

the erection of the statue of Maréchal Foch in London and was created an Officer of the *Légion d'Honneur* in 1933.

Her works on the Alps and mountaineering in general were very numerous and some were highly successful: *High Alps in Winter* (1883), *High Life and Towers of Silence* (1886), *My Home in the Alps* (1892), *Hints on Snow Photography*—in which she was a veritable expert—(1894), *True Tales of Mountain Adventure* (1903), *Story of an Alpine Winter*—St. Moritz, a novel—(1907), *Mountaineering in the Land of the Midnight Sun* (1908), *Day in and Day out: reminiscences* (1928).³

To her many friends, Alpine and others, Mrs. Le Blond's death in the fulness of her mental powers came as a grievous shock. She was one of those who could not grow old. Her skill as a mountaineer, like her extraordinary kindness to all, will live in the memory of her *Home in the Alps*—and far beyond.

E. L. S.

EXPEDITIONS.

Dauphiné.

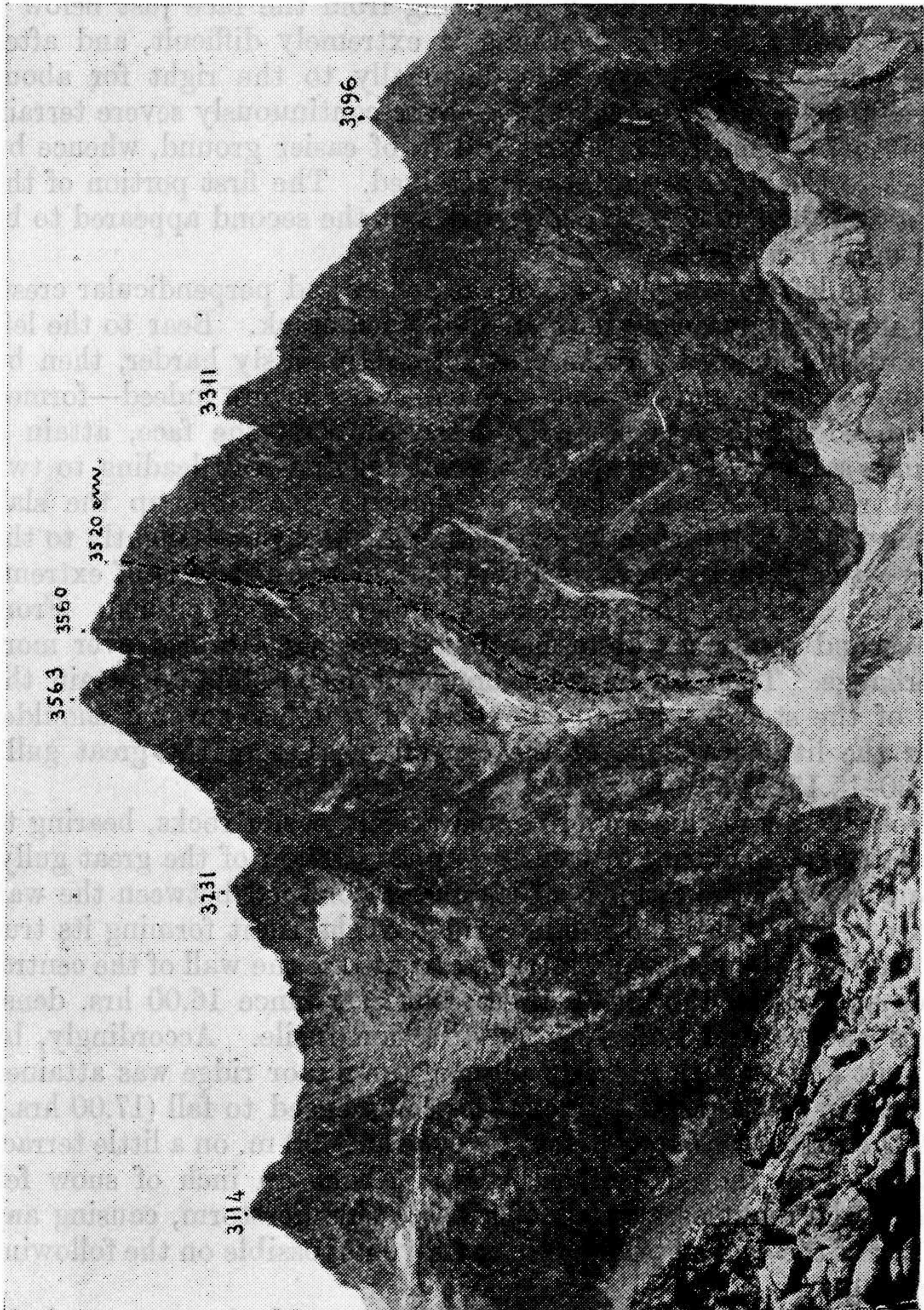
PIC D'OLAN, 3578 m. = 11,739 ft. (Central peak, 3563 m.). By the N.W. (Valjouffrey) face. August 23–24, 1934. MM. G. Gervasutti and L. Devies.

[A great gully seams the entire wall and lies, practically, about the centre of the said N.W. face. From above, the gully commences under a little gap of the main (watershed) ridge to the S.W. of the central peak. It forms at first a deep and narrow cleft, and, after a short step, a series of oblique snow patches situated under the central peak. Below this point again the gully is cut off for a great distance by a slabby zone. A trickle of water alone indicates the presence of the cleft. Lower down again, in the plumb-line of the N. peak, it forms a smooth recess in which lie patches of snow. Thence the gully plunges straight down towards the uppermost portions of the small glacier situated at the foot of the wall. A kind of buttress bounds the great gully to the right: this buttress is approximately the line of ascent.]

From the Font Turbat hut (4 hrs.) bear across the torrent and attain the bergschrund at the base of the face by means of the moraine and the small glacier, 05.15. At 05.50 the party commenced the ascent by bearing some 25 yards to the right of the water streaming down from the great gully. Climb first by slabs, then by ill-defined and difficult cracks (2 pitons). Now by rocks provided with good holds to the first of three caves noticeable from below

³ She had also translated some of Maréchal Lyautey's works, who, strangely enough, died on the same day.

to the right of the great central gully. The exit thence is to the right by difficult chimneys and cracks, whence they continued by a rib separating the great gully from a little rocky couloir more to the right. The ascent of this rib is nearly perpendicular and very



Photo, L. Devies.]

PIC D'OLAN, N.W. FACE (FROM A POINT ON THE WAY TO AIGUILLE D'OLAN).

x = bivouac.

exposed, but the holds are good (2 pitons); the rib is accomplished by keeping a little to the left of the crest for some 330 ft. till one attains a rubble-strewn shoulder (cairn built, 08.20–08.30), close to the refuse receptacle of the great gully.

The ascent now continues diagonally to the right by easy rocks

to a yellow step appearing to be formed by a tower; then by more difficult ledges and low walls—still to the right—towards a deep grey-coloured chimney interrupted by great overhangs. Now clamber up the yellow vertical wall about 100 ft. to the left of the deep-cut chimney. A low perpendicular step is ascended straight up towards a loose boulder projecting from the face just below a yellow overhang. This overhang is extremely difficult, and after overcoming it the party bore diagonally to the right for about 350–400 ft.—some 3 rope-lengths—over continuously severe terrain (5 pitons). Then follow about 100 ft. of easier ground, whence by ledges to the right a platform is attained. The first portion of the great step had now been conquered, but the second appeared to be still more formidable.

