EXPEDITIONS

Dauphiné

LE RATEAU, 3754 m. = 12,317 ft. By the N. face. August 18–19, 1938. Mm. M. Fourastier and A. Madier.

The N. face of Le Râteau forms one of the most magnificent and strikingly perpendicular rock walls in the entire range of the Alps. Its sheer height above the steep and much torn Glacier du Râteau is at least 2000 ft. The climb of the face in question, although even more mechanized than in normal modern practice, is relatively of far greater importance than that of the Eigerwand, or of the N. face of the *summit* of the Grandes Jorasses ridge. The N. face of Le Râteau was, at all events, completely virgin. (See also *A.J.* 46. 48. The traverse of the W. and E. arêtes reveals the full terrors of the N. face, *ibid.* 23. 326.)

The first party leaving the Selle hut at 01.00 attained the upper plateau of the Râteau Glacier *via* the Col de la Lauze and the upper gap of the Col des Ruillans. Crossing a bergschrund they attacked the lowest tip of the very badly defined spur descending in the plumb-line of Le Râteau's summit, 07.15. A second schrund was turned by an awkward overhang, and the next icy 350 ft. were scaled by broken rocks. The spur now steepens considerably, the rocks becoming firmer but far smoother. Hammer and nails are thenceforward continuous. At 10.15 they attained a narrow and very steep ice ledge, followed by a short crevice and perpendicular wall. Next they followed the right bank of an extremely steep ice gully. Above came great vertical slabs—still on the right bank of the said gully—into which they inserted many pitons. Having overcome these they mounted icy slopes to a small platform, 17.45, where the night was spent. Leaving next morning at 07.30, by a traverse to the right, W., and an almost vertical ice wall, they attained the base of a crevice some 400 ft. in height, 08.30. The said crevice, virtually perpendicular throughout, and cut off by three overhangs, constitutes the worst difficulty of the ascent and its ascent proved desperate work. An icy couloir followed by another crevice further W. brought the party at length to the summit-ridge, some 30 ft. to the W. of the summit, 17.00.

The party had made a previous attempt in July when three days were expended, bivouacs being made in the 'narrow and steep ice ledge' and in the same spot as on August 19. The July failure was caused by shortage of metal in the upper bivouac.

From *Alpinisme*.

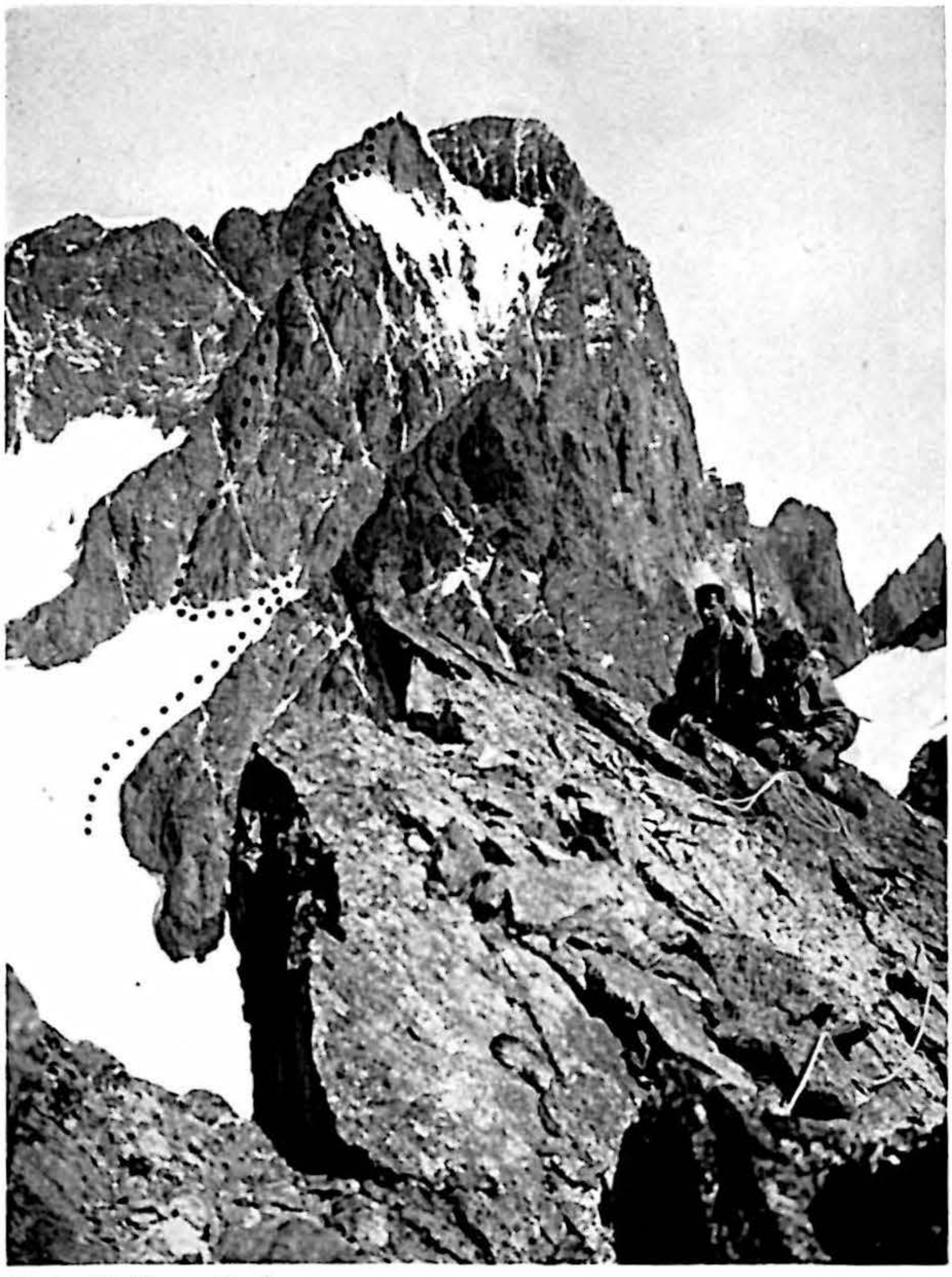
LES ECRINS, 4103 m. = 13,462 ft. By the S.W. arête of Pic Lory. June 18, 1937. Mm. M. Fourastier and J. C. Ryle, with Josef Knubel.

This route was first climbed by Herren O. Brügger and F. Thönen



Photo, T. A. H. Peacocke.]

N. FACE OF CASTOR.



Photo, M. Fourastier.]

S.W. BUTTRESS OF LES ECRINS.

with Hans Kohler in August 1931. The only record of the ascent seems to be a brief statement in *Alpinisme* of 1933 (No. 4, p. 353).[1] Our party, leaving the Col des Avalanches at 05.30, took the central of three obvious couloirs in the S. flank of the arête. This was steep and full of ice at that time of year; the top was reached at 08.00. From here a line of ascent parallel to the crest of the arête, but approximately 300 ft. below it, was followed until the upper snow slopes were reached. From this point the crest of the arête was utilized for a short way, and then a traverse made across the upper edge of the snow slope to the base of the final bastion. The ascent of this proved to be the most difficult part of the route; the angle is nearly vertical, the rock deplorably rotten and the exposure considerable. However, the passage is not long, and once the summit of the bastion is gained the rest is easy. We reached the summit at 12.00

The descent was made *via* the Brèche Lory and the N. face of the mountain in fog. The Col des Ecrins couloir proved to be an almost unbroken slope of steep hard snow, and caused some delay. La Bérarde was reached at 19.00.

J. C. R.

Mont Blanc Group

GRANDES JORASSES (*Pointe Walker*), 4205 m. = 13,797 ft., *B.I.K.* By the N. face. August 4–7, 1938. Signori R. Cassin, G. Esposito and U. Tizzoni.

