appetite that kings might envy and on beds of balsam boughs sank at night into a ten fathom sleep beyond the gift of the most luxurious 'Ostermoor'."

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 5,264 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 Boom on the west guard the pass, with mount Whymper, 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 about 30 feet wide and 100 deep cut down by the waters of Tokumn creek which drains Prospector 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.

Castle Mountain

"The rocky summits split and rent, Form'd turret, dome or battlement."

About ten miles of road are open on the western side of the Divide and the Government is now constructing the 52 miles which will link up the highway with the road from Golden through the Columbia 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 Lethbridge, Macleod and Calgary and thence to Banff, traversing the Banff 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 Crowsnest route to Lethbridge, visiting Waterton Lakes Park on the way, or of going on to Spokane 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 completion 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 immense mass 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 foundation eight 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 mediæval 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 trod. 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 architectural creations as if some celestial Michael Angelo or Christopher Wren had wrought into stone the dreams of a thousand years.

TEMPLE MOUNTAIN.—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 about 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 hard to realize its tremendous proportions but perhaps as you look at it a drifting stratum of cloud high above will float lazily across it, wreathing it to your amazement only shoulder high and leaving its beautiful cone, whiter by several shades than the vapoury cloud scarf, suspended in mid 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 crowns 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 of the myriad far-reaching peaks and interlacing valleys is a truly glorious one.

On the Moraine Lake Drive
"Mt. Temple's gabled top rises 6,000 feet above, ornamented by an exquisite hanging glacier."

The jagged outlines of the Ten Peaks which guard Moraine lake are 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 wonderful 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 such men as Collie, Stutfield, Woolley and Whymper 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."

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. Sulphur, Cascade and Rundle mountains are climbs within the attainment of every vigourous person and require no guide. Mount Norquay affords some good opportunities for rock work and is frequently climbed by members of the Canadian Alpine Club. Mount Edith, which has been likened to the Little Dru, at Montanvert, and mount Louis, two dolomite peaks, are very interesting climbs but too difficult for the amateur. Mount Aylmer, near lake Minnewanka, is the highest peak in the immediate neighbourhood while the finest peak in the park, mount Assiniboine, is only 20 miles to the south.

Nearing the top

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 he has seen the parks whereas he has touched only their merest fringe. Range after range of mountains as beautiful as those he has looked upon 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 can spare the time there is no way of seeing the parks which can compare with a trip of this kind. For if you want to know the real heart of the mountains you have to go off alone and live and camp among them. In the mountains, as everywhere else, "Pan does not come for the calling." 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 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 trips may be taken and practically everyone will yield 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 tents, ponies and other equipment may be obtained from the Government Information Bureau, Banff.

Breaking Camp

"Who hath smelt wood-smoke at twilight? Who hath heard the birch-log burning?
Who is quick to read the voices of the night?
Let him follow with the others, for the young men's feet are turning
To the camps of proved desire and known delight."

—Kipling.

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 the ship of the desert, the pony is the mountain express. He is the 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 a type all by himself, hardy, sure and clean of foot. In disposition he is wayward, inquisitive and about as far removed from altruistic as can be imagined. He has, though, such a supreme regard for his 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.

He will carry his swaying pack burden through a hopeless tangle of forest and fallen logs or swim a mountain stream a few degrees above freezing. His wicked little rolling eye suggests that he may have "ways that are dark and tricks that are vain," but the majority of these ponies are so well broken that they can be ridden by anyone whether he has ever been on a horse before or not. If you happen to belong to the latter class, the guide assures you, "Sure, I've taken out folks that didn't know which end of a horse went first but we ain't ever had any accidents," and you find that you can trust both him and the pony to see that you don't.

The origin of the mountain ponies is shrouded in mystery but it is believed they are Indian breed originally imported from Mexico or South America, probably a cross between the mustang and the horses introduced by the Spaniards in the conquest of Mexico. Smaller than the Indian horse of the prairie they are equally strong, untiring and fleet. Though only fourteen hands high they can carry a man or heavy pack with ease up the steepest of mountain trails and their hardy nature enables them to endure all sorts of weather in winter or summer. One of the most picturesque sights at Banff during the season is the departure of a pack-train for the wilderness. If the expedition is to last several weeks sometimes thirty ponies will be required, the necessary equipment being fastened in huge bundles to the broncho's back by the famous "diamond hitch," an ingenious combination of loops and twists of the rope said to be imported from Mexico, a trick which many outfitters in the early days paid $100 to learn.

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 and half way 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.

Upper Kananaskis Lake

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 white 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.

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 head 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. Dawson, the distinguished Canadian geologist, who first saw its glistening cone in 1885 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 figuration, the prevalence of sudden storms and the numerous defeats of those who sought to climb it have caused it to be known as the "Canadian Matterhorn" though it has no such black list of fatalities to its credit as the Swiss peak.

Mt. Assiniboine

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, "*In 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, nestling between the outlying ridges of our peak, which proudly stands upon the backbone of the Continent, and supplies the head-waters of three rivers—the Cross, the Simpson and the Spray.

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 Goodsir and the Ottertails, mount Stephen and mount Temple, with the giants of the Divide, mounts Victoria, Lefroy, Hungabee, 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 "G.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.

Anemones

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 to the lake itself, more than 600 feet above. The road lies between tall pines, above which you catch glimpses of the noble heads of Temple and Lefroy, and as you wind about you have a good view of the Bow valley and the peaks on its farther side. The air is cool and sweet with balsam and pine; paint-brush and fireweed dot the dark background with colour; a mad-hearted stream leaping from stone to stone in a wild rush to the valley adds the music of tumbling waters. Rounding a corner you catch your first glimpse of Victoria glacier and as you pass through the portico the full glory of the lake bursts upon you. "I have travelled," says Sir James Outram in his charming book, "*In the Heart of the Canadian Rockies*," "in almost every country under heaven yet I have never seen so perfect a picture in the vast gallery of Nature's masterpieces . . . As a gem of composition and colouring it is perhaps unrivalled anywhere. To those who have not seen it words fail to conjure up the glories of that 'haunted lake among the pine-clad mountains, forever smiling upward to the skies'."

It is indeed a canvas painted by Nature in one of her grandest moods. The lake is intense in colour but that colour is never the same for two minutes in succession. It sweeps the whole gamut of green, blue, amethyst and violet, undershot by marvellous tones of green and gold, constantly shifting and altering from moment to moment as if some magician were mixing his colours in its magic bowl.

The majesty of the picture is gained from the great sweep of the curve in front—a line that has been added by man—by the sheer wall of Fairview, the lofty snow-crowned head of Lefroy at the left and the darkly wooded slopes of St. Piran to the right. Between, rising apparently from the verge of the lake, but in reality 4 miles away, is the great bulk of Victoria with its huge benches of snow, some of them 200 feet

deep. 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

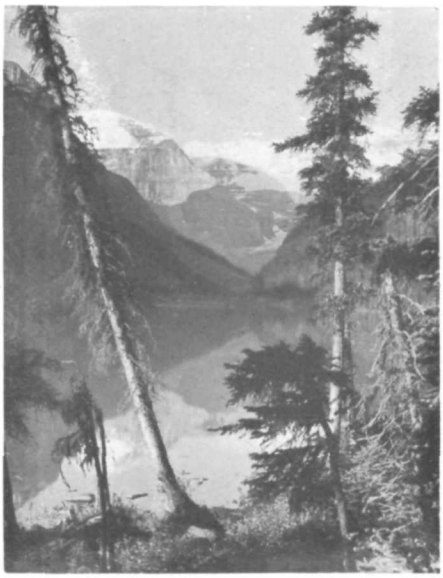
At Lake Louise

Watching the white smoke of avalanches thundering from the glacier over four miles away.

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 look and wonder," feeling dimly that Being interfused, "Beauty itself among beautiful things," which lies at the heart of the world. She has done this at lake Louise. It has that preeminent 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. Wilcox, 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.



Lake Louise

"Its waters are distilled from peacock's tails and paved with mother-of-pearl and into them rush those wild blues that are only mixed in the heart of glaciers."

The peaks encircling lake Louise from left to right are: Saddleback (7,893 feet), Fairview (9,000 feet), Lefroy (11,220 feet), Victoria (11,355 feet), Whyte (9,776 feet), Big Beehive (7,430 feet), Niblock (9,754 feet), St. Piran (8,681 feet), Little Beehive (7,100 feet).

Boating, tennis, riding and climbing fill in 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, sedate 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 it 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."

Lake Agnes—One of the Lakes in 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 enshrined in the memory forever.

From Mirror lake a trail of about half a mile also follows round the face 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, Hungabee, Temple, Pinnacle, Deltaform are all fine climbs, 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 chalet 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.

At Moraine Lake Chalet
"Looking across the wild blue greens of the lake to the Tower of Babel and the silent majesty of the Ten Peaks"

Leaving Lake Louise Chateau 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 left. Soon 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 semi-circle 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

The Ten Peaks

"No scene has ever given me an equal impression of inspiring solitude and rugged grandeur."
Sir Jas. Outram.

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 deposit 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 semi-circle 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 Stoney language. From left to right they are: Wa-zi, Nome, Yamni, Tong-sa, Sapta, Shakpi, Sa-go-ah, Shak-no-rra, Nam-chu-nugh 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 △. Between 9 and 10 is the Wenkchemna pass, the route to Prospector valley, Tokumn creek and Vermilion river. Projecting down into the valley is the tongue of Wenkchemna glacier, one of the five principal glaciers of the park.

The total impression at Moraine lake is one of extreme wildness and loneliness. With the exception of the little chalet there is no mark of man. The landscape retains the same primitive and original beauty which it has worn for 10,000 years. Here, through dateless centuries, the immense forces of nature have waged war against the savage strength of the peaks but though scarred they are still unconquered. Tempest and thunderbolt have shattered and splintered their summits as if by a cyclopean hammer, avalanches have raked wide swaths through the upstruggling forest, and the glaciers have deeply scarred their ancient flanks, but they still lift their lofty foreheads 6,000 feet from the valley into the serene light of heaven, like "a council of eternal and immovable chieftains" seated under the blue teepee of the sky.

The Giant's Stairway
Paradise Valley

CONSOLATION VALLEY.—Opening out to the southeast, hanging above the valley of the Ten Peaks to the left of mount Babel, is Consolation valley, another beautiful little valley which is well worth a visit. A trail north of the Tower of Babel leads to it from Moraine Chalet. Great avalanches have heaped up huge piles of rocky débris at its sides but the floor of the valley is green and smiling, with an abundance of alpine flowers. The glacial stream which drains it widens out midway into twin blue lakes noted for their fishing. At the head of the valley are the fine glacier hung peaks, mount Quadra (10,028 feet), mount Bident (10,109 feet), and mount Fay (10,612 feet).

PARADISE VALLEY.—Paradise valley, one of the loveliest valleys in the park, lies parallel to the valley of the Ten Peaks between mount Temple and the Saddleback and thus nearer lake Louise. It may be reached by a trail branching off from the Moraine Lake carriage road, or by the excellent trail which leads around the east side of lake Louise over the Saddleback. Another more difficult trail crosses Victoria glacier and passing between mount Lefroy and a quaintly shaped peak known as the Mitre, skirts the Horseshoe glacier and so down to the valley.

The valley was discovered in 1894 by a small group of alpinists who, with Lake Louise Chalet as a base, were doing exploration work in the surrounding region. Among these was Mr. Walter D. Wilcox, who gives an interesting account of the incident in his "*Canadian Rockies*." After several hours trying experience on the Lefroy glacier, during which they had endured every kind of hardship and discouragement known to the mountaineer, they reached the summit of the pass, 8,500 feet above sea level, and this enchanting landscape was suddenly revealed. "A most beautiful valley," says Mr. Wilcox, "lay

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 vehement 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 Sheol, a mile above the valley, rise up like a citadel wall. 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 springtide 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 mounts 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 expanse of ice and fallen debris an impression of extreme desolation. Several times 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, a region which Sir James Outram declared "absolutely unapproached in interest, variety and charm on the continent of North America yet within the capacity of the ordinary walker."