To the left towers the edge of the yellow and perpendicular crest, and immediately below it is an ill-defined crack. Bear to the left towards the crack by rocks growing continuously harder, then by an overhanging and diagonal crevice—very severe indeed—formed by an edge which is partially detached from the face, attain a minute stance. Above this is a great bulging slab leading to two small recesses situated below overhangs. Scramble up the slab to the first recess; then by overhanging edges gain—slightly to the right—the second recess. All this part of the ascent is of extreme severity, especially the ascent of the bulging slab (4 pitons). From the second recess the afore-mentioned crack is attained over more overhangs. Then by unstable cracks it is possible to attain the top of the step (2 pitons), composed of a *débris*-covered shoulder near the little ice slope of the central portion of the great gully (14.30–15.15).

Now by a fine climb over comparatively easier rocks, bearing to the left of a *gendarme*, attain the upper portion of the great gully. The surface of the latter is of ice and is confined between the wall of the central peak and a minor ridge to the right forming its true left bank. The party had intended to attack the wall of the central peak and attain the latter direct, but ever since 16.00 hrs. dense mists had rendered all sense of direction futile. Accordingly, by difficult and smooth rocks (2 pitons), the minor ridge was attained somewhat to the right. Snow now commenced to fall (17.00 hrs.), and the party was compelled to bivouac at 3300 m. on a little terrace parallel with the edge of the crest. About an inch of snow fell during the night as a result of a fierce thunderstorm, causing any attack of the central peak's face to prove impossible on the following morning.

At 06.30 the party accordingly commenced the ascent of the crest. Soon, however, a great step forced them away to the left. To the right of the surface of the great gully they were compelled to climb excessively difficult rocks covered with snow and glaze (10 pitons).

However, at 10.30, they finally attained the watershed some

few feet to the right of the afore-mentioned gap forming the summit of the great gully, between the central and S. peaks.

[The height of the wall is about 3700 ft., the 'times,' halts excluded, about 15 hrs. 10 mins. About 4 pitons were left behind. The entire ascent was made in *Kletterschuhe*, boots having been left behind at the bergschrund.

The ascent is of extreme difficulty and is comparable to that of the S. arête of the Aiguille Noire de Péteret, of which both members of the party had made the ascent.]

L.D.

[We must congratulate the party on the solving of one of Dauphiné's most magnificent faces—and problems.—*Editor*.]

Pennines.

DENT DU MIDI (*Cime de l'Est*), 3180 m. = 10,434 ft. By the E. arête,¹ taken in the *descent*. September 25, 1934. M. E. R. Blanchet with Kaspar Mooser. The angle is very great—greater than appears in the illustration. The descent—some 650 ft.—took 4 hrs. The rocks of the upper two-thirds, crumbling limestone, are dreadful. The lower 200 ft. is composed of mostly good, but practically vertical rock. In order to 'sweep' two superimposed chimneys, two *rappels* were made, but these were perhaps not obligatory. In the last 80 ft. a *rappel* was, however, a necessity, as the lower portion overhangs. Nevertheless, by bearing rather more to the N., it might be possible to avoid the overhang. The Plan Névé Glacier was attained by a rather awkward ledge previously traversed.

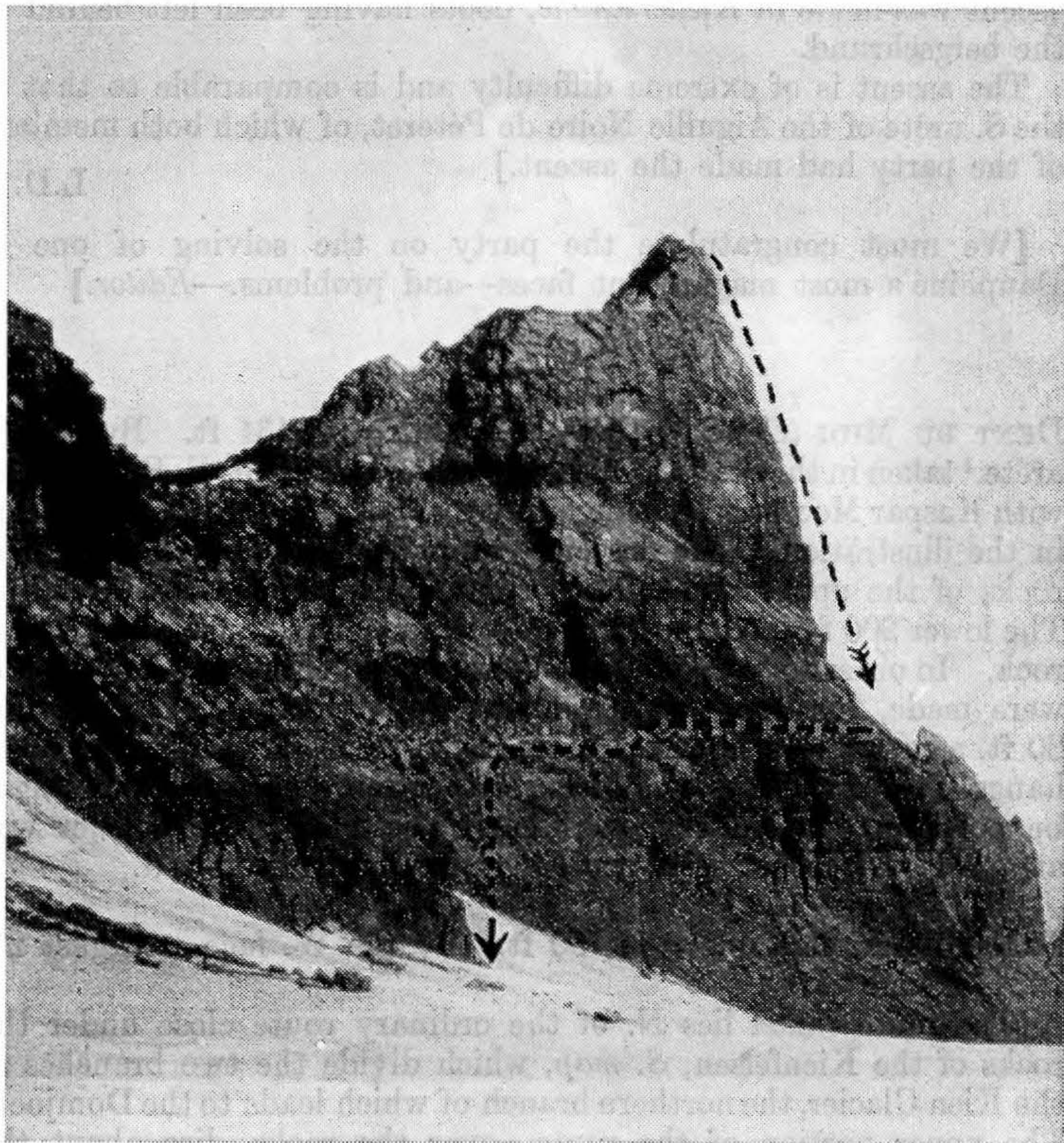
TAESCHHORN, 4494 m. = 14,750 ft. By the W. face. August 25, 1934. Same party.

[The route taken lies N. of the ordinary route close under the rocks of the Kienfelsen, *S. map*, which divide the two branches of the Kien Glacier, the northern branch of which leads to the Domjoch. The upper portion of the route—over the rocks—lies about the 'hho' of the word *Taeschhorn*, *S. map*. (This latter portion is to the N. of the usual route which joins the S.W. arête, *Teufelsgrat*, in its last 200–300 ft.) The variant is not difficult, but the ascent of the rock wall is excessively dangerous.]

