THE MOUNTAINEER

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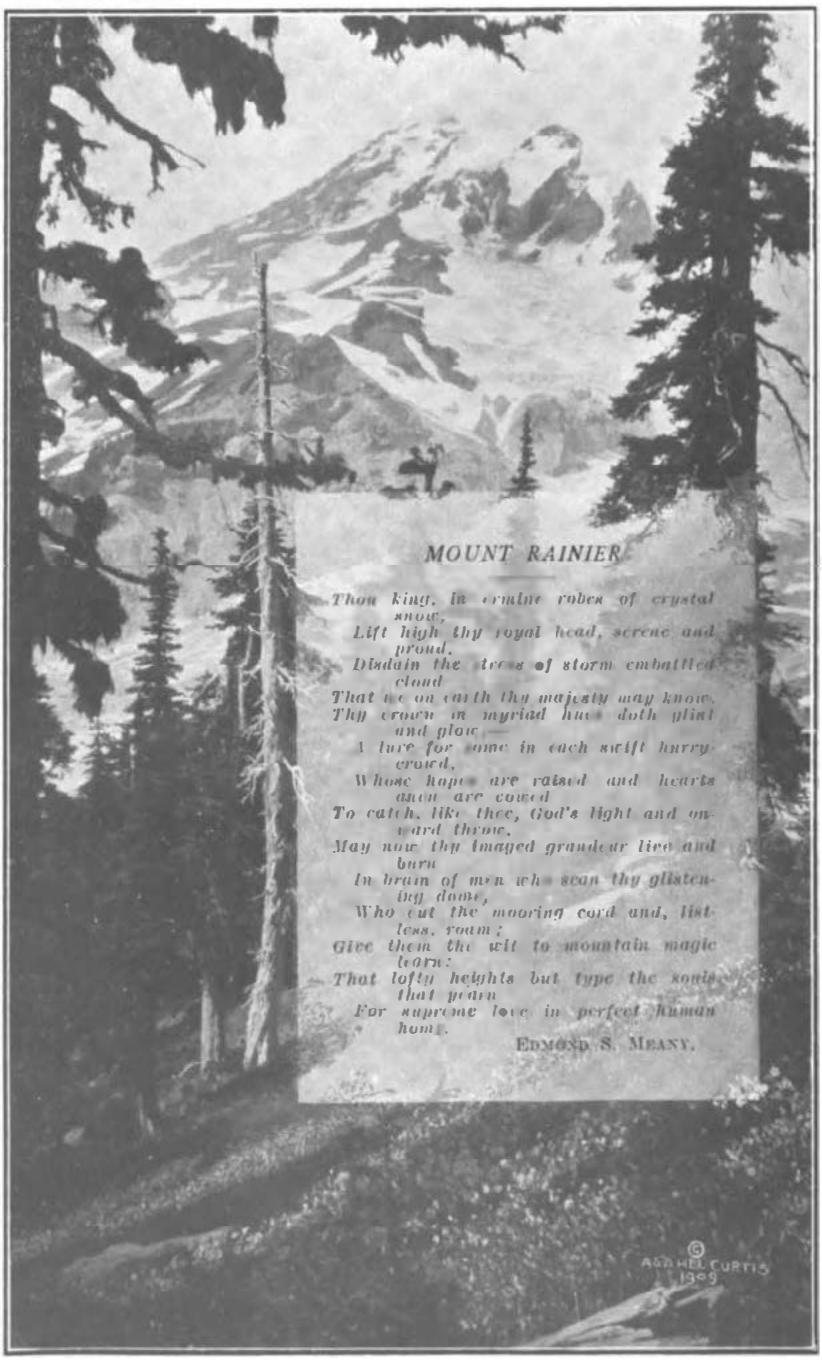


MOUNT RAINIER

THE OBJECT OF THE CLUB

THE object of this organization shall be to explore the mountains, forests and water-courses of the Pacific Northwest, and to gather into permanent form the history and traditions of this region; to preserve, by protective legislation or otherwise, the natural beauty of the Northwest Coast of America; to make frequent or periodical expeditions into these regions in fulfillment of the above purposes. Finally, and above all, to encourage and promote the spirit of good fellowship and comradry among the lovers of outdoor life in the West.

THE MOUNTAINEER

VOL. II. SEATTLE, WASHINGTON, NOVEMBER, 1909.

GREETINGS FROM THE PRESIDENT TO THE MOUNTAINEERS.

For more than thirty years my home has been in Seattle, a city whose arms reach out into the pulsing tides of the Pacific. While thus from boyhood I have dwelt at the level of the sea, my soul has continually feasted upon visions of lofty peaks. Eastward towers the Cascade Range, with the gleaming snow-crowned sentinel monarchs, forming a wide panorama of enduring charm and beauty. To the westward the Olympics rear more jagged summits in a serrate line—a great celestial saw cleaving the clouds. From boy to man have I loved these scenes, grateful that I could live and learn and work in their inspiring presence.

And now with you, my friends, I am coming into a more intimate acquaintance with the loved mountains, as we build trails to climb their sides and play in their wonderfully beautiful parks, until added strength and a profound enthusiasm enable us to scale their utmost heights. The alpine tree and flower, the snow and ice, the glacier and avalanche, all these have a power to lift the soul to a better understanding of the majesty of God.

O Mountaineer, I clasp your hand and vow anew my love for the great white hills.

EDMOND S. MEANY.

A WORD FROM THE PRESIDENT OF THE SIERRA CLUB OF CALIFORNIA.

To the Mountaineers:

I AM with you heart and soul in your work of white icy mountain climbing and all that goes with it. In particular, I warmly congratulate you on your fine triumphant success in all three of your outings. I regard Mt. Rainier as second to none of all the icy volcanic mountains of the coast.

JOHN MUIR.

MOUNTAINEERS' OUTING TO MOUNT RAINIER.

ASAHEL CURTIS.

The third annual outing of the Mountaineers, with all its pleasures, its temporary discomforts and its final triumph in the ascent of the highest mountain in the United States has passed into history. Time only leaves a memory of the happy days spent in the flower-strewn parks or on the higher ice-clad slopes; of the equally happy nights around the great campfires; of the well-earned, well-enjoyed rest, and of the life-long friendships that here found birth.

The discomforts of the long marches are forgotten; the days when, storm bound, we lay inactive; even the bugle boy, who always sounded reveilee long before we thought he should, is forgiven. Almost we might forgive those who insisted upon that fearful line, which one from the far Atlantic Coast in sport called the human centipede, but which we in our own rebellious spirit derided as the "chain gang."

Yet he is a poor mountaineer, indeed, who has not returned to his home the better for the many lessons learned in the solitudes. The trivial things of life, the petty cares that to us seem so great, slink back in the presence of this majestic mountain. It is as if one heard from out the solitudes a voice: "Why all this haste? Why all this fret and care? A thousand years ere your impatient feet first trod the earth this same beauty smiled, unknown to man. The same flowers bloomed content to bloom and die, adding their mite to Nature's hoard of mold. The same streams of ice coursed their way down mountain slopes in awful majesty. A thousand years after you slumber in that last great sleep, your petty deeds and purposes un-

known, forgotten by the hordes that followed you, they will still bear their message to other sons of man, who as restless and resistless as yourself, found here a curb to their impatient, witless will."

To the majority of the club members who participated in this outing it consisted of two or three weeks spent on the northern side of the mountain. That they may for a moment see, as it were, behind the scenes, I wish to give a brief synopsis of the early work that made the expedition a success, and to give credit to those who contributed to this.

The outing was intended as a trip around the mountain, and this plan was not abandoned until after the first two preliminary trips had been made. The first trip was via Fairfax and the Evans Creek trail to Crater Lake and Spray Park, made August 27 to September 1 by the Outing Committee. The second one was via the Carbon River trail to Moraine Park, on which Mollie Leckenby and Mrs. Curtis joined the party. The great amount of trail work to be done convinced the Outing Committee that it was not possible for the club to make the preparations in so short a time. On the other hand, the amount of country on the north side to be explored was so great that a single season of three weeks was all too short for that alone.

As any trip to the mountain, to be considered a success, must include the ascent, it was necessary to find a route to the summit from some point on the north side. This could not be from Spray Park; therefore camp must be made in Moraine Park or some park farther to the east. Prof. J. B. Flett had twice made the ascent over much the same route by which Prof. I. C. Russell climbed, and we determined to attempt the ascent with the party.

The Moraine Park trail had been destroyed by the Carbon glacier, and it was pronounced a hopeless task to put it in condition for horses. The park rangers ad-

vised building a trail through the Sluiskin Mountains, but this would require a summer's work and would cost $1,500. The only other alternative was a fifty-mile march up the White River Valley to Glacier Basin. To settle this problem the Outing Committee made the round trip from Fairfax to the camp ground in Moraine Park and returned through the Sluiskins on July 4, and determined to build a trail over the shifting moraine of the Carbon. This work was done for the club under the supervision of Park Ranger T. E. O'Farrell and practically finished in a week.

When every plan seemed to be working at its best, a feeling that there must be something wrong somewhere caused Mr. Nelson to go to Fairfax to investigate. He found that our worst fears did not do the situation justice. Spray Park was still deep in snow, and it was not possible to get horses farther than Crater Lake. In getting our first supplies to the lake Henry Loss had killed one horse and crippled others. The deep snows prevented repairing the trail beyond the lake in time for the party, and Nelson advised that we abandon the Spray Park part of the outing, or postpone it until the last.

To do this meant the entire rearrangement of the supplies of the outing, particularly the commissary outfit, and will explain to those who were with us the first week why there was a shortage of table utensils and a scant dinner the first night in camp.

The party left Seattle on the morning of July 17, reached Fairfax at 11 a. m., and marched to the first camp eleven miles out on the Carbon River trail. In a drizzling rain camp was made, and tents erected to protect everyone, and in spite of the discomforts of wet garments it was a happy party that gathered around the first campfire.

The following morning a number of the men were detailed to go in advance and complete the trail across

MOUNTAINEER CAMP AND MORAINE PARK

MORAINE PARK AND THE SLUSKIN MOUNTAINS

Photo by Dr. B. R. Stevens

EASTERN SLOPE OF MOUNT RAINIER SHOWING ROUTE TO SUMMIT

Photo by Asahel Curtis

MOUNT RAINIER FROM TEMPORARY CAMP SHOWING ROUTE TO THE SUMMIT

the Carbon Glacier. This was accomplished in time to permit the advance part of the pack train to go on into Moraine Park without delay. Here camp was established, quarters assigned to the men and women, commissary housed in its own tents and plans made for the try-out trips. These served a double purpose, to see the surrounding country with the greatest possible dispatch and to drill members of the party and try their mettle. The first try-out trip was to the Winthrop Glacier, the second across the Carbon into Spray Park, the third with small packs across the Winthrop Glacier to St. Elmo Pass.

In the meantime Mr. L. A. Nelson, Mr. Grant W. Humes and myself had made a trip to the head of Inter Glacier and selected a site for temporary camp on Ruth Mountain. This camp spot had been suggested by Prof. J. B. Flett, who had previously climbed from here.

When making this preliminary trip we had hoped to make the ascent, but were unable to do so because of a storm. On July 28 Nelson and Humes went on to temporary camp, and on July 29 made the ascent, going up the ice field that forms the head of the White and Winthrop Glaciers. They were forced to cut steps considerable of the way because the snow slopes were steep and frozen. I was prevented from joining them in this ascent by a broken shoulder. This ascent, made over untried country by two men who had to break trail or cut steps so much of the way, ranks as the most difficult one made by members of the club.

While they were climbing the main party of seventy-seven came up to temporary camp and met them on their return from the summit. Their strenuous climb discouraged a number from attempting the ascent, and on the following morning seventeen turned back, leaving a party of sixty-two.

The spot chosen for camp was a ridge of boulders

and volcanic ash between Inter Glacier and the main White. (Plate 5.) Beds were made by laying a line of large rocks below to keep from rolling out and down the mountain. The looser earth was then dragged down to make a softer couch. The greater part of the party had sleeping bags, which afforded ample protection from the intense cold that followed the setting of the sun.

July 30 broke clear and beautiful, and the party in seven companies moved out from camp, dropping to the White Glacier and winding upward among long crevasses. The only object by which elevation could be judged or distance measured was the peak, Little Tahoma. As we slowly toiled upward we seemed to gain so little on the elevation of this peak that the effect was disheartening. At last it could be seen that we had topped its highest point of red basalt, and we knew we were nearing the 12,000-foot level. Only 2,500 feet above us was the summit, and in unbroken line the party was climbing easily. The try-out days in line had been irksome to many, but their value was proven here. But few could have stood alone on the slopes that now measured 45 degrees and ended in broken crevasses. Fewer still could have endured the strain of breaking steps in the hard snow, always with that white blur running upward to the blue sky, and downward until the eye grew dizzy following where miles away the ice and forest mingled. The only safety lay in watching the steps ahead and moving forward as the signal was given. At 12,500 feet I passed along the line to see how everyone was taking it, and reached Dr. Van Horn at the head of Company D. As he recognized me he said: "Curtis, this is no place for the father of eight children."

I could not help wondering how many more had reached the same conclusion. It had been impossible to rest for more than a moment, because there was no

protection from the fierce wind that swept down into our faces. At 13,000 feet a half-closed crevasse, large enough to shelter the entire party, gave a much-needed chance for rest and lunch. (By reference to Plate 5 this entire route can be traced and a clear idea formed of the ascent.) Above the crevasse we crossed over the head of the Winthrop, planning to enter the saddle between Crater Peak and Liberty Cap. Here the wind increased to a gale, still in our faces, and continued throughout the day.

Once in the saddle between the summits, the ascent was easy, the entire party reaching the crater in eight hours and forty minutes from temporary camp. Here, out of the wind, everyone sought a sheltered spot to warm themselves on the hot rocks and ashes. The A.-Y.-P. flag was fastened to its staff and an effort made to plant it among the rocks, but the wind tore it down each time, and it was carried to the snow dome of Columbia Crest and the staff set deep in the snow. It remained there only fifteen minutes, however, when the staff was broken by the wind. The flag was rescued and placed inside the crater by the Ingraham party, who passed the night on the summit.

The party that reached the summit climbed in the following formation:

General Staff.—Asahel Curtis, L. A. Nelson, Lulie Nettleton, W. M. Price, Grant W. Humes, F. O. Morrill.

Company A.—P. M. McGregor, Captain; E. W. Harnden, Prof. E. S. Meany, Nita J. Feree, Wayne Sensenig, Dr. Cora Smith Eaton, Lydia E. Lovering, Winona Bailey, G. D. Emerson, Lieutenant and member of General Staff.

Company B.—Dr. E. F. Stevens, Captain; John A. Best Jr., Roy Hurd, Mary J. Price, Henry Howard, Lieutenant.

Company C.—H. C. Belt, Mrs. H. C. Belt, John

Fahnstock, C. M. Farrer, Annie Farrer, Lulie Smith, Olaf Hansen, Charles Albertson, Lieutenant.

Company D.—Dr. F. J. Van Horn, Captain; May I. Dwyer, Anna Howard, S. L. Moyer, Elizabeth David, H. Hutchinson, R. Merrill, Alida J. Bigelow, Lieutenant.

Company E.—Blake D. Mills, Captain; Cora Garvin, Robert Van Horn, Dr. L. W. Clark, Stella Scholes, J. M. Jensen, Bertha Reed, H. V. Abel, Gladys M. Tuttle, Lieutenant.

Company F.—Murray McLean, Captain; Freda Sanford, Grace Howard, Rena Raymond, Anna Stauber, H. May Baptie, A. W. Archer, Mollie Leckenby, Robert Carr, Lawrance Carr, J. Fred Blake, Lieutenant; H. Otto Knispel.

Company G.—Major E. S. Ingraham, Captain; Kenneth Ingraham, Richard Buck, W. J. Colkett, Harvey Moore.

After an hour on the summit the descent was made safely to temporary camp, where a second night was spent. Twilight gave way to full splendor of moonlight while clouds formed in the valleys and rolled fragments of mist upward against the bulk of the mountain. The toil of the day and the discomforts of our beds were forgotten in the splendor of the scene. A mile above us the great White Glacier formed and wound its ten miles of ice downward into the dark chasm. From our eery crag we could not see where it passed the base of the cliff, but we could look straight down on the seamed surface of ice. More than a mile away across the ice, clear in the moonlight, rose the dark crag of Little Tahoma and from the depths occasionally came the boom of moving ice.