To 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

Lake O'Hara
"Apparelled in celestial light,
The glory and the freshness of a dream."

day at the lake. The trail leads from the Chateau over Victoria glacier and Abbot pass to tiny lake Oesa, 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 lacy fall 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 pinnacles of the Wiwaxy 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 desolation and bareness of this lake present a marked contrast to the enchanting scenery of lake O'Hara. It is almost entirely surrounded by bare rocky walls, down which a white glacier creeps to thrust its 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.

Photo by Mrs. Warren
Mt. Columbia

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 (11,686 feet), mount Athabaska (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 to the rich hunting district in the vicinity of Wilcox pass and the headwaters of the Brazeau.

HECTOR LAKE.—This beautiful lake near the headwaters of the Bow, a favourite camping ground along the Bow trail, lies at an altitude of 5,694 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 project towards the valley. At the head of the lake is the Bow glacier, broken into innumerable seracs, the ice cold waters descending through a steep and narrow canyon to the lake.

Virginia Deer

CHAPTER 5

YOHO PARK

At the Great Divide, the summit of the Kickinghorse pass, the traveller passes from Alberta to British Columbia and from the Rocky Mountains Park to Yoho Park. The steep descent of the western slope was formerly made by the railway in a series of thrilling switchbacks from which, if the traveller had sufficient nerve left to look about him, he caught glimpses of some of the most dramatic scenery in the world. The construction of the corkscrew tunnels has deprived the traveller of some of the former thrills but fortunately most of the scenery is still visible. The old roadbed, too, still exists and for anyone who is energetic it is worth while leaving the train at Hector and walking the seven miles down the mountain side to Field. The glimpses he will get of the blue gorge of the Yoho valley to the right, with the great icefields at its head, will certainly awaken a desire to explore a region which is one of the most magnificent in the Rockies.

The little town of Field is the headquarters of Yoho Park. From it radiate roads and trails to numerous beautiful spots. All of these are worth a visit but no traveller to the mountains should miss the Yoho valley. If the visitor has only one day to spend it is possible by leaving Lake Louise on the early morning train to take the trip up the valley, returning to Emerald Lake Chalet for the night and going on by train the next morning. While the tourist who follows this plan will congratulate himself that he has not missed such a delightful experience he is also sure to regret that he had not several days more at his disposal to do justice to the many charms of this unique district.

At present the chief accommodation in Yoho Park is the Yoho camp, near Takakkaw falls, in the Yoho valley, the Emerald Lake Chalet, a charming little mountain inn capable of accommodating about forty guests, and the Bungalow camp at Wapta, all maintained by the Canadian Pacific Railway and each providing excellent accommodation of its kind.

YOHO VALLEY

"A giant valley
Asleep and vast and still and far away."

"Yoho"—an Indian exclamation of wonder and delight—is the fit appellation of Yoho valley. "Wonderful" is the inevitable exclamation which rises to the lips of every traveller who gazes on its grandeur. Since its discovery in 1897 by Jean Habel, the distinguished German Alpinist, this valley has elicited from all travellers enthusiastic expressions of delight. "I am not afraid," said the late R. E. Vernede, the well known author, "of exaggerating the beauties of the Yoho. This valley of enormous trees spiring up from unseen gorges to well nigh unseen heights; of cataracts that fall in foam a thousand feet; of massed innumerable glaciers; this valley into which it seems you could drop all Switzerland and still look down, is not easily overpraised. The difficulty is to praise it adequately."

Seen from the Kickinghorse pass the Yoho is only a narrow cleft between deep wooded walls stretching north to the gleaming whiteness of the Yoho glacier. Who could believe that little strip of blue haze concealed so many wonders! Yet that narrow opening represents a valley 14 miles long and more than a mile deep, walled in by almost perpendicular mountains hung with primeval forest and crowned by enormous snowfields which creep down from the peaks in slow moving rivers of ice or fall in tremendous cataracts of spray.

Switchback, Yoho Valley Drive

THE BURGESS TRAIL.—From Field there are two ways of reaching the valley. We may either take the carriage road along the floor of the valley or the "sky-line trail" up the steep face of mount Burgess, 7,000 feet above. From the latter we get a tremendous, breath-taking panorama, a chaotic sea of peaks crested with the white foam of glaciers stretching away as far as the eye can see. The deep abyss is below, the enormous concave of heaven, immeasurably filled with light, above and through all this crumpled immensity we pass like moving specks, in a universe suddenly enlarged beyond all comprehension.

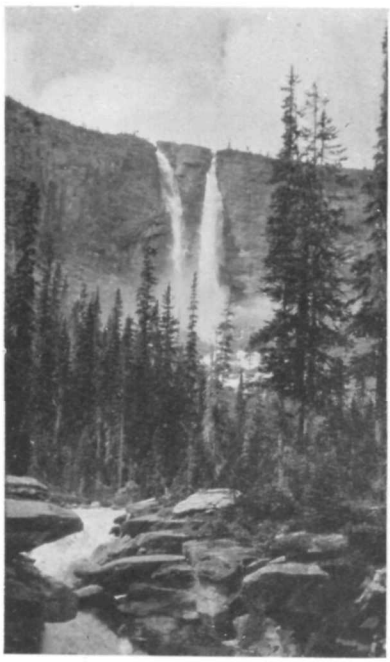
YOHO VALLEY DRIVE.—The valley road winds through a series of pictures which seem trying to surpass each other in beauty and grandeur. Crossing the bridge from Field the road finds a narrow footing between the swirling waters of the Kickinghorse and the base of mount Burgess. Directly ahead are mounts Stephen and Cathedral, towering up against a sky of cobalt. Their great masses close in upon us as if they would shut out the very sky. The sheer tremendousness of the scenery would be overpowering were it not relieved by the great beauty of the vegetation. The lower forest-clad slopes appear to be covered with velvet and along the roadway grow innumerable shrubs and flowers. To the right roars the Kickinghorse in a succession of mad rushes from rock to rock, at one place tumbling down in a series of steps like the keyboards of an organ. Turning sharply to the left we see the "meeting of the waters" where the Yoho joins the Kickinghorse in a beautiful cascade. Each moment the scenery grows wilder and more impressive. We seem to be getting into the very heart of nature. Time has left no impress in these solitudes. It is only within a quarter of a century that they have echoed to the voice of man. The silence of the countless centuries still hangs over them like a palpable thing. We feel like intruders as if at our coming unseen presences had just withdrawn.

Takakkaw Falls, Yoho Valley
"The wild cataract leaps in glory."

Six miles from Field we reach what is called the "Switchback," the most thrilling spot in the drive. The road zigzags up the face of the mountain in a series of sharp turns like the letter Z. The Yoho tumbles far below. The cliffs rise sheer above. The turns require skillful driving either for motor or tally-ho but mountain drivers know their business and there is no fear of accident.

THE TAKAKKAW FALLS.—A few miles farther on a dramatic turn in the road suddenly reveals the Takakkaw, a shining wonder of a waterfall apparently poured out from the very heavens like a libation to the unseen gods of the hills.

Born in the great névé between mount Niles and mount Balfour, 2,500 feet above, the ice-cold torrent twists down a narrow chasm till it gains the edge of the precipice where it takes an initial leap of 150 feet and there gathering itself together falls in a glorious curtain of milky green waters and lacy streamers of spray 1,000 feet down the face of the cliff, to tumble in a final beautiful cascade of 500 feet into the Yoho river.



Twin Falls, Yoho Valley
"A land of streams, some like a downward smoke
Slow dropping veils of thinnest lawn did go."

LAUGHING AND TWIN FALLS.—When we have drunk our fill of the beauty of the falls we turn to the valley behind us where the white tents of Yoho camp invite us to linger and rest. Here a delicious dinner, which tastes doubly delicious to appetites sharpened by the mountain air, awaits us. From Yoho camp we may take pony and push on six miles more up the valley, past two beautiful cataracts — Laughing and Twin falls—to the Yoho glacier. This is an ice world full of intense interest to the scientist or climber with half a dozen great glaciers and thirty square miles of snowfields in the immediate neighbourhood and we are loath to leave it behind. Returning to the camp we may either take the trail six miles over the mountains to Emerald lake or return by way of the road to Field, a distance which will be almost three times as long.

EMERALD LAKE AND DRIVE

SNOWPEAK AVENUE.—The seven mile drive from Field to Emerald lake is worth taking for its own sake. A primeval forest almost impenetrable with its tangle of fallen tree trunks is all about us through which now and then we catch the gleam of a white peak. About two miles from Field there is a lovely bit of road known as Snowpeak avenue. The road lies between two tall lines of pines which stand straight at either side but do not overarch so that the intense blue of the sky shows between. At either end of the vista whether going or coming there is a beautiful snowpeak—Emerald peak on the outward journey and Goodsir on the return. The restfulness of this road through the scents and silence of the forest is its chief charm. Other drives may be more spectacular but few will be remembered with so much pleasure.

A diversion of about two miles may be made either going or returning so as to include the Natural bridge.

EMERALD LAKE.—Emerald lake owes its beauty to the peculiar colour of its waters and the charm of its thickly wooded shores. At Moraine lake and lake Louise one shore at least is formed of bare and

rugged rock, but Emerald lake lies in a jade green forest which completely clothes all its shores. Its waters are of a prevailing emerald in colour. In their crystalline depths it is said you may count twenty shades of green at one time but never one of blue. Mount Burgess lifts its rugged peak like an enormous tower at the right and the great bulk of mount Wapta rises far above timber line in front but the lower slopes are green and velvety in the hottest summer, lending the spot

Emerald Lake, Yoho Park

"Green as an emerald in a jade green ring of forest."

an air of sylvan loveliness. Far away to the left you catch a glimpse of the President glacier and the interesting group of peaks to the west of the Yoho valley. High among the trees is the charming little chalet maintained by the Canadian Pacific Railway. The homelike atmosphere and excellent cuisine—Martha's Maryland chicken and browned potatoes linger deliciously in the memory—make this little inn a favourite resting place in the mountains. One may pass days here absorbing the silence and beauty of the region, exploring the shores of the lake in a little boat or fishing the best pools for gamey trout. Trails lead to mounts Burgess and Wapta, both of which make excellent climbs—the latter affording a wonderful view of the Yoho valley—or around the left side of the lake and over the Yoho pass to the Takakkaw falls. In the neighbouring woods there are numbers of wild flowers including some of the loveliest orchids in the mountains.

KICKINGHORSE RIVER AND NATURAL BRIDGE.—The Kickinghorse river, though it derives its name from an accident which Dr. James Hector, the discoverer of the pass, sustained through a kick from his horse, aptly deserves the appellation. It is a wild broncho of a river, constantly throwing its rider in the shape of banks and bridges. Its tossing mane is yellow with sediment carried down from the heights, which accumulates in such masses that the river is continually changing its course. About two and a half miles west of Field it reaches what is known as the Natural bridge, a rocky barrier which projects across the whole bed of the stream. Brought up against this sudden check the river rears its head as if to look about it and, discovering a narrow opening in the barrier, it flings the whole force of its volume through the contracted orifice with a great lashing of waters and upthrown clouds of spray. It seems probable that the river once flowed over this rocky barrier but some few thousand years ago it may have dropped below its level, finding some natural crack in the strata which it has

The Natural Bridge

Valley of the Kickinghorse, Yoho Park

"Where the quiet coloured end of evening smiles
Miles and miles."

widened into the present opening. A little farther down, the river enters a narrow canyon where it tears its way through a series of fine cascades to the Kickinghorse falls.

FIELD.—At Field we may climb mount Stephen (which derives its name from Lord Mount Stephen, one of the first directors of the Canadian Pacific Railway, and which bears the reputation of being the most climbed peak in the Rockies), explore the great fossil bed, 150 feet thick—ossuary of millions of trilobites which once swarmed in a vanished sea—2,200 feet up on its north side, or climb up to the summit of its curious sugar-loaf head. Or we may take the trail to lovely lakes O'Hara and McArthur and visit lake Oesa and the upper valley of Cataract brook. Returning to Field the wide valley of the Ottertail with its glorious views of the Van Horne range invites us, or if we are scientifically minded we may go on to Leanchoil and explore the interesting region of the Ice River valley, the only igneous outcrop in the park, where the blue sodalite, somewhat resembling lapsis lazuli, is found. This is a beautiful but little known section guarded by three fine peaks, mount Vaux (10,881 feet), Chancellor peak (10,751 feet) and mount Goodsir (11,676 feet), the last-named the highest peak in Yoho park.

