

THE ASCENT OF MT. ST. AGNES,
CHUGACH RANGE, ALASKA

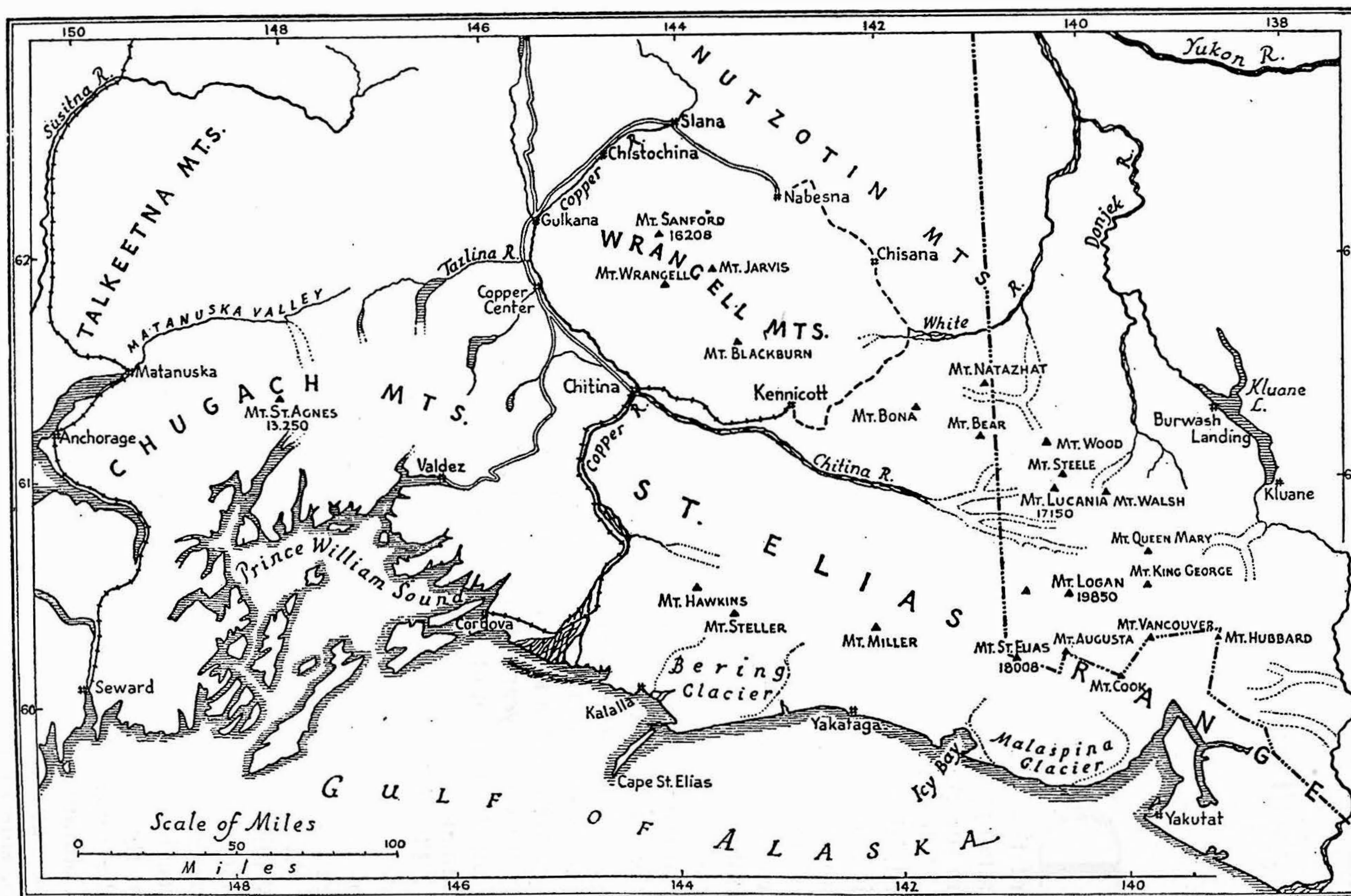
BY BRADFORD WASHBURN

DURING the months of May and June 1938 a small expedition was sent out by the Institute of Geographical Exploration of Harvard University to make a thorough reconnaissance of the Chugach mountains in the Alaska Coast Range, and to attempt the ascent of Mt. St. Agnes (13,250 ft.), the highest peak in the group.

The Chugaches are geologically a western prolongation of the St. Elias Range, much in the same way as the Fairweather Range is a southern offshoot of this massif. Sweeping in a jagged arc about the head of Prince William Sound, this rugged little range of mountains enjoys probably the most constantly diabolical weather on the entire North American Continent. An almost unbroken series of S.E. and S.W. storms, finding their origin in the Bering Sea area, deluges Prince William Sound with an annual rainfall of over 200 ins. This rainfall, converted into snow on the upper reaches of the Chugach Range, has resulted in one of the wildest and most rugged glacier systems in the world. On the S. or seaward side of the range, where this precipitation is heaviest, only a score of truly clear days occurs during the course of an entire year. On this side the mountains are particularly jagged on account of the heavy frost action due to the variable climate.

The rock is dominantly schistose. In many cases its beds stand directly on end and, except under extraordinary conditions of drought, every platform and cranny in these great southerly cliffs is buried deep in fresh snow, or plastered with ice.

When seen in beautiful weather from the broad reach of Prince William Sound, the Chugaches present an amazingly even skyline. For nearly 40 miles there is scarcely a single pass in the range lower than 9000 ft., yet only a handful of the main summits reach an altitude of 11,000 ft. Although the eastern extremity of the range may be said to rise from the head of Valdez Arm, the central mass of the higher peaks starts just to the W. of Columbia Glacier, some 40 miles W. of Valdez. The 5000-ft. pass at the head of the Columbia, connecting this glacier on the S. side of the range with the two immense ice systems of the



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Nelchina and Tazlina on the N. side, is the only low pass for a distance of 70 miles, till one reaches a broad divide at the head of Serpentine Glacier, Harriman Fjord, leading to the great Knik Glacier and the Knik River.

The peaks of the Chugaches can be roughly divided into two groups: the first, extending from the Columbia Glacier westward to the pass at the head of Harvard Glacier, is composed of a system of symmetrical snow-covered peaks dominated by Mt. Witherspoon (12,100 ft.). The second, bounded on the E. by Harvard Glacier and on the W. by the low Serpentine Pass, consists of an infinitely more rugged massif whose highest summit is Mt. St. Agnes (13,250 ft.).

Although Mt. Witherspoon can unquestionably be climbed from the head of one of the westerly tributaries of the Columbia Glacier, the southern approaches to Mt. St. Agnes are far more complicated. Given moderately reliable weather and a reasonable snowfall, there would doubtless be two or three excellent routes by which Mt. St. Agnes could be attacked from the head of College Fjord. The existing weather conditions, however, are so utterly abominable that the ascents of any one of the three reasonable ridges on this side of Mt. St. Agnes would be rendered exceedingly difficult, if not downright dangerous, by a combination of *verglas*, deep fresh snow, and very steep, rotten rock.