The following morning the clouds lay around the mountain in a vast sea that stretched on all sides to the horizon. A few peaks broke through, but they were insignificant in comparison to the dominating bulk of ice that we were on. The impression was of being

afloat on a great iceberg. Major Ingraham and his four companies, who had spent the night on the summit, came down as early as they could see to travel, and rejoined the main party at St. Elmo Pass. Returning to camp, we walked down into this mass of clouds and found camp shut in by a dense fog.

During the last week of the outing, fifty-five members of the party made a knapsack trip to Spray Park, taking bedding, camp equipage and two days' provisions. They crossed the Carbon Glacier about midway in its length, and entered the lower part of the park, just where the meadows begin.

It had been found impracticable to move the main camp to Spray Park, and yet it was too great a treat to omit entirely. As day after day the eye feasted upon the beauties of ice-bound mountain crag or flowery meadow, the mind became satiated, and it required the unusual to attract attention. Yet nowhere else on the mountain had the effect been so strange as here. The park winds in and out among the crags, with small lakes; streams that course through meadows or plunge over rocks in beautiful cascades; trees bent and broken by the wind; flowers of every hue, so thickly strewn that it was impossible to step without crushing them. Each step brought a change of view, and at first the expressions of praise were lavish, but as we climbed and the view became more general all this gave way to a feeling of sadness.

The park was so beautiful that it seemed unreal, and one regretted that so few could see it. Nature had fashioned this playground much better than man could hope to, and had set it away here between two great glaciers at the base of a mighty mountain. Thousands on thousands of acres in extent, it stretched from the dark belt of timber 4,000 feet upward to the ice-clad slopes below Liberty Cap itself. The last trees clung low down to the rocks at an elevation of almost 8,000

feet, while flowers grew nearly a thousand feet higher. But in the lower park the effect of the wind was not so evident, and countless thousands of avalanche lilies, each with a dewdrop on every petal, nod gently in the mountain breeze. In time, when trails and roads are built, this great park will be open to the public, and thousands will be able to enjoy what has passed so long unnoticed. However, here as elsewhere, it will require the strong hand of the government to prevent wanton destruction.

Those who first visited Paradise Park wantonly set fire to the beautiful groves of alpine fir and hemlock, "just to see them burn," and today those same groves stand, bleached ghosts of trees, their beauty gone for ever.

It must always be the work of the club to assist in every way possible in the work of protecting the beautiful places of our state. A great part of this must be in educating those who, in greatly increasing numbers, go each year into the mountains.

BEDS AT TEMPORARY CAMP Photo by Asahel Curtis

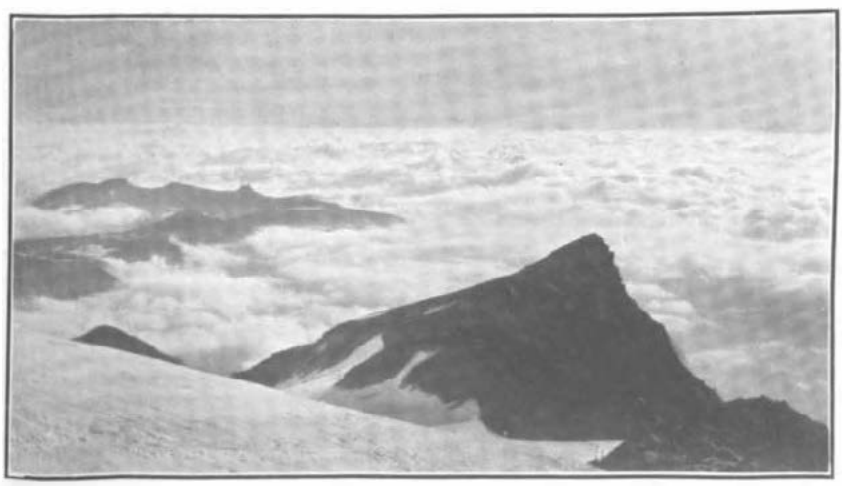


Photo by E. W. Harnden

DAWN AT TEMPORARY CAMP, ABOVE THE CLOUDS

Photo by Asahel Curtis

LUNCHING IN A CREVASSE AT 13,000 FEET

Photo by A. W. Archer

LIBERTY CAP FROM CRATER PEAK

ON COLUMBIA'S CREST.

MAJOR E. S. INGRAHAM.

AFTER long hours of incessant climbing I stood upon Columbia's Crest! A cold wind pierced my tired body to the marrow, but my soul forgot the discomforts of its habitation and surged and expanded in reverence and admiration of the scene around me. At my feet slumber the snows of a century, yielding not to winter's blast nor summer's heat. One law alone they obey—that causes the apple to fall and the planets to keep in their appointed places. Inch by inch they are dragged down the mountain's rock-ribbed sides until changed into the slow-moving glacier. The stunted trees upon the glacier's bank have grown old beckoning it onward. The flowers of a hundred summers have smiled upon it and bid it welcome. Yet it pauses not nor yet hastens. When the snows upon which I now stand will have reached the silver stream far below, our children's children may listen to its murmurings.

CARBON GLACIER.

EDMOND S. MEANY.

I hail thee, river of ice and snow,
Thou source of our valleys' fertile soil.
I climb thy seamy sides to know
A tithe of thy patient, ceaseless toil.

Grind, grind, grind,
Huge stones to dust, O stream!
Grind, grind, grind,
Till thy sides as mirrors gleam!

Thy open lips of ice doth pour
A gushing stream in noisy flood,
A stream released in joyful roar,
Behold! the glacier's milk-white blood.

Grind, grind, grind,
To crumbling dust these stones!
Grind, grind, grind,
The mountain's shattered bones!

Was this great rock by Titan tossed
Thy cold, brown breast to crush and bruise;
Or didst thy maiden, wintry frost
Launch playful boat for seaward cruise?

Grind, grind, grind,
The rocks however hurled!
Grind, grind, grind,
Thou millstone of a world!

How weak the pen, how vain the brush
To catch the hues of this deep gash!
How here revealed thy power to crush,
How awful is thy breathing's crash!

Grind, grind, grind,
In cruel jaws of ice!
Grind, grind, grind,
A Devil's Paradise!

New life from death, eternal whirl,
How brief each puny span of life!
How long the atoms, grinding, swirl
Ere seized anew for a season's strife!

Grind, grind, grind,
To powder every stone!
Grind, grind, grind,
New life will death atone!

I mount thy shoulders' utmost height,
Where threat'ning ice-cliffs poise and nod,
Where avalanches roar in flight
Like falling demons cursed of God.

Grind, grind, grind,
And grind exceeding fine!
Grind, grind, grind,
My Master's will and thine!

August 5, 1909.

THE GLACIERS OF MOUNT RAINIER.

ISRAEL C. RUSSELL.

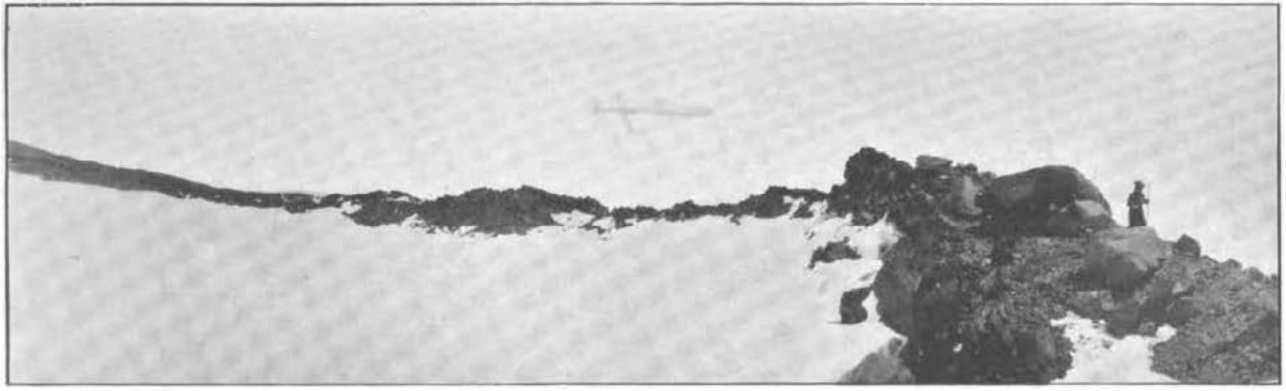
[Compiled by Alida J. Bigelow from Mr. Russell's report in the 18th Annual Survey, Vol. 2, U. S. G. S.]

The geology of Mount Rainier in its present general form shows that when in its greatest perfection it was a conical mountain, with gracefully concave sides. The upper portion of the mountain is formed to a large extent of fragments thrown out during explosive eruptions. Lava flows are also abundant, but did not greatly modify the character of the slope as determined by the falling of projectiles shot out of the summit crater.

The height of the mountain, between 15,000 and 16,000 feet, before the explosion that truncated its summit, insured the gathering of perennial snows and the formation of névé* fields and glaciers on its more elevated portions. The main topographic changes that have resulted must therefore be due to glacial action and the eroding power of streams fed by the ice.

Assuming that the peak was originally a perfectly symmetrical cone with smooth, even sides, and that the névé formed a uniform covering over the upper third of its surface, the downward flow of the névé would be equal. Many disturbing conditions come in, however, in the case of a peak like Mount Rainier, composed of loose agglomerate and lava sheets. Irregularities in the surface of the cone, erosion by streams flowing from the ice, unequal drifting of the snow, as well as unequal melting, owing to variations in exposure

* Neve is the granular snow-ice, before the formation into solid glacial ice.



CRATER OF MOUNT RAINIER Photo by Asahel Curtis

MOUNTAINEERS ON THE SUMMIT OF MOUNT RAINIER

Photo by Asahel Curtis

IN AN ICE CAVE UNDER COLUMBIA CREST

Photo by Asahel Curtis

PLANTING OF THE A.-Y.-P. E. FLAG INSIDE THE CRATER

on the western and southern sides, would lead to the gathering of the ice into more or less definite streams. Individualized ice streams once established would hold their positions, and by their erosion would sink deeper and deeper into the rocks. From the extremity of each glacier a stream fed by the melting ice would carve a gorge or canyon, leading to rivers on the plain below. As the ice gathered in well-defined streams, melting would be retarded and the glaciers constantly extended farther and farther down the water-cut gorges. In this manner what may be termed primary glaciers would originate from the dividing of the descending névé. As the glaciers deepen their beds they sink into the mountain and are more completely sheltered from the sun, thus tending to perpetuate their own existence. Between the primary glaciers there would be portions of the lower slopes of the mountain left in relief by the excavation of the valleys between them. These V-shaped masses pointing up the mountain would form wedges, against which the descending névé would divide to form primary glaciers. The Wedge and Little Tahoma are typical examples of such wedges.

As is well known, the erosive action of a glacier, other conditions being the same, depends on the gradient of its bottom. Judging from the present condition of Mount Rainier and other similar isolated peaks on the Pacific Coast, it appears that the most intense erosion occurs in a zone about half a mile broad where the primary glaciers become distinct ice streams. In this zone the glaciers excavate canyons, and thus increase the slope of the central mass of the mountain above the extremities of the V-shaped residual masses, on its lower slopes. Tho heads of these valleys tend to become amphitheaters. The cliffs encircling an amphitheater in which a glacier has its source, gradually recede, owing to the disintegration of the rocks in the great crevasse, termed a bergschrund, which is formed

near where the upward sloping névé meets the rock wall inclosing it.

The extension of the amphitheaters at the heads of the glaciers renders the sides of the dome more and more precipitous as glacial erosion progresses. Carbon Glacier, flowing northward and having its amphitheatre sheltered from the noonday sun, has excavated a great recess or cirque* in the side of the mountain, while the glaciers on the south side of the peak have scarcely more than begun to form similar recesses.

The primary ice streams on Mount Rainier, in the order of their occurrence, beginning on the north side of the mountain and going about it toward the east, south, etc., are as indicated on the accompanying map, the Carbon, Winthrop, Emmons (or White), Ingraham, Cowlitz, Nisqually, Kautz, Wilson, Tahoma, Puyallup, Edmunds and Willis (or Mowich) Glaciers. The secondary streams, or interglaciers, as it is convenient to term them, in the order just stated, are Interglacier, Frying Pan, Little Tahoma, Williwakas, Paradise, Van Trump and others not named. A former extension of the interglaciers and the previous extension of true glaciers, where only deep snow accumulations now occur, is shown by the polish and grooves on the rocks, below the positions they occupy.

Carbon Glacier.

The amphitheater in which Carbon Glacier has its source is the largest excavation that has been made in the sides of Mount Rainier. The snow on the less steep slope above the cliff leading to Liberty Cap, creeps down to the verge of the precipice and then breaks off and forms avalanches, which descend to the glacier below. [Avalanches were very common here, and could be plainly seen from the Mountaineer Camp, 1909.] Carbon Glacier in reality has no true névé at present,

* Cirque, an amphitheater-like valley head.

except the snow-covered area, just mentioned, above the summit of the cliffs encircling its amphitheater. The gathering ground of the glacier has been decreased by the extension of the amphitheater until it is but a fifth or a tenth of its original extent. This glacier is still enlarging its amphitheater, and if the process does not check itself by decreasing the area on which snow for the supply of the glacier accumulates, will cause such a recession of the cliffs at its head that the central dome of the mountain will become broken.

The wall of rock rising above the head of the glacier is about 4,000 feet high. On this vast precipice little snow accumulates, but on its summit there is a vertical cliff of stratified névé snow about 200 feet high. [This wall of rock is called Willis Wall. See Plates 17 and 25.] At the outlet of the ampitheater the snow, still having the characteristics of a névé, is much crevassed, especially where it passes over bosses* of rock on the floor below. The glacier descends a moderately steep slope on leaving the amphitheater, flows for a mile and a half with a very gentle grade, and then goes over the edge of a precipice and descends a steep slope to its end. The alternate breaks, and level reaches resembling a great stairway are not a novel feature, as is well known, but a characteristic of many alpine glaciers, and indicate similar features of the rock surface beneath. A glacier cuts back its beds from one ice fall to another, in much the same way that a cascade of a stream recedes. [Plate 17 shows Carbon Glacier and its much crevassed condition on leaving its cirque or amphitheater.]

Opposite Andesite Cliff, Carbon Glacier is about half a mile broad, but it soon increases to nearly a mile in width, and maintains this increase all the way to the brink of the steep descent, a mile and a half below.

Down-stream, the glacier is progressively more and

* A boss is a protruding mass of harder rock in the glacier bed.

more deeply covered with stones and dirt. Below the beginning of the steep descent leading to the terminus no ice can be seen in a general view. The end of Carbon Glacier was seen by Willis in 1881. At the time of our visit the glacier had retreated about 100 yards, as nearly as could be estimated, above the position it occupied thirteen years previous, and the precipice at its terminus had become less steep.

[The Mountaineers' Club built a trail, easily used by pack train, up this face of Carbon Glacier in 1909. This shows that in the thirteen years since Mr. Russell reported, there has been much greater wasting away of the ice. See Plate 18.]

A recent lowering of the surface of the glacier is recorded by abandoned lateral moraines. These are conspicuous along each side of the glacier. On leaving the glacier on either side and climbing the fresh slopes of morainal material bordering it, one finds similar parallel ridges, each of which is clothed with forest trees. These older moraines are in several instances higher than the most modern ones, and show in general a progressive lowering of the surface of the ice as the width decreased. When the earliest pair of moraines were formed it was about a mile broader and its surface about 250 feet higher than now. Whether the valley was ever more deeply filled with ice than is recorded by these old moraines remains to be determined. [These elevated lateral moraines are common at the sides and above most of the glaciers on Mount Rainier.]

At the foot of the steep descent Carbon River emerges from a cavern in the ice, a roaring torrent, heavily encumbered with boulders. [Plate 18.]

Winthrop Glacier.

