

The Exploration of the Sources of the McLennan River

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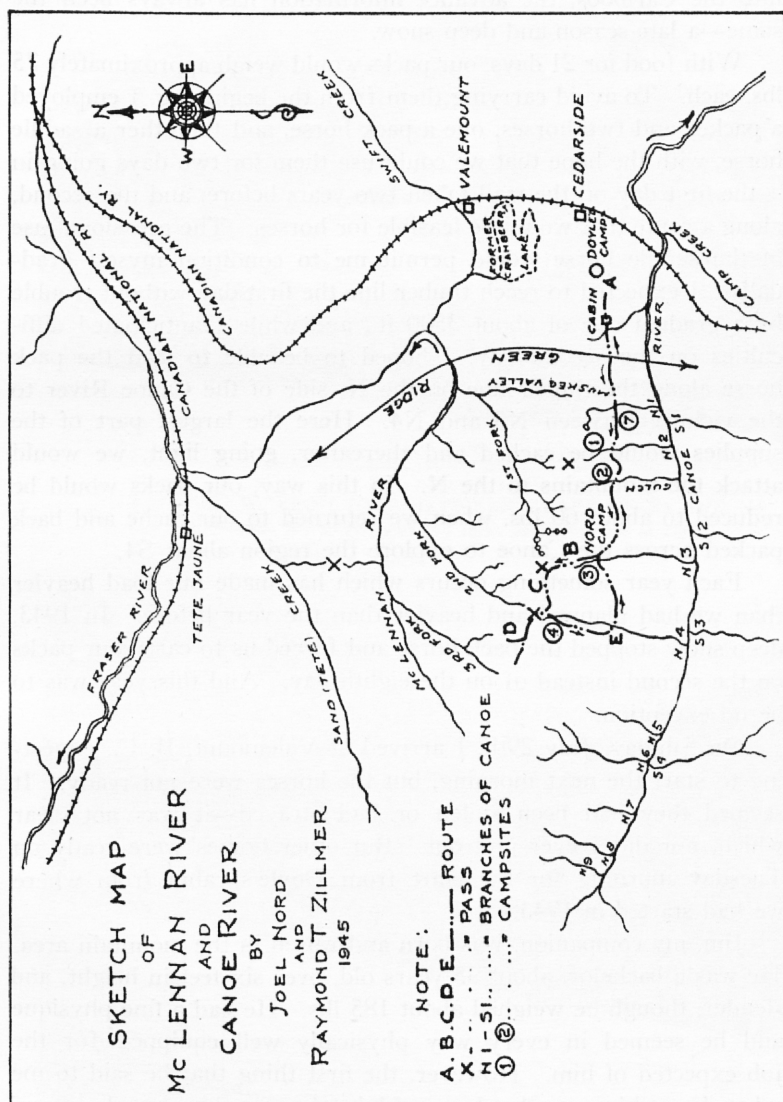
WHEN exploring the sources of the Canoe River two years ago, Lorin Tiefenthaler and I were intrigued by a spectacular group of peaks to the N. of the river. We saw them as we looked W. from Key Peak—a viewpoint which was too low to permit unraveling the arrangement. Ten days later, when we were at our glacier cave camp 10,000 ft. high, on the divide S. of the Canoe, these peaks and the glaciers about them were again one of the most conspicuous sights in the Canoe area. Although I was too far away to map the region, I determined that some of the peaks exceeded 11,000 ft. This region is designated on my sketch map of 1943 as "icefield and peaks."

I planned that my next trip of 21 days would have the following objectives: the climbing and exploration of this area, as well as that about the S4 branch of the Canoe, and a crossing from the Canoe to the North Thompson basin. I fully realized that these objectives were rather ambitious for three weeks, but one must plan for a maximum to realize even a minimum, as I found on my other exploratory trips.

That I would penetrate additional sources of the McLennan River was farthest from my thoughts, for I assumed that the Sand Creek drainage lay N. of our first objective. However, the location of Sand Creek and the location of the McLennan, which we had explored two years before, seemed to leave an unaccounted-for space of the Cariboo Mountains between them. What streams, if any, lay in this region? My trip was not directed towards solving this question, although, as will appear, it became necessarily involved in the other plans that I had made.

