

is its continuation. Thence through a hole and by rotten edges in the face to the summit. (3½ hrs.)

Descent through the line of chimneys down the S.W. face into the Val Monfalcone.

Maps of the outlying Carnic Alps are none too reliable. When the party gained the summit they found no trace of any former ascent, neither could they find their summit indicated on the map. A detailed description of all these ascents appears in *Æ.A.Z.* liii. pp. 206-16.

F. S. C.

CIMA D'ARADE, 2503 m. By the S. face. August 12, 1930. Same party.

Easy access through chimneys in plumb line of the summit to belt of scree; then up chimney (about 60 m.) representing right extremity of 'Y,' and by good wide ledge into the left-hand chimney of Y. Straight up from a small notch to a broad grassy ledge. Climb the vertical face below the summit by a black edge into a crack and up to a small overhang. Then by the exposed and difficult rocks of the face, followed to the right by a ledge to a corner and direct up over rock steps to the notch W. of the summit. A rope's length up to a tooth on the ridge, followed by a descent of about 10 m. into a gap, and by the W. edge of the summit to a conspicuous slab. A long stride leads into a crack, whence the summit is soon attained. (3 hrs.)

PUNTA MANTRICA, 2510 m. By the S. face. August 14, 1930. Same party.

By a succession of chimneys to the left, attain the gap between the two peaks, and along the edge to the W. peak or summit. (2 hrs.)

(For detailed descriptions see *Æ.A.Z.* liii. pp. 206-16.)

Alaska.

MT. FAIRWEATHER, *ca.* 15,400 ft. First ascent, June 8, 1931. Messrs. Allen Carpe and Terris Moore.—See Mr. Carpe's narrative in the present number.

VARIOUS EXPEDITIONS.

Mont Blanc Group.

MONT BLANC, 4810 m. = 15,782 ft., *B.I.K.* By the Brenva Route. July 31, 1931. Mr. T. Graham Brown with Joseph Knubel and Alexander Graven. The party left the Torino hut at 03.28 and reached the Col Oriental de la Tour Ronde at 05.15—

having been delayed for about 22 minutes at the foot of the Col by a party in front. Left again at 05.24. Ascended *Col Moore* and reached the lowest rock on Moore's arête at 05.56 or 1 hr. 54 mins. from the Torino hut, excluding halts. Left again at 06.14 and reached the last stones below the ice arête at 07.10 with a short halt on the way. Left again, 07.20, paused at the outer end of the ice arête, and crossed the said arête, reaching the slope above its inner end at 07.33. The arête was corniced to the right at its inner end and steps had to be cut in snow along its steep W. side; 35 mins.' ascent in safe but too soft snow brought the party to ice up which steps were cut until rocks were reached at 08.30 below point 4304 m. Left again, 08.40 and reached point 4304 m., up ice, at 08.55. Left again, 09.00 and emerged on the snow plateau above the séracs at 10.00, with a short pause on the way. Continued towards Mont Blanc, rested from 10.10 to 10.24, and reached summit at 11.03—in 5 hrs. 56 mins. (excluding halts) from the Torino hut. Left again, 11.16; descended by the Bosses arête and N. face of Dôme du Goûter (*Pointe Bayeux*) to Grands Mulets, which were reached at 13.29—in 7 hrs. 48 mins. (excluding halts) from the Torino hut.

The ascent was made on probably the only possible day in July. The speed of the ascent was forced by the threat of coming bad weather. The conditions to the foot of 'Moore's arête' were excellent. The rocks of 'Moore's arête' were iced in places and carried snow—the presence of which, however, probably rendered easier the ascent of the upper part of the buttress. The lower two-thirds of the upper slope was covered with snow which was rather too soft, although not dangerous; the upper third was ice. The way found through the séracs was complicated at one place. The weather threatened to break at between 9 and 10 o'clock, and the Calotte of Mont Blanc was traversed to the Vallot hut in thick mist and a very cold wind. At the Vallot hut the intention of the party to descend over the Aiguille de Bionnassay had to be abandoned on account of the uncertainty of the weather. The snow on the N. face of Dôme du Goûter was very soft. A second party, consisting of Messrs. Rand Herron and Félix Simon, with Aschenbrenner, ascended the Brenva route later on the same day.

COL DE LA CALOTTE DE LA BRENVA, 3699 m. = 12,137 ft., *Vallot*, between the Fourche de la Brenva and the Calotte de la Brenva—from the Glacier du Géant to the Glacier de la Brenva. *First traverse*, July 27, 1931. Mr. T. Graham Brown, with Joseph Knubel and Alexander Graven.

The party left the Torino hut at 07.55, and reached the lower lip of the bergschrund immediately under the Col at 10.05, through deep soft snow, with 35 minutes' rests on the way. The only point at which the bergschrund could be crossed was at the extreme left E. side, and the crossing, together with a short horizontal traverse

on very steep ice to the foot of a small isolated rock, occupied 2 mins. less than one hour—the short ascent to the level of the top of the rock (iced) occupying another 17 minutes. The subsequent route then led in ice up the very steep slope of the couloir descending from the Col, and on the right, W., of a rib of rock which descends from the Calotte. The line of this slope passes up and to the right round a more or less isolated outcrop of rock in its steep lower part. Above this, the slope eases somewhat and there is a patch of broken rocks. This was gained and ascended; and then a direct ascent, partly up snow and partly up ice at an easier angle than before, brought the party to the ridge of the Col at 12.25—in just under 4 hrs. from the Torino hut, if halts be excluded. Light snow had been falling during the whole of the ascent. The Col was left again at 13.06 and its southern slope was descended to the Brenva Glacier, which was reached at 13.40—the descent having been rendered difficult by the condition of the snow. The whole traverse had occupied about $4\frac{1}{2}$ hrs. from the Torino hut to the Brenva Glacier, if halts be excluded. The party then returned over the Col Oriental de la Tour Ronde to the Torino hut.

Note on the Frontier Cols. M. Lagarde (*Vallot*, iv. 'Mont-Blanc—Tour Ronde,' p. 143) states that the Col de la Calotte might (equally with the Col de la Fourche) make one of the best passages across the frontier ridge to the upper Brenva Glacier and the foot of the Brenva route; but in Joseph Knubel's judgment the classical Col Oriental de la Tour Ronde is still the best passage. Curious to test this, we made the Col de la Calotte on an off day, but when the conditions were admittedly unfavourable to a rapid crossing. The ice slope immediately above the bergschrund of the Col de la Calotte is, however, extremely steep and the present party considers that even if the conditions were to be good and the bergschrund easy to pass (instead of being very difficult), this col would not normally afford a rapid means of passage across the frontier ridge.

If the Brenva route is to be ascended under the best conditions (snow and not ice on the upper slopes), safety demands that the upper slopes above the ice arête *should be reached as early as possible in the morning*. The most rapid line of passage from the Torino hut over the frontier ridge to the foot of the Brenva Buttress is therefore a matter of importance. The writer of this note has now crossed the frontier ridge or attained it from the Glacier du Géant by the 'Pas de la Tour Ronde,' both of the Cols de la Tour Ronde, the traverse of the Calotte de la Brenva, and the Col de la Calotte—that is, by all the recognised routes except the Cols du Trident and de la Fourche. As these two latter cols (together with the then untested Col de la Calotte) have been stated to be the best passages across the frontier ridge preparatory to the ascent of the Brenva route, the following information may be found useful. The cols

are taken in order from W. to E.; and the times, which are given from the Torino hut, are exclusive of halts:—

(1) Messrs. Courtauld and Oliver reached the Upper Brenva Glacier over the *Col de la Fourche* in 4 hrs. from the Torino hut on August 13, 1919, halts not known. (*Die Alpen*, 1928, p. 296.)

