

attaches to anybody. The funeral service was held at Courmayeur and the body then conveyed to Turin.'

The 'Rivista' for August adds some further particulars. The part of the route most exposed to stones had been safely passed, and the accident happened as they were crossing a small gully. The statement, however, that the leading guide sprang forward, the hinder one backward, to the nearest points of shelter, drawing the rope tight and making it impossible for Signor Poggi to move in either direction, is contradicted in the September number; and, indeed, the conditions seem to have been such as to make this impossible.

ALPINE NOTES AND NEW ROUTES.

PIC BOURCET, CENTRAL AND WEST SUMMITS (12,115 ft. [?], 12,100 ft. [?]), AND ROUTES BY THE W. FACE. August 16.—Mr. Ernest Aves, with Christophe Turc as guide and J. Rochette as porter, left the hotel at La Bérarde at 2.55. The rope was put on at 7.5, and the top of the Col de la Casse Déserte reached at 9.10. Descending the col on the E. side for about a quarter of an hour, they turned S., and in about 20 min. reached the S.E. foot of the mountain. So far the route from the col had probably been that taken by Mr. Swan.* Crossing a triangular piece of snow, Turc attempted the rocks on its left, but no advance being possible there the snow was descended S. to the end of a long rib of rock. This was turned (10.55) and found to give good going on the other side. Here the actual climb may be said to have begun. Bearing N.W., the party mounted the S. face of the mountain until very near the Pointe Swan. Skirting this on the left side, they made, first by a chimney, then by open rock, and again by a second chimney followed by open rock, for the central summit of the main ridge (1.5). Hold had been somewhat uncertain at points on the way up, but only for the last 80 ft. or so were the rocks very bad. Here they were distinctly rotten and dangerous. The central summit seemed to be about 15 ft. lower than the Pointe Swan. The party followed the main ridge for about a quarter of an hour, then descended by a medial arête (S.) for a short distance, traversed rather steep rocks (W.), and finally climbed by easy rocks to the W. summit (2.25). This is the point seen from the Tête de la Maye, and is, perhaps, 30 ft. lower than the Pointe Swan. A second cairn having been built by Turc (the first having been put up at the central summit), the party began the descent, at first S.E. and then S., following a couloir of easy rock and loose stone until opposite a well-marked gap in the side of the mountain facing the Vallon des Etançons. Cutting across an ice-slope, they climbed a low wall of rock and reached the gap (3.50). Here the descent of the W. face and the most uncertain part of the route began, although Turc, who so far had led, had shouted down, after a brief reconnaissance from the gap,

* See *Alpine Journal*, vol. xiii. p. 404.

that La Bérarde would be reached 'à huit heures.' This proved, however, an over-sanguine estimate, as the rocks were not left until 7.30. During the last part a decided trend to the S. had to be taken, but for the greater distance the party zigzagged and did not diverge greatly from the line directly below the gap. The rocks were fairly solid, but decidedly steep, and on five occasions rope had to be fixed for the last man, Turc. In all about 190 ft. of rope was thus left. After quitting the rocks about half an hour of twilight remained in which to traverse the snowfield at their base; but the slope was easy, there were only two or three crevasses to be crossed, and the moraine was reached just as darkness settled down. From this point, about 8,500 ft. up, 2 hrs. of daylight walking would have easily taken the party down to La Bérarde; but by lantern light something over 3 hrs. proved to be necessary, and the hotel was not reached until 11.50. Time, 20 hrs. 55 min. Halts, 2 hrs. 15 min. August 29.—Messrs. Hiatt, C. Baker, and F. W. Oliver, accompanied by Albert Supersaxo and Christophe Turc, made the first ascent of this peak directly from the Etançons valley. Leaving La Bérarde at 3.30 A.M., they followed the ordinary Etançons route to the Cabane des Bergers, from which point a direct line was taken up steep grass slopes, débris, and easy rocks to the amphitheatre closed to the E. by the main N. and S. ridge of the Grande Ruine group, to the N. and S. by the western ridges of the Pic Bourcet and Tête de Charrière respectively. A small fringe of glacier was crossed and the rocks of the main ridge struck at a point midway between the two western ridges at 7.0 A.M. After ascending a few feet on to a broad débris-covered ledge, an easy traverse was made along the face to the angle between the main ridge and the fine western ridge of the Pic Bourcet. Up this angle runs a long and steep gully, and to the left of the gully, running parallel to it, is a well-marked crack. The chief difficulty of the climb consisted in attaining the notch which marks the summit of the gully, and which is the point where the S. ridge merges in the mountain. The route followed lay sometimes in the gully, but for the most part on the rocks of the face of the S. arête to the right of the gully. On the whole a zigzag course was followed, gradually approaching the gully above. In the frequent traverses which were necessary the party were never more than 200 ft. from the gully. Their line of ascent was always much nearer the gully than the route taken by Mr. Aves in his descent some days previously. The two routes converge at the notch, which was reached after $3\frac{1}{2}$ hours' climbing up very steep and friable rocks. From this point the main ridge can be followed to Mr. Aves's cairn on the S.W. summit of the Pic Bourcet. The party, however, descended a few feet on the E. side into a very broad couloir filled with ice, out of which they climbed straight up to Mr. Aves's cairn. The point was reached at 11.30. Here a halt was made, but as clouds rapidly collected and a storm became imminent, it was decided to descend the mountain by Mr. Swan's route. The ridge from Mr. Aves's summit was followed over another, slightly higher, point—intermediate in position between Mr. Aves's and Mr. Swan's peaks—then, bearing always to the left, by a succession of couloirs and ribs of rock, a