Several aerial reconnaissance flights made both before and after our ascent of Mt. St. Agnes have yielded a great amount of valuable knowledge about the hitherto only roughly mapped southern side of this range. They also cover in great detail all of the totally unmapped northern approaches. Our aerial photographs, most of which were taken in the summer of 1938, now show the entire upper basin of the Knik Glacier, second largest in the range after the Columbia, as well as all of the valleys of the Matanuska, Nelchina, and Klutina Glaciers, only very rough sketches of whose snouts appear on the existing map of Alaska.

A careful study of these aerial photographs showed beyond a doubt that the only logical route up Mt. St. Agnes was by way of its great N. ridge, a buttress of which dropped to a pass separating the heads of the Knik and Matanuska Glaciers. The glaciers on this side of the range are entirely different in character from those on the S. slope. In contrast to the steep, crevassed, cascading glaciers of the coastal side, here one finds icefields of a much more Alpine type. The climate is much drier, and frost action is materially lessened on account of perpetual cold at the head of the shady cirques, some of which are scarcely ever reached by the sun at any time in the year. The foothills on this north side

are almost entirely free of snow below 5000 ft., whereas even 2000-ft. domes between the fjords on the coastal side of the mountains are buried deep beneath snow almost every month of the year.

Lack of adequate transportation facilities and trails through the wilderness will for some time make it exceedingly difficult to approach the great northern glaciers of the Chugaches. It was our firm belief, after a final study of the aerial photographs, that the wisest route by which to gain the N. ridge of Mt. St. Agnes would be to follow the course of the Matanuska Glacier. This glacier is about 40 miles in length. Finding its source almost at the summit of Mt. St. Agnes, it first tumbles precipitously for some 5000 ft. in rough icefalls to its upper basin. With the exception of one 1000-ft. cascade of séracs at the lower entrance to this basin, it follows a very steady and gentle gradient, almost free of major crevasses, dropping about 5000 ft. in a distance of 30 miles to its snout, which is the main source of the Matanuska River. This river in turn follows a swift, twisting course nearly 70 miles to the head of Cook Inlet.

Owing to its habit of meandering against bluffs, first on one side of the valley and then on the other throughout almost its entire length, the Matanuska River is a very difficult one to follow either on foot or on horseback.

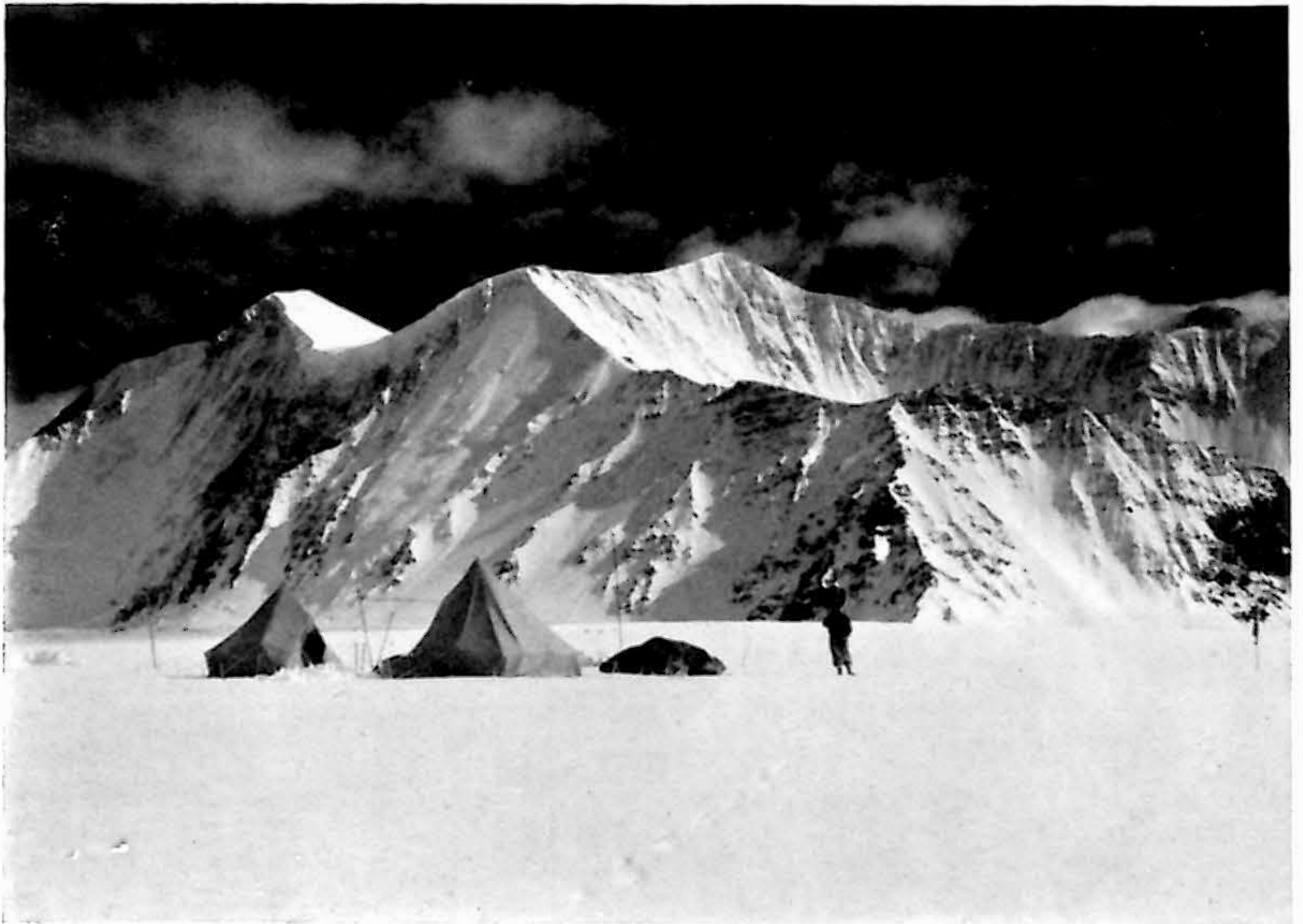
At the end of the narrow part of the valley, about 60 miles below the snout of the glacier, lies the town of Palmer, a Government Agricultural Experiment Station on the Alaska Railroad. This is the last inhabited village on the Matanuska River to-day. An old railroad bed from which the tracks have been uprooted can be followed from Palmer along the valley to Chickaloon, 30 miles further up the river on its N. bank. This town, once the centre of promising coal and gold mining activities, is today completely deserted. An old trail used to continue from Chickaloon along the hills and terraces above the N. bank of the Matanuska River, across the pass at its head, and down eastward into the Nelchina country, often reported to contain rich mineral deposits. After years of abandonment, this trail has recently been reopened by prospectors interested in attempting once more to work the gold-bearing gravels at the head of the Nelchina River. Pack horses, however, are not available in this part of Alaska at any price, and the wages asked by local porters are so outlandish that ground transportation from Palmer to the Matanuska Glacier would be exceedingly expensive.

On several of our aerial photographs we noticed a wide patch of almost uncrevassed ice at a height of about 5,000 ft., just above



Photo, B. Washburn.]