Lynx

Marmot

CHAPTER 6

GLACIER PARK AND THE SELKIRKS

Crossing the great Rocky Mountain trench occupied by the Columbia river, the visitor begins the ascent of the Selkirks and a few miles west of Griffith station enters Glacier park, a reserve of 486 square miles.

"The Selkirk Mountains", says Elizabeth Parker, in the delightful *Guide to the Selkirk Mountains*, "have their own lovers to whom no snows are so white as the Selkirk snows and no clouds so radiant, no forests so darkly beautifully green. There the cedar, hemlock, fir, and spruce, grow together in the rich valleys, climbing in serried ranks to meet the blue ice, softening every sharp outline to a gentle undulation. There hang myriads of glaciers festooning the high mountain walls, and there the curved mounds and cornices of driven snow beautify the harsh mountain faces. And, there, if the pilgrim only travels far enough, whole summits are white against the blue sky, gray rock scarcely showing above the green forest. For, from the railway and the hotel, you see but a strip of the Selkirks. It is the place to absorb the phenomena of alpine beauty in forest and snow; the place to study the phenomena of alpine structures and alpine vegetation. Nor is that rainbow-edged phenomenon, the 'Spectre of the Brocken,' wanting."

Every tourist who can afford the time should plan for a week at least at Glacier House. He will find ample things to fill each day and at the end of it he will probably feel that it has been one of the most memorable weeks of his life.

GLACIER HOUSE.—Glacier House holds a unique place in the memory of those who visit it. While not so luxurious as the hotels at Banff or Lake Louise, its homelike, hospitable atmosphere and excellent service make it a delightful resting place. In the green valley of the Illecillewaet, which derives its musical name from the Indian word meaning "swift water," it has a magnificent setting of forest and peak. The great grey head of Sir Donald (10,808 feet) rises to the east, with

Eagle and Uto peaks to the north. Close at hand is a beautiful cascade 1,200 feet high which tumbles from small glaciers below mount Avalanche. "Throughout the stillness of the summer night," says Mr. A. O. Wheeler, "music fills the glen. 'A cataract blowing its trumpet from the steep' perfectly illustrating Wordsworth's familiar line. Once a lady tourist of uncertain age and temper, complaining querulously to the manager of the hotel, that the fountain in the grounds disturbed her sleep and must be turned off, he assured her that it was always turned off at night. 'I shall try to-night,' he added sympathetically, 'to turn off the Cascade, the real disturber of your dreams'."

The Illecillewaet Glacier

About 200 yards from Glacier House is what is known as the "meeting of the waters," where the tempestuous Illecillewaet river and Asulkan brook rush together in a turbulent embrace which scatters clouds of crystal spray.

THE ILLECILLEWAET GLACIER.—But the chief centre of interest at Glacier House is the glacier itself and one of the best places from which to view it is from the hotel balconies. Less than two miles away, it seems much nearer, its gleaming whiteness framed in the dark fir forest against a sky of deepest azure, forming a picture so lovely that the eye is caught and held by it continually as if it were some magnificent drop scene in a theatre.

The glacier falls from the great Illecillewaet snowfield, 10 square miles in area, which lies along the eastern escarpment of the Selkirks and which also feeds the Geikie glacier to the southwest. From the crest of the snowfield to the base of the Illecillewaet glacier there is a drop of 3,600 feet. Markings with red paint on the adjacent walls show the rate at which the glacier is receding. The average total precipitation at Glacier House is 56·68 inches, of which 77 per cent, or about 36 feet, falls as snow. As much as 50 feet of snow has been known to fall in a single year, adding annually enormous masses to the snowfield and yet the glacier is melting more rapidly than it grows. Records which have been kept since 1887 show that it is retreating about 33·2 feet per annum. One of the good points from which to view the glacier is Cascade Summer House, directly above the falls. The trail to this point through the forest and thence to Avalanche basin makes a delightful morning's excursion which can be taken either on foot or pony back.

OVERLOOK ON MOUNT ABBOTT.—Another interesting trip is to the Overlook on mount Abbott (7,950 feet). From this vantage point we can look down on the enormous tongue of the ice monster, with its deep furrows and cracks and fissures and its tumbled mass of moraine. On the way we pass Marion lake, a sombre little mountain tarn called after his daughter by Mr. W. Spotswood Green, a pioneer explorer, whose book "*Among the Selkirk Glaciers*" is one of the most interesting on this region. The climb to the summit is somewhat arduous but the visitor is well repaid for the exertion by the remarkable bird's-eye view it affords.

Road to Nakium Caves

THE ASULKAN VALLEY.—"The chief gem of the district," says Sir James Outram, "is the Asulkan valley, named after the mountain goats which used to haunt its solitudes, a truly exquisite spot richly wooded, with fine waterfalls and sparkling streams and a grand entourage of glacier and peak." A trail branches off from the main trail to the glacier about a quarter of a mile from the hotel and winds for about four miles through the gloom of an almost tropical forest. "Frequently through the openings in the trees the sable walls of mount Abbott, the Rampart, the Dome and the snowy heights of Castor and Pollux come into view overhanging the valley on the west, their snows showing white against the azure sky, in clear and cloudless sunshine. These snows are the fountain-head of a series of cataracts in sight at intervals, that fall in silvery spray down the mountain side and over the high precipitous ledges to the streams below. In one place seven may be counted, variously named—'Asulkan falls,' 'Seven falls,' 'Menotah falls.' It is an enchanted valley. 'The cataracts blow their trumpets from the steep,' and the sunlight is the light of no common day. The gloom and the glory of mountain beauty meet in the valley. This feeling is intensified by the continuous sound of rushing waters, now faint when the path enters the woods, now filling the air as the torrent sweeps by at your feet."

Numbers of hoary marmots or Whistlers are found at the head of the valley and the curious phenomenon known as "red snow," a form of algæ (protococcus nivalis), is frequently to be seen on the glacier.

NAKIMU CAVES.—From Glacier House a good carriage road leads to the Nakimu caves, seven miles distant in the Cougar valley. The word Nakimu is Indian for "spirit's noises" and the spirits indeed seem to have some special connection with this valley. Mount Cheops, called after the Great Pyramid, tomb of the illustrious Pharaoh, would seem to be in the secrets of the "Above Persons," the spirits who make the rain. A cloud above its head is a sure indication of a shower and woe to the person who disregards the warning for he is certain to meet a drenching.

Seracs, Illecillewaet Glacier

Half-way down the valley, Cougar brook, which has come cascading gaily through flowery uplands, is suddenly snatched down into the bowels of the mountains. About 450 feet farther it reappears, flows for a little in the light of day, only to disappear again into the subterranean darkness. Three times in the course of a mile is it caught down in this way and finally the waters disappear forever by an underground channel. Wierd, rumbling noises and the sound of rushing waters can be heard from its underground passageways. It is no wonder that the Indians thought them the abode of the "Under Water Persons" perhaps even of "Ground Man" who typified the power of the earth.

The caves are a series of chambers formed partly by seismic disturbance and partly by the action of the water, connected at various levels by narrow passageways along which the stream rushes in almost total darkness. The names of the chambers give an indication of their character,—Witches' Ballroom, the Auditorium, the White Grotto, the Marbleway, the Judgment Hall, the Bridal Chamber and many others. A traverse of the caves is a thrilling experience but those who do not care to attempt the whole journey will find that a descent into the first series will give them a very good idea of the formation of this curious phenomenon of nature.

ROGERS AND BALOO PASSES.—A delightful day's excursion by pony is to take the trail over Rogers pass, through the woods of Bear Creek valley, over the wind blown summit of Baloo pass, returning via Cougar valley and the caves. For varied and beautiful scenery this trip can scarcely be surpassed.

CLIMBING IN GLACIER PARK.—Glacier House is a favourite centre for alpine climbing and Swiss guides are stationed there throughout the season. Rogers peak (10,536 feet) is a good climb for beginners, as also is mount Sir Donald, called after the late Lord Strathcona. Mr. A. O. Wheeler writes of the view from the latter: "From its height and isolated position, the peak of Sir Donald commands extensive and superb views in every direction. Indeed to ascend Sir Donald is only to 'taste blood' so many glaciers and snowy ranges of the Selkirks are spread out before the climber." Many of the peaks in these ranges have not been climbed and whole regions are still waiting for the explorer.

Snow Lilies

A Ski-jumper

CHAPTER 7

MOUNT REVELSTOKE PARK

The greeting of Mount Revelstoke Park may well be "the top of the world to you." It is a mountain-top park, wholly situated above the clouds, probably the highest national park in the world. It covers an area of about 100 square miles on the wide plateau which forms the summit of mount Revelstoke and, on account of its altitude, has an individuality all its own. The general character of the landscape is that of many high passes—a wide park-like plateau, gently rolling, covered with green herbage and scattered groves of balsam and fir. Everywhere, growing in such profusion that you may wade through them to the knees, are millions and millions of wild flowers—violets, daisies, lilies, marigolds, lupins and the red mountain heather—veritable gardens of flowers spangling the meadows with colour, blue and white and gold and rose. Near the summit there is a large cleft in the rock 100 feet long and 20 feet wide which has been called the "Ice-box," because even in the height of summer it holds almost 20 feet of snow. Across a small valley towards the Clach-na-Coodin range are three charming little lakes of translucent emerald—Eva, Ella and Millar. The park abounds in fish and game. The wild grouse start up at the sound of your coming, caribou hob-nob with your grazing pony and if you are very quiet you are more than likely to catch a glimpse of a black bear hobbling off through the trees.

A Winter Sports Resort.—Mount Revelstoke Park is widely known for its winter sports. It has one of the finest ski-jumps in America, considered by experts to equal the famous Blumendal hill in Norway. The Canadian amateur record is held by a Revelstoke man, who this year surpassed his own former record jump of

185 feet by making a standing jump of 204 feet on this hill. Several jumps of over 200 feet were made by professionals, one contestant making a jump of 227 feet, which is the record for the world for 1921. A unique feature is that owing to the altitude these sports can be carried on late into the season. A few years ago the ski competitions were held on the 24th of May.

Lake Eva, Mt. Revelstoke Park

"Coloured like thick opals and moonstones, the tall slim firs growing at the bottom as if they were real trees."

THE MOUNT REVELSTOKE MOTOR ROAD.—Mount Revelstoke Park is only waiting for the completion of the motor road which is now within two miles of the summit. Already it is the most thrilling drive in the mountains. It might well be called the Royal Drive, for every Royal party which has toured Canada since the inception of the road has asked that this drive should be included in the itinerary. Mementoes of these visits are retained in two milestones and a stone tablet, each of them marking the spot to which the road was completed at the date of the Royal visit. The first post was erected by His Royal Highness, Prince Arthur of Connaught, the second by his father, H.R.H. the Duke of Connaught, then Governor General of Canada, the third, a tablet dedicating the park to the public, was unveiled by His Royal Highness, the Prince of Wales in September, 1919, in the course of his western tour.

DRIVE UP MOUNT REVELSTOKE.—Arriving at Revelstoke by the afternoon train you find that the drive can be taken by motor in three hours allowing ample time to be back to the hotel for dinner. Leaving the little town behind you, you start to climb up the slopes of beautiful mount Revelstoke. The road ascends by an easy grade—seven per cent is the average—through virgin forest thick with underbrush or along the verge of a rocky ledge dropping sheer away below. Each moment the view grows more impressive. Below lies the valley, flat as a floor, with the Illecillewaet coming in from the left, the Columbia from the right and the little town set between. To the west can be seen the narrow cleft in the range, Eagle pass, through which the railway crosses to the Gold range. The glorious old snow bonnet of mount Begbie (8,946 feet)—the monarch of the range—stands out prominently

in front. To the southeast is the snow capped line of the Selkirks, shining in the afternoon light. The road is now (1921) within a little over two miles from the summit and the panorama which its present termination affords is worth coming many miles to see. We are tempted to linger here gazing at the little mountain town far below us, encircled by its gleaming ribbons of silver and set about by a circle of mighty peaks, but the level light reminds us that it is time to leave.