descent was made into Mr. Swan's great couloir, and the S.E. branch of the Casse Déserte Glacier reached at 4.30. As the weather had entirely broken, the Plate des Agneaux Glacier was followed, and the Refuge at the Chalets des Alpes reached at 7.30 P.M. The party was on the rocks of this mountain from 7 A.M. to 4.30 P.M.—a circumstance due to the extraordinary rottenness of the rocks on both sides, especially in the neighbourhood of the summit. In this respect the Pic Bourcet exceeded anything within the experience of any member of the party. It is not possible or necessary to minutely describe the line of ascent taken to the right of the gully on the W. face. The rocks are steep and require careful handling; but, provided they are free from new snow, a climbing party should always be able to force a passage either up or down without artificial aid.

ROCHER DE L'ENCOULA (11,608 ft.). *August 25.*—The last-named party, unaccompanied by Mr. Baker, climbed the Rocher de l'Encoula from the Col de l'Encoula de Petit Pierre by the south arête, which was followed in its entirety to the top over several summits of subordinate importance. This variation of M. Duhamel's route * adds interest to a not very exciting scramble.

CRESTA PAGANINI (3,444 m. = 11,300 ft., Paganini). COL PAGANINI. *August 19.*—Signor G. Bobba and Mr. G. Yeld, with François Pession, of Val Tournanche, and Joseph Jantet, of Epinel, made the first ascent of the above, and completed the passage of the Col Paganini, the southern side of which was traversed by Messrs. E. T. Compton and G. Yeld, with François Pession, André Pellissier, and Léon Guichardaz, in August 1892.† In 3 hrs. from the Monei Chalets, at which they had spent the night, the party reached the foot of the Cresta, 3,218 m. (the last figure is doubtful), and thence, chiefly by good rocks, passing over 3,436 on the way, reached the highest point, 3,444 m. They then, after going down a little on the other side, descended in the direction of the Coupé de Monei by a very steep snow-slope, with a bergschrund at its foot, which took some negotiating.

These names were proposed by me in honour of Signor Paganini, whose map is the only one upon which this rock ridge is correctly laid down, and were warmly supported by Signor Bobba. It is properly a big buttress of the Tour St. Ours, 3,602 m. = 11,818 feet (Paganini), and is joined to it by a fine snow ridge, traversed by Compton and myself in 1892. The Col Paganini is between the Cresta Paganini and the Tour St. Ours. The Cresta is very conspicuous, not to say imposing, from the Monei Chalets, whence it looks like a separate mountain.—G. Y.