MT. ST. AGNES PARTY. FROM LEFT TO RIGHT: GABRIEL, WASHBURN,
REEVE (PILOT), DYHRENFURTH, BRIGHT.



Photo, B. Washburn.]

BASE CAMP, 5300 FT., ON MATANUSKA GLACIER.
Peaks behind separate camp from coast.

[To face p. 210.]



Photo, B. Washburn.]

HEAD OF MATANUSKA GLACIER, MT. ST. AGNES 20 MILES DISTANT, FROM FLIGHT ALTITUDE 13,000 FT.
Airplane landing made at bend of glacier, middle foreground.

the great bend of the Matanuska Glacier, some 20 miles from its snout. A year ago, our success on Lucania had been entirely due to making our approach to its base with a ski-equipped airplane. This smooth spot on the Matanuska appeared to be such a likely landing place that we dispatched our veteran pilot of 1937, Bob Reeve of Valdez, to make a short flight to investigate in detail the possibility of landing a four-man party with six weeks' supplies, literally within stone's throw of our goal. This flight was made early in February, 1938, as soon as the sun was rising high enough at noon to make possible the taking of pictures on this N. side of the mountain. Reeve reported that the landing conditions on the ice were perfect, and that the relatively low altitude (5300 ft.), as compared with our Lucania landing (8600 ft.), would preclude any danger either in landing or taking off, even under slushy conditions in the late spring.

Detailed plans for our small expedition were completed late in March, and all our equipment freighted to Alaska at that time. Our party, originally to have been six in number, was reduced to four by unforeseen circumstances at the last moment. It was finally composed of Norman Bright of Sunnyvale, California (one of the two unfortunate men who were unable to join Bob Bates and me on Lucania a year ago), Norman Dyhrenfurth of Franconia, New Hampshire, Peter Gabriel of the same town, and myself. Dyhrenfurth and Gabriel, both natives of Switzerland, were engaged in teaching ski-ing, and were both most enthusiastic at this opportunity to become familiar with some of our magnificent Alaskan mountains.

On account of my affiliation with Harvard University, I was unable to start west from Cambridge until early in May, but my three companions sailed from Seattle on April 23. We sincerely hoped that Reeve would be able to fly them in to the glacier during the calm weather of the late spring, and that they would all be established at our first camp by May 16, the day of my expected arrival in Valdez. But St. Agnes and her obstinate weather made havoc of our pretty plans!

To fly from Valdez, on the coast, to our glacier base on the opposite side of the range proved to be much more difficult than we had ever expected. The coastal weather is bad at best, but every time it cleared in Valdez, it stormed on the N. side of the mountains, and every time it was clear in the interior, it deluged rain on the coast.

After days of waiting, and two unsuccessful attempts to make this ridiculously short 50-minute flight, Peter Gabriel and Bob Reeve at last succeeded in making their first landing on the

glacier in the morning of May 16, the day that I arrived in Valdez —*the first clear two-hour period that they had had in seventeen successive days.*

New storms then beset us, and it was not until May 27 that Reeve was again able to sneak out of Valdez early in the morning through rifts in the clouds, and land Peter and me at the glacier base. With a camp on the glacier now established and occupied, things were much better. Peter and I were equipped with a small 10-watt radio telephone. Unlike so many expedition radios, this set possessed the amazing quality of actually working perfectly. With efficient two-way communication between the glacier and Valdez, it was now possible to maintain a constant watch on the weather at both ends of our flight, and no more false starts were made. The weather at our camp stayed amazingly fine, although Mt. St. Agnes and the whole Chugach ridge above us were shrouded in almost continual storm clouds. This range acts like a great dam, effectively keeping all but the most intense coastal storms on its S. side.

On the morning of May 31 a lull in the rain and wind at Valdez gave Reeve a chance to fly in Norman Bright and a little more of our equipment. At last, on June 1, Reeve succeeded in making the final flight into our base with Dyhrenfurth and the last heavy load of supplies.

All of these flights were made with a Fairchild 51 monoplane, operating on wooden skis specially surfaced with stainless steel, and by taking off at low tide from the great Valdez mud flats. Unfortunately, however, the tides at this particular time of year had been running quite low. This, combined with very warm sun on the mornings of the last two flights, had made the mud so stiff that Reeve had been unable to bring in some 200 lb. of equipment considered most vital to our work on the glacier. After his last trip on June 3, all hope seemed to be gone for another trip from Valdez for several days. Although the sun beamed warmly down on our glacier camp, Valdez as usual reported dense fog and heavy rain on the morning of June 2. Fully aware of this possibility, we had left 200 lb. of supplies in Valdez which were all virtually unbreakable, such as radio batteries, jam, generator oil, and some tools.

Determining by radio exactly what had been left in Valdez, we transmitted this short list to Anchorage, on our own side of the mountains, where moderately good weather seemed to prevail almost constantly. Although there was no mud flat at Anchorage which would permit a ski take-off in the summer, Star Airways picked up our order in a local store, placed it in a Bellanca Sky-

rocket plane with wheel landing gear, and delivered it to us only a few hours later, by throwing it piecemeal into the snow in front of our tents. We guided Dan Victor, the pilot, to our position in the unmapped heart of the mountains entirely by radio. This delivery of our last supplies completed the base camp equipment, and made us ready for the attack on our mountain, after a loss of over a month due to frightful weather conditions.

Some may question the necessity of transporting almost 2000 lb. of supplies into the glacier for so short an expedition. The answer to this inevitable query is the result of a good many years' experience in Alaskan mountaineering from airplane-stocked bases: a party proceeding into unknown country afoot, or with a pack-train, invariably leaves caches or supply depots as it advances, which will prove invaluable sources of food and fuel on the return journey. This type of party is also familiar with every detail of the route back to civilisation, so that it can make a rapid unerring retreat in case of any emergency. A party landed by airplane in the centre of a totally unmapped area has no depots lying between it and civilisation. In case changed landing field conditions or adverse weather render it impossible for the airplane to make its scheduled return to take the party home, the returning party knows but few details about the route out to civilisation on the ground.

On each of the three expeditions of this sort which we have recently made to Alaska, it has been our policy to carry out a detailed study of the retreat to civilisation from the air, prior to making our first landing at our mountain base. On all three of these expeditions, our field party has been equipped with a set of aerial photographs showing as completely as possible the general topography of the line of retreat on foot. Each time we have also stocked our base with almost twice as much food as we actually deemed necessary for our climb, thus allowing a wide margin of safety in case any emergency should arise. On the Lucania expedition in 1937, these precautions were amply justified. On the Yukon expedition of 1935 and on the Mt. St. Agnes trip, the extra cost of this emergency equipment which was not used at all may be chalked off as a very valuable sort of life insurance.¹

At last established on the Matanuska Glacier, we started hand-sledging with a vengeance. Constant fresh falls of snow every