The névé of Winthrop Glacier extends to the summit of Mount Rainier. A part of the snow that ac-

WHITE GLACIER, THE LARGEST ON MOUNT RAINIER Photo by Asahel Curtis

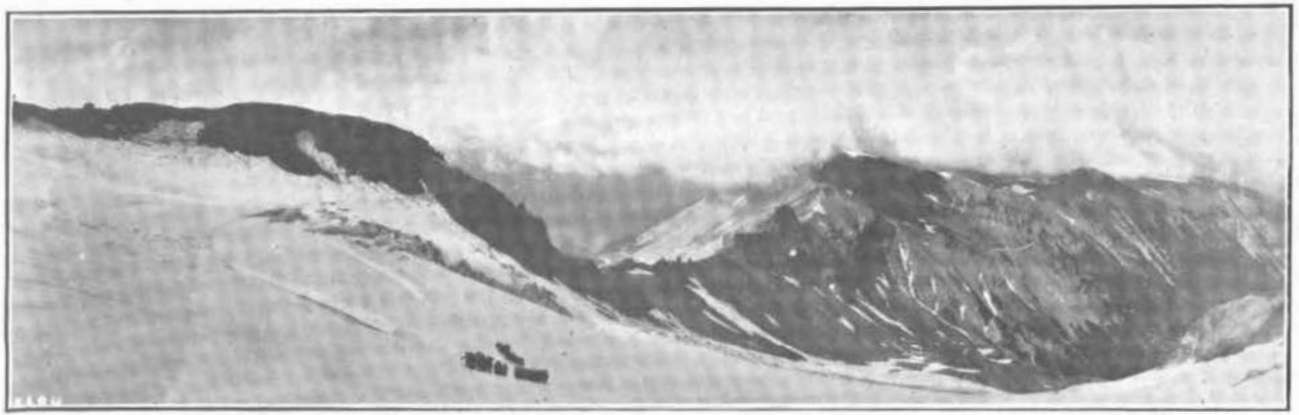


Photo by Asahel Curtis

MOUNTAINEERS ON INTER GLACIER, ST. ELMO PASS IN CENTER, GLACIER BASIN AT RIGHT

Photo by Asahel Curtis

RUSSELL PEAK

SPRAY FALLS

cumulates in the great summit crater between Crater Peak and Liberty Cap flows eastward down the precipitous slope of the central dome, covering all that side of the mountain. The eastern side of the mountain is more heavily snow covered than any other portion, mainly for the reason that the prevailing westerly winds cause the snow to be deposited there in greatest abundance. Near the lower limit the névé is divided by two rocky promontories known as The Wedge and Little Tahoma. Their prow-like rock masses divide the névé into three primary glaciers—the Winthrop, Emmons (or White) and Cowlitz.

The névé of Winthrop Glacier descends below The Wedge and terminates above timber line at an elevation of approximately 8,000 feet. Below the lower margin of the névé the solid blue ice of the glacier proper, in places heavily covered with *debris* extends far down the valley, between rugged mountains, and ends at an elevation of between 4,000 and 5,000 feet. [Winthrop Glacier carries the largest rock masses of any glacier on Mount Rainier. This is probably due to the great supply of loose rock at the edge of Willis Wall. See Plate 19.]

From the ends of the glacier one branch of the White River flows out as a swift, turbid stream, heavily loaded with coarse *debris*. One of the characteristic features of the glaciers about Mount Rainier is the occurrence of well-marked domes, the summits of which are commonly fractured so as to produce radiating crevasses. Several of these domes occur in Winthrop Glacier, both in the névé portion and in the glacier proper. The margin of the glacier is heavily moraine covered and much broken by crevasses. In places it is impassable.

The extremity of the glacier flows past a bold rock dome, which was formerly covered with ice, and at a later stage, as the glacier receded, divided it into two

branches, the eastern being the broader. The ice has here shrunk away from the moraine, and is now fully 100 feet below its crest.

Emmons (or White) Glacier. [Plate 20.]

[White Glacier is the longest in the United States.]

Below The Wedge and Little Tahoma, Emmons Glacier is a well-defined ice stream, about five miles in length, with bold, rocky cliffs on each side. The glacier becomes heavily charged with debris along its borders from the adjacent cliffs, and in the lower portion of its course is completely covered with stones and dirt on either side. These lateral moraines become broader and broader toward the terminus of the glacier, leaving a tapering lane-like tongue of clear ice between, but before the terminus is reached the ice over the entire surface is concealed by a continuous sheet of brown and barren debris.

The tongue of clear ice near the extremity of the glacier is some two or three miles long, and much of the way about one-third the width of the valley.

Emmons Glacier, like all the other primary glaciers on Mount Rainier, is evidently wasting away and its terminus receding.

Ingraham Glacier.

The portion of the névé descending the east side of the central dome of Mount Rainier, to the right or south of Little Tahoma, forms a primary glacier of an abnormal type. This well-defined ice stream does not descend the mountain slope in a direct course, but is deflected southward or becomes tributary to Cowlitz Glacier.

On approaching its junction with Cowlitz Glacier, Ingraham Glacier descends a precipice about 800 feet high and forms a fine ice cascade.

Cowlitz Glacier.

The Cowlitz Glacier, above where Ingraham Glacier joins it, expands somewhat and occupies an irregular depression having something of the features of an amphitheater. The slopes at the head of the depression are so sharp that the snow descends in avalanches.

The portion of Cowlitz Glacier below Ingraham Glacier is enclosed by bold cliffs and is well defined. There is less evidence of shrinkage along its sides than in the case of the other glaciers examined. A sharp-crested lateral moraine is evidence, however, of a recent lowering of the surface of at least 75 or 100 feet.

Nisqually Glacier.

Nisqually Glacier heads in two névé fields, which occupy what may be termed incipient amphitheaters, situated below the level of Gibraltar. The easterly névé, the one nearest Gibraltar, however, is fed by two snow streams, which endure through the summer and form ice cascades on which avalanches frequently occur.

This glacier narrows to a well-defined stream to the west of Paradise Park, and at its terminus there is an archway from which Nisqually River rushes out.

[Mr. Russell did not study Kautz, Wilson, Tahoma, Puyallup and Edmunds Glaciers, and so no report is given of these.]

Willis (or Mowich) Glacier.

On the northwest side of Mount Rainier and at the head of the deep, narrow valley through which the north branch of the Mowich River flows, is a glacier known as the Willis (or Mowich). It has many of the features of the primary glaciers already described, but is of small size, and one may see all its characteristic features in a single day's excursion.

The entire distance from Liberty Cap, where the snow accumulates to the extremity of the glaciers, where it melts away, is approximately five miles. The breadth of the glacier where its borders are best defined, about a mile above its terminus, is approximately 3,000 feet.

At the head of the canyon there is a steep ascent to the summit of the mountain resembling the higher and more precipitous cliffs at the head of Carbon Glacier. There is a noticeable enlargement of the canyon near its head, but it is not extensive enough to be classed as an amphitheater. From the summit of Eagle Cliff—where may be seen the most magnificent of the views about Mount Rainier, and in fact one of the most sublime pictures of noble scenery to be had anywhere in America—the whole of Willis Glacier, from the snow fields that give brilliancy to Liberty Cap down to the dirt-stained and crevassed extremity of the ice stream, is embraced in a single view.

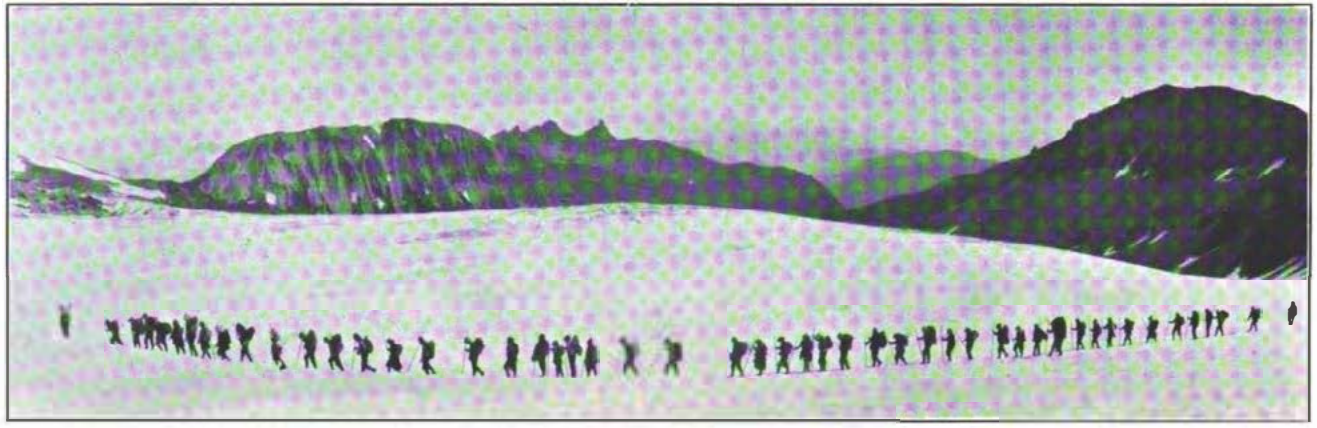
From Eagle Cliff the manner in which Willis Glacier is divided at its extremity into two moraine-covered tongues of ice is a noticeable feature. The bold rocky eminence that causes the division rises steeply in the center of the valley to a height of fully 1,000 feet, and is clothed on its down-stream side with forest trees.

The retreat of the glacier within recent years has been accompanied by a lowering of its surface, as is plainly recorded by fresh-looking ridges of debris along its border. On the northern side of the glacier, for a mile above the ice fall of 400 feet, there are three well-defined abandoned lateral moraines.

Interglaciers.

The interglaciers were formerly more extensive than now, and much of the beauty of the park-like regions in the neighborhood of the upper limit of timber growth is due to the changes they made in the relief of the

WINTHROP GLACIER, SHOWING ST. ELMO PASS. Photo by Asahel Curtis



CROSSING THE WINTHROP GLACIER Photo by Asahel Curtis

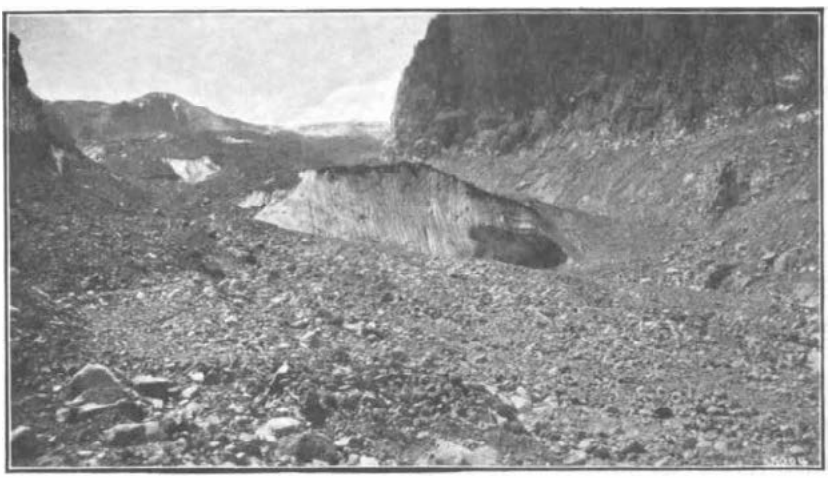


Photo by Asahel Curtis

NOSE OF THE CARBON GLACIER

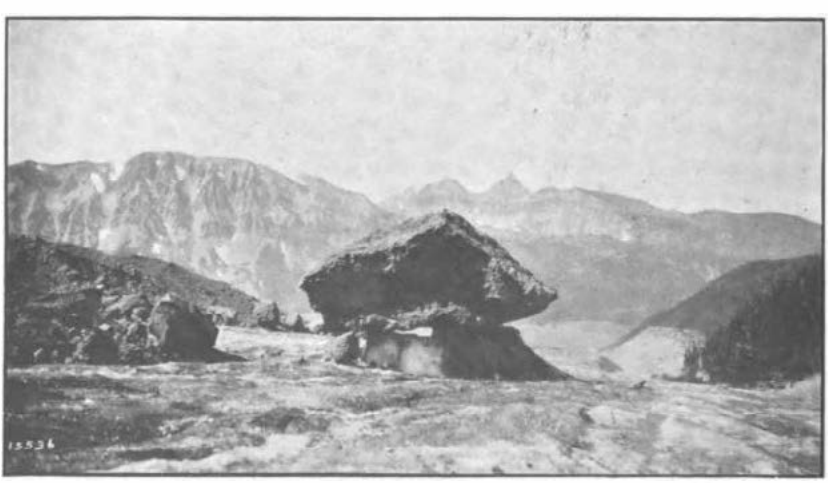


Photo by Asahel Curtis

HUGE ROCKS CARRIED DOWN BY THE WINTHROP GLACIER

mountain side, both by rounding and smoothing the rocks over which they flowed and by heaping moraines upon them. [See Plate 2.]

Many of the crags and pinnacles which give diversity to the scenery on the steep mountain slopes, like the Guardian Rocks near Spray Park, Gibraltar and the numerous crests near it, and other similar crags in Henry's Hunting Ground, etc., are remnants spared by the glaciers which once enveloped nearly the entire surface of the mountain, but still in their deeper portions flowed in most instances in well-defined channels. [See Plate 3.]

THE LURE OF THE WEST.

E. W. Harnden.

Why does a far Easterner, an Appalachian, go vacationing into the far West, not once, but repeatedly? Wildness and remoteness from civilization are as easily enjoyed in New England as in the West—in the Maine woods, in New Hampshire, even in the old Bay State. I have had as strenuous work bucking brush for days at a time in the White Mountains, far from all evidences of mankind, as I have had in the Tuolumne Canyon, and there were compensations, scenic and otherwise, of a somewhat different kind. In winter, too, our White Mountains afford some true alpine aspects; and certainly New England need not apologize for its yachting, canoeing, snow-shoeing, hunting or automobiling.

Thoreau once said that other nations have their written epics—that America is living hers; and it seems to me that the lure of the West today lies in its epic, dramatic appeal, now somewhat subdued in other

parts of the country, an appeal human as well as scenic. The people are doing things in a more virile, unfettered, optimistic way, not having found their limitations and not admitting that they have any; and Nature, also, has worked along the Pacific Coast, in the canyons, mountains, glaciers, waterfalls and trees, with a broad, titanic sweep of the brush not to be found elsewhere. Her work, perhaps, sometimes lacks the perfection of detail to be found in the East, and there are people who prefer the Hudson to the Columbia. Personally, I do not.

In scenery, from Alaska to Southern California, and in climate (making a *few* mental reservations), I believe the Pacific Coast leads the world; and the situation of Washington and Oregon, in the very center of things, is especially fortunate. (I hear some enthusiastic Seattleite say, "Why drag in Oregon?") You have within your own borders the great volcanoes, the Olympics, Crater Lake and numberless other wonders; while Alaska, the Canadian Rockies and Selkirks, the Sierras, and all the great national parks of the West, are readily accessible. Because of all these attractions, although an Eastener who thoroughly appreciates and enjoys the advantages and charms of the East, I go West as often as I can, because certainly scenery, climate and electric human contact go to make up no mean part of life.

Rainier is the most majestic great dome mountain, not excepting Mount Blanc, that I have ever seen. Where else can you find a mountain with fifteen or sixteen tremendous living glaciers on its sides? Four years ago, from Paradise Park, repose seemed to be its keynote; but I found this year that it is a dozen mountains in one, and that even the Matterhorn has nothing more terrific than the avalanching Willis Wall.

One of the grandest pictures in my "nature gallery"

was furnished at our temporary camp. Can any of us ever forget the tremendous view from that isolated rocky ridge, the sweep of the great, crevassed White Glacier, the noblest ice river in the country, curving its great length from the mountain heights to the valley below, with rugged Little Tahoma cutting the sky-line beyond, and far off, on the horizon, Mount Baker and Glacier Peak? I can close my eyes and see that glorious moonlight effect of the "night before" silvering everything, as I saw it sitting up in my sleeping bag and looking across the glacier; and I can see also that superb sea of cloud stretching around and beyond Ruth Mountain, below us, "the morning after." Spray Park, too—the most beautiful of the Rainier parks—presented a phase of the old mountain entirely new to me.

I wonder how many have any idea of the proportions of Rainier. Several years ago, standing on a summit of the Tatoosh Range, to the south, I made some eye measurements. Here was a fine range, perhaps a dozen miles in length, attaining about 7,500 feet above sea level. Opposite loomed Rainier, with a base line as great as, or greater than, the whole length of the range, and rising to a height of 14,500 feet. Imagine the cubic dimensions, ye materialists! If the whole Tatoosh Range were broken up and spread over Rainier it would be hardly noticed.