PUNTA DEL TUF (3,420 m. = 11,221 ft., Paganini; 3,416 m. = 11,208 ft., Italian Government Map ‡). *August 21.*—Signor G. Bobba, with Casimir Thérissod, of Val Grisanche, and Mr. G. Yeld, with François and Sylvain Pession, of Val Tournanche, made the first ascent of this peak, which is well seen from the hamlet of Val Nontey. From the Col Lauzon route they reached the summit by the N.E. ridge, mainly

* See *Alpine Journal*, vol. ix. p. 362.

† See p. 317.

‡ See *Climbers' Guide to the Mountains of Cogne*, p. 122.

over rocks, with occasional patches of snow and ice. They then descended to the col between the Punta del Tuf and the Gran Sertz, going first to the right and then working round to the left by steep but good rocks, which afforded interesting climbing. From the col they got down to the Lauzon Glacier, mainly by a ridge of blue rocks between two gullies. The gully on the left, in descending, curved a little. These gullies were raked by falling stones; in fact, the whole of this face of the mountain seemed more or less infested by them. After a by no means pleasant descent the Lauzon Glacier was reached, and a direct line taken to the royal hunting lodge on the Col Lauzon route. A herd of chamois was seen on the ascent and descent. The 'times' have unfortunately been lost. The descent from the col to the Lauzon Glacier cannot be recommended.

COL DE MONEI (3,428 m. = 11,247 ft., Italian Government Map; 3,431 m. = 11,257 ft., Paganini). *August 25.*—The same party in returning to Cogne from the Piantonetto refuge discovered a useful variation of this col. Instead of mounting by gullies, the stones in some of which were this year busy early in the day, they kept more to the west, ascending by a sort of ridge. This they followed very nearly to the crest which divides the Val Nontey from the Val Piantonetto, the last few minutes only being spent in a steep gully. They reached the summit ridge about twenty minutes to the west of the true col. This route reduces to a minimum the danger from falling stones.

LES JUMEAUX DE LA ROCCIA VIVA, EAST PEAK (3,589 m. = 11,776 ft., Paganini).—This name is proposed for the two rock towers on the ridge east of the Rocchia Viva. They are very well seen from the road between Cogne and Crétaz, and the eastern one is a very striking sight from the Piantonetto refuge.

August 24.—Mr. G. Yeld, with François and Sylvain Pession, made the first ascent of this peak from the Piantonetto refuge. They reached the foot of the peak by the route followed by Messrs. Coolidge and Gardiner, with Christian Almer the younger and his brother Rudolf, on their ascent of the Rocchia Viva from the east, August 17, 1889,* and thence gained the summit by steep and difficult but good rocks, in which they met with one or two ideal chimneys. The party were overtaken by a heavy thunderstorm on the descent, and for the last bit took to Coolidge and Gardiner's couloir, down which they raced and gained some sort of shelter under a projecting rock. Instead of returning by their morning's route they crossed the Bocchetta di Monte Nero (Signor Baretto's Colle San Lorenzo) to the refuge. The Rocchia Viva Glacier, like most of its neighbours, was much crevassed this year compared with last.

'This is one of the finest climbs in the Cogne district. In the pleasure of the climb, and afterwards in the excitement caused by the storm, I did not take all the "times" I should have taken, but we were absent from the refuge a little over seven hours. The view of the approaching storm from the summit was magnificent. G. Y.'

* *Alpine Journal*, vol. xiv. pp. 484, 485.

PUNTA CREVASSE (3,303 m. = 10,837 ft., Italian Government Map; 3,307 m. = 10,850 ft., Paganini). * August 27.—The same party made the second ascent of this peak, the first ascent of which was made by Messrs. Coolidge and Gardiner, with Christian Almer the younger and his brother Rudolf, on August 21, 1889.†

Starting from Cogne, the party struck the ridge which runs from the Punta Crevasse to the Col Trajo, a little above the col, and then, instead of following the route taken by their predecessors, climbed the 'numberless rock teeth' on the ridge. All the teeth were climbed except the last two, which were turned a little below their summits on the west side. The climb was by no means easy; but it was interesting, though the rocks were abnormally rotten. The ascent from the point struck above the Col Trajo took 2 hrs. 20 min. Epinel with its green pastures was very pretty from the top. The party descended by the same way, the difficult part taking 1 hr. 10 min. They reached Aosta the same evening by the way of the Gran Nomenon chalets and Vieyes.

