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About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

Robert Marshall
Wiseman
Alaska

September 23, 1930.

Dear Family et al:

And here I am, back again at Wiseman, after four ideal weeks of exploration in the jagged wilderness between here and the Arctic Divide. But this is the wrong end of my tale on which to begin.

Logically it commences on the afternoon of August 25 when we took off from the Fairbanks flying field. We, meant Clara Carpenter (22 year old schoolmarm of Wiseman, returning from a visit outside), her big brother Lew (Wiseman miner), Al Retzlaf (my last year's partner), myself, Robbins (the pilot) and two goldfish which Clara was transporting to brave the Arctic winter. As I'd taken the same 225 mile flight three times before there were few fresh thrills, except flying over the Yukon Flats (a vast plain, 40 miles wide and extending as far as the eye can see from 4,000 feet above it, just filled with a myriad of glistening ponds and the mile wide silver ribbon of the Yukon River) which is a fresh thrill each time and getting lost for a short while in a country in which there are five landing fields in 300,000 square miles. Robbins had only been into Wiseman once before, and the entire region north of the Yukon is so inadequately mapped that it's very easy to get mixed up. So when we came, flying a little off course, to the place where the Jim, South Fork, Middle Fork, North Fork and Wild Rivers all come within a few miles of each other and all head in the same general direction we didn't know for a while which was which. It wasn't quite like being lost in an auto either, where you can stop and study the map at leisure, for here we were moving at 110 miles an hour and there wasn't a decent map anyway. But pretty soon Lew picked out Wild Lake for which we were heading and simultaneously Al and I recognized some of the topography of the North Fork which we had explored the summer before, so Robbins banked her sharply around and we returned to the Middle Fork of the Koyukuk which we had erroneously crossed.

The welcome awaiting us when we landed at Wiseman would seem preposterous to anyone afflicted with the conventional notions about the stolid frontiersman. The instant I stepped out of the plane Martin Slisco, jovial roadhouse proprietor ran up and threw both arms around my neck. Little Willie English, seven-year-old Eskimo boy with whom I used to have hopping races last summer, was next and he jumped up and kissed me. Old Pete Dow, hard-bitten, cynical old sourdough of 32 Arctic winters, pretty nearly pumped my hand off and his face was all cracked with smiles. And following them came all the others, for every soul in town, eskimo and white, was out at the field. They greeted me with everything from just a warm handshake and a "Well, Bob," to a regular pumping and a long conversation.

The next two days were spent in Wiseman, conversing happily with friends I had been with for 15 days the year before, but who acted as if we were lifelong acquaintances. They were so eager to pour out the events of the past year to someone to whom they were not stale stories long ago and yet who was genuinely interested in them. So I heard over and over, from a dozen different ones, each giving a slightly different slant, the chief landmarks of the past year in the life of the community: of the great lawsuit between Dubin and Hyde; of Dan Aston blowing out his brains during the dark days; of how John Laane had left Emma

Creek the August before on a 40 day prospecting trip to Blue Cloud and how never had trace of him been seen since; of the terrible tongue lashing which Joey Ulen gave Mrs. Wanamaker; of Captain Rowden clearing out with several thousands of unpaid debts; of the poor year in the diggings; of the exceptionally cold winter; of the sensational ice-jam when the river broke up in the spring.

Most the time in Wiseman, however, was spent preparing for our four weeks exploration trip to the Arctic Divide. Four weeks isn't a very long trip of exploration compared with the $2\frac{1}{2}$ years that the Lewis and Clark Expedition was gone or Steffanson's five years on the Arctic ice, but even in four weeks when you don't expect to meet a human being in all that time, when you have to be prepared for both winter and summer weather, when your work is going to be botanical, ecological, geographical, photographic and mineralogical, there is a surprising amount of preparation to be done. The worst is if you forget one little thing, for instance a whetstone, it's going to cause you a hell of a lot of inconvenience to say the very least.

I should devote a paragraph to the personnel of our expedition, which included two partners, one employee and two horses. The partners were of course Al Retzlaf and myself. Al had brought back some rock samples from just below the divide on Grizzly Creek last year and had them assayed at the college in Fairbanks. They ran so high in gold that a promoter from Texas had backed Al to the extent of \$1,500. to investigate further the potentialities of the region. I had as my major ostensible objective the entirely laudable study of tree growth at northern timberline, as my minor ostensible objective the not quite so respectable study of the geography of the great unexplored drainage of the upper North Fork of the Koyukuk (an area of about 1,000 square miles), and the preliminary mapping of it, and as my most important, though not advertised objective at all, gaining the absolutely unmeasurable aesthetic thrill of just looking at as gorgeous natural beauty as could possibly exist anywhere. We planned to spend about two weeks in this great thousand acre wilderness of the upper North Fork, just below the Arctic Divide and a week or so more travelling each way to and from it. As the point in this tract of land closest to civilization was 75 miles from the nearest human being while the furthest point was about 115 miles away, we couldn't very well back-pack four weeks worth of our varied equipment, so as last year we hired Jack Hood's two horses to pack us in. But it was so late in the year for feed and it would be such a nuisance looking after them while we were reconnoitering that we decided to take a man with us to take them back as soon as we reached our base camp on Grizzly Creek, just under the Arctic Divide. All the way out we would leave food caches in small trees where the animals wouldn't disturb them and thus coming back we wouldn't have to be bothered toting much food along. The man we got was huge Lew Carpenter, 6 feet 3, 235 pounds, 48 years old. Lew had a reputation as a hard man to get along with but as usual in such cases I found that if one forgot the reputation and treated the man as decently as possible he turned out fine. And so Lew did. He was as genial as could be all trip, enlivened several evenings with excellent yarns, did more than his share of the work, and never growled nor grumbled once despite the numerous hardships.

Our first day out we merely followed the road seven miles from Wiseman to Nolan Creek. Here we stopped for the day and spent the remainder of the afternoon and evening visiting with another group of old friends. The Pingels had us for lunch and a most sumptuous dinner. Mrs. Pingel is a most interesting old lady, an ex-missionary with a rare sense of humor. After dinner she hitched up her dog with its pack harness and started for Wiseman to attend to some business. Seven miles of mud and a dark road before she got to town didn't phase her in the

least. Al and Lew went over to Harry Foley's to look at some rocks and old man Pingel, who is over 70 and verging on dotage, though he still works with pick and shovel in his cut every day, played on his fiddle and spun out to me a slightly misty reminiscence of his early days in the far north, of the stirring adventures from '98 to '02, of the golden days when he was a young man not yet 40 and the best of life lay ahead. Some of it was quite thrilling: storming White Pass in mid-winter, boating up the virgin waters of the Stewart River, seeing a companion clawed and bitten by a bear, breaking through overflows at 60 below, crossing the trackless wilderness from the Chandalar to Coldfoot in the dark days of December. There was also a Miss Price, a courageous schoolteacher who made the crossing with him to Coldfoot that winter, whom he brought into his narrative more often and with more emotion that he would probably have liked to admit even after 30 years, fifteen of which were spent in relatively happy marriage with an ex-missionary.

We all went up to old George Eaton's to spend the night. He put Al and Lew in his bunkhouse and got me to share his double bed with him. Then he talked to me from ten till long after midnight, the steady, rambling monologue of an old bachelor who has lived alone too long. Some I had heard before when I bunked with him last year, of his wife who divorced him for desertion when he joined the rush to Alaska, of his daughter, whom he loved above everyone else in the world, drowned on a Sunday school picnic. I was very sleepy and dozed through most of it, but I followed enough to know it was largely the re-airing of years of grievances and especially the recounting of various very splendid things he imagined he had said to people who had used him badly. "I said to him, 'Alright, I'll pay you but by the God, I'll break you inside of a year.' And by Jesus, inside a year he'd gone broke." The last thing I remember before falling asleep was: "I said to her, 'You're nothing but an old whore, that's what you are.' I said that right to her face and her man standing there too."

Next morning at 7:30 we set out for our month's vacation from the rest of humanity. George and Pingel and Smithy Wanamaker postponed starting their day's work long enough to see us off. Al went ahead and picked the route, leading Brownie. Lew followed with Bronco and also carried his gun. I had nothing to lead but carried my gun and a 30-pound pack, walking sometimes in the middle, sometimes behind and sometimes going ahead to reconnoiter. We swapped jobs occasionally but in general maintained this formation all the way to the Arctic Divide.

Of our first four days out from Nolan there is no need to go into detail for we followed the same course we had taken last summer. Scenically the chief difference was that the valleys instead of being dark green and light green where the needles of the spruce blended with the broader leaves of cottonwood and willow, were now dark green and brilliant gold. Along the valley of the North Fork, which extended without turnings for many miles, it was glorious to look down from some promontory over this bi-colored sea walled in by snow-capped mountains.

The third afternoon out, as we were laboriously leading the horses above the bluffs opposite the mouth of the West Fork we were startled by a voice shouting to us from the other side of the river. I ran down to the shore and saw a man poling a boat across the stream. In a few moments he landed and introduced himself as Ernie Johnson. Of course I knew about Ernie, most illustrious hunter and trapper of the far North, a sort of a Daniel Boone among the pioneers of this arctic frontier, unanimously admitted by the exceptionally competent woodsmen of the Koyukuk to be their peer.

Though Ernie spends practically all his time in the woods, and is

alone most of his days, he is not an anchorite by preference but merely because he can seldom find anyone to share his difficult life. When Lew and Al got down to the river's edge he fairly insisted that we go no further that day. So we pitched our camp a little ways upstream among the willows, hobbled the horses and left them to feed and crossed the unfordable North Fork in Ernie's boat, all the while his four dogs barked vociferously. Ernie had a very comfortable and spacious tent with a Yukon stove and a bunk built in. The tent was at the river's edge and back about 100 yards was a winter cabin (like all winter cabins, no good in summer because the dirt roof leaks in rain) and a cache for his food, snowshoes, sleds, magazines, etc.

While Al fished and Lew started supper, Ernie wanted to show me the West Fork. He thought we might see a moose so we took our guns, but Ernie talked such a blue streak that any moose within rifle range must have pulled out of the district before we came near. We talked principally about geography - compared notes on our observations in the country at the head of the Anatic Pass Creek which no one except Al and we two had ever seen. Ernie told me of low passes leading from one drainage to another, pointed out some of them to me from a hill we climbed, explained about sloughs which cut off tedious passages over niggerheads. It was the vital information of the wilderness. He also told me quite a bit about his life. He had been 50 in July; came to Alaska in 1910 via Minnesota and Sweden. He had been a carpenter by trade but loved the woods so much he came north to the greatest wilderness of the continent. Here he spends all but about two weeks in the year out in the hills, away from the "cities" of Wiseman and Bettles, with populations of 80 and 20 respectively. He traps and hunts, averaging about \$2,500. a year income. "But the only reason I stay out here isn't for that at all, because I can make better money being carpenter, but because I like it out here among these rugged mountains better than anything else in the world."

Ernie and I hit it off fine right from the start and before we got back from our "hour and a half hunt" it was practically arranged that we were to make an exploration of the upper Alatna River country next July, a country which Ernie stated was "the most rugged I've ever seen in all Alaska."

After supper Ernie took us back to our camp. He seemed loath to say goodbye. He was floating downstream next day toward Bettles while we were moving up, but for one night the only two camps in 100,000 square miles of wilderness were just across the river from each other.

Next day we travelled north in an intermittent rain which turned into snow during the afternoon. A fierce wind howled out of the North and we had to push ourselves against it as we crossed the high ridge where the river takes its big loop to the west and back again. Here Al dropped behind to fish in a lake about which Ernie had told us and caught 35 grayling in as many minutes. They gave pleasant variety to our menu. When we made camp that night after seven it was snowing hard, we were chilled through and it seemed like anything but the right time to be setting out on an exploration of the Arctic Divide.

But next morning we were awakened by the sun shining through the tent. We rushed outside to find a crystal clear day. There was not a cloud in the sky. Every mountain was covered with snow, every peak showed a clean white edge set against a pure blue background. Almost everything in life seems to be at least somewhat blurred and misty around the edges and so little is ever

absolute that there was a genuine exultation in seeing the flawless white of those summits and the flawless blue of the sky and the razor edge sharpness with which the two came together.

In the whole sparkling panorama the most exhilarating sight of all was the view due north toward what the summer before I had christened the Gates to the Arctic. Ten miles away rose the two gigantic white posts, Frigid to the left towering 3,000 feet above the valley floor with half its height sheer, Boreal to the right jutting up over 5,000 feet. Between was a deep gap about a mile wide through which the wintry summits of the Arctic Divide could be seen 25 miles further away. All day we travelled up the floor of the North Fork Valley toward these massive Gates. In order to avoid the severe going of the sidehills we kept to the gravel bars which lay first on one side of the river and then on the other. Thus we were forced frequently to ford the swift and icy current. At one place where the crossing was especially difficult we could only make it by walking on the upstream side of the horses and using them for support. As it was Lew was almost swept away, and it was rather an agony to be forced to watch him without being able to lift a finger in aid. We stopped for lunch at Fishless Creek and dried out.

After lunch we continued up the valley of the North Fork. Wandering through the falling gold of the cottonwood and willow leaves would have been joy enough, but then there were those snowcovered mountains which hemmed us in on every side, and far in advance our goal of the Arctic Divide. As we drew closer to the Gates they appeared more and more rugged and bristling with unscalable crags. On Frigid I counted 27 separate pinnacles in three miles. Boreal had fewer but they were even more immense.

At the very center of the grand chasm we found our old camp of last year. Al and I were just reminiscing by the dead coals of the old fire when suddenly we saw two grizzlies about 300 feet ahead. They reared up but then ran away before we could hobble the horses so that Al might take a shot.

We camped a mile beyond at Fish Creek, building a big bonfire by which to dry out. There was a brilliant aurora that night. The thermometer dropped to 24 next morning and the weather was still sparkingly clear. We travelled eight miles upstream to the junction of the North Fork with Anatomic Pass Creek. We made camp for the day at noon. I spent the afternoon snapping pictures in every direction, for whichever way one looked rose exceptionally rugged summits. There were so many unexplored chasms, such an infinitude of barely scorable mountains, that a person could spend many summers tripping from this center and still have fresh territory to explore. I predicted to Al that there would be a summer hotel here inside of 15 years catering to airplane tourists. It certainly would make the most ideal mountaineering center I have ever seen.

Ernie Johnson has a cabin around here, about a mile above the junction. I believe it must be the most northerly in interior North America, being situated at about $68^{\circ} 15'$ north latitude. It is surrounded by a good stand of spruce. One tree I measured was 16 inches in diameter at breast height and about 60 to every acre ran 10 inches or more, notwithstanding the fact that the northern timberline was only four miles away. Near the cabin Al and Lew fixed up a cache with four days food supply, while I bored into and made growth measurements on a dozen trees.

The next day was also perfect. There wasn't a cloud in the sky from morning to night. It was 27 when we got up and remained cold while a fierce wind howled from the direction of the North Pole. By 8:25 we were on the march, facing the harshness of Boreas. But it was harshness easy to face with a warm sun shining and snow-capped peaks rising on every side. Behind us was that mammoth range comprising the Matterhorn of the Koyukuk, Hanging Glacier and Boreal, a lofty snowclad boundary to the vision. To the west were all the piled up mountains which culminated in the unscalable pinnacles of the Six Darning Needles. North, as imposing as ever after a year of memories of it, was the 3,000 foot shear cliff which marked the entrance to the Valley of Precipices. And beyond its stupendous dark face, a little to the right, the snow covered pinnacles of the Continental Divide.

After lunch we proceeded up the most superlatively precipitous of all gorges which I have ever seen, the Valley of Precipices. So sheerly did the cliffs to the west rise that by one o'clock the valley was shaded as evening. From a steeply sloping base of about a thousand feet the black rocks towered straight up into the air for two or three thousand feet more. The strata were tilted at all angles, sometimes dipping north, sometimes south, occasionally being nearly horizontal. On the east the mountains were less abrupt but they rose for about 3,000 feet with strata tilted at 30 degrees. Between the mountains on this side were four deep chasms leading back between lofty cliffs and great peaks of tumbled conglomerate.

As I travelled up this great gorge of the north I lost all sense of time. It was like walking out of a sleep when we suddenly burst into full sunlight and found that the sun, shining down the gentler valley of the West Fork of Anatic Pass Creek, was still four hours high.

A mile further we stopped at our old 101 mile campsite of last year, so named because we estimated we were that far from the closest human beings at Nolan. It was rather a blow to find that bears had dug up all the cans I had buried so carefully the year before, but it gave Al, who has the true prospector's indifference to the sight of old tin all over the landscape, a great laugh. Al and I immediately set to work rustling enough dry wood to last us a few days from the meagre willow growth, the last spruce having been left 12 miles behind. Lew fixed up a site for the tent. By six o'clock we were all set up in our remote home. At about that time the sun dropped behind the mountains to the west and it got so cold that water froze in the pots almost as soon as we dipped it from the river.

There followed a week of explorer's heaven, the sort of thing a person of adventuresome disposition might dream about for a lifetime without ever realizing. Each day I set out to climb some fresh peak or explore some fresh valley which apparently no human being had ever visited. Often as when visiting Yosemite or Glacier Park or the Grand Canyon or Avalanche Lake or some other famous natural scenery of surpassing beauty, I had wishes egotistically enough that I might have had the joy of being the first person to discover this grandeur. I had read Captain Lewis' glowing account of the discovery of the Great Falls of the Missouri and was completely thrilled. At about the ages of 11 to 20 I used to feel that I had been born a century too late, that though I might have some good times I would never enjoy anything as glorious as I would have known had I lived in the days of Lewis and Clark. Later I changed these notions as I became more realistic and appreciated that, statistically viewed, I would probably have been bumped off by Indians or died of fever before having many good times, and that anyway background is much less important than psychological processes in determining how

happy a person can be. Later still I realized that though the field for geographical exploration was giving out, the realm of mental exploration -- aesthetic, philosophical, scientific -- was limitless. Nevertheless, I still maintained a suppressed yearning for geographical discovery which I never seriously hoped to realize. And then I found myself here, at the very headwaters of the mightiest river of the north, at a place where only three other human beings aside from myself had ever been and with dozens of never visited valleys, hundreds of unscathed summits still as virgin as during their paleozoic creation.

The first day in this heaven was blessed, perfect weather. Lew decided to stay over a day and hunt sheep. Al was going to prospect near camp, where he had picked up his gold bearing rock the summer before. I wanted to take advantage of the weather to climb one of the highest peaks on the Arctic Divide the summit of which was only about four miles from camp.

The ascent commenced over gently rising, sod covered slopes at the bottom of Grizzly Creek valley, but after 500 feet or so of this I found myself among hugh conglomerate boulders over which I had to pick my way with great care to avoid smashing an ankle. In a little basin among the boulders I scared out three sheep. Above the conglomerate came a slope of yellow rock fragments so steep that I was continually starting juvenile landslides, likewise so steep that I could not climb more than 75 steps without stopping for breath. But when I reached the top of this incline I was on the very divide. Above me rose the last thousand feet of my mountain, just a great gray stack of limestone, from which fact I called the peak Limestack Mountain.

The view from the summit showed a myriad of tumbled mountains rising out of deep valleys, cut up by great clefts and chasms, commencing in green vegetation and river bars, rising into rocks stratified at times and chaotically jumbled at others, culminating in unbroken snow and framed always by the pure blue of the sky. There were so many mountains it was positively bewildering. I could pick out Blue Cloud, 70 miles airline to the south, but from it clear over to the summits far north toward the Arctic Ocean there wasn't another one among all the thousands of peaks I could see which had ever been climbed or even mapped.

I spent $3\frac{1}{2}$ bright hours up there on top of the continent, looking in every direction over 70 miles of complete wilderness in which, aside from Lew and Al, I knew there wasn't another human being. This knowledge, this sense of independence which it gave, was second only to the sense of perfect beauty extending on all sides. My time on the summit was divided into three phases: first, just pure aesthetic enjoyment such as another person might get listening to Beethoven's Fifth Symphony played by some dreamed-of super-Philadelphia Orchestra; second, taking pictures; and third making sketch maps of the topography in every direction. I had to be rather careful on top because, though the side from which I climbed Limestack was gentle enough, the opposite side fell off about 1,500 feet perfectly vertically.