Lorin Tiefenthaler, who had been such a pleasant and capable companion on so many trips, could not go with me in 1944 or in 1945. My search for a suitable person to take his place ended in my employing someone to accompany me in 1945. I shall call him Jim. He was recommended by a responsible packer whose judgment I thought could be relied upon.

I intended to start into the mountains about July 1st, but Jim



wrote that the season was so late and the snow so deep that I had better start a month later, which I did. Every time I have gone into the Caribos, the advance information has always been the same—a late season and deep snow.

With food for 21 days, our packs would weigh approximately 75 lbs. each. To avoid carrying them from the beginning, I employed a packer and two horses, one a pack horse, and the other a saddle horse, with the hope that we could use them for two days going in—the first day on the trail taken two years before, and the second, along a route that would be feasible for horses. The occasional use of the saddle horse would permit me to condition myself gradually. I expected to reach timber line the first day without trouble by a gradual rise of about 3500 ft., and while I anticipated difficulties on the second day, I hoped to be able to lead the pack horse along the timber line on the N. side of the Canoe River to the vicinity between N3 and N4. Here the largest part of the supplies would be cached and thereafter, going light, we would attack the mountains to the N. In this way, our packs would be reduced to about 60 lbs. when we returned to our cache and back packed across the Canoe to explore the region about S4.

Each year something occurs which has made our load heavier than we had planned and heavier than the year before. In 1943, deep snow stopped the pack horse and forced us to carry our packs on the second instead of on the eighth day. And this year was to be no exception.

On Sunday, July 29th, I arrived at Valemount, B. C., expecting to start the next morning, but the horses were not ready. It seemed they had been stolen or had strayed—it was not clear which, nor did I ever find out. But other horses were ready on Tuesday morning for the start from Doyle's cabin from where we had started in 1943.

Jim, my companion, was born and raised in the mountain area. He was a bachelor, about 35 years old, over six feet in height, and slender, though he weighed about 185 lbs. He had a fine physique and he seemed in every way physically well equipped for the job expected of him. However, the first thing that he said to me when I met him was that he wouldn't take any chances. I assured him that I always take every precaution for safety—that this was my tenth back-pack trip in the mountains without serious injury, and my fourth in this vicinity.

Donald Gordon, who furnished the horses, had a very broad experience in the mountains of this area. He back packed for surveys and for mines. Jim told me, just as a packer living in the vicinity had told Allen Carpe in 1924,¹ that a low pass separated the Rausch River from the North Thompson River. But Donald knew better, for he had packed to the head of the Rausch, over the low flat pass into the Azure, and over the divide on the W. to the Blue Ice Claim at one of the sources of Hobson Creek. He also back packed supplies up Serpentine Creek to the top of Mt. Lempriere in the Monashees when the Geodetic Survey occupied that peak, and, laughing about it in a critical way, he told how the high wooden standard, which was to hold the light, had been built below the mountain and back packed all the way to the top.

The horse that was to pack our supplies had never been used as a pack horse and was not shod. When he was being packed for the first time, with everyone trying to reassure him in the various phases of the packing operation, we expected some revolutionary reactions. But the animal, to the surprise of everyone, was most intelligent. He seemed to understand what was taking place and took everything with a calm and poise that approached human comprehension, and he proved equally capable and intelligent on the entire trip. This is a considerable compliment, for he met many new experiences, I am sure. Perhaps his good behavior may be attributable to the fact that the saddle horse was a lady and the pack horse was a gentleman. He never left the side of his lady.

The first day was quite uneventful, for everything went smoothly according to plans. According to Steffanson, we had a right to feel quite competent that day, for to him mishaps are a sign of incompetency. But we would soon feel otherwise. Our trail, in a general westerly direction, took us at right angles over a well wooded ridge which, where we crossed it, was about 1000 ft. higher than the Valemount flats. This ridge deserves some consideration. It is next to the Cariboo Mountains themselves although as it runs to the N. by N. W., it gradually becomes higher until, at the N. end, it merges with the Cariboos. On the S., this ridge seems to reach to the southern side of the Canoe, and this accounts, I believe, for the fact that the Canoe flows through a canyon just before it reaches the flats. There is no break in this ridge excepting that

¹ *Appalachia*, June, 1928, p. 9; February, 1926, p. 403.

made by the Canoe and the McLennan Rivers. Jim said that this ridge was once the shore of a lake. Is this ridge the frontal moraine of a large glacier that once went down the entire Canoe and McLennan valleys? The valley of the Canoe is sufficiently U-shaped to account for such a glacier. A glacier occupying the entire Canoe Valley W. of the green ridge would have been 25 miles long. The flat upper portion of the Canoe Valley shows that only very recently, perhaps 20 years ago, it must have contained a glacier about two miles long, and this portion of the valley has very steep walls, sufficient to account for a glacier of considerable depth.