The commanding proportions of Rainier as compared with other snow peaks are particularly striking viewed from the summit of Olympus; which reminds me also that in the Olympics Washington has a gem. While not on a gigantic scale, judged by Alpine yardsticks, everything is clean, compact, perfect. Here are unspoiled, magnificent woods; splendid hunting and fishing; fine streams, falls, and clean-cut rock canyons; and climbing, not unduly arduous, which offers a fine variety of snow and rock work, with a constantly-changing succession of beautiful views. Olympus from

Dodwell and Rixon's Pass is superb; and the west summit of the mountain affords a fine panorama to the north, east and south, the beautifully shaped, peculiarly precipitous peaks of the peninsula standing forth in dense array, etched in a strong outline of snow and ice against dark rock. In the distance appear Rainier, Baker, and other snow peaks, while to the west the landscape falls off rapidly to the dense woods which stretch to the Pacific.

As for Baker, undoubtedly the easiest way of climbing it—from the southwest—has been found. The packers even got a horse up to what they called "the equator." But the mountain lacks dignity viewed from that side, and we regretted not having first approached it from the north. Our stay with the Mazamas, while short, was delightful, the "owls" particularly exerting themselves in our behalf.

Crater Lake, Oregon, more than justified high expectations. It deserves a place well up on the list of the national parks of the country, and should certainly be visited by all Mountaineers who have not done so, not for mountaineering feats, but as a spectacle. Lake and crater are best viewed from Watchman's Peak. We were more than charmed with the unrivaled blues of the lake and with the steep crater sides, suggesting in their erosion the Grand Canyon of Arizona and in coloring the Grand Canyon of the Yellowstone, while the scientific interest is inexhaustible.

Never have brother Emerson and myself been more hospitably treated, never have we more thoroughly enjoyed the hearty good fellowship of the great out-of-doors, than at the hands of the Mountaineers. In our future wanderings may we always find at hand those governed by the same rule of action—"Each for all! All for each!"

Sitting in my den, it all comes back to me. I see the Olympics from Moraine Park, in the golden sun-

set; the moon sailing over Willis Wall. I live again through the tramps, the climbs, the comradeship of the "good fellows," men and woman, the stimulating exchange of ideas, the laugh, the song, the story, the hushed enjoyment of majestic scenes. Even the memory of the mosquitoes is hallowed. And I smell the wood smoke and see the great logs blazing and the sparks flying. How far removed and unimportant all petty things were, what an Arcadia this world seemed, as we looked into the campfire. And I see the Igorrotes, as far out-Igorroting those on the "Pay Streak" as they themselves were outdone by the Mountaineers in their ordinary climbing rigs and make-up. I hear again the sonorous accents of Rain-in-the-Face, haranguing the palefaces (pale, forsooth!); the familiar story of Stickeen, never told with a better setting; the pathetic tale of "Willie," too sad for tears! And, oh, for just one more taste of that maple wax!

And other Western campfires and experiences come to mind—with the Sierras, the Mazamas, with a companion, alone; and I examine my outfit, plan improvements for another season, study maps—and go to bed.

FLOWERS OF THE MOUNTAIN.

WINONA BAILEY.

The Outing Committee had promised the "botany bunch" for the Rainier trip such display of flowers as they had never dreamed of, and they kept their promise. When camp was first made in Moraine Park the snow had so recently melted in most places that only a few tiny green leaves gave promise of gardens of loveliness three weeks later. A few flowers like the fur-clad Western or Mountain anemone (*pulsatilla occidentalis*) had already ventured out from beneath their winter coverings. But even the hardy sweet colt's

foot of the higher altitudes (*petasites frigida*) wrapped in cotton as it is, seemed to shiver beside the icy stream. The little blue violet (*viola retroscabra*) was out, and nestling so close to Mother Earth as not to feel the chill winds, smiled a welcome. Wild heliotrope (*valeriana sitchensis*), so called because of her fragrance, was arrayed in her thinnest gown—possibly in her Alaska home she has become inured to cold weather and light garments—and tossing her head high, received the attention she demanded. The avalanche lily, as Mr. Curtis appropriately calls the white dog-tooth violet of the mountains (*erythronium montanum*), is also acclimated to a northern home, and to show its indifference to cold frequently pushes its head up through the edge of a retreating snow-bank.

But to go back to Fairfax and come up the trail with the flowers. The first miles were not especially interesting, leading for the most part through a burn with the fire-weed (*epilobium spicatum*), conspicuous, as it is in such places, the whole Western country over. A reminder of home were the graceful plumes of goat's beard (*aruncus aruncus*). Three weeks later this gentleman, like many a good mountaineer, had lost his blonde complexion and developed a shaggy beard, while his place in the world of beauty had been taken by the feathery ocean spray (*scizonotus discolor*). In many places the rocks were covered with the bright yellow of the stone crop (*sedum divergens*). The botanists also picked up a turtle-head (*chelone nemorosa*) and a coarse water-leaf (*hydrophyllum capitatum*) before reaching the deep forest near the borders of the National Park. Within the forest the air was sweet with the delicate fragrance of millions of the tiny, tinkling pink bells of the twin flower (*Linnaeas Americana*), the one flower the great Linnaeus wanted to bear his name. Whenever the trail came near the brook there were great hedges of beautiful lace-like leaves with spikes of

pink flowers (*capnoides scouleri*) that resembled the more modest bleeding heart (*bikukulla formosa*), called by the children Dutchman's breeches, which indeed grew near by.

But the parts of the woods the Mountaineers love best are the places where tower giant cedars and firs and hemlocks hundreds of feet into the air, shedding through their branches a mellow light on great soft beds of the most beautiful of Washington's many mosses, the lacy *hylocomium splendens*. Here are numberless dainty white flowers; the one with four white bracts set across its four green leaves is the dwarf dog-wood (*cornus canadensis*); the pure white waxy flower, like a delicate lily, between two long leaves, is the *clintonia uniflora;* while the exquisite white one growing out from the center of a circlet of leaves in a bed of moss is the rare *moneses uniflora*. The two prince's pines are in these woods side by side, the *pipisissiwa* of the Indians, one (*chimaphila umbellata*), with shiny stiff green leaves and fancy pink parasol-like blossoms; the other (*chimaphila menziesii*) with more dainty flowers, pure white, often with mottled leaves. Then there are many pyrolas, a tall pink spike (*pyrola bracteata*), a shorter, more compact one (*pyrola secunda*) and a tall stem set with creamy white flowers (*pyrola picta*). The orchid family is represented by groups of slender coral-root (*corallorhiza mertensiana*), three or four together; and the two twablades (*ophrys caurina* and *ophrys convallarioides*), with their delicate green spikes. Occasionally a clump of colorless Indian pipe (*hypopitys hypopitys*) is seen just pushing its head through the ground.

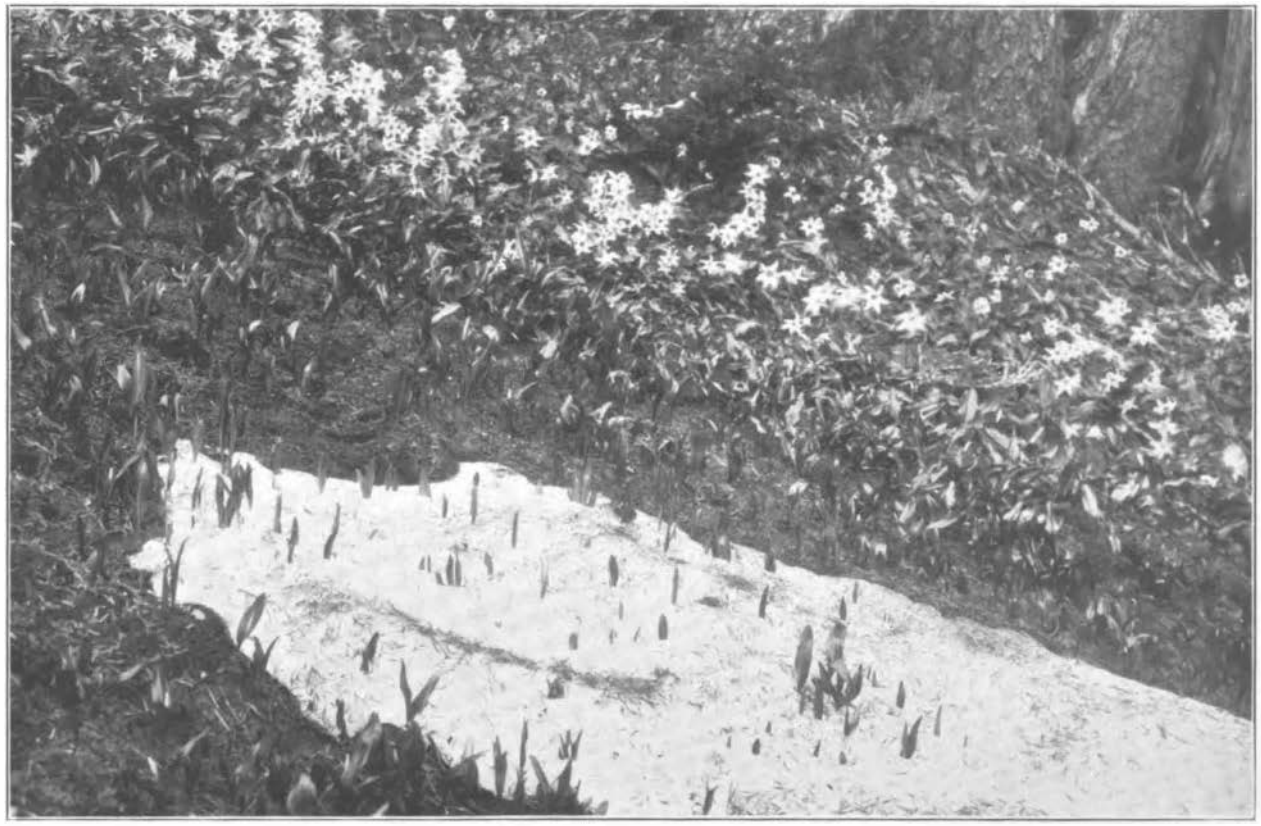
On the rocks of the moraine just below the nose of Carbon Glacier grew mats of wild foxglove (*pentstemon menziesii*), with showy purple blossoms, and clump after clump of rock fern (*cryptogramma acrostichoi-*

des), its plume-like fertile fronds very numerous and conspicuous among those infertile.

The practice trips from camp introduced an entirely new group of plants. On the dry, rocky ledges, high above the mountain meadows, and heathery benches, it seemed as if no flowers would care to cling. But adapting themselves to their bleak abode by such expedients as fleshy or hairy leaves or long tough roots —they are all perennials—they lifted their bright faces from the sandy slopes or gravelly beds, and from many a crevice in the rocks. At Camp Curtis the botanists took all the flowers they saw—three plants of *draba aureola* and three of a species of Jacob's ladder (*polemonium elegans*). The *draba* is a mouse-colored plant with yellow blossoms, a member of the mustard family, and probably the highest flower on Mount Rainier. The Jacob's ladder is a beautiful indigo with a bright yellow center, very sticky leaves and a disagreeable smell. Another high plant, also a member of the mustard family, is the *smelowskia calycina,* a white flower with grayish green leaves, the blossom not unlike ordinary candy-tuft.

At St. Elmo Pass were the funny little chubby heads of *phacelia sericea* settled close down in a nest of gray leaves; the silvery green gray leaves of *potentilla villosa,* as soft and silky as the finest velvet; two saxifrages, the little spotted white flowers of *saxifraga bronchialis,* and the exquisite mats of *saxifraga cespitosa* covered with smiling white blossoms. On all the trips up high on the rocks nothing was more frequently seen than Tolmei's saxifrage (*saxifraga tolmeii*), very shiny, fleshy, bright-green leaves, forming a big mat and white flowers with dark centers standing in the mat, like stickpins in a cushion.

On the trip across the Carbon Glacier, up toward Observation Rock, Mr. Curtis found a fine specimen of his favorite mountain flower, moss campion (*silene*



ERYTHRONIUM MONTANUM Photo by Asahel Curtis

acaulis). He promised the botanists this plant a year ago on the Mount Shuksan trip, but when Shuksan was given up, moss campion was too. This specimen entire was like a little green dome twelve inches across. The leaves looked indeed like moss, but the covering of exquisite, little, pink, stemless blossoms showed that it was a flowering plant.

A wet mossy place where water trickled out from among rocks would be studded with brilliant, yellow monkey flowers (*mimulus alpinus*), a monkey head with no body, for the leaves are very, very small, but the flowers an inch long. Our Tyrolean friend, who loved to browse over the rocks, brought us one day some sage (*artemisia borealis wormskioldii*), another day an interesting plant (*luina hypoleuca*), leaves thick grayish green on one side and woolly, almost white, on the other, feeling like felt.

On the gravel slopes above Moraine Park and overlooking the upper part of Carbon Glacier, grew two sturdy plants, one (*spraguea umbellata*), with fleshy dark red leaves and blossoms like balls of thin, pink paper, the other less beautiful but equally brave (*eriogonum pyrolaefolium coryphaeum*), with brownish green, thick leaves and fine, creamy flowers.

We had learned to think of Spray Park as the paradise of flowers, and so we found it. After dropping down from heather bench to heather bench, suddenly we saw them, like Wordsworth's daffodils, "a cloud, a host," "fluttering and dancing in the breeze." But these were not all golden; they were red and white and blue and yellow. The great red masses were the painter's brush (*castilleja oreopola*), a wonderful crimson peculiar to the higher altitudes; the blue, great spikes of lupine (*lupinus subalpinus*); the white, fluffy balls of smartweed (*polygonum bistortoides*), or in damper places beds of white marsh marigold (*caltha*

leptosepala); the yellow, a small but very abundant yellow flower, a rare plant found so far only on Mount Rainier, and on Mount Rainier only in the vicinity of Moraine and Spray Parks. It belongs to the celery family, and has been named *hesperogenia strioklandi.* The avalanche lily was at the height of its glory, three, four, even five flowers on a stem, and of these flowers, acres and acres, countless as the snowflakes in the great banks that gave them water.

Of all the trails the Mountaineers have followed, in the Olympics, on Mount Baker, on Mount Rainier, none surpasses the one from Spray Park to Crater Lake in beauty or wealth of flora. The verdure of the undergrowth was furnished largely by the white rhododendron (*rhododendron albiflorum*), not yet in bloom, and its cousin *menziesia ferruginea.* Yet nearer the ground were the two mountain huckleberries, the red and the blue, the former with fine graceful leaves, as decorative as the fronds of a fern; while creeping along on the ground, its last year's leaves left fastened close to the earth by the weight of last year's snow, was the delicate walking raspberry (*rubus pedatus*). At a turn of the trail, where an opening in the trees revealed Spray Falls, the nature lover was forced to divide his attention between the great silvery sheet of spray across the canon and the gorgeous pink monkey flower (*mimulus lewisii*) at his feet, and the earliest heads of rose-colored mountain hard-hack (*spiraea densiflora*) just above him. Farther down the trail in the midst of great banks of wild heliotrope (*valeriana sitchensis*), already familiar at camp, were many white fringy stems of *trautvetteria grandis,* and next long beds of pink belled Solomons's seal (*streptopus roseus*), with its tiny pink bells strung along under its spreading leaves. Here and there a wake-robin (*trillium ovatum*)

grown pink or purple with age showed how spring and summer merge up among the glaciers. Where a little stream crossed the trail and leaky boots sought stepping stones or a log, the botanist dodged out of line and back again in a minute with a shooting star (*dodecatheon jeffreyii*) and two orchids, a white and a green one (*limnorchis leucostachys* and *piperia unalaschensis*).

But the time came when we must leave the spots we had learned to love, and all the flower friends we had made, and the night before camp was broken we went around to leave our adieux with each one. First, the heathers, how hard the parting was, for they had been our constant companions! And yet their vacation was nearly over, too, for their blossoms were falling. Red heather (*phyllodoce empetriformis*) had been a staunch friend, ready to give anything he possessed for our comfort—many a bed had he furnished, thanks to the kind permission of Mr. O'Farrell, the park ranger; next came yellow heather (*phyllodoce glandulifiora*), then their cousin, white heather (*cassiope mertensiana*), true and pure as any real lily of the valley, and last the treasure of the trip, little Alaska heather (*harrimanella stellariana*). Then we said good-bye to the louseworts, *pedicularis contorta,* yellow, short and stout; *pedicularis ornithorhynca,* red, also short, and inclined to be chubby; tall, graceful *pedicularis groenlandica,* that we nicknamed "red elephant" because he chooses to adorn himself with little elephants' ears and trunk; white *pedicularis racemosa,* looking fresh and sweet in her lavender pink bonnets; and last *pedicularis bracteosa,* yellow, pompous, well-to-do.