When I got back to camp Al was cooking supper and a sheep was hanging from a tripod. He had been prospecting about two hours and in that short time had found that his rock was only of sporadic occurrence in the conglomerate and absolutely hopeless to exploit 1600 miles from the end of the railroad. Then he saw a sheep moving along the skyline on the mountain across the creek. He grabbed up the gun, rushed up the mountain, which rises perhaps

2,000 feet above camp, and when almost on the summit came upon a band of a dozen sheep. He knocked over two easily enough and then, just to see how well the gun shot, aimed at a third about 200 yards away and killed him too. It was wilful waste but we forgot all about woeiful want that evening as we consumed heaping platefuls of fresh lamb stew.

It was eight o'clock, almost dark, before Lew dragged in packing a grizzly hide and several big chunks of grizzly steak. He had crossed over to the Arctic side of the divide and tramped for hours without seeing a fresh sign of sheep. Just as he was about to turn back he saw on a ledge of rock above him a grizzly, pacing back and forth like a tiger in a cage. The bear didn't see him so Lew detoured and came out above the bear and a couple of shots ended his pacing.

Next morning Lew pulled out with the horses, his bear skin, most of the sheep Al had brought down the mountain the day before and all our superfluous equipment, including the 8 x 10 tent which we had used all along. This left us with a little 5 x 7 one which contained room for little besides ourselves. Consequently, Al and I packed our stuff about 300 yards up the valley where an overhanging schist bluff furnished fine shelter for everything we didn't take into the tent. It also protected us from the north wind. Al rigged up a fly for the tent out of an old tarp and we soon had the new camp rigged up in a way we felt could withstand the worst the Arctic might bring us.

In the afternoon we climbed up to the summit of the mountain on which Al had killed his sheep. We took choice cuts from the two remaining ones; also opened their stomachs and found that they had been feeding exclusively on reindeer moss and sphagnum. Though the perfect weather had ended, and the sky was heavily clouded, the air was still very clear, the mountains just as rugged from here as from the Divide. If we did not have as extensive a view as the day before, we had added the Divide itself, about two miles away airline across the valley of Grizzly Creek. It was capped by a limestone palisade from one to two thousand feet sheer and extending for about five miles. It did not show a solid front but a vast series of columns chiselled out by the uneven weathering of the limestone. From the grooves between the bases of the columns the crumbled limestone debris spread out in fan-shaped formation for another 1,500 feet of elevation. The bottom 500 to 1,000 feet of the valley might have been the bottom of any glacial valley except that there was no vegetation larger than dwarfed willows.

We could look right over the low Anatuviik Pass at the very head of Anatuviik Pass Creek. Across it the Anatuviik River flowed through a broad, gently rolling valley. It looked so greenish-brown and peaceful it might have been some Montana valley, - the Gallatin, Deerlodge, Missoula or Bitterroot - except that the snow-covered limestone crags beyond were too rugged for even Montana.

We returned to camp by a rocky, unexplored hanging valley on the east side of the mountain and the steep south wall of the Grizzly Creek Canyon.

Next day, despite an intermittent drizzle, we followed the middle of the three main forks of Grizzly Creek to its source. Just before we came to the first fork, $5\frac{1}{2}$ miles above camp, the river flowed over a solid bar

of bed rock. This, Al informed me fervidly, was the prospector's dream for if there was any gold at any point above, some of it would surely be washed down and would lodge in the crevices of the rock. It was in just such places that all the great historic strikes had been made. Why holy mackerel, if this were Bonanza or El Dorado Creek in the Dawson country, one claim in such a place would yield several millions. It was glorious - but unfortunately after Al had panned for half an hour he did not raise enough gold to fill one tooth of a rotifer.

A mile above the first fork the middle branch came in from the right, tumbling down 200 feet of cascades from a lofty valley just below the clouds. We headed up this fork and soon were climbing great steps of some basaltic rocks. It was a giant stairway rising 200 feet and then suddenly it ended and we found ourselves in a strange, flat valley from which the glacier had departed so recently that the stream had not yet had time to gouge out anything from the valley floor. This perfectly flat bottom was about 400 feet wide and covered with gravel and small rocks which had shattered as they tumbled from a black mountain to the right, the crest of which was lost in fog. But partly hidden in the mist we could discern huge boulders which seemed to be just poised to tumble over on us. As we followed the valley up the half mile to where it turned at almost right angles there was the delicious feeling of searching where we knew no mortal had ever searched before and a half spooky sensation that some supernatural phenomenon might lie just ahead.

But if this half mile seemed unearthly, what lay around the bend was even more so. Here was absolutely nothing at all but rocks, always dull colored rocks, conglomerate rocks, basaltic rocks, limestone rocks, schist rocks, even one granite rock from god knows where - for all we could see the whole cosmos might have been rock and fog. We had felt below that we were heading the advance of mankind into the valley, but here we were leading life itself for there was no faintest sign of any animal existence in this rocky world and not a single bit of green vegetation, nothing but a few dry, black lichens desperately clinging to the dry, black rocks.

At the head of the valley was what appeared from the distance like a great dam. When we reached the base we found it to be solid conglomerate bed rock about 60 feet high. We climbed up the face which was so steep we could barely make the grade and found ourselves at the end of our valley, almost on the continental divide and almost in the clouds. Looking down the valley through the fog we could make out the lower slopes of many other jagged mountains, always leaving a sense of mystery where they were cut off by the clouds. The whole country seemed to stand on end, and where in most parts of the world you would think it splendid to have one deep gorge in 100 miles, here they would be separated often by only a narrow ridge.

The following day we set out in the opposite direction from camp to follow the west fork of Anatovic Pass Creek to its source. About a mile above the mouth of this stream a series of cascades about 1,500 feet high, culminating in one straight plunge of 200 feet drop, down from a hanging basin on the left. Thus far Al had been the year before panning gold, thus far Ernie hunting sheep, but beyond all was untrammelled ground. For about 6 miles it was surprisingly mild untrammelled country too. The river cut through well worn slate mountains, meandering now to one side of the valley, now to the other.

But I wasn't disappointed for I had not anticipated any sensational scenery.

The river curved around the high, flat topped mountain, and then suddenly we found ourselves out of the mild country, in a recent glacial valley flanked on the south by a most astounding series of knife edge ridges. Their black igneous faces rose more than a thousand feet sheer from the valley floor, while between them were deep hanging gorges which ended where they emerged, high up above the main valley, in waterfalls and cascades. One slender fall must have been 500 feet high. Across the valley, in complete contrast, the mountains sloped quite gradually and there were no deep gorges cutting them.

We followed up the broad, rapidly rising valley floor for three more miles to where the river dropped in great leaps for quarter of a mile through a canyon which it had cut for itself in the rock. Here we separated, Al to pan vainly for gold, I to explore the head of the valley. I climbed steeply along a ridge northwest of the canyon, getting a glorious view down the rugged valley whenever I turned around. Far below me to my left the river was tumbling its initial two miles through a deep V gorge. Across it a mountain rose almost straight up for probably 2,500 feet. Its face was a patchwork of black rock and white snow. Chunks of rock were continually breaking off and rumbling down into the valley so I called it the Rumbling Mountain.

When I crossed the highest point on the ridge I could look down into a big glacial cirque forming the very head of the West Fork of Anatic Pass Creek. The floor of the cirque was covered with gravel and mud, and amazingly for this region there were scarcely any rocks. To my right nestled a little lakelet, probably 200 by 400 feet in size, bluish-green in color. It is perhaps the loftiest body of water in the whole Brooks Range, being at least 6,000 feet above sea level.

Beyond the cirque was a low, curving ridge which I took to be the Arctic Divide. It was only eight or more hundred feet above the cirque and the slope was not too steep so I decided to clamber up. About half way I heard a great noise like an explosion above me and looked up to see a big rock, probably 6 feet through, plunging down the mountainside in my general direction. I started to run but slipped and sprawled flat. When I looked up again it seemed to be coming straight for me and it was too late to move. For an instant it was like a horrible nightmare I used to have about semi-annually in childhood, of a great rock about to crush me and I being unable to move. I lay just as flat as I could, knowing that junks like this as they go bounding down the mountainside only hit the ground now and then. Fortunately the spot where I was lying was neither now or then, so I was soon travelling on my way once more, possibly a bit shakily, to the top of the ridge.

I had been correct, it was the Arctic Divide. About 300 feet above me was a low mountain at the very head of the cirque and this I easily ascended. From its summit there extended down the valley to the east and north perhaps the most impressive view I have ever gotten. It was of the great knife-edge south wall of the valley extending in semi-circular front for eight miles from the Rumbling Mountain to Flat Mountain. Within these eight miles I counted ten different knife-edge ridges, each faced with a giant precipice where it broke off into the main valley, each rising two or three thousand feet from the gorges which separated it from the neighboring knife-edge ridges. These gorges lay about a thousand feet above the valley floor. Through this the river meandered back and

forth with many old channels marking it with varied patterns.

I named this remarkable valley and the river which drained it Keenunga, which is the eskimo for knife-edge, thus putting myself in the same shady class as a nomenclator with Charles Fenno Hoffman who nearly a century before had taken the Seneca word Tahawus and placed it on a mountain the Senecas had never seen.

To the southwest, about two miles along the divide on which I stood, was a very high mountain which I imagined must be at the junction of the major rivers, the Anatuviik, North Fork and John. I decided, even though a cap of fog rested on its summit and the way seemed exceptionally precipitous, to try it. I followed the ridge for a gently rising mile to its base, then swung over to the north side and scaled up its very jagged summit by some rather stiff rock work. The fog was so dense that I got very little view but topographically, I was able to verify my surmise. The southeast face of the mountain was a sheer precipice 1,500 feet high, dropping into a snowfilled hanging valley. I descended into this high valley, but not by the direct route, and then dropped down another thousand feet by a frozen cascade to the very head of the Keenunga River. From here I hastened back to Al and we returned the 10 additional miles to camp without event. That evening we feasted sumptuously on fried tenderloin of wild sheep and grizzly bear stew with potatoes, vegetables and dumplings.

But this is getting tedious and I must skip over our last three days in paradise with not more than a paragraph apiece. The first one we followed up Grizzly Creek $3\frac{1}{2}$ miles to where a deep gorge cut back between the limestone pinnacles of Tabletop and Limestone. For a mile we climbed up along the sides of the creek which came down too steeply for comfortable walking. Then the slope tapered off and we found ourselves in a great amphitheatre about a mile long and nearly half a mile wide. It was capped by pillars of limestone 200 to 1500 feet high, the base of one pillar resting on the capital of the one below. Underneath the pillars were steeply sloping banks of limestone debris where the spectators might have sat, to see the spectacle of the creek tunneling under permanent ice or cutting through a chasm 20 feet deep and only four feet wide. But here, let alone spectators, there were not even dried lichens, only snow and crumbled limestone and above that sheer precipices of the same rock.

The next morning it rained so much I stayed in camp studying Spurr's Geology and reading Anna Karenina. After luncheon, as there was a temporary cessation in the rain, I set out to explore the Hanging Basin above the waterfall and cascade near the mouth of the Keenunga River. When I had climbed the 1,500 feet to the top of the falls I was surprised to find myself in a gently rolling valley which might have been set down anywhere in the Adirondacks or even northern Massachusetts without anachronism. The back side of the mighty west wall of the Valley of Precipices was only a mild hillside. I climbed it easily without stopping once for breath and marvelled from the summit of the mountain at the contrast between the seemingly overhanging view into the Valley of Precipices, 3,000 feet below to the east, and the gentle slope of an agricultural country dipping into the Hanging Basin on the west. It was only at the very head of the basin, where there was a permanent icefield, that there was any ruggedness at all. While following the valley up to this icefield I saw ten very tame sheep. They merely looked at me placidly and didn't even start to run away.

The last day a high fog settled down and we couldn't see more than 50 yards from the tent. More studying of Spurr and reading of Anna. About four o'clock, chiefly for exercise, we set out to walk to the center of Anatuwick Pass, about three miles to the north. The fog had lifted by this time. The going to the pass was over gently rising, sod covered hills which afforded easy walking. The center of the pass was over a mile wide without a steep climb on either side. Just before the pass one of the forks on Anatuwick Pass Creek flowed in from the right, tumbling down with great velocity. It cut through quite a rugged canyon which looked interesting enough to follow down to where it joined the valley of Grizzly Creek. It was mild scenery compared to what we had seen, yet there were brown slate and schist bluffs rising 100 feet sheer from the edge of the water. Besides these bed rock formations there was a great rabble of miscellaneous rock, some of which as limestone and conglomerate had tumbled from the divide. But most, including a brown diorite, a diabasic porphyry and a black diabase had obviously been carried by the glacier.

During odd moments around camp I started an ecological experiment to throw light on the validity of my theory that the northern timberline in Alaska is not due to unfavorable environment for tree growth, but simply due to the fact that there hasn't been time since the last ice sheet receded for the forest to migrate further north. According to my theory, the spruce stands eventually will extend clear to the Arctic Divide and cross over into the sheltered valleys north of the divide. If this is so it should be possible simply by sowing seeds to extend the timberline far north of where it now is. This is precisely what I did. I collected spruce cones about four miles south of the last timber, extracted the seeds and sowed them on two plots of ground on Grizzly Creek, 12 miles north of the present timberline. One plot was covered with the natural vegetation of Sphagnum, Cladonia (reindeer moss), *Dryas octopetala*, *Salix arctica*, *Carex* and a plant the eskimos call Angowuk. On the other I scraped this away and sowed my seeds directly on the black soil. If my experiment gives positive results I will have advanced the timberline about 3,000 years according to my estimate of spruce migration rates.

On the morning of the eighth day in our camp below the Arctic Divide it was still raining, our tent was commencing to leak and the prospects of clearing seemed so remote that we decided to pull out. We shouldered what we fortunately thought were 60-pound packs apiece, though later it turned out they weighed 70, and started down the long 17 mile grind to the mouth of the Anatuwick Pass Creek. Before starting we ditched a week's food supply, including about 8 pounds of sugar which nearly broke my heart, and only held out about 12 pounds of the most concentrated food to take with us. The packs felt so heavy at first, especially to Al who hadn't as much experience in back packing as I, that when after 200 yards I let out a loud cheer at the completion of one one-thousandth part of our journey home Al only answered by a disgusted grunt. We stopped about three times to the mile, sitting down always on a sloping bank or rock so that we could rest the packs without removing them. Shoulders straining, back straining, head straining against the headstraps, we scarcely even appreciated the grandeur of the Valley of Precipices. On the whole the going was pretty good except for the last five miles when we hit quite a lot of niggerheads, but nevertheless it made a substantial installment on the required payment for our one week in heaven.

We pitched our tent near Ernie Johnson's cabin at the Forks and used his stove for cooking. The cabin was too damp and dirty for sleeping. As it alternately rained and snowed the next day we stayed pretty close to camp but I spent much of the time making growth measurements and stand tables in the timber adjacent to the cabin. The following day we were off before seven for a two days' exploration of the Upper North Fork, Al's exploration to be largely by pan and shovel, mine by mapping and camera. We took no sleeping bags or tent, planning to siwash out for the night. Thus we had very light loads, just my photographic and Al's prospecting equipment, a little food, a pot and frying-pan and the gun. We covered the 11 miles to the first junction of the Upper North Fork in about 4 hours. The scenery all along the way is superb - on the left a high, gray stone ridge cut by six deep gulches; on the right the multi-pinnacled summits of three mountain masses rising five to six thousand feet above the valley floor and divided by the great Gorge of the Waterfalls and the Gorge of the Silver Plunge. In the center the river itself was in continual foam as it twisted back and forth across the valley. We picked a campsite about half a mile above the forks and after an abbreviated lunch started on our way, Al to pan and I to explore.

Five more miles of rugged river valley brought me to a second forks. On the way the river cut right through Graystone Ridge and on either side straight gray walls rose sheerly from the valley. At the second forks one branch of the river swung in a general northerly direction to the divide, only about seven miles away. About a mile up it issued from a deep canyon. It was near the mouth of this fork that Ernie and Charlie Irish saw 22 wolves at one time. The other branch diverged at nearly right angles heading from a due easterly direction. No human being apparently had ever been up it, so of course I determined to explore this fork.

A mile and a half brought me to a small permanent icefield across which I slipped gaily. Just beyond I crossed a little knoll and suddenly found myself not 500 feet from a band of 17 sheep. They all ran away up the mountainside while I snapped three times at them. As I continued up the valley I observed that the north divide consisted of an unusual group of almost equally high peaks in perfect alignment which I had marvelled at from Limestone. Each peak was only a little over a mile apart; there were seven of them in the ten miles between Twentytwo Wolf Creek and the final fork of the branch I was following, which I named Alignment Creek. Between each rocky, snow-capped summit, a deep gulch with quite a flow of water descended. These numerous breaks in the topography added excitement to the pursuance of this unknown river, for it was always a mystery as to just what would be in the deep draw ahead. At very least there was sure to be a pretty series of cascades. Nevertheless, on the whole the valley of Alignment Creek was much less precipitous than the Valley of Precipices or the Grizzly or Keenunga Creek valleys. But for a change the less awe-inspiring scenery was a relief from the bleak rock walls at the head of Anatovic Pass Creek, and anyway the country was enough on end to suit the most precipitously inclined. But best of all it was fresh, gloriously fresh. At every step there was the exhilarating feeling of breaking new ground. There were no musty signs of human occupation, not even the psychological depression that nothing could be new. For this, beyond a doubt, was an unbeaten path.

But for a few seconds I suddenly wished it were a whole lot more beaten. The river kept boiling down the narrow valley, now sharp up against one steep side, now flush against the other. Occasionally it was so flush I had to leave the bed and climb over high cliffs. But usually by careful footwork I could pick my way around at the base. At one such place, where a schist ledge came down straight to the edge of the river, the rock near the base had fragmented and due to its right angled cleavage it was possible to pick a precarious footing.

There was a stretch of about forty yards that way in which I was totally absorbed in watching where I was placing my feet.

When I had gotten around the bluff I looked up and my heart stood still, as the books all say. About 150 feet ahead were three grizzlies! One hundred and fifty feet may seem like a long distance to a catcher trying to throw a man out stealing second, but between three bears and a human being, 11 miles from the closest gun, 106 from the first potential stretcher bearers, and 300 air-line from the nearest hospital it dropped to the realm of the microscopic. The closest bear was small, probably a two-year-old, the second was of medium size, the third appeared about like two elephants and a rhinoceros. Suddenly my heart stood stiller, for they reared up, one after the other, from little to gigantic, just like so many chorus girls going through some sprout in sequence.

But I must leave my bears on end to digress for a minute on the subject of neuroses. I commend to future treatises on psychoasthenia that they use my case as an excellent example of ursaphobia. They could say: "Statistically speaking probably not one grizzly bear in twenty bothers anyone and it is doubtful if one in 200 encountered actually hurts the unarmed traveller. Nevertheless, due to the fact that in two of the first three encounters which R. M. had with grizzlies there were rather startling associations - the necessity of taking to a tree in one case, of shooting in the other - R. M. simply cannot get over his bear complex and seems to become panicky every time, unarmed, he comes upon a grizzly."

Quicker than you have read this psychological discourse the bears got down off their hind legs and disappeared, fast as they could travel into the willows.

The bears safely "eluded", I continued upstream. As the water from each deep gulch was subtracted from the volume of the main creek it became noticeably smaller. Finally I came to the last forks and there was only a little brook left. Here, virtually at the head of the North Fork, 110 miles from the nearest person other than Al, I reluctantly turned around.