From the Kien hut mount the S. branch of the Kien Glacier, keeping near the rocks of the above-mentioned Kienfelsen. Then climb the very steep rock wall—dry on this occasion—crowned with dangerous séracs. These latter were scaled by a breach in the sérac rampart found exactly in the line of ascent. This appears to be the one fault in the otherwise vertical sweep. The party then bore to the right, S.E., over snow-covered ice slopes towards the ordinary route. Here a snowstorm caused the party to descend

¹ The ridge so conspicuous from Montreux or Bex.

erroneously towards the Domjoch before attaining the summit. Discovering their mistake, they retraced their steps to the top. In thick fog they again went astray, descended by the Saas rib,



CIME DE L'EST, SHOWING 1934 LINE OF DESCENT.

regained the summit, eventually found the S.E. arête, and, by this and the Mischabeljoch, regained Zermatt at 24.00 hrs.

In fog and bad weather, the numerous corniches proved very treacherous, necessitating the utmost care. Under the circumstances 'times' would be useless.

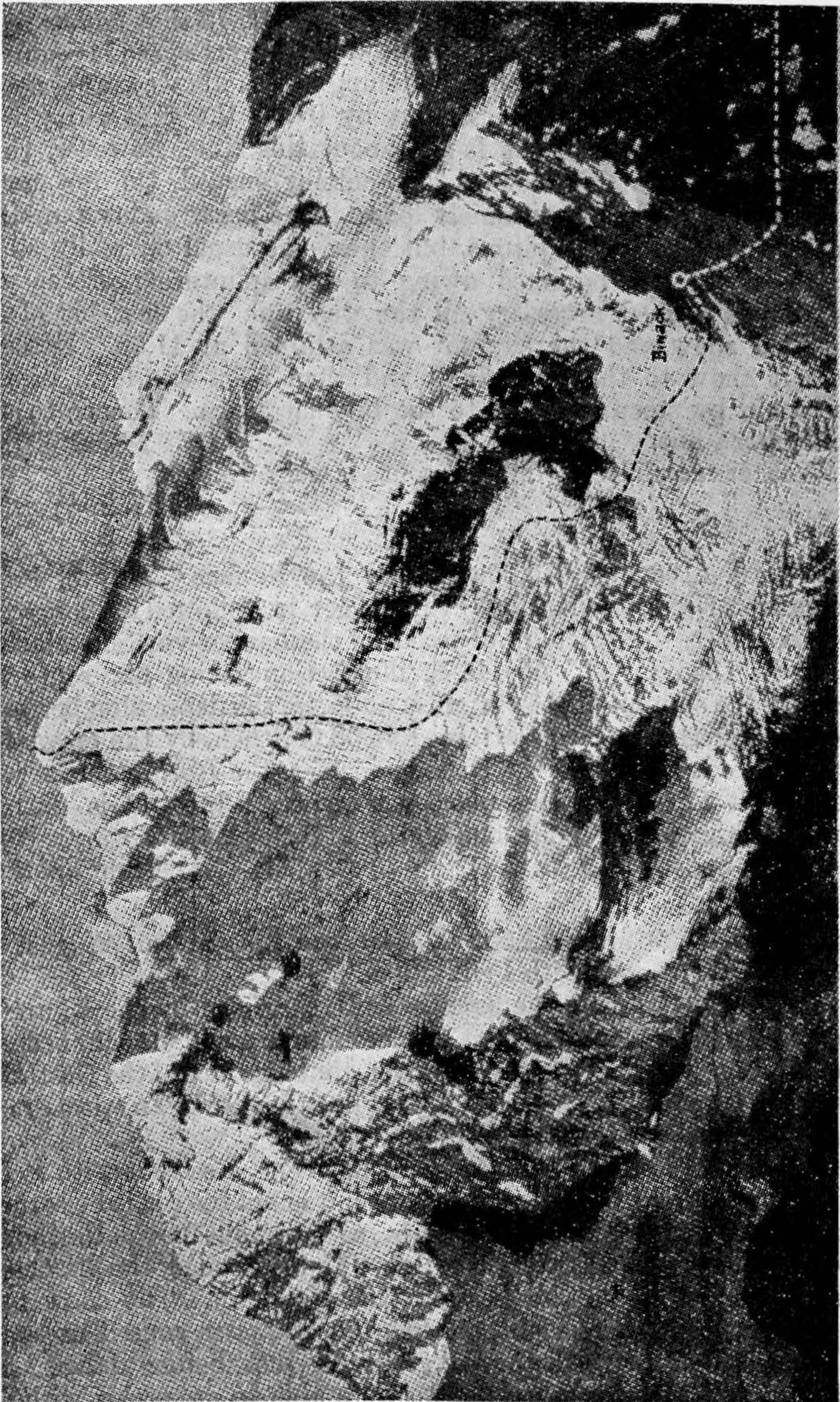
The rocks climbed on the W. face are shown as *too* snowy on the Siegfried map.

E. R. B.

Bernese Oberland.

GROSS DOLDENHORN, 3650 m. = 11,976 ft. By the N. face. July 8, 1934. Herren S. Plietz and M. Bachmann of Zürich. From the Doldenhorn hut, *via* débris in the direction of the Spitzstein (2793 m.,

S. map), then bear E. well below this point over laborious slopes leading to the main glacier basin. Having attained a spot whence



N. FACE OF DOLDENHORN, WITH 1934 ROUTE.

the imposing N. face of the Doldenhorn is perceived, bear N. towards a conspicuous rock in the moraine slope, left bank of the glacier,

affording shelter from storms. Bivouac here at about 2700 m. On the following morning, July 8, the party left the bivouac at 03.30, bearing N.E. to the glacier basin, then upwards to the bergschrund attained immediately below the summit. At 05.45 they cut straight up very steep névé slopes at first in good condition; speed is required on the lower third owing to threatening séracs above. The slopes soon attain extreme steepness, but by 07.00 the first party had overcome two-thirds of the face; about this time, however, they encountered ice and prolonged step-cutting ensued, the few rocks if possible at all being extremely loose. The party endeavoured to secure themselves with pitons, but these—as usual on really steep slopes—could not be fixed owing to the splintering of the ice. Handholds proved necessary all the way up; the last bit of all provided snow and the summit was attained at 11.30. Descent by soft snow to the *Leiterflühli* and then from the level of the Spitzstein by steep boulders to the bivouac place. Thence to the Doldenhorn hut.

Weather magnificent, but the route is very difficult.

From Sport.

JUNGFRAU, 4166 m. = 13,669 ft. By the N. face. July 8, 1934. Herr Ernst Gertsch with Hans Schlunegger, jr., followed in the *descent* approximately the exact line of ascent of the Lauper-von Schumacher party in 1926 ('A.J.' 45, 46–8, illustration facing 62, route 3). Leaving the summit of the Jungfrau at 05.45, the depression between the two Silberhoerner was attained at 08.00, then, by the crevassed névé of the left bank of the Giessen Glacier, the Rotbrettlücke was reached at 12.00. In this place yet another Club hut is now in course of erection. Conditions and weather excellent.

From Sport.

NESTHORN, 3820 m. = 12,553 ft. By the S.E. arête. August 1, 1932. Mr. H. Booth with Felix Julen.