Up in the draw on the way to the mountain lived the yellow dog-tooth violet (*erythronium parviflorum*), just as beautiful as his cousin avalanche lily, but more

retiring. Farther up was *phlox diffusa,* a great mat of grayish leaves and blue, or pinkish blue, flowers hanging over a rock or down a bank, and near by a tiny golden aster (*erigeron aureus*). That unobtrusive but independent little blue fellow with Quaker gray clothes was a lupine (*lupinus lyallii*). Not one of our new friends did we respect more than him. To that marshy spot, with the bog-moss (*sphagnum*) we went for a parting word with the little pink swamp laurel of the mountains (*kalmia glauca microphylla*).

We couldn't take time to climb up to the cliff-dwellers again, but we waved at them from below, and high up on the rocks the rock-dwelling painters' brush (*castilleja rupicola*) and crimson wild foxglove (*pentstemon menziesii*) waved back at us their bright banners. That clump of lace fern (*cheilanthes gracillima*), real quality, she, shook her lace scarf at us, and we knew she had pardoned our intrusion on her quiet retreat the day before. We said good-bye to a bright yellow member of the rose family (*dasiphora fruticosa*) and purple aster and blue aster (*aster pulchellus* and *aster polyphyllus*), and to tiny blue speedwell (*veronica cusickii*), friend *polemonium coeruleum* and golden rod (*solidago corymbosa.*)

Returning to camp, we were just having a parting word with a bright yellow flower of modest behavior, a general favorite, because of her resemblance to the buttercup (*potentilla flabellifolia*), when somewhat to our surprise we found that Alaska spiraea (*lutkea pectinata*) had come all the way down to Lawrence's water-wheel by the cook tent. She looked charming in her creamy white attire, and we bade her a fond farewell.

The next morning blue violet (*viola retroscabra*) had a tear in her eye as we left, and perhaps *rhododendron albiflorum,* whom we passed on the trail, soon after saw tears in ours, but we tried to hide them as we gazed back toward the Elysian Fields and saw, high

up on the hillside, green hellebore (*veratrum viride*), gracefully waving his green ribbon pennants, apparently with no consciousness that he is the greatest fever remedy in the world, and squaw grass, or Indian basket grass (*xerophyllum tenax*), stretching high his fluffy, feathery tow-head to catch a last glimpse of his departing guests.

THE DOG-TOOTH VIOLET.

EDMOND S. MEANY.

In the mountain's hanging gardens
  I roamed in joy today
And saw a lavish treasure
  In flowers that strewed the way.

They nod and sing a welcome,
  They speak to those who know
Of life and love in summer,
  Of sleep beneath the snow.

And one with snowy petals
  My memory ever thrills.
Thou art purest and the fairest,
  Sweet lily of the hills.

EARLY ASCENTS OF MOUNT RAINIER.

MAJ. E. S. INGRAHAM.

General A. V. Kautz, then a young lieutenant, was probably the first person to attempt the ascent of Mt. Rainier. That was in July, 1857, and the route chosen was a rocky spur that extends from Longmire's Springs to Peak Success. Lieut. Kautz, with a soldier named Dogue for a companion, climbed to the ridge connecting Peak Success with Crater Peak, and probably could have gained the summit, but the lateness of the hour and prudence, lead them to beat a hasty retreat to the lower altitudes. Had they known of the existence of the steam caves in the crater, which have since afforded protection and shelter to belated climbers, they would doubtless have continued the ascent and thus had the honor of first standing upon the top of The Mountain.

For thirteen years thereafter the snows of Rainier were unstained by human footprints. In 1870, P. B. Van Trump, who had lived within view of the mountain for three years, and Hazard Stevens, son of the first governor of Washington Territory, joined forces to attack the mountain. They were successful, first reaching the summit of Peak Success, and then crossing over and climbing Crater Peak. They learned of the existence of the steam caves, and spent the night in one of them. There is no doubt that to Van Trump and Stevens belongs the honor of first standing upon the apex of Mt. Rainier. They gave the names Peak Success, Crater Peak and Liberty Cap to the trident shaped summit. That was in August. In October of the same year S. F. Emmons and A. D. Wilson, geolo-

gists in the employ of the U. S. Government, also climbed to the summit.

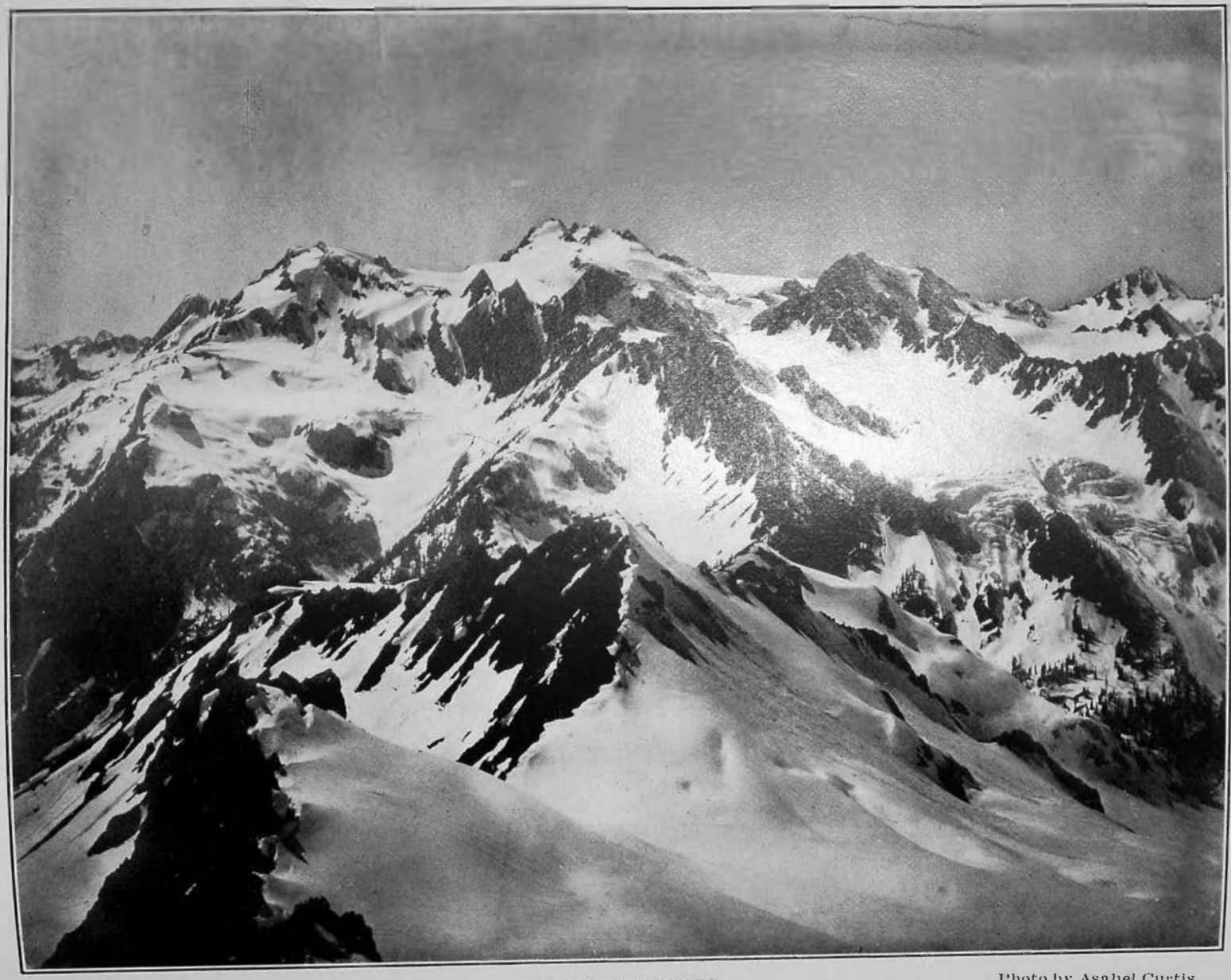
In 1883, Van Trump, James Longmire and Geo. Bayley composed the third party of successful climbers. So far all successful ascents had been made by what is now known as the Gibralter Trail. In 1885, three men living in Snohomish, whose names I do not know, made the ascent from the northeast side, taking the same general course followed by the Mountaineers in their ascent the present year. In 1886 and 1887, the writer made unsuccessful attacks on the northeast side, but upon reaching an altitude of 13,800 feet having been working in clouds all day, prudence demanded a return to the timber line. In 1888, I organized a party to make the ascent from the south side. I was glad to receive into my party after its organization and equipment, John Muir, Wm. Keith and Van Trump. The summit was reached without great difficulty and two hours were spent exploring the crater. In 1890, the first woman, Miss Fay Fuller of Tacoma, reached the summit, but it was with a Seattle party.

Origin of Names.

Van Trump and Stevens named the three peaks. Peak Success was so called to commemorate their successful climb. The name Crater Peak is obvious. The name Liberty Cap was suggested by its fanciful resemblance to the head and cap of the Goodess of Liberty. Columbia's Crest received its name from Mr. Hawkins, a member of my party of 1894. The names of the glaciers have been given by various map-makers. Many of them commemorate the names of early climbers. The map made by Prof. I. C. Russell and published by the Department of Geology of the United States, outlines and names all the existing glaciers. Those names are of government record and will stand unless regularly changed by the proper authority as

was recently the case in changing the name Narada Falls, to Cushman Falls. Winthrop Glacier was named in honor of Theodore Winthrop, who first saw the mountain in 1853 and published an article extolling its wonderful beauties. Edmonds Glacier was named after Senator Edmonds of Vermont, who visited Spray Park in 1884. The names Kautz, Stevens, Van Trump, Ingraham and Willis honor early explorers of the mountain. Paradise Park was named by the Longmires. Sluiskin Falls by Van Trump after his Indian guide.

The writer in his dozen or more trips to the mountain, has pinned many names to points of interest as follows; the reason for selecting most of the names is so obvious that no explanation is needed. Camp Muir, in 1888, Mr. Muir was of my party. Upon reaching that point in the ascent, Mr. Muir suggested it as a good place to spend the night, saying that the presence of pummice in large quantities indicated the absence of wind. Beehive in the cleaver higher up was so called by its fanciful resemblance to the old style beehive. In 1889 I gave the name Gibralter to that frowning battlement which must be conquered in the ascent from the south side. Elysian Fields and the Summerland are names given by me to two beautiful parks on the northeast and east slopes respectively, on account of their delightful location and surroundings. Interglacier received its name, in 1886, from the fact that it does not head in the upper slopes, neither is it a tributary to any other glacier. St. Elmo's pass received its name from a fine exhibition of St. Elmo's fire that occurred while we were spending a night there. In the midst of a thunder storm that was booming in the valleys below we noticed balls of St. Elmo's fire gathering on the ends of our alpenstocks, that were standing upon each side of our rocky beds. Raising our extended fingers upward they became illuminated with



MOUNT OLYMPUS

Photo by Asahel Curtis

electric fire; our tinware was easily located by the light it emitted.

There are several names of minor interest that have not found their way on the maps. It seems to me that it would be a commendable work for the Mountaineers to make a lexicon of all the recognized names, giving their origin while it is possible to do so. It also seems right that the club should give names to many points of interest not so designated.

OLYMPIC NATIONAL MONUMENT.

Hon. W. E. Humphrey.

The story of the new "National Monument" set aside in the Olympic mountains, is a tale that will not take many words in the telling. Ever since I have been in Congress I have been working to have a bill passed that would make a national game preserve in these mountains. I desired this, not only to preserve the game, but as a step toward a national park. This bill was favored by President Roosevelt but met with much opposition in Congress. Once I did succeed in getting it through the House, but it died in the Senate. There was no possibility of getting it passed again before President Roosevelt went out of office. In my anxiety to do something toward preserving the Roosevelt elk of the Olympics, the largest and finest elk in the world, and to keep this region in shape where no one could claim that they held rights because of settlement, I thought of the statute that gives the President the power to set aside certain areas of land to preserve such features as were of a great scientific value. I decided to ask the President to do this with this region. I requested Mr. Pinchot, who was interested always in

game protection, to go with me to see the President for this purpose.

I shall not forget that visit. It was, as I recall, the second day of March, two days before the end of the Roosevelt administration and the beginning of the Taft administration. I was waiting in the Cabinet room when the President came in. He had that wearied and tired expression that comes from long continued exertion, when there is more work crowding upon you than you can possibly do. This was the first and only time that I ever saw him when he showed the effect of the almost unbelievable amount of work that he did in those closing strenuous days.

Without waiting for any formal greeting, as soon as he entered he called to me across the room, "Tell me what you want, Mr. Humphrey, and I will give it to you. Do not take time to give me the details, simply tell me what you wish me to do." I said, "Mr. President, I want you to set aside as a national monument, 750,000 acres in the heart of the Olympic mountains, the main purpose of this is to preserve the elk in the Olympics." He replied, "I will do it. Prepare your order and I will sign it." That was the whole of the transaction. I shook hands with him, wished him success in Africa and told him good-by. As I was going out, he said to me, "I will tell you all about my hunt when I return." That is the last time that I saw him.

Later I sent him at Oyster Bay a photograph showing a portion of the "monument," which had been sent to me by Mr. Curtis. He wrote me saying he was greatly pleased to get the picture and closed by saying that he would certainly tell me all about his African trip when he returned home.

EASTERN IMPRESSIONS OF THE MOUNTAINEERS.

KATHERINE REED.

When this native of Chicago was asked to give her impressions of the Mountaineers' camp in Moraine Park, Mt. Rainier, as those of an eastern member, she had a moment of reluctance. In the windy city she was always accounted western without challenge. In Washington, D. C., her adopted home for seven years, she has more than once been charitably accounted for with,

"But, then, you're from the west, you know!"

It is not to be disputed, however, that whatever her location geographical, her true place among the Mountaineers is with the *Che-cha-kos*. This was proclaimed officially by the outing committee in the baggage car, "north of the King Street station," as they sat in conference upon the easterner's dunnage bag weighing a fatal fifty pounds. It was finally allowed to go through as a concession to its owner's newness, not to say rawness and distance from home. But with appropriate irony it was ordered packed alongside that of the president of the society, whose dunnage, as befitted an expert, was as much under weight as the new-comer's was over.

This first impression made in the Mountaineers by the eastern member was not half so exciting as that made by them upon her. It came over the telephone, Thursday, July 17, from some unknown headquarters:

"Your dunnage must be ready in forty minutes or it will not be taken to Fairfax."

Alone in a flat, in the strange city of Seattle, dunnage too heavy to be packed alone, no expressman known, or persuadable even if known; this first impression on the hapless easterner was one of dismay, promptly developing into fright. Had she not come across the continent to take that dunnage to Fairfax, and now even before she had seen them, was she not already being left behind by these speedy mountaineers?

The cloud-veiled mountain at this moment seemed further off than Washington, D. C., and much more impossible. Fortunately, however, entreaties over the 'phone and cries of "help, help," resounding through the flat, brought to the rescue a stalwart Swede of the Ray H. Butler Company, who swept the dunnage into the bag and had it down to the N. P. R. tracks before its owner's preliminary mountain heart-beat had fallen to ordinary again.

Impression No. 2 came at the station Saturday morning as one of gratified relief. Here was a large group of people looking almost as queer as she did. This depot memory consists largely of boots; partly also of knapsacks, bandannas or strange-cornered packages of luncheon, worn before, behind, sideways, "any old way." Also there was a look about the crowd noticeably superior, if not actually condescending, to the other people at the station who did not have a good time, a mountainous time, so conspicuously advertised all over them.

I suppose that only in the west would a person start off up a mountain with seventy-two people, half a dozen of whom only she had been hastily introduced to; the other sixty-six she was to become acquainted with, without even knowing their names, for several days or a week. Not the least interesting of train impressions was the friendliness at once evident, which belongs, of

course, to east and west alike, when out-doors people come together. The ride to Fairfax was full of this delightful freedom.