As we turn downwards the September sun is just sinking behind the Gold range. A magnifieent shaft of light strikes through the narrow gorge of Eagle pass, falling like a searchlight across the valley. Summit lake at the top of the pass shines like silver. A film of blue haze, like a veil of chiffon or the gauzy drop screen of a theatre, is drawn across the lower slopes. One after another the peaks light up, their cold immensities transformed as if at the touch of an unseen wand into airiest rose. Regal old Begbie is crowned with gold and hung with royal purples. Overhead float diaphanous cloud shapes like rosy foam blown from the tops of the peaks. For a few minutes the transfiguration holds while

> "Royal the pageant closes
> Lit by the last of the sun,
> Opal and ashes of roses,
> Cinnamon, umber and dun."

Then the light fades. The peaks die out, one by one. The show is over. Night draws the darkness across the amphitheatre of the valley. The great mountains—the leading actors—withdraw themselves even from our admiration into the upper solitudes to hold converse with their true compeers—the stars. It is time to go home. We turn down to the valley with an infinite regret. To-morrow we must go back to the work-a-day life of the cities. It is hard to say goodbye to the serenity and peace of this beautiful mountain world. A squirrel scampers across our path with some food which he has gathered for his winter store. Well, we have been busy too. Like him we have laid up a rich harvest for the long winter months—a harvest of health, of new inspiration, fresh vision and unforgettable memories.

Squirrel

Young Robin

APPENDIX 1

VEGETATION AND WILD LIFE OF THE PARKS

TREES

"We grow on mountains where the glaciers cry,
Infinite sombre armies of us stand
Below the snow peaks which defy the sky.
We know no man, our life is to stand stanch,
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 pointing 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 Gileads and the graceful coppery boles 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 coals 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 Selkirks 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 palloniana, 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 festers and the shrubs grow so closely together that it is practically impossible to force a way through without an axe.

FLOWERS

"A garland will I weave of mountain flowers
Pink alpine clover, pale anemones
And saxifrages fed by flying showers."
—John Addington Symonds.

To the lover of nature the wild flowers of the parks will be a constant source of delight. Strange as it may seem the flora of the higher altitudes is among the most beautiful in the world. Over 500 varieties have been identified in the Rockies, and their colour, fragrance and delicate loveliness add the last touch of enchantment to the region. While they grow in rich profusion in the valleys and on the lower slopes, it is on the alpine meadows above timber line where even the stubborn little pines and spruces have been beaten back by the cold, that they are to be found at their finest. High tablelands like Simpson pass (7,200 feet) in July are veritable seas of colour, waves of blue and rose and white and yellow and vivid green breaking against the stern grey of the rocks. Higher still at the verge of perpetual snow, the "dauntless flag of the flowers" will still be found waving, crowding their whole life-cycle into a brief season of perhaps six weeks. In the Bow valley spring comes about the end of April and a few days later the frail anemone is pushing its head through the melting snow. Soon there are flowers blowing everywhere in the lower valleys and as the snow retreats the gay floral procession follows, coming so close upon its heels that you may sometimes stand with one foot upon the snow, the other touching living flowers. "On the lower levels," says Mrs. Henshaw, in her delightful *Wild flowers of the North American Mountains*, "white-flowered, scarlet-fruited shrubs mingle with the Wintergreens, Larkspurs, Violets and

White Heath
"Lone flowers hemmed in with snows and white as they."

Primula
"These little dream flowers found in spring."

Columbines; flaming Indian Paint-brushes, Gentians, Queencups and Purple Vetches cover many a slope; here a valley is covered with yellow Lilies, Gaillardias, Arnicas and Goldenrods—a glorious Field-of-the-Cloth-of-Gold—and there some mossy plateau is gay with arctic-alpine Androsaces, Stonecups, Everlastings and the trailing vines of the sweet-scented Northern Twin flowers. On the high passes above timber line grow the White Heath and the red Mountain Heather, the latter first cousin of its famous Scotch namesake, covering the slopes with its "rose red robe." Higher still grow the Saxifrages, the White Dryas, the frail Everlastings, "pearly, pink tipped and pale."

MOUNTAIN LAKES

> "A lake is the landscape's most beautiful and expressive feature. It is earth's eye looking into which the beholder measures the depth of his own nature."
>
> —Thoreau.

One of the delights of the Rockies is the great number of exquisitely tinted lakes. They are of many sizes, ranging from a few yards to several miles in length, but from the tiniest tarn to a sheet of water like lake Minnewanka, they are distinguished by a brilliance and purity of colour which is truly gemlike. Sometimes, like lake Agnes, they will lie high up in a bare little rocky pocket chiselled out by a hanging glacier. Oftener, especially in the lower and older valleys, they will be fringed with the slim spires of spruces or firs which are reflected in their crystalline depths. A hanging valley, the outlet of which has been obstructed by a moraine, nearly always contains one or more beautiful little lakes, and they are also found on many of the high passes.

The wonderful colour of the water always arouses interest and the question naturally arises what is its cause. This is generally conceded to be due to the presence of glacial deposit. Dr. A. P. Coleman

Mirror Lake

"Blue, blue, as if the sky let fall, a flower from its cerulean wall."

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 ziroon, 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 gamiest 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 restocked 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 wood things unheeding 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 not 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 that 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

grizzly, they begin to drift back to the lower valleys and they may then be seen in large numbers. During the winter deer wander all through the streets of Banff, poking their noses about the back doors of the residents, looking for scraps of food or that irresistible deer delicacy—potato peelings. It is a common but always pretty sight to see them feeding from the hands of children. Even in the summer a tourist who rises early may see a deer below his window or he may come upon one in any solitary walk about Banff. If he goes out a few miles along

Bighorn sheep along the Motor Highway

the motor road west he is sure to see some Bighorn sheep (Ovis canadensis) and if he is lucky he may even see 200. "The Bighorn or Rocky Mountain sheep," says Harlan I. Smith, Archæologist of the Geological Survey, Ottawa, "is the chamois of the American west, a fine strong, sturdy, active, bold mountaineer with a keen eye." His long curved horns have made him a coveted prize of the big game hunter, but he furnishes almost as great a trophy for the camera and he has become so tame about Banff that it is possible to secure a picture of him even from a motor car.

The Mountain goat (Oreamnos montanus) live on the higher summits usually above timber line. "They look," says Mr. Smith, "slow and clumsy, have a rheumatic gallop and their motions remind one of a bear, but while curious and somewhat stupid, they are the most skilful and brave alpine climbers of all the hoofed animals of the Americas." Whether it is a sign of superior intelligence or otherwise, they are apparently dominated by feminine influence and you will usually see them travelling along the shaly upper slopes or across a dizzy ledge on the verge of a thousand foot precipice in the wake of a "sagacious old nanny." A band of these goats can frequently be seen feeding on the slopes of mount Rundle at Banff.

Another animal, of which the visitor who goes out along the trails is sure to make the acquaintance, is the Hoary marmot (Arctomys 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

Rocky Mountain Goat
"Wild goats sporting round the eagle's nest."

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 Parry'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 "Wisagatchak" 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.

Fool-hen

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.

Whiskey-jack

BIG GAME

While no hunting may be done in the parks the areas adjacent to their boundaries are among the best big game districts on the continent. They can be reached usually by a two or three days' trail trip. Banff is the principal outfitting centre for expeditions of this kind and there are several firms which supply guides, ponies and all the necessary camp equipment. The Bighorn, or Rocky Mountain sheep, the Rocky Mountain goat and the Grizzly are the most prized trophies.

Royal Canadian Mounted Police

APPENDIX 2

TRAIL TRIPS

TRAIL TRIPS RADIATING FROM BANFF

1. BANFF TO SPRAY LAKES—Starting from Banff in a southeasterly direction trail follows the Spray river, branching at fork of the river to the foot of lower Spray lake, the left branch proceeding through Whiteman's pass between Goat range and Three Sisters to upper and lower Spray lakes, joining main trail at the foot of latter lake. Approximately 30 miles.

Extension Trips

(a) KANANASKIS LAKES—From the foot of Spray lakes up the pas between the Kananaskis and Spray ranges to the Summit thence down the north fork of the Kananaskis river to Kananaskis lakes. Approximately 23 miles.

(b) BRYANT CREEK—From the foot of Spray lakes up Bryant creek to the foot of mount Assiniboine. Approximately 18 miles.

(c) BREWSTER-BRYANT—From the foot of mount Assiniboine, down Brewster creek to Healy creek. Approximately 19½ miles.

2. BANFF TO MOUNT ASSINIBOINE—From Banff in a westerly direction past the Cave and Basin and Sundance creek to junction with Brewster-Bryant trail; up Brewster creek to Bryant creek, to foot of mount Assiniboine. Approximately 30 miles.

Extension Trips

SUNDANCE CREEK—From mouth of Sundance creek and up creek to Sundance pass. Approximately 1 mile.

3. BANFF TO SIMPSON PASS—From Banff in a southwesterly direction past the Cave and Basin, along Bow river to Healy creek and following Healy creek up to the summit of Simpson pass. Approximately 19 miles.

Extension Trips

(a) MOUNT ASSINIBOINE—From summit of Simpson pass south along Simpson river and the south fork of latter to the foot of mount Assiniboine. Approximately 18 miles.

(b) REDEARTH CREEK—From the mouth of Healy creek, following the Bow river to the mouth of Redearth creek, thence up the creek, following the east fork to rejoin Simpson trail at Simpson pass summit. Approximately 23 miles.

4. SAWBACK—From Banff via the Banff-Castle motor road to mount Edith and north up Fortymile creek to Sawback lake, over the summit and down Sawback creek to its junction with the Cascade river. Approximately 25 miles.

5. CASCADE RIVER—From Banff along motor road to Minnewanka, and following the Cascade river northwest to join the Sawback trail at the mouth of Sawback creek. Approximately 32 miles.

Extension Trips

(a) SOUTH PANTHER—From the Cascade river trail at the mouth of Stoney creek, following up the creek to the head of the South Panther river. Approximately 11 miles.

(b) CUTHEAD—From Cascade river trail near the mouth of Cuthead creek, proceeding north over the summit and down Wigmore creek to the Panther river. Approximately 8 miles.

6. GHOST RIVER—From Banff, following motor road to lake Minnewanka and along the lake through Devil's gap to the Ghost river. Approximately 26 miles.

7. CARROT CREEK—From Banff via the Calgary-Banff motor road east to Carrot creek and thence up Carrot creek to join the Ghost river trail at the east end of lake Minnewanka. Approximately 22 miles.

8. JOHNSTON CREEK—From Banff via Banff-Castle motor road to Johnston creek and up the creek to the canyon and falls. Approximately 17 miles.

9. CASCADE MOUNTAIN—From Banff along motor road to Vermilion lakes and up the west face of Cascade mountain. Approximately seven miles.

10. RUNDLE MOUNTAIN—From Banff up the west face of mount Rundle. Approximately $3\frac{1}{2}$ miles.

11. SULPHUR MOUNTAIN—From Banff up the east slope of Sulphur mountain, past the Hot Springs to the Observatory. Approximately 5 miles.

12. RED DEER—From Banff by motor road to Bankhead, approximately 6 miles, thence up the Cascade river by trail to the Panther river, following down the latter to its junction with the Red Deer river, and up the Red Deer to Pipestone creek, down Pipestone creek and Pipestone river to Laggan, total 140 miles. Return trip to Banff may be made by motor road or by train 40 miles.

TRAIL TRIPS RADIATING FROM LAKE LOUISE

1. LAKE TRAIL—From Chateau Lake Louise, following the west shore of the lake to opposite end, $1\frac{3}{4}$ miles.

Extension Trips

LOWER GLACIER—From the head of Lake trail, following the creek up to Victoria glacier, 4 miles.

2. LAKES IN THE CLOUDS—From the Chateau the trail climbs 1,000 feet to Mirror lake, thence 200 feet to lake Agnes, 5 miles.