(2) The writer's party took 4 hrs. and 31 mins. over the *Col de la Calotte* on July 27, 1931, in bad conditions.

(3) The writer and Alexander Graven reached the central bay of the Upper Brenva Glacier in 3 hrs. 10 mins. from the Torino hut by traversing the *Calotte* itself on July 31, 1929.

(4) Herren von Schumacher and Amstutz reached the same place over the *Col du Trident* in 2 hrs. 25 mins. on July 26, 1927 (*Die Alpen*, 1928, p. 296), but by making use of steps cut on the previous day—this being a considerable saving of time as Mr. Smythe took as long as 3 hrs. to make the steps up to this col on July 31 in the same year. ('A.J.' 40, 46.)

(5) The *Col Occidental de la Tour Ronde* is admittedly an inconvenient passage.

(6) The writer with Knubel and Graven crossed the *Col Oriental de la Tour Ronde* to the upper Brenva Glacier at the foot of Col Moore in 1 hr. and 48 mins. actual climbing on July 31, 1931. The few steps necessary between the bergschrund and the rocks had already been made. But, a fortnight earlier, the same party, with Mr. B. R. Goodfellow in addition, cut steps and reached the crest of the col from the lower slope of the bergschrund in only 6 mins. longer than the time taken for the corresponding part of the climb on July 31. The saving of time in making the steps may therefore be regarded as negligible.

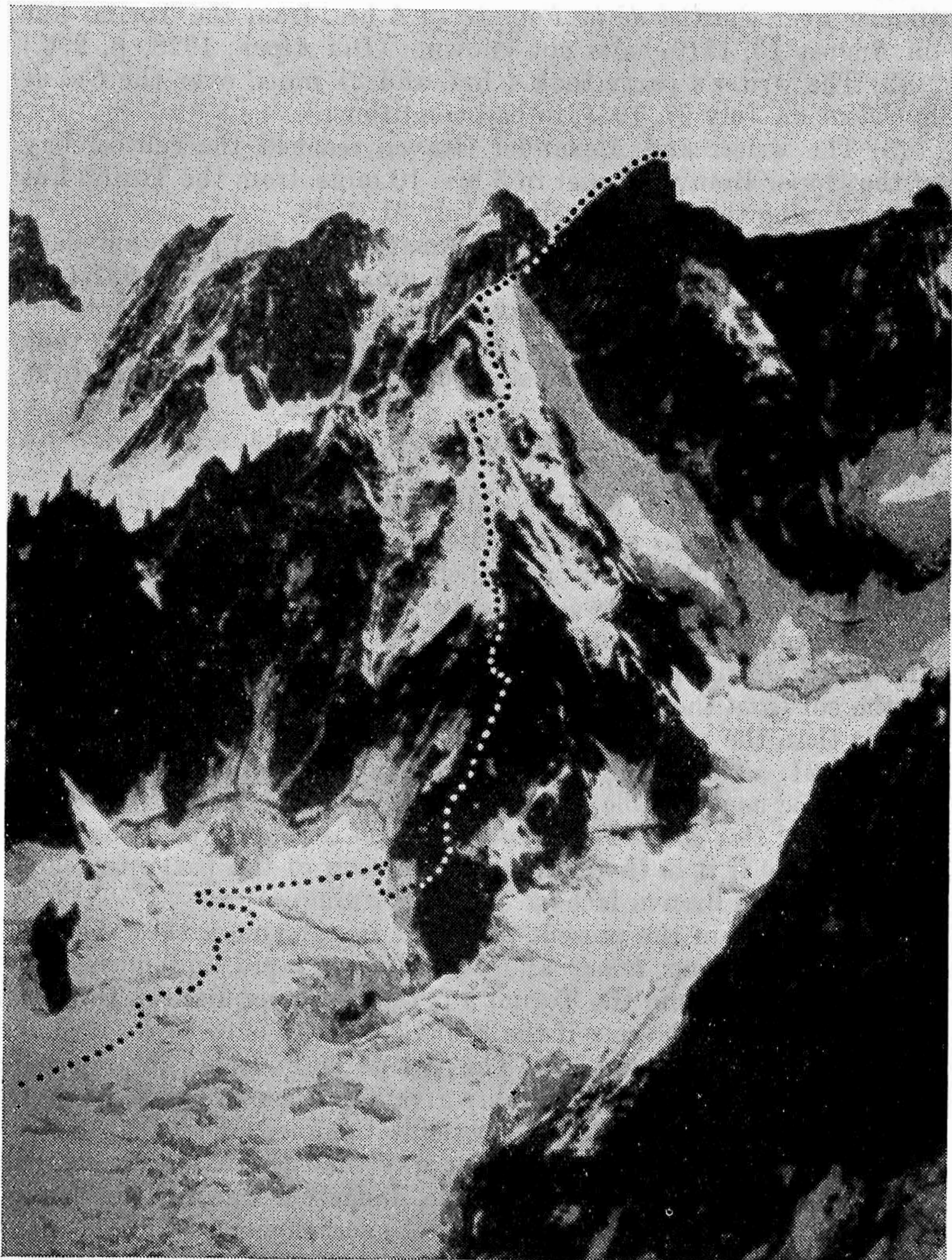
(7) The '*Pas de la Tour Ronde*' makes a long expedition convenient only if it is the deliberate intention of the party to reach the foot of the Brenva face late in the morning.

All members of the present party are in agreement that the *Col Oriental de la Tour Ronde* affords the most rapid and most convenient passage from the Torino hut to the Upper Brenva Glacier. This is especially the case if the Brenva buttress is to be reached at Col Moore—as it should be. The Col de la Fourche (if prepared on the previous day) may possibly give a passage as quick, or even quicker, to the foot of the 'Güssfeldt Couloir.' But that latter route, although it affords a quicker way than Moore's arête to the upper part of the Brenva route, is a dangerous one.¹ The writer has seen falls of ice in it on many of the occasions on which he has had it under view.

MONT MALLET, 3988 m. = 13,085 ft., *B.I.K.*, by the N.W. arête, attained from the Glacier des Périades; ROCHFORD ARÊTE; July 13, 1931. Messrs. B. R. Goodfellow and T. Graham Brown,

¹ As has been pointed out frequently in the JOURNAL.—Editor.

with Joseph Knubel and Alexander Graven. A steep snow slope runs down to the Périades Glacier due W. from the more or less



Photo, T. Graham Brown.]

MONT MALLET FROM L'ÉPAULE DU REQUIN, SHOWING 1931 ROUTE.

horizontal snow arête just under the summit rocks on the N. (Périades) ridge of Mont Mallet. The N. edge of this snow slope is bounded by a rib of broken rocks. From near the top of this rib, a fine buttress descends N.W. in the direction of the Requin hut. Previous parties seem to have ascended by the snow

slope and the broken rocks on its N. edge. The present party ascended by the above N.W. buttress—upon which no signs of any previous ascent were observed.