In July 1924, during the ascent of the Nesthorn by the N. arête, I came to the conclusion that the mountain could be climbed by the E. face. It would appear, however, that this face of the Nesthorn had been ascended previously by Captain V. J. E. Ryan with Franz and Josef Lochmatter (see 'A.J.' 45, 357).

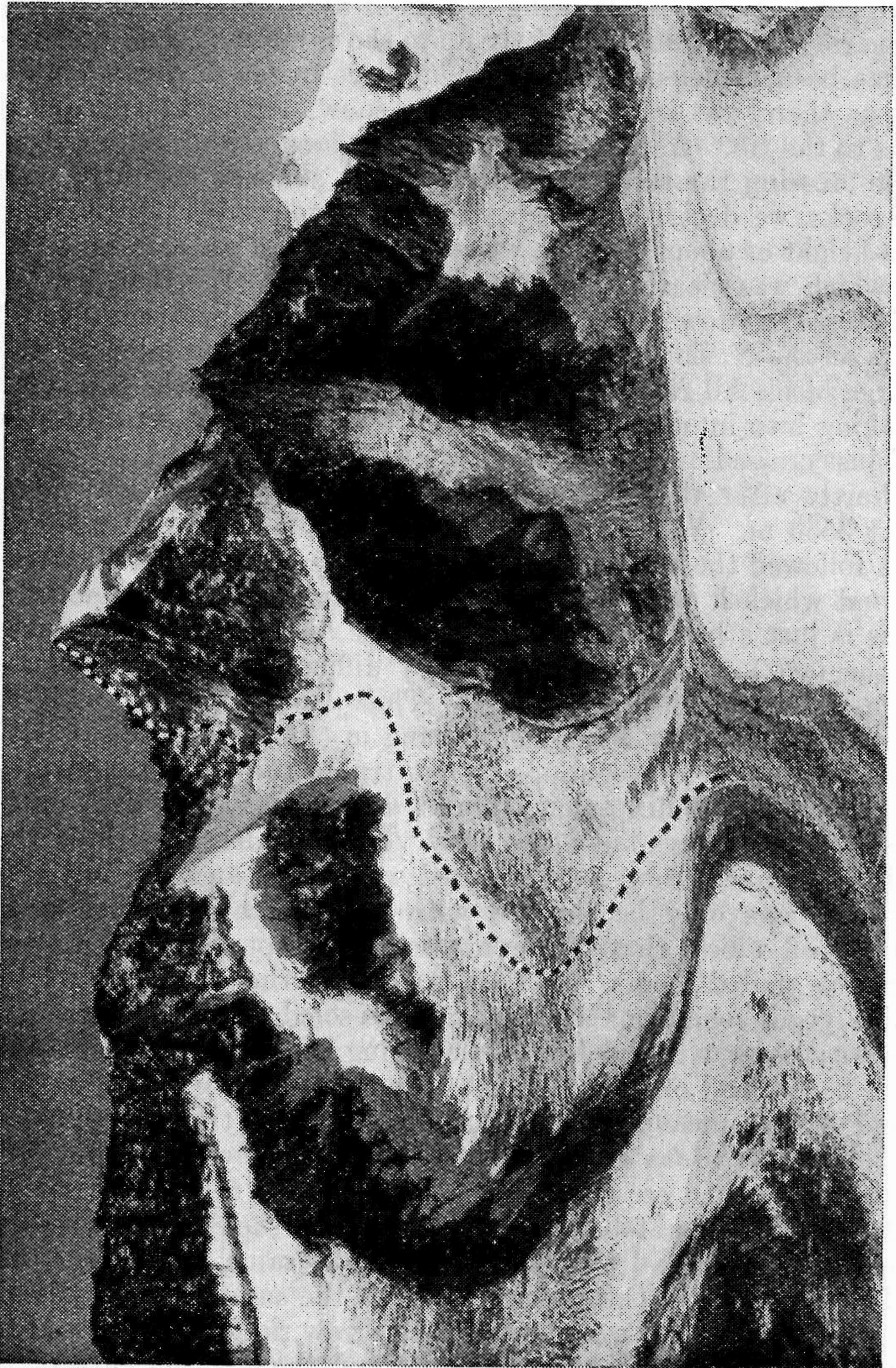
On July 31, 1932, in ignorance of this event, I set out with Felix Julen from Belalp for the Ober Aletsch hut in not too settled weather. At 01.00 on August 1 the sky was clear, so we set out for the Nesthorn. We crossed the Ober Aletsch Glacier and ascended the nameless glacier descending to the E. from the Nesthorn. The snow had not frozen during the night, so that the crevasses caused us some difficulty. We reached the bergschrund just before dawn. By descending a little to the right we were able to cross this without difficulty; we then traversed up soft snow to the left and, after crossing two more bergschrunds, without difficulty got on to the

face of the mountain a little to the S. of a deeply-cut couloir (the S. branch of the one descending from the summit). The rocks were generally easy and good, but there were some loose places and difficult slabs to cross. In general we worked to the right, crossing some patches of snow, it being our intention to attain the S. slope of the rib of rock leading directly up to the summit. Unfortunately, as has been mentioned, the snow had not frozen during the night, and as there was ice underneath the snow, we could not quickly cross to the rib. As there is clearly some danger from falling stones while crossing the snow patches, once the sun has begun to warm the rocks, we decided to keep straight up towards the S.E. arête. At a height of about 3500 m. we stopped for half an hour on a faint rib which was clearly safe from falling stones. We then went on and crossed a snow depression to the right, N., and had been climbing rocks on the N. slope of this depression for about ten minutes when a large block fell from the crest of the lower part of the S.E. arête, breaking into innumerable fragments over the snow depression we had just crossed.

Shortly after this we reached the S.E. arête some way above point 3533 m. We turned the first big tower on the N. side, and then followed the ridge, difficult in places, to a large patch of snow beyond which it was clear serious difficulty would be encountered. (This is just a little above the top of the highest large snow patch on the face.) After climbing a very difficult step, we reached a ledge resembling a mantelpiece. This place coincides with the description given by Mr. G. W. Young in 'On High Hills'² as the place on which Mallory slipped when trying to turn the difficulties on the S. side. Felix Julen attempted to traverse the slabs on the N. slope of the ridge, but found these very difficult. The slabs when Mallory climbed them were covered with snow and ice, but when dry they can only be climbed with very great difficulty, as the granite of which they are composed does not afford very good grip for nailed boots, so that to climb the ridge completely under good conditions rubber or rope-soled shoes are essential. The weather was now definitely becoming bad, so we decided it was wiser to descend on the N. side of the ridge to avoid trouble. We found when endeavouring to turn difficulties on that slope, that it was obligatory to *descend* to the top of the large snow patch mentioned earlier. We then crossed the face to the series of chimneys in the E. face, which I had followed on the descent of the S.E. arête in 1924. These are never really difficult, but at the same time never easy, and we reached the last rocks just below the summit shortly before 10.00. After a meal we followed the narrow ridge to the actual top (10.30). The weather became worse and the greater part of the descent was made in mist, which conveniently cleared, enabling us to find the best way down the steep crevassed glacier between the

² *Op. cit.*, p. 180 *et seq.*

Nesthorn and the Lonzahoerner. We reached Belalp at 15.20, just getting the first drops of the thunderstorm which we had been expecting since our departure from the summit of the Nesthorn.



NESTHORN, WITH 1932 ROUTE.