Extension Trips

(a) LOOKOUT POINT—From Mirror lake trail follows around the face of the Beehive to Lookout point. $\frac{1}{2}$ mile.
(b) UPPER GLACIER—From Lookout point along the mountainside to join Lower glacier trail, $1\frac{1}{4}$ miles.
(c) BEEHIVE—From lake Agnes the trail climbs to the summit of the Beehive, $\frac{1}{2}$ mile.
(d) MOUNT ST. PIRAN—From lake Agnes to the summit of mount St. Piran, 1 mile.
(e) LITTLE BEEHIVE—From Mirror lake to the summit of the Little Beehive, 1 mile.

3. PARADISE VALLEY—From the Chateau trail leads around the foot of mount Fairview and up Paradise valley, 10 miles.

Extension Trips

(a) LAKE ANNETTE—From Paradise valley trail across the creek to lake Annette, 1 mile.
(b) GIANT STEPS—From Paradise valley to the Giant Steps, 1 mile.
(c) SENTINEL PASS—From Paradise valley through Sentinel pass to Moraine lake, 7 miles.

4. SADDLEBACK—From the Chateau the trail climbs between mount Fairview and Saddleback, thence follows Sheol valley to meet trail in Paradise valley, 5 miles.

5. MORAINE LAKE—From the foot of Paradise valley to the valley of the Ten Peaks and Moraine lake, 5 miles.

Extension Trips

(a) CONSOLATION LAKES—From Moraine lake cabin, leading up Consolation valley to the lakes, 3 miles.
(b) WENKCHEMNA PASS—From Moraine lake leading along the Glacier to the summit of the Wenkchemna pass, 5 miles.

6. HECTOR—From the Chateau along the mountain side to the Great Divide, thence to Hector, 10 miles.

Extension Trips

LAKE O'HARA—From Hector, following up Cataract creek to lake O'Hara, thence to lake McArthur, 10 miles.

7. BOW LAKES—From the Chateau by motor road to Laggan, thence by trail up the Bow valley to Bow lakes and North park boundary, 36 miles.

8. PIPESTONE—From the Chateau by motor road to Laggan, thence by trail up the Pipestone river to Pipestone summit, 32 miles.

Extension Trips

LITTLE PIPESTONE—From the Pipestone trail at the mouth of Pipestone creek, up the latter to Red Deer summit and Ptarmigan lake, 8 miles.

9. PTARMIGAN—From the Chateau by motor road to Laggan, thence by trail up Corral creek to Ptarmigan lake, 16 miles.

TRAIL TRIPS RADIATING FROM FIELD

1. FOSSIL BEDS—From Field up mount Stephen to the fossil beds. Approximately 3 miles.

2. YOHO LAKE—From Field across Kickinghorse river over Burgess pass to Yoho lake. Approximately 6 miles.

Extension Trips

(a) TWIN FALLS—From Yoho lake down to the Yoho river at Takakkaw falls and up the river to Twin falls. Approximately 9 miles. A return trip to Yoho lake may be made from Twin falls along a higher trail approximately the same length.

(b) WHALEBACK—From Twin falls over Whaleback mountain and back to upper trail. Approximately 2½ miles.
(c) YOHO GLACIER—From Twin falls following the Yoho river to the glacier. Approximately 4 miles.
(d) LITTLE YOHO—From the Upper Yoho trail and following up the Little Yoho river, returning on opposite side. Approximately 14 miles.
(e) EMERALD LAKE—From Yoho lake, leading over the Yoho pass to chalet at the foot of Emerald lake, where the trail meets the auto road from Field. Approximately 4 miles.

3. LAKE O'HARA—Starting from Field along the auto road, approximately 6 miles, to Ottertail river, thence by trail up the Ottertail river and McArthur creek to lake O'Hara, approximately 22 miles. Return trip can be made from lake O'Hara down Cataract creek to Hector, and by road to Field, approximately 16 miles. Total round trip from Field, approximately 43 miles.

4. AMISKWI—Starting from Field, approximately 3 miles along Emerald lake road, thence up the Amiskwi river, a distance of 8 miles.

5. KICKINGHORSE—Starting from Field along Emerald Lake road, approximately 3 miles, to Natural bridge, thence along Kickinghorse river and across the river to meet the Ottertail road, approximately 12 miles. Return to Field via latter road, a distance of 6 miles.

6. BEAVERFOOT—From Field along the Ottertail road to Ottertail, approximately 8 miles, thence by trail along the Kickinghorse and Beaverfoot rivers to the mouth of the Ice river, approximately 21 miles.

Extension Trips

(a) ICE RIVER—From the Beaverfoot trail at the mouth of the Ice river, up river. Approximately 6 miles.
(b) LEANCHOIL—From the Beaverfoot trail near Deer Lodge, crossing the Kickinghorse river and following the C.P.R. to Leanchoil. Approximately 3 miles.
(c) DEER LODGE—From the Beaverfoot trail up the mountain past Deer lodge. Approximately 2½ miles.

7. SUMMIT LAKE—From Field east along old C.P.R. right of way to the Kickinghorse canyon, approximately 3 miles, thence by trail to Hector and Summit lakes, approximately 3 miles.

Extension Trips

SHERBROOKE LAKE—From C.P.R. right of way at Kickinghorse canyon north by trail to Sherbrooke lake, approximately 4 miles.

TRAIL TRIPS RADIATING FROM GLACIER

1. NAKIMU CAVES—From Glacier by wagon road, 3½ miles, thence to the Caves by trail, 1½ miles.

2. GREAT GLACIER—From Glacier trail climbs to the Great glacier, with return trail on the opposite side of the creek, 40 miles.

Extension Trip

SIR DONALD—From the Great glacier trail climbs up mount Sir Donald, 3 miles.

3. ASULKAN—From Glacier, trail leads south up Asulkan brook to the Asulkan glacier, 6 miles.

4. MOUNT ABBOTT—From Glacier trail climbs mount Abbott, 6 miles.

5. LOOK-OUT—From Glacier climbing mount Avalanche to the Avalanche glacier, 5½ miles.

6. ROGERS PASS—From Glacier trail climbs to Rogers pass along old railway right of way, 4 miles.

Extension Trips

(a) BALOO PASS—From Rogers pass leads west through Baloo pass and connects with Nakimu caves trail at the Caves, 5 miles.

(b) MOUNT HERMIT—From the old railway right of way, half a mile east of Rogers pass, trail climbs mount Hermit, 3½ miles.

Black Bear

APPENDIX 3

*PLACE NAMES AND ALTITUDES IN ROCKY MOUNTAINS PARK

ABBOT; pass, 9,588 ft.; after Philip Stanley Abbot, member of the Appalachian Mountain Club, Boston, who met his death on the steeps of mount Lefroy, 1896.

ABERDEEN; mount, 10,340 ft.; after the Marquis of Aberdeen, former Governor General of Canada.

AGNES; lake, 6,875 ft.; after Susan Agnes, wife of Sir John A. Macdonald, former Premier of Canada.

ANNETTE; lake; after Mrs Astley, wife of the late manager of the Lake Louise Chalet. (Wilcox).

ASSINIBOINE; mount, 11,860 ft.; after the Assiniboine tribe of Indians. (Dawson)

AYLMER; mountain, 10,365 ft.; after town of Aylmer, Quebec. (McArthur).

BABEL; mount, 8,590 ft.; fancied resemblance to Tower of Babel.

BALL; mount, 10,825 ft.; after John Ball, Under-Secretary of State for the Colonies, 1855-57. (Hector)

BANFF; town, 4,521 ft.; by Lord Strathcona, after his birthplace, Banff, Scotland.

BANKHEAD; town, 4,596 ft.; by Lord Strathcona, after Bankhead, Banffshire, Scotland.

BATH; creek, (bed) 5,272 ft.; creek named July 20, 1881, when Major Rogers, of the Canadian Pacific engineering staff, took an involuntary bath in it by being thrown from his horse.

———

*From a paper by Mr. Jas. White, Deputy Head of the Commission of Conservation, read before the Royal Society of Canada, 1916.

BIDENT; mount, 10,109 ft.; resembles a double tooth.

BONNET; peak, 10,290 ft.; descriptive of summit.

BOOM; lake, 6,210 ft.; mountain, 9,015 ft.; drift wood dammed against a shoal resembled a lumberman's boom.

BOSWORTH; mount, 9,083 ft.; after G. M. Bosworth, 4th Vice-president Canadian Pacific Railway.

BOURGEAU; mount, 9,517 ft.; after E. Bourgeau, botanist to the Palliser expedition. (Hector)

BOW; river; pass, 6,868 ft.; lake, 6,420 ft.; the wood which grew on the banks of the river was suitable for the making of bows; translation of Cree Indian name "manachaban."

BREWSTER; creek; after Jas Brewster, well known guide and outfitter, Banff.

CANMORE; town, 4,284 ft.; after Kenmore village, Argyllshire, Scotland.

CASCADE; mountain, 9,826 ft.; from translation of Indian name "mountain where the water falls."

CASTLE; mountain, 9,030 ft.; from resemblance to feudal fortress. (Hector)

CONSOLATION; valley; pass, 8,300 ft.; named by Wilcox in contrast to neighboring Desolation valley.

COPPER; mountain, 9,160 ft.; named by Dawson on account of copper deposits.

COSTIGAN; mountain, 9,630 ft.; after late Hon. John Costigan, Minister in Sir John A. Macdonald's Government.

DELTAFORM; mount, 11,225 ft.; from similarity to Greek letter △.

DEVILS HEAD; mountain, 9,205 ft.; translation of Cree name "We-ti-kwas-ti-kwan." Sir Geo. Simpson says that it bears a rude resemblance to an upturned face.

DEVILS THUMB; mountain, 9,108 ft.; descriptive.

DOUGLAS; mount, 11,015 ft.; after David Douglas, a Scottish botanist who crossed the Athabaska pass, 1827.

DRUMMOND; mount, 9,530 ft.; after Thos. Drummond, Assistant naturalist in Franklin's second expedition to the Arctic, 1825-27 (Dawson)

EDITH; mount, 8,370 ft.; after Mrs. J. F. Orde (nee Edith Cox), who visited Banff with Lady Macdonald in 1886.

EIFFEL; peak, 10,091 ft.; from huge tower rising about 1,000 feet, which suggests Eiffel tower.

FAIRHOLME; range (N. peak), 9,305 ft.; named by Hector, probably after Fairholme seat, Lanarkshire, Scotland.

FAIRVIEW; mount, 9,001 ft.; magnificent view from summit.

FATIGUE; mountain, 9,696 ft.; descriptive of explorer's sensations when climbing mountain.

FAY; mount, 10,612 ft.; after Prof. Chas. E. Fay, member of Appalachian Mountain Club, Boston.

GHOST; river; formerly called Dead Man's river, which from Dead Man's hill; combatants slain in a battle were buried on top of the hill.

GIROUARD; mount, 9,815 ft.; after Sir Percy Girouard, K.C.,M.G., D.S.O.

GOAT; mountain, 9,290 ft.; translation of Indian name "Wap-u-tik." (Palliser)

GROTTO; mountain, 8,870 ft.; contains a large cave with high arched roof. (Bourgeau)

HADDO; peak, 10,073 ft.; after George, Lord Haddo, eldest son of the Marquis of Aberdeen.

HEALY; creek; named by Dr. Dawson after Capt. J. J. Healy, sometime manager of N.A.T. & T. Co., Dawson, who located some copper claims on adjoining mountain.

HECTOR; mount, 11,125 ft.; lake, 5,654 ft.; after Dr. (later Sir) James Hector, geologist with the Palliser expedition, who discovered the Kickinghorse pass.

HOLE-IN-THE-WALL; mountain, 9,184 ft.; from cave in side of mountain.

HOWSE; pass, 4,500 ft.; after Jos. Howse, employee of Hudson's Bay Company, who crossed pass in 1810 to Montana.

INGLISMALDIE; mountain, 9,715 ft.; after Inglismaldie castle, seat of Earl of Kintore, Scotland.

KANANASKIS; river (mouth), 4,179 ft.; corruption of "Kin-e-ah-kis," a Cree Indian, who is reputed to have made a marvellous recovery after a blow from an axe.