The party left the Requin hut at 03.18 and reached the bergschrund below the N.W. buttress at its left-hand, N., end at 05.52, having paused 17 mins. on the way. Half an hour was spent in making a way across to rocks which proved to be impracticable. The party therefore retired, and crossed the bergschrund again more to the right—finding lodgment on the rocks at 06.34, when a brief rest was taken. The difficult ascent of a short and unsound couloir led, at 06.55, to a neck of rock on the ridge of the buttress. This place was left again at 07.10, and the ridge was climbed up sound rock until 07.45, when it constricted below a gendarme shaped like a wave breaking over to the right. The climbing at this point was difficult, the gendarme being traversed to the right rather than by an easier chimney (loose rock) on its left. Easier rock then led to the base of a steep and broad step. A difficult horizontal traverse of about 90 ft. to the left on snow-filled and iced ledges along the face of this step brought the party to a rock couloir with some unsound rock, which was ascended—the whole movement being about 150 ft., and requiring care. The foot of the steep ice arête which crowns the rock of the buttress was reached at 08.53. The party halted from 09.15 to 09.35 at the top of this ice arête and then ascended by an arête of snow and broken rocks set at an easier angle. The top of this having been reached, the traverse of a snow couloir led to the upper part of the snow slope. The N. arête of Mont Mallet was reached at the more or less horizontal snow ridge at 10.40 without further halt, and Mont Mallet itself at 11.40—6 hrs. 56 mins. from the Requin hut excluding halts, but including the time wasted in the first attempt to cross the bergschrund. The Dôme de Rochefort was reached (13.12) from Mont Mallet, and the Torino hut was reached over the Aiguille de Rochefort (14.31) at 17.59, or exactly 12 hrs. from the Requin hut if halts be excluded. The party was rather heavily laden, and the snow was very soft on the *Rochefort* arête.

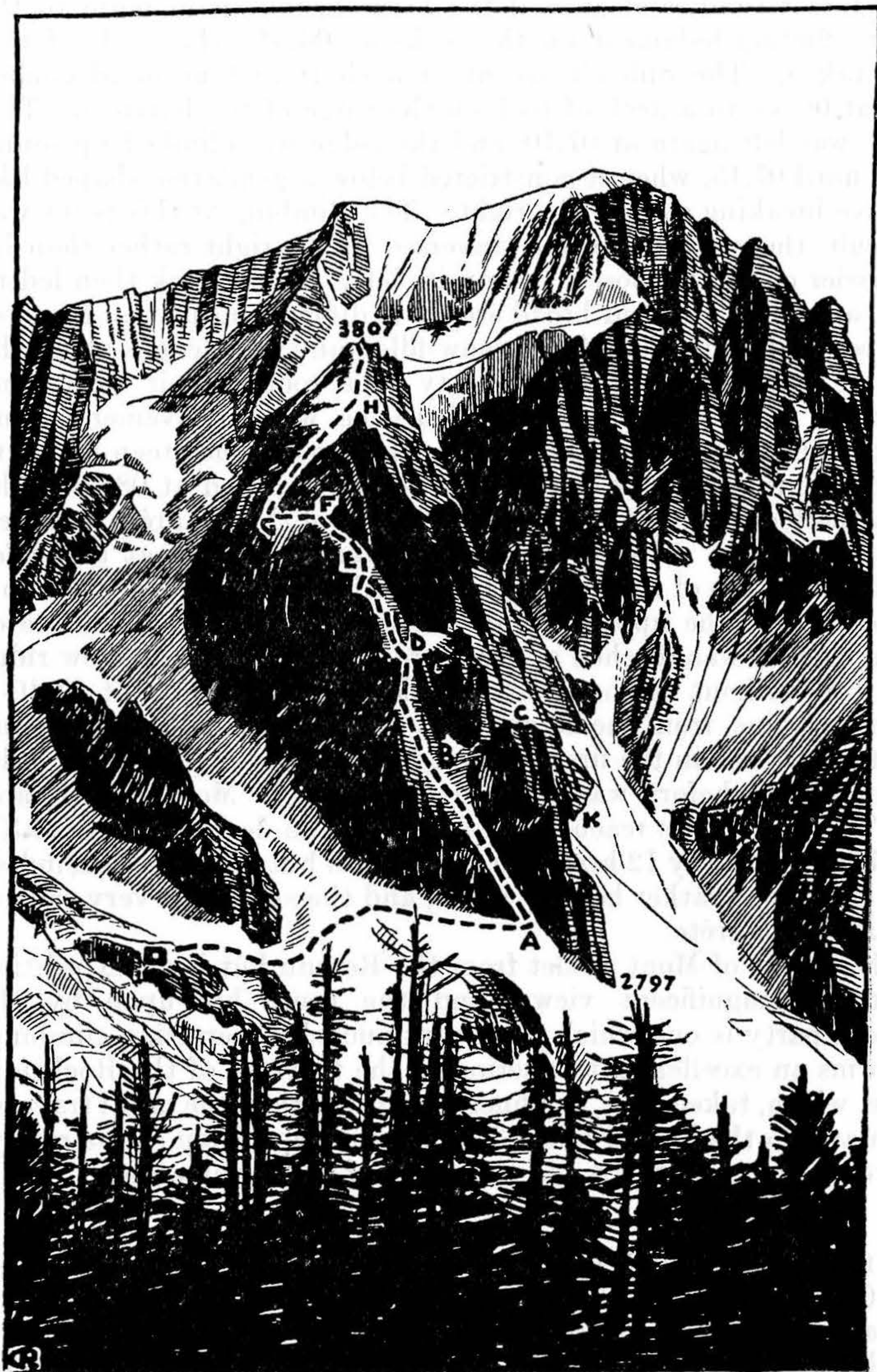
The ascent of Mont Mallet from the Requin hut is an expedition affording magnificent views, and the route hit upon by the present party is one which gives continuously interesting climbing. It forms an excellent introduction to the traverse of the Rochefort arête, which, taken thus, is a finer expedition than the usual traverse from and to the Torino hut. The present expedition seems rarely, if ever, to be undertaken and is worthy of greater attention.

T. G. B.

TOUR DES JORASSES, 3807 m. = 12,509 ft.; height, but no name on (1910) *B.I.K.* By the S. face and ridge, August 5, 1931. Signori Renato Chabod and Pietro Zanetti; Gabriele Boccalatte-Gallo and Guido Derege on two ropes. The summit, 3807 m. *B.I.K.*, now proposed to be called 'Tour des Jorasses,' stands above the Pra Sec Glacier through which runs the ordinary route to the *Pointe Walker*

of the Grandes Jorasses. It is about 60–70 m. higher than the glacier.

To the S. a long ridge and face go down for more than 1000 m. to point 2797 *B.I.K.* The summit consists of a rocky knife-edge divided into two points of about the same height E. and W., separated by a notch about 10 m. deep. From the Grandes Jorasses hut the



Drawn by R. Chabod.]

ROUTE UP TOUR DES JORASSES, 3807 M., 1931.

summit is not clearly seen, but one can see the pinnacle marked 'H,' which is a sort of 'vorgipfel,' from which a well-defined ridge comes down to 'K.' This ridge is separated from another ridge (*F.E.D.C.* 2797 m.) by a very evil-looking couloir, partly iced and broken from time to time by huge steps of rock. This couloir is easily visible from the carriage road of the Ferret Valley between Le Tronchey and La Vachey.

The route followed is partly by the S.W. flank of the second ridge, *F.E.D.C.* 2797 m., and partly along the ridge itself till one reaches 'F.' At this point the ridge is welded to the mass of the 'Tour,' and the route by rocks and snow reaches the snow gap between 'H' and the W. peak, and from the said gap goes straight up by the final ridge. The point 'A' is about 60 m. higher than point 2797 m. of *B.I.K.*, so the climb is in all about 3000 ft.

On July 23, 1931, the climbers had been up to 'C' reconnoitring.

From the first snow patch the route goes towards the second snow patch 'D.' There are difficult chimneys up to this point, followed by slabs and a very narrow ridge up to 'E.' The climb is then much easier as far as the shoulder 'F.' Then a delicate traverse to 'G,' then by rocks and snow up to 'H' whence they climbed the final summit, of which the W. peak is the highest. From there they descended to a gap between the two peaks, and then with three *rappels* they reached the Pra Sec Glacier, about 70 m. below the summit.