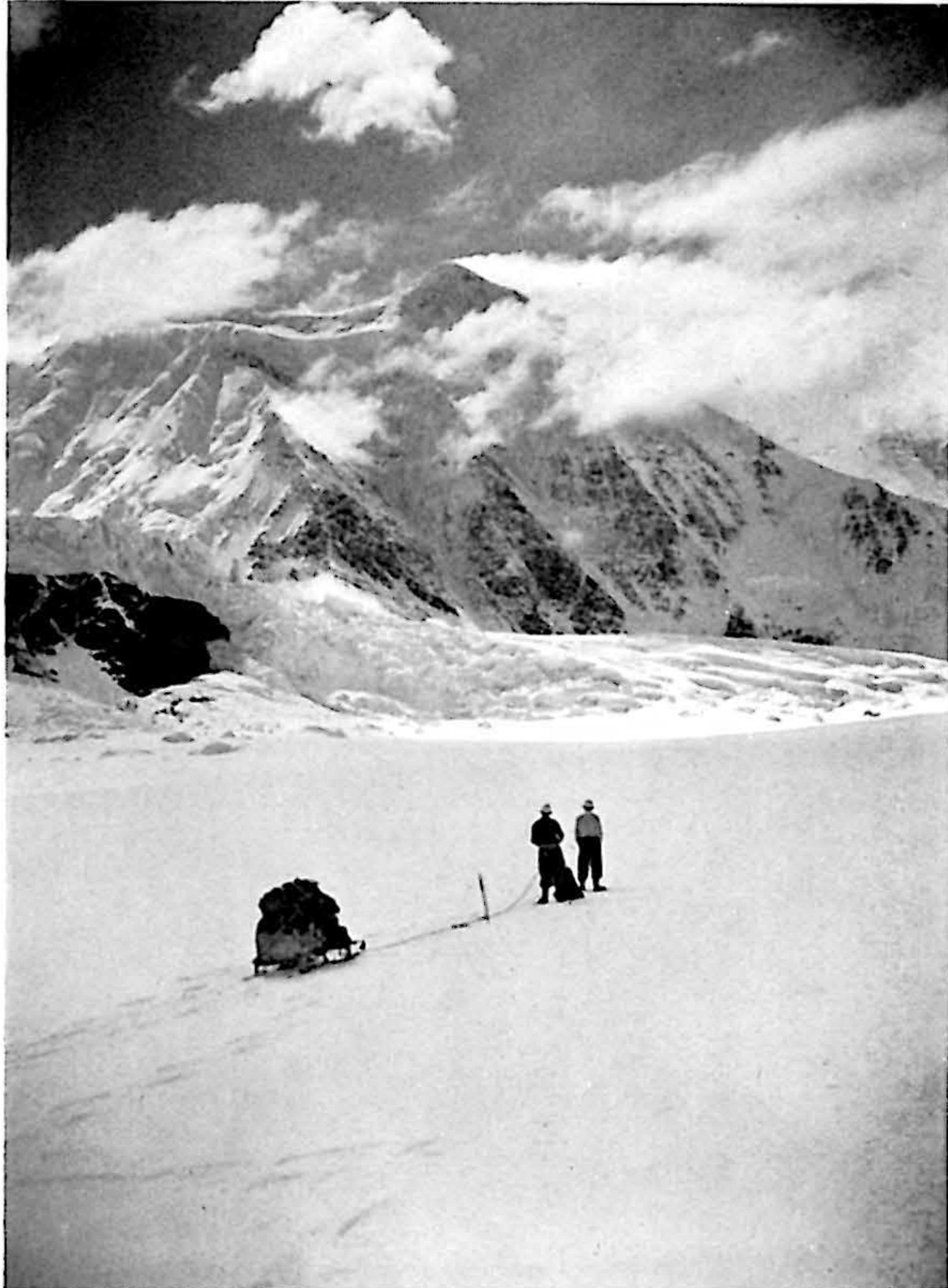
¹ In sharp contrast to this system of planning, it is interesting to study the story of the tragic Mt. McKinley expedition of 1932, on which all of the party were flown to the Muldrow Glacier, no aerial photographs were taken, and not a single member of the party was familiar in detail with the route back to civilisation afoot.

night made conditions abominable. We spaced our camps close together so that we could relay them two or three times a day with light loads, and thus keep the trail well broken out. On June 4, Camp II was set up at 5950 ft., two miles above our original base. We took the radio as far as this point, but left all of our emergency supplies cached on the dry medial moraine at Camp I.

No sooner had Camp II been pitched, then a terrific south-east storm came whipping down on us over the mountains. In one night the wind snapped two of our heavy bamboo tent poles which had withstood the most formidable blows on our winter expedition of 1935. Two feet of fresh snow fell, and our trail was completely obliterated. The fury of the wind and snow died down after two days of continual gale. Then a complete reverse in the weather sent the thermometer soaring from just above zero to nearly 60° F. The wind shifted to the south-west, and we wallowed in slush, rain, and dense fog until June 10. What had been moderately enjoyable work between Camps I and II was reduced to the meanest sort of drudgery, as we relayed ahead to Camp III knee-deep, even on snowshoes, in a sea of nasty slush which did not freeze even at night. A clear hour now and then, however, enabled us to work out a good route up the left side of the low icefall leading to the upper basin of our glacier, and Camp III was excavated in a field of incipient snow-covered crevasses on June 10.