LEFROY; mount, 11,220 ft.; after Major-General Sir John H. Lefroy, head of Toronto Observatory, 1842-53. (Hector)

LOUIS; mount, 8,800 ft.; after Louis B. Stewart, D.T.S., Professor of Surveying, Toronto University.

LOUISE; lake, 5,670 ft.; after Her Royal Highness Princess Louise, wife of Marquis of Lorne, former Governor General of Canada.

MARGARET; lake, 5,924 ft.; after a daughter of Rev. H. P. Nichols, Holy Trinity Church, New York. (Thompson)

MCCONNELL; mount, 10,000 ft.; after R. G. McConnell, Deputy Minister, Department of Mines; assistant to Dr. Dawson in 1882.

MINNEWANKA; lake, 4,800 ft.; Indian name meaning "lake of the water spirit."

MIRROR; lake, 6,650 ft.; from the reflection in the lake when seen from a great height above.

MITRE, THE; mountain, 9,470 ft.; from its resemblance to a bishop's mitre.

MOLAR; mount, 9,914 ft.; "so much resembling a large tooth that we named it mount Molar." (Hector)

MORAINE; lake, 6,190 ft.; after the ridge of glacial formation at its lower end. (Wilcox)

MORLEY; village, 4,067 ft.; after famous Methodist clergyman, Rev. William Morley Punshon.

NEPTUAK; mountain, 10,607 ft.; Stoney Indian numeral "nine"; the ninth of the Ten Peaks.

NIBLOCK; mount, 9,754 ft.; after Superintendent Niblock, Canadian Pacific Railway.

NORQUAY; mount, 8,284 ft.; after Hon. John Norquay, sometime Premier of Manitoba.

OPAL; mountain, 8,000 ft.; from small cavities found here, lined with quartz crystals coated with films of opal.

PALLISER; range (summit), 9,930 ft.; after Capt. John Palliser, who commanded an exploration expedition in the Rockies, 1857-60.

PEECHEE; mount, 9,615 ft.; after Sir George Simpson's half-breed guide.

PIGEON; mountain, 7,845 ft.; probably after the wild pigeons seen in the vicinity. (Bourgeau)

PILOT; mountain, 9,680 ft.; because visible for a long distance down the valley.

PINNACLE; mountain, 10,062 ft.; descriptive. (Wilcox)

PIPESTONE; river (mouth), 5,029 ft.; because of the occurrence on it of fragments of soft, fine-grained, grey-blue argillite, which the Indians have used in the manufacture of pipes. (Hector)

PULPIT; peak, 8,930 ft.; descriptive. (Thompson)

REDEARTH; creek; from the red ochre found on its banks.

REDOUBT; peak, 9,510 ft.; "formation resembles a huge redoubt." (Wheeler)

RUNDLE; mount, 9,665 ft.; after Rev. Robt. T. Rundle, Methodist Missionary to the Indians of the Northwest, 1840-48. The Stonies say of him "poor he came among us and poor he went away, leaving us rich".

ST. PIRAN; mount, 8,681 ft.; after St. Piran, Liggan bay, Cornwall, Eng., the birthplace of W. J. Astley, late manager Lake Louise Chalet. (Wilcox)

SAWBACK; range (summit), 10,000 ft.; its vertical beds of limestone form a serrated edge.

SEEBEE; station, 4,217 ft.; Cree Indian for "river."

SHEOL; mountain, 9,108 ft.; previously called Devils Thumb; name changed to avoid confusion with Devils Head.

SIMPSON; pass, 6,650 ft., after Sir Geo. Simpson, Governor of Hudson's Bay Company, who crossed it on his journey around the world in 1841.

SPRAY; river, from spray of falls in river.

STORM; mountain, 10,309 ft.; after numerous storm clouds seen on its summit. (Dawson)

SULPHUR; mountain, 8,030 ft.; from hot springs on side.

TEMPLE; mount, 11,626 ft.; by Dawson, after Sir Richard Temple, President, Economic Science and Statistics Section, British Association, 1884, which visited the Rockies in that year.

THREE SISTERS; peaks (highest), 9,734 ft.; descriptive.

TUZO; mount, 10,648 ft.; after Miss Henrietta L. Tuzo, now Mrs. J. A. Wilson of Ottawa, first lady to ascend Eagle peak.

TYRRELL; mount, 8,846 ft.; after J. B. Tyrrell, Assistant Geologist with Dawson in survey of Rocky Mountains, 1883.

VERMILION; lakes, 4,521 ft.; from ferruginous beds in vicinity.

VICTORIA; mount, 11,355 ft.; by McArthur after late Queen Victoria.

WASTACH; river (Paradise valley); Stoney Indian for "beautiful."

WENKCHEMNA; mountain, 10,401 ft.; Stoney Indian numeral meaning "ten."

WHITE; mount, 9,131 ft.; after Jas. White, Deputy Head Commission of Conservation, Ottawa, Assistant to Dr. Dawson, 1884.

WHYTE; mount, 9,776 ft.; after late Sir William Whyte, 2nd Vice-President, Canadian Pacific Railway.

WIND; mountain, 10,100 ft.; by Bourgeau because surrounded, when seen, by wind clouds.

YUKNESS; mount, 9,342 ft.; Sioux Indian for "sharpened as with a knife."

*PLACE NAMES AND ALTITUDES IN YOHO PARK

AMISKWI; peak, 9,249 ft.: Cree Indian for "beaver."

BAKER; mount, 10,441 ft.; after G. P. Baker, member Appalachian Mountain Club, Boston. (Collie)

BALFOUR; mount, 10,731 ft.; by Sir Jas. Hector, after John Hutton Balfour (1808-84), botanist, Edinburgh, Scotland.

BIDDLE; mount, 10,876 ft.; after M. Biddle, who climbed mount Sir Donald in 1902.

BURGESS; mount, 8,463 ft.; after late A. M. Burgess, former Deputy Minister of the Interior.

---

*From a paper by Mr. Jas. White, Deputy Head of the Commission of Conservation, read before the Royal Society of Canada, 1916.

CATHEDRAL; mountain, 10,454 ft.; from resemblance to cathedral.

CHANCELLOR; peak, 10,731 ft.; after Sir John Boyd, Chancellor of Ontario.

DALY; mount, 10,332 ft.; after late Judge Chas. F. Daly, President American Geographical Society, 1864-99.

DENNIS; mount, 8,326 ft.; after late Lieut.-Col. J. Stoughton Dennis, Surveyor-General of Canada.

DUCHESNAY; mount, 9,592 ft.; after late E. J. Duchesnay, C.E., Assistant General Superintendent, Canadian Pacific Railway, killed in tunnel near Spuzzum by falling rock.

EMERALD; lake, 4,262 ft.; peak, 8,332 ft.; from colour of water.

FIELD; town, 4,066 ft.; mount, 8,645 ft.; after Cyrus West Field, promoter of first Atlantic cable, who visited the locality in 1884.

GOODSIR; mountain, 11,676 ft.; after John Goodsir, Professor of Anatomy, Edinburgh University from 1846. (Hector)

HABEL; mount, 10,361 ft.; after Dr. Jean Habel, Berlin.

HUNGABEE; mount, 11,447 ft.; Stoney Indian word meaning "chieftain."

Ice; river; translation of Indian name "Wash-ma-Wapta"; rises in glaciers of mount Vaux. (Dawson)

KICKINGHORSE; pass, 5,332 ft.; Sir Jas. Hector was nearly killed by a kick from his horse near site of present Wapta station; name is abbreviation of translation from Indian.

KIWETINOK; peak, 9,512 ft.; Cree Indian word signifying "on the north side."

LEANCHOIL; station, 3,682 ft.; Lord Strathcona's mother was Barbara Stuart of the manor of Leth-na-Coyle (Lainchoil), Inverness, Scotland. (Strathcona)

MARPOLE; mount, 9,822 ft.; after R. Marpole, General Executive Assistant, Canadian Pacific Railway, Vancouver,

MCARTHUR; lake, 7,359 ft.; after J. J. McArthur, D.L.S., International Boundary Surveys, Department of the Interior.

NILES; mount, 9,742 ft.; after Prof. W. H. Niles, President of the Appalachian Mountain Club. (Fay)

ODARAY; mount, 10,165 ft.; Stoney Indian for "very brushy" or "wind-fall". (Habel)

OESA; lake, 7,398 ft.; from Stoney Indian word meaning "ice"; its surface is ice-covered practically all the time.

O'HARA; lake, 6,664 ft.; after Lieut.-Col. O'Hara, R. A., who frequently visited the locality.

OTTERTAIL; river; translation of Indian name.

POLLINGER; mount, 8,998 ft.; after Jos. Pollinger, Swiss guide, who made first ascents of the President, The Vice-President and other peaks.

PRESIDENT; peak, 10,287 ft.; after Lord Shaughnessy, President of Canadian Pacific Railway. (McNicoll)

PROSPECTOR; valley; after an old prospector's camp near its entrance (Wilcox)

ROSS; lake, 5,654 ft.; after the late Sir Jas. Ross, Superintendent of Construction, Canadian Pacific Railway, in 1884.

SCHAEFFER; mount, 8,824 ft.; after Dr. and Mrs. Schaeffer, of Philadelphia, who did valuable exploration and botanical work in the Rockies. The latter (now Mrs. William Warren, of Banff) discovered Maligne lake, Jasper park.

STEPHEN; mount, 10,485 ft.; after Sir Geo. Stephen, later Baron Mount Stephen, formerly President, Canadian Pacific Railway.

TAKAKKAW; falls; Indian name signifying "it is wonderful"; suggested by Sir William Van Horne.

TROLLTINDER; peak, 9,414 ft.; named by Jean Habel because it resembles somewhat a well known mountain in the Norwegian valley of Romsdalen; name signifies "witch's peak."

VAN HORNE; range; after late Sir William Van Horne, formerly Chairman, Canadian Pacific Railway. (Dawson)

VAUX; mount, 10,881 ft.; possibly after George Charles (Mostyn) 6th Lord Vaux de Harrowden. (Hector)

VICE-PRESIDENT; mount, 10,049 ft.; after late D. McNichol, 1st Vice-President, Canadian Pacific Railway.

WAPTA; peak, 9,106 ft.; Stoney Indian for "river."

WAPUTIK; range, 10,000 ft.; Stoney Indian for "white goat"; former favourite haunt of goats.

WIWAXY; peaks, 8,863 ft.; Stoney Indian for "windy."

YOHO; valley, 4,800 ft.; pass, 6,020 ft.; Cree Indian word signifying "wonder or astonishment."

*PLACE NAMES AND ALTITUDES IN GLACIER PARK

ABBOTT; mount, 8,081 ft.; after H. Abbott, an official of the Canadian Pacific Railway.

ALBERT; canyon, 2,350 ft.; by Rev. Principal Grant for Albert Rogers, nephew of Major Rogers, discoverer of Rogers Pass.

ASULKAN; valley, 4,100 to 6,600 ft.; Indian for "wild goat"; by W. Spotswood Green, because of numbers of wild goats seen on pass at the head of Asulkan glacier.

AVALANCHE; mount, 9,387 ft.; owing to numerous avalanches.

BAGHEERA; mount, 9,096 ft.; by the Topographical Survey (bagheera, tiger), with reference to Cougar brook.

---

*Data from "The Selkirk Mountains", by A. O. Wheeler, Director of the Alpine Club of Canada.

BALD; mountain, 7,663 ft.; owing to smooth, grassy slopes lying along its crest.

BALOO; pass, 6,681 ft.; Indian for "bear," with reference to Bear creek.

BATTLE; creek; owing to a fight between a prospector and a grizzly.

BEAR; creek, 2,900 to 7,000 ft.; owing to former prevalence of bears in its valley.

BEAVER; river, 2,400 to 4,600 ft.; from great number of beavers that formerly inhabited the valley.

BISHOP'S; range, 10,762 ft.; by Topographical Survey, with reference to contour of its two highest peaks seen from Donkin pass.

BONNEY; mount, 10,205 ft.; by W. S. Green, after Rev. T. G. Bonney, F.R.S., Prof. University College, London, and then President, Alpine Club (England).