After traversing the glacier they reached the Rochers Whympier and, as it was late, descended to the Grandes Jorasses hut.

It is a beautiful climb, not too difficult, but at the same time no child's play. The rocks are quite good. If the party had consisted of two only, it would have been easy to reach the summit of the Grandes Jorasses.

- = Grandes Jorasses hut.
- A = Beginning of the climb.
- B = First snow patch.
- C = Point reached July 23, 1931.
- D = Second snow patch.
- E = Platform at the beginning of less difficult rocks.
- F = Shoulder joining the ridge '*F.E.D.C.*' 2797 m. with the mass of the mountain.
- G = Third snow patch.
- H = *Vorgipfel*.
- K = Beginning of the ridge 'H.K.'
- 3807 = Summit of the 'Tour des Jorasses.'

Times :

Left hut, 03.40.

Beginning of the climb, 05.00.

'B,' 06.30-07.00.

'D,' 08.30-09.00.

'E,' 12.35-13.10.

Summit, 15.20-15.30.

Pra Sec Glacier, 17.20.

Rochers Whymper, 18.30.

Grandes Jorasses hut, 20.20.

R. C.-C.

AIGUILLE DES GRANDS CHARMOZ, 3445 m. = 11,304 ft., *Vallot*. By the N. face. June 30-July 1; July 5-9 (!), 1931. Herren W. Welzenbach and W. Merkl.

June 30.—From the Thendia Glacier attack commenced on the 4000 ft. face, by difficult rocks. The lower rock rampart was conquered by its centre and a bivouac established about half-way up the face on the lowest bit of the ice slope situated thereon.

July 1.—Attack resumed up the ice slope in the direction of the steep and slabby final summit rocks. Searching for a way out, party forced towards the N.W. arête, attaining latter above a deep notch (3265 m., *Vallot*), some 400 ft. below the summit. Here threatening weather prevented them from continuing the ascent and compelled a descent over the N.W. arête, while the breaking of a storm rendered obligatory a long halt about point 3117 m., *Vallot*. A second and extremely violent storm forced them to halt on a narrow ledge at about 9500 ft., the bad weather so prolonging the descent that another bivouac in rain had to be made on the Nantillons slope of the Doigt de l'Étala, 2850 m.

July 2.—Descent in improving weather over the Col de l'Étala to the Nantillons Glacier and to Montenvers (12.00).

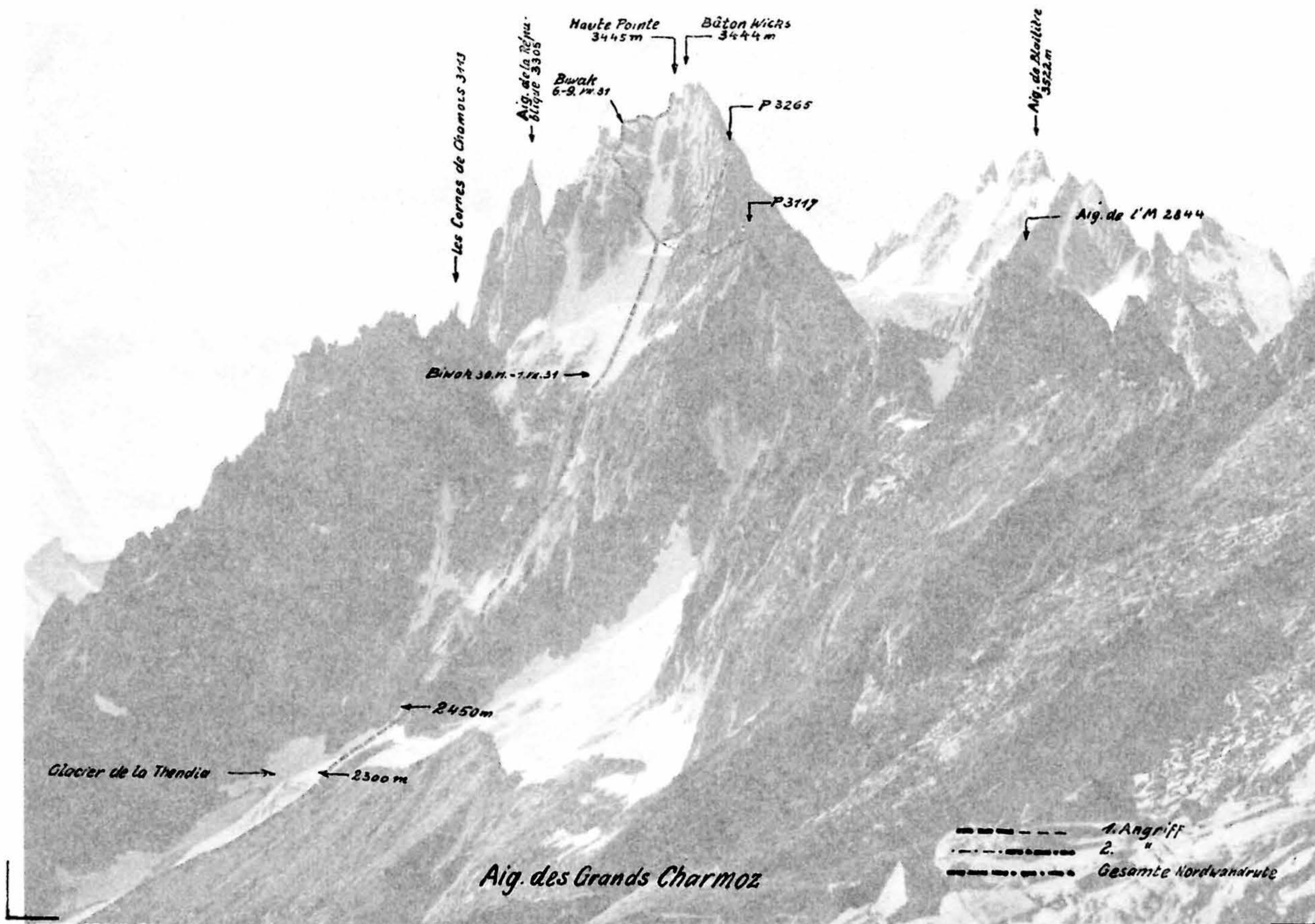
July 5.—To avoid the lower stone and avalanche-swept face, party attacked N.W. arête, bivouacking that night about point 3117 m. on said arête.

July 6.—Party pulled out on to the N. face towards the ice gully descending from a notch in the summit rocks. Crossing this dangerously swept gully, party clambered up the extraordinarily steep rocks of its true right bank. In the afternoon a sudden storm so delayed progress that a bivouac in a minute recess some 300 ft. below the summit became necessary: a series of storms continued all night.

July 7-8.—Continuous snow; further advance or retreat impossible.

July 9.—Slight clearance of weather. As 1½ ft. of snow lay on the badly iced face, a descent of the wall proved impracticable owing to the threat of avalanches, leaving the forcing of the ascent as the only solution. This was accordingly attempted and the summit reached under extreme difficulties and further snow storms (9 hrs.).² Descent by Charmoz-Grépon couloir to the Nantillons Glacier and Montenvers, 22.30.

² The crest of the N.E. 'arête,' on which is situated the conspicuous Aiguille de la République, 3305 m., was attained far above the deep-cut notch S. of that tooth and comparatively close to the



Photo, Wehrli.]

AIGUILLE DES GRANDS CHAMMOZ, N. FACE.

[To face p. 370.]



Photo, Wehrli.]

AIGUILLE DES GRANDS CHARMOZ, N. FACE.