MONT BLANC FROM THE QUINTINO SELLA CLUB HUT. August 16.—Messrs. T. L. Kesteven and A. M. Marshall, with Joseph and Emil Gentinetta and Rudolf Kauffmann, made a variation on the route given in Kurz's Guide (pp. 109, 110). The ordinary route was followed from the hut to the col south of the point marked 3,886 m. on Mieulet's map. From the col the basin of the Mont Blanc glacier was crossed, and the ascent made not by the usual arête, but by a 'prominent rib of rock' almost due east of the col. The rib was fairly easy, and appears to be quite safe from falling stones. The rib ends above under an icefall, which was traversed without difficulty, but which under different conditions might give great trouble. A good view of the icefall is obtained from the col. Above the icefall steep snow-slopes lead to the main ridge of the mountain, which was struck about midway between Mont Blanc de Courmayeur and the principal summit. Time from the hut to the summit, including halts, 6 hrs. 50 m.

THE ASCENT OF MONT BLANC BY THE AIGUILLE BLANCHE DE PÉTÉRET.—The variety of ways leading to the top of Mont Blanc is remarkable. By tracing the ways of all expeditions differing from each other on a map of large scale you get a network of lines which allow of several hundreds of combinations, each different from the other, each leading to the top from Chamonix, or from St. Gervais, or from Courmayeur.

Having made four ascents of Mont Blanc I have become acquainted with the following portions of the various routes:—

Dôme du Goûter.—Grand Plateau, Grands Mulets, Chamonix.

Aiguille Grise, Courmayeur.

Aiguille du Goûter, St. Gervais.

Grand Plateau, Mur de la Côte, Rochers Rouges.

Arête des Bosses, summit of Mont Blanc.

* See *Climbers' Guide to the Mountains of Cogne*, p. 141.

† *Alpine Journal*, vol. xiv. pp. 486, 487.

Rochers Rouges.—Brenva Glacier, Courmayeur.

Summit of Mont Blanc.

Upper Part of Arête des Bosses.—Rochers and Glacier du Mont Blanc, Courmayeur.

Mont Blanc de Courmayeur.—Summit of Mont Blanc.

Aiguille Blanche de Pétéret, Brenva Glacier, Courmayeur.

My last expedition took place on August 14, 15, 16, 17, 1893.

First day : Courmayeur, Brenva Glacier, first gîte (on the east face of the Aiguille Blanche), 3,200 m. = 10,500 ft.

Second day : Aiguille Blanche de Pétéret (4,013 m. = 13,165 ft.); Pétéret arête, second gîte (on the south face of Mont Blanc de Courmayeur), 4,250 m. = 13,950 ft.

Third day : Ascent of Mont Blanc de Courmayeur (4,756 m. = 15,600 ft.); Mont Blanc (4,810 m. = 15,780 ft.); cabane of the Rochers Rouges (4,510 m. = 14,800 ft.).

Fourth day : Mur de la Côte, Corridor, Grand Plateau, Dôme du Goûter, Aiguilles Grises, Courmayeur (1,230 m. = 4,025 ft.).

I was accompanied by E. Rey and Chr. Klucker as guides and César Ollier as porter. Three more porters were wanted as far as the first gîte.

It is well known that the Aiguille Blanche de Pétéret had been ascended only once, by Sir H. Seymour King in 1885. We did not follow his route, which leads over the west flank (Fresnay side), but wanted to try the east flank, very steep, a slope too that stands out 1,400 m. = 4,500 ft. above the Brenva Glacier.

As the lower Brenva Glacier, except the very end, is not practicable, we had to follow the left bank of it (Mont de la Brenva) to a height of 2,550 m. (= 8,360 ft.). Here we took the remarkably crevassed glacier, crossing it in 2½ hrs., and reaching the opposite bank—*i.e.* the base of the Aiguille Blanche—at 2,750 m. = 9,020 ft., where the ascent, properly speaking, began. After three hours' climb we chose a place for the night, at the level of 3,200 m. = 10,500 ft., on the broken rocks of one of the ribs which project from the mountain's surface. The weather was calm and clear, the temperature relatively warm.