The trail, after crossing the ridge, drops into a marshy area behind it but soon mounts rapidly up the side of the Cariboos proper. In the early afternoon we reached timber line, and when, shortly thereafter, we arrived at N2, I could hardly recognize the vicinity, for it was now grown up with bushes, and on our prior trip it presented quite a different appearance. We went up steeply alongside N2 and camped early that afternoon at about 6000 ft., a few hundred feet below our former camp. There was almost no snow about, whereas two years before, the snow was very deep and impossible for horses. Donald saw a coyote near camp that night. The night was cold—31° at 9.15 P.M.

The next day gave me great concern, for we had reached the end of the trail and neither Jim nor Donald knew anything about the country we were heading into, and I had seen it only from the mountains above. How far could we take the horses? Much depended on that. In the morning we worked our way up the steep slope on the W. side of N2, and when we reached the top of the cut we made our first mistake. We worked our way down and around the side of slopes instead of going higher, so that we were soon working our way through the tangle of the fallen timber of an old fire, whereas higher up, we would have been, for the most part, in fairly smooth grassy alpland. The going on the second day was so rough that the saddle horse was useless. There were many indications of moose about us.

After travelling an hour we saw ahead of us and perhaps a mile away, a creek which cut deeply between two ridges that came from the mountain on our right. The ridges seemed steep on the sides facing us but lower down they merged with a high bench. Our problem was to go either below the ridges or to cross them perhaps one-fourth of the way up. Jim thought that we would

be unable to reach the alpland behind the ridges if we took a route below them. I saw courses up the E. side of both ridges that seemed possible for horses, but Jim was very doubtful. However, he determined to attempt a crossing of the ridges and we took a route which brought us on the easterly ridge without great difficulty. But as we looked down the other side we saw that it was impossible for horses, for the creek at this point was in a canyon. We retreated but were able to cross the ridge perhaps 500 ft. higher over steep, grassy meadows between trees. In this crossing, the pack horse, being unshod, gave much concern to the men. We lunched on reaching the creek, and after lunch we again went up a very steep, grassy meadow to the top of the second ridge. As it was about as steep as horses could go, especially unshod, we were careful never to be below either of the horses, which, had they lost their footing, would have rolled to the bottom of the gulch.

On reaching the top of the ridge, we were shocked to find a steep wall on the W. face. Jim walked up the ridge some distance to see if there was a break in this wall, but he found none. I went down the ridge and found a place where the wall was broken and where I could walk off the ridge without the use of my hands. I felt that we could get the horses down if we unloaded them, but Jim, more experienced and cautious, felt otherwise. So we returned to the creek and camped there, having advanced on the second day about as far as one could back pack in two hours.

On the morning of the third day, Donald left us. Jim and I were now confronted with the problem of back packing our entire load to the point where we had planned to cache most of it—a point we had hoped to reach with the horses. The weight of the load now was even greater than in 1943, for Jim, in spite of my instructions to the contrary, had made several weighty additions. He had insisted on taking a heavy rifle as a safeguard against grizzlies and to provide food in an emergency, although I had never regarded a weapon as necessary for either, a three-inch bladed jackknife and the ice-axe being my only weapons. He also added to our load 6 lbs. of bread, other food, several pounds of tobacco, and a heavy tarpaulin to cover the cache. He insisted on carrying an axe, which I never carried except when I expected to build a raft. This additional material increased each of our packs to about 80 lbs. In addition to the pack, Jim always carried his gun, and I, the two ice-axes tied together in a very clumsy package.

We went over over the ridge without much trouble, however, and then took a course westward a little below timber line, whereas, had we known it, we could have again taken a better route on the quite level alpine meadows above timber line. Shortly after noon we saw N3 below us and were surprised to see smoke in the valley. Jim thought the camper was Joel Nord, a prospector whom he knew, but he was not sure, so he cautioned me to be quiet as he approached the camp and held his loaded gun ready for firing.