[To face p. 370.]

Under good conditions the ascent of the face might be forced in one day.³ The great wall is dangerous throughout and of the most extreme difficulty. Rock and ice pitons were carried by the party as well as a *Zdarsky* tent-sack.

W. W.

[We must express our thanks to Dr. Welzenbach for his interesting note and, beyond congratulating him on having extricated his party from a series of seemingly hopeless situations, refrain from comment.

Dr. Welzenbach has kindly supplied us with *complete* details of his route—under the circumstances not perhaps the least remarkable achievement of the week.—*Editor.*]

Pennines.

DENTS DU MIDI, *Doigt* (or *Dent de Salanfe*), 3112 m. = 10,539 ft. July, 1931. M. E. R. Blanchet with Kaspar Mooser. From the gap, *Col de la Dent Jaune*, follow the ridge or watershed, apparently the most obvious route. Access is, however, barred high up by the vertical step of an enormous tooth. The party turned this first to the right and then by its flank. (No times.)

The route is very exposed and not to be recommended. The rocks are vile and holds crumbling. On two occasions we had to fashion holds with a hammer.

[The late Baron G. de Meyendorff with Arthur Revaz, on June 12, 1921, took another route, abandoning the watershed at the *Col de la Dent Jaune*.⁴ This route traverses the slope to the great gully seaming the Iliez slope and ending between the two *Doigts*. Early

summit of the Grands Charmoz. In other words (*vide* illustration), the latter part of the ascent was by the W. slope of the said N.E. arête or buttress to its crest and along the latter, whereas the Ryan-Lochmatter party of July 14, 1905, appears to have forced its way straight up the upper portions of the main N. face, having found the great N.W. arête impossible in its upper third.

For a thrilling account of an attempt on this face in 1926, see *Alpinisme*, No. 23, pp. 381–390, an ennobling story of comradeship in peril, by M. R. Tézenas du Montcel.—*Editor.*

³ The expedition has been repeated: the party (no date), starting at 15.00 from the base of the N. face, arrived on the summit, N.E., ridge just below the top, at 22.00 hrs. the same *night*! They bivouacked on the N.E. arête and completed the ascent in bad weather next day, descending to the Montenvers (*Der Bergsteiger*, October 1931, p. 66; *Der Bergkamerad*, October 1931, pp. 305–7).

No more characteristic example of modern folly could be quoted.—*Editor.*

⁴ This route is not described in the new *Climbers' Guide*, 'Guide de la chaîne frontière entre la Suisse et la Haute Savoie,' vol. II.

in the season with good snow, this route is far preferable to ours and is shorter than the usual way.—Notes from Mr. H. F. Montagnier and Arthur Revaz.]

E. R. B.

GRAND COMBIN, 4317 m. = 14,164 ft. By the S. face and arête. August 1, 1931. Signori Michele Baratono, Lino Binet, Amilcare Crétier and Alberto Deffeyes. The party left the Col de Sonadon at 05.00, and began the climb of S. face of Grand Combin at 05.15 by the first couloir to the W. of Col de Sonadon. The route follows a diagonal line towards the E. (bad rocks, powdery snow and then rocks covered with *verglas*) as far as some rocks near the S. ridge, which are absolutely overhanging. From this point they had to traverse as far as a great rib of rocks and snow by which they reached the S. ridge at 08.00 (4000 m.). Thence they climbed the S. ridge on good rocks except for a few bits of bad snow and iced rocks. In 1 hr. 25 mins. they reached the junction of the S. and S.E. ridges at the foot of the last step of rocks below the summit, which was reached at 10.00.

[The route lies between the itineraries 435 and 436 of Kurz's *Alpes Valaisannes*, I, pp. 117–19.—R. C.-C.]

SIGNALKUPPE, 4561 m. = 14,965 ft., *S. map*. By the N.E. (Macugnaga) face. July 17, 1931. MM. L. Devies and J. Lagarde.

From (Macugnaga) the Belvedere, *via* the S.E. arm of the Macugnaga Glacier, to the Pedriola Alp (1 hr.). Thence they mounted the glacier to its upper crevassed slopes, called the Signal Glacier. They bivouacked (2½ hrs.) on a rocky islet in the middle of the glacier at about 2700 m.

On the following day they ascended the glacier to the base of the rocky wall of the peak. Thence they bore to the right, S.W., by the lower slopes of the Monte Rosa Glacier, then, crossing two bergschrunds, scrambled on to the rocks of a rib descending in a plumb-line from the summit. Scaling the lower portion of this rib, the party attained the true right bank of the great ice slope of the N.E. face (3 hrs.), and skirted this to the great snowy hogsback dominating the rib (6 hrs.). Thence they reached the base of the summit rocks, where they bore to the right, N.W., to a rock and ice couloir. Climbing this couloir and the following ice slope, they debouched on the snow plateau of the Colle Gnifetti, whence the final rocks of the summit and the Capanna Margherita were attained (5¾ hrs., or 14¾ hrs. from the bivouac, including 2 hrs.' halts).

Mountain in bad condition, rocks covered with snow. Those constituting the great rib were hardly used on account of their difficulty; they were *skirted* to avoid stonefall. The ice slopes were covered with bad snow, except on the uppermost part. There ice lay quite bare and the pick would not bite. All along the great rib, on the margin of a great hollow forming a kind of couloir, the



Photo, Signor Baratono.]

GRAND COMBIN, S. FACE AND RIDGE, SHOWING 1931 ROUTE.

A = where rocks are taken.

B = junction with S. ridge.

C = green rocks.

B-D = route along S. ridge towards summit.



Photo, V. Sella.]

SIGNALKUPPE, E. FACE, FROM MONTE MORO,
SHOWING 1931 ROUTE.

ice slopes are uniformly very steep but not broken. The deep snow prevented any stonefall—nevertheless there must often be great risk. Near the base of the great slope, some 300 ft. below the upper bergschrund, the lower portion of the sérac bastion collapsed. The party had just time to shelter under an overhanging boulder; the avalanche swept right over this, raked the route followed for over an hour, then plunged down over 3000 ft., completely covering the bivouac islet—which had appeared quite out of range the night before.

All the lower portion of the route down to about 3400 m. is exposed to sérac avalanches: fortunately, these appear to be rare. At about 2400 m. there is risk from the Marinelli couloir, while higher up the Signaljoch, Signalkuppe and Monte Rosa Glacier are all threatening. Hence a bivouac on the Signal Glacier is not to be recommended. It would be better to sleep at the new Zamboni hut at the Pedriola Alp, 2052 m. If a bivouac proves obligatory, parties should sleep at 2700 m. on the buttress descending N. from the E. arête of the Signalkuppe, or on the extreme tip of the great rib descending from the summit.⁵

The first party recommends their successors to: (1) attack the great rib much lower down by a gully to the left, S.E., seaming its extremity; the 1931 route could be rejoined by bearing to the right, N.W., some 500 ft. higher up—thus more or less obtaining shelter from falling séracs; (2) high up, instead of taking to the rocks as the first party did, try the surface of the couloir leading diagonally upwards left to right, and attain the main ridge rather to the S.E. of the point reached in 1931.

J. L.

WEISSMIES, 4031 m. = 13,225 ft. By the E. face (taken in the descent). August 27, 1931. Mr. and Mrs. G. W. Murray with Oscar and Alfred Supersaxo.