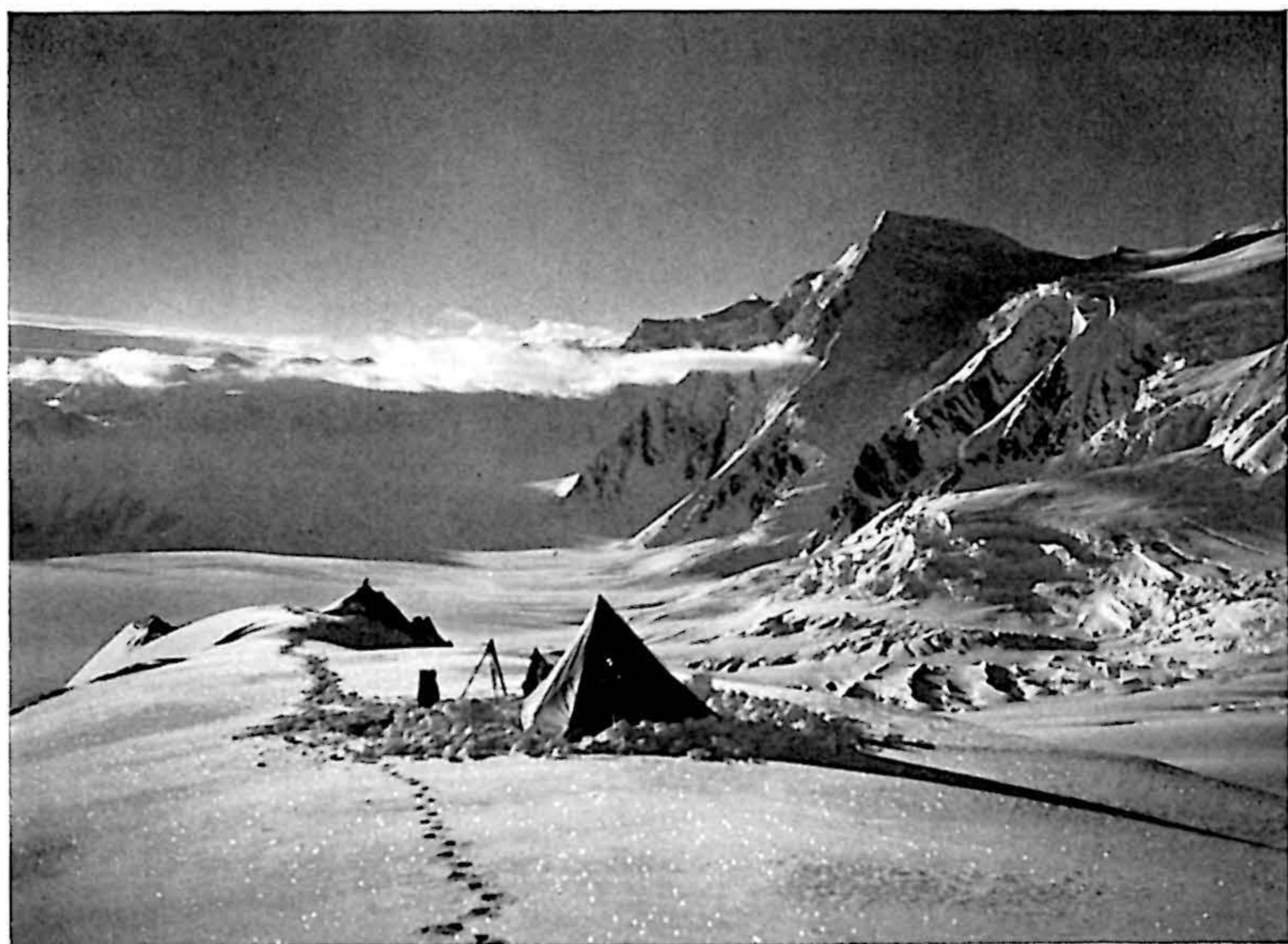
The next day dawned beautifully clear, the first really lovely morning since May 27, when Peter and I had made our landing at the base camp. The weather had started to break the evening before, and we had succeeded in making some three miles of trail ahead towards the base of the N. ridge which rose from the middle of the glacier, about four miles above our present camp. We left a series of 3-ft. twigs planted in the snow at 100-ft. intervals to ensure packing operations ahead, even in the densest fog. Despite a gorgeous morning of work amid stunning mountain scenery, the clouds rolled in again over the range on the afternoon of the 11th, and our trail markers stood us in good stead. A hard frost that night and another clear streak the following morning brought us safely to Camp IV, 7500 ft., at the very base of the great N. ridge of Mt. St. Agnes.

If normal snow and weather conditions could have been counted upon, and if we had been engaged in a purely mountaineering expedition, Mt. St. Agnes would have been a long but certain ascent from this camp. One of our most important goals, however, was to complete a survey of the mountain during the climb.



Photo, B. Washburn.]

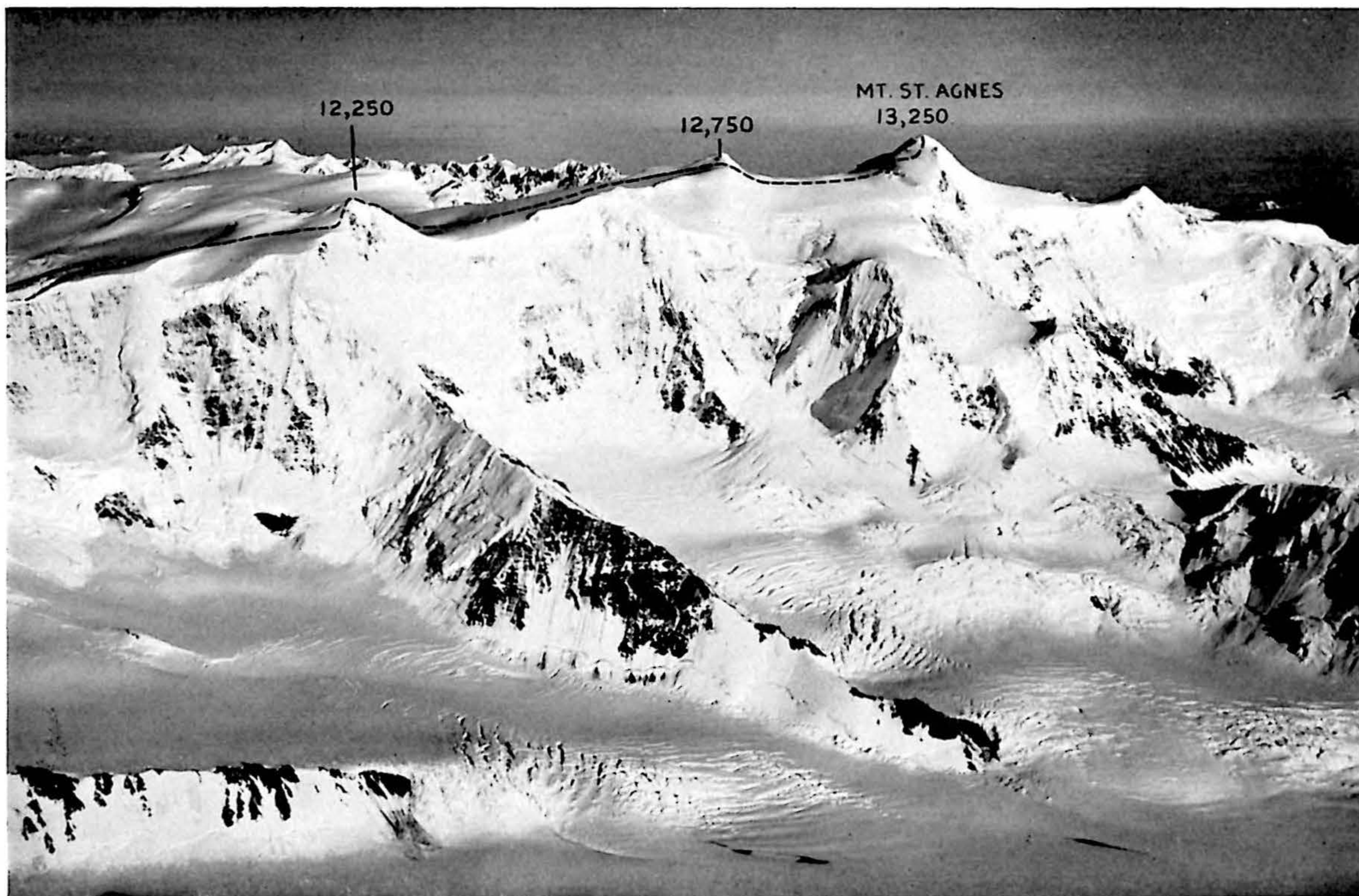
SLEDGING BETWEEN CAMPS II AND III, MATANUSKA
GLACIER.



Photo, B. Washburn.]

CAMP V AT DAWN, LOOKING E.

[To face p. 214.]



Photo, B. Washburn.]

MT. ST. AGNES, W. FACE ; HEAD OF KNIK GLACIER.

We hoped even with luck to be able to bring one of our instruments right to the summit, in order accurately to establish the relative altitudes and azimuths of the other peaks of the range from this important point of vantage.