[The upper part of the S.E. arête of the Nesthorn provides rock-climbing of the highest order. When the slopes leading up to point 3533 m. consist of good snow, the S.E. arête can be reached at the commencement of the interesting part, avoiding the long

stretch of loose and tiring rock between the Unterbaechhorn and point 3533 m.—provided the above-described route is followed. The danger from falling stones is not serious if one of the slight ribs of rock on the E. face is reached before the sun begins to have any serious effect.

The final difficult piece of ridge can be avoided by following the route taken in 1924, which is the obvious line to follow when seen from above, entailing no unnecessary ascent or descent.]

H. BOOTH.

Bernina (West Wing).

MONTE DISGRAZIA, 3678 m. = 12,067 ft. By the N. face. July 10, 1934. Signori A. L. Albertini and G. Schenatti (the latter of Chiareggio).

Having attained the great bergschrund at the foot of the final wall on July 9, the party proceeded to bivouac there—on the Disgrazia Glacier. On July 10 they crossed the schrund at its W. extremity and then bore E. across the base of the face towards the lower third of the rocky buttress situated below the hanging séracs in the centre of the face. Then by the western edge they climbed up with serious difficulty to the great bastion. This latter was easily climbed to the crevasse separating the bastion from the upper slopes (4 hrs.). The crevasse was crossed at its W. edge, followed by a diagonal movement to the E. over the extremely steep ice slope abutting against the final rocky cliff of the summit (3 hrs.). This cliff, already of excessive difficulty, was rendered far worse by bad conditions; it consists of a succession of small smooth slabs varying between an excessive angle or absolute perpendicularity. All this either plastered with snow or polished with ice. The cliff or rampart, some 300 ft. high, was scaled almost directly upwards, with but negligible deviations, to the summit itself, *ca.* 5 hrs. (or 13 hrs. 25 mins. from the base).

A. C.

[This is the direct ascent of the N. face: the previous routes (see pp. 204–5) having attained the N.W. arête somewhat below (W. of) the summit. Professor Corti considers the ascent as among the hardest accomplished in 1934.—*Editor.*]

Alaska.

MOUNT FORAKER, E. (or N.E.) Peak (about 17,300 ft.), August 6; W. (or S.W.) Peak (about 17,000 ft.), August 10, 1934.

[Mt. Foraker stands isolated in the Alaska Range about 15 miles S.W. of Mt. McKinley ('Denali'), these two great mountains having no near rivals in height. It is more difficult of access than Mt. McKinley, and one of the obstacles faced by the present expedition was the lack of knowledge with regard to the formation of the mountain and the topography of its glaciers. Before 1934, the nearest human approach to the base of Mt. Foraker had been



made by the few parties who had visited the snouts of the two Foraker Glaciers and the Herron Glacier, about 20 to 25 miles distant from the summit; and the nearest linear approach had been made by the two parties who have reached the S. peak of Mt. McKinley. Photographs taken from the tundra plains N.W. of the mountain seemed to indicate a possible route by a S.W. ridge, attainable from the Herron Glacier—which itself was supposed to originate in a great névé basin (or in a collection of glaciers) which drained the whole N.W. slopes of Mt. Foraker.]

Mr. Charles S. Houston's expedition consisted of himself, Carl Anderson (of Anchorage), Oscar R. Houston, C. M. Storey, jun., C. Waterston, and T. Graham Brown. The first and the two latter formed the climbing party, but each member of the party was essential to the ultimate success of the expedition, which all members share. No porters were with the party, and the limits of time available for the ascent prevented the portage of more supplies than were essential for a high-climbing party of three men only.

The party was fortunate to reach McKinley Park Station (on the Alaska Railway) on *July 3*, as its plans had been completely upset by a strike of the longshoremen on the Pacific Coast. That night was spent in camp at Copper Mountain, about 60 miles W. of the Station, reached by motor-car over road. The horse-pack train was met there, having been sent on beforehand.

July 4 to 7 was spent on the journey of about 70 to 75 miles to the S.W. over untracked country—chiefly tundra-covered moorland, with occasional belts of timber or dwarf alders and willows along the fast and deep rivers which had to be forded. Camps were made at McKinley Bar, Muddy River, and Birch Creek; and the party reached the Foraker rivers on *July 7*, camping near their confluence, with the intention of going on next day to near the snout of the Herron Glacier.

An unclouded view from the camp next morning (*July 8*) showed possibilities on the N.E. ridge of Mt. Foraker, and the day was spent in ascending the highest point [*'Spy Glass Hill,' ca. 5800 ft.*] of the foothills between the snouts of the E. and W. Foraker Glaciers. The view, perhaps one of the finest mountain views in the world, embraced Mt. McKinley on the left (N.E.) and Mt. Foraker on the right (S.) with the whole of the lower intervening watershed ridge. The N.E. ridge of Mt. Foraker looked to be feasible *if its lower end could be reached*, and the W. Foraker Glacier (and *not* the Herron Glacier) was seen to drain the visible side of the mountain. The further journey was therefore postponed until another exploration decided the feasibility of the proposed route—which was the more attractive because a high camp on the above glacier might also serve for an attempt upon *'Mount Hunter.'*

On *July 9* an attempt to explore the W. Foraker Glacier was turned back at a point about 4 miles up the glacier by a severe storm. *July 10* was spent in camp (snow).

The climbing party, with Carl Anderson in addition, set off on *July* 11 to explore the W. Foraker Glacier. On reaching the first bend (to the right when ascending, or to S.W.) the N. face of Mt. Foraker came into view, a wonderful, abrupt slope (average angle probably between 35° and 40°) of ice and rock. This face, one unledged wall, is about 12,500 ft. in vertical height from flat glacier (about 4700 ft. in the basin under the face) to the summit of the E. (or N.E.) peak of Mt. Foraker (about 17,300 ft.). The N.E. arête of Mt. Foraker was seen (as also from Spy Glass Hill) to rise steeply (for perhaps 6000 or 7000 ft.) from the S.W. end of a long horizontal section of the main watershed ridge which continues N.E. to the mass of Mt. McKinley, being interrupted by two small elevations between the two greater summits. The nearer of these to Mt. Foraker is the central of three nearly equal peaks set at right angles to the watershed ('The Bridesmaids'), and the intervening ridge appeared to be about 3 miles long. Its flank looked to be too dangerous to attempt; a practicable route over the N.W. and Central 'Bridesmaids' existed, but seemed to be too long for the limits of date. Another fine arête (probably N.W.) ran across the view up the W. Foraker Glacier (which arises in the basin between 'Bridesmaids' and Mt. Foraker, and makes a great bend under the N. face of the latter mountain). This arête looked to be practicable, and the party bivouacked on the left lateral moraine of the glacier, about 18 miles above its snout and opposite the great face.