The party left the Leschaux hut at 03.30 on August 4, attaining the northern base of Pte. Walker's great precipice at 06.00.[2] They mounted the very friable rocks of the lowest spur, having been much assisted by the steps cut up the lowest ice slope and over the bergschrund by a French party [3] who had attempted the face previously and had retreated at *ca.* 3200 m. They climbed the said ice slope, keeping as close to the margin of the rocks as possible, to the great precipitous, slabby step apparently barring all further progress. They forced their way vertically upwards for some 70 ft. and then slightly to the right, W., for two rope-lengths [*ca.* 350 ft.]. Having overcome the slab, a long and nearly vertical edge must be straddled—all this part of the ascent presents extraordinary difficulties, and many pitons were used. With the same trouble and the expenditure of more pitons a vertical step was climbed by a crack, and a kind of lunette-shaped platform was attained. The party turned off the great iced slabs on to an ice slope, cutting up this with much labour for some 350–400 ft. This finally led to the W. to the base of the second great vertical step or slab, midway up the face [*sic*]. Here the party securing themselves by ropes and pitons, spent the night in a single sleeping-sack.

At 06.00 on August 5, the climb was resumed. The next 300 ft.

[1] *Cf.* also *A.J.* 25. 736; 46. 53–6.

[2] See illustration *A.J.* 47. facing 356; *ibid.*, 48. facing 74, Pte. Walker is on extreme left of massif.

[3] Mm. P. Allain and J. Leininger.

are again desperately hard, the great slab consisting of many overhangs each worse than the other. More pitons were used, but in spite of several having been extracted after use in the lower part of the wall, the supply was now running short. Having scaled the slab, the party turned slightly E. and climbed broken and glazed rocks at an easier angle followed by a 160-ft. ledge to the right, W. By pulley and pendulum methods and a *descent* of some distance, they attained a kind of edge leading into the central couloir of the face. Over easier terrain for about 100 ft., followed by a difficult step and extremely smooth black rocks, they attained the snowy band situated midway [*sic*] in the face, 3600 m. They bivouacked in this spot; then, thunder-storms in the immediate vicinity not materializing on the face, they were able to cook the solitary meal of the day.

They started as quickly as possible on the morning of August 6—all their watches were crushed—more slabs with contrary strata, ledges and clefts were passed with varying trouble; finally, by zigzags, they attained the base of a tremendous tower or bastion visible from below. This was climbed by a crack and edges with enormous difficulty—the route leads diagonally right across the face—body friction being the method of progress employed. Bad weather was coming on and the party was much harassed by missiles blown or falling from the summit ridge above. After the tower came yet another 70-ft. slab of extreme difficulty, after which the edge of the buttress was followed to the summit, attained in a hurricane. The descent was commenced at once, but the party was stopped by a crevasse and obliged to bivouac again in the rocks of Pte. Whymper, where a terrible night was spent. Entrèves was attained on the following day, August 7, while on August 8 the entire population of Lecco turned out to greet Cassin on his return to his native town.

The party carried two ropes each of 160 ft. and a light line of the same length, 36 rock and ice pitons, three ice-axes, two rock and one ice hammers. All appear to have worn rubber shoes *throughout*.

Cassin and Esposito were both concerned with the variant to the E. of the N. buttress route of Piz Badile, and the ascent of the Western Zinne from the N.[4]. Together with Tizzoni, all are experts in the Grigna, the *Klettergarten* of Lecco.

Abridged from *Lo Scarpone*.

DENT DU REQUIN, 3419 m. = 11,217 ft. By the E. face and E.N.E. arête (Dibona-Mayer route [5] with Bower-Morin variation [6] start.) August 1, 1938. Messrs. C. Douglas Milner and J. R. Jenkins.

Mr. G. S. Bower recommended this route for a first day; he could recall no great difficulties in 1927. In fact, he had been able to make the complete ascent in boots, without having had to discard his rucksack at any point.

The party left the Requin hut at 04.30 and followed the ordinary route for half an hour to the foot of a smooth, vertical buttress pro-

[4] *A.J.* 49. 286; 48. 362. [5] *A.J.* 27. 443–4. [6] *A.J.* 38. 267–8.

jecting into the Glacier du Requin. At this point they left the ordinary route, and branching to the right mounted the steep initial snow slopes. After negotiating numerous crevasses, they approached the head of the highest tongue of the glacier. An obvious ledge leading on to the slabs at the base of the face was gained over steep snow (06.30). The party then followed an almost direct line up grey slabs to the base of a rib of red rock descending from the Capucin du Requin. The climbing was nowhere difficult, but always interesting ; in view of the slabby nature of the rock, boots had been discarded in favour of rubbers. Once the red rib had been reached, the rocks became steeper and difficulties commenced. The party was soon forced over on to the left flank, and ledges and cracks led to a steep, deep-cut chimney, near the crest of the rib. The exit at the head of this chimney, over a large capstone, provided a difficult and strenuous problem. Above, easy ledges tempted the party over to the right to the junction of the route with the Dibona-Mayer route. A shallow gully was crossed and a line of weakness followed without difficulty below the crest of the E.N.E. arête. Arrived below the Capucin, they moved to the left and climbed cracks and chimneys until the bed of the couloir between the Capucin and the second gendarme was reached. Carefully following the instructions of the *Guide Vallot* they ascended this to a point 20 ft. below its head.

From this point, hauling up of the rucksack on the rope became obligatory at almost every stage. A steep crack led up to the left to a broad ledge. This ledge continued round the corner and after a delicate traverse had been made a short descent led to the foot of a deep chimney. This chimney was climbed by back and knee without great difficulty, and after some easier rocks a descent of some 40 ft. was made into the shallow couloir on the left. Thus the second and third gendarmes were passed.

From here the climbing became more delicate, and after a short crack climbed by strenuous ' lay-back ' tactics, a steep wall above was climbed on small holds to a broad ledge. (Here the guide-book failed them, and the route consequently followed was a Hobson's choice confirmed by pitons inserted by a previous party.)

On the ledge was a huge detached flake which was skirted round to its left ; a steep wall was disclosed with a crack at its right-hand corner. This crack was climbed to a ledge, and after a short traverse to the left, the final section was easily overcome by an upward traverse back to the right. Above, the angle lessened, and after a move still further to the left it was seen that the fourth and fifth gendarmes had been turned. The party then mounted directly towards the *brèche* separating the fifth gendarme from the final section. First, however, a steep and difficult crack separating a projecting buttress from the main mass demanded a great expenditure of energy. Steep and holdless chimneys, with two pitons at vital places, led to the *brèche*. From here the last and greatest difficulty, a knife-edge of rock followed by a steep slab, brought the party to the ordinary route. The summit was gained

at 15.00, and later the 'Fontaine' chimney was descended and the Requin hut reached at 19.00 by the ordinary route.

This climb is strongly recommended to those who enjoy sustained effort on good rock. An exacting standard is maintained throughout and no passage offers exceptional difficulty, as would be found if a start were made by the fearsome Mayer couloir. Although this route is called the E.N.E. arête, it is really a traverse across the E. face below the crest of the ridge, only following the arête itself for the last 100 ft. or so. Route-finding is most intricate in the upper part, to discover a line which provides the only practicable way across a section of steep and excellent rock.

This climb could be done in much faster time, but it was a first day, and the excellent weather as well as the difficulties of the route induced leisurely progress.