Apart from the continually wretched snow conditions, it was apparent that one of our main problems on this N. ridge of the mountain would be two intermediate summits which would undoubtedly have to be traversed on the way to the actual peak. One of these had an altitude of 12,250 ft., with a deep notch beyond it, 11,400 ft. high. A gentle slope climbed out of the S. side of this col to another eminence, 12,750 ft. high. Beyond this lay still another gap involving a 500-ft. drop in altitude, which was finally dominated by the 1000 ft. summit cone of Mt. St. Agnes. Our aerial photographs clearly showed these details of the upper part of the mountain, but from our position on the lower glacier we had never been able actually to see the top of Mt. St. Agnes, which had always remained hidden behind the summit of Pk. 12,750 ft. It seemed wise to us to push an advanced camp to at least 10,000 ft. on the ridge above Camp IV before attempting this final climb, which, even from there, seemed as if it must be at least six miles in length.

A wild blizzard lashed Camp IV almost steadily for three days after we had dug ourselves in at the foot of the ridge. An unexpected pause in the gale on the night of June 13 gave us a chance to make a nocturnal reconnaissance along the crest of the ridge to an altitude of 10,000 ft. in the glorious northern twilight. We had hoped to be able to capitalise on this break and mark a trail with twigs to an altitude of about 11,000 ft., but the wind and driving snow above the 10,000 ft. shoulder blocked our advance completely, and we were forced to beat a chilly retreat to camp.

On this sally we had at last succeeded in finding an excellent level camp site, just below the crest of the ridge at an altitude of 9800 ft., and there we had left a small preliminary cache of supplies before descending to Camp IV on the night of the 13th. The next two days were again wretched—high winds, occasional fog, and constant drifting snow. On the 14th, during a short lull in the gale, we tried to haul a load at least part way up to our next depot, but, only 500 ft. above the camp, the wind struck again with redoubled force, and we had to give up in disgust and descend once more, leaving our loads in the drifts.

Towards supper time, on June 15, the clouds lifted and the wind died away completely. We had a speedy meal, each shouldered a load of supplies, and started out in hopes that we would at last be able to get one load through as far as Camp V.

The ridge was in terrible condition. Although a comparatively easy climb under good snow conditions, it was now downright treacherous. Deep, drifted snow festooned its crest, and large cornices, developed entirely during the past three days, overhung the eastern side. We changed the lead frequently, as breaking was very tedious and the grade steep and steady. At 10 P.M. we reached an altitude of 9000 ft., and there gave up our struggle against mountainous drifts of powder snow at the foot of the last steep 800-ft. rise below our high cache.

The weather, however, was perfect, so we decided to make a speedy descent to Camp IV, gather up the last bare necessities for a camp, and work all night in a desperate effort to establish an intermediate depot here before a new storm could ruin our well broken trail. Midnight saw us all safely back at Camp IV, and at 3.30 A.M. we had returned with another load to our little shelf at 9000 ft. While Norman Bright and I set up a temporary camp, Gabriel and Dyhrenfurth descended once more to retrieve the three loads which had been buried deep beneath the snow, where we had abandoned them on our attempt to climb the ridge two days before. At 5 A.M., after a gruelling night of uninterrupted work, we all stretched out for a few hours' rest. We had left all our supplies at Camp IV, with the exception of one week's food, one tent, and two sleeping-bags. From here on we planned to double up in bed, as the snow conditions were so awful that packing any sort of luxuries ahead was absolutely out of the question. We were now furious with St. Agnes and her weather. Apparently the only way to succeed in our attack would be to make a desperate and determined onslaught with just as little equipment as possible.

When we awoke, after five hours of fitful sleep, our beautiful night had vanished, and the sky was rapidly filling with new storm clouds. It seemed as if these storms would never end. We were now determined to push our way up to the 9,800 ft. camp, even if we had to do it in 100-yd. relays. At noon we rolled up the tent, and tackled the last 800-ft. rise separating us from our final camp site. As the day wore on, the clouds descended slowly but surely on to the upper part of the mountain. Another big storm was obviously in the making. We reached the cache at noon, dumped our loads, and returned for another relay without even eating lunch. Time was precious. We did not want to get caught with our meagre supplies divided when the new storm struck. At 6.30 P.M., as we floundered into the 9800-ft. camp with our final load, the whole ridge was enveloped in dense fog, and new snow was beginning to fall.

June 17 and 18 were a nightmare. Scarcely had we dug in our

tent when a new blizzard started. Although we were pitched on a very fine flat shoulder, we were in a spot exposed to the unbroken force of the wind, which must have reached a speed of nearly 100 miles an hour that first night. The snow-laden gusts hit the tent so savagely that we were forced to take down our pole, and spend the night swathed in flapping sail-silk for fear of having the whole camp ripped to shreds.

The storm continued all through the 17th with unabated fury. Late on the following afternoon there was a short lull, and Bright and I made a sally forth to try to discover and mark a route upward through a complicated field of crevasses on the steep slope above camp. Two hours' work carried us up into the clouds, which were so thick that it was impossible to go any further. We were then about 500 ft. above camp. The wind began to pick up again, and we retreated to our lonely little tent in the face of another gathering south-east gale. During our absence, Gabriel and Dyhrenfurth had built a new and much higher wall around the tent, and we rode out a second tempestuous night, this time with the tent pole up.

At dawn on the 19th, the clouds had lifted again, and the wind had died down to a dead calm. Even on the exposed ridge above camp, not a breath seemed to stir the deep, fresh snow which blanketed the mountain. The sky was a dull, ominous grey, confused little wisps of clouds floated aimlessly around below us in the Matanuska Valley, and a huge ring around the sun boded no good.

Our situation was truly absurd—with two full months to devote to the ascent of a 13,000 ft. mountain, after landing with an airplane almost halfway up it, we had spent four weeks waiting in Valdez before we could so much as fly to our base. We had now used up an additional eighteen days advancing camp a scant ten miles along an easy glacier and 2300 ft. up a technically easy ridge. Gabriel and I were due in Valdez by July 1. He was to meet a party of Harvard men who were to spend the month of July ski-ing on the Columbia Glacier, and I was to meet Terris and Katrina Moore for the Sanford climb. We had truly expected to encounter the worst of weather on Mt. St. Agnes, but we had never dreamed of anything so diabolical as this.

The barometer which had already reached a dishearteningly low level had begun to fall again, and another storm seemed undoubtedly to be on the way. In this part of Alaska it is questionable whether one can ever refer to one storm or another as a separate disturbance. The lulls between the gales seemed to last just long enough for the wind to shift officially into another quarter before starting out on a new rampage.