The 15 miles back to Al and our siwash camp were made at a straight four mile an hour clip. The feeling of striding through untrammelled terrain was only a little less keen than going out, the scenery looking back even finer. It had also cleared up considerably and the spectacle at the Wolf Creek Forks was one of the most rugged grandeur imaginable. Downstream, framed by the sheer cliffs where the river cut through Graystone Ridge rose a jagged rock wall more than 4,000 feet high and three miles long. Directly across the 22 Wolf Fork was the paired pinnacle of Two Prong Mountain, each prong jutting straight up into the sky. Upstream was the dark canyon from which 22 Wolf Creek emerged and over the canyon was the massive Inclined Mountain, with its dark, tilted strata, so conspicuous on its opposite flank from the Valley of Precipices. The Alignment peaks, one after the other, seemed almost living as the late afternoon sun played queer pranks around their snowy tips, while real life was added to the scene by five sheep feeding peacefully on one of the low, grassy hills near the forks.

When I reached our siwash camp I found that Al had made the best possible preparations for a cold night without blankets. He had cut willow and spruce bows to lie upon, inclined slightly toward the fire, and had collected a great quantity of dried wood. In addition he had a delicious macaroni and

vegetable dinner awaiting me. The night passed as nights without blankets usually do when there is no out bank to reflect the fire's heat, alternately roasting and chilling, with little sleep. But we were fairly comfortable as such nights go.

About two o'clock quite a wind came up and this was shortly followed by snow. By 5:30, when we were ready to start, visibility was so limited that we decided further exploration for the day was useless so we returned through a considerable snowstorm to our camp near Ernie's cabin. We just stopped once to examine the deep gorge separating the Matterhorn of the Koyukuk from Noel Wien Mountain. There was a big creek in this gorge which came down out of the clouds in two sheer leaps of 500 and 200 feet. The upper fall was the largest and most impressive single plunge I have seen in this whole far northern country.

Had the weather been even tolerably good the next day we would have climbed Hanging Glacier Mountain. But it was storming all around us, showed absolutely no indications of clearing, so it seemed to be time to get out. We shouldered our packs once more, now reduced to 65 pounds each, and set out on the long trek to Wiseman, 91 miles away. For the first 84 miles to Nolan the route was trailless and uninhabited.

There is no need to go into the details of our seven day journey back to civilization. It can be summarized by three words, damn hard work. Please repeat them 91 times, once for each mile. This, however, would be an invalid procedure at that, for there was a vast difference between the miles. Some of them, along gravel bars, we hardly noticed at all. But there were others when I really believed all of Lizzie's and Putey's contentions concerning my malaclustic nature. It seems the most ridiculous thing in the world that anyone of his own free will should put himself to such grinding effort. I remember opposite Moose Quandary Gulch it took us 55 minutes to make half a mile. We had to take a very steep side hill where even without packs a person would have had a hard time worming his way through the tangled alder thickets. With packs it was simply a case of brute strength, tearing your way through the brush for half a mile. There was also a very hard stretch where the river takes its great loop to the west. We had to climb uphill for four miles through niggerheads and over half frozen moss into which we would sink at every step almost to the ankles. It was snowing steadily that day and this made our rests very chilly and uncomfortable and our progress very slippery. As I looked dimly through the storm up the North Fork, frozen along the shore and completely surrounded by the snowcovered landscape, I was ready to believe that this really was the Arctic. The worst going of all was at Jack Delay Pass. Here the niggerheads were three feet high and grew so close together it was impossible to walk between them. But it was also impossible to walk on top of them for any distance for they would roll over, plunging you off into the muck between them. This would probably happen about once in every 20 steps and as we took about 2,000 steps to the mile I think it conservative to say that at least 100 times in each of three endless miles we would find ourselves sitting on the ground, a 65 pound pack anchoring us firmly in the mud, while above us would tower an overhanging cliff of sedge formation nearly waist high. Then we'd grit our teeth and gather up all our energy and pull ourselves up the necessary three feet and in about 20 paces it was all to do over again.

But it was done and there was a genuine exhilaration in coming through the toughest conceivable travel in triumph. Tired we would be but never worn out; difficult as the going was we always had plenty of reserve. It was precisely the stimulation I've gotten from such varied activities as climbing the five slashed summits of the Dix Range in one day with Herb and George; racing with Gerry Kempff through 29 stormy Idaho days out of 30 in November, 1927, in order to finish a tremendous program of essential experimental work, coming home from the woods each night soaked and chilled through, changing clothes and eating and then doing office work with Gerry and Lily until long after midnight; staying up 40 consecutive hours without sleep on my water relations study at Hopkins; or suddenly, after hard concentrated study, getting a glimmer of the significance of the quantum theory. A hundred other examples could be given but the principle in all is the same. It's the great stimulus for mental and physical adventure alike - the joy of triumphing over something which you know few people are capable of conquering. All this is pure egotism of course, but then I consider egotism one of the most commendable sources of happiness.

There were two very pleasant half day interludes on our journey. In the first we climbed the Red Star Mountain, 20 miles below the junction of the North Fork and Anatovic Pass Creek. This mountain had excited our interest on all three previous passages by it, for it was capped by a red, star-shaped blotch, probably 2,000 feet across. We had always been too rushed or too wet to stop before, but this time, though snow-flurries were all around, we determined to investigate the source of this brilliant coloration. The ascent proved very easy, only about 2500 feet and four miles in distance with just the last 400 feet of elevation really steep. We found the entire top of the mountain as well as of the higher peaks immediately north was an igneous upthrust, the only one we had seen in this vicinity. The red, really a vermilion, was only superficial, the interior of the rock under its coating being a steel gray. There was much of the vermilion substance, all pulverized, scattered in the rock crevices and over a large area of ground. Just what the red substance is mystifies us as much as ever, but Al is bringing it back to the College in Fairbanks to be analyzed.

The second interlude came on the fifth afternoon out from the Forks when I shot a moose. The first shot at about 700 feet tore off a hind leg and the rest was simple. Like the Indians, we make camp right where the moose died, dressed him, cached the meat (except for a few pounds we used) and cooked a feast which included the entire tongue and two hugh T-bone steaks. The moose was a young bull which Al estimated to weigh about 450 pounds dressed. When the first snow comes George Eaton and I are going after him with George's dog-team. Shooting the moose gave me a dual pleasure. First, I never tasted more delicious meat than the tongue, the steaks we ate at four meals and the liver which we enjoyed every meal for two days. Second, in the future when certain of my friends chide me for not being a more enthusiastic nimrod and it is too complicated to explain that a living wild animal is very much more beautiful to me than a dead one, it will be very handy for me to be able to elevate my nose just a trifle and remark with a trace of ennui: "Oh, deer (or elk, or goats as the case may be) seem too tame after moose."

The last night out the thermometer dropped to 15. It remained so cool all morning we didn't even perspire staggering up the steep mountain-side to Pasco Pass. Once through it our last real difficulty was over and the remaining 11 miles to Wiseman were all downhill. We reached Pingels' house on Nolan Creek in time for a noon dinner as well as a most enthusiastic reception. We spent most the afternoon around Nolan, telling our tales, hearing the latest news and just enjoying the company of other human beings, after four weeks of wilderness. After 101 trailless miles of back-packing from Grizzly Creek to Nolan the 7 miles of road to Wiseman seemed very easy, even though excessively muddy. I sat down flat once. When we hit the last mile from the foot of the big hill into Wiseman we were going strong and we struck a four mile an hour pace into town. Of course everybody in town dropped around to the roadhouse that evening and it was very pleasant to talk with them. Very pleasant too it was to find the first installment of mail awaiting me, some 17 dandy letters,

And thus ended a glorious trip. It contained no thrilling adventures like last year - no bears driving the horses out of camp, no 3:15 A.M. escapes from drowning, no necessity of building rafts, no all night marches to evade the mosquitoes. There were no days on end of soaking, no continual nervous strain whether we would come out. Whereas last year I felt toward the end as if I would be content to sit by a stove for the rest of my life if only I ever reached Wiseman, this year I didn't feel the slightest eagerness to get back. There was much hard work but never any real discomforts and we really travelled remarkably efficiently. It was just a comfortable, unexciting trip physically, but by far the most thrilling I have ever had in my life aesthetically.

Our record of exploration included the following:

- 6 unclimbed mountains ascended, including 3 peaks on the Arctic Divide
- 3 major valleys, never before visited by man, explored.
- 6 minor valleys, gulches and chasms first visited.
- 42 miles of untraversed valley walked and mapped.

Our record of ambulation included:

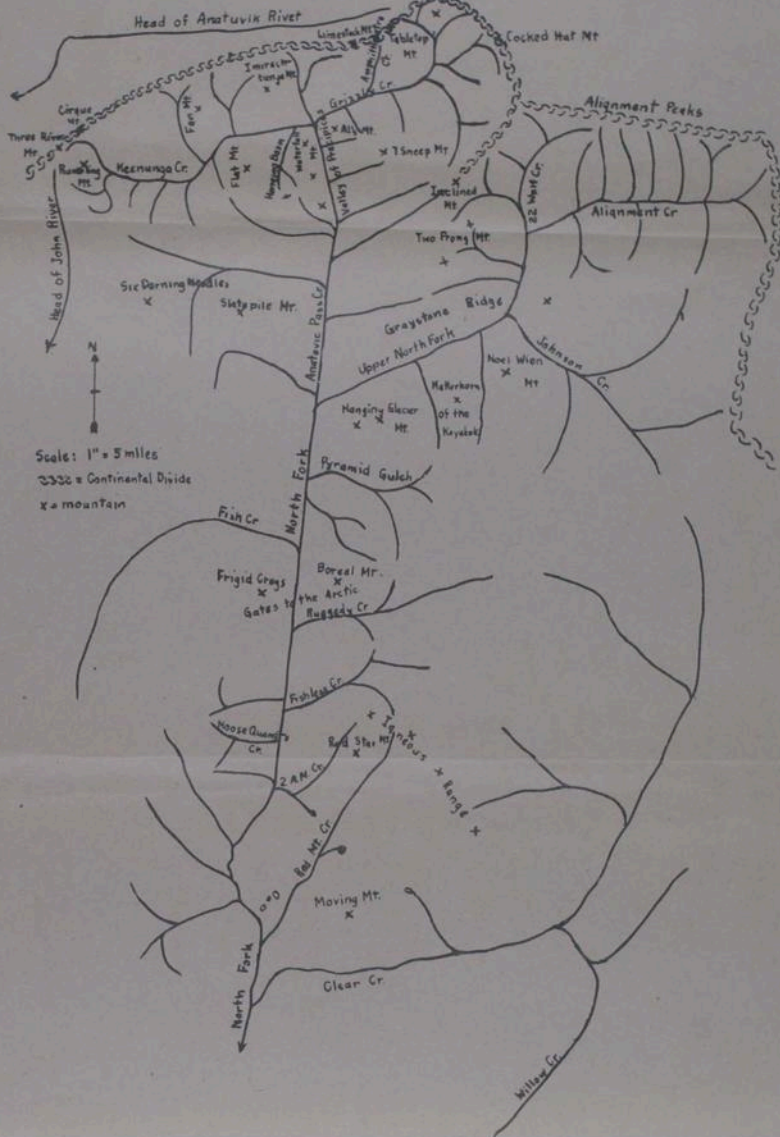
- 108 miles leading horses
- 108 miles carrying heavy packs
- 170 miles of side trips with just light packs

Our scientific record included:

- 6 stands of timber studied for growth
- 4 sample plots laid out to determine size of trees and number per acre
- 1 experiment inaugurated in relation to tree establishment beyond timber-line.
- 4 stomachs cut open to determine feeding habits.
- 11 rock samples brought back for identification

Daily temperature readings taken.

ROBERT MARSHALL
WISEMAN
ALASKA



Our mineralogical record included:

6 creeks prospected
0 creeks discovered with gold in them

Our zoological record included:

58 sheep seen
7 grizzly bears seen
2 moose seen
1 black bear seen

Our record of living off the country included:

3 sheep killed and partly eaten
1 moose killed and partly eaten (ultimately will be
entirely consumed)
1 grizzly bear killed and partly eaten
112 grayling caught and entirely eaten
1 mess of huckleberries entirely enjoyed
2 messes of cranberries partly enjoyed

I must end this long-drawn account with a eulogy of my partner. Although we had no important interests in common aside from the often rather all-absorbing interest of making this particular journey, he was so considerate, so affable, so eager to help me in accomplishing purposes in which he had no vital concern, that we didn't have even the remotest semblance of a harsh word between us. Some of you, who know how incompetent I am in all manual and culinary manipulations, will appreciate fully what a sublime disposition this must imply in Al. But it wasn't only in a negative way that Al was so good. He was the most resourceful person you can imagine. He could do everything from patching up the split hoof of a horse to repairing my camera when the back broke. He could do every one of the many activities of our trip better than I except for walking, backpacking, mapping and photographing; of the work around camp he did twice as much as I. Yet never by the faintest hint did he imply that he was doing more than his share of the work nor was he disgruntled that my objectives were entirely realized while his ended in total failure.

Bob.

P.S. I must explain this unusual method of writing letters. I have so many friends to whom I want to tell the same story about the events and life up here that if I wrote to each one individually I would have my entire winter occupied and no chance to write any personal letters. So my sister has kindly consented to have this letter mimeographed and sent to each of you and the same thing will be done with other general letters. That will give me a chance to answer all of your letters in a more personal way.

P.P.S. Just as an example of what may be expected of the mails in here, a letter from Putey written August 21 arrived here by airplane September 20, while one written June 22 to greet me when I arrived here came in by boat on Sept. 25. Similarly the letter Helen Smith wrote me August 28 got here Sept. 20 and the one she sent July 28 arrived September 25. This boat brought the people some of their last year's Christmas presents. So for heaven's sake, don't send me any packages, for no parcel post, freight or express comes in here between September and June.

ROBERT MARSHALL
Wiseman,
Alaska.

October 6, 1930.

Dear Family et al:

I am now comfortably established in my Wiseman home. It consists of a 16 x 18 foot log cabin which I have rented from Martin Slisco, proprietor of the roadhouse. Martin is giving me the cabin, all the wood I need to burn and my dinners for sixty dollars a month. He is also giving me, free of charge, a great deal of devoted help and kindness in everything from getting me established to aiding me in my various studies. He is a walking encyclopedia in regard to the inhabitants of Wiseman and can tell me with equal facility the exact year any of them came to the Koyukuk or how many dogs each of the 76 adults owns.

When I was gone to the Arctic Divide, Martin fixed my cabin with an architectural device of his own invention. He ripped up dozens of cardboard cartons and completely shingled the outside of my cabin with this material. It gives the house a weird but unique appearance. Of practical concern, however, it furnishes an ideal insulation against the cold of the arctic winter. With the cabin freshly mudded in addition, new dirt shoveled on the roof and a fine, large heater, I am all set for 60 below.

If the outside is unique the inside is rather typical of the frontiersman's home. In size, as I have mentioned, it is 18 feet from the door to the rear end and 16 feet wide. On the south side, where it will admit the maximum possible sunlight, is a large window 64 inches long by 24 inches high. Through it I can look out across the still unfrozen Koyukuk river to a range of steep, rugged mountains all covered with snow. In the immediate foreground are the buildings of the roadhouse which really means hotel and community center. As you know the closest road (also the closest pavement, railway, or doctor) is 200 miles away airline and 1500 miles distant by the usual means of transportation, consequently the initial half of roadhouse is somewhat misleading.

The height of my cabin is 7 1/4 feet on the long sides and about a foot more in the center. The walls are all lined with canvas, which once was calcined green but now has faded, under the influence of considerable moisture, to a dozen different shades of blue, green, gray and brown, all hodge-podged together. My walls, in good frontier style, have their sole pictorial ornamentation in the form of a large calendar advertising "Martin A. Pinsky - Leading Clothier - Fairbanks, Alaska". This calendar shows a picture of an old she-bear and two cubs being stung by hornets and two hunters just coming up. It is entitled "The Surprise Party." There are also three maps on the

wall, but this is not quite in keeping with custom. In the very center of the room is the heater on which I cook my breakfast and lunch as well as using it to keep the cabin warm. There is a large rack above it for drying wet clothes.

As one faces the door my bunk is in the rear right-hand corner. It has a straw mattress which is fairly comfortable if one shakes it up every three days. Otherwise there develops a non-conformity between its topography and the outline of the human body. I will tell you what in the line of furnishings I see as I lie in my bed on a morning just before arising.

Immediately to my left, against the center of the rear wall, is a bureau with deep shelves instead of drawers. In it I keep all my inner apparel. My outer garments, instead of flying all around the room as is my usual habit, are hung neatly from seven hooks on the rear wall. I know those who have lived intimately with me, especially the family, Al Cline, Neil Hosley, Bob Weidman and Harry Gisborne, will be incredulous, but it is gospel truth. On top of the bureau is my portable orthophonic and my 30 precious records. In the left hand rear corner is a two decker bunk. The lower berth is all made up for any guest I may invite to spend the night with me. The upper one contains my camp equipment: 2 tents, 2 sleeping bags, 4 pack sacks, an air mattress, a pair of skis and an extra axe.

Starting forward along the left wall comes a high cabinet with seven shelves devoted, from top to bottom, to: medical and surgical equipment (grateful acknowledgment for selection hereby made to George Wislocki, Fliss Clothier, and Dr. Winkenwerder at Johns Hopkins), photographic equipment, psychological equipment, scientific apparatus (principally meteorological, ecological, and botanical), a still empty shelf, stationery and my mineralogical collection.

Beyond this cabinet come my three fuel boxes, one with paper and wood shavings for starting the fire, one with kindling and one with heavy wood. Over one of them hangs my Springfield, .30 rifle. In the left front corner is my bathroom table, as it were, with wash basin, water bucket, slop pail underneath, mirror on the wall and comb, toothbrush, etc. scattered around. Next to it, along the front wall, is my kitchen cabinet which carries dishes, cooking utensils and food. My reserve food supply I keep under the spare bunk but there is little of that since the store is only a two minute walk away.

The only highbrow feature of my entire apartment is found in the right front corner, where are situated my two book cases. The better one is of crude local construction, made of unvarnished boards hammered together so as to constitute four two-foot shelves. This bookcase is devoted to the humanities. Next to it is my scientific bookshelf which consists simply of two egg crates placed end on end.

The contents from which will be drawn my coming year's reading, contain the following books:

HUMANITIES BOOKCASE

Top shelf - biography and history

Life of Sir William Osler	Cushing
Life of Pasteur	Radot
Life of John Marshall	Beveridge
Rise of the American Civilization	Beard
Decline of the West	Spengler
Ordeal of Civilization	Robinson
Strange Death of President Harding	Means
A History of Education during the Middle Ages	Graves
The renaissance	Pater

Second shelf - Sociology, Anthropology, Philosophy.

Middletown	Lynd
Coming of Age in Samoa	Mead
Humanity uprooted	Hindus
The sexual life of savages	Malinowski
The Golden Bough	Frazer
The Quest for Certainty	Dewey
Pragmatism	James
The Philosophy of William James	James (edited by Kallen)
Humanism and America	Forster
The dance of life	Ellis
Emergent evolution	Morgan
Science and the modern world	Whitehead
The social contract	Rousseau
Ethics	Spinoza
The republic	Plato

Third Shelf - Fiction

Power	Feuchtwanger
Typhoon	Conrad
Kristin Lavransdatter	Undset
The Magic Mountain	Mann
Jean Christophe	Rolland
War and Peace	Tolstoy
Anna Karenina	Tolstoy
Pride and Prejudice	Austen
Nicholas Nickleby	Dickens
Swann's Way	Proust
Within a budding grove	Proust
Gargantua and Pantagruel	Rabelais
Borian Grey	Wilde
Mrs. Dalloway	Woolf
Erewhon	Butler

Fourth Shelf - Drama, Art, Poetry, Essays

Complete Works
Plays
Lyrical dramas
Man and superman
An anthology of world poetry
Outline of art
Essays

Shakespeare
Euripedes
Aeschylus
Shaw
Edited by Van Doren
Brpen
Lucian

Science

Minor surgery
Emergencies of general practice
Essentials of physiology
Applied anatomy
A manual of individual mental tests
and testing

The trauma of birth
Elements of scientific psychology
Social psychology
Physics of the air
Thermodynamics
Differential and integral calculus
Calculus made easy
Medical biometry and statistics
An introduction to the theory of
statistics
The universe around us
The plant in relation to water
Growth in trees
Geology applied to mining
Government geological bulletins on northern Alaska
The friendly Arctic

Christopher
Morse & Colcord
Bainbridge & Menzies
Trevos

Bronner, Healy, Lowe,
Shinberg
Rank
Dunlap
Dunlap
Humphreys
Lewis & Randall
John
Thompson
Pearl

Yule
Jeans
Maximov
MacDougal
Spurr
Government geological bulletins on northern Alaska
Stefansson

Now I will complete my interrupted circuit of the room by starting down the south or right wall. Just two feet from the bookcase my window commences and occupying the entire space in front of it is a large table 68 x 45 inches. On top of it are three large filing boxes, my stationery, a dictionary and -- Now, Al, Neil, Bob, Gis, Molly and Pacy who have worked on desks adjacent to me, don't faint! There is not a trace of the usual chaos of papers, books, magazines, gloves, snowshoe straps and the like, but an immaculately clean oilcloth surface whereon I can spread the work of the moment without having first to shovel clear a small space on which to set my papers.