J. R. J.

AIGUILLE DU PLAN, 3673 m. = 12,051 ft., *B.I.K.* By the E. arête or buttress. August 4, 1937. Mm. P. Hagenbach, F. Müller and André Roch.[7]

The party left the Bobi Arsandaux shelter-hut at 03.30. The schrunds of the Envers de Blaitière Glacier were crossed easily despite that they were more open than on our last visit in July. We climbed up the lower slopes of the Plan-Pain de Sucre couloir and scrambled on to the arête or buttress from the left, to *descend* soon after by a *rappel*, of 70 ft. into the great chimney at the base of the 'Ryan' buttress. Next, the Plan-Crocodile couloir was climbed—bad conditions, powdery snow on ice. Thence the 'Ryan' buttress was attained at a shoulder, 09.30. From the shoulder the initial chimneys are not very difficult and soon lead to a platform at the base of real trouble. The first crack is most impressive, but is really less severe than its appearance. Henceforward, crevices succeed endlessly to the summit. One is nearly always forced on to ledges to the left whence one gains the next crevice. In one place, however, a movement is made to the right to climb the crest itself for a moment. The last crevice is Y-shaped, one is forced to a sensational exit to the left. The top was attained at 19.30.

I and many of my companions consider this the finest climb in the Chamonix Aiguilles—Cf. *A.J.* 39. 318.

A. R.

PAIN DE SUCRE, 3607 m. = 11,834 ft., *B.I.K.* By the N. face. July 4, 1937. Mm. R. Gréloz and André Roch.

We left the Bobi Arsandaux shelter-hut at 04.00. The shelter, crushed in by the weight of snow, will unless otherwise reconstructed soon consist of débris only.[8] The crevasses of the Envers de Blaitière Glacier were propitious and progress speedy. Our route was for a time the same as that of 1931.[9] We cut up the great snowy gutters

[7] *A.J.* 39. 318–20; 48. 58–61; *Kurz*, 288.
[8] See *A.J.* 48. 184.
[9] *Kurz*, 297.



Photo, A. Roch.]

PAIN DE SUCRE, AIG. DU PLAN, CROCODILE, FROM GREPON.

For details see p. 332.

of the Plan-Sucre couloir and then bore away to the left to attack the very steep slopes of the N. face. Close to the furrowing minor ribs the snow was good, but in between large steps were obligatory. At 10.00 we struck the N.E. arête of our peak, the last traverse of about 100 ft. having taken more than an hour's step-cutting. Before committing ourselves to this terribly steep bit, we had manufactured a great ice bollard as belay for the rope.

We encountered all manner of trouble on the ridge, and the summit was not attained until 16.00. We descended quickly *via* the Requin hut to Chamonix.

A. R.

AIGUILLE DU FOU, 3502 m. = 11,490 ft., *B.I.K.*[10] From the S. September 2, 1937. Mlle Erika Stagni, Mm. F. Gros and André Roch, with R. Lambert.

The party left Montenvers at 01.00, taking the Nantillons route *via* the Rognon. We bore to the right above, crossing the base of the Aiguille de Blaitière's N. arête to attain the 'Reynier' ledges on the S. slopes of that peak. By mistake we crossed the ridge too low and soon found difficulties in the ledges. To save trouble we redescended and crossed a higher notch. We soon traversed the twin gullies, plunging downwards from Aiguille de Blaitière and took the 'Bobi' ledges leading to the Col du Fou. In *Kletterschuhe* we commenced the fine climb up the S. buttress. Great boulders lead to the first crevice, the ascent of which, despite three wooden plugs already in position, proved extremely hard. The second crevice proved even more severe, necessitating mechanization. A rectangular slab and finger cracks are the solution. Higher up the climb is less hard to a great split slab situated on the left, *i.e.* the left portion of one's anatomy is inserted in the crack or against the mountain. It is an exposed and fatiguing scramble. Finally comes a little traverse leading to a platform, whence a sensational final chimney with good holds brings one to the easy summit rocks. Having climbed these we continued over the CISEAUX teeth and the three peaks of the AIGUILLE DE BLAITIERE.

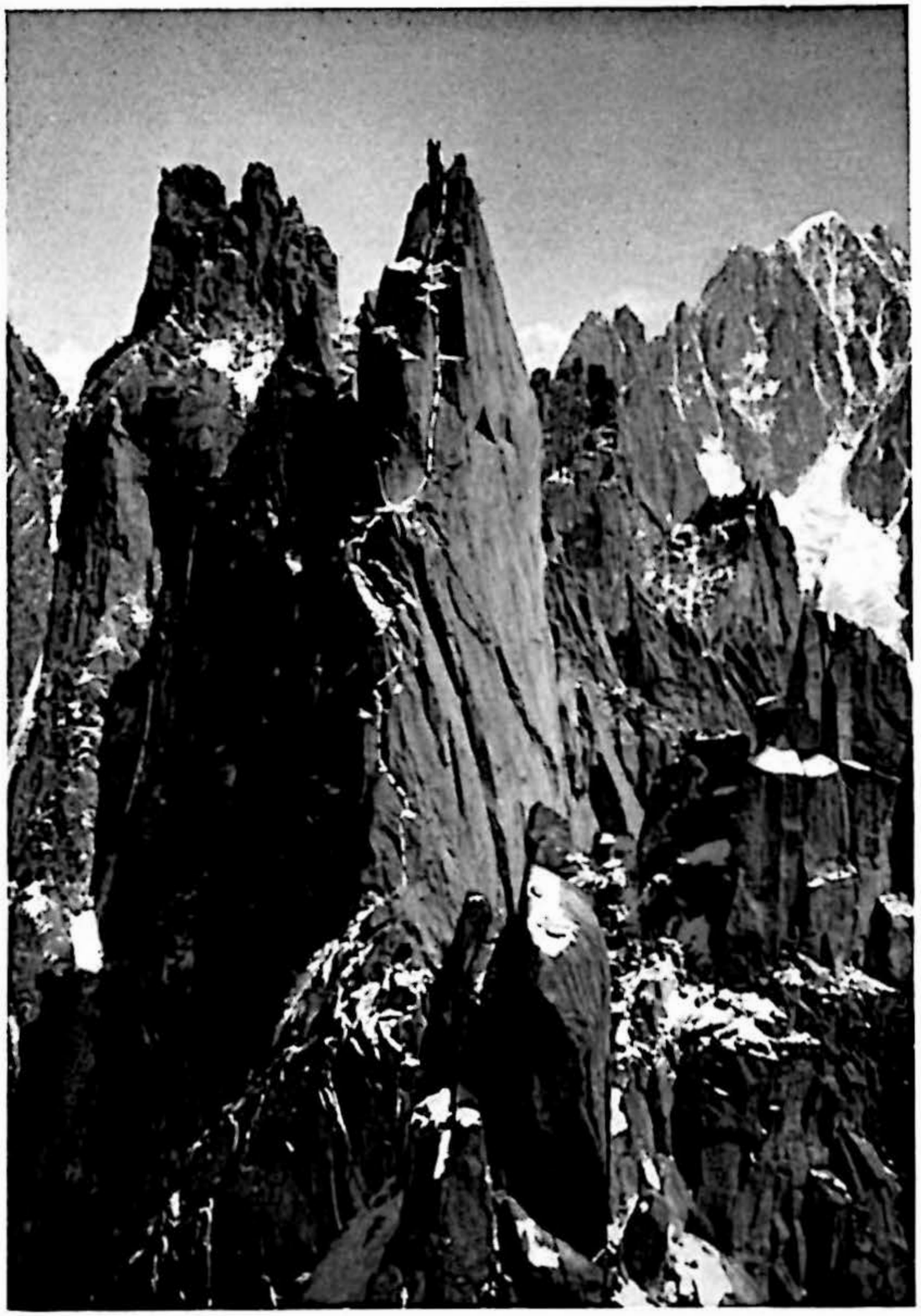
We were able to regain Montenvers before dark.

A. R.

AIGUILLE SANS NOM, 3989 m. = 13,088 ft.; AIGUILLE VERTE, 4127 m. = 13,541 ft. Traverse. August 3, 1938. Mr. C. W. F. Noyce with Armand Charlet.