On the following morning we left at 4.30 A.M., and reached the top of the Aiguille Blanche at 10.56 A.M. The difficulties we had to overcome were certainly considerable, though not extraordinary, but the danger of stones rushing from time to time through iced couloirs that we had to cross was very great. The ascent consisted chiefly in rock-climbing. Between 3,700–3,900 m. = 12,150–12,800 ft. we had to follow a ridge of snow and ice taking its origin in a rocky bastion which is crowned by the conical snow pyramid of the top.

After a rest a little below the summit we continued our way by following the ridge which connects the Aiguille Blanche with Mont Blanc de Courmayeur. It dominates the Brenva Glacier on the right, the Fresnay-Brouillard Glaciers on the left. Its deepest point (2,010 m. = 6,595 ft.) belongs to a snow col without a name, which we reached after two hours of slow progress. Leaving it and taking the side of the plateau of Fresnay we came near to the bottom

of the latter, but immediately attacked the rocks before us, and made a halt at 3.30 P.M. about 700 m. = 2,300 ft. below the top of Mont Blanc de Courmayeur. After discussing our chances we decided to pass a second night on the rocks, which we reached at 5 P.M. at a height of 4,250 m. = 13,950 ft. As we had no fuel nor blankets we had to suffer accordingly between sunset and sunrise. On the following morning (third day) our expedition left at about 6 o'clock, and after great labour and difficulties reached the top of Mont Blanc de Courmayeur at 12.55 P.M. We found nothing but ice on the arête that we hit again at 70 m. (= 230 ft.) above the gîte. Only 200 m. (= 650 ft.) in height could be done within 2½ hrs. Therefore we gave up the arête, turning again to the left and beginning our rock-climbing anew. This was hard work; for the rocks were rotten, very steep, partly ice-clad. The rope caused great annoyance. Nearly 4 hrs. were wasted till we got out of the rocks and reached again the last piece of the arête at a distance of about 80 feet from the top. Fortunately there was no cornice.

The Mont Blanc de Courmayeur has been reached twice before—by Mr. T. Eccles, 1879; by Mr. G. Gruber, 1880. Both expeditions took the Brouillard Glacier and the Fresnay plateau, but chose different ways from there to the top. Mr. Gruber followed the central ridge, because it was in good condition. The snow arête between the two Mont Blancs (4,756 m., 4,820 m.) is nearly horizontal. We reached the summit at 1.55 P.M., where we were most heartily greeted by Messrs. A. M. Marshall and T. L. Kesteven. These gentlemen obliged me very much by coming to the aid of my exhausted provisions, giving me indeed the whole amount of their own. We passed the following night in the cabane of the Rochers Rouges, packed together with 12 workmen—a most dreadful night—and took our way home to Courmayeur as indicated above.

The expedition lasted 88 hrs.

The difficulties encountered as far as climbing and step-cutting are regarded were hardly more intense than those of other arduous expeditions; but there is the peculiar difficulty of *length* and the danger of *time*. The length of way on which you encounter serious difficulties is greater than on other expeditions. The time during which you are exposed to stonefalls and to a break of the weather is longer. If the weather should break in the middle of the expedition the chance of escaping is not great. We enjoyed five days not only of steady but of splendid weather, and should not have succeeded without this auxiliary.

The best thing I can say of Rey and Klucker, the guides of that expedition, is that they *did* it.

PAUL GÜSSFELDT.

A MISSING PAGE IN ALPINE HISTORY.—In selecting this title for an article in the October number of the 'National Review' concerning the first ascent of Mont Blanc by an Englishman, on August 9, 1787, Mr. Richard Edgcumbe has overlooked the fact that an account of the expedition of Colonel Mark Beaufoy (not B-aufroy), the traveller in question, was published by him in the 'Annals of Philosophy' for

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February 1817.* The interesting MSS. dated November 1816, now printed by Mr. Edgcombe, was apparently used as a draft of the article in question, modestly written and published thirty years after the ascent, the two versions being at points identical. The account of our compatriot's expedition received additional publicity through being chosen as the subject of the opening article in No. 1 of the now venerable 'Blackwood's Magazine' (April 1817), which consists of a notice of, with extracts from, the 'Annals' paper of Colonel Beaufoy, mentioned as 'a philosopher of considerable eminence.' The Colonel, who was at one time in the Coldstream Guards, was a frequent contributor to the 'Annals' of papers on various subjects, as well as author of several books, of scientific interest, and of a work upon Mexico which appeared in 1828, a few years before his death.