It proved to be Joel Nord, who had been prospecting for mica in this locality for three years. We camped with him, and I obtained a great deal of information from him, for he had made a very thorough examination of the country to the N., S., and W. of us and had staked out over half a dozen mica claims that looked very promising. The information proved to be of great value and saved us considerable effort and time.

I had intended to continue W. on the Canoe River side of the mountains and to cache my supplies a few miles W. of N3. I expected, by climbing the mountains to the N. of our cache, to reach the icefield and the high mountain area, but Joel said the high peaks I was looking for were not there, as the mountain I wanted to climb was a single mountain mass which dropped immediately on the north to a pass which he recommended that we take to reach the upper portion of N4. This pass could be reached by going north to the head of the valley we were in and then by turning W. we would enter the drainage of N4.

To the W. of N4 lay the area we were looking for, and by going up N4 to its source we would reach a second, a third, and possibly a fourth fork of the McLennan, as well as an approach to the high area. On brown wrapping paper Joel drew a map of the route showing the branches of the McLennan, and a very accurate map it proved to be. He has since drawn a more accurate and complete map which appears with this article. I have made some changes in it, principally in compass directions, but substantially it is the map of Joel Nord. While I have never examined Sand Creek, I include it in the map to show the position which I believe it occupies in relation to the McLennan. Everything Joel described proved accurate, and while I probably would have discovered these creeks in any event, it would have been only at a great waste of time and energy. I am happy to acknowledge my indebtedness to Joel Nord.

His mentioning of the additional forks of the McLennan was in one sense a surprise to me, but in another sense it was not. On my prior trip I had gone to the source of "a" McLennan and I knew of no other McLennan, but I could not understand what streams, if any, were between Sand Creek and the McLennan we had examined. The area was so large that it seemed to require some streams for proper drainage. But I did not know a satisfactory answer to this puzzle until Joel spoke of the additional branches of the McLennan.

The next morning, with Joel accompanying us and packing part of our supplies, we went up to the source of N3. On the way up, we passed our camp site of 1943, stopped at Joel's forge where he sharpened his drills, and examined the books of mica in the claim that he was then working. We followed the top of the terminal moraine of the glacier flowing from the mountain west of us. The glacier showed considerable recession, and in the not too distant future a lake should be formed at the end of it, for a small pond is already formed behind the dam of an old moraine.

When we reached the top of the pass, we overlooked the McLennan which we had explored two years before, except that we were now in the northern part of the end of the valley. The end of the valley was broader than I had thought it was. Below us was a string of three greenish-blue lakes which, although surrounded by a barren area without vegetation, looked beautiful from above. Joel told me that he had been in this valley two years before, the very day after we had been there, and he pointed out to me the rather spectacular route we had taken. It appeared that we had followed a ledge on the S. side, then in deep snow, now bare, and thereafter had gone up the glacier which occupies the S. side of the valley. The glacier seemed too steep to negotiate, for now the ice was bare, whereas, we had deep snow. Joel had seen our camp on the McLennan and on N3, but he always arrived a day after we had left. The barometer showed 8050 ft., but it was probably higher. It hailed and snowed, and the temperature was near freezing at about 2.00 P.M. when we were in the pass. Jim declared that we would have had a better route to this pass if we had crossed into the McLennan after the first day and had gone to the area of the three lakes that we looked down upon, but Joel said that pack horses could not have reached the lakes.

We then turned and walked west down a small glacier and the

north side of the mountain until we came to a ledge where, at 7500 ft., we could examine our route of the following day over the next pass. While we ate a late lunch, Joel pointed out our next camp site on N4 and the route we were to take to the northwest up N4. To the left we could look down N4 to the Canoe and the mountains to the S. and S. W. of it. For a mile or two below our proposed camp site, creek N4 is quite flat, but it then drops precipitously to the Canoe. Opposite and to the W. of us was a high mountain which had a cirque facing us and a shrunk glacier now well below the cirque. This glacier, another glacier overflowing from the northwest into the head of N4, and the glacier we had just crossed are the principal sources of the waters of N4. N4 flowed steeply from the N.W. and looked like a sinuous silver ribbon shining in the background of green alpland.