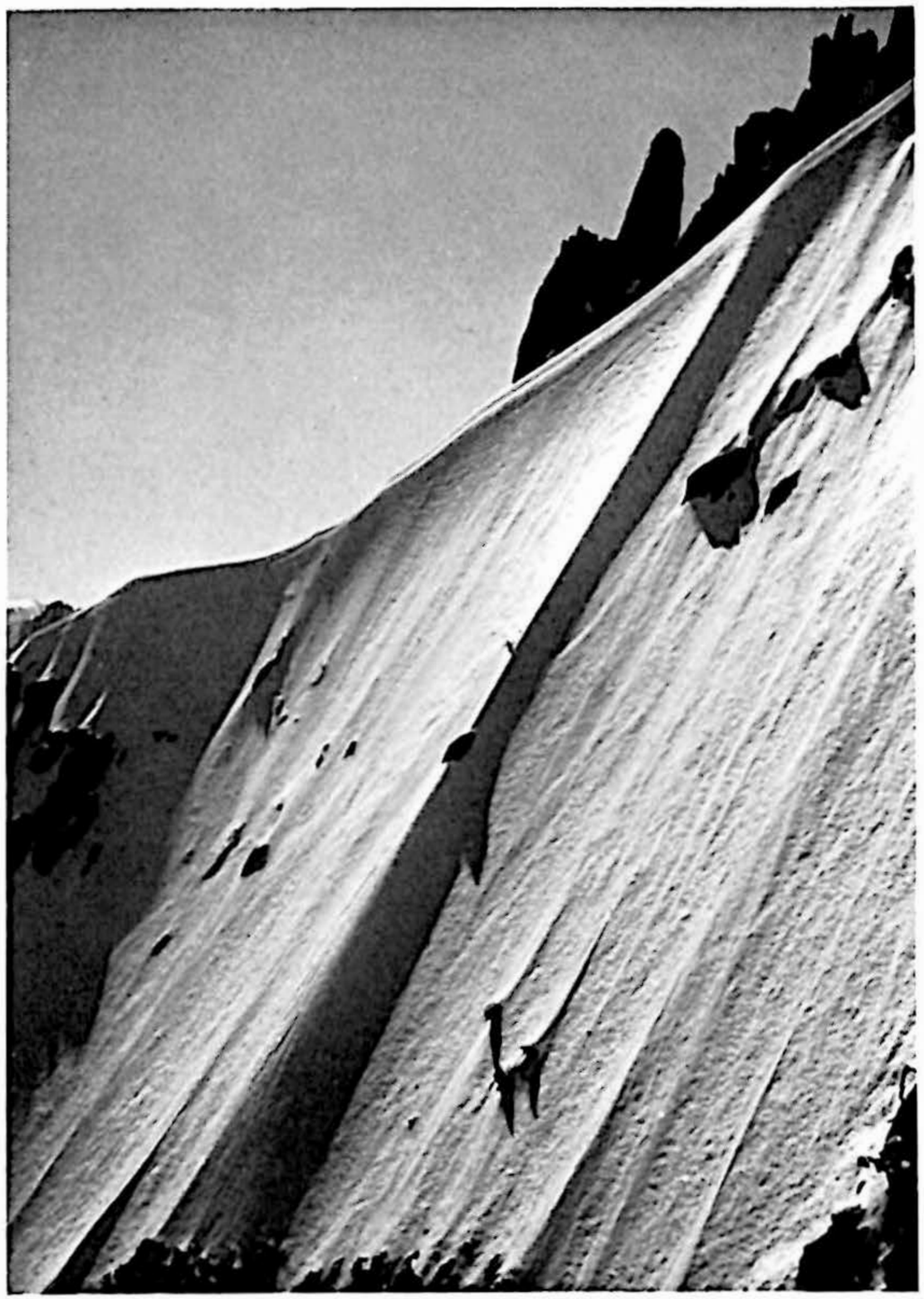
From the Charpoua hut (dep. 03.05) the party from immediately under the *Brèche sans Nom*, 3725 m., *Vallot*, turned on to the S. face of the Aiguille, whose culminating point, *Pointe Petigax*, was attained at 07.15. Thence the crest of the great ridge was followed easily to the summit of Aiguille Verte, 09.10. Descent by the 'Whymper' couloir to the Couvercle, 11.10.[11]

[10] See *Kurz*, pp. 308–10; in general, *La Montagne*, 1931, pp. 72–7.
[11] Note the extraordinarily fast times.



Photo, A. Roch.]

AIGUILLE DU FOU, FROM DENT DU CAÏMAN.



Photo, A. Roch.]

N. SLOPE OF PAIN DE SUCRE, FROM RYAN-LOCHMATTER ROUTE ON AIG. DU PLAN.

The couloir leading to the *Brèche sans Nom* was dry if icy, no stones fell. The difficulties were all concentrated in the face and glazed chimneys of the Aiguille sans Nom.[12]

MT. MAUDIT, 4471 m. = 14,669 ft. By the S.E. (or Tour Ronde) arête.[13] August 3, 1938. Messrs. M. S. Taylor, G. S. Bower and J. R. Jenkins.

Leaving the Torino hut at 02.00, the party crossed the Col des Flambeaux and gained the snow basin below the Fourche. The climbing of a steep 80-ft. snow wall above the bergschrund of the Col de la Fourche was facilitated by the steps of a previous party, and by the aid of these the col itself was rapidly gained at 05.00. From here, the crest of the arête was followed over easy rocks and then snow to a gendarme which was passed on the right side. A meal was taken at 06.15 shortly beyond this point, and thereafter interesting climbing on the right flank of the sharp snow arête led to the foot of a great buttress of rock. After a short traverse to the right broken rocks were gained, and by scrambling upwards to the left the foot of a snow slope was reached. The bad condition of the snow forced the party on to the rocks at the edge of the buttress, and a section of difficult climbing up a series of fluted ribs led to the snow slopes above. These gradually steepened and became more iced until they merged into the exceptionally narrow ice arête leading to the Grand Gendarme. The condition of the ridge—powder snow on the Brenva side and hard crust on the other—increased the difficulties. Below the gendarme they traversed an ice slope on the Brenva flank to the first rocks, which they descended for 100 ft. Traversing a further section of ice, easier rocks were gained which led up a steep rib to an impasse in the form of a narrow chimney. By climbing a wall to its right, easier rocks were gained leading to the continuation of the arête beyond the gendarme. Proceeding on the Brenva side, and utilizing rocks projecting through the ice, the party reached a steep rib bounding the (true) right wall of a gully. Having climbed this rib, they traversed into the gully and, ascending it, reached the short ice slope above. At the top of this, steep and broken rocks followed to another ice saddle. This was crossed with difficulty to a large granite block which was passed on its right. Above, easy rocks brought the party to the N.E. arête of Mt. Maudit from which a view was obtained across the steep N.W. slopes. After scrambling up a rock rib, an arête of treacherous powder snow was followed to the foot of a final wall, which debouched on to the summit of the shoulder (4336 m.).

The top of Mt. Maudit was finally gained at 16.00 after a laborious ascent of its western slopes. A descent was made to a point above the Col de la Brenva, and the Grands Mulets reached at 19.00 by the Corridor route.