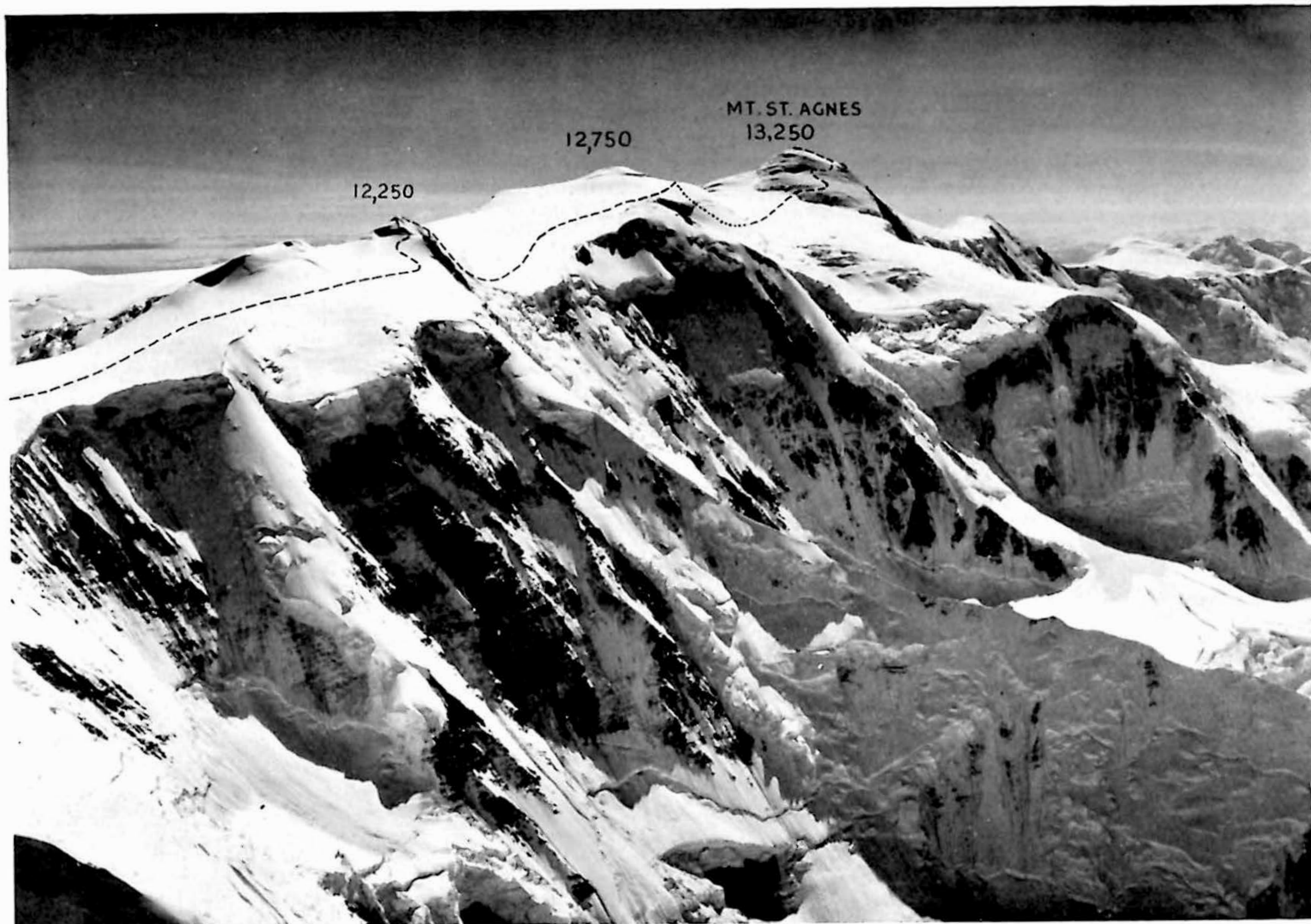
Furious beyond words with St. Agnes and her deceitful moods,

we started out just before 9 A.M. on June 19 determined to climb until we could go no further. This was obviously our last chance, if there was to be any hope of our reaching Valdez when we were supposed to be there. Moreover, every one of these snowstorms was now bringing heavy rains to the glacier below Camp II, and it was becoming more and more problematic whether the surface of the ice, stripped of its smooth covering of winter snow, would not be too rough for the airplane to land to take us out again. The prospect of the long walk down the Matanuska Valley was none too reassuring.

The weather hung in the balance. Following the remnants of our trail of the 18th, we traversed the crevasses above camp and made the 11,000 ft. shoulder in about two hours. Above this the snow was hard packed by the wind, and the crest of the ridge was broad and easy walking. At 12.50 P.M., advancing at top speed, we reached the summit of Pk. 12,250 ft., its last 300 ft. a superb knife-edged arête of wind-packed icy snow.

Disappointing as was the weather with its curious seas of clouds scattered here and there below us, and its high grey haze, the view from this sharp little peak was a magnificent thrill. To the east stretched all the peaks of the Wrangell Range—Sanford, Drum, Wrangell, and Blackburn, clear as crystal beyond the limit of our curtain of clouds, and sparkling in beautiful sunshine against a clear, blue sky. Ahead of us rose the long, gentle northern slope of Pk. 12,750 ft., and at last, after weeks of waiting, just to the right of this we caught our first glimpse of the actual summit of Mt. St. Agnes. At our feet a 50° ridge dropped over 800 ft. into the deep col separating us from Pk. 12,750 ft.

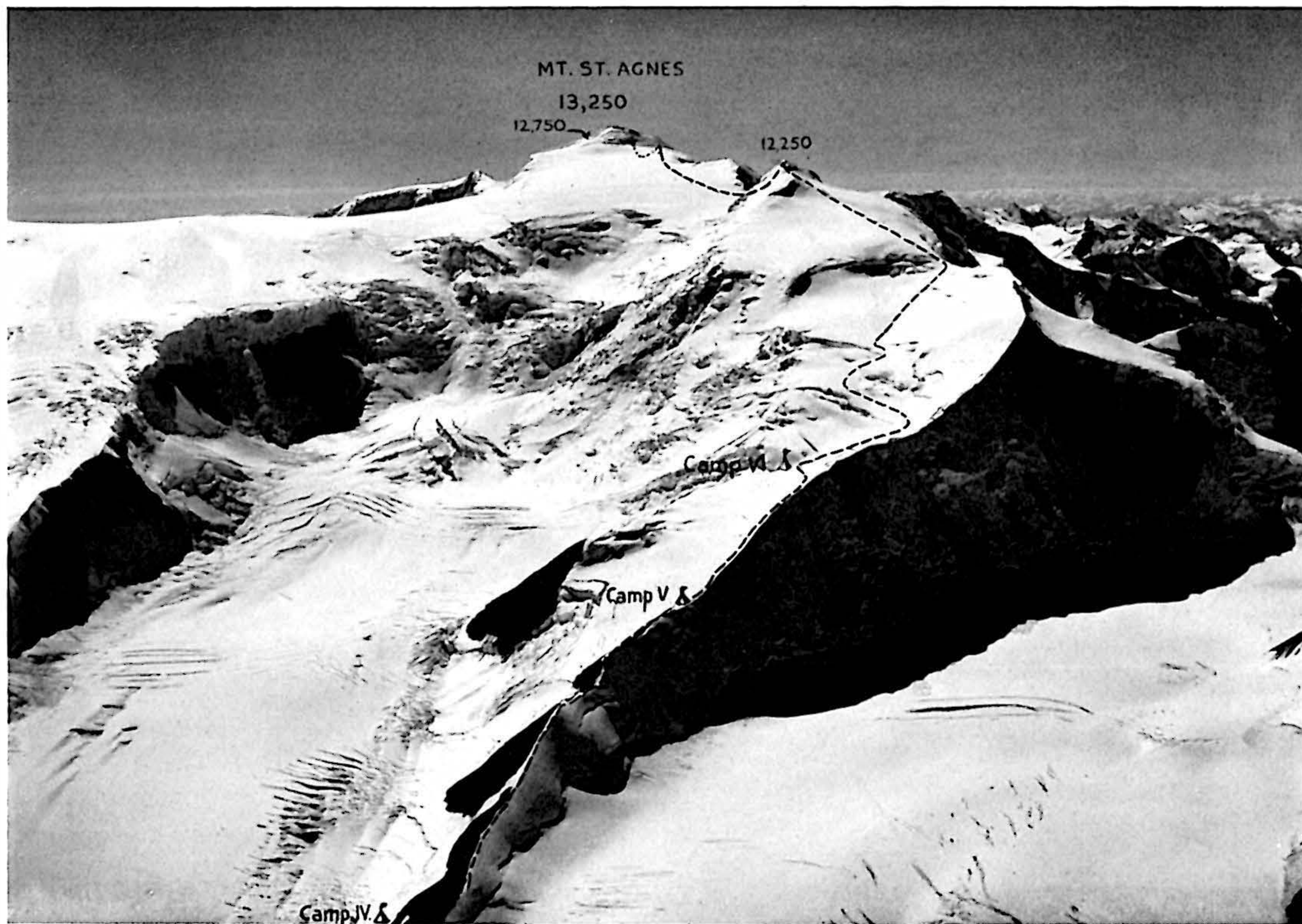
The weather looked as though it would hold for a few more hours. It was still ominously calm. Scarcely a cloud moved in the valleys about us. As far as the eye could reach, the ocean to the south was hidden beneath a motionless sea of mist whose upper surface hung at about 11,000 ft. We decided to take one fierce crack at the summit while we still had a chance to make it. We had used crampons to reach the top of Pk. 12,250 ft., and they continued to stand us in fine stead for the steep descent into the notch now below us. The long slope rising on the S. side of the notch was tedious rather than difficult. Snowshoes here would have proved a godsend, but these we had abandoned just before noon when we had put on our crampons to make the final ridge of Pk. 12,250 ft. After a long, hard battle with deep drifts, we finally came out on the shoulder of Pk. 12,750 ft., overlooking our last gap, at 3 P.M. A broad gap of drifted powder snow stretched below us—beyond it, a mile ahead, rose the last 1000-ft. cone of Mt. St. Agnes.