Joel left us after lunch. As we went down toward the camp site at about 6000 ft., we saw about 20 goats feeding in the upper valley and on the mountain adjoining it on the E. It rained hard several times toward evening so that we had trouble establishing a satisfactory camp. I looked forward to the next day, for I hoped that it would disclose the mysteries of the area between Sand Creek and the McLennan. I told Jim that we would stay at this camp at least another night, and that on the next day we would go light and have an easy time exploring the region of the purported additional branches of the McLennan with a view to determining which of the newly discovered peaks we would climb the following day. Joel had spoken of a large glacier we would reach, and when I started to explain to Jim the use of a rope on a glacier and the method of using two ropes if either of us fell into a crevasse, he quickly interrupted me to state that he would take no chances. I made no further explanation then.

A morning rain delayed our start the next day until after 10 o'clock. Our way up the valley was beautiful and easy, being up a gradual but steady ascent on good footing, and to considerable extent we could follow goat trails between low and scrubby trees which did not, however, grow as high as the pass. There were a few flowers here and there as we went up the alpine meadow. I was feeling pretty high, not only because of the beautiful country about me, but in anticipation of the surprises so near at hand. Little did I realize the anti-climax that would soon strike. Jim was a considerable distance ahead, for I could not keep up with

his gait. When I caught up with him shortly before noon, a little below the pass, he said very quietly to me, "I can't go any farther. My knee is bad."

I didn't answer for a considerable time—quite different from the quick answers I usually give! But this was something extremely important to me. It seemed as though one year of my life was at stake. I had not noticed any limp. Should I attempt to persuade him to continue? Entirely contrary to my every desire, I decided that I shouldn't, and now I am certain that I determined this matter correctly. So I said, quietly too, as in a dream, and calmly and casually so as not to indicate the terrific turmoil within me, "I suppose this is the end of the trip." He said, quickly, "Yes," and nothing more. I never saw him limp thereafter, nor could I ever keep up with him thereafter. And this did not surprise me.

This was the fifth day of a 21-day trip. The failure of the pack horse was more than compensated for by the help of Joel, and now, with everything within my grasp, I must quit. However, after five minutes, I left Jim and continued alone. I soon reached the pass; in fact, I had directed my course to the W. of the pass so that I was considerably above it when I reached the top. And there it was, just as Joel had said—another branch of the McLennan. I am calling it the second fork of the McLennan, and the branch of two years ago the first fork. I could look straight down the fork into the flats above Valemount, and in the distance immediately in line with the direction of the valley was Mt. Robson, but as usual with its summit in the clouds. But Mt. Longstaff and Mt. Whitehorn, to the left of Robson, were clear. The stream has four branches on the right or southeast side and none on the northwest side. On the left of the stream is a saw-toothed ridge. The direction of the lower two-thirds of the creek is 50° E. of true N., the magnetic deviation in this vicinity being $26^{\circ} 30'$. Blocking the way to the Valemount flats was the green ridge heretofore described.

I continued to the N.W. on rock and then up on a large glacier to a height of 7700 ft., or perhaps over 8000 ft., for the barometer at camp that night showed a drop of 400 ft. It is a large, quite smooth glacier which flows principally to the W. by N. W. to join a long moraine-striped glacier coming from a huge icefall on the S., an icefall that flows from the large icefield we had seen from the S. on our prior trip. The glacier I was on also flows slightly to the second fork of the McLennan and to N4. To the N. was

a low peak which offered a good viewpoint. It seemed easy, so I tried to climb it in my poncho when it started to hail and rain, but it proved too difficult for that, and I was compelled to wait on a ledge until the rain stopped. It was after 3 so I lunched in a cold and cramped position while I waited for the rain to stop, and then I went to the top.

The peak, while not high, is strategically located. The moraine-striped glacier which lay below the icefall is at the head of the third fork of the McLennan, and to the W. of the third fork is a high, steep, narrow ridge behind which is still another fork of the McLennan, and to the N. I could see where the third and fourth forks join. I could see the mountains to the west of the fourth fork which undoubtedly rises from a large glacier which also has its source in the icefield S. of us. The fourth fork is probably the last of the McLennan, so I shall call it the main McLennan and shall number the other forks in the order discovered. The third fork flows 40° E. of N., and the source of the main McLennan 55° E. of N. After the two forks join, the confluent stream, in a gentle curve, turns more and more to the E., to behind or N. of the saw-toothed ridge.