Finally, leaving the desk we can return to the right rear corner to find me by this time jumping out of bed, running to the paper and kindling boxes, grabbing a handful of each, dumping them in the heater in efficient arrangement, striking a match and

igniting the more readily combustible fuel.

II

So far I have described only my most immediate material surroundings which are of course the least important part of my life. I really ought to tell you something also about my human surroundings. The only trouble is that I don't know where to begin. There are 76 adults, white and eskimo, who make this community of Wiseman their headquarters and I already know all but six. Every single one of them stands out in my mind as a unique and interesting personality. Obviously it is impossible to tell you about all 70 in this letter so I guess I might as well take one at random and try to give you a little glimpse of him.

III

I spent the other night with old George Eaton in his cabin on Nolan Creek. George is almost 70 and has lived pretty much alone for 33 years. He talked with me until after midnight, going backward to the thrilling days of '98 when he crossed White Pass in mid-winter on the trail to Dawson, going forward to his prospects for the coming winter in the hole which he and Smithy Wanamaker and Jess Allen have sunk on Four Below. George thought there might be pretty good money here, but he'd been prospecting for 33 years in the far north and he knew perfectly well that "gold is where you find it." George also explained to me, with ample reminiscent illustrations, what an exceptionally good carpenter and hunter he was and how his four dogs made the finest dog-team in the country.

After a six o'clock breakfast, while we were waiting for the dishwasher to warm, George rummaged up for me all his store receipts for the past year, as I was anxious to obtain some figures on the cost of living in Wiseman. In the course of this task he came across a couple of rolled sheets of paper.

"Maybe, Bob," he said, "you'd be interested in this poem I wrote for one of the affairs they had at the Pioneers Hall. I never had any education, so it's not very much, so maybe you won't want to look at it."

Of course I was anxious to see it, so George handed this poem to me.

Setting alone in my cabin
After crude supper was done
Wondering why I never took life serious
Why I turned it all into fun.

For the chances I had were many
Poker was my game
Had I led the right sort of life
I might have won myself fame.

It was one day in Seattle
The fairest of fair women I found
And she knocked my heart for the count fellows
In the first and fatal round.

Our courtship was like a dream fellows
And after a couple of months hurried by
We were happily wedded
North Seattle's blue sky.

Well, that was the beginning of the end pals
For my blood was still running hot
I tried hard to forget the fast life
But forget it I could not.

I lost out on the swack parties
The poker and crap games I missed
The devil's deep voice called me
And damned if I could resist.

I listened not to the pleading
Of the little wife so loving and sweet
Instead I trampled her heart down
Under my very feet.

Soon after our separation
To this Hell's cursed Alaska I came
I was lucky playing poker
So they boasted and passed my name.

Then I went to mixing with women
The kind that know no shame
And I lost like all men do
Who endeavor to play that game.

The devil was my leader
I obeyed each and every command
And drank sported and gambled
With the rest of the fallen band.

Now if I but had the power
To turn life's stained pages back
I wouldn't be setting here pondering
In my dirty little old shack.

"Gee, that's fine, George," I said, "that's simply swell. I like especially those lines - over here - 'The devil's deep voice called me and damned if I could resist.'"

George's wrinkled face was all smiles.

"That's the part Mrs. Pingel didn't like at all, but it's the truest lines in the whole poem. Of course you understand that poem hasn't nothing to do with me really and there's a lot in there that isn't just so for anyone. A person has to change things a little to put them in poetry. But I'm atelling you, Bob, Alaska's broken up more lives than any god damn place in the world. There's Pete Dow and George Huey and myself and god almighty only knows how many thousands more in here lost their homes by coming to Alaska. Of course I've had some awfully good times in here but if I never came in I'd probably have a small fortune now and I'd have a wife yet and most likely children and something to look forward to. My brother and his wife lived together forty years and he told me they never had let anything unpleasant pass between them in all that time and I don't know why it would have been any different with us."

George got off the bed where he was sitting and went over to the wall. There was a badly faded picture hung there by a pin. He removed the pin and handed me the yellowish picture. It was of a woman sitting competently on horseback, a broad hat on her head, a confident expression on her face. She was not bad looking although her pug nose was a trifle too prominent.

"That's the woman that was my wife," George explained. "She sent me that picture after I came to Dawson. She was only sixteen when I married her and I was thirty. I hear some people say a man shouldn't marry a woman if she's more than ten years younger than him, but god damn it, that's all nonsense. Me and my wife, we were just as happy as could be for seven years. We lived on a farm near Seattle. My wife, she was a good one on the farm. Knew all about everything. We had some neighbors and they'd gone to college and one day when she first got there the woman come to call on my wife. We had a young bull and the woman pointed to him and said:

"My, that's a fine cow you got, I bet you get lots of milk from her."

"My wife told me about it that night and she says: 'I've never been to college but at least I can tell a bull from a cow.'"

"But I wasn't satisfied. We had to work too hard, I thought. And then we had a baby girl and I wanted her nicely brought up. Well, it was late in 1897 that the reports come in of the big strikes in the Yukon country and I thought all I had to do was to go to Dawson and I could pick up a fortune in a few weeks' time. I thought surely I'd be back by fall, just loaded with gold. Then I was going in business in Seattle and it would be a much better life for my wife than on the farm.

"I left Seattle on February 14 and got to Dawson June 3. Well, I made good money right from the start. Not big money but good money. I could have made big money too. There were two brothers, Benson was their name, and they wanted me to go into partnership with them but I knew they were crooks and I didn't want to mix up with them. So when Jim Benson, he was the older one, came up and says:

"George, you're the best mechanic in the whole Dawson country, and I want you to come in with us on 17 Below as a partner," why then I says:

"You god damn dirty crook, I wouldn't work with you and your brother if you gave me the whole of the Klondike!"

"So I walked away and that next summer they took \$140,000. from that ground. But I went ahead and did nicely, only you see how it was, I didn't want to go home until I'd made a real stake, \$50,000. I set for myself. I would have made it too in a year or so. And then one day about three years after I came to Dawson I got a letter from a lawyer and he said my wife was suing me for divorce on the grounds of desertion and that I should come back if I wanted to defend myself.

"Well, I got so ~~gaxa~~ god damn mad I tore the letter up and I never answered the letter and I didn't write to my wife again for better than 15 years. But it really wasn't her fault after all. I found that out years later. There was a bunch of bastards, came back from Dawson to Seattle, and they went to my wife and filled her up with the god damnest pack of lies you ever heard tell of. Told her I was living with another woman and that I was drunk all the time and I don't know what all they didn't tell her. There wasn't a god damn word of truth in anything they said but you know some people aren't ever happy unless they're stirring up trouble. But of course my wife had no way of knowing it wasn't so and then there was the mail. Why, they'd think on the outside you could write a letter and get an answer inside a week and maybe it would be a year before I ever got her letter and maybe I wouldn't get it at all. Why, when I was building my boat on Lake Bennett in the spring of '98 there'd be fellows would come around and they'd tell you they was going out in a week and if you had any letters to send outside to have them ready in a week and they'd take them out to the post-office at Skagway for a dollar a letter. Well, maybe they would and maybe they'd just take them up the trail a couple of miles and bury them in the snow and they might be \$10,000 to the good. That was the way our mail worked in those days. So you can't tell, some of my letters might have gone that way and she never heard of me and with all those lies they gave her it wasn't her fault and it wasn't my fault neither.

"Well, I commenced going with the sports then, not much you understand because I still expected to make a fortune and come back and shake it in her face. And then I'd take my little daughter back with me. She was seven years old then and she used to write me letters all the time. She had a beautiful handwriting too, I'm atelling you."

George got up and unpinned another faded picture from the log wall of his cabin.

"This was her. She was seven years old when this was taken and a few weeks later she was drowned. Well, I never felt so terrible in all my whole life. Nothing seemed to amount to anything anymore. I just went crazy. Yes, Bob, I'd be a rich man today if she hadn't died. But I'd been thinking over since my wife left me that every cent I made would be for my girl's benefit and when she died I just couldn't stand the thought of money no more. I just couldn't get rid of it fast enough. Why, I'm atelling you, I gave away fifty dollar bills right out in the streets of Dawson.

"I'd always gambled a little but now I spent all my time gambling and I hoped I'd lose too. I went with the whores every night. Only I never went crazy like old Knute or Pose and paid them a thousand dollars just because they asked me. I've gone to bed with more god damn women than any man in all Alaska, I guess, but I never paid them more than their price. But they all liked me just as much as if I'd given them a fortune. I used to haul wood in Dawson right down the row and there wasn't a one who wouldn't come out and smile at me. When I was out to Anchorage in 1923 I went into a restaurant with Sam Dubin and Murray. All of a sudden a woman came and threw herself around my neck and pulled me one side to the counter and kissed and kissed me. She said to Murray and Dubin:

"I never thought I'd see this man again. He's the best dancer ever come into this north country. We were pals together in Dawson 25 years ago."

"And me not knowing her from a man only for the clothes she wore. But she told me her name was Sweet Marie and I kind of remembered the name. When I got ready to pay she wouldn't take a cent of my money but she took Dubin's and Murray's.

"You don't spent a cent in here today, boy!" she said.

"But there were hundreds of more like her. Some of the best looking women I ever saw in my life were in those old dancehalls. When Dawson was at its height you could go into a dancehall and find a hundred beautiful young women whom you'd have to travel days and days and days to find their equal outside. A woman who wasn't good looking, she just couldn't make a living, that's all. They were a pretty hard, cold-blooded lot but they had some wonderful points at that. Take the Oregon Mare, for instance. Why when they had that flu epidemic in Fairbanks she worked night and day nursing people who wouldn't even look at her when they got better. Aunt Kate - she was a wonderful singer you know - she used to offer her services free for the charitable entertainments in Dawson. She married Pantazes, you know, and set him up in the show business and then when he got independent he treated her like I wouldn't treat a bitch dog. She used to come to me - you know how a woman sort of seems to like to confide in someone when she's in trouble - and she told me all about this Pantazes."

George stopped and for perhaps a minute there wasn't a sound except his deep breathing and puffing on his pipe. Then he got up and knocked out the ashes.

"George," I queried, "have you ever met your wife again in all these years?"

George had started walking toward the stove but he wheeled around.

"Well, I guess I have. I was riding in a street car in Seattle along First Avenue when I was out in 1917 and I saw a woman on the street wave at me. I started to get off but she motioned me not to so I stayed on. I thought probably she'd made a mistake, you know, and took me for somebody else.

"A few days later I was walking along Pike Street and looking into a store window when a lady comes from behind and grabs my arm. She says: 'Do you know me.'

"Well, I was just about to tell her if I wanted any whores I knew where to go to find them and she needn't try to pick me up, when all at once I recognized it was my wife.

"'Will you talk with me", she says.

"'Certainly,' I says.

"So I took her into a moving picture show where we could sit and talk together quietly and she told me the whole story I was atelling you about the lies that was told her and her never getting any letters from me. She was married again but she hadn't no children. She wanted me to come and meet her husband but I wouldn't do that. She said he was a fine man but if she was on her deathbed I know she'd call for me. There's something comes between a man and woman when they've lived together, I don't care under what circumstances they separate, that never passes away."

By this time the water on the stove was boiling and we had to add some cold water before we could wash the dishes.

Bob

I regret the typographical error which appeared in Bob's letter of September 23rd. The word "malacclustic" should have read "masochistic."

Ruth Marshall Billikopf.

ROBERT MARSHALL
Wiseman
Alaska

October 26, 1930

Dear Family et al:

After four weeks around Wiseman, I filled my packsack with a few essentials, picked up my snowshoes and started out last Monday morning for a trip down river to see the country and meet the fellows who are mining on the Porcupine. I set out with Bobbie Jones, who had some work to do at Coldfoot and on the Porcupine and who also wanted to do some hunting. Bobbie has the fastest dog team in Wiseman and I rode all the way down to Coldfoot with him. It was my first real dog sled ride and gave me a thrill I don't ever recall before from transportation. It took us two hours to make the 11½ miles to Coldfoot so you see we weren't going very fast but when the four dogs hit a downhill stretch the sled just seemed to be flying. Actually at such spots I suppose we might have been travelling 15 miles an hour. But one sits so close to the ground on a dog sled that it seems to whiz by much faster than when you're going 40 miles an hour in an auto. You tear along between dark green spruce trees rising from fresh, powdery snow, are brushed by the willow branches and the evergreen leaves of the Alaska Tea, follow the beautiful rhythm of the legs of the huskies as they beat on the trail, have time to look up at the mountaintops and note the constantly changing outlines, they cut against the deep blue sky, and feel yourself to be a part of the world through which you are travelling. In the auto, on the other hand, you are you and the landscape is the landscape and never is there any merging between the two, always the one, however beautiful, is external.

Coldfoot is a strange town. It has dozens of houses, four or five streets and not a single inhabitant. Back in the booming days of 1901-1902, when the big stampede was on to Gold Creek, Myrtle Creek and Emma Creek there were several hundred people who made Coldfoot their headquarters and seven gay saloons brightened the Arctic winter. For eight years it was the metropolis of the Koyukuk, a single oasis of teeming vitality in hundreds of thousands of square miles of frigid wilderness. Then in 1908 the big strike was made on Nolan Creek, and in the next three or four years more money was taken from this one stream and its tributaries than from the whole Koyukuk previous to that time.

A new town sprang up on the Koyukuk, 15 miles above Coldfoot, at the point where freight for Nolan had to be landed for the 7 mile haul overland to the creek. This town became Wiseman. For a few years Coldfoot managed to give it a fairly good run for its money, but then in 1912 Hammond River was struck, nearly two million dollars came out of it and Wiseman also became the river terminus for this development. So Coldfoot dropped steadily in population, year after year, till finally there was hardly anyone except natives living there. Myrtle Creek, last of the rich diggings which had made Coldfoot prosperous, at length was abandoned, the native school was moved to Wiseman and nobody was left in Coldfoot except an old German bootlegger who had once run one of its gaudiest saloons

and Dan Aston, the half crazy roadhouse proprietor. But John Kleffens was drowned two years ago last spring while fording the Koyukuk in flood and Dan Aston blew out his brains during the dark days last winter so now there are nothing but a few mice to listen to the wind gusts blowing downstream along the Koyukuk.

Bobbie and I spent the afternoon chopping wood and fixing up a few odds and ends. We stopped in Dan Aston's old roadhouse which Bobbie now owned and used as a stopping place on his frequent trips down river. Big Charlie, a lazy, good natured eskimo who was in camp 12 miles downstream with his wife and 15 year old daughter, snowshoed in on us during the afternoon. He was en route to Wiseman for supplies.

That evening, just at dusk, I walked out across the snow to the point where Slate Creek, a large stream, joins the Koyukuk. The houses of Coldfoot were hidden by the trees. Upstream it was almost dark and even with snow on them the mountains which hemmed the river as far as one could see looked black. But not as black as the spruce trees in the foreground across Slate Creek which as night approached first lost their three dimensional appearance and became merely flat, black objects on the landscape, and then lost even their outlines and became a blurred mass of darkness. But downstream to the southwest the twilight persisted for a long time. Twelvemile Mountain stood out black and clear against it, the deep valley of the Middle Fork to its left, the brightest of the orange sunset sky to its right. I kept looking around up and downstream, watching the darkness creep down from the north and the stars come out, watching the orange fade slowly in the south. All the while, as an accompaniment to what was passing before my eyes, the wind and the unfrozen waters of Slate Creek were putting on a symphony, sometimes rising to a great crescendo, sometimes dying down so that I could hear nothing but the unending but constantly varying rushing of the water. It reminded me of the drum undertone which runs through the entire Bolero, by Ravel, never the same at any two instants but still exactly the same throughout the whole song.

Then it occurred to me why the eskimos to whom I have played it are so crazy about the Bolero, why according to what everyone tells me their music is so similar to it. Because the Bolero is a perfect counterpart of the music they have heard from earliest childhood out in the wilderness of the north. The drums are the rivers rumbling unvaryingly and the rest of the orchestra is the wind howling, the ice cracking, snowslides coming down the mountains, rocks tumbling over one another, the wild animals howling. It represents to the natives all the chaotic music of nature in its wildest moments.

After supper I took another walk, this time through the deserted city of Coldfoot and out to the old cemetery. There was no moon but I could see every house in town plainly, each roof a bright white where the stars and the northern lights shone on the roof. But I couldn't see clearly enough by night to realize that the houses were slowly tumbling to ruin and so it looked to me for all the world like a live little town after everyone had gone to bed and the last light was out.

Then I got to imagining some mythical old miner who might have left Coldfoot in the fall of 1907 while it was still running strong. I decided that this fellow had not met anyone from the Koyukuk in all those years and so assumed that Coldfoot was still a booming town. Then he determined in the autumn of 1930 to come back to the Koyukuk and prospect some creek which had impressed him long ago as being very promising and which had of course grown in his imagination during the quarter of a century which had intervened. So he would take the boat to Beaver and start out on the long, tedious walk across country from the Yukon via the Chandalar to the Koyukuk. After six nights in old cabins along the way he would come down Slate Creek the seventh evening, living in his imagination during miles of tiresome travel the gay evening ahead. He would wonder if Linda, his favorite whore was still there, would doubt it but still hope, adding 23 to a conservative estimate of her age in that distant day. Then he would pass the familiar cemetery to the right and laugh as there would suddenly recur to him the night when bald-headed John Bowman, lying drunk among the wooden slabs, had suddenly sat up just as Kobuk Mary was passing, and how she seeing the moonlight on his shiny pate had thought it a spirit and run frantically the long mile to town. But now the mile would seem short to the old miner, knowing that only a few minutes intervened before he'd get a warm shot of whiskey and a hilarious evening. Then he would see the first dark house through the trees, soon several of them and he'd wonder why everyone had gone to bed so early. In a few moments he'd be right in the town and not perceive a single light. That indeed would be strange for the saloons and the sporting houses should be bright and noisy till far into the night. Could it be prohibition? Or maybe his watch had gone crazy and it was much later than he thought.

Oh, here it was, Linda's old house. He'd give it a try. He would bang on the door but no answer. Then he would shout. Yes, the old girl must have gone. Well, he really expected it anyway. There was Jack's house. Somebody should be living there still. It had been the finest in town. But no answer there either.

Then he would notice that the snow in the streets had not been tramped down and there was no sign of footsteps leading to any house. He would run up and down, pounding at every door and shouting at the top of his lungs. But there would be no answer, no sound save here and there some little rodent, frightened by his pounding, scurrying away across a rotting floor. At last it would dawn on him that the town was deserted, that a civilization had come and flourished and died within the span of his memory.

Then he would look up and see the mountain across the river, the stars in the sky, Orion just rising over Sitkum Pass. There would be something almost unbelievably friendly about these only unchanged elements in that ancient world of his. So he would shoulder his pack again, leave the town, too dead even for ghosts, and set out for some clump of timber where he would shiver through the night by an inadequate fire, when he might have slept warmly in one of the old houses.