Reminiscence, anticipation and gayety, walked up the aisle and then back again, hung over the backs or sides of seats, asked "Where was So-and-so?" and "Hadn't such-and-such turned up yet?" Shook hands heartily in welcome, or invited you to eat luncheon with a jolly group down the car. Hospitality extended even to the new-comer's alpenstock, so hopelessly new and bare of inscriptions. It was invited to the crowd of experienced ones stacked up sociably in the corner near belated dunnage (going, you notice, to Fairfax though *not* ready in forty minutes on that scaresome Thursday).

The Saturday walk up the trail was memorable for the queer rain which kept steadily on but did not wet anything perceptibly for its pains, though it freshened the fragrant twin-flowers in luxuriant hollows and pretty slopes; for the uselessness of the alpenstock as yet, but which was never to be left alone a minute by any wayside resting place; for the individuality shown in costumes, particularly the one protected by an olive poncho cape which could also serve other protective uses, topped by a fetching straw hat on which a lovely pine branch was frescoed and finished off by little, trim, tall boots that fairly flew along and up, up, up. There was that halt for luncheon by the brook overgrown with alders, and then the tramp, tramp, tramp again along the lovely trail. At night the flaring, roaring fire and expeditiously gotten supper, the friendly drying of moist garments, and the kindliness of all these strangers, aroused in the captivated new-comer a sense of exultation that interesting as all was so far, it was but a faint promise of excitements to come.

There was no first view of Rainier from the trail next day. Fogs and clouds kept that in store. But

surely all of us remember with gratitude that moment at the end of the day when Dr. Van Horn gathered us together in the beautiful park that for three weeks was to be our home. The sunset glowed down the gorge beyond the Mother Mount Range. The magnificent snows of Rainier deep as the ages, white as the Great White Throne itself, were flushed with rosy color, the very *Jungfrau* light.

A history of each day that followed in this happy camp would not be too detailed for mountaineering memories. Each day was different but alike delightful to experience and recall. One felt oppressed at times with having only five senses, however active, with which to enjoy the mountain beauty investing us from every side, or to appreciate the opportunities for companionship. You had to be in a kind of a hurry all the time to keep up with the sensations, thoughts and impressions that poured in upon you. It was impossible to convey it to yourself in adequate manner, much less to friends far away. Consequently, it was noticeable that the picture post card was the main medium of correspondence. And such post cards!—only those who received these mementos know beside ourselves what photographs we had in camp.

The most abiding and recurrent memory to me is the spirit of the people. Ninety-two at our greatest the second week, and fifty-two at our smallest, the last few days, we formed a nucleus for an ideal state. Here were authority and rules for which the reason was so evident in each case that obedience was merely intelligent co-operation. No one was greater or less sure by talents or temperament. Each made his place by these alone. This was remarked one day by the cook's helper:

"All the people are so good as one anudder—no richer, make no difference."

ON THE STEEP SNOW SLOPES OF THE UPPER WHITE GLACIER Photo by A. W. Archer

Almost every kind of vocation was represented among us; "doctor, lawyer, merchant, chief;" mothers and fathers, bachelors unabashed, single ladies quite content, a merry widow, a lover or two, and a bonnie lass and laddie to complete our family circle.

We varied, too, in weight, between a substantial two hundred twenty-five—the weight of the law of course—and slender little eighty-six; as for age we were all young except two who were just younger. With all these chances for variation in temperament, every note of wit and humor was struck in this assemblage. It rang out in prolonged laughter from the slope to the northwest at almost any time of day; it accompanied the rites of making or of going to bed, it radiated in quiet significant smiles from the official tent; in shafts of repartee it flew from tent to tent. Not the character and attainments of leaders, nor the presence of distinguished guests would suffice entirely to counteract it. Perhaps no single moment so expressed the prevailing tone in Moraine Park as that, at the end of every evening program when Dr. Van Horn rose.

The momentary hush that prefaced the wanderer's night song, the instant of silence afterward to hear the bugles sound "Taps" from the ridges near by, as it echoed and re-echoed; by the darkened mountains, the increasing splendor of the stars above; the dying down of the hospitable fire below—all this was a fitting benediction to the pleasures of the day and a welcome preparation for the night.

As Mr. Curtis once observed casually "The mountains either lift a man up or pull him down." What they had maintained in one man was evident the second Sunday night, when Nature quotations were being given around the fire.

In his turn, arose from a place on the slope above

the rest, the member of the club who lives most in the mountains, and took off his hat before he began.

This opening tribute to the subject of his poem, no less than to the poet and his words, was felt immediately as an expression of character borne out, in every line and feature as he stood there in the leaping firelight, picturesquely outlined against the tall black firs.

Those Sunday night quotations were a revelation, by the by, of the love of true poetry and the verbal memory possessed by the Mountaineers. The more outdoors the person, the more quotations he knew. It was something worth while when the man from Alaska gave "Under the wide and starry sky," and when the second in command gave,

> "Here's what I love, the blue sky above,
> The wide clear space, and the open place,
> And the life that fills."

Or when Mr. Curtis, with such impressive voice, quoted:

"Oh, East is East and West is West, and never the twain shall meet,
Till Earth and Sky stand presently at God's great Judgment Seat;
But there is neither East nor West, Border, nor Breed, nor Birth,
When two strong men stand face to face, tho they come from the ends of the earth!"

Beside all this the president of the club proved a veritable poet-laureate. From time to time he withdrew to a cloistered space in Marmot Park and built a friendly fire. Warmed by this and soothed by unfailing cigars he celebrated in turn our mountain,

"King in ermine robes of crystal snow," our glacier lilies, alpine firs, and even our Carbon Glacier, in verses highly acceptable at evening assembly.

In a list of camp talents, dramatics would take a high place. I still seem to see bearing down upon me in moments of review the chief of the Igorrotes, bejeweled with kitchen ware and garnished with dish towels, managing his heavily socked feet like an aborigine.

We had an artist, too, among us, whose sketch-book was filled before his departure with pictures of distinguished characters heard or seen about the camp (not omitting the solicitous mosquito), "speaking likeness" most of these were, eloquent as the artist's evening pantomimes.

The skill, strength and general expertness of the girls and women among the Mountaineers, impressed this *che-cha-ko* especially.

Their outfits and contrivances for comfort and dispatch were fairly masculine in ingenuity, and no less feminine in taste. Going into a neighbor's tent one day—not to borrow please, understand—lo, in the marvellous wall-pocket were stowed away the contents of a bureau and writing-desk combined, with one tiny pocket for a still tinier book—the highly appropriate poems of a Tentmaker—the Rubaiyat itself.

Camp calls and camp talks are continually echoing back to me. I wish I could hear the Apache yell in the morning instead of the galloping milk wagons. The cawing of improvised crows making merry near the head of the trail, the bugle to assembly and to meals; the orders down the line; the wonderful Tyrolean yodeling, for all once more would I barter a Boston Symphony concert, and the clatter of the Wright aeroplane.

The camp metaphors were so deliciously sophisticated. "Throw out the life line" came with vividness

from the party below waiting coldly if not impatiently, for the party above to get through using that responsible article, and "I heard a voice, way up in the mountain-top—tip top" was enthusiastically and frequently illustrated in fact as well as in song.

Even the gloves talked: "I'm Mollie's, whose are you?" The buttons displayed stag's heads, the overalls were marked "Black Bears." The alpenstocks recited histories as long as they were, burned in with fire, if not with blood; the hats bragged loudest of all, "Olympus," "Mt. Baker," "Mt. Rainier."

At this point, if at any, a *che-cha-ko,* who is in no sense at all a tip-topper, should modestly pause. Not for her the pains or glories of the summit, the invigorating comparisons and joyous congratulations.

Recollections here become too personal, too numerous to share. The humming-birds, the banks of heather, the violets, and all the other flowers. The glacial Cascades in the morning, the sunsets and heavens at night, and always Mt. Rainier above us. These all are "mountain voices calling softly to me."

In the future when they speak again may all our Mountaineers be able to answer:

"I'm coming, I'm coming,
And my heart is light and free,
I hear the mountain voices
Calling, softly to me."

INDIAN LEGENDS OF MT. RAINIER.

W. D. Lyman.

Among the most interesting and beautiful of all Indian stories, perhaps those connected with the great mountain peaks are first. As is fitting, the most striking are those whose scenes are laid in and around Mt. Rainier.

By reason of the Indian superstitions in regard to the great peaks, the Indians can seldom be prevailed on to ascend their summits. Some people represent that this is simply a part of the general superstition which the red men have for any form of hard work, but I incline to the opinion that it is just a straight superstition. On account of this idea the first explorers of the great peaks have found it very difficult to reach the summit.

One of these legends, the scene of which is Mt. Rainier, may be called the Indian legend of Rip Van Winkle. According to this there was an old man living near the mountain who was very avaricious and desirous of getting much "hiaqua," by which they signify shell money, still common among the Indians of the Sound. This old Indian seems to have been on very intimate terms with Sahale and kept begging him to supply him with more money by magic. Sahale, however, was aware that this greed for money was liable to make the old Indian a victim of Kakahete, the chief of the demons, and therefore he always refused to grant him any magical power.

But once Moosmoos, the elk divinity, obtained a tomanowas power over the old man and whispered magic in his ear, telling him that upon the summit of the mountain he might find much hiaqua and become

the richest of all men. Accordingly, going back to his tent, he informed his wife that he was going on a long hunt, but in reality he was setting forth for the summit of the mountain. He climbed almost to the summit on the first day, and the next morning, at the rising of the sun, he stood upon the mighty summit. There he discovered that there was a great valley in the summit of the mountain, all filled with snow except one place in the middle. Here was a lake of black water and at one end of it were three large rocks. The old man was confident that these were tomanowas rocks, for one was shaped like a salmon's head, the next like a camas root, and the third like the head of his own totem or divinity, Moosmoos, the elk.

Our hero, preceiving these symbolical rocks, immediately concluded that this must be the place where the hiaqua was secreted. At once therefore he began to dig, with an elkhorn pick which he had brought along, at the foot of the rock which was shaped like the head of Moosmoos. At this a number of otters came out of the lake and gathered around in a circle watching him dig. When the man had struck the ground a number of times equal to the number of otters, they began to pound the ground with their tails. Still he continued to dig, and about the time of the setting of the sun he turned over a great block of stone underneath which he discovered a cavity filled with great strings of hiaqua, enough to make him the richest man in all the land.

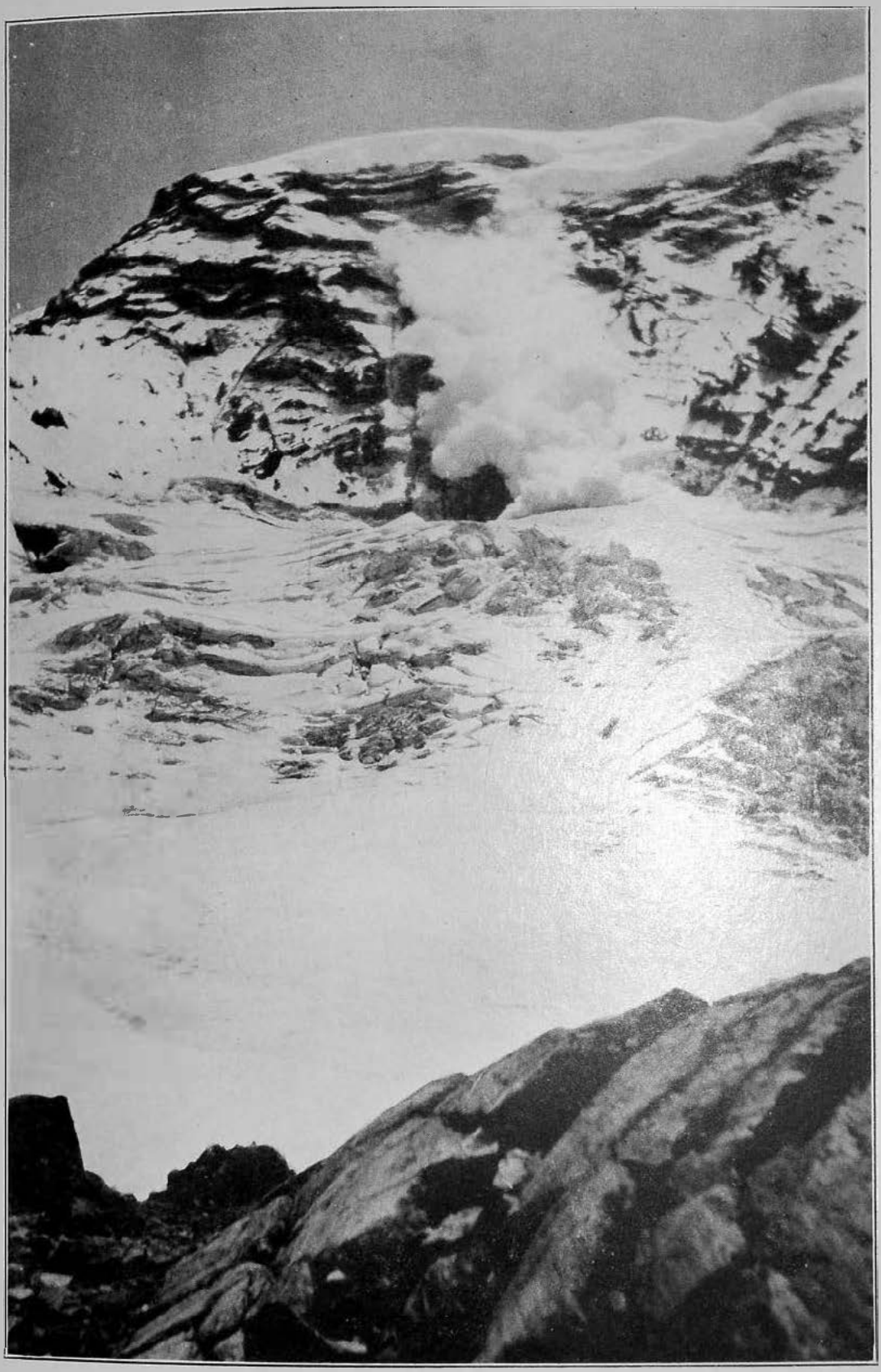
But now the greedy adventurer made a great mistake. He loaded himself down with the strings of hiaqua, but left not a single shell as a votive offering to the tomanowas powers by whose magic he had made the discovery. Sahale was greatly displeased at such ungrateful conduct, and all the tomanowas powers combined to show their wrath. Skamson, the thunder-bird, Tootah, the thunder, and Colasnass, the snow god, all

swooped down from the clouds, turned the sky black, and blew the old man with the strings of hiaqua about him across the rocks and buried him in the snow. Out of the darkness came the awful voice of Sahale denouncing his wickedness. Also the terrified old man began now to hear the mocking voice of Kahatete and his attendant demons. The whole frame work of nature seemed about to disrupt, for after the snow storm there came a burst of volcanic fire upon the mountain summit, the air became thick and hot, and streams of water poured down the mountain side.

In spite of all this confusion of nature the old man seems to have retained his consciousness and he began to think how he might propitiate the offended deities. He accordingly dropped one of his strings of hiaqua as an offering, but this seems to have been a mere mockery and the demons and the winds kept howling at him in derisive tones, "Hiaqua! hiaqua!" Then the old man laid down one string after another of the hiaqua until they were all gone. After this surrender of his treasure he fell upon the ground and entered into the sleep country. When he awoke he found himself at the very place where he had gone to sleep the night before he climbed to the summit. Being very hungry he gathered camas roots with which to refresh himself, and while eating he began to have many thoughts in regard to his life and doings. His "tum-tum," as the Indians would say (heart), was much softened as he contemplated his greed for hiaqua. He found that he no longer cared for hiaqua, and that his mind was calm and tranquil and benevolent. Moreover he went to look at himself in a pool, and discovered that he had marvelously changed. His hair had become long and white as snow. The mountain, itself, had changed its contour. The sun shone brightly, the trees glistened with new leaves, the mountain meadows were sweet with the perfume of flowers, the birds sung in the trees, the mighty moun-

tain towered calm, tranquil and majestic into the deep blue sky, glistening with new fallen snow, all nature seemed to rejoice, and the old Indian found that he was in a new world. And now he seemed to remember where he was, and he made his way without difficulty to his old tent. There he found an old woman with white hair, whom he did not at first recognize, but soon discovered to be his own "klootchman." She told him that he had been gone many suns and moons, and that in the meantime she had been digging camas and trading for hiaqua, of which she had accumulated much. The old man now perceived all the mistakes of his former avaricious life and settled down in his own home upon the banks of the Cowlitz in peace and contentment, becoming a great tomanowas man and a counsellor and adviser to the Indians in all times of trouble. He was worshipped by them for his wisdom and benevolence, as well as for his strange experience on the summit of the mountain.