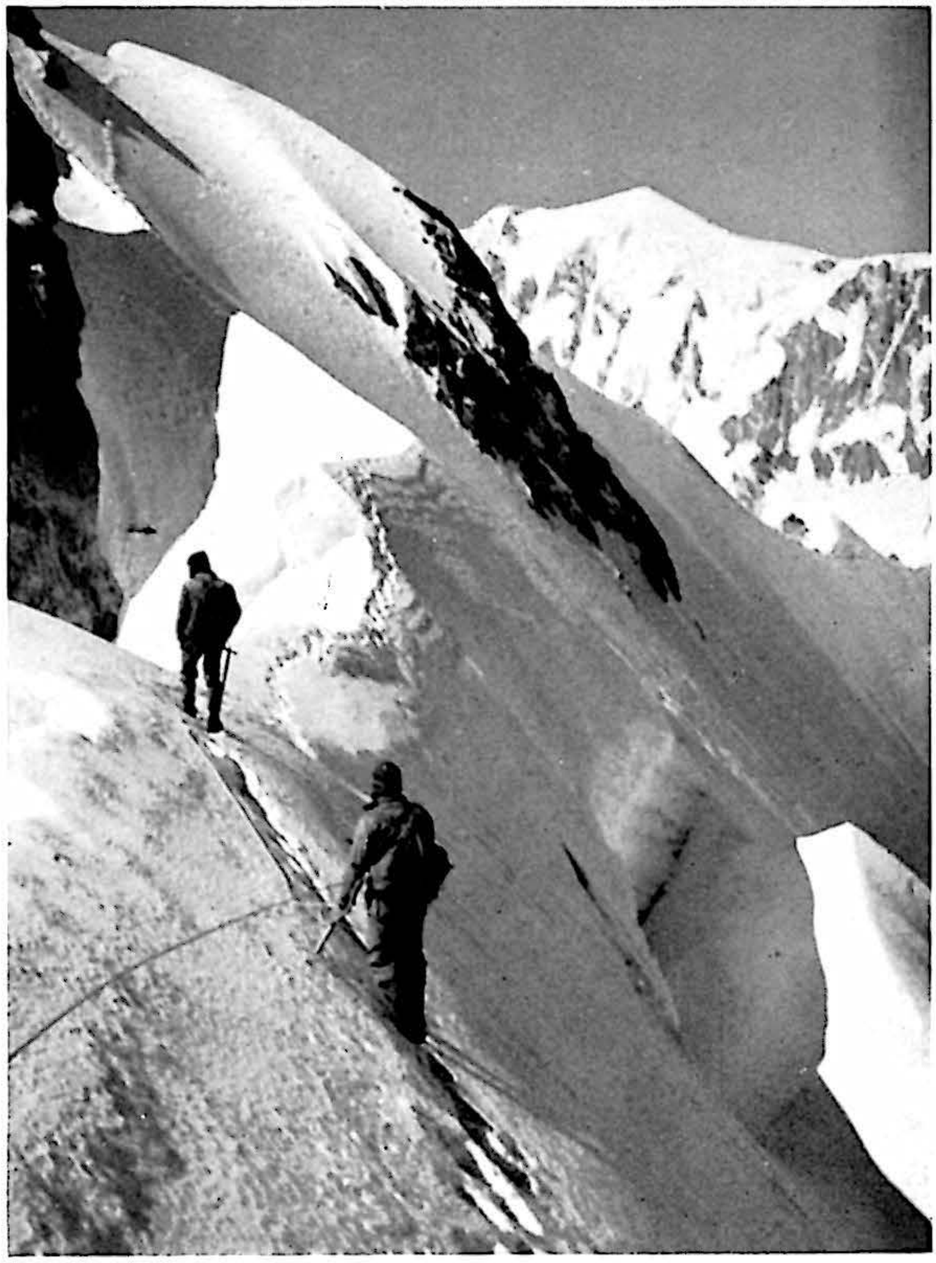
[12] The route corresponds with the Fontaine ascent of 1899, *A.J.* 21. 261–2. See also *Ibid.*, 509–17.

[13] *A.J.* 14. 404 (1st ascent); *Ö.A.Z.* 1889, 1–6, 13–17, 29–34; *Bollettino*, C.A.I. 1902, 268 *sqq.* *A.J.* 25. 749, 32. 148 *sqq.* *Die Alpen*, 1934, 307 *sqq.*



Photo, M. S. Taylor.]

MT. MAUDIT. THE NARROW ICE ARETE SHOWING TRAVERSE ACROSS ICE SLOPE BELOW GRAND GENDARME.



Photo, M. S. Taylor.]

ROCHEFORT ARETE. APPROACHING AIGUILLE DE ROCHEFORT FROM MT. MALLET. MONT BLANC BEHIND.

The long time taken by this party was due partly to their lack of training and partly to the difficult snow conditions. Nevertheless, the climb is an exceedingly long one; the climbing above the Grand Gendarme (which is about the half-way point) takes considerably longer than would appear from below.

J. R. J.

Prior to 1924, there had been three ascents only by this magnificent and safe route. Since then, there have been at least ten ascents. The Grand Gendarme was first traversed in 1933 (*Die Alpen*, *loc cit.*), and this was repeated by M. André Roch's party in 1935; times, 6 hrs. and 4 hrs. respectively.

ROCHEFORT ARETE.—This traverse from the base of the Aiguille du Géant, over the Aiguille de Rochefort to the Mt. Mallet Glacier is one of the most popular excursions in the Mt. Blanc group. It is occasionally continued to the Calotte de Rochefort but more frequently it concludes with an ascent of Mt. Mallet itself.

This season (1938), a broad crevasse across the full width of the Mt. Mallet Glacier, the upper lip some 50 ft. above the lower, necessitated a long *rappel* for all parties descending by the route.[14]

On August 18, a party consisting of M. S. Taylor, C. R. Nicholls, and J. R. Jenkins left the Refuge Chevalier at 05.00, with the intention of traversing the Rochefort arête in the reverse direction. A powerful wind and soft powder snow impeded them on the Mt. Mallet Glacier until the dreaded crevasse was reached at 07.15. After a long traverse had been made to the right without means of access to the upper lip being found, an unusual ice chimney 50 ft. high was discovered. This was climbed with great difficulty in crampons by back and foot methods and the upper snows gained. The summit of Mt. Mallet was reached at 08.30, the Aiguille de Rochefort at 09.15 and the foot of the Aiguille du Géant at 10.45.