Next morning early I started down river to Porcupine Creek. This is the Slavic center of the region for six of the seven Slavs in the Wiseman community have claims down here and several others have

gone outside within recent years. Just at present there are only three men working here, old Tom Kovick from Montenegro and Sam and Obran Stanich from Bosnia-Herzegovina. I met Sam and Obran in the woods, cutting timbers for the new hole they are sinking, and they immediately laid off work for the day and took me up to their house. They talked eagerly about all sorts of subjects, showed me proudly the new house they had just built, took me down by a 29 foot ladder into their old hole from which they had taken many thousand dollars, and exhibited their remarkable cabbages, turnips and potatoes they had grown in their garden. They were so pleased to show off their possessions to me, simple and modest but very comfortable. There was a justifiable and indeed a highly commendable pride in being able to point to every improvement they had and say: "We did this all ourselves, made the plans and executed them without anyone else's help."

Sam and Obran are clear-eyed, strong, confident of their ability to cope with any situation that may arise but modest and not at all boastful. They are young for this community, only 44 and 41 years old. They are gay and continually laughing, and like almost all people from the far north they exhibit the very acme of easy hospitality. Of course, tho I'd never seen Sam before and Obran only for a few minutes, I soon felt as if they were old friends.

Sam came to America in 1902 and Obran in 1909. They had been raised on a farm in the old country. Neither ever went even one day to school; they can barely read or write in either English or their native language. Their English is very broken. They had an uncle who was head night watchman at the Anaconda Smelter of the A. C. M. and he got each of them a job for the A. C. M. when they first came to America. They are very proud of this uncle. From Anaconda both migrated to Alaska, Sam in 1906, Obran in 1910, and they came into the Koyukuk from the Iditarod in 1916. They bought a claim on the Porcupine and have worked there ever since. It is ground which yields no sensational returns and involves much heavy rock work. The native born Americans and the nordic Europeans won't consider that type of drudgery; they want something where there's more of a gamble, more of a chance for a sudden fortune. But Sam and Obran have been content with a steady income of three or four thousand a year between them, never more, and today they are actually better off financially than all but about four or five men in the whole camp. They are probably worth between \$10,000. and \$20,000. apiece, whereas others who made \$50,000. in a single cleanup are now broke.

Two days with Sam and Obran impressed me most vividly with what economic security and freedom can do for men. Outside I can plainly picture Sam and Obran. With their lack of education and modest amount of intelligence they would be unskilled laborers, half the time unemployed, struggling desperately to merely exist, bored with work, getting their few thrills vicariously through movies, never conscious that there is a joy in just being alive, seldom gay and only hilarious when drunk. They would be inferior people, having no confidence in themselves, seldom making a decision more important than whether to buy a banana or not. But up here, though they work more laboriously, and go through greater physical hardships than they ever would in industrial civilization, though they lack conveniences which

even the most poverty-stricken New York family would have, still they live with every comfort they crave (except women), are not only interested in but actually excited about their work, talk as eagerly of it outside working hours as any scientist might speak of his investigations, get thrills first hand from hunting, difficulties overcome, beautiful nuggets uncovered, people met unexpectedly, and are conscious always of the joy of being their own bosses and guiding their own destinies.

"I've had better time here in North Country", Sam said to me, "because I'm my own boss, independent man. Even if I only make three or four dollars day I'm my boss."

Obran, when we were down under the ground together, had said very much the same thing.

"I'm my own boss," he remarked too. "Winter time I like to work and I can work, summer time I want to rest a few days when it's hot, I can rest. In here pretty nearly everyone working for himself, nobody to drive you and everybody your friend like one big family."

That evening we went down the creek quarter of a mile to old Tom Kovich's cabin where Bobbie Jones was stopping. The talk centred chiefly on socialism, everyone in the cabin strangely enough being a socialist. From this it naturally drifted to militarism and old Tom spoke very interestingly about his experiences in Montenegro. It was to avoid the army that he came over to America in 1901, for they had sent him to military school, "teaching me how to shoot gun, which way go, which way come back, how save yourself, how kill other man, all militarism which I don't like."

Tom too has joy in freedom which is so characteristic in everyone in this North Country. These were his words. "Any time I want to go home and take rest I am free, sit down in cut* I am free, go hunt I am free. When I work for other man I never free. When somebody work for me in cut I told him what to be done and then don't bother him no more. He do more that way too when he free."

Next morning I set off to see as much country as I could in a day's walk down the river trail and back. I followed down the Koyukuk 16 miles, across Twelvenile Creek, around Windy Arm and down to the Portage Barn. The timber I passed through was all stunted spruce in soil too wet and too frozen for anything but the slowest growth.

I had a fine chance to study the ecological conditions. On my way back, just below Windy Arm, I followed tracks to Big Charlie's camp where his wife Bessie and his very pretty little daughter Jennie were fishing through the ice. Thanks to my lessons I was able to

* A cut is the ditch which is dug in order to reach bedrock just on top of which all the gold is found.

greet them with con-no-wit-bit uv-no-vak (how do you feel this afternoon) and could stroke my beard and say u-nik poll-uk (big beard), so we got along very gayly for the half hour I stayed with them. They had nothing to eat but fish, berries and a little flour.

I got back to the Porcupine just after a splendid sunset, which brightened all the peaks to the north with the strangest orange light. Next morning I said goodbye to my friends and returned the 16 miles to Wiseman. Saw about 60 ptarmigan on the way but my 30 Springfield rifle was too heavy to use on them. I bumped into Ike Spinks, whom I hadn't seen since last year, at Coldfoot. He is an exceptionally intelligent Scotchman, an ardent atheist and a very keen observer of the life he has seen, both white and native. We had a most enjoyable conversation all the way home. While we were eating lunch at the Marion Creek cabin, Jim Wilson came along and stopped to talk, so you will see that the trail was certainly crowded this day.

As ever,

Bob.

October 31, 1930.

Dear Family et al:

Now that I've been back from the North Fork exploration for 5½ weeks during all but one of which I've been right here in town, I guess I ought to devote one letter to describing my life in Wiseman. I can't, however, use the method I used to employ when I was in the West and describe a typical day because there's no such thing as a typical day here. About all I do according to schedule is to get up some time between 7 and 8, cook and eat breakfast immediately thereafter, sweep my cabin, make my bed and wash the dishes after that, fix a light lunch for myself sometime between noon and two, eat supper with Martin Slisco in the roadhouse around six and retire between 10:30 and 12:30. But even this isn't as regular as it sounds in stating and it certainly is a great luxury not to have to get up a moment before I feel like it, in contrast to last winter during so much of which I rose each morning by alarm clock between 3:00 A. M. and 3:30.

The remainder of my day has been devoted principally to the following activities:

(1) Talking with my neighbors in their homes, in mine, in the roadhouse and in the store.

(2) Playing the phonograph alone and for visitors.

(3) Giving Stanford-Binet Intelligence tests to adults and children and getting them to fill out the Dunlap-Snyder Moral Evaluation questionnaires.

- (4) Dancing.
- (5) Learning the eskimo language.
- (6) Logging.

Very pleasantly my house has become rather a social center of the community, second only to the roadhouse and the store. I imagine on the average a dozen people drop in to visit every day. Sometimes it's to borrow books, sometimes to hear music, but generally just to talk. Apart from the genuine delight of their companionship, these visits have afforded a splendid opportunity to learn the most intimate beliefs of the members of this fascinating arctic society. Alone with me they quite naturally talk about matters which concern them more personally than the necessarily general discussions of the roadhouse and bit by bit there are being spun out before me dozens of fascinating biographies of thoughtful people, actively aware that they are alive.

In the public roadhouse, as I have said, the discussions are more general. One amazing thing, in contrast to conversation I have heard in every society in which I have been thrown, is that tales of which the narrator is the hero are virtually unknown. Among the lumberjacks whom I studied such talk involved 11 per cent of all the conversation; among many of my introspective friends from New York and Baltimore and Missoula I'm sure it would consume at least 5 per cent. Again it never consists in mock obeisance to the arts by people who really care nothing whatsoever about them. Nor does one hear: "Oh, ~~xxx~~ haven't you read Point Counterpoint? You must read it really, it's marvelous." If a book or a magazine article is cited in these roadhouse conversations it is always pertinent to the subject under discussion and never, that I have observed, to advertise the quoter's erudition.

But from a positive standpoint, what subjects do these conversations embrace? Here is a sample of the topics discussed during two hours of conversation one evening in the roadhouse. I have made similar notations for a good many evenings but this one will suffice as an illustration.

- (1) Vaughn Green gives a recipe for cooking porcupines. "Place the porcupine and a rock in a kettle of water and boil. When the rock gets tender enough to stick a fork in it throw out the porcupine and eat the rock."
- (2) Thermometers - are Green or Tyco's thermometers better?
- (3) The coldest weather ever recorded in the Koyukuk.
- (4) Koyukuk is the queerest river in the country in that it never entirely freezes up.
- (5) Did Martin kiss Mrs. Dubin? (No says Martin, yes avers everyone else).

- (6) The Dubin-Hyde lawsuit of last winter here in Wiseman.
- (7) Is it like one big family in the Koyukuk?
- (8) Is everyone a trifle crazy?
- (9) Lightning.
- (10) Forest fires.
- (11) Copper resources of the U. S.
- (12) Man's waste of natural resources
- (13) Matter never can be lost from the world but merely changes to less useful form.
- (14) Is there such a thing as the soul?
- (15) Pete Radicevitch tells a pornographic story.
- (16) Macaroni an exceptionally good food.
- (17) Fishing possibilities in the region.
- (18) Trail to the Chandalar.
- (19) Cabins in the Chandalar Country.
- (20) How hard it is to be married to a squaw if you intend to live outside later.
- (21) Are the eskimos inferior to the whites.

But merely to recite topics of conversation is a rather dull procedure. Actual verbatim expressions might be of greater interest. Here are a few random ones sprung by these old miners, most of them cut off from the main stream of civilization for 30 or more years.

Billie Gilbert (referring to some hair-splitting)
- "That's a distinction without a difference."

Jim Kelly - "Any man can be a cook if he's got a good place to board."

Pete Davey - "I've always been sober whenever I couldn't get something to drink."

Harry Foley - "Worry never made me gray-haired. It was early piety, getting down on my knees in church too much."

Harry (in another vein) - "It's nice to sit on the sidelines and look at life as it goes by and wonder what it's all about."

They describe themselves tersely and fittingly. "Pete has a weather-beaten face like a man who's just come out of a blizzard." "Anything that Kelly can't break is almost unbreakable." "I tell Martin his love affairs are like Caesar - all in the subjunctive mood."

Of their life in here opinions vary.

Martin Slisco says: "Gold mining is the cleanest living you can make. You're not robbing anyone or hurting anyone to get it; you're just taking it clean from nature."

Billie Burke stresses a unique aesthetic side of gold mining. "There's something about gold you love too, like you might love a picture or a statue. I tell you, there's something beautiful about a bunch of nuggets."

Billie Gilbert (who likened Martin to Caesar) is less enthusiastic. "Of course everybody in here has some idiosyncrasies. They wouldn't be in here if they were normal. Outside at least a person has a chance to see something and hear something and learn something even if they're not making any money."

Pete Radicevitch too sees flaws in the life. "Summertime the mosquitos are suicide and wintertime you're always running risk of losing your hands and feet. Still there's something about the imagination makes you like Alaska better every year."

Albert Ness is unqualifiedly enthusiastic. "I have absolutely no desire to go outside. In here we have no police, no press, no church, no priests, no tenements, no big business men, no crimes or any of the other things with which they're cursed outside."

A long hiatus while Old Pat Kellecker came to visit me and stayed for an hour and a half. Pat is 73, blind in one eye, probably the most feeble man in camp. He is apt to drop dead in his hole any day. He is an Irishman, a very pious Catholic, a remarkably well read man. Almost his first remark fits in perfectly with this story.

"This is the greatest thing in the world here to my notion, that man here is his own master. I've gone out and worked 15 hours a day here and it doesn't seem half as long as working 10 hours outside. I imagine a man outside that has to work for wages without any interest in his work is more or less in bondage all the time, there's a touch of slavery about it as I see it."

He then went on to tell me about one James Greelman who

years ago quit one of the big New York dailies because it wouldn't give him a free hand to write what he wanted. He left these lines on his desk, probably familiar to most of you but new to me.

"Oh, happy is he, born and taught,
Who serveth not another's will.
His armor is his honest thought
And simple truth his utmost skill.
That man is free from servile bonds,
Not hope to rise, not fear to fall,
Lord of himself yet not of lands
And having nothing yet hath all."

Pat quoted St. Thomas Aquinas (thought it sounded like Thomas Jefferson to me): "When the government is not fit for the people it is their business to overthrow it."

"The great theologians," he said, "laid out the rules and regulations but if you got a great theologian today he'd be kicked out of his church like Norman Thomas was. Norman Thomas is greater than any minister in the Presbyterian Church today but he was too good for them."

This brings me to the amazing prevalence of socialism in this community. Before the war George Huey once came within 2 votes of winning on the Socialist ticket. Socialism has declined here but today out of the 61 whites in Wiseman no less than 22 are out and out socialists or communists in their economic beliefs. There aren't more than a dozen people in the whole community satisfied with the present economic order. The others might be termed progressives, they jump all over the existing regime but are such rugged individualists themselves that the idea of socialism, sometimes foggily conceived, scares them.

In conversation you hear five derogatory remarks on the existing system to every one supporting it. Here are a few typical ones.

Martin (referring to honors heaped on millionaires for no reason except that they are wealthy) - "Ain't that the terror when they ought to be licked with a big stick with the long tongs on the end."

Pete Radicevitch (a cynical socialist) - "We won't get socialism until people are hungry. Their minds aren't in their heads; they're in their stomachs."

Albert Ness (an optimistic socialist) - "Labor is the only people who are winning today. They're not winning much but little by little they're winning and sometime all of a sudden they're going to get control."

George Huey - "You may see it Bob, and maybe you too Ness, but I'm 75 - still you can't tell, it may come all of a sudden."

Albert Ness - "Yes, it's just like the natives getting religion - it comes all of a sudden."

But they aren't all as mild as this. Carl Frank, an old German who will be 77 in December and has lived here in the Koyukuk longer than any other white man (since 1898), urges this treatment for the capitalists and all other rulers. "Ins Wasser werfen, Kopf abhauen, oder aufhängen."

The feeling against militarism is even stronger than that against capitalism. I haven't yet heard anyone defend it. Here are three typical remarks.

Pete Radicevitch (who had to serve in the Serbian Army before the War) - "You hitch up a horse to a wagon and put bridle on him and whip him to drive him where you want him to go, it's just the same as you put man in army. The rulers, they get the poor producer in the army to kill himself and they wear the nice uniform and roll the mustaches."

Martin Slisco - "My belief is that the United States could make the whole world do what she want them and give up all arms."

Hughie Boyle (who has never seen an auto in his life) - "Always wars are fought for something which could be settled perfectly well peacefully. There never was a war that there was any justification for fighting, to my way of looking at it."

Religious and philosophical beliefs form a very live topic. There was a great debate in here the other night on the immortality of the soul. Aze Wilcox, Pete Radicevitch and Harry Snowden (eskimo) taking the positive side and Martin Slisco and Floyd Hyde the negative. Here was one of Aze's speeches (Aze too has never seen an auto).

"Take the animals, they know where to find trails which haven't been used for years. How can that be? Because they've gotten something handed down to them from their ancestors, some spirit, which tells them where to go. Look how the world has jumped ahead in the last 100 years. It's because one person's spirit goes to the new born one and he gets the benefit of some of what that person knew. Take a great mind like Edison's, he must have gotten the spirit from many men. Of course the person who does isn't conscious of any of this but even so it's true just the same."

Martin Slisco, who can scarcely read or write, had this to say in rebuttal.

"No, I tell you how I figure it. When you die you dead and nothing left only a little dust, maybe a pipeful perhaps. Heaven is the happiness and the content and the health and that you have what you craving for here on earth. Angels are good men

and women, bad men and women are devils. The worst thing in my belief you can do to a man is to take away something he craves for whether he craves for liberty as much as for food."

But ~~she~~ wouldn't believe this and cited as infallible proof of some psychic spirit the fact that people are frequently aware when some close relative dies, even though thousands of miles may intervene. To which Martin replied:

"You believe that craziness? It's like that Bill Waah who used to be in here. He got a letter from his wife that she had a kid and he hadn't seen her in five years. But he tell everybody he have dream nine months before that he sleeping with wife and baby must have been born that way by dream. She have two more kids while he gone and he think they born too because he have dream."

My phonograph has really been a great blessing. In the morning after breakfast I always put on some good snappy jazz records and you can have no idea how pleasantly the drudgery of sweeping or making your bed can be disposed of to the tune of A Room With a View. But dish washing I find is done best to march music, and I notice that of all my band pieces the Washington Post March leaves the dishes the shiniest. In the evening, on the other hand, just before retiring I delight in playing the Hungarian Rhapsody of Liszt, the Bolero, The Ride of the Valkyries and occasionally some of the records of Schubert's Unfinished Symphony. The last record for the evening I always put on just before turning out the gasoline lantern and then I listen to it snugly from bed. When the final note is done and the automatic stop has clicked it generally takes me I presume about 30 seconds to fall asleep.

Most fun of all is when friends drop in to listen with me. The second day I had moved in, while I was still setting things in order, I received four callers. Three of them had come to the north country in '98 or earlier, Verne Watts, Poss Postlethwaite and Bob MacIntyre. The fourth was an eskimo, Harry Snowden. With the customary tact of the people of the far north, they didn't mention the real reason they came in which was because they were afraid I might be getting homesick and wanted to cheer me up, but instead made it appear as if they wanted something from me, to hear my new phonograph. I didn't want to be highbrow so I wouldn't risk any of my classical music but instead started off with four Show Boat records. Ol' Man River met with tremendous enthusiasm; it has with everyone here who has heard it. But when I got to Why Do I Love you, and the words "why do you love me?" came out, old Verne, who once when double crossed by a prostitute, was only saved from blowing out her brains by the fact that he had had the fingers of his right hand cut off by a saw so recently that he still instinctively used that hand to grab for his gun, - old Verne opined with a sly smile: "that fellow's taking a lot for granted, isn't he?"

What interested me most on this occasion was Harry Snowden's conduct. He sat through a dozen popular songs with the most complete lack of expression on his face that I can imagine in a human being. His high cheekbones, his protruding lips, his half-closed eyes, his completely immobile countenance might have been a model for some painting of the god of boredom. Then timidously I tried the Bolero and almost at the first notes Harry was completely transformed. He broke into a broad grin and said with great feeling: "That's good, Bob." A little later he muttered: "Gee, that's fine music." At the end he was in ecstasy and exclaimed:

"Gee, isn't there a lot of playing, isn't there a lot of music going on there! Play it again, Bob!"

One evening old Carl Frank brought down some of his classical records. The Pingels came with him and also Floyd Hyde and we started out with a regular concert. Carl had Beethoven's 8th Symphony, which I tried vainly to get in Baltimore, played by the Berlin Symphony Orchestra and reproduced by some German company. Then I reciprocated with Beethoven's 5th, then Carl played the Prelude to Meistersinger, to which I responded with the Ride of the Valkyries, Carl played some hymns of Bach, I replied with the Hungarian Rhapsody and Carl came back with the Trompeter von Sackingham. By this time others had come drifting in until there were 13 in the little cabin. Some were obviously getting bored by the heavy music so I swung the evening over to jazz, band music and sentimental pieces like Believe Me if All Those Endearing Young Charms and Springtime in the Rockies which especially appealed to some of these old bachelors. The Blue Danube too was very popular. Many of the old fellows had waltzed to it with some dimly remembered sweetheart forty years before. The El Capitan and Washington Post marches were among the most popular two-step music in the Dawson days of '98 and they too brought a far away look on several faces. Harry Snowden was there and of course I had to put on the Bolero, which was enthusiastically received by almost everyone. It was explained to me how much the Bolero resembles the eskimo music.

After a while some of the home talent was induced to perform. Roy King sang an amusing ditty about "Every nation has a flag but the coon." Old Carl in a surprisingly good voice sang "After the ball is over." Floyd Hyde, youngest white person in camp (27) sang the Marseillaise in a voice which almost lifted the roof, dirt and all, off the house.