The prettiest and most poetical of all Indian legends in connection with Mt. Rainier is that of Lawiswis, the queen of the fairies. According to this legend, Nekahni, which is another name for the great spirit, lived upon the slopes of Mt. Rainier in the upper portion of what we now call Paradise Valley. There he kept his flocks of wild goats and from that lofty height he watched and ruled the earth spread out before him. Now there lived in the lower part of the valley a lovely creature called Lawiswis. She was of the nature of both sea shells and roses, so that when she went to the shore the sea shells all worshiped her and caught the dew of the morning as a nectar for her to drink. When she was in Paradise the roses made her like obeisance and served her with like nectar which they caught from the morning dew. She was also the queen of the fairies, and of everything beautiful, a sort of mountain Titania, in fact. Nekahni loved this fairy queen and built her a



AVALANCHE ON WILLIS WALL FALLING 5,000 FEET

bower in Paradise, which was surmounted with masses of wild roses, and these roses at that time were pure white and had no thorns. Part of the time Nekahni dwelt high up on the mountain watching his wild goats or communing with Skamson and Tootah and Colasnass, and part of the time he would descend to dwell with Lawiswis in her fairy bower.

Now there was at that time dwelling in the dark and sullen gorge of the Nisually River a famous Skookum named Memelek. Memelek was a frightful looking creature. She was clothed in strips of cougar skins, fastened together with the fingers of slaughtered fairies. She had snakes around her neck and waist, and when she wished to kill anything she would send these snakes to bite them. Memelek hated Lawiswis on account of her beauty and innocence, and especially because Nakahni favored her so much more than herself. Accordingly, one day when Nekahni was busily engaged with his goats, high up on the rocks of what we now call Gibralter, Memelek determined to wreak her wicked vengence upon the helpless and innocent Lawiswis. She therefore stole up out of the gorge to the bower in Paradise and letting loose her snakes bade them go and sting to death the fairy queen who was lying innocently asleep. And now the roses around the bower saw the imminent danger of their adored mistress. What could they do? Nekahni was far away and could not come in person, but by a magical petition they let him know the danger, and instantly, just as the loathsome reptiles were crawling upon them, the roses turned a bright red, and were covered with sharp thorns which pierced the coils of the reptiles so that they turned back in dismay and fled to their hideous mistress. Thus Lawiswis was saved and the discomfited Memelek was forbidden ever to come up out of the deep gorge to the Nisqually and there she has remained ever since.

A KNAPSACK TRIP INTO SPRAY PARK.

WAYNE SENSENIG.

On Monday morning, August 3, fifty-five mountaineers left permanent camp in Moraine Park on a knapsack trip through Spray Park to Crater Lake. We descended to the Carbon Glacier at eight o'clock and, following the zig-zag course cruised out by our leader, we reached the lateral moraine on the west side at eight-forty. The moraine at this point was so precipitous that it was necessary to cut steps all the way to its ridge. We crossed the boulders beyond the ridge without difficulty and entered upper Spray Park at nine o'clock.

Upper Spray Park is an open country (six to seven thousand feet in elevation), with here and there a group of stunted trees. These trees with their gnarled branches and innate ruggedness proclaim in no uncertain manner their struggles with the winter hurricanes. Some of these trees, less than ten feet high, have trunks more than two feet through and suggest "Sermons in trees."

Spray Park contains many small lakes or ponds and numerous waterfalls. We proceeded up a small valley to its head and then began to climb in earnest. We ascended terrace upon terrace pausing a while above the steepest of these to catch our breath and to drink in the beauty of this wonderland all about us and to gaze at the ever changing old mountain, silhouetted against a sky of deepest blue.

We walked upon a carpet of heather, both the blue variety and the white with its waxen bells, and among the heather grew acres and acres of many other flowers.

The Glacier Lily grew almost everywhere, one specimen bore five flowers on a single stem and one of these flowers was four and a half inches across. The crimson Paint Brush, the Shooting Star, and a variety of yellow flowers added color to the scene. We enjoyed spring all over again.

We continued to gain elevation until we reached a low ridge of loose rocks, just west of Cataract Canyon, from which we had a fine view of lower Spray Park. About a mile and a half ahead of us was a group of ponds and just beyond the ponds arose Fay Peak, very steep and practically bare of trees but covered with grass and heather. A goat could not conceal himself on this, the south, side. The summit consists of an enormous rock with many spires and curiously enough a dozen or more trees find here a foothold defying the storms. This mass of rock has a rectangular appearance from a distance and resembles a large castle.

The photographers hurried ahead of the main party to climb high enough on Fay Peak to get better views of the mountains. The rest of the party proceeded to the ponds above mentioned and there, among the flowers and the most delightful surroundings imaginable, we enjoyed a rest of three quarters of an hour until the photographers returned.

We then picked up the trail to Crater Lake. The trees became more numerous and very much larger as we lost elevation. This end of the trail consists of a series of switch-backs and from many points one can get splendid views of Spray Falls which drops from ledge to ledge, a total drop of about eight hundred feet. I shall not attempt to describe Spray Falls as a series of photographs alone can do justice to it.

The trail descends almost to the foot of Spray Falls and is here on a level with the Mowich river bed but it immediately leaves the river and gains elevation very

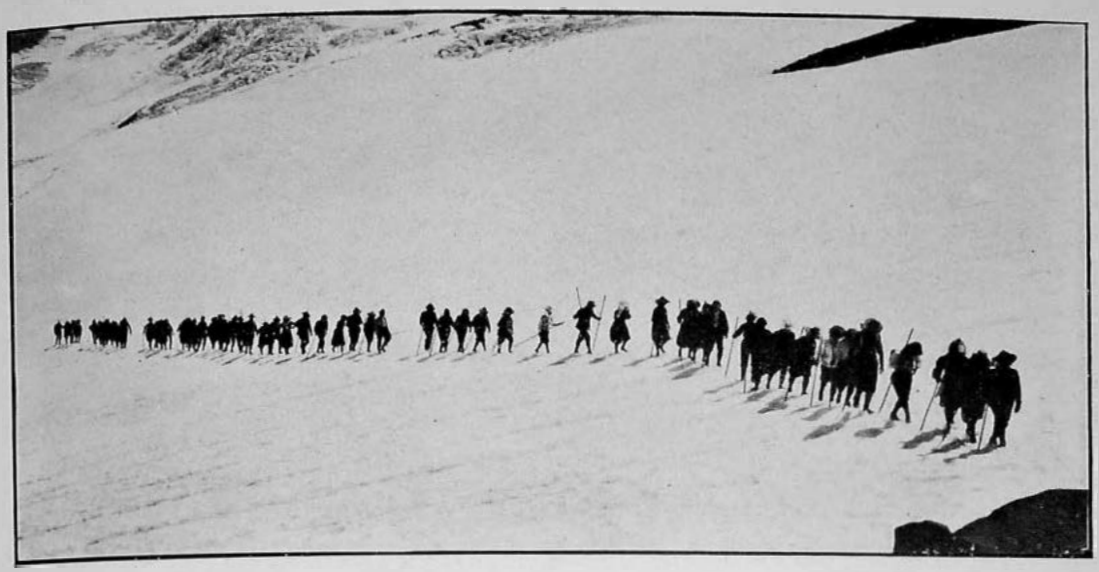
gradually until Eagle Cliff is reached. Eagle Cliff, almost perpendicular, is eighteen hundred feet above the forest-lined canyon of the Mowich and a splendid view of Mt. Rainier may be had from this point. One also gets a splendid view of the canyon, the walls of which consist of a series of saw tooth ridges radiating from Mt. Rainier which rises about nine thousand feet above this point. From Eagle Cliff the Mowich Glacier is in full view and ends in a great mass of loose rocks.

From Eagle Cliff the trail bears in a northwesterly direction toward Crater Lake. The trail, a sylvan colonnade, winds through a primeval forest in which the Alaska Cedar, a most graceful tree, is much in evidence.

We reached Crater Lake about 5:30 p. m. The lake is three quarters of a mile long by half a mile wide and is surrounded on all sides by high hills. We camped on a small peninsula on the west side of the lake from which point one can best appreciate its wild beauty. On the east side of the lake facing us, were the Castle Crags, which from this point bear a striking resemblance to Fay Peak from upper Spray Park. The Castle Crags, however, are more beautiful than Fay Peak, if possible. A small portion of the summit of Rainier is also visible, the bulk of the mountain being eclipsed by the nearer hills.

However we realized we couldn't exist very well on scenery alone so the men rustled wood for two large fires while the women cooked the dinner. After dinner we assembled about the camp fire. We listened to very interesting talks on the Geology and Indian folk lore of this locality and we sang many songs. After a very success camp fire session, we departed to our blankets and soon it was morning.

We breakfasted while gazing at the reflection of the mountains on the glassy surface of the water. A



"THE LINE" Photo by Asahel Curtis

Photo by Asahel Curtis

MAJOR E. S. INGRAHAM ON ST. ELMO PASS AT THE SITE OF HIS FORMER CAMP, SHOWING ONE OF THE ROCK BEDS THAT HE MADE YEARS BEFORE WHEN THE PASS WAS NAMED

WILLIS WALL, THE NORTHERN SIDE OF MOUNT RAINIER

violet color was quite noticeable in these reflected images.

On account of a very heavy dew, we spread our blankets in the sunshine where they quickly dried and at about eight o'clock we began our return journey to Moraine Park. We stopped at Eagle Cliff for another look and noticed that clouds were beginning to settle over the mountain. We made the ascent of the switch-back without difficulty, stopping at every vantage point to look at Spray Falls. Along this switch-back there were beautiful specimens of Squaw Grass and many other less showy flowers.

At the top of the switch-back we found ourselves in a fog and were unable to see fifty yards. This fog stayed with us all the way back to camp. The whistling marmots, the day before, piped their shrill warnings of the approach of an unknown invader, and the birds were very lively, but now the only living creatures abroad were a few jays and magpies.

It was a drab day and we were glad, indeed, when we had crossed the Carbon Glacier, and reached our permanent camp in Moraine Park about 6 p. m.

LIST OF MEMBERS ON MT. RAINIER OUTING.

Abel, H. V.
Albertson, Chas.
Archer, A. W.
Blake, J. Fred.
Best, John A., Jr.
Brayton, Annie C.
Belt, H. C.
Belt, Mrs. H. C.
Baptie, H. May.
Barnes, Cornelia.
Bailey, Winona.
Brayton, Fannie E.
Bigelow, Alida J.
Bronson, Richard Lea.
Buck, Richard.
Colkett, W. J., Jr.
Cameron, Crissie.
Curtis, Mrs. Florence.

Curtis, Asahel.
Coenen, A. Margaret.
Chesterman, Ethel.
Caesar, P. V.
Caesar, G. V.
Clark, L. W.
David, Elizabeth.
Dayton, Clara C.
Dwyer, May I.
Denman, Asahel H.
Eaton, Dr. Cora Smith.
Elmer, Maud V.
Emerson, G. D.
Farrer, Chas. M.
Farrer, Anna.
Feree, Nita J.
Fahnstock, John F.
Freund, Elizabeth.
Garvin, Cora.
Hanson, Olaf.
Howard, Anna B.
Howard, Grace E.
Howard, Henry.
Hutchinson, Minnie.
Humes, Grant.
Hill, M. F.
Harnden, H. W.
Hutchinson, A. H.
Hurd, Roy.
Ingraham, Maj. E. S.
Ingraham, Kenneth.
Jenson, I. M.
Krows, Melvin A.
Knispel, Hans Otto.
Koehler, Miss L. B.
Leckenby, Mollie.
Lovering, Lydia E.
Moore, Harv. E.
McLean, Murray.
Merrill, A. R.
Morse, Alice A.
McGregor, P. M.
Moyer, S. L.
Morrill, F. O.
Mills, Blake D.
Mills, Mrs. Blake D.
McFarland, Winifred.
McCormick, J. A.
Meany, Prof. E. S.
Nelson, L. A.
Nettleton, Lulie.
Price, W. M.
Patton, Miss G. N.
Price, Mary.
Reed, Miss Katherine.
Raymond, Rena.
Smith, Miss Lulie.
Southard, F. S.
Sass, Miss K. M.
Sensenig, Wayne.
Stauber, Anna H.
Schachts, G. N.
Scholes, Josephine.
Scholes, Stella.
Scholes, Emma.
Stevens, Dr. B. R.
Stevens, Dr. E. F.
Sanford, Freda.
Tuttle, Gladys M.
Terry, R. L.
Van Horn, F. J.
Van Horn, Robert.

LOCAL WALKS.

LULIE NETTLETON.

A popular feature of the Mountaineers' Club is the series of Local Walks conducted every two weeks during the winter. These walks are in the hands of a committee who arrange routes, estimate expense, appoint a leader, and send out notices to the members.

On designated dates, at the appointed meeting place, are gathered a merry group of people attired for walking, and in costume sufficiently substantial to meet with impunity any weather the uncertain Puget Sound climate may ordain. City pavements do not appeal to these pedestrians and taking car or steamer to where country roads or trails may be found, they are off for a tramp that brings a glow to the cheek, a light to the eye and an appetite for the knapsack lunch always carried. A few typical walks may be mentioned.

November 22, 1908, Mr. S. L. Wardwell led a party along the new Cedar River Pipe Line to see the construction work on the new main.

On January 17, 1909, the club members were accorded the privilege of visiting the grounds of the Alaska-Yukon-Pacific Exposition, under the guidance of Miss Roberta Terry, thus giving them a glimpse of a great exposition in the making.

One of the most strenuous excursions was a sixteen-mile walk under the leadership of Mr. P. M. MacGregor. Through alternate rain, snow and sun the party walked from Newport, past Lake Samamish up a steep trail to Coal Creek and the mines, then on through New Castle to Kennydale.

A novelty in local walks was the long remembered one when the members followed Mr. Thomas Church by a trail of confetti. It led the mystified followers a merry chase but proved a splendid practice in trail finding.

A particularly beautiful trip was that led by Mr. H. C. Belt from Riverton to Three Tree Point.

On May 16, 1909, a large company assembled at Colman Dock and took the 7:30 steamer for Bremerton where Mr. John A. Best, of that place, joined them and led a delightful walk to the rhododendron fields.

Since these trips have been instituted the club has explored the entire shore line of Lake Washington, the country south of Renton, and has followed many of the old trails in the vicinity of Bremerton and Port Orchard.

Fort Lawton and West Point Lighthouse have been visited, and the prairies between Tacoma and Olympia have twice been the route of pleasant two-day trips.

Are these walks worth while? A thousand times yes, for besides the information culled, those participating are benefitted by the fresh air, the invigorating exercise, and the pleasure of contact with wholesome, congenial comrades.

LOCAL WALKS—1908-9.

No.	Date.	Objective Point.	Distance.	Leader.	Attendance.
46	Oct. 25, 1908	American Lake to Spanaway Park	6	Crissie Cameron	27
47	Nov. 8, 1908	Chico to Wildcat Lake	15	Geo. L. Hannaman	47
48	Nov. 22, 1908	Beacon Hill Reservoir to Renton	8	S. L. Wardwell	16
49	Dec. 6, 1908	Northup Landing to Newport	10	Murray McLean	55
50	Dec. 20, 1908	Edgewater to Christopher	10	Melvin Krows	22
51	Jan. 3, 1909	Hall's Lake to Edmonds	12	Thomas Church	40
52	Jan. 17, 1909	A.-Y.-P. Exposition Grounds	7	Roberta Terry	35
53	Jan. 31, 1909	Port Orchard to Bremerton	8	John A. Best, Jr.	45
54	Feb. 7, 1909	Newport, Lake Sammamish, Kennydale	16	P. M. McGregor	26
55	Feb. 14, 1909	Colby to Port Orchard	8	Gertrude F. Smith	56
56	Mar. 21, 1909	Hall's Lake to Edmonds	12	Thomas Church	43
57	Apr. 4, 1909	Fort Lawton to West Point Light	8	J. Fred Blake	50
58	Apr. 10, 1909	Renton, Cedar River and Elliot	8	Henry C. Howard, Jr.	10
59	Apr. 18, 1909	Silverdale to Hood's Canal	12	Henry H. Botten	68
60	May 2, 1909	Riverton to Three Tree Point	14	H. C. Belt	42
61	May 16, 1909	Chico to Lake Kitsap	10	John A. Best, Jr.	67
62	June 13, 1909	Newport to Kennydale	8	Roberta Terry	48
63	June 27, 1909	Renton, Cedar River, Elliott	7	Henry C. Howard, Jr.	40
64	Oct. 3, 1909	Vashon Island	8	Hattie A. Strang	35
65	Oct. 17, 1909	Mercer's Landing to May Creek	10	Melvin A. Krows	48
66	Oct. 31, 1909	American Lake to Steilacoom	10	Tacoma Mtns.' Leaders	24

LOCAL WALK COMMITTEE,
MELVIN A. KROWS, Chairman.
L. A. NELSON,
ALICE FRYER,
J. FRED BLAKE,
MURRAY McLEAN,
ANNA HOWARD.