CAMELS, The; peculiarly shaped rocks on the summit of mount Tupper.

CASTOR; peak, 9,108 ft.; by Messrs. Abbott, Fay and Thompson, with reference to Castor and Pollux of heathen mythology.

CHEOPS; mount, 8,506 ft.; with reference to Great Pyramid of Cheops, from the pyramidal form of the extreme peak.

COUGAR; brook, 3,500 to 7,000 ft.; owing to cougars or mountain lions by which valley was said to have been frequented.

CORBIN; peak, 8,892 ft.; after a prospector from Illecillewaet village.

DAWSON; mount, 11,113 ft.; by W. S. Green, after late George M. Dawson, D.S., F.G.S., Director Geological Survey of Canada.

DOME, The; 9,029 ft.; on account of its contour, by Messrs. Fay, Thompson and Abbott.

DONKIN; mount, 9,694 ft.; by W. S. Green, after W. F. Donkin, of the Alpine Club, England; killed in Caucasus in year Mr. Green made his survey of Selkirks, 1888.

DOUGLAS; falls, 5,000 ft.; after Howard Douglas, formerly Chief Superintendent, Dominion Parks.

EAGLE; peak, 9,353 ft.; rock on southeast face seen from Glacier House resembles an eagle.

FEUZ; peak, 10,982 ft.; after Ed. Feuz, Sr., Swiss guide stationed at Glacier House.

FOX; mount, 10,576 ft.; by W. S. Green, after Mr. Fox, English Alpinist, who lost his life in Caucasus, 1888.

GEIKIE; glacier, 4,200 to 8,000 ft.; by W. S. Green, after Sir Archibald Geikie, F.R.S.

GREEN; mount, 8,860 ft.; after W. S. Green, author of "Among the Selkirk Glaciers."

HERMIT, The; 8,887 ft.; a rock-figure on west ridge of mount Tupper, resembling a hermit with dog sitting at his feet.

ILLECILLEWAET; river; by Walter Moberly, C.E.; Indian for "swift water."

INCOMAPPLEUX; river; Kootenay Indian for "fish river."

LILY; glacier, 5,500 to 8,200 ft.; after daughter of Rev. H. Swanzy who explored Selkirk glaciers with W. S. Green.

MACDONALD; mount, 9,428 ft.; by Order-in-Council, after the late Rt. Hon. Sir John A. Macdonald, Premier of Canada.

MACOUN; mount, 9,988 ft.; after late Prof. John Macoun, Dominion Naturalist and Botanist.

MARION; lake, 5,666 ft.; by W. S. Green, after his daughter.

MCNICOLL; mount, 8,745 ft.; after D. McNicoll, Vice-President, Canadian Pacific Railway.

MITRE; creek; in relation to Bishop's glacier.

NAKIMU; caves; Indian for "grumbling."

PURITY; mountain, 10,457 ft.; by H. W. Topham, who saw it from Donkin pass, a pure white cone shrouded in snow.

RAMPART; The, 8,476 ft.; with reference to the great rock escarpment rising sheer above Asulkan valley.

ROGERS; mount, 10,536 ft.; by Carl Sulzer, after Major Rogers, discoverer of Rogers pass.

ROSS; peak, 7,718 ft.; after Jas. Ross, in charge of construction, Canadian Pacific Railway.

SELWYN; mount, 11,013 ft.; after late Dr. Selwyn, Director, Geological Survey of Canada.

SIR DONALD; mount, 10,808 ft.; by Order-in-Council, after Sir Donald A. Smith, later Lord Strathcona, one of the first directors of the Canadian Pacific Railway.

SIR SANDFORD; mount, 11,634 ft.; after Sir Sandford Fleming, K.C.M.G., first President, Alpine Club of Canada.

SMART; mount, 9,517 ft.; after Jas. A. Smart, formerly Deputy Minister, Department of Interior.

SWANZY; mount, 9,562 ft.; after Rev. H. Swanzy, W. S. Green's companion in exploration of Selkirks, 1888.

TUPPER; mount, 9,229 ft.; formerly mount Hermit, changed by Order-in-Council, in honour of Sir Charles Tupper, one of the fathers of Confederation.

URSUS MAJOR; mount, 8,930 ft.; in relation to Bear creek, by Topographical Survey.

URSUS MINOR; mount, 9,026 ft.; in relation to Bear creek, by Topographical Survey.

WITCH TOWER, The; 8,080 ft.; fantastic group of rock-shapes on northwestern shoulder from the summit of mount Fox; suggests number of hideous old giant beldames leaning from parapet of rock tower.

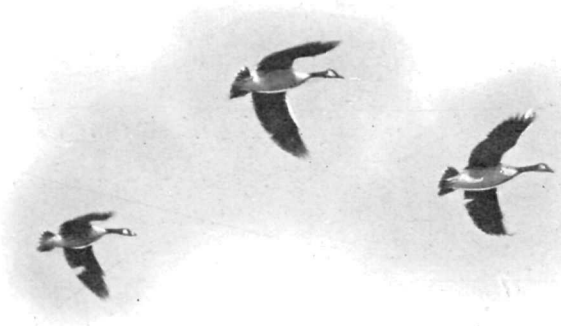
*PLACE NAMES AND ALTITUDES IN MOUNT REVELSTOKE PARK

CLACH-NA-COODIN; range, 8,675 ft.; after the Clach-na-cudden or "Stone of the Tubs", the palladium of Inverness, Scotland.

REVELSTOKE; mount; after Lord Revelstoke, English financier and member Canadian Pacific Railway Company, who visited Canadian West in late eighties.

---

*Data from "The Selkirk Mountains", by A. O. Wheeler, Director of the Alpine Club of Canada.



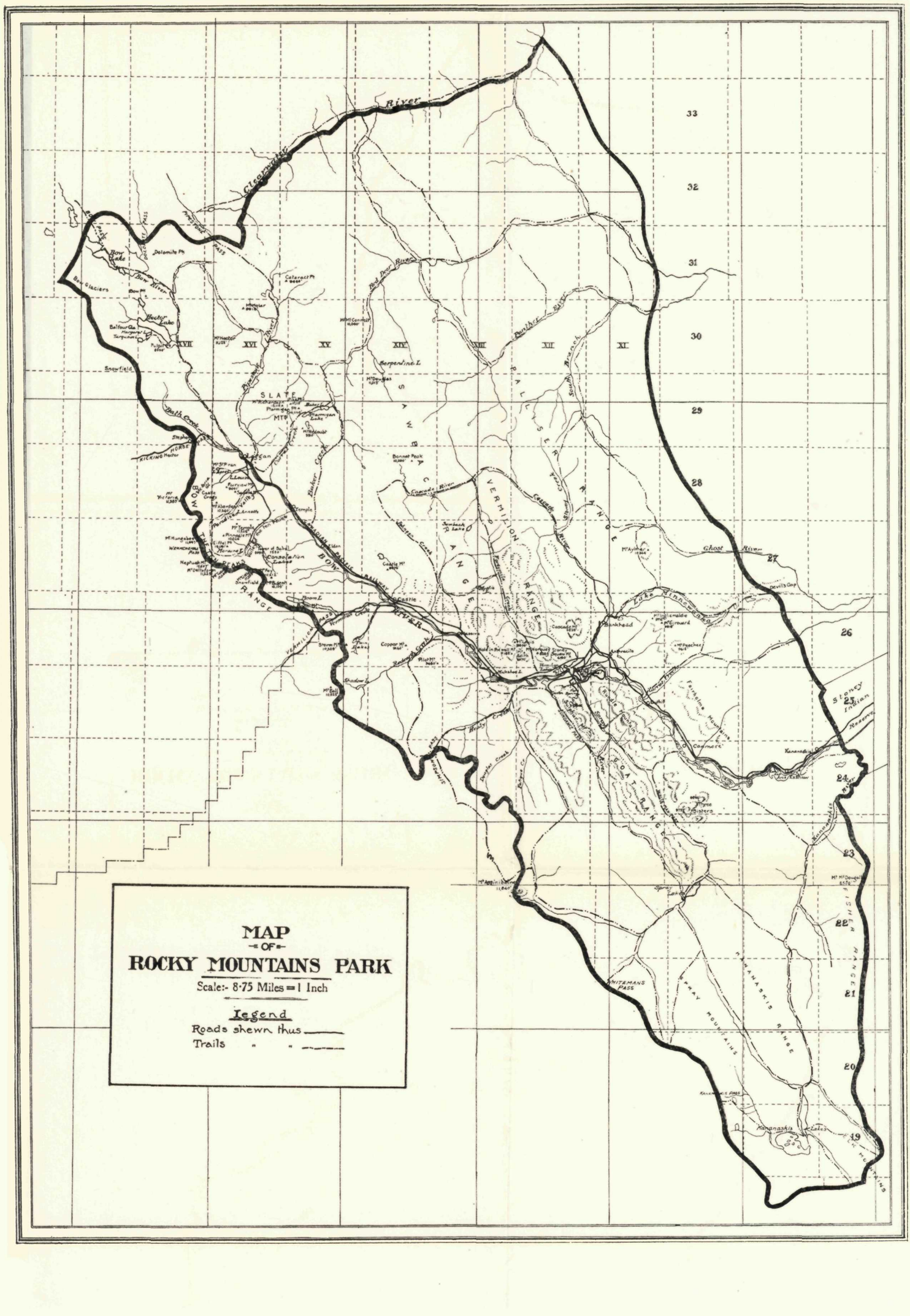
INDEX

FURTHER INFORMATION WITH REGARD TO THE

CANADIAN NATIONAL PARKS

MAY BE OBTAINED UPON APPLICATION TO

J. B. HARKIN, COMMISSIONER, CANADIAN NATIONAL PARKS, DEPARTMENT OF THE INTERIOR, OTTAWA, CANADA :: :: ::


MAP
OF
ROCKY MOUNTAINS PARK
Scale:- 8·75 Miles = 1 Inch
Legend
Roads shewn thus
Trails
Bow River
Cleopatra
Forestry Trail
Bow Lake
Dolomite Pk
Bow Glaciers
Hector Lake
Balfour Gl.
Mt Hector
Cataract Pk
Mt Niblock
Mt Conmell
Mt Dennis
Bath Creek
Snowfield
Pipestone River
Pipestone Pass
Bow Pass
Bow Summit
Bow Valley
Bow Valley Trail
Bow Valley Forestry Trail
Bow Valley Forestry Reserve
Bow Valley Provincial Park
Bow Valley Provincial Park Reserve
Bow Valley Provincial Park Reserve Boundary
Bow Valley Provincial Park Reserve Boundary Line
Bow Valley Provincial Park Reserve Boundary Line Survey
Bow Valley Provincial Park Reserve Boundary Line Survey Monument
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 1
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 2
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 3
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 4
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 5
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 6
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 7
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 8
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 9
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 10
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 11
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 12
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 13
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 14
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 15
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 16
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 17
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 18
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 19
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 20
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 21
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 22
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 23
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 24
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 25
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 26
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 27
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 28
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 29
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 30
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 31
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 32
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 33
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 34
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 35
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 36
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 37
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 38
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 39
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 40
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 41
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 42
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 43
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 44
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 45
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 46
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 47
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 48
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 49
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 50
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 51
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 52
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 53
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 54
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 55
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 56
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 57
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 58
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 59
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 60
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 61
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 62
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 63
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 64
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 65
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 66
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 67
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 68
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 69
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 70
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 71
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 72
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 73
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 74
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 75
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 76
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 77
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 78
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 79
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 80
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 81
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 82
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 83
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 84
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 85
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 86
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 87
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 88
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 89
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 90
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 91
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 92
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 93
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 94
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 95
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 96
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 97
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 98
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 99
Bow Valley Provincial Park Reserve Boundary Line Survey Monument No. 100