Concerning the psychological tests I've been giving, I'll speak merely statistically because it's too early to draw conclusions. I have given the Stanford-Binet test to 13 adults of whom 10 have been above normal, 4 have made almost perfect scores (i. e. have not missed on more than two tests) and only one has fallen as low as the dull normal class. In the vocabulary part of the examination 8 out of 13 have made as good or better than the standard for superior

adults. This rather surprising result may be attributed, I suppose, to the great amount of reading done in here.

The five eskimo and half-breed children have all been above normal and little Lorraine Green had an I. Q. of 127 which according to Terman would place her among the top 3 per cent of all children. Harry Jonas, aged 6, when I was giving him the vocabulary test which was too hard for him, finally remarked in condemnation: "You do something wrong to me, you make me don't know."

Lest someone should imagine because of these high marks that I do not adhere strictly to the formula in giving the tests or mark too leniently, I will affirm that I'm exceedingly strict and hard-boiled in these respects because I don't know enough to be otherwise. However, the matter of rapport of which the psychologists make so much is all in my favor and indeed there really is no question of rapport with children who have ridden miles piggyback on the examiner's shoulders and playfully delight in pulling his whiskers.

Now I will take you over to the roadhouse where a dance is going to be held. The tables all have been shoved down to one end against the counter which divides the kitchen from the rest of the house. That leaves a clear floor space of about 20 x 24 feet. The floor consists of planed but unpolished spruce lumber. In one corner near the door is a little shelf on which the portable phonograph which provides the music is sitting. Near by is a table and an unused stove over which the records are scattered. Anybody whom the spirit moves is at liberty to play any record he feels like. Generally the men do this but occasionally a woman has some favorite piece she wants and gets busy.

The women sit on one side of the dance floor, on chairs set between bulky burlap sacks of sugar, flour and beans. After all it is a practical roadhouse first and anyway there's no logical reason why 100 pounds of beans don't make just as fitting an environment for dancing as glittering tinsel. The men recline mostly on the tables and on the counter in front of that part of the roadhouse which is a store and also on chairs squeezed in between. Occasionally a man will sit with the women but not often. There are on the average twice as many male dancers present as females which is a great blessing to the men and should be exhausting to the women, but they seem to be amazingly sturdy.

The women wear neat but not fancy dresses such as one might see on any normal working girl who likes to make a good appearance and has a little money to make it with. They always look clean and usually are fresh. The men are not so particular and come in their normal working clothes: flannel shirts, no tie, badly wrinkled trousers, plain moccasins, such as they use every day along the trail. The women, on the other hand, if they wear moccasins instead of oxfords, always have fancy beading on them.

Now let me introduce you to my dancing partners. First, I'll take you up to Kobuk Mary. She is in the first grade in school, but lest you presume that I am cradle robbing I will also add that her son Willie, aged 8, is in the third grade and her granddaughter, little Mary, aged 5½, is in the same class with her. Old Mary is 48, but like most eskimo women of that age she looks to be 80. Her skin is dry and parchmentlike, she has blue tattoo marks all over her chin. But she is light as a feather on her feet, dances superbly, has a delicate figure something like Peggy Rankin and indeed when I dance Look For the Silver Lining with her I might think it was Peggy if I had more imagination and didn't look down at her.

Her daughter, Tissue Ulen, is a remarkable girl. She is strong as an ox and once in a single day carried 75 pounds for 33 miles over a snowy trail. But she is as quiet and refined as she is strong, and this is all the more remarkable considering that as a girl she used to see her mother, night after night, dancing naked in their cabin at Coldfoot for the amusement of the miners who would get her drunk. When still just a little girl Tissue became pregnant and had a rather horrible experience with a crude abortion. She is now very happily married to Jo Ulen, wireless operator, and has two fine girls, but the effect of her early mishap has been growing worse and she just left a couple of weeks ago for Portland to undergo a uterine operation.

Over here is Mamie Green, shouting some pert remark across the floor to one of the men. She is a contemporary of Tissue's, both are about 22. At the age of 16 she was married to Vaughan Green, deputy U. S. Marshal for the district. He was 47. Since then one of the favorite biennial pasttimes of the Wisemanites has been guessing who might be the father of her child. This has happened three times so far and the only thing which seems certain is that Vaughan has been the father of none of them. But he cheerfully lives the fiction that he has and everybody is happy, most of all Mamie who carries on a flirtation with every white man under 50 in the camp. She herself is half Japanese and half Eskimo with probably some Russian blood. She is of the roly-poly type. (Gee, Vaughan himself just came in to chew the rag at this juncture!) She dances and flirts better than any woman in camp and might fairly be considered the reigning belle of Wiseman.

But not for much longer. Little Lucy Jonas is coming right along. She is only 14 now but in a couple of years she will have the requisite poise and maturity. At present she is very bashful, giggles at every remark for fear of missing some supposedly clever one, pets you continuously through the dance because, I imagine, Mamie told her the men like that, and feels terribly embarrassed when you step on her toes. She is quite the prettiest girl in camp. She is in the fifth grade in school and doing remarkably well considering that six years ago when she came over from the Arctic Ocean she couldn't speak a word of English. In winter she

lives luxuriously in the Jonas Igloo, built of poles and mud and branches, in summer less elegantly beside some moose which her father has shot, the whole family establishing home wherever the animal expires. But all this is so far above the standard of the bleak Arctic Coast that Lucy can hardly believe that that was ever her mode of life and she once exclaimed to me: "Just fancy, living in a snow house!"

Lucy's Mamma, Mrs. Jonas or Kal-habuk as she is called in Eskimo, is built along the lines of a cider jug. She looks young for an eskimo of 33, probably because she has preferred semi-starvation to work. Despite the loss of one eye she is quite good-looking. Considering that she was 27 when she first came among white men she has picked up their dances remarkably well.

That homely little white woman over there is Mrs. Pingel. She dances about as you would expect from an ex-missionary of 63 who took up dancing at the age of 50.

Mrs. Wheeler, the other white woman, is a grandma. She has one paralyzed leg but she drags it gamely through every dance. She says when she can't dance any more she will be ready to die. She has two sons living somewhere along the West Coast and two divorced husbands. She is one of the kindest women in the world, has given the old woman-starved miners of the Koyukuk just the sympathy they needed and has been almost like a mother to the eskimo girls just starting to raise families like Tissue and Mamie. She told me: "I don't believe in charity. I believe in helping people to help themselves. I told Tissue last year I wouldn't sew for her. I'd help her and show her how to do things and correct her when she was wrong, but I wouldn't be in here always and she'd have to learn how to do things for herself."

Knute Ellingson, who has fallen in love with practically every woman, native and white, who has been in the Koyukuk during the past 31 years, had this to say about her in comparison with Mrs. Pingel.

"She's done more for this camp than any woman who's ever been here. To hell with this 'come to Jesus' stuff!"

One thing I have been digging at quite hard but not hard enough is the eskimo language. My admiration for the mentality of these people, already high, has been augmented when I marvel how any human beings can learn so difficult a language. The vocabulary in every day use seems to be almost infinite. Already I know several hundred words and yet I can scarcely be said to have commenced on the ordinary words which even a little child knows. Everything seems to have a different name for it. In English the front leg of an animal, the hind leg and the human leg are all legs, merely differently modified. In eskimo you have a ta-lik, a mu-nik and a ne-yuk. But if you pronounce the last one mu-yuk you're not saying "leg" at all but "hair."

And that brings me to my next arraignment of the Eskimo, or I should say more accurately the Kobuk tongue. For every tribe has a dif-

erent dialect and the one I am studying is Kobuk. In this language just the slightest mispronunciation may have disastrous effects on your meaning. For example, Kobuk Mary who has been one of my three chief teachers, had a cold in the eyes. I knew that con-no-wit-bit meant "how are you feeling" and I got from one of my other teachers, Harry Snowden, that e-dik meant "eyes." So very proudly I greeted old Mary one morning with con-no-wit-bit e-tik, unconsciously substituting a "t" for a "d". To my chagrin Mary responded with most raucous laughter and told me not to let Harry teach me any more bad words. I finally discovered what my mistake was, that e-tik in King's English (which assuredly wasn't the English used in explaining my error) means "rectum" and that I had gone up to Mary and asked: "How do you feel in the rectum."

But in general things are going more encouragingly. I greet my friends every morning with con-no-wit-bit uy-lavak and every night with con-no-wit-bit uy-novalk. I bid them goodbye with mart-nusga-mang-ole-gig-nya, ask for a dance with all-a-luk, thank them for it with koya-runga, offer them a drink of water with ill-witch imir-ach tunge. I can count from a-tor-sic to da-lir-ut kee-berk and occasionally even exclaim pete-a-cher-uk! in obscene exasperation.

I should like to conclude this section on the Kobuk language with another joke on me. It seems the eskimos have a nickname of ~~xxxxxxxxxxxxKoyukokx~~ their own, never complimentary, for every white person in the camp. Mine is Na-pak-tuk lug-lu-nach, given because of my boring into the trees with my increment borer. It is really a swell name for a forester and literally means "tree spoiler!"

I spent three days in the woods with Martin, helping him cut his winter's fuel supply and incidentally mine, carrying the logs to rollways and more recently hauling it to town by dog team. This was the first real woods work I'd done since the autumn of 1927 when Gerry, John Lacey and I logged the Koch Plots at Priest River and it seemed quite exhilarating again even for so clumsy an axeman as I.

And now, even if this letter weren't as unconscionably long as it is, I'd have to quit it because the dog team has just come in with the first winter mail. A splendid team it is too with seventeen sturdy huskies pulling at the harness. I must go over to the roadhouse and get the latest news.

The news is all from north of the Yukon. I haven't seen a bit of news other than personal from the outside world in the more than two months I have been in here, with two exceptions. Al Retzlaf sent me a full page from the Fairbanks Daily News-Miner telling of the death of Major General Allen, first white explorer of the Tanana and Koyukuk rivers. It was he, you know, who commanded the Army of Occupation in Germany after the World War. Aside from his splendid early geographical services I admire him as the finest example of what a soldier can be

at the very best. Thanks to the kindness of Major Ahern, I had the great pleasure of taking luncheon last March with the General and enjoyed two hours of delightful conversation.

The other news took the form of a clipping from Dorothy Coggeshall, quoting a very clever letter written by our mutual hero, Mr. Justice Holmes. These two items represent the sum total of my knowledge of what has transpired in the outside world since August 23. Of such vital news as who won the World Series I cannot guess, not even knowing who won the pennants. Of the progress of economic conditions and the terrible unemployment I haven't gotten a hint. On Tuesday two personal friends are up for governor, Elisabeth Gilman and Gifford Pinchot, yet not even the remotest vibrations from the active campaigns I know they have waged have reached me. Strangely enough this lack of news does not trouble me and I don't feel any enthusiasm over the fact that the second-class mail has just come and I can read in the Literary Digest, Time, The Pathfinder and the Nation the news of the past months.

As for first class mail, none arrived this time it having all come two weeks before by the airplane which took the Pingels, Mrs. Wheeler and Tissue away. In that mail I received 34 letters which were a great joy and I hereby want to give general thanks to all the kind senders. Later individual letters will be forthcoming. The next mail arrives here about December 1 and anything which left the East by October 27 will surely catch it.

As ever,

Bob.

ROBERT MARSHALL
Wiseman
Alaska

November 5, 1930.

Dear Family et al:

Election Day is one of the three great holidays of the year in Wiseman. From all over the hills, for more than thirty miles distant, the miners head for town, less to do their duty as citizens than to enjoy the social hilarity. The diggings centering around Wiseman are so widely scattered, the extreme distance between Jack Rooney's hole at Rooney Lake and Dutch Henry's sniping on the South Fork being over 70 miles, that many men who have been in the country for over quarter of a century have never visited their friends' operation. But the general congregation in Wiseman at Election Day, Christmas and Fourth of July furnishes the opportunity to keep in touch with one another and to exchange ideas and thus helps to make this geographically scattered community such a closely knit one socially.

As much as a week before Election Day the first man drifted in, and from then on by ones and twos and threes they came, some of the nearer ones not until the day of voting. In town they would group together, and talk on many matters, but it was interesting to observe that the subject of most animated conversation was their work. There are nine outfits of from 2 to 4 men sinking holes this winter, and eight other single men going it alone. By Election Day most had started their holes already and there was eager inquiry and recital in regard to what sort of digging was encountered, how deep it was going to be to bed rock, how the hole lay with reference to the position of the river channel in the geologic age when the gold was deposited, whether there would be cross-cutting, if it would be necessary to timber. There would be discussion of how the gold might have washed down, different geologic theories would be expressed and sometimes sharply contested, reasons would be advanced why such a spot should be just as good as one 300 feet away where \$80,000. had been taken out. But they all knew it was a great gamble and that the hard winter's work might not yield them enough to pay for the clothing they wore out.

It all reminded me very much of scientists discussing their research. Only I think perhaps there was more genuine interest and the person who was being told about another's work was not so eager to inject at any cost a recital of his own accomplishments.

Voting took place at the Pioneer Hall. The polls opened at eight in the morning and closed at seven at night. There were three judges: Harry Foley, a Republican because his father had been a Democrat; George Eaton, a Democrat because he and Jim Ham Lewis had years ago been delegates to the same democratic state convention in Washington; and Albert Ness, a Socialist because he never could see how a person could believe in anything else. The voters straggled in all day long and there was much good natured banter, between themselves and the judges. The most important election was for territorial representative to Congress, the candidates being Wickersham, republican, and Grigsby, democrat, and Wickershamites and Grigsbyites violently but good naturedly urged the merits of their candidates. But nobody took the election seriously and I think the general sentiment was well expressed by the following random remarks:

"It's a sure bet anyway that neither of them cares what happens to us."

"Whatever way the vote goes, things will be just the same as ever on the Koyukuk when it's all over and the world will keep turning once in 24 hours."

"All these politicians have the same motto: follow me and you'll wear diamonds, otherwise I'll put you in jail."

"Whichever one's elected, we know both of them ought to be in jail."

After supper the judges counted the ballots. It would have made Senator Capper think he was in Utopia could he have been there to find that 50 out of 62 potential voters had cast their ballots and that one of them had snowshoed 33 miles to do this while two others had come 31 miles by dogteam. But the crowd of 20 who gathered to watch the counting of the ballots didn't have the proper attitude for Utopian citizens. It is true they cheered violently when a vote for their candidate was reported and jeered at the supporters of the rival candidacy, but it was all a highly flippant procedure. It reminded me very much of the cheering we used to indulge in during our old sandpile horse-races when Fastest Fawn or Turkish Coffee or Girl of the Gas Mines or John B. Waterhole or one of the other imaginary steeds would make a great spurt.

After the votes were counted there was a meeting of Igloo No. 8, Pioneers of Alaska. This is the one fraternal order of the community but unlike most organizations of that sort it is almost completely democratic. Anybody who came to Alaska prior to January 1, 1906 can join. There are no secrets and no member is ever favored, no non-member ever discriminated against for that reason. All its property is shared by the whole community, members and non-members alike. This includes a hall where the biggest dances are staged, a large phonograph, a library and a fund for taking care of the sick who are broke. Since there is no civil organization in the community the Pioneers function as a voluntary cooperative for performing many of the tasks usually done by the local government. They supervised the building of the airplane field, raised funds to buy a wireless station, protested to the Post Office Department on the abominable mail service. It was the result of this latter action which principally occupied this meeting which I was invited to attend. Also to my surprise they elected me as an honorary member.

Shortly after that meeting was over, at about 10 o'clock, the Election Day dance commenced. The Hall was crowded, people sitting on chairs and benches all the way around three sides of the 25 x 40 foot room. On a platform at the fourth end was the large orthophonic phonograph which provided the music. At eleven o'clock when the dance was at its peak there were 45 people present, 28 men, 10 women, 7 children. The dances were delightfully varied compared with outside: not only the standard fox-trots and waltzes but also two-steps, schottisches, heel-and-toe polkas and one swell square dance. But best of all were the native dances.

At about mid-night Big Jim, the uncrowned king of the Koyukuk eskimos, jumped up at the close of one of the fox-trots and said in a

loud voice: "Now it's our turn." At this the whites all clapped and everybody around me whispered what I already knew that they were going to stage a Kobuk dance. The four older eskimo women, who had been dancing the white dances continuously since ten, filed out to the dressing room. Jim sat down by his big base drum which had been sent him from outside and Harry Snowden and Jonas sat on either side of him. This, I was told was a very small group. They used to have as many as 20 natives dancing together.

Then Jim started beating the drum, lightly at first, while he and Harry and Jonas sang together at the top of their lungs a song which at first sounded like just the wildest sort of cacophony. But pretty soon you noticed a strange rhythm to everything and the sense of discord vanished. In perfect time to the rhythm Malakluck, Kobuk Mary, Keepuk and M.,s. Jonas entered the room, all dressed up in their most magnificent parkas of caribou, sheep, wolf, wolverine and otter fur pieced together in fanciful design with animal tails hanging like tassels all over the back. They swayed back and forth to the music, arms moving gracefully in slow motion. They formed a semicircle on the floor around the men who were now singing louder than ever. Jim kept beating the drum harder and harder. Suddenly Harry got up and went through the wildest gyrations, jumped up and down, threw his arms from side to side, twisted his body and emitted the most dismal yells. But everything here too was done in perfect time to Big Jim's beating and singing. Indeed they all followed Jim as carefully as an orchestra would follow its conductor. After Harry was through Jonas jumped up and danced and then Harry returned again. In all the variety of contortions through which the two men and in a later dance Jim went they consistently held their bodies in cubistic shapes; the arms and legs as they jumped around would be held either straight or at right angles but never in a curving way. The women on the other hand kept always in harmonious curves as they swayed back and forth, going through a sort of muscle dance. Very much as in their every day lives they formed a background for the activities of the men.

But all this dancing was not meaningless like the white dances. The song which Jim sang as well as the dance had been made up by himself and represented a sort of history of his people's migration from the Kobuk to the Koyukuk. I could understand quite a lot of the phrases and next evening Jim explained me what I did not understand. You may be disappointed in the realism of the story. Before reciting it I must add that the words of the story were continually interspersed with "Ya! Ya! Ya!" and "Hanga! Hanga! Hanga!", much as we sometimes sing tra-la-la-la and doc-doo-doo-doo. Here in substance is the song which Jim sang.

"I was out hunting all through the long sun and when I got back I found my people were gone. But I found a few old people still left and they told me that everyone had gone to the Koyukuk. So I came across the mountains and I found them living at Coldfoot with the white people. I was all dirty so I asked for water to wash my hands and when I had washed they gave me food to eat and coffee to drink. I was very happy because I knew my people had come to a good place where there were lots of caribou and moose and sheep and bear and fox and lynx and plenty of fish and trees to build houses. And all the white people were very good to them. When Christmas came we went up to Wiseman and we danced and sang and talked and ate at the roadhouse and had a very fine time."

All this acted out elaborately: amazement at finding people

gone, tedious journey to Koyukuk, washing hands, drinking coffee, pleasure.

At one o'clock everyone repaired to the roadhouse where a lunch of coffee, cake and sandwiches was served. About two the dancing re-commenced and an hour later there were still 27 people at the hall. When the dance finally broke up at 6:35 A. M. there were still 16 of us left. These included five women who had danced every dance all night, Mrs. Jonas in addition having participated in the Kobuk dances. Mamie Green had spent the usual busy day which the mother of three young children in this country must inevitably spend; Mrs. Wilson had walked up seven miles from Emma Creek through the snow; while the other two, Mabel Marsan and Lucy Jonas, had been occupied all day cooking dog-feed and going to school respectively. Of the men who stuck it through Knute Ellingson, Hughie Boyle and George Eaton were all about 70 or older. Despite their age Knute and George dance beautifully, in fact they're the two best dancers in Wiseman. As a matter of fact, it was the older men who kept things going, Victor Neck, John Harvey, and I being the only ones under 50 to stick it out. Harry Snowden, who went thru all the violent eskimo gyrations, also hung on through the last fox-trot.