Early on *July* 12 the party left the bivouac and ascended a feeder ('Tranquillity Glacier') of the main glacier for about 3 miles, when a col between the Foraker and Herron Glaciers was reached at 'Tranquillity Pass' (crossed by the base party, which then descended the Herron Glacier, on August 3). A small point ('Scree Peak,' about 7300 ft.) to the N.W. was ascended for examination of the N.W. arête, which rises from 'Tranquillity Pass' (about 5800 ft.). Two sharp snow and ice ridges (one from the pass, one from the Herron basin) converge at a snow point ('Junction,' about 9000 ft.). The narrow ridge then rises to another point (about 9400 ft.) at the outer end of a long horizontal arête (distance from 'Junction' to this point, about 1300 ft.; from the point to the inner end of the snow arête, about 1800 ft.). Above the inner end of the horizontal arête, the ridge (there very narrow and steep) rises abruptly to a 'First Platform' (about 10,050 ft.), and thence again to a 'Second Platform' (about 10,700 ft.). Above that a steep, but easier, snow slope rises to a rock-crowned 'First Hump' (about 11,320 ft.), and another similar slope rises to a 'Second Hump' (about 11,900 ft.), also crowned with scattered rocks. Here the ridge disappears in a steep face which ascends to a rock skyline, the 'Cock's-comb,' about 14,000 ft. at the point above the main ridge. The lower part (600 ft.) of the face above the 'Second Hump' consists of a steep snow slope; above that are steep rocks, then easier rocks, then steep rocks again, increasing in angle for the upper

750 ft. The 'Cock's-comb' forms the outer edge of a high névé basin (invisible from the present viewpoint) from one side of which rises the higher E. (or N.E.) summit as a fine rock-sprinkled cone with a final *calotte*; and from the other side of which rises the Lyskamm-like W. (or S.W.) summit, a mass of ice-cliffs. These summits are about 2000 ft. or more above the surface of the basin.

This N.W. ridge was seen to be practicable. It resembles a greatly magnified 'Old Brenva Route' seen in mirror image, its height of about 8200 ft. from 'Tranquillity Pass' to 'Cock's-comb' (11,500 ft., pass to summit) contrasting with the 3300 ft. of elevation of the Old Brenva Route between *Col Moore* and the Col de la Brenva (4340 ft., col to summit). The party descended to the camp that day (*July 12*), and the decision was made to fix it as the Base Camp (about 1800 ft.) and to attempt the climb by the W. Foraker Glacier and the N.W. ridge.

On *July 13* the tents were struck and the horses managed to pack the food and equipment up to a point on the right lateral moraine of the W. Foraker Glacier about 1 mile above its snout and about 5 miles from the Base Camp site (a magnificent piece of horse packing which, however, should not be repeated). The party, with light packs, reached the same point, where Camp I (about 2480 ft.) was made. The horses returned towards home under the care of Bill Alloway.

July 14 and *15* were occupied by the carriage of loads about 4 miles up the moraine, Camp II (about 3910 ft.) being established there on the latter date.

On *July 16* and *17* loads were carried about 9 or 10 miles up the glacier to a cache, the party returning to Camp II; *July 18* was taken as a rest day at Camp II to dry clothes wet by the rain and snow of the preceding days; on *July 19* further loads were carried up to about 2 miles beyond the cache, where Camp III (about 5180 ft.) was made on the terminal moraine of the glacier which descends N. from 'Tranquillity Pass' without actually merging in the W. Foraker Glacier. *July 20* and *21* were spent in bringing up loads from the cache on the glacier, some loads being carried further upwards to Tranquillity Pass on the latter date.

An attempt was made by the climbing party, on *July 22*, to find a way up the N. terminal branch of the N.W. ridge. The route was not practicable for the carriage of heavy loads.

A practicable, but difficult, route was found, on *July 23*, up the W. terminal branch of the main ridge. The flank of the terminal branch was practically a steep icefall, and the chief obstacle was a great crevasse and a fragile snow bridge, the surface of which was about 50°. A point was attained on the branch ridge at about 8600 ft. and short of the 'Junction.' The party returned to Camp III.

Too much snow was falling on *July 24* to justify further progress, but an attempt was made on *July 25* to establish Camp IV at the

point reached on *July 23*. The weather was too bad, and the snow bridge was in too poor condition, to justify its passage; but a cache was made on the outer lip of the crevasse, and another on the glacier at the foot of the steep slope below it. The party returned to Camp III and struck the tents, leaving again with the final loads late that night.

The crevasse was reached again early on *July 26*, and all loads were brought up to its outer lip. Half of the party having crossed the snow bridge, the food and equipment were roped across the crevasse, while the remainder of the party crossed the bridge. A cache was made on a shelf dug in the steep upper snow, and the party carried initial loads thence up to the point reached on *July 23*, where Camp IV (about 8600 ft.) was pitched on a shelf dug into the side of the arête, a few feet below its crest. An ice cave was made there a little later.

July 27 was spent in bringing the loads up from the cache at the snow bridge, and on *July 28* snow was falling too thickly for further work.

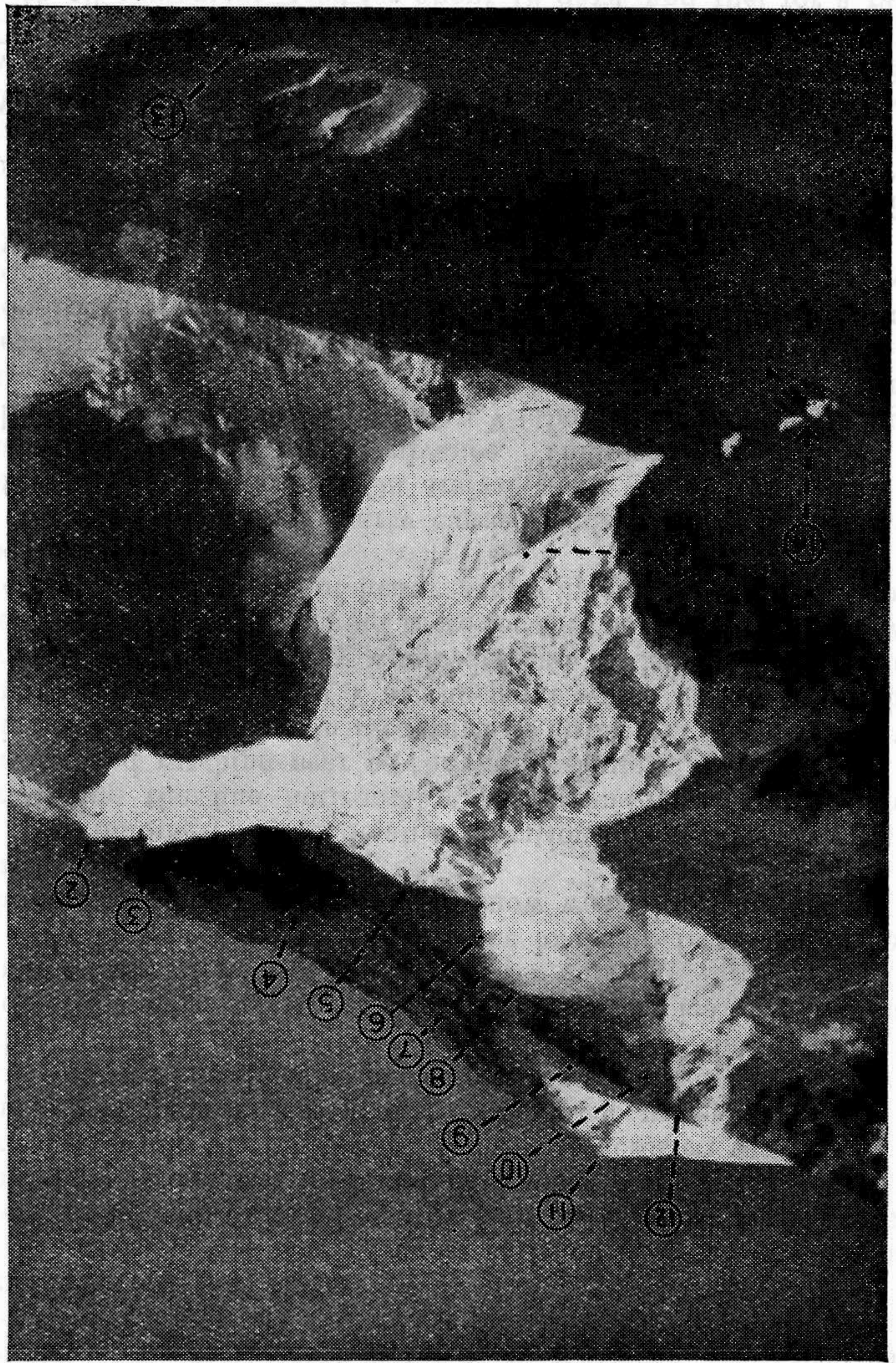
The climbing party made an exploration of the ridge on *July 28*, traversing the fine horizontal arête, ascending the steep upper crests, and reaching near to the 'First Hump' until stopped by high wind and hail. On its return to Camp IV, the decision was made to establish Camp V at the point which had been reached, whereafter the base party would descend to Camp III (a 'Logan' tent having been left behind there for this purpose). *July 29* was, however, another day of heavy snowfall, and advance had to be postponed.