Beaufoy's, the fourth ascent of Mont Blanc, was made in the year following the first ascent by Balmat and Paccard, and a few days after Saussure's. It may not be uninteresting to note that the centenary of the first ascent was observed by Mr. F. O. Schuster, who, with Henri Devouassoud and a porter, ascended the mountain on August 8, 1886.

Students of the literature of Mont Blanc will find reference to printed accounts of ascents in the appendix to M. Kurz's 'Guide de la Chaîne du Mont-Blanc' (French edition), 1892. Nearly 100 such accounts may engage their attention.

H. C.

DENT DU REQUIN (3,419 m. = 11,218 ft.). *July 25.*—Messrs. A. F. Mummery, Wm. Cecil Slingsby, G. Hastings, and Dr. Norman Collie ascended this peak. They bivouacked immediately under the peak on a grass-covered crag overlooking the foot of the séracs on the Géant. By doing this they had ample opportunity of making a most careful study of the face of the mountain through telescopes under various conditions of light and shade, which proved to be exceedingly valuable. All agreed that it was of paramount importance to reach one point—a patch of snow some 500 ft. below the summit of the mountain. This patch resembled a huge white butterfly, and, though it may probably at some future date be reached from below, it was decided to try to reach it from the S. arête near the top of the mountain.

As the story of the ascent of this fine peak is to be told at length at a later date, it is sufficient to say that the party left their gîte at 3.10; they ascended the Glacier du Requin, which comes down from L'Aiguille du Plan; they reached the S. arête some 50 ft. below the top of their wished-for goal at 8.50. They descended some 450 feet to the white butterfly patch of snow, partly by the S. arête and partly by means of a long rope. They then traversed the face and climbed to a V-shaped notch on the N. arête by means of two steep chimneys. After more interesting climbing on this arête the

* *Narrative of a Journey from the Village of Chamounix, in Switzerland, to the Summit of Mont Blanc*, undertaken on August 8, 1787. By Col. Beaufoy, F.R.S. [Due mention of this ascent is made on p. 9 of Mr. W. Longman's *Modern Mountaineering*. Barry and Auldjo also refer to it; and the latter quotes some of Beaufoy's observations.]

summit was reached at 1.10. They left at 2.20, reached the glacier at 6.25 and their gîte at 11.45. Two of the party here retired to their sleeping bags; the others went on, and reached the Montanvers at 4.30 A.M.*

As all of the party were fresh from England their pace was miserably slow. One had a railway headache, another could not go uphill, whilst a third could not go down, and the fourth showed the greatest desire to add to his local geographical knowledge by making, about every half-hour, minute observations. These, it may be added, were at all times of greater value if made in a sitting posture. A strong party in good training could easily make this expedition in six or seven hours' less time.

AIGUILLE DU PLAN (3,673 m.=12,051 ft.). August 7.—The same party crossed this peak from the Chamonix side to the Mer de Glace, two of them having taken part in the unsuccessful attempt made in 1892, which is so graphically described by Mr. Carr in his paper 'Two Days on an Ice Slope,' in the last number of this Journal.

After several careful reconnaissances it was decided that the mountain should this year be attacked from the Glacier des Pélerins.

The party encamped on a most lovely little green alp between the Glaciers de Blaitière and des Pélerins. They left their tent at 1.45, and reached the head of the right-hand lateral moraine of the Glacier des Pélerins at 3. There are three large couloirs on the S.W. face of the Aiguille du Plan. At the base of the middle one there is a glacier bay, shaped like the letter M. At the head of this couloir is a narrow col between two peaks on the north-western arête of the Plan. On the horizon on the col itself could be seen the blue séracs of the Glacier de l'Aiguille du Plan. By this col the party hoped to make their ascent. They ascended without difficulty to the top right-hand corner of the letter M by the Glacier des Pélerins and reached the rocks at 5. A trap dyke bright with *Ranunculus glacialis* and *Silene acaulis* here traverses the whole face of the mountain horizontally. The party followed it S. and turned up the second little gully to their left. Until 7.20 they climbed up easy snow; then ice forced them to rocks on their right. At first these were very easy, and a good height was soon made; then the rocks became steep and smooth, and at 9.10 the party was driven back to the same gully which they had left. The trough of the gully was here only about 7 ft. wide, a square-walled trap dyke very similar to many on the Cumberland fells. Till 11 there was difficult step-cutting until the base of some crags was reached. These were 300 or 400 ft. high, and were looked upon from the first as being the most doubtful place in the ascent.