We left the Weissmies hut at 05.00 and ascended in leisurely fashion by the usual route. By 10.00 we were on the secondary summit of the Weissmies, about 250 m. S. of the main one; and began the descent by a rocky rib leading straight down from the survey beacon to the Laquin Glacier. The rocks presented no special difficulties, but were covered by new snow which alternately helped and hindered our progress. From 12.00 to 12.30 we had lunch just after crossing a small snow saddle, and by 15.30 the rocks had become so glacier-worn and smooth that we left them and traversed northwards across the face of the glacier which sweeps down from the summit of the Weissmies. At 16.30 we unroped on the Laquin Glacier and had another meal. By 19.50 we were in Simplon village.

⁵ The approach and prospect appear truly alluring.—*Editor*.

Oscar remarked, 'Now there are seven routes on the Weissmies and I have been first man on four of them. I call it my mountain !'

G. W. M.



WEISSMIES FROM ABOVE SIMPLON VILLAGE.

Left-hand route corresponds with 1931 ; others are previous routes.

LAQUINHORN, 4005 m. = 13,140 ft. By the W. face. September 2, 1931. M. E. R. Blanchet, with Kaspar Mooser. From the base of the face in question, the first party climbed up the rocky wall (07.20 hrs.), exactly under the plumb-line of the summit, first by a diagonal ledge bearing to the right, S., some 150 ft. long, then

straight up by awkward tile-like rocks. At 08.25 they touched the great ice streak cutting the rocky face. The snow was good and



LAQUINHORN, W. FACE, SHOWING 1931 ROUTE.

Photo, E. Gyger.]

rapid progress over slopes steepening from 45° to 50° was possible. Above the streak the party bore back towards the left, N., till again straight under the summit, 09.25. Thence, the final wall was climbed by a reddish rib where fresh snow made the steep and roof-like rocks very awkward. The summit was attained at 11.25.

Interesting, but dangerous from stonefall. The glacier was covered with fallen débris, while the upper ice streak was scored by stone shoots. It is vital to be as high as possible before the sun touches the face.

[This route is quite different from that of M. Herbert Speyer's party of July 12, 1898,⁶ which route should be described as 'by the S. arête attained from the W.' From the point attained in the S. arête, the 1898 party took 1 hr. to the summit, whereas our party reached the crest a few yards only to the S. of the top.]

E. R. B.

Bernese Oberland.

JUNGFRAU, 4166 m. = 13,669 ft. By the N.W. face. July (?) 26, 1931. Herr Ernst Gertsch, with Christian Rubi. From the Jungfrauoch the summit of the Jungfrau was attained, *via* the ordinary route, at 07.00. Descent in improving weather to the Silberhorn (1 hr.). Thence down the very steep hanging 'Rotbrett' Glacier—nameless on the map—between the Silberhorn and the *Rotbrettgrat*. Thick clouds preventing the sun from affecting the slopes, the party overcame the upper third of the slopes with comparative ease, despite their steepness. Lower down the difficulties of séracs and ice-walls became very serious. Many *rappels* in ice of 100 ft. or more had to be made, while the stonefall, as usual on this side of the mountain, proved far from negligible. The Schwarzmönch was attained at 12.00 where the untrodden portion of the route ended. Stechelberg was attained at 16.00 hrs.

Route is stated to be very interesting and striking. The descent involved is about 12,000 ft., while total *ascents* on Silberhorn and Schwarzmönch comprise about 1000 ft.

From *Sport*.

GROSS WANNEHORN, 3905 m. = 12,812 ft. By the S.W. arête (*Herbrigsgrat*). August 31, 1931. Mr. and Mrs. G. W. Murray, with Alfred and Oscar Supersaxo.

[The name *Herbrigsgrat* is applied on the *Siegfried map* to the lower portion of this arête, abutting on the Aletsch Glacier. It would seem convenient to extend the name to the upper portion also.]

The party left the Eggishorn hotel at 04.10, and roped at 08.30 at the snout of the Wannehorn Glacier. By 10.00 we reached the long arête running S.W. from the summit of the Wannehorn, at a point where it had died away to a mere rocky fence between two glaciers. Higher up it stood out steep and smooth, built of good rock, rather over 1000 ft. high, a noble buttress of the Wannehorn. We continued over some very soft snow to the foot of this at 11.30, and not liking the look of a direct attack, moved round to the right

⁶ *A.J.* 19, 248.



Photo, Ad Astra.]

SILBERHORN AND JUNGFRAU, SHOWING 1931 ROUTE.

[To face p. 376.]



Photo, Wehrli.]

GROSS WANNEHORN FROM S.W., SHOWING 1931 ROUTE.

to the first of two snow-couloirs. Some delay was caused here by the new snow twice avalanching from just below us, and the weather, up till now very hot, changed abruptly to a snowstorm. At 12.30 we started up the couloir and after 30 ft., Alfred, wishing to arrive on the arête as low down as possible, took to the rocks on the left. These were good but very steep, and the holds were so slight that our party of four could only move one at a time. The next 500 ft. to the arête took us $1\frac{3}{4}$ hrs. So far as I could see through the driving snow, the rocks immediately to our right between the two couloirs were much easier. Once the arête was gained, our difficulties largely disappeared, but the snowstorm continued, and we arrived rather unexpectedly on the summit at 15.15. We descended by an approximation to what the new S.A.C. guide (*Berner Alpen*, Band IV, p. 244) calls route 340, and were off the rocks by 16.45. At 18.30 we were down on the main Aletsch Glacier, and after a melancholy trudge through heavy rain were back at the Hôtel Jungfrau at 21.30.

G. W. M.

Bernina (W. Wing) Group.

CIMA DEL LARGO, W. Peak, *ca.* 3155 m., no height on *S. map*. By W.N.W. ridge attained *via* the Vallone del Bacone and Balzo ridge. July 11 and 12, 1931. Count A. Bonacossa and Signor L. Binaghi. From near the Albigna bridge (1304 m.) through wood and boulders to the wild Vallone del Bacone (1 hr.) which was ascended keeping N., mostly by an old hunter's track through bush and boulders till nearly 2100 m. (stonefalls do not occur and would have been easily avoidable). The track leads to the Balzo ridge (2 hrs.). Walking over it a bit, then keeping on its S. flank over grass and a few sound rocks, the moraine, point 2780 m., is attained in 2 hrs. more. Crossing the Bacone Glacier above the crevasses and descending slightly, the Largo W.N.W. ridge is soon attained; a kind of broad slope of stones and sometimes insecure rocks is followed without any difficulty to the first peak (2 hrs. 35 mins. from point 2780 m.). Climb of no particular interest, but scenery really wild, especially towards the S.W. ridge of Bacone.

The first day, owing to threatening weather, from point 2780 m., we only crossed the Forcola del Bacone (variation of 'Sommer' 1924 route, *Die Alpen*, 1925, pp. 185-6; Sommer did not leave the Vallone del Bacone, keeping towards the end N. of the Balzo ridge). On the second day we recrossed the Forcola from the Forno hut and completed the route.

A. B.

Bernina (E. Wing) Group.

PIZZO DEL TEO (Pizzo Teo), 3052 m. = 10,012 ft., *S. map*. By the W. arête. August 29, 1931. Herren W. Flaig, K. Hupfer, F. and O. Kühlken. From Val di Campo by tracks to Mottal, 2520 m., thence along the ridge connecting with the W. arête of

Pizzo Teo. Attaining a broad *débris* gap, a great, pointed tooth and three smaller pinnacles lie between the said gap and the main summit. The lesser pinnacles are turned on the right, S. or S.W., by grassy ledges leading across ribs to the steep gully falling S.W. from the notch to the W. of the pointed tooth. By slabs and ledges first straight up then diagonally to the left to a little chimney on the N.W. edge of the tooth. Up and over this, then by ledges to its S.W. rib or buttress. Climbing this rather to the left—near a mass of loose boulders—they came to a recess whence slabs lead to the top of the tower. Thence a few steps first E., then S., till ledges are found leading to the left to the eastern edge of the tower, whence a quick descent, N., brought them to the gap before the final tower, whence the summit is attained by concave slabs, its left edge and a kind of shoulder (3 hrs. from Mottal).