NOTES.

Through the courtesy of several business houses of Seattle, the Mountaineers were enabled to make a very creditable showing at the Alaska-Yukon-Pacific Exposition.

The display was shown in the Forestry Building, and represented a model camp. The Puget Sound Tent and Duck Company loaned a valuable silk duck tent, the Seattle Hardware Company sent the commissary outfit, the Rubber Store a sleeping bag, and Mr. C. C. Filson contributed a complete personal outfit.

The beautiful display of mountain flowers was prepared by a committee of club members, consisting of Prof. J. B. Flett, Dr. Cora Smith Eaton and Miss Winona Bailey.

* * *

The Mountaineers wish to acknowledge the German-Austrian Year Book presented to the club by Mr. Otto Hans Knispel of Austria. It is an interesting publication and a valuable addition to the collection of mountaineering literature.

* * *

The Mountaineers' Club is always glad to furnish information to parties interested in the mountains of Washington. It is in a position to recommend reliable guides and outfitters. Any requests should be addressed to the club secretary.

* * *

The publication committee has been aided by the advertisers in the annual, and it is earnestly hoped that members of the club will patronize these advertisers when purchasing, and also state that they are Mountaineers. Thus encouraging them to continue advertising in the pages of "The Mountaineer."

The Mountaineers now have a valuable collection of mountain pictures hung in the Chamber of Commerce rooms in the Central Building. This collection consists of ten handsomely framed enlargements of photographs taken by Mr. Asahel Curtis in the Olympics, on Mt. Baker and Mt. Rainier.

* * *

The Mountaineers are in hearty sympathy with the Sierra Club of California in its gallant fight to save the Hetch Hetchy valley, as one of the beauty spots of America, and have given and will give them all the aid in their power.

* * *

We are indebted to Augustine and Kyer for splendid service in supplying provisions for our commissary department. Their prompt delivery and the excellent quality of the supplies has aided our outings materially.

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THE MOUNTAINEER

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Published for Members. Annual dues $3.00.

ORGANIZATION.

Directors.

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DR. E. F. STEVENS, *Treasurer*, 1505 E. Madison.
MISS LULIE NETTLETON, *Historian*, 1806 8th Ave. West.
ASAHEL CURTIS, 627 Colman Bldg.
L. A. NELSON, 522 New York Blk.
JOHN A. BEST, JR., Bremerton, Wn.
PROF. J. B. FLETT, 107 N. Tacoma Ave., Tacoma, Wn.
REV. F. J. VAN HORN, 923 James St.
MISS ALIDA J. BIGELOW, 1139 Eighteenth Ave. N.
A. J. CRAVEN, 1120 Garden St., Bellingham.

SECRETARY'S OFFICE: 522 Pioneer Bldg. Phone Main 2956.

COMMITTEES.
1908-1909.

Outing Committee

Asahel Curtis
L. A. Nelson
Charles M. Farrer

House Committee

Prof. Henry Landes
Mrs. Vesta E. Stevens
Dr. E. W. Young

Publication Committee

Miss Lulie Nettleton
E. A. Childs
Miss Mary Banks

Program Committee

H. C. Belt
Geo. E. Wright
Miss Hattie A. Strang

SECRETARY'S REPORT.

The Mountaineers have added many new names to their membership list during the past year, and for the most part they represent active and interested members. They come, too, from widely separated states, the middle west and the Atlantic coast.

The local walks on alternate Sundays, have proved to be more popular than ever and many extra outings have been organized in consequence, including some of two or three days duration, and they have all been very well attended. The average attendance on these walks has nearly doubled since last year.

The general activities of the club included a campaigu for the creation of a national park in the Olympic Mountains, and in assisting the Sierra Club in its efforts to preserve the beauties of the Hetch Hetchey Valley, in the Yosemite National Park. In the latter case there is still much work to be done. The club is also endeavoring to obtain a detail of troops to assist the Rangers of the National Parks in this state, during the summer months. The superintendent of the Yosemite Park states that this plan has worked very successfully there and that it would be quite impossible for him to give the park proper care in any other manner, the force of rangers at his command being entirely inadequate for the work. The same conditions prevail here.

A model camp was exhibited by the Mountaineers at the A.-Y.-P. Exposition during the summer. It was cared for by enterprising members and was awarded a grand prize.

The demand for our publications has increased and subscribers to the magazine include many well known educational and scientific bodies, besides mountaineering clubs.

CHARLES M. FARRER,
Secretary.

ANNUAL REPORT OF TREASURER.

1908-1909.

Receipts:

November 1, cash on hand	$ 41.71	
John A. Best, to balance	8.98	
Received for dues	612.00	
Advertising	72.00	
Pins	5.25	
Magazine	7.45	
Lecture	21.05	
Stamps	.05	
Refunded on mailing prospectus	9.20	
Loaned by Dr. E. F. Stevens	110.00	
Loaned by Dr. E. F. Stevens	89.50	
		$977.19

Expenditures:

Final payment on magazine	$273.25	
Chamber of Commerce ex. of photo	38.80	
Grant Humes lecture	11.50	
Expense of Secretary	208.58	
Preliminary trip to Rainier	89.50	
A.-Y.-P. Exposition	18.00	
Balance on Mountaineer No. 3	27.25	
Repayment of Stevens loan	199.50	
		$866.48
		$110.81

E. F. Stevens, M. D.

Report of expenditures and receipts on account of Olympic outing:

63 people at $40 each	$2,520.00
From sale of 14 horses	418.00
Value of horses on hand	200.00
Sale of saddle equipment	53.25
Sale of tents	40.00
Local walk fund, spent for commissary outfit	76.51
Total receipts	$3,307.76

Expenditures:

Horses	$1,006.00
Packers	756.25
Packtrain, general	133.35
Packtrain, equipment	123.75
Packtrain, groceries	97.70
Two preliminary trips	133.75
Two cooks	146.00
Guide	84.00
Transportation	343,05
Commissary	109.52
Groceries	637.59
Incidentals	41.36
Total disbursements	$3,612.32
Deficit	304.56

Financial report of Mt. Baker outing:

Receipts	$1,695.50
Local walk	37.60
	$1,733.10
Deficit	50.00
Total	$1,783.10

Expenditures:

Packing	$ 587.56
Trail	241.35
Commissary	155.00
Preliminary trip	60.48
General expense	101,31
Transportation	184.00
Cooks	113.80
Provisions	339.60
Total	$1,783.10

Report of expenditures and receipts on account of Mt. Rainier outing:

Received from members of party	$2,940.00	
Meals in camp	49.20	
Supplies sold to government	24.65	
Advertising	53.00	
Total receipts		$3,076.85

General expense	$ 170.65	
Provisions	784.24	
Commissary	152.41	
Trail	76.85	
Cooks	154.50	
Transportation	432.50	
Preliminary trip	78.75	
Advertising	63.00	
Prospectus	126.00	
Packing	725.30	
Reunion	18.75	
Total disbursements		$2,746.95
Balance		$ 324.90

ASAHEL CURTIS,
Chairman Outing Committee.

REPORT OF PROGRAM COMMITTEE.

During the entire year the committee was continuously favored with valuable suggestions from members for available programs, and every request of the committee, whether upon members or otherwise, was cheerfully and acceptably complied with. We desire to thank the membership of the club, both for assistance in the recommending of persons to take part, and for the attendance and evidence of appreciation of the programs submitted.

In January, Mr. Samuel C. Lancaster entertained the club with views and descriptions of scenes visited by him upon his recent tour of Europe. The club met in the new assembly hall of the Chamber of Commerce in the Central Building for the first time at the February meeting. After the electricians of the club had succeeded in solving a difficult problem in obtaining electric power for the stereopticon, we heard an interesting and amusing talk on Japan and its people by Miss Adelaide Pollock, illustrated by views collected by her while there.

At the March meeting our president, Prof. E. S. Meany, recounted various "Stories of Chief Joseph and other Indians," in his usually happy style, and exhibited numerous curios from his collection. Mr. Grant Humes showed an entirely new set of pictures of wild animal life in the Olympics, at the April meeting. The May meeting was given over to the Outing Committee and we were given a forecast of the summer's outing, through pictures taken by the committee on the preliminary trips.

The list of programs is completed by an interesting and instructive talk by Hon. A. E. Griffin upon the early history of the Pacific northwest.

The meetings were all well attended and the spirit of hearty comradeship, which has always been strikingly evident at all gatherings of the club, has not in the least diminished.

Respectfully submitted,

H. C. Belt.

MEMBERS OF THE MT. BAKER OUTING.

Bailey, F. L.
Bailey, L. L.
Bailey, Winona.
Baptie, H. May.
Belt, H. C.
Belt, Mrs.
Best, John A., Jr.
Blake, Fred J.
Cameron, Crissie.
Carr, Lawrence.
Carr, Robert.
Craven, A. J.
Craven, H. W.
Curtis, Asahel.
Curtis, Mrs.
Easton, Chas. F.
Easton, Martin.
Eaton, Dr. Cora Smith.
Epler, Frank.
Farrer, Annie.
Farrer, C. M.
Freund, Elizabeth.
Fryer, Alice.
Hanson, Olof.
Hall, C. R.
Hall, D. B.
Hahn, Rosa Dean.
Hannaman, Geo. L.
Hess, —.
Howard, Anna.
Howard, Grace.
Humes, Grant.
Johnson, Anna.
Johnson, Nellie S.
Krows, Melvin A.
Leckenby, Mollie.
MacLean, W. A.
McGregor, P. M.
McLean, Murray.
Mills, Blake D.
Mills, Mrs.
Morrill, J. O.
Nelson, L. A.
Nettleton, Lulie.
Sensenig, Wayne.
Southard, Frank S.
Sprague, —.
Stauber, Anna H.
Stevens, E. F.
Stevens, Mrs.
Strang, Hattie.
Tingle, Mary C.
Thompson, H. L.
Thompson, Mrs.

GLACIER PEAK

FOURTH SUMMER OUTING OF THE MOUNTAINEERS.

The fourth annual outing of the Mountaineers planned for Lake Chelan and Glacier Peak, is one of the greatest trips that the state of Washington affords.

Lake Chelan is one of the show points of the state and needs little description. It is 1,079 feet above the sea, yet the bottom is over a thousand feet below the sea. It is 48 miles in length, its southeastern end being in the rolling sage brush country of eastern Washington, and its northwestern in the rugged evergreen-clad mountains of the Cascade range.

Glacier Peak is a great glaciated volcanic cone 10,436 feet high, situated 33 miles west of the lake. It is the source of many large glaciers, being the third largest glacial system in the state. No large party has ever climbed the peak and the club will have the chance to make the first ascent as a club.

The peak can be seen from Seattle and along the coast. It is particularly noticeable during the summer when the snow is off the main Cascade Range, as then the white summit is plainly defined.

The party will go via. the G. N. to Wenatchee, transfer to a steamer on the Columbia, go to Chelan Falls, thence by stage to Lakeside, and by boat up the lake to Lucerne at the mouth of Railroad Creek. From this point the entire trip will be on foot, a distance of 35 miles to camp on the head waters of Suattle Creek. From this camp the summit can be made in a single day.

ASAHEL CURTIS,
Chairman Outing Committee.

CONSTITUTION AND BY-LAWS
OF
THE MOUNTAINEERS' CLUB
OF WASHINGTON

ARTICLE I.

NAME.

The name of this organization shall be The Mountaineers' Club.

ARTICLE II.

OBJECTS.

The object of this organization shall be to explore the mountains, forests and water courses of the Pacific Northwest, and to gather into permanent form the history and traditions of this region; to preserve, by protective legislation or otherwise, the natural beauty of the Northwest coast of America; to make frequent or periodical expeditions into these regions in fulfillment of the above purposes. Finally, and above all, to encourage and promote the spirit of good fellowship and comradery among the lovers of out-door life in the West.

ARTICLE III.

MEMBERSHIP.

Section 1. . Anyone above the age of seventeen years who is in sympathy with the purposes of the club is eligible for membership.

Sec. 2. There shall be two classes of members,—active and honorary.

Sec. 3. Active members shall be elected by a unanimous vote of the board of directors after being recommended by two members.

Sec. 4. Honorary members may be selected by unanimous vote of the Board of Directors; the limit as to number being 25.

ARTICLE IV.

BOARD OF DIRECTORS.

Section 1. The affairs of the club shall be managed by a Board of 12 Directors, who shall be elected at the annual meeting. Five Directors shall constitute a quorum.

2. A nominating committee elected by the club at the meeting, next preceding the annual meeting, shall place in nomination eighteen members in good standing from whom the club shall by ballot elect the 12 Directors.

ARTICLE V.

OFFICERS.

The Board of Directors immediately after being duly elected shall meet and elect from their number the following officers:

President,
Vice-President,
Secretary,
Treasurer,
Historian.

ARTICLE VI.

DUTIES OF OFFICERS.

Section 1. The President shall preside at all meetings of the Board of Directors and of the club. He shall not be deprived of his vote by reason of his office. He shall appoint, subject to confirmation by the Board of Directors, the following standing committees, consisting of three members each:

1. Outing Committee.
2. House Committee.
3. Program Committee.
4. Publication Committee.

and such other special committees as may be needed.

Sec. 2. The Secretary shall act as such for the Board of Directors and the Club, and shall record the minutes of their meetings, be ex-officio member of the Outing Committee, receive all monies and care for all records and papers belonging to the Club; he shall keep account of and properly turn over to the Treasurer all funds of the Club which may come into his hands, he shall make and keep a correct list of the members of this club in good standing, noting of each his correct name, address and date of membership, and it shall be his duty to send annually a copy of such lists to the Historian of this club. He shall keep a record of all official outings and in so far as possible the mountaineering achievements of the members of the club.

Sec. 3. The Treasurer shall receive all dues and monies belonging to the club from the hands of the Secretary, giving his receipt for same, and shall keep a correct account of all monies received by him, and shall only pay out the same upon the written order of the Secretary, countersigned by the President of the Club.

Sec. 4. The Historian shall collect and preserve all information concerning the Club, its membership, their achievments, the localities visited, and be ex-officio member of the Publication Committee.

ARTICLE VII.

DUTIES OF COMMITTEES.

Section 1. The Outing Committee shall have entire charge of all outings, including receipt and disbursements of the outing funds.

Sec. 2. The House Committee shall have charge of the Club Headquarters, and of such receptions, entertainments or other functions as may be held by the Club.

Sec. 3. The Program Committee shall outline the program for each meeting, giving notice to the members through the Secretary by mail.

Sec. 4. The Publication Committee shall include the Historian. It shall have full charge of all publications authorized by the Club, and act as the official mouth-piece to the public press. The chairman of the committee shall be the club Editor.

ARTICLE VIII.

MEETINGS.

Section 1. The annual meeting shall be on the third Friday, in November, of each year.

Sec. 2. Regular meetings shall be held on the third Friday of the month, October to May, inclusive.

Sec. 3. Fifteen members shall constitute a quorum.

Sec. 4. Special meetings may be called by the President or a quorum of the Board of Directors.

ARTICLE IX.

DUES.

The annual dues for members shall be $3.00, payable in advance.

ARTICLE X.

AMENDMENTS.

This constitution may be amended at any regular meeting by a four-fifths vote of the members present, written notice having been given at the previous meeting.

ARTICLE XI.

RULES OF ORDER.

Roberts' Rules of Order shall be authority in all parliamentary matters before the club.