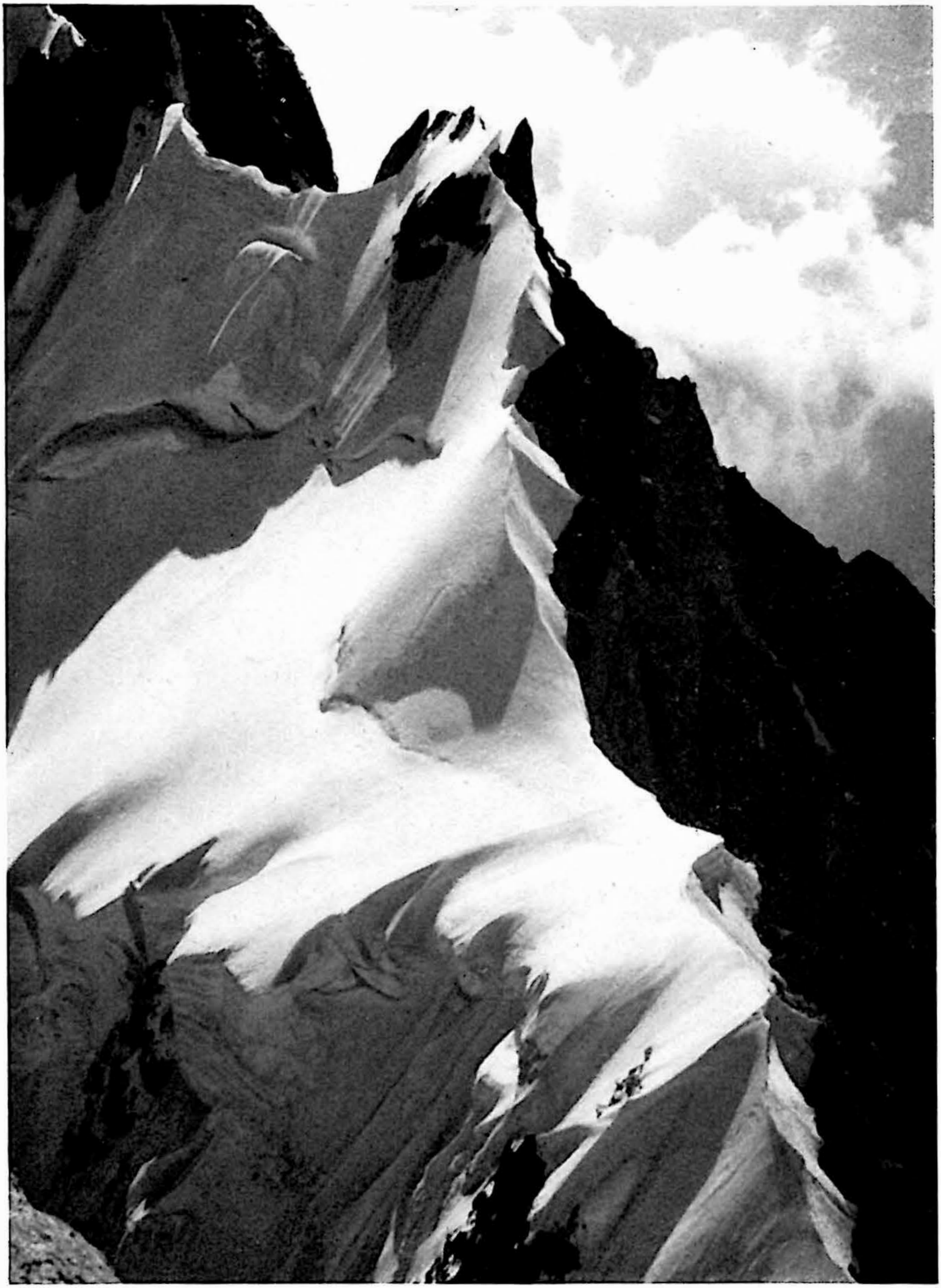
Pennines.

ALPHUBEL, 4207 m. = 13,803 ft. By the N.E. face,[15] August 1, 1938. M. E. R. Blanchet with Oscar and K. Supersaxo.

This face, in its initial two-thirds, consists entirely of snow and ice culminating in an ice wall. The upper third is rocky. The party leaving the Langefluh at 04.30 attained the bergschrund at 10.10, the face of the rocks at 12.00 and the 'Saas' (N.E.) summit at 15.00. The bergschrund was very difficult, necessitating a human pyramid. The slope above averages 55 degrees; incoherent snow resting on ice made its ascent very dangerous, the said snow thinning out considerably higher up. The total height of the snow and ice wall is some 450–500 ft. The upper rocks are very rotten but not particularly difficult. Very bad snow made the descent by the ordinary (E. face) route laborious. Saas Fee was attained at 21.15.

[14] Somewhat similar conditions were to be found in August 1913.—EDITOR.

[15] *Alpes Valaisannes*, iii *b*, route 469. The route described above is slightly to the N. of '469,' first taken in 1891 (*A.J.* 15. 551).



Photo, C. D. Milner.]

ROCHEFORT ARETE FROM SUMMIT OF AIGUILLE DU GEANT.

TÄLIHORN, 3446 m. = 11,302 ft. (New *S.* map; the old gives 3485 m.). By the N. arête [16] attained from the W., August 8, 1938. Same party *without* K. Supersaxo. The arête was reached from the W., Laquin Glacier side, by a difficult rock rib not previously scaled. No times.

CASTOR, 4230 m. = 13,879 ft. By the N. face. August 18, 1938. Messrs. T. A. H. Peacocke, M. G. Meade-King and D. A. Hodgkinson.

The party left the Bétemps hut at 02.10 and crossing the Grenz Glacier followed a trough between it and the Zwillings Glacier until a favourable point was reached to tackle the lower icefall. This was passed by the aid of some jumping in the true left-centre. The normal Felikjoch route was followed until the upper icefall was reached when a divergence to the right was made through a convenient corridor. This led to the upper Zwillings Glacier. The route then bore to the right, through magnificent scenery, as a formidable crevasse prevented further direct progress. After finding a way through a series of bergschrunds a bridge was found across the big crevasse and easy snow slopes leading towards the N.E. ridge were reached. The snow became very bad and progress somewhat slow, but conditions improved higher up. The upper bergschrund gave no difficulty. The route kept below the crest of the N.E. ridge owing to a strong N.W. wind and only struck the crest some 200 ft. from the lower summit, where the E. slope became icy. A beautifully narrow snow crest led to the highest point, which was reached at 10.10.

This face was first climbed by Prof. G. I. Finch in 1909 who kept further to the right. (W.). The present route is not described in the *Guide des Alpes Valaisannes*, but in the present condition of the glacier seems the best way up the face. It possesses distinct advantages over the ordinary route *via* the Felikjoch from the point of directness, scenery and safety, and for those who enjoy an interesting snow and ice expedition it can be confidently recommended.

T. A. H. P.

OBER GABELHORN, 4073 m. = 13,364 ft. S. face, direct finish. August 1, 1938. Mr. G. R. Speaker with Alexander Graven; Miss M. Scott Johnston with Felix Julen.

The 400 ft. new direct finish starts from a horizontal traverse leading to the foot of slabs below the vertical summit wall. A very delicate and difficult movement over a small rib (made safe by a piton thread to belay the second) led to a ledge on the right about 120 ft. up. A broken rock rib was then followed vertically for about 80 ft. to another ledge, from which a straight line led in another 100 ft. vertically up to the tripod on the summit. Sound granite gave climbing in many places equal in exposure and difficulty to that found on the Mer de Glace face of the Grépon.

Descent by the Arbengrat as far as the first shallow gully, leading

[16] Cf. *Alpes Valaisannes*, iii *b*, route 805, first taken in 1913. *A.J.* 28. 231.

back on to the left wall of the big central couloir (which runs down from the summit wall) and so down over the steep rock to the sharply inclined *névé* from which the ascent began.

Left Staffelalp 03.15, reached rock buttress separating *névé* from main couloir on right 07.45, arrived on summit 11.45. Descent began 12.25, *névé* at foot of rocks reached at 16.00 and Zermatt at 19.00. (See also *A.J.* 10. 97 ; 25. 86 ; 35. 285.)

G. R. S.

Bernese Oberland.

EIGER, 3974 m. = 13,038 ft. By the N., *Eigerwand*, face. July 20–24, 1938. Herren H. Harrer and F. Kasparek (Austria) ; L. Vörg (Munich) together with the guide, A. Heckmeier of Traunstein.

The Bavarian party started from a camp at Alpiglen, but on July 20, noticing signs of bad weather, returned thither from their bivouac in the face. During the descent they met the Austrian party going up, accompanied by yet another of two more Austrians, Fraisl and Brankowsky. On Fraisl receiving a stone on the head together with light concussion, the former together with Brankowsky abandoned the expedition. Meanwhile Vörg and Heckmeier, who had returned to Alpiglen, perceiving nothing amiss with the weather, started once more at 02.30 on July 22. Proceeding very fast in spite of heavy loads (*ca.* 40 lbs. per man), and profiting by steps cut previously by themselves and the Austrian party in the two lower ice slopes, they caught up the latter at 11.30. Dropping all idea of previous rivalry, both parties now joined up together. As viewed from the valley, they had by evening attained a point some 400 ft. higher than the spot reached by the victims of 1935 and 1936,[17] *i.e.* near a cleft leading towards the upper portion of the Lauper-Zürcher route of 1932.[18]

At 19.00 they bivouacked, knowing that the worst troubles were still ahead. Starting again at 07.00 on July 23, they overcame, roped all together, several great difficulties, notably a 30–40 ft. step in the cleft composed of overhanging ice. Then traversing to the right, W., they came to the upper ice slope known locally as *die Spinne* (Spider).[19] Signs of stormy weather now became evident and the Bavarian party, detaching themselves, proceeded to try and explore as high as possible one of the ice gullies leading upwards from the *Spinne*. The storm broke with the Bavarians at the upper margin, while the Austrians were still about the centre of the slope. Fortunately no water, merely sleet and hail, fell. Consequently the adventurers were able to stand up against the pressure of continual cataracts flowing downwards all composed of comparatively light elements. Here, however, in the course of an avalanche which completely submerged the Austrians,

[17] See *A.J.* 48, illustration facing 365.
[18] *Ibid.* 44, illustration facing 319.
[19] Presumably from the numerous ice threads radiating therefrom.