Descent by approximately the same route to the picturesque Teo tarns, whence a good path leads *via* Aura Fredda into Val di Campo.
W. F.

CORNO DI CAMPO, 3234 m. = 10,610 ft. By the S.W. *arête*. August 27, 1931. Herren K. Hupfer, F. and O. Kühlken and Walter Flaig. Through Val Mera and over steep grass and *débris* to the highest grassy plateau or shoulder (2660 m., aneroid), just S. of the steep S.W. *arête* (2 hrs. from Lungacqua). From the shoulder an obvious grass and rock ledge leads diagonally N. to the imposing ridge. The party followed this ledge for some rope-lengths with the intention of thus turning on the W. slope an overhang composed of light-coloured rocks, threatening further progress higher up. The party crossed a couple of minor ribs and a stone-shoot to a better-defined buttress, W. of the said stone-shoot, whence, doubling back, they attained the crest of the *arête*—it would be better, probably, to keep on or about the actual crest throughout.

Now along or, as near as possible to, the true crest which is sometimes level, sometimes broken into great steps, now narrow and then serrated—a fine climb—to the level *débris* terrace under the broad nearly vertical final tower. From a few steps to the left of the point attained at the base of this tower, they zigzagged up, crossed a gully, and by a step some 120 ft. high, arrived on a ledge. Along this nearly level ledge in a N.W. direction, then diagonally to the left over well-stepped rocks to a *débris*-slope just below the final rampart-like rocks of the tower. Thence they bore S. along the *débris* ledge to its end, whence they climbed up a chimney-like angle—bad rocks—seaming the tower and attained, by a crevice behind a loose flake, the main ridge which was easily followed to the top (5½ hrs.).

Descent by the snowy N. face and up the Pizzo Paradisino, 3305 m., whence descent towards the S.E. by the stony glen—far better descend into Val Mera—between the two peaks, to the surface of Val Viola Poschiavina.

W. F.

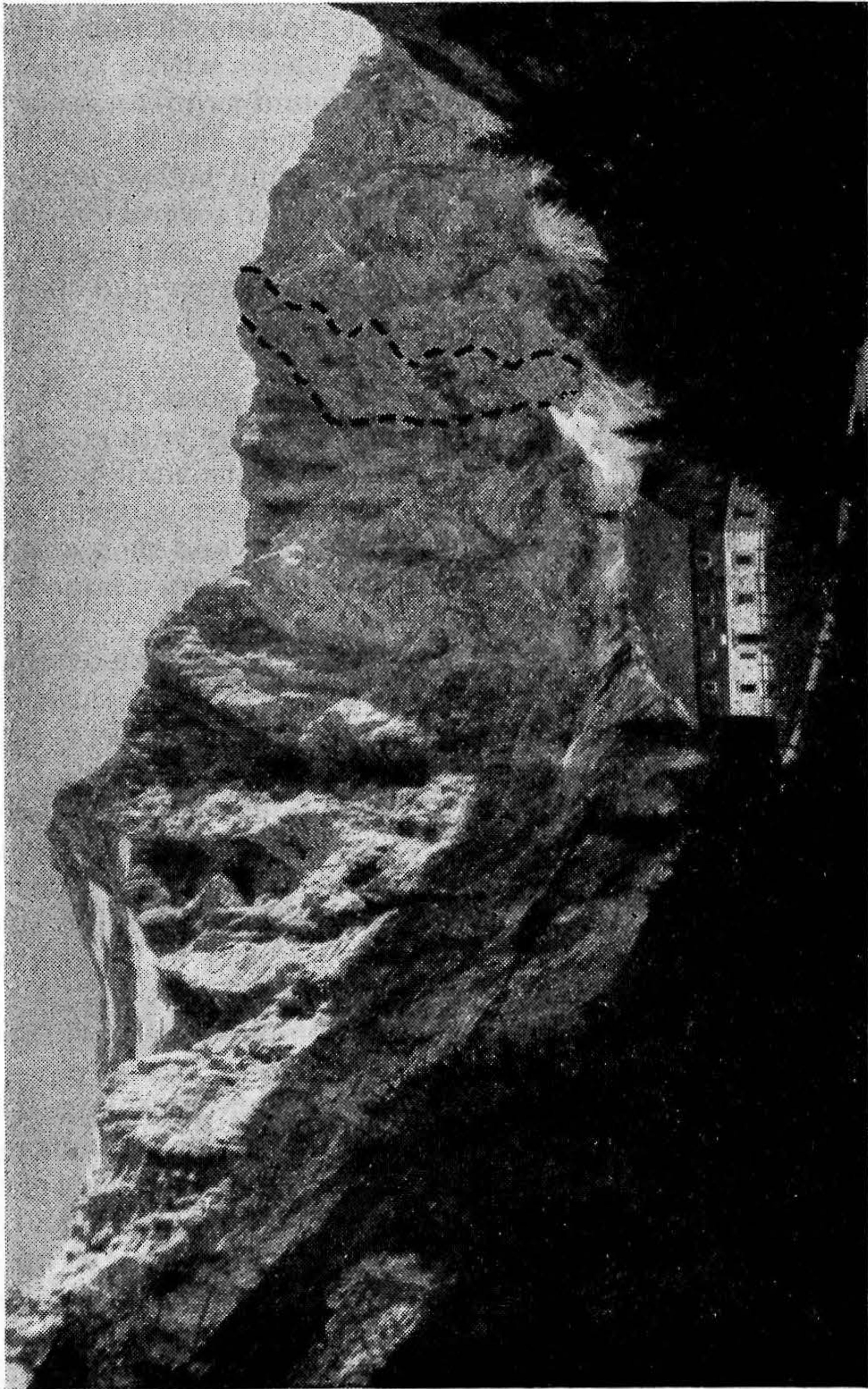


Photo, W. Flaig.]

CORNO DI CAMPO (LEFT) AND P. PARADISINO (RIGHT) FROM W. RIDGE OF P. SAOSEO.

Julian Alps.

TRIGLAV, 2863 m. = 9400 ft. By the N. face (or *attempted* 'Jug' route). August, 1930. Miss Paula Jesih and Milan Goštisa.



TRIGLAV, N. FACE, SHOWING 'ČOP-TOMINSEK' AND 'JUG' ROUTES UP W. WING OF WALL.

Access to the face is gained few metres to right of the snowfield below the 'Jug' Memorial Tablet. By grassy slope to very wide grassy ledge and thence to mouth of a steep chimney some 100 m. high leading to conspicuous smooth slabs. Some difficult bits in

first chimney. Thence to the right into small chimney leading diagonally to a small platform. To the right now rise smooth, slightly overhanging slabs, leading by a very difficult traverse to a large overhang.

A piton was here observed in the overhang, possibly fixed by the late Dr. Jug, shortly before his fall in 1924.⁷

From the little platform they traversed the smooth slabs to the overhang, and there drove in two pitons. These, with a *karabiner*, afforded holds. Above the overhang they found two recesses at the back. After failing to negotiate the slabs from the first of these hollows, they turned to the right, past the second hollow, and by a narrow ledge reached a small rib, and then crossed several overhangs to easier ground. Thence they zigzagged on open rock, sheer, but with good holds. From the end of this face a narrow and slippery ledge, sharply tilted towards the end, leads up to a little ridge below a holdless and exposed overhang.