The map which Joel sent me after I returned indicated a pass leading to Sand Creek from below the junction of the third fork and the main McLennan. I did not see and I know nothing of this pass, and I have not been able to question Joel before I write this article, but I am confident that he is right, and in that event it would seem that there can be no other branches of the McLennan other than those already mentioned.

It may seem strange to some that Holway, Carpe, and the Munday did not see these forks of the McLennan in view of their proximity, but it is understandable to me. The two most westerly forks are very deep and narrow and the mountains W. of them high. It would be difficult to recognize them except from near by. However, it is their failure to see any of the branches of the McLennan that resulted in their mistake of identifying the head of the Canoe as the head of the McLennan. They probably determined that the Canoe was the McLennan because in the Valemount flats the McLennan is the first sizable stream S. of Sand Creek, and in the mountains the Canoe was the first stream that they saw south of Sand Creek. And because of this error, Carpe and Munday insisted that they could not see the Canoe River at all. Carpe, how-

ever, later recognized his mistake when he climbed Mt. Albreda and identified the Canoe River from that viewpoint.²

N. by N. E. of the peak I was on was a little glacier which flowed N. and N. W. and gave birth to a creek that joined the third fork. But the view to the S. by S. W. was the climax. It compares favorably with other spectacular mountain views in Canada. An almost vertical icefall, several hundred feet high, flows to a long glacier the lower end of which was hidden behind a ridge and peak N. W. of me. The median moraines on the lower glacier are quite prominent. One may follow them into two dark bands in the icefall, bands which are formed from two cleavers higher up. Above the icefall is a sort of amphitheater of ice which flows from a much higher icefield which reaches farther back and disappears over the horizon to the S. and S. W. The highest peaks are in this icefield on the horizon. Several are over 11,000 ft., and over half a dozen, over 10,000 ft. In the S. E. corner of the icefield there seems to be a pass or low point that may offer a route to the head of N5.

It was difficult to leave this fascinating view, and I did not return to camp until 7. On the way back, Mt. Robson was clear as I passed the second fork and it stood out high above its dwarfed neighbors.

That evening I determined to go out alone, via the third and main forks. Jim would not accompany me, although this route would have been no more difficult than the route by which we had come. I changed my mind, however, during the night, and in the morning we started back and returned as we had come, with one exception. We decided that we would not go back to N3 as we had come, for the way up looked too laborious and not at all like a pass but like a climb over the mountain, so we went down N4 to the lower end of the flats. We then climbed around the south side of the mountain east of us and followed timber line to Joel's camp on N3 where we spent the night.

I learned from Joel that my original plan to reach N3 by pack horse was entirely feasible and that a prospector had once brought his pack horse to that point. Joel had seen the indications of an old route and thought that it could be cleaned out without a great deal of work. The next day we walked beyond our first camp and

² *C. A. J.* xvi, 243.

to within a few hours of Doyle's camp, so that in the last day and one-third, we walked as far as we did on the first three days, on two of which we were assisted by horses.

We had some pretty tough bushwhacking at times, especially when we selected a poor route which took us steeply down through alders, willows, and débris into N2. Here, on one occasion, I crashed, made a complete somersault, and landed on my back unscathed in bushes, head downhill, with my arms pinned below me so that I had great difficulty extricating myself. I couldn't find the two ice-axes, however, but Jim found them 15 ft. higher from where I had fallen.

Our last camp was about three hours from Doyle's camp. After we had dinner and after I had erected the tent, Jim, at 8.30, said that he wanted to walk in to Doyle's camp that night. So he left me, taking the gun and assuring me that there would be no danger. I merely said that my nine other trips had been taken without a gun. Darkness compelled him to halt after an hour or so. And he encountered a bear and its cub, the footprints of which I saw the next morning.

The entire trip was a most unusual experience in companionship. I employed a strong, young man with the hope that he would lighten my work a bit. And what occurred? I was the first one up every morning, usually a half-hour before Jim who said it was hard for him to get up on cold mornings. I prepared every meal on the trip but one—the day I climbed alone. I washed and dried all the dishes for every meal but one. I put up the tent and prepared the boughs for every camp. I carried half the load. Why didn't I do something about this? I determined that I would make no effort to remake a matured man. In spite of my disappointing experience, I enjoyed the trip, for I like hard work and I was philosophically determined that no one could deprive me of the joy of the mountains. And I lived a long time in eight days.