Kasparek had a hand badly crushed by a stone although not quite put out of action. As soon as the storm was over, all four proceeded up the precipitous ice gully, bearing towards the left, E. Finally attaining a narrow ledge, they bivouacked about 20.00 at a height of some 3650 m. Despite many avalanches sweeping over and above their bivouac, thanks to good equipment, the night proved endurable.

On July 24 at 07.00, the climb was resumed, conditions being dreadful and snowfall continuous. Ceaseless dust avalanches poured down the precipitous ice gully in which the party was embarked. Climbing very slowly and carefully, one man of the party studied the face above so as to give warning of slides to his struggling companions. Towards 12.00 the leader, Heckmeier, attained the gradually easing-off slopes of the uppermost snow. Finally, at 16.00, all four stood on the summit.[20] The storm was still raging so that the descent by the ordinary route had to be undertaken at once. While descending, the party met a rescue expedition which was to have attempted salvage from the top on the following morning. Eigergletscher was duly attained by all during the late evening, while on July 25, in brilliant weather, the dangers overcome were manifest to all, still plastered with snow and ice as the Eigerwand appeared.

It is of interest to quote the equipment, etc., carried by the two Bavarians: Provisions for six days, 200 ft. of rope, 200 ft. of spare line, 30 rock pitons, 20 ice pitons, 2 normal and 2 short axes. In addition tent-sacks and sleeping-bags were transported. Both climbers wore 12-spiked crampons, which were discarded once only, on the traverse close to the scene of the 1936 accident.[21]

From *Basler Nachrichten* and *Communicated.*

As regards the composition of the party: With the exception of Herr Vörg, remembered for his Caucasian exploits, including the first ascent of Ushba from the W.[22] and still more, perhaps, as one of the only two men who had returned in safety from the dangers of the Eigerwand,[23] little is known of the members outside Eastern Alps' circles.

Compared to the first ascents of the N. faces of Matterhorn and Grandes Jorasses,[24] Ailefroide from the N.W., S. face of Les Ecrins,[25] Dent Blanche by the N., arête, Gspaltenhorn, W. (*Rote Zähne*) arête, the Eigerwand may be said to possess little or no 'mountaineering' value. The *true* route up Eiger's N. face was discovered in 1932. While bearing ungrudging tribute to the skill, endurance and modesty of the 1938 party, we see no reason to dissent from the opinion expressed on p. 9 of the present VOLUME.

[20] Judging by the traced illustration in *Sport*, the party struck the final edge (marked '5' in the illustrations, *A.J.* 45, facing 54, 55), abutting against the *Mittellegigrat.* The route is clearly marked on the illustration in *Der Bergsteiger*, September 1938, p. 704.

[21] *A.J.* 48, illustration facing 365.

[22] *A.J.* 48. 114–17; 49. 85–6, 284.

[23] Pp. 148–9.

[24] The 1935 ascent is referred to.

[25] *A J.* 38. 304–7.

JUNGFRAU, 4166 m. = 13,669 ft. By the N.E. arête. July 20, 1938. Mr. C. W. F. Noyce with Hans Brantschen.

This was the first ascent of the N.E. arête since the rockfall of 1937 (*A.J.* 49. 280; illustration 50, facing 141). The party left the Jungfraujoch at 03.45, attaining the scene of the rockfall about 04.30. It proved necessary to keep to the right, N. of the crest for some 250 ft.—very rotten rocks. Above the step the edge was regained and followed throughout to the summit, attained at 10.35. The affected position of the ridge proved by far the most difficult. Conditions were snowy. The Jungfraujoch was regained at 12.55.

SCHEIDEGG WETTERHORN, 3474 m. = 11,201 ft. By the N.W. face.[26] July 22, 1938. Same party. Leaving Gr. Scheidegg at 04.15, the base of the cliff was attained at 04.45. The party changed into rubbers at about a quarter of the way up, having followed approximately the 1929 route.[27] The summit ridge was attained at 16.25, the Gleckstein hut at 19.30 and Grindelwald at 21.40. Both members of the party were quite without local knowledge.

FINSTERAARHORN, 4275 m. = 14,026 ft. By the S.E. arête attained from the S.W. July 29, 1938. Same party.

They left the Concordia hut at 02.00, ' attaining the foot of the rocks ' at 06.30. ' The ridge seen to the right of the summit from the Grünhornlücke ' was followed throughout over its many gendarmes to the lower peak on the main S.E. arête, whence the summit was attained at 10.05.[28] Descent by Agassizjoch to Grindelwald, 19.30.

TRUGBERG, 3933 m. = 12,904 ft. By the N. arête, with descent by the W. face. August 3, 1938. Messrs. K. C. P. Struvé and A. M. Robinson.

The party left Jungfraujoch at 04.50 and started up the N. arête of the Trugberg at 05.40. The lowest part of the ridge consisted of hard icy snow, leading up awkwardly to the first rock tower which was turned to the W. by a short steep ice slope requiring much step-cutting. A series of easy, but rotten, rock towers succeeded, which were climbed directly, followed by a long, level snow ridge that led to a second series of towers of more imposing calibre. Interesting rock-climbing of moderate difficulty was met with here, each tower being nearly vertical on its N. slope and descending at a moderate angle to the S. The icy character of the intervening sections imposed a slow pace.

The summit of the Trugberg consists of three fine rocky pinnacles, each about 50 m. in height and none of which can be turned. The central pinnacle is slightly higher than the other two and is marked by a pole carrying a wooden cross-piece. Difficult rock-climbing was experienced on the N. face of this pinnacle and it was found necessary to climb without sacks for about 25 m. It is probable that such few

[26] See *A.J.* 41. 404–6; 42. 1–15, illustrated. [27] *Ibid.*

[28] This route seems to correspond with the S.A.C. *Climbers' Guide* No. 279, first taken in 1911 by a British party, *A.J.* 26. 88–9. ' 279 ' commences at the point marked 3536 (*S.* map) on the Walliser Fiescherfirn, then mounts the great rocky buttress to the lower peak on the main S.E. arête.—EDITOR.

parties as climb the Trugberg ascend the northern tower only, regarding it as the summit, and return to the Mönchjoch without attempting the central point. Such was the evidence of boot-scratches and sardine tins.

The summit was reached at 09.10, and at 09.30 the party left to continue the traverse of the peak along the S. arête. The ascent of the third summit pinnacle proved difficult, but the rock was excellent. A line was taken bearing over to the E. slope. An easy rock descent followed, succeeded by a long snow ridge in a decaying condition leading to another group of towers well separated from the former. The party finally left the ridge at a little gap just to the N. of this group of towers, and descended the *west* face of the mountain down a wide snowfield clearly shown on the Siegfried map just to the W. of the 'T' in 'Trugberg.' By descending S.W. at the start for about 300 m. to the top of the steep icefall and then turning N.W., a way was found down a steep tongue of ice that debouched on to a rocky buttress, which in turn led down to the Jungfraufirn at the 3450 m. contour, reached at 12.30. Return to Jungfraujoch 14.10.