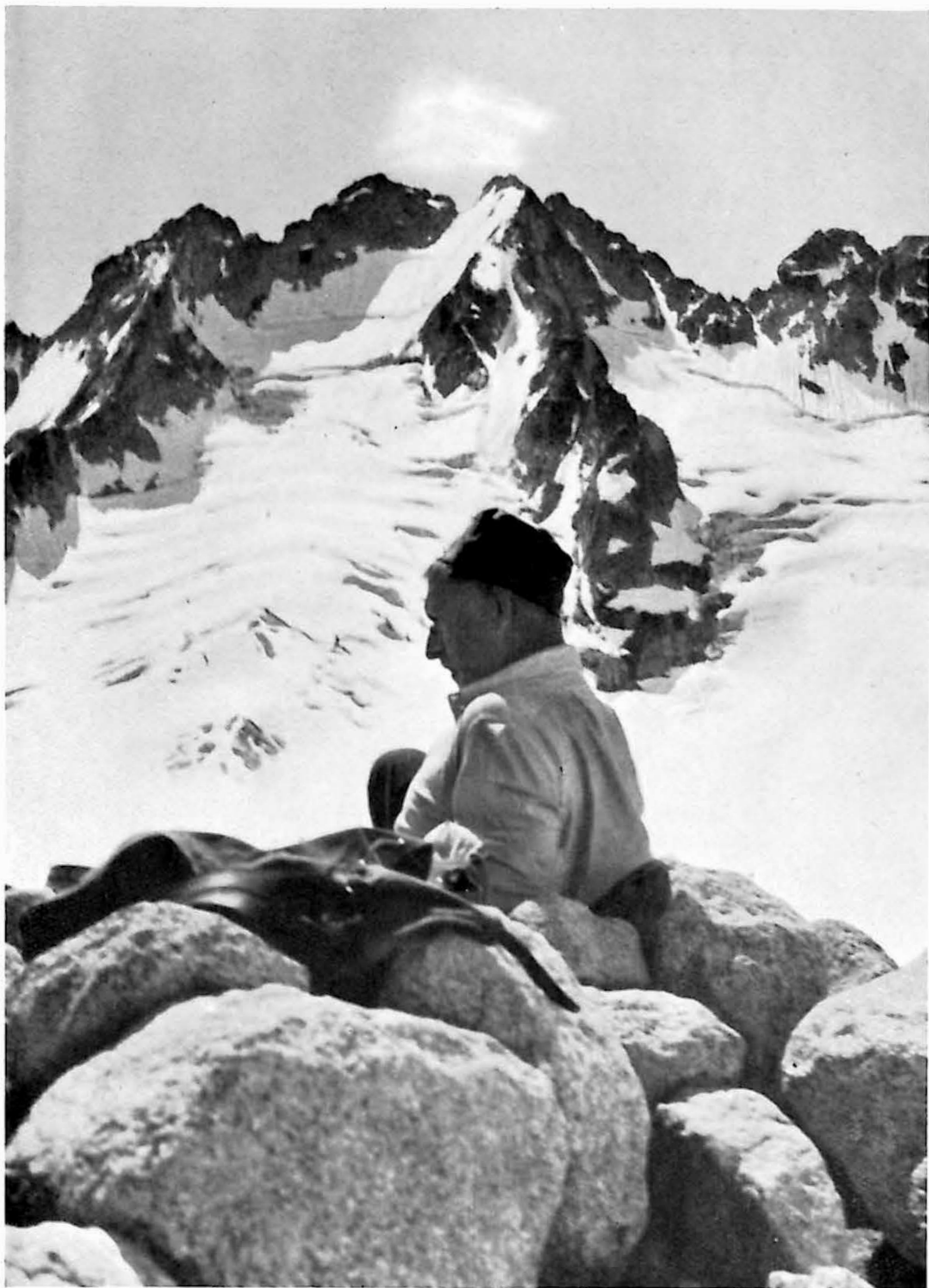
They crossed and got on to steep slabs below great rusty-brown boulders. They attained to the E. a small chimney with good hold leading to a large rock separated by a crack from the main face, then on by a crevice to a large platform, followed by a perpendicular ridge leading to a hole. They zigzagged to a chimney and thence to the ridge followed by smooth slabs, then to the left behind a large rock, and thence on to perfectly smooth and roof-like slabs.

After a very difficult traverse to the left, they crossed an overhang and entered a chimney at the end of which they climbed through a small 'window' (chockstone). Came out upon shaly slope, then on by a small ill-defined rib.

Thence by zigzags over friable rock, to a chimney with good holds, affording rapid progress. The chimney led to the ridge, from which a ledge (rotten rock) leads to a likewise rotten chimney, first moderately, then sharply inclined. At the end of the chimney a small 'window,' and beyond that an enormous complex of smooth and tilted slabs.

Thence to the left to far side into small chimney, up that, across the ridge for a few metres to the foot of the slabs. Thence down to shale-lined chimney and up by that to the foot of characteristic smooth slabs, in the upper part of which appears a conspicuous rock not unlike a roughly-fashioned chair of state. Up the left edge of the slabs towards a snowfield. Now on the far side of the snow and by the only available ledge to the final rocks. Thence straight up by very steep, partly overhanging rock, and a smooth back and knee chimney to the top of a pinnacle. From the top of the pinnacle they traversed to the left to a small ledge leading gently to the snowfield. The rock of this ledge is particularly brittle. Towards the end of that ledge they turned to the right on to the snowfield which leads to the 'Bamberger' route.

⁷ *A.J.* 40, 179 ; 42, 78.



Photo, W. H. Amstutz.]

HIS MAJESTY THE KING OF THE BELGIANS ON AGO DI SCIORA. PIZ ZOCCA IN
BACKGROUND.

[To face p. 380.]

The Triglav 'N. Face' is between 700 and 800 m. high in that portion traversed by the 'Jug' route, and for the first three parts of the route it is almost sheer. Great smooth slabs, occurring in successive series, constitute the special and characteristic difficulty.

The climb occupied 16 hours in all.

F. S. C.

ALPINE NOTES.

THE ALPINE CLUB OBITUARY :	Date of Election
Allport, D. W.	1875
Colgrove, J. B.	1876
Morse, Sir George H.	1887
Holmes, Alfred	1894
Shea, C. E.	1896
Nicholson, L. D.	1902
Candler, H.	1905
Collin, T.	1907
Schofield, J. W.	1907
Drake, Canon F. W.	1908
Kidd, Canon J. H.	1921
Morshead, Lt.-Col. H. T.	1922
Painter, A. R.	1923
Wright, W. A.	1925
Peto, R. H. K.	1929

THE CLOSING OF THE ITALIAN ALPS.—If a little easier in frequented districts during the height of summer, there are no real signs of improvement in the general situation, which continues to be unsatisfactory. During the C.A.I. Congress at Botzen, the President announced that 18 passes, hitherto closed, would be open between the Stelvio and Pontebba in 1932.

The S.A.C. and letters of the REV. W. A. B. COOLIDGE.—The Librarian of the S.A.C. Central Library, Zürich, requests us to announce that, 'together with the Alpine portion of Mr. Coolidge's library, the S.A.C. has collected during the course of the year, in their library at Zürich, many letters belonging to that distinguished mountaineer. It is true that Mr. Coolidge found little time to put into order his copious correspondence.¹ Nevertheless, thanks to the zeal of Herr Adolf P. Dietschi, M.A., some sort of order has now been installed and the correspondence would be of the highest value to

¹ Mr. Coolidge, *himself*, was always able, despite the seeming disorder, to lay his hand on any letter, however obscure the subject, at a moment's notice !