On *July 30* the whole party carried loads as far as the inner end of the horizontal arête. On arrival there, snow was falling too heavily to admit of further advance. The loads were dumped, the climbing party then making Camp V (about 9700 ft.) a little higher up, on a shelf dug in under a protecting ice wall, and the base party returning. The base party was prevented by bad weather and conditions from reaching the snow bridge, but returned upwards back to Camp IV, where they slept in the ice cave and descended to Camp III next day (*July 31*).

Heavy snowfall on *July 31* kept the climbing party in Camp V, but on *August 1* it managed to bring the remaining loads up to the camp and also to carry loads further up to the 'First Platform.' A light snowfall later increased in severity, and an attempt to carry a second cargo of loads up to the First Platform was unsuccessful. On this evening the climbing party was established in Camp V with all equipment, food for about 18 days, and fuel for a rather longer period.

The bad condition of the snow prevented movement on *August 2*, but *August 3* was spent in reaching the First Hump and establishing Camp VI there (about 11,320 ft.) on a shelf cut in the lee of a large rock. All loads were also brought up to the camp.

On August 4 the climbing party succeeded in raising heavy loads to a cache above the first steep rocks on the face above. With



Photo, T. Graham Brown.]

light loads, it then reached the 'Cock's-comb,' established a cache of emergency food there, made a short exploration of the Great Basin, and returned to Camp VI. The upper rocks of the face had given some steep and interesting climbing.

The 'Logan' tent was struck and left at Camp VI next day (*August 5*), and the party carried a bivouac tent and loads forward. The day was spent in establishing Camp VII (about 13,350 ft.) on a steep snow slope (45°) between the lower and upper steep rocks of the face. This camp was made by pitching the bivouac tent on a shelf which was partly dug into the slope and partly built out from it upon the foundation given by a rock. All loads were also brought up to the camp.

A successful attempt was made to reach the higher E. (or N.E.) summit next day (*August 6*). Leaving the bivouac tent at 08.25 (late, because of the great cold), the Cock's-comb was reached in 55 minutes. This was followed for 50 minutes, and (after a halt) the party then descended to the Great Basin and went up (and then across) to the foot of the N.W. arête of the summit, reached (at 15,300 ft.) at 12.58. A ridge of scattered rocks was succeeded by a steepening slope of snow and ice, steps having to be cut towards the top. The angle of the ascent eased on the *calotte*, but a strong wind increased in violence. The summit was reached at 16.25, and the mountains to the S.E. and S. were seen for the first time. They seemed to be about 10,000 to 12,000 ft. in elevation, and there were no rivals to Mts. McKinley and Foraker. A pink mist obscured the unusual bird's-eye view; the party looked for Mt. Hunter without success, although it should have been plainly distinguishable if its height and position were those given on the maps. The temperature was only -4° F. (the base party found the day too hot below to travel during daytime), but the strong wind and commencing hail made the 'apparent' temperature far lower. (We had been warned to expect -20° to -40° .) An aneroid reading (forgotten on the summit) at the highest rocks about 10 minutes below the summit on the descent gave 15.7". The W. (S.W.) summit looked to be the lower.

The summit was quitted at 17.00 in increasing wind. A pause was made at the highest rocks aforesaid to leave a record in a tin (jammed between two stones). Inadequate shelter against increasing wind and hail was reached in the lee of a rock at 17.40. The foot of the arête was reached at 18.43, and the Great Basin was traversed by following a line of willow wands which had been planted during the ascent—it being impossible to see ahead for the distance of a rope's-length, and tracks having been largely obliterated. The Cock's-comb was reached at 20.40, and Camp VII at 21.28, in great cold. The ascent had occupied 6 hrs. 16 mins. of actual climbing, and the descent 3 hrs. 25 mins.—a total of 9 hrs. 41 mins.

In view of the arduous work of the past few days, *August 7* was taken as a rest day—the first deliberately so chosen. The weather deteriorated in the evening, and a very severe blizzard occupied *August 8* and *9*, 30 inches of new snow falling round the bivouac, but being compacted or blown off by the wind on the night of the latter day.

On *August* 10 the party left at 08.20, in good weather, to make an attempt to bring down the emergency food from the upper cache (should the storm continue), and reached it with some difficulty because of the snow and ice on the rocks. On arrival at the cache, the weather looked promising enough to admit of an attempt upon the lower (W. or S.W.) peak, which proved to be successful. The Great Basin was entered at once and traversed for about 6000–6500 ft. to a point where the route diverged to the foot of the E. peak (its N.W. arête had been reached thence in about 2200 to 2500 ft. across the Basin). Going now round to the right (S.) for another 6500–7000 ft., a point under the steep flank of the S.E. arête of the W. (or S.W.) peak was reached at 15.05, incipient frost-bite having caused delay. The interesting ascent of the flank (including a horizontal traverse of about 500 ft. on a slope of about 50° under a solid ice wall) occupied about $2\frac{3}{4}$ hours for perhaps less than 1000 ft. gain of height. The arête was finally reached through a crevasse in ice cliffs, and a platform was attained at 18.15, when another attack of frost-bite again delayed the party. A final steep and interesting climb (ice slopes, fissured) landed the party on the W. (or S.W.) summit at 19.14 (aneroid, 15·98"), when it was at once realized to be lower than the E. (or N.E.) summit. The view was again partially obscured.

The summit was left at 19.30, a variation (easier) was made on the descent to the Great Basin, the S.E. arête being followed to near its foot (there being doubled by a large wind hollow). Camp VII was reached at 23.15. The net climbing time for the ascent was 8 hrs. 40 mins.; that for the descent, 2 hrs. 57 mins.; and the total climbing time, 11 hrs. 37 mins.

The bivouac tent (in which the party had slept for six nights) was struck on *August* 11, and all food and equipment was moved down to Camp VI—a heavy day.

On *August* 12, a yet more arduous day. All loads were carried down to Camp IV, snow falling at times and the conditions being difficult—especially along the arête towards the 'Junction.' The party slept in the ice cave.

An attempt was made to reach Camp III on *August* 13. The party succeeded in bringing all loads down as far as the cache above the snow bridge, but at that point a severe storm commenced, and the snow bridge was too fragile to be crossed at the time. Here a tent was pitched on a shelf under the protection of a crevasse wall.