II

November 18

I am just back from a ten day trip up the Middle Fork to help Jess Allen and Kenneth Harvey haul in their sheep meat which they shot this fall, to see the country and to continue my study of tree growth at timberline. Jess is 51 and despite the loss of an arm is one of the best woodsmen in camp. Kenneth, only 29, is the second youngest man in Wiseman. This was the first real mushing (i. e. dog-sled travelling) I had ever done for serious purposes. We had two sleds with five dogs for one and six for the other. We took turns driving the sleds and running ahead to pick the route. Our journey was 62 miles up the Middle Fork to the last big forks in the river, within about 15 miles of the Arctic Divide. Here Jess and Harv had cached eight sheep. It took us three days to make the trip out and six to come back. The first night we had an old trapper's cabin for shelter, after that we had only a tent with a stove which we carried along with us.

My conclusion in regard to mushing without trail or prepared shelter may be summed briefly in the remark that it's the most damnably uncomfortable work I know but that there are moments of exhilaration which you wouldn't exchange for anything. Most of you can drop the letter here but a few with a penchant for detail may care to read further.

The first reason why this mid-winter mushing is such damnable work is that whenever the going is real heavy, which means whenever there's deep snow or gravel bars to cross, you have to get out yourself and pull with the dogs. On this trip such work involved about a third of the distance and it seems that psychologically as well as philogenetically man is too far removed from the beasts of burden to get much joy out of such labor. The second reason is that wherever the going is just ordinarily heavy you are supposed to run along behind the sled so as not to overburden the dogs. Its nothing to trot several miles through the light snow this way without stopping. The third reason is that whenever the going is real good on glare ice and it's perfectly legitimate to hop on the sled and ride, in a few minutes the wind and the 25 below zero atmosphere and your previous per-

spiration combine to make you so cold you're even more uncomfortable than in the first or second misery. In addition there are such trivial annoyances as snow blowing in your face and the depression of starting out before the short November daylight commences and appreciating all day that when you're done travelling you've got four hours of tight rustling to get camp set up, wood cut, dogfeed cooked and supper prepared. And then of course there are overflows and they really rise above the class of trivial offenses. You see when it gets real cold the river at places freezes solidly to the bottom. This dams the water which is flowing under the ice all winter and it backs up and finally flows out over the top of the ice by way of some crack or airhole. Thus you find these overflows of water on top of the ice. Often they're glazed over so that you think they're good ice until you break through. If you are wearing shoe-packs and the water doesn't go over you're all right. If you're wearing moccasins, which are much warmer, or if it does go over the top, your feet get soaked and then you've got to stop just as fast as you can, build a fire and dry out. Most of the people who have lost their feet in this north country and many who have frozen to death had their catastrophe start on an overflow.

But now for the exhilaration, and after all one minute of that makes up for an hour of the other. Sometimes it comes standing on the back of your sled, in the few minutes before you get too cold, while you're flying over smooth ice and living in the rhythm of your trotting team. Sometimes it comes when you look up suddenly and notice some great towering limestone crag, for the Middle Fork is bounded by any number of rock faces from 500 to 1500 feet high. Sometimes it comes when you feel yourself overcoming the distance between you and your destination, overcoming the cold, overcoming the hard travelling, overcoming 60 miles of an uninhabited and seldom traversed wilderness. Sometimes it comes over a longer period, as that morning when we made that last lap on our journey to the Upper Forks. There was perfect weather for once, the going was good, and we could observe the whole pageant of a midwinter Arctic morning growing out of a midwinter Arctic night. It was full starlight when we started, heading straight on the course toward Polaris. After half an hour the black sky in which the stars twinkled brightly and coldly commenced to turn gray and the stars slowly faded. The gray became faintly blue and then a single snowy peak in the northwest showed a tip of pink. So gradually you could hardly notice it advancing, the pink spread from peak to peak until all the summits to the north and west were colored. The pink kept creeping down the slopes, changing so imperceptibly in color that it was a surprise when you noticed the pink was all gone and the whole mountainsides were bathed in a golden spray, craggy peaks, snowfields, dark spruce timber, everything. And then all of a sudden, after a whole morning of shadow, there was a wide bend in the river and at high noon we drove out into the sunlight.

We reached our destination at the Upper Forks that afternoon shortly after one. It was getting constantly colder and we couldn't work hard enough setting up camp to keep warm. We had to stop frequently and warmed our feet and hands by the fire where the cornmeal was cooking for the dogs. But by 5:30 all the chores were completed and we retired to the well-heated tent for supper and repose.

That night of November 10 probably most of you were spending comfortably in steamheated rooms in the heart of steamheated cities. That night near the arctic divide, though the thermometer had dropped to 40 below and we had only a thin canvas shelter, we probably spent scarcely less

comfortably. But ours was a single oasis of warmth and comfort in thousands of square miles of freezing wilderness. That same night, eight miles below us, Albert Ness was forced by darkness to stop and he shivered through a miserable night by an inadequate siwash fire.

That night also marked the tragic conclusion in the romance of Martin's cousin, Leo Slisco. Leo's father had made a small fortune at Nome. With plenty of money and unusually good looks Leo had run riot among the chorus girls of Frisco, had married and gotten divorced from a prominent West Coast actress and a night club queen, had twice contracted and been cured of syphilis and was now an advanced dope addict. Broke, sick, just over his second divorce, he had determined to come to Wiseman and his cousin and start life again. Reaching Fairbanks the authorities jugged him a month for disorderly conduct while under the influence of hop and refused to allow him to come to the Koyukuk by plane. So he set out over the 320 mile trail from Nenana. There was a roadhouse 18 miles out. Leo apparently had gone 17 of them when it must have gotten dark and certainly very cold. Inadequately clothed, unused to the north country, dissipated I can perfectly picture the cold horror which must have seized him when darkness came on and no shelter was reached. He probably felt that he had travelled at least 30 miles and must surely be on the wrong trail, that his only hope for life was to return. Anyway, when one mile from shelter he wheeled around and backtracked. Next morning they picked him up by the side of the road in a sitting posture, frozen stiff. Like so many others he had only sat down to rest a minute which suddenly became eternity.

Next morning from our shelter Harvey set out straight up the mountain opposite camp in quest of more sheep. Jess and I started upstream. We had gone a mile and a half when Harv came running up with the news that Ness had just driven into camp, with a message for Jess to return at once because Mrs. Allen was sick. We all returned to camp and found there was nothing critically wrong but that her mind was affected quite badly. She had shown traces of insanity on and off for the past two years, apparently a complication of going through change of life.

The way this case was handled by the community was typical of how such emergencies are met on this frontier. It was essential for Jess to be gotten, everyone around town could see that. So Marsans volunteered their dogs and sled and Albert Ness volunteered a week of his time and considerable misery and set out after us. As I have already related, he had to siwash out one night in the bitter cold. But all this was considered merely the normal neighborliness of the frontier and Albert expected no thanks and would have been indignant at any offer of money.

It was too late for Jess to start back to Wiseman that day but next morning he was off before daylight and with six dogs making his empty sled fly down the river he reached town by night. Meanwhile, there being nothing to be done then, I set out again for the divide between the Koyukuk and Chandalar. The two streams were but three quarters of a mile apart and were connected by a very low pass rising only 50 feet above the Chandalar Valley and 500 above the Koyukuk. It was bleak and windswept this frigid mid-November afternoon and with the thermometer still below 30, snapping photographs with a cut-film camera was a chilly pastime, to put it mildly. But there was a joy in sliding on the ice of the Chandalar 40 miles above where any other Wiseman white man had been, a joy in seeing the rugged arctic divide only 10 miles away, lit by the last sunlight of the short

afternoon and especially an exhilaration in coasting 500 feet into the Koyukuk.

Returning to camp I stopped at the last timber. By dint of much pressure and at the price of numerous shivers and some profanity I bored nine different trees. The ages and distribution of the timber gave beautiful confirmation to my theory on the advance of the northern timberline. When I got to camp I just had time before darkness to cruise a quarter acre sample plot in the heavy timber surrounding us. It would be quite disconcerting to those who hold the commonly accepted theory of a stunted northern timberline to learn that just a mile and a half away were trees 18 inches in diameter.

Albert Ness stayed with us to help haul the meat back to Wiseman. It took us six days to return because the loads were so heavy we had to double haul more than half the distance, that is split the load and haul twice over the same ground. It was hard work but the nights in camp were very pleasant. Ness is a remarkably well read man and his interests are wide. Harvey loves to talk about guns and hunting better than anything else, but when you get him off those subjects he has very interesting ideas. The following topics jotted down one evening are typical of the subject matter of our conversations in which I always let them take the lead.

1. Houdini
2. Heredity vs. environment
3. Genes and heredity.
4. Health.
5. Medicine.
6. Birth Control.
7. Free discussion of sex essential.
8. All of us agnostics.
9. Dogs. the
10. Creasy, the one negro in/Koyukuk
11. Race prejudice.
12. What fine people the eskimos are.
13. Terrible treatment of Indians outside.
14. A hunting experience of Harvey.
15. Thrilling experience of Ness during 30 years in northern wilderness.
16. Geography of upper Bettles River
17. Spiritualism
18. Psychoanalysis.
19. Protons and electrons.
20. President Harding.
21. Rotteness of American government today.
22. Life in here happier than outside
23. Mining.
24. An experience of Ness breaking thru ice.
25. General Miles.
26. Jefferson, Hamilton, Washington
27. Woodward's biography of Washington praised by Ness.
28. Hypocrisy and narrowness of religion.
29. Crime due to example of wealthy.
30. Big companies rule lives of employees.

This letter will go out in a day or two by plane. Mrs. Allen was judged insane last night by jury as required by the laws of Alaska, and consequently the Territory can now take her to the sanitarium at Morningside for proper treatment. It is a perfectly clear case of paraphrenia and she is obviously in the second stage where the patients have well-systematized delusions of persecution. She thinks there is an elaborate plot to poison the people of Wiseman, one by one, to break up the school, and especially to do away with her because she has fought so hard to keep the school here. She has also done a lot of reading lately on thought transference and I was rather flabbergasted when I returned to town to find that I had flashed her psychic messages 62 miles down the river that there was gasoline in the coal

oil, strychnine in the prunes and arsenic in the flour.

Jess is all broken up but he has sense enough to see that it is imperative that she be taken where she can get treatment. He comes in to see me two or three times a day and having chosen me as the person on whom to unburden has unfolded a most poignant psychological tragedy in which a domineering family, suppression of sexual information, a lonely childhood, absence of any friends, terrible fear of being an old maid and abhorrence of sexual intercourse have played a part. All this has happened in spite of the fact that Mrs. Allen has the best formal education of anyone in Wiseman with two years of graduate work at Wellesley on top of a four year college course, and in spite of the fact that her brother, Dr. C. is head of one of the biggest medical clinics on the West Coast.

It was important for the hearing last night to get jurors who had modern ideas in regard to insanity. Again it was typical of this frontier spirit that when I walked up to Hammond River yesterday to ask Verne Watts, Victor Neck and Harvey to come down, they dropped their work immediately and walked the six snowy miles to town and then after the hearing at 9:30 at night trudged the six long miles back, all without the slightest feeling of having done anything heroic.

Bob.

ROBERT MARSHALL
WISEMAN
ALASKA

January 27, 1931.

I.

Dear Family et al:

Since nothing very thrilling has happened during January, other than the return of the sun after an absence of a month, I shall devote this letter to making you better acquainted with some of my Eskimo friends.

Of course the place to begin is at the cabin of Big Jim and Nakuchluk, for this is the center, social, spiritual, and economic, of the native population of Wiseman. I think the economic is most important, for I can't see any other sufficient reason for Jim's immense prestige among the natives here, which makes most of them look up to him for leadership in all the important problems which confront them. He is not a medicine man: there are none in Wiseman. He is not the oldest native here: that superlative belongs to Oxadak. He is not the best musher: that honor goes to Riley. He is not the ablest hunter: Harry Snowden beats him in that respect. And of course Big Charlie and Jonas have the pretty daughters. But one thing Jim always has possessed has been an amazing amount of energy which has sent him out to the trap lines, out on the hunt, down the river hauling freight, when the other natives were idling around town. In addition, his word has always been scrupulously kept, so that the store has given him large credits. Consequently, Jim has invariably had more food, more worldly wealth in general than any of the other natives. With the prevalent Eskimo custom of potlatching, dividing up whenever one has more than the others, Big Jim has been the principle support of the entire Eskimo community. Many winters Jonas, who is perhaps the laziest man in the world, has fed his whole family of six, principally on the meat which Big Jim has shot. In addition to this economic prestige Jim is wise, kind, and without favoritism, so it is quite natural that he should be the leader, and his large, clean cabin the communal center of the Eskimos of Wiseman.

Perhaps some night, after supper and half an hour of chewing the rag around the roadhouse, I decide to pay Big Jim a visit. So I start across the town. First, down the main street, across the Wiseman Creek bridge, with yellow light pouring out on the snow from a couple of cabins to my right, and moonlight flooding the whole frozen valley of the river to my left. Then at the store I turn and cut diagonally back from the river, passing more snowcovered cabins with cheery lamplight in the windows, and also several deserted ones, looking even by moonlight very black and cold. All the while the bright waves of the aurora flicker in the sky overhead, and the stars twinkle in the thirty below air like shuttering magnesium powder.

I open the door to Jim's cache, which serves for the storage of all non-perishables as well as for a vestibule, and then open the inner door and enter the house. Jim smiles cordially and says a hearty Konnowitbitch (how are you?), and of course I reply Nakurunga (I am fine.) Nakuchluk laughs, says Alapas (it's cold), and I say Alapas apie apie (it's too cold), and then everybody laughs and they all continue with what they were talking about when I entered.

My Eskimo vocabulary is still so limited (only about 700 words) that it is quite an effort to follow the conversation at all, and try as I will, I continually lose the train of thought altogether. So I will take the easier course and describe what I observe after I repose myself on the floor, perhaps beside Cupuk.

At one end of the single room of the large cabin, which measures 14 x 32 feet, all the women are seated on the floor. Nakuchluk is working on some skins, scraping them thin with an amazing collection of homemade instruments, some iron, some bone, some obsidian. She sits with her legs straight out in front of her, her body bent forward, her head bowed over the skin on which she is working. She is a little, dried up old woman, wrinkles all over her face, but with the sweetest childish smile. All the while she works she hums, except when she breaks into the conversation, which is often.

Beside her, smoking an 18 inch long pipe, with legs also straight in front of her, sits old Utoyak, most elderly woman in camp. She is probably about 70. She is very quiet, seldom smiles, seldom even sings. Although she has lived intermittently among the Whites for a dozen years I have never heard her speak even one word of English. I think she is entering dotage, and I imagine that her mind strays most the time over the windswept tundra to the north where she wandered for more than half a century. She is the most tattooed woman in camp, with five blue lines running from her lower lip to the tip of her chin, whereas her closest rival, Nakuchluk, has only got three to beautify this part of her face.

Beyond Utoyak sits Kalhabuk, youthful mother of four strapping Jonas children, and wife of the Lazy Jonas. She is the most powerful woman I have ever known. When the store burned down four years ago, and all the people around carried out everything they could in the few minutes before they were driven out, Kalhabuk emerged several times with an hundred pound sack of flour on her shoulder and a fifty pound sack under one arm. I am sure she could lick three out of four men in Wiseman in a fight. But the test could never come off, because she is the most placid of mortals, and takes everything as it comes along in the greatest good humor, including Jonas' indolence. If you ask her why she doesn't make him work she replies vaguely: "Oh, that's all right." She exerts almost no parental authority over her children. She is simply crazy over her daughter Lucy, and would, I believe, sacrifice almost anything to make her happy. She sits there with a cynical smile on her face, unless she is laughing or yawning, and peacefully smokes her pipe.

Between me and Kalhabuk sits Cupuk. She is about 26. She married Louis Sackett, a native from Alatna, who soon after ditched her and left for the Kobuk. Her face is homely, her back deformed, her temper rather fiery, her I.Q. low, so the poor girl has had rather a hard time picking up another man. Externally she keeps up a jolly, lively appearance, and as I sit beside her she jokes, and nudges me, and whispers about licentious dreams, but I know that underneath she is terribly depressed.

In the center of the room, facing the women, Big Jim, Oxadak, and Arctic Johnie sit on chairs. Big Jim is about 65. He has closely cropped gray hair, bright eyes, a protruding jaw with a little stubble on it. On either side of his mouth are two holes into which he used to insert ivory ornaments for the dance. One hole has all closed up, but you can observe soup oozing through the other when he eats. His clearly enunciated voice is always the dominant one in the conversation. His wrinkled forehead and a worried look in his eyes make you feel he must have known great tragedy, until he smiles when you forget everything except his sincere geniality.

Oxadak is a couple of years older. He is Utoyak's husband. He speaks hardly any English either, but is much jollier than his wife. He has a deep, base voice, in striking contrast to the high pitched voices of the other Eskimos. Arctic Johnie, his adopted son, is a surly looking native of perhaps 35 years. He seems solemn and morose, and this impression is accentuated by his very dark skin, the other Eskimos here being as light as dark complexioned Whites. He dresses exquisitely, mostly in

furs, and seems to take great pride in his personal appearance. About ten years ago he brought down his wife, Louise, from the Arctic and she refused to go back with him. This November he came in with his wife, Annie.

I sit beside Cupuk and watch them all: Big Jim and Oxadak talking in loud, guttural voices together; Nakuohluk working; Utoyak smoking her pipe; Kalhabuk smiling across at me; Cupuk whispering about the dream she had last night; all the women, now chattering together, now singing in a low voice, now breaking into the conversation of the men. Very frequently everybody in the room rooks with laughter. Sometimes Big Jim tells me in English what the joke was about. Here is one typical story, in the exact words which he used to explain it, which caused everybody to roar, made Big Jim pretty nearly break down laughing before he could finish it, and almost compelled Nakuohluk to choke. Remember that him, as the Eskimos use it, means it as well as him.

"Long time ago, me young man, six men go hunt. Take him along fish, take him along seal oil, pack them over. Pretty soon no more grub, all gone, he no last long, somebody get him little bit of flour from ship. No steamboat. Ship.

"Make camp, old man get him over close to fire all time, no one else get close. Take off parky, all time close fire. Turn one side to fire, turn other side to fire, no keep him warm. Young man fix it up, mix him flour in frying pan, no grease in it, put him on fire. Says, 'Here, old man. You all time too close fire, you hold him pan.' Old man says he no savvy make hot cake. Young fellow give it to him right away, says: 'You hold it.'

"Pretty soon hot cake burn him on bottom. Young fellow says: 'You turn him. Move him.' Hot cake no cook him on top at all. Old man shake him little bit higher, little bit higher, little more up, up, up, up, up above him head, (all the while Jim talks his whole attention is concentrated in acting out what he is telling, the old man shaking the frying pan and gradually raising it until it is high above his head, and at the same time nervously uncertain of how he should flap the hot cake over) pretty soon throw him up, pretty soon (hot cake) fall, hit him over head, old man turn head round, pretty soon he (hot cake) roll him down back of head. Hot cake stick him there on neck behind, no parky, no nothing. Everybody laugh then, old man roll down in snow, take him out. Old man no mad, he laugh too."

Stories like this, of funny or ridiculous experiences, both of themselves and their friends, form one of their favorite subjects of conversation. Hunting experiences, and especially current discussions of where the game is now are of special interest. So too are geographical discussions, how the rivers fork, where the passes lie, where the niggerheads are especially bad. But the favorite topic of all seems to be gossip, for they are for the most part very catty, and always are down on at least one of their number about whom they can't make mean enough remarks.

Often late in the evening Jim will bring in the bass drum, while Oxadak and Johnie will take the little ones, and then everyone joins in singing until the rafters fairly ring to the stirring music of Tunga Chunga and A Yah Yah E Yah.

II.

When Big Jim was still a young man in his native Sellawik country along Kotzebue sound, just north of the Bering Straits, he fell under the influence of the Missionaries. Their teachings became the dominant force in his life. All the complexities of nature, all the perplexity of how the infinitely varied world he knew came to be, all the fear

provoking superstitions, were simply resolved in a perfect faith that a beneficent God, not so different in character than Jim himself only infinitely greater, had created the universe for the happiness of mankind. In a severe life in which young friends were continually being carried violently to death, in which beloved parents died and apparently rotted away, it was very consoling to learn that after death everybody would be reunited in an existence infinitely happier than that on earth. "We know nothing about all this, we no know how earth come, till we learn God business. Now we learn God business, everything fine."