MAP
OF
YOHO PARK

Scale 2·60 Miles = 1 Inch

Legend

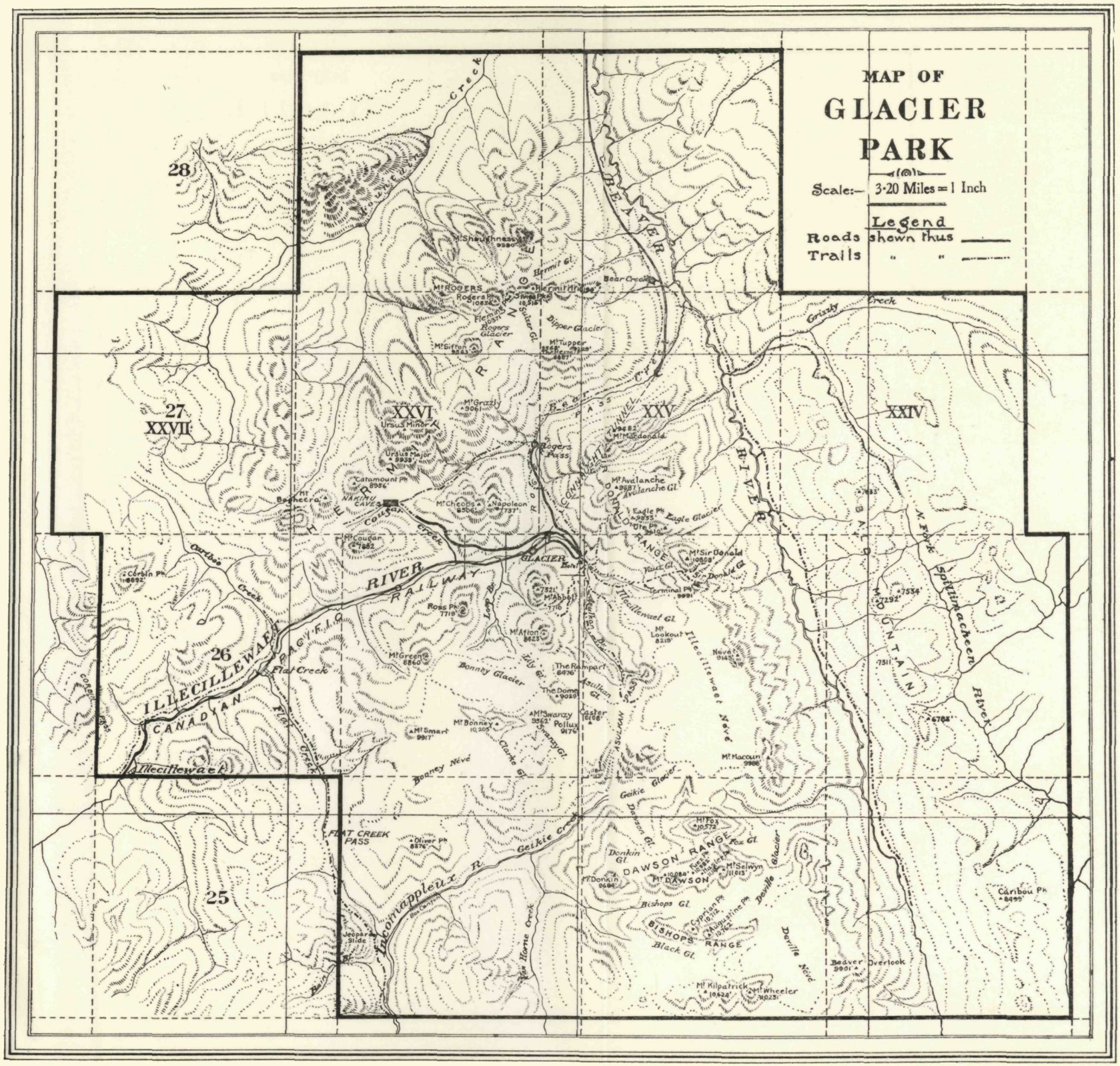
Roads shewn thus ———

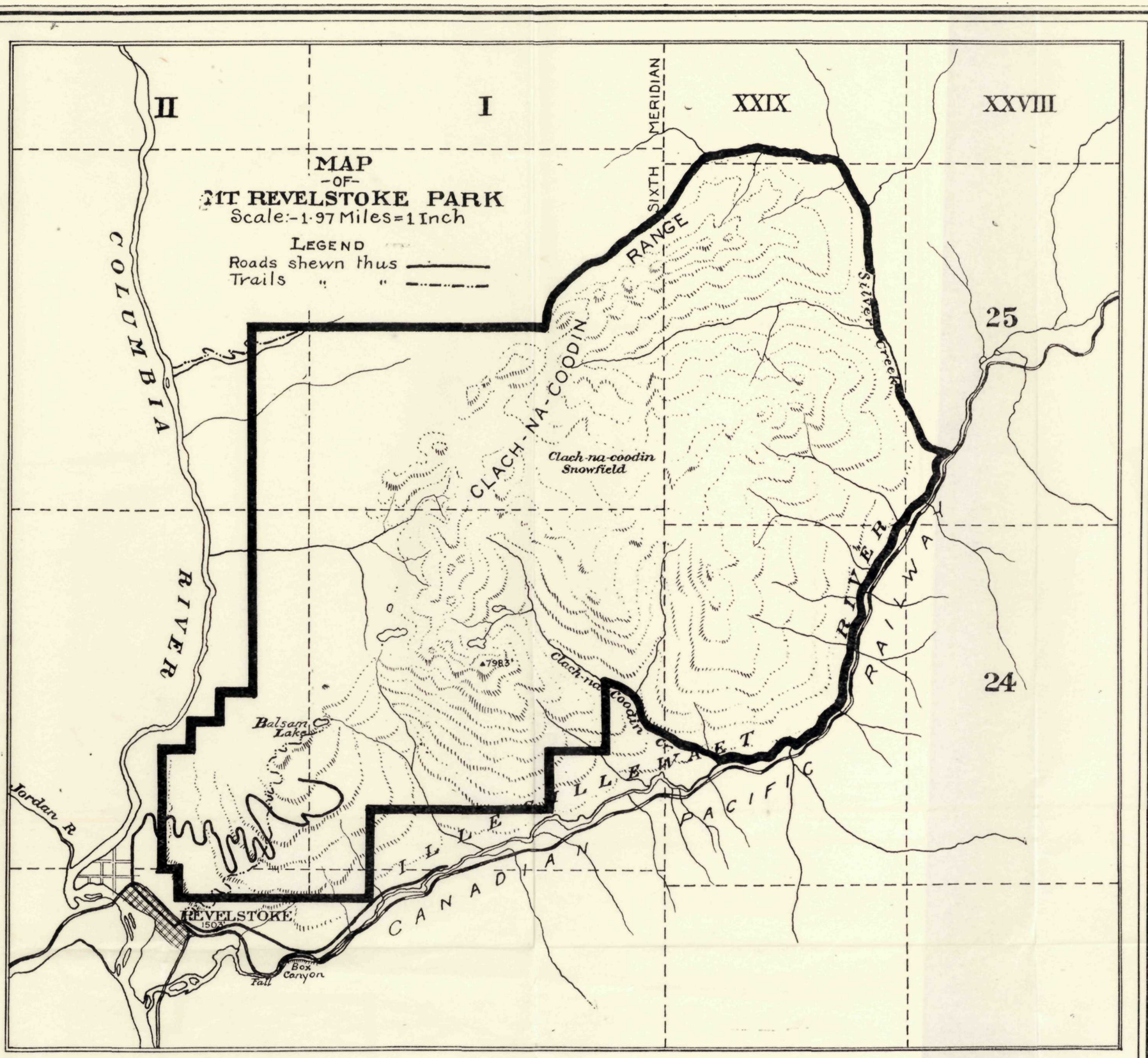
Trails " " ——·——·——

31 30 29 28 27 26 25

XIX XVIII XVII

Mt Baker 10,441'
Ayesha Pk 10,026'
Mt Collie 10,315'
Mt Gordon 10,338'
Mt Habel 10,361'
Amiskwi Falls
Amiskwi Pass
Wapta Glacier
Mt Yoho 9646'
Yoho Gl.
Habel Glacier
Waterfall Valley
Trolltinder 9414'
Isolated Pk 9224'
Mt McArthur 9882'
Whaleback Mt 9558'
Twin Falls
Kiwetinok Pk 9512'
Mt Pollinger 8998'
Kiwetinok Pass
Mt Kerr 9384'
President Pass
The President 10287'
The Vice President 10,049'
Emerald Pass
Mt Marpole
Michael Pk 8884'
Mt Carnarvon 9964'
Emerald Pk 8332'
Kiwetinok Cr.
Amiskwi River
Yoho L.
Yoho Pass
Yoho River
L. Duchesnay
Takakkaw Falls
Daly Gl.
Mt Daly 10,332'
Mt Niles 9742'
Mt Ogden 8798'
Paget Pk 8407'
Sherbrooke L.
Stephen
Summit Lake
Kicking Horse Pass
Kicking Horse River
Tunnels
Upper Kicking Horse Canyon
Hector
Ross L.
Emerald Lake
Chalet
Mt Wapta 9106'
Burgess Pass
Mt Field 8645'
Mt Burgess
Narao Lakes
Tunnel
Cathedral Crags 10,075'
Cathedral Mt 10,454'
Cathedral Brook
Popes Pk 10,360'
Mt Stephen 10,495'
Mt Field
Canadian Pacific Railway
Emerald Creek
Otterhead Creek
Dennis Pass
Mt Dennis
Duchesnay Pass
Mt Duchesnay 9592'
Boulder Creek
Mt Odaray 10,163'
L. O'Hara
L. Oesa
Abbot Pass
Mt Victoria 11,353'
Mt Huber 11,081'
Wiwaxy Peaks
Mt Yukness 9342'
Mt Schaffer 8824'
McArthur Pass
Horseshoe Gl.
Park Mt 9671'
Lake McArthur
Mt Biddle 10,878'
Rock Tower
Wenkchemna Pass
Nephalk Mt 10,160'
Mt Owen 10,118'
Otterfail
Otterfail River
McArthur Cr.
Miska Cr.
Mt Hurd 9265'
Mt Vaux 10,881'
Hanbury Pk 10,267'
Goodsir Creek
Ice River
Icefall
Chancellor Pk 10,751'
N. Tower 11,555'
Mt Goodsir
S. Tower 11,676'
Garnet Mt 7897'
Waste Falls
Steep Cr.
Zinc Valley
Zinc Mt 9800'
Fraser Cr
Sodalite Valley
Fallon Cr
Beaverfoot River
Mt McMillan 8214'


MAP OF
GLACIER
PARK
Scale:— 3·20 Miles = 1 Inch
Legend
Roads shown thus
Trails " "
28
27
XXVII
XXVI
XXV
XXIV
26
25
Mt Rogers
Mt Sheughness
Mt Sir Donald
Mt Avalanche
Mt Macoun
Mt Fox
Mt Dawson
Mt Selwyn
Mt Donkin
Mt Kilpatrick
Mt Wheeler
Mt Tupper
Mt Grizzly
Mt Cheops
Napoleon
Mt Cougar
Mt Bonney
Mt Swanzy
Mt Smart
Mt Green
Mt Lookout
Mt Afton
Mt Abbott
Mt Beehera
Mt Sifton
Mt Macdonald
Mt Ursus Major
Mt Ursus Minor
Mt Logan
Mt Pollux
Mt Castor
Mt Donkin
Mt Dawson
Mt Selwyn
Mt Fox
Mt Macoun
Mt Kilpatrick
Mt Wheeler
Mt Sifton
Mt Tupper
Mt Grizzly
Mt Cheops
Napoleon
Mt Cougar
Mt Bonney
Mt Swanzy
Mt Smart
Mt Green
Mt Lookout
Mt Afton
Mt Abbott
Mt Beehera


II
I
XXIX
XXVIII
SIXTH MERIDIAN
MAP
-OF-
MT REVELSTOKE PARK
Scale:-1·97 Miles=1 Inch
LEGEND
Roads shewn thus
Trails " "
COLUMBIA RIVER
CLACH-NA-COODIN RANGE
Silver Creek
Clach-na-coodin Snowfield
RIVER
RAILWAY
25
24
▲7983'
Clach-na-coodin Creek
Balsam Lake
Jordan R
REVELSTOKE
1503'
Box Canyon
Falls
CANADIAN PACIFIC
ILLECILLEWAET