This ascent of the Trugberg by the N. arête, with descent by the W. face, can be recommended to parties who do not wish to complete the traverse to Concordia, the latter portion of which is exceedingly long and comparatively uninteresting, or to descend the E. face to the Ewigschneefeld and plough back through soft snow to the Ober Mönchjoch. More than 2 km. of snow walking is avoided on the return journey, and a most attractive climb saved from a hot and weary anticlimax. But it is desirable to map out the line of descent when walking over to the Mönchjoch in the morning, as there is one rock buttress only which leads right down to the Jungfraufirn, and an error in the choice of buttress would result in a serious cut-off. From above, this cliff looks bottomless, and is flanked with towering séracs of daunting appearance, but as one proceeds a safe way down the rocks becomes apparent.[29]

With the exception of the N.E. arête of the Jungfrau, the serrated skyline of the Trugberg offers the hardest and most interesting ridge climb within easy reach of Jungfraujoch. Judging from the lack of marks thereon, it is very rarely attempted.

A. M. R.

South America

COTOPAXI (*ca.* 19,500 ft.). June 13, 1938.

The party consisted of André Roosevelt and G. H. Bullock. On June 11 camp was pitched on the edge of the snow cap S.W. of the summit at about 14,800 ft. Our equipment was carried up by pack-horses, and we rode to within some 400 ft. of the camp. The weather remained practically windless throughout, clear most of the time with clouds below, and rather cold. In this we were lucky, as violent winds round the base of the mountain are common.

[29] The first ascent of the N. arête was made by M. and Mme G. Hasler in 1906, *A.J.* 23. 332. The W. face is not mentioned as a route in the (1931) S.A.C. *Climbers' Guide*.

After waiting one day for purposes of acclimatization, we started at 2 A.M. on June 13, wearing crampons. The N. and E. slopes of Cotopaxi are uniformly covered with crevassed glacier, while the W. and S. are snow slopes. Our route followed a nearly straight line over snow slopes, to the S.E. corner of the crater at the point where the glacier begins. The steepest part was about halfway up and nearly 45 degrees, the final wall of the crater being steeper in parts. Proceeding slowly with one short halt, by 6 o'clock we were slightly over 17,000 ft., when Roosevelt was overcome by the altitude and had to turn back, and I went on alone. At 8.20 I stepped into the sun, and at 9 A.M. reached a patch of rocks at the foot of the final wall, where I halted for 30 minutes. The last 300 ft. were mainly deep and rotten snow, and took an hour and a half. Time 11 o'clock. After 90 minutes in the crater the descent took only 55 minutes, with glissades of over 3000 ft. I did not reach the highest point, which is on the N.W. side of the crater, 100 to 150 ft. higher.

Inside the rugged old crater and about half its diameter is a perfect raised ring of smooth snow, forming the new crater with the more or less vertical-sided pipe inside. The top of the snow ring is only about 50 ft. lower than the S. side of the old crater, from which a shale slope leads down to it. Three small columns of smoke rose from the pit, but there was no sound. Both inside and outside the old crater there were bare patches due to internal heat, associated with a sulphurous smell. Since 1914 the volcano has shown very little activity.

Below 17,000 ft. the snow was frozen as hard as a board, and even in the afternoon was not very soft, whereas at 18,000 ft. at 7.30 A.M. there was no crust and one sank in about six inches. Over 19,000 ft. the snow in places was completely rotten with a very slight crust, and I sank right through to the rocks, though the temperature was near freezing. This was undoubtedly due to volcanic heat, which comes to the surface in spots. About 20 yards from one bare patch rose ice cliffs 100 ft. high, which here form the edge of the crater and the head of a glacier.

I felt no symptoms of mountain sickness, and though the rate of ascent was slow, I felt the height less than I did on Mt. Blanc two years ago. In camp, symptoms were much the same as during the first night at a hut at 10,000 ft. in Switzerland. This must be the result of living at over 9000 ft.

Cotopaxi was first climbed in 1872 by Reiss, and in 1873 by Dr. Stübel, both from the S.W., as by myself. Most subsequent ascents were by the N.W. ridge, *e.g.* Dr. Wolf in 1877, Freiherr von Thielmann [30] in 1878, Whymper [31] in 1880, who spent a night near the summit, Nicolás Martinez, Hiti and Villacrés, who also jointly found a route from the E. in 1912. The last ascent seems to have been in 1925, by a party of Italian officers.

During periods of volcanic activity the amount of snow and ice on the mountain is sometimes greatly diminished. Catastrophic floods

[30] *A.J.* 8. 448, 9. 45.
[31] *A.J.* 10. 118–122. Whymper, *Travels among the Great Andes*, ch. vii.



Photo, G. H. Bullock.]

LOOKING INTO INNER CRATER OF COTOPAXI.

[*To face p.* 314.

were caused in 1877 by the sudden descent of melted ice and snow during an eruption. The present inner crater was probably formed shortly before 1914, but no report or description of it appears to be extant.

ILINIZA (*ca.* 17,400 ft.).

Iliniza was twice attempted by Whymper in 1880, and climbed by his guides Jean-Antoine and Louis Carrel.[32]

On July 9 and 10, 1938, André Roosevelt, Leonidas Plaza and I camped at about 15,000 ft. a little below, and some way to the E. of the col between the two peaks of Iliniza. The weather was unpleasantly windy and cold, blowing continuously for 48 hours, except for part of the first night. We were in cloud most of the time, but had several clear periods when the summits were visible.

Little Iliniza, the N. peak, is about 17,000 ft., a rock peak with no glacier, and sometimes quite bare of snow. As we saw it, its S. face was a snow slope, and its summit rocks were thickly plastered with ice. It was climbed on May 3, 1912, by Nicolás Martinez and party by the ridge from the col between the two peaks. The only difficulty seems to have been a traverse past the main gendarme across to the N. ridge. While they were on the ridge an earthquake started stonefalls all over the place.

The S. and main peak is heavily glaciated. Between it and our camp was a vertical wall crowned by a big ice cliff. From the col this is avoided, and one can walk up on to the flat glacier W. of the N. and S. summit ridge (? Whymper's ridge). This ridge does not start from the col, but about a kilometre E. of it. Under good snow conditions there is a very feasible snow route for an average party from the W., striking the main ridge on the S. side of a subsidiary summit at a gap in the cornice, a little N. of the summit. Perhaps overcautiously I decided that the slope was a little steep for our party. I hope to have another look at it. The main ridge is also obviously climbable from the N., and to judge from a photograph from the S.W. also. On the other hand, the E. face appears formidable and overhung by a huge cornice of ice, so much so that I think Whymper may have been mistaken about the main topography of the mountain, of which he hardly, if at all, got a clear view ; possibly he was never on the E. face.

The curious cornice formation mentioned by Whymper is prevalent, and crowns the summit ridge on the E. side, and also flanks the route up the W. face. The summit ridge does not appear to be cut by the cornice at present, as described by Whymper. It is very similar to those found on Ruwenzori, and some ice bulges inside the crater of Cotopaxi are reminiscent of it. It is, I feel sure, formed by the wind from dampness in the air and not from snow. Round our camp on Iliniza large lumps of hard flaked ice had formed on the rocks, many of them more than a cubic foot in size, and the upper rocks of Little Iliniza were plastered with lumps of ice.

G. H. B.

[32] Whymper, *op. cit.* 287.



Photo, G. H. Bullock.]

FOOT OF W. FACE OF ILINIZA.



Photo, G. H. Bullock.]

END OF N. RIDGE OF ILINIZA. BELOW AND FURTHER TO LEFT IS VERTICAL WALL AND ICE-CLIFF NEAR CAMP.