Photo, B. Washburn.]

MT. ST. AGNES, W. FACE, SHOWING HEAD OF KNIK GLACIER.

[To face p. 218.]



Photo, B. Washburn.]

MT. ST. AGNES FROM THE AIR, N.W. SIDE, SHOWING ICEFALLS AT HEAD OF MATANUSKA GLACIER.

A light, south-east breeze was beginning to pick up, and tiny wisps of cloud to drift lazily across the gap below us. The crazy patches of mist scattered down the Knik Valley to our right were rapidly marshalling forces for the fray, already forming a single blanket that climbed higher toward us every minute.

Abandoning our survey equipment, we descended into the gap as fast as waist-deep floury snow would permit. We munched a bite of lunch in the hollow at 3.30 P.M. (our only meal of the entire day), and then floundered on in a last effort to reach the summit cone before the clouds enveloped us completely, but we were an hour too late. At 4 P.M. the mist rolled in about us in one vast billowy sea, and light snow began to fall. We picked our way gingerly upward among the great crevasses of this ice-capped summit, remembering as best we could the line of attack which had seemed most obvious from our lunching place. At 4.30 P.M., after considerable zig-zagging, we struck the final ridge. Painstakingly marking every inch of our route with willow wands, we pressed ahead into a biting easterly wind laden with frost particles which made amusing caricatures of our weather-beaten faces. At 4.50 P.M., tired but triumphant, in dense fog and an icy breeze, we reached the summit of Mt. St. Agnes.

The clouds about us were so thick that Gabriel and Bright, who were only 100 ft. behind Dyhrenfurth and me, were completely lost to view and suddenly appeared, melting like spectres from the driving mist. The summit was dome-shaped and unmistakable—20 ft. or more in diameter, with precipitous slopes dropping off to the north-east and south. Bitter as was our disappointment at missing what must be one of the grandest mountain views in North America, we were warmed by a sort of fierce pride at having conquered Mt. St. Agnes—a pleasant sensation which one can only have when he has struggled desperately to gain an unexpected goal. The temperature on top was 16° , and a frigid little wind, that constantly seemed to be increasing, awoke us suddenly after a few moments of rejoicing. At 5 P.M. we left the summit. The long arduous descent with its two disheartening uphill climbs ended at 10.30 that night when we at last stumbled into camp, dog-tired but happy beyond words.

Scarcely had we brewed ourselves a little supper, and wriggled wearily into bed, than the new storm struck. All that night the wind roared, and the snow hissed and drifted past our little camp with renewed vigour. Late the next day, during the usual evening lull, we abandoned camp and descended as fast as safety allowed, reaching the old site of Camp IV at 6 P.M. in as furious a blizzard as we had encountered on the entire trip. Our old

cache was completely snowed under, and we passed a miserable night huddled in a heap in our small emergency tent, with the wind and snow simply shrieking past outside. St. Agnes seemed to be putting up a game fight to the very end, but that hectic night turned out to be her final stand. The next day dawned superbly clear—the only clear day of the entire climb, and even on this day a storm was still raging on the summit—and we managed to retrace our steps on fine hard crust all the way to Camp II.

The radio rallied magnificently to our call. Loose, rough snow, and cracks in our old landing field at Camp I, forced us to choose a new place for the airplane to land on a wide, smooth slope just below Camp II. Here the heavy rains had not yet thawed away the glacier's smooth winter surface, and we snowshoed a firm runway, 2000 ft. long and 80 ft. wide. On the morning of June 23, Bob Reeve swooped in from Valdez, and, in two quick flights, brought us and all our equipment safely home to civilisation.

The Mt. St. Agnes adventure was, to say the least, a bitter experience. Evil as we had expected the weather to be, the Chugaches harassed us with a series of storms that I am sure none of us will ever forget. Ordinarily, no matter how bad the weather on a mountain trip, one is rewarded by an occasional clear day, if he is only willing to wait patiently. During the five months between April and October, 1938 that I spent in the vicinity of this mountain, occupied partly in climbing and partly in aerial mapping for Harvard and the National Geographic, we enjoyed only seven truly clear days. Four of these days occurred in succession in August, and on only two of them was the entire mass of the Chugach Range clear of clouds. The weather in this part of Alaska is wretched beyond the remotest limit of the imagination, but were it not for this amazing deluge of nearly 300 ins. of rain a year, the Chugaches could never present to the climber their magnificent snow-festooned ridges and enormous glaciers, their weird cloud effects and glorious sunsets. A first ascent in the Alaska Coast Range will for ever be a prize well worth the winning.

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² For Mount Logan, see *A.J.* 37. 89 *sqq.*, 334 *sqq.*, 38. 252 *sqq.*, 39. 1 *sqq.* For numerous other *A.J.* references see *A.J.* 50. 95, footnotes.

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³ This article is well worth studying for those who are interested in the history of the first ascent of Mt. McKinley, N. Peak.—EDITOR.