Although this shelf was only about 600 ft. above flat glacier, the downward slope below the crevasse was very steep, and dangerous after a snowfall. The party was consequently confined to the bivouac during *August* 14 and 15, snow falling heavily and continuously from *August* 13 to midday on the later date. Thereafter, during a lull, the remaining food supply was brought from the cache at the crevasse to the tent, and the decision was made to descend

after the next day of sunshine, if that occurred before the food gave out. Some sunshine during the afternoon of *August 15* was followed by a renewed (light) snowfall during the night, and the early morning of *August 16* being clear and brilliant, it was decided to wait another 24 hours at the bivouac and to force the descent on *August 17* whatever were the conditions (as food was becoming short). But the base party arrived at the foot of the slope that morning (having visited Tranquillity Pass on the preceding days without being able to see the tent), and Carl Anderson made a magnificent solitary ascent of the snow slope, finding that it was sufficiently consolidated. The descent was therefore made that day, all stores and equipment being roped across the crevasse and the fragile snow bridge being crossed in safety. The party then descended to Camp III, having spent 22 days above the glaciers on the great ridge.

Camp III was struck on *August 17* and loads were carried down to Camp II, which was then pitched. On *August 18* the site of Camp III was again visited, and the remaining loads were carried down to Camp II.

On *August 19* the party descended to the site of Camp I, made that camp, and spent the day carrying the loads down to it.

The Base Camp was reached on *August 20* with loads, and the remaining loads were brought down on *August 21*.

August 22 was spent at the Base Camp, and an attempt to explore the E. Foraker Glacier was made by Carl Anderson, C. S. Houston, C. M. Storey, and Graham Brown on *August 23*. No view was obtained during an ascent of $3\frac{1}{2}$ hrs. up the right bank, and the intention to bivouac was abandoned in very bad weather, the party returning to the Base Camp.

The horse train arrived on *August 24*, and the party started next day for the journey 'out'—camping at Birch Creek; near the confluence of Clear Water and McKinley Rivers; and on McKinley Bar near the terminal moraines of the Muldrow Glacier. Savage River Camp, about 12 miles from McKinley Park Station, was reached on *August 28*.

Mt. Foraker is a formidable mountain, and the route followed looked to be the only practicable one. Its average standard is at least as high as that of a first-class Alpine peak, and some of the passages were difficult, while much of the exposure was very great. The *net* climbing time for the whole route (as combined from the individual times of each first passage of a part of the route) was about 20 hrs. from Tranquillity Pass to the E. (or N.E.) summit. The great difference of elevation, 11,500 ft., between the foot of the route (at Tranquillity Pass) and the summit may be compared with the 9300 ft. of climbing elevation on the route up Mt. McKinley after the Muldrow Glacier is quitted. The long duration of the party upon the ridge (22 days) is in part accounted for by the 8 days of

inaction (only one of them an intentional rest day), but was chiefly due to the necessity of carrying ample supplies in case of a long-continued storm. The party actually thrice 'ascended' the mountain (during 'packing' operations) up as far as the Cock's-comb (14,000 ft.). Porters would have saved time, but the party had none, as its members wished to climb the mountain by themselves.

The organization of the expedition by Charles Houston was beyond praise.

A word may be said about the nomenclature of the Alaska Range, often criticized by writers. Proper names (of politicians, of male and female friends or relatives, and of members of exploring parties) have been attached to peaks and glaciers by travellers, who have sometimes merely seen them from a distance. 'Denali'—the Great One—is admittedly the correct (Indian) name for Mt. McKinley; and the Indians on the N.W. plains called Mt. Foraker 'the woman' or 'the wife'—Sheldon says that their name was 'Sultana, His (*i.e.* Denali's) Wife.' It is doubtful if there were native names for any of the lesser summits in the Alaska Range, but the approaching completion of a new Government map might give opportunity for a careful revision of the names now attached to these summits and to some of the glaciers.

T. G. B.

MOUNT FORAKER [July and August, 1934]. Illustration.

N.W. Ridge between 'Tranquillity Pass' and 'Cock's-comb,' taken from 'Scree Peak,' about 7300 ft., in the early morning (04.20); greatly foreshortened in upper parts. (The elevations given below are approximate only.)

- (1) Ridge explored on July 22.
- (2) 'Junction Point' (about 9000 ft.).

NOTE.—The route of access to Junction Point, and the site of Camp IV, are not shown. The route lay up a ridge to the right corresponding to that upon which No. 1 lies.

- (3) Outer end of horizontal arête (about 9400 ft.).
- (4) Site of Camp V, above inner end of horizontal arête (about 9700 ft.).
- (5) 'First Platform' (about 10,050 ft.).
- (6) 'Second Platform' (about 10,700 ft.).
- (7) Camp VI, at 'First Hump' (about 11,320 ft.).
- (8) 'Second Hump' (about 11,900 ft.).
- (9) Icefall of the Great Basin.
- (10) Approximate site of Camp VII (about 13,350 ft.).

NOTE.—The surrounding rocks are greatly masked in new snow.

- (11) Outer (W.) end of the summit ridge of the (lower) W. Peak. The (higher) E. Peak is not seen, it is well to the left of the photograph.
- (12) 'Cock's-comb,' at right (S.W.) end (about 14,000 ft.).
- (13) 'Tranquillity Pass' (about 5800 ft.), hidden behind a near shoulder of snow.
- (14) Direction of an upper basin of W. Foraker Glacier (hidden by the nearer ridge).

For a distant view of Mt. Foraker from the N., see 'A.J.' 44, facing 274.

Canada.

'MOUNT CONRAD,' *ca.* 10,300 ft. (The highest point of the Bobbie Burns³ Range.) September 8, 1933. Dr. and Mrs. I. A. Richards with the late Conrad Kain. Left camp in Bugaboo Creek 03.20 and crossed the pass between Snow Patch and Bugaboo Spire, 08.20 (see 'A.A.J.' 1931, vol. i, No. 3, pp. 292-97). Bore N.W. across to the basin of the Warren Glacier (breakfast 09.00 to 09.45 by the big medial moraine near a remarkable glacier lake draining by a canal formed of crevasses for over a mile to the N.). Proceeded N.W. and descended into the head of a glacier basin draining S. into Howell Creek. Up again on to the northern névé slopes of a chain of minor peaks, from which a second considerable descent to the W. had to be made in order to mount to the foot of the N. ridge of 'Mount Conrad,' by which, over easy snow slopes, the summit was gained at 16.00. A sharp rocky peak entirely surrounded by large glacier systems.

The name Mt. Jeannie, from Robert Burns's wife, was suggested in a note left on the summit; but, since this was Conrad Kain's final expedition, the name Mt. Conrad is being proposed to the Geographic Board of Canada.

The route was retraced to the breakfast place and a descent to a timber-line bivouac made down Warren Glacier. It is pleasant to recall with what fine energy and high spirits Conrad Kain enjoyed this the last of his innumerable first ascents.

I. A. R.

ALPINE NOTES.

THE ALPINE CLUB OBITUARY :						Date of Election
Tatton, R. G.	.	.	.	.	.	1885
Mead, C. W.	.	.	.	.	.	1887
Baker, H. C.	.	.	.	.	.	1891
Brooke, Rev. Canon H. S.	.	.	.	.	.	1907
Foot, H.	.	.	.	.	.	1909
Koetser, D. H.	.	.	.	.	.	1925
Merkel, Willy	.	.	.	.	.	1934

³ We fail to see the slightest connection between Robert Burns and this massif. It is, however, the first mention of 'Robbie' under the pseudonym of 'Bobbie' that we have yet come across! —*Editor.*