But Jim's religion, which eases his mind of worries, and teaches him to live a life which sincerely strives to follow the admonitions of the Ten Commandments and the Sermon on the Mount, is far from a puritanical one. He decries the missions which forbid the natives to dance. He likes to see people happy all the time. He drinks when he can get something, though unlike almost all the other drinking natives, he almost never gets drunk. He smokes, dances, sings, has sexual intercourse, and isn't ashamed of any of them. He doesn't even resent his wife going to bed with whom-ever she wills when he is away. These liberal beliefs he claims to owe to the famous Archdeacon Stuck (first climber of Mount McKinley). I imagine if Jim were asked to name the three greatest people in the history of the world he would enumerate God, Jesus and Archdeacon Stuck.

Jim's morning program when he is out in the hills is as follows: "Just get up, pray first and sing little bit. He no forget anything you pray him, God. Some people forget him pray, no help him God. White people, native people, all same (to) God. All of us just like brothers. Then we build him fire. Pretty soon sing some more, singing good morning, sing pretty hard, open him lung, feel pretty good. Me never sick, sing hard morning. Peel fine. Nakuchluk sing too."

He is entirely fearless of any of the many dangers of the North. He is so exceedingly competent that despite sixty years of wandering in the wilderness he has never seriously frozen himself, never even suffered a single major injury. About five years ago he killed a bear near Coldfoot with an axe. When I asked him if he wasn't scared he replied: "Dogs scared, me no scared. Me scared of bear, he kill me all right. Me no scared, he no kill me."

Although Jim is no medicine man, he has many practical home remedies. Here is his attitude toward boils.

"I see him boiling business sickness lots. He bust, he no all come out, he grow again. You out him, you no clean him good, bime by he come back again. You keep him rotten all time, put on rag, put on soap, chew up sinew, put him on, keep him warm with cotton, then pretty soon he get very rotten, you clean him good knife then, no more come out. Old man, me father and me father's father all teach him that. Call him boiling business."

Which in other words simply means, wait until the boil is ripe before lancing.

Both Jim and Nakuchluk have taken the kindest interest imaginable in me. Jim says: "You know me boy, Johnie? You all same me boy." And Nakuchluk says: "Me be your mamma." So they have done the loveliest sort of unexpected things, brought me old trinkets which they took from the Arctic, made fancy gloves and fur boots for me, shown me how to make fire without matches. Especially Jim has delighted in teaching me how to talk, how to sing, how to dance in Kobuk fashion. He is a severe teacher in that he insists that what he teaches be learned exactly right. He may take few minutes to get me to say a single word just correctly. He makes me watch his lips, shows me where his tongue is placed for each sound. If I make the slightest mistake

he shakes his head and says: "No good. No good at all." But when I get it right he beams all over, as if he'd just gotten a silver fox in his trap, and he encourages me to further effort with his happy "auriga!" He had a terrible job teaching me to dance, my rythmical sense being so poorly developed, but he would encourage me with remarks like: "Learn to sing, dance together just like telegraph. Hard work at first. Pretty soon you learn him, no more hard work, fun all time."

III.

Ike Spinks told me that I must be sure to get the story from Nakuchluk of how Peluk, her first husband, disappeared. Ike said the only way to get it really right was to wait until Big Jim was gone some night, and then go to bed with the old woman. I didn't think it was necessary to adopt such heroic measures, but I did think she might be less inhibited in telling her tale if Jim wasn't around, so I came over one evening when Jim was off to the Mosquito Fork. This is the story I got, about one quarter from her Eskimo, about one half from her English, and about quarter from Cupuk's excellent translations.

The whole trouble commenced one spring, some thirty-three years ago, when an unknown Eskimo, encamped on the tundra along the Arctic Coast, heaved a stone at his dogs who were barking. Now it chanced that the trajectory of this missile, instead of carrying it to the ribs of one of the raucous canines, collided with the skull of a passing Eskimo named Mukollik. Mukollik dropped unconscious to the ground, and his loving wife, Missonik, rushed posthaste to Peluk, who was a great Medicine man.

Please do not think I am exaggerating his prominence. I will quote you one little example of his miraculous ability, just as his own wife Nakuchluk told me about it, to prove to you his potency. "Man sick. Peluk put big bugson him, big bugs. Pretty soon he take them off, swallow them himself, bime by vomit them up. Man get all better again, pretty soon he all well."

As soon as Peluk saw Mukollik he realized his case was very grave. But extraordinary conditions may sometimes be cured by extraordinary measures, so he prescribed this unusual treatment, that he, Peluk, should have sexual intercourse with Mukollik's wife. Nevertheless, Mukollik died.

Now Tunach, the devil, was exceedingly wrath for he did not approve of adultery with the prospective widow as a treatment for a fractured skull. So he gave Peluk to understand that he had better beware. Then Peluk explained to Nakuchluk that Tunach would surely get him if she ever let Peluk get out of her sight, that to circumvent Tunach she must always follow Peluk wherever he went. Peluk also told Nakuchluk that if Tunach ever did capture him he would try his best to get back, but that she must never allow any men to live with her or he could not return.

In the autumn of that year Peluk and Nakuchluk headed for the Arctic divide to try their luck on the Koyukuk. They crossed over at the head of John River, and food having run short, spent some time there snaring rabbits and ptarmigan. One day they spied some caribou on the hillside a short distance above them. This was rare luck, and Peluk hastened to get his gun. He left Nakuchluk to attend to the snares, but cautioned her to keep an eye on him constantly.

She watched him mount the hill, but as he approached the caribou they started to walk away. Pretty soon they disappeared behind a little hummock. He followed them, and she continued working on her snares, expecting him to reappear at any moment. But he didn't. The short December day drew to a close and still no Peluk. She spent a

sleepless night in their skin shelter, and at first daylight started out to hunt for him. But the wind had blown during the night, and Peluk's tracks were all covered over, so she saw not the faintest trace of him. The next day she set out again, looking for him, and the next day, and the next. But all in vain. Peluk had vanished as completely as the flowers of summer.

A few days later a couple of hunters from the Arctic passed by her camp. They joined her in the hunt, and slept that night in her shelter. Next morning when they went outside they saw Peluk's fresh snowshoe tracks coming almost to the shelter, and then abruptly ending. There were no back tracks. Tunach had snatched him again when he was almost to safety.

The hunters wanted her to come along with them, but she refused to go. Maybe she could still find Peluk. Maybe he would try to come back again. She would stay there without a gun, living on what ptarmigan and rabbits she could snare, and hunt for Peluk every day.

"Me look round, me look round lot, me look round every day, me no find him. Me no find him at all nothing. Every morning, me wake up, me go outside, put him ear on snow, listen, maybe me hear him come. Him no come. Me hear nothing, me hear nothing, only wind, only wolf howl, only ice break him. Me snare few ptarmigan, no more rabbit. Dog die, no nuff ptarmigan (for) me (and) dog. Me get pretty poor, pretty near me die too. Bine by sun come up, pretty soon lots people come along. Me pretty glad, me so glad me forget Peluk."

Of course they came into her shelter, men and women both, and she told them the story of her misfortunes. While they were talking they heard a sound outside, like the wind, and saw a man's shadow on the snow.

"'Ha! Peluk come home!' everybody say. Me run out, look, nobody, just black shadow. Bine by me look again, no shadow at all, nothing. Me never see Peluk again, me never see him no more."

IV.

One night when I was over alone with Big Jim, learning to sing, there was a frenzied knocking at the door. Jim opened it, and there were Bessie and Jennie, almost choked with crying.

"My Charlie dying," Bessie wailed. "He coughed up blood, he's bleeding from the lungs, come quick."

Then she and Jennie started back on the run to their tiny cabin, about 50 yards away, and Jim and I followed. On the way, Jim made a very practical division of labor. He said: "Me make praying business, you give him medicine."

And so it was arranged. When we got inside the cabin Jim immediately flopped down on his knees, and, with bowed head, commenced an earnest prayer for Charlie's recovery. Charlie was sitting at the edge of his bed, bent over an old butter can which was used as a cuspidor, and now and then spitting out a little blood. It was a slight hemorrhage, and on the spur of the moment I could think of no medicine to give him except to have him lie down, as quietly as possible, and to loosen everything tight about his clothing, which was almost nothing. When these simple operations were completed I joined Jim on the floor, and helped with the "Amen" in which Jennie also joined, but Bessie shook so with sobbing she could not enunciate a sound.

I have never seen such a picture of complete, woebegone misery as Bessie presented. You would have thought she was watching her husband and daughter being burned at the stake. No, it was worse than that, for in such an event she would perhaps have mercifully fainted. Now all she could do was stand and howl and shake, with a look like a woman of ninety on a face which chronologically was only 33 years old. After a while, when the bleeding had stopped, she managed to splutter out a few phrases.

"Oh, my poor Charlie.---- Why did I ever come to Wiseman. ---- If Charlie dies I rather be dead. ---- That's how I lost my two little children already. ---- Marie was sitting right beside me sewing. ---- All of a sudden she started choking. ---- Whole lot of blood come up, just like this. ---- In a few minutes she was dead. ---- I wish I was never born. ---- I wish I was in Bettles. ---- Oh, my poor, poor Charlie. ----

Then she would lay her head on Charlie's chest and just sob again, until I would have to impress on her that it was essential that Charlie be kept quiet.

Meanwhile Charlie took the whole matter with stoical indifference. He wasn't the least bit excited about the blood, assured Bessie that he felt a whole lot better since he had coughed it up, that the cold which had been bothering him for two months would now be cured in no time. He said to me, with philosophical resignation: "Funny thing, my Bessie. Me get sick, anyone get sick, she act just like crazy. She love me too much, I guess. Funny thing."

And Bessie, with great heaving of her breasts, sobbed out: "I can't help it."

V.

After that evening I came on exceptionally intimate terms with the Suckiks, as they call themselves for that is Big Charlie's Eskimo name, and the last name which the whole family has adopted. Bit by bit, I have picked up both their biography and their philosophy.

Big Charlie was a native of the Kobuk country, where as a boy he grew up largely on caribou, seal oil, berries, and fish. In 1898, when he was sixteen, he and his father set out on an all summer's hunt across the Endicott Range to the Koyukuk. It was here that they met the first white men they had ever seen. I will let Charlie tell the story.

"First white man I ever saw down below Bettles, '98. Me and old man come over from Kobuk down head of John River. We see white thing like smoke against hill, and we go see what it is. Pretty soon we see man, look different any many I ever see. He say: 'Hello!' I don't own savvy hello. He give me tobacco, and I smoke that fine. Pretty soon he motion like this (making beckoning motion). Then me and old man follow. Then he walk a little ways and motion again, and we follow some more. Pretty soon I says to old man: 'Maybe he want us to go with him.'

"Then we follow him, and pretty soon we see big boat in slough. We never see anything like that, white smoke coming out and everything, and we scared. But he go on board over gangplank, and pretty soon he go down in cabin, and come out with tobacco, and throw it at us. We know that, and when he motion some more we think he all right, so we come on over gangplank. Then he take us down to cabin and make motion, and long time we no savvy nothing. But then old man says to me: 'Maybe he wants us fetch him caribou skins, he give us tobacco.'

"Then he take us to other cabin, and we set down at table. I never see him table before. Funny thing. Then man come in and bring all sort of grub, set him on table. I know nothing about that sort of grub. I don't know nothing about use him fork, I no savvy plate. I no know which way to hold knife and fork. Pretty soon I eat bread and tea, I know that all right. Pretty soon white man put something yellow on bread. Pretty soon I swallow it, pretty soon it go down just like strong whisky. I feel it go all the way down to stomach, it burn like fire in stomach. My papa all scared, he try doctor me up this way with hands, blow on me. Pretty soon I all better.

"Stay four days, pretty soon I like white man's gun. He show me bullets, 30-30, and I think he too small to kill anything with. I think his gun bum, no go for nothing.

"Us fellows no savvy white language for long time. Pretty soon we find native boy, he savvy quickly, he tell us few words. Then we know few words, pretty soon we learn real quick."

The year before Charlie came over from the Arctic, Bessie was born somewhere down the river near the mouth of the South Fork. Her people were Koyukuk Indians, and she had the childhood which most Koyukuk girls must undergo of terribly hard labor before she was ten years old, packing huge loads of wood, working on the gee-pole, curing the meat which the men cooked. I have heard the life of the Koyukuk girls described by a white man who has lived a great deal among that race "as part way between how we treat our children and our dogs, but a whole lot nearer the dogs."

When she was still a tiny baby her father, Big William, had taken sympathy on his brother, Big Betas, who had just lost his only child, and had given Bessie to him and his wife to raise. At eleven she went to work at the roadhouse in Bettles, and for five years she stayed there, waiting on tables, helping in the kitchen, dancing all night long, drinking heavily, smoking, giving the men who stopped there frequent sexual gratification. She learned there, both the white language and the white customs.

Meanwhile Big Charlie had prospered exceedingly well in the Koyukuk. He was strong, energetic, intelligent, lucky, and made good money, mining in the summer; trapping, hunting, and freighting in the winter. He was scrupulously honest, and the old Northern Commercial Company often trusted him with the transportation of several thousand dollars in gold. At one time he had over \$2,000 deposited at the Northern Commercial store, which was something absolutely unprecedented among the natives. He made his home in Bettles, living right next door to Bessie's home.

In the spring of 1913, shortly after the breakup, Charlie was starting out for a summer up the John River. As he was about to shove his boat off, Bessie came down to say goodbye. She had liked him very well for years, had come to think of him as a big brother, in fact called him brother. When she came down this morning Charlie said jokingly: "Don't you want to come along with me up John River?"

"Sure", she said instantly. She went right home to get her things, and left with him that day. They must have spent a very happy summer together, judging by their frequent fond recollections of little incidents. They returned in the autumn by way of the North Fork and Wiseman, where they were officially married in the white manner.

During the next four years they wandered all over, mining, hunting, trapping. Three children were born to them, and they were very happy. But in the spring of 1919 all of their children developed severe colds, and the oldest and youngest died within a few weeks.

This broke them up completely. For weeks they did nothing but bemoan their fate. They never again seemed to develop their old energy. Thereafter, Charlie never would do any work at all as long as there was something left to eat in the house, and he kept putting off things so consistently that the other natives got to nicknaming him Tomorrow Charlie. Bessie, who can make the most beautiful beaded moccasins, rarely indulged her art, except under the pressure of necessity, and spent most of her time dancing, loving Charlie, and fondling Jennie, the one child left her.

Today time has worn off much of their misery, and they are generally an exceedingly jolly family. They are continually joshing you, and they all have a hearty laugh. But they still remain as lazy as ever, making their living just as much as possible from handouts which the whites, who are mostly very fond of them, frequently give.

They are both passionately devoted to Jennie, who is 14-1/2 years old, and exceedingly good looking. Bessie shows me the magnificent bead work she can already do, Charlie points with pride to some drawings she has made. Both stress what a very good girl she is. Both delight in telling stories of her precocious remarks, just like any white parents. For example, when she was five she had asked her papa: "What make ptarmigans so wild? Do you think maybe little mice chase them all the time?"

Charlie asked amazedly: "Who told you that?"

To which Jennie replied saucily: "Don't ask too much question."

After nine years they still are made all happy, just by recounting that tale.

As I have said, they love to joke. Here is a typical conversation.

Bessie - This is some old shack. Look at the floor there.

Bob - Don't you get your feet all full of slivers when you get up in the morning?

Bessie - Sure, my big toes are just full of them. That's why I don't come up to dance anymore.

Bob (advancing with open knife)- Take off those moccasins and I'll amputate your big toes. Then you can dance again.

Bessie - You don't get fresh to me or I'll burn your whiskers off.

Jennie - "Where's the coal oil, Mom.

Bessie - That's right, we sprinkle a little coal oil on them, touch a match, and, zing, it goes.

Meanwhile Charlie sits and chuckles, and the rest of us all laugh.

Although they are on good terms with all the natives of Wiseman, they and Harry Snowden alone remain aloof from the potlatch, and the custom of keeping continual open house. "I feel all sick if I can't be alone some time," Bessie says.

In religion they are even more unique, for they are the only ones who don't go to the prayer meetings which Jim conducts periodically. Both Charlie and Bessie are

agnostics. When you ask Bessie what she thinks will happen after she dies, she just shrugs her shoulders. Charlie is a little more verbose on the subject, though no more plain.

"Long time ago, before you're born from mamma, you don't know. Then you born from mamma, you do know. After you dead pretty hard guess what happen. You guess, I guess, all same. All us fellows know, he dead and buried and leave him there. All I know, I want to have as much good time I can when I live, no worry about when I dead."

He is very tolerant on the subject of belief.

"Long time ago, even before white man come, native have story spirit leave body, go other place. Good thing to believe, I guess. Got to believe something. Belief don't hurt nobody."

As for himself: "I no believe nothing I no see. Other natives, they see devils and spirits and all sorts of people that really aren't real. I no see nothing ever. Maybe so, but I no believe it."

About the relation of man and wife they both talk frequently. Charlie says: "Too bad husband, wife can't always die together." Subjectively, he remarked: "My Bessie, me, just like two kids together. Have good time together all the time, never fight."

Bessie's comment on him was: "I think Charlie's the most wonderful man in the world. He's always good natured, never gets angry about anything. I'm not that way at all. I tell person just what I think of him, fly right off the handle."

One day, when Charlie was still in bed, Martin and I dropped in for a visit. Bessie was combing her heavy, black hair, which reached to her waist.

"Are you a barber?" she asked Martin, laughing.

"Gee whiz, you ain't going to cut your hair. You look fine as it is."

Bessie laughed some more.

"Don't worry, Martin," she said, "I'm not that crazy yet. There's no sense in it."

"That's the way I feel about it. You're real, old fashioned woman that way, and the way you love Charlie."

"Sure, I'm old fashioned woman. If you no love husband, what's use to have husband at all."

"Doesn't that make you jealous, loving him so?"

"Of course! The two got to go together. Where you has no jealousy, you can't has any love."

Charlie doesn't believe in the marriages so prevalent in Wiseman, of a man in the late thirties or forties wedding a girl in her early teens. "Old man, young girl marry, no good. He wants sleep all time, she wants dance all time, they can't be

happy that way. Young man, young girl marry, they have same laughs together, same jokes, same troubles, same happy, same everything, then they get along fine all the time."

His advice on courtship was this: "Me tell you Martin, any time you like him girl, you no go after him. No good, that kind of girl for man. You want him girl, him go after you, him all right, that kind. Long time ago me young boy, me savvy girls plenty."

He believes in the essential sameness of the human race, both as regards place and time. "All over just the same: some people fine, some people no good, some people just like dog, no heart at all. Native, White, Arctic, Koyukuk, Yukon, Outside, all over, all the same. Long time ago, maybe one man meet other man in woods, kill him with bow and arrow, long time ago. Today some man all same, only maybe they scared to kill because Marshal arrest them, otherwise all same."

Their attitude toward child education is frequently discussed. It can be summed up in one short remark of Bessie's.

"I never punish Jennie. Charlie and I never spank her in our lives. If she do something wrong I just tell her it's not nice and she don't do it any more. Punishing children all the time is no good. It just makes them mean."

VI.

I had planned to write you about Harry Snowden, lone wolf among the natives here, only Eskimo old bachelor in the Koyukuk, who maintains that if "young kids get married together, all same cat, scratching and fighting together all the time." I wanted to tell of my visits to the igloo where three Arctic families live together, and where upon entry I am immediately knocked down by four little kids who can't speak any English, but who delight in stroking my whiskers, riding on my back, and generally clambering all over me. Especially I wanted to write of the great fight between Arctic Johnie and his beautiful wife, Annie, which caused the latter to leave her husband and set up an independent household for herself and children, as well as breaking the entire native population except the neutral Suukiks into two fiery factions. But I have already drawn this letter out to an indefensible length, so I must reserve those tales for personal narration to any one interested.

BOB.