Without describing the fun which was met with it is sufficient to say that a way was forced up the crags, and the col was reached at 12.

Here it was conclusively proved that if the party in the expedition of 1892 had climbed 60 or 70 feet of rather difficult rocks, the foot of which they had reached, success would have been certain, as no obstacles of especial difficulty remained.

The party followed a snow arête, and were much astonished to find,

* This is the peak called by Forbes 'Aig. des Blaitières derrière.'

almost at the head of the Glacier de l'Aiguille du Plan, a difficult bergschrund, the top lip of which was out of one man's reach. By means of a human pyramid this was crossed, and the top of the mountain was reached at 2. The party remained there until 3.30. They descended by the Glacier du Requin, which they found to be difficult, though probably the difficulties were increased by following the track of a chamois. They reached the Mer de Glace at 7.10 and the Montanvers at 8.50.

AIGUILLE DE GRÉPON.—On August 4 Miss Bristow, with Messrs. Mummery and Slingsby, effected the traverse of the Grépon; hence this peak has now entered into another of the phases common to all fine mountains. The Grépon was first traversed in 1892 by Messrs. Mummery, Hastings, and Dr. Collie.

COL DE L'ÉBOULEMENT. August 4.—Mr. E. A. Broome, with the guides Josef M. Biner and Aug. Cupelin, made an additional pass from the Montanvers to Courmayeur, which he names the Col de l'Éboulement, as it is between the aiguille of that name and the Aig. de Leschaux. He considers it affords better climbing than either the Pierre Joseph, Talèfre, or Triolet cols, and only slightly inferior to the Hirondelles. Though between the same peaks as the Col de Leschaux* the range is crossed at a totally different point, and the routes on both sides are distinct.

From Montanvers the Gl. de Leschaux was ascended to its E. arm; then (leaving the couloir leading up to the Col de Leschaux well to the south) the two great snow-slopes which seam the S.W. face of the Aig. de l'Éboulement were ascended, first by the left and higher by the right-hand one. When nearly on a level with the col a traverse to the right over rocks, and a short climb up slabs, led to its summit at a point where some huge rocks take a shape resembling a lion couchant. These rocks are unmistakable and lie to the N. of the unnamed rock-needle in the ridge, while the Col de Leschaux is to its S.; the route, too, so far can easily be followed on Donkin's photograph, taken from the Tacul (No. 141 of the collection in the Club rooms).

The descent was straight down over difficult rocks (a spare 60-ft. rope being twice requisite), then by easier rocks to the very steep snow-slope at the head of the W. arm of the Glacier de Triolet; down this to the bergschrund, across the plateau, and by the Triolet Club Hut to the Val Ferret and Courmayeur. Times, exclusive of halts: ascent, 5½ hrs.; descent to Triolet Hut, 4¾ hrs.

PEAK MARKED 3,549 M. (= 11,645 ft.) NEAR THE AIGUILLE DE CHARDONNET. August 2.—Messrs. J. J. Brigg, Eric Greenwood, and A. Holmes, with Jules and Omar Ballay, of Bourg St. Pierre, made the first ascent of this peak. After crossing the Col de Chardonnet to the Glacier de Saleinaz they turned sharply to the left, S.W., and made for the foot of a snow couloir which comes down between the Aiguille de Chardonnet and the peak next to it on the E. (3,549 m.). The rocks on the true left of this were ascended for three or four hundred feet; then the party were forced off the rocks and into the couloir, at

* *Alpine Journal*, vol. viii. p. 337.

the top of which was an overhanging snow cornice. The summit, consisting of two upright slabs of rock about 20 ft. high, was gained at 2.45 P.M. (2½ hrs. from the glacier). The descent was made by the Glacier du Tour, the moraine on the right bank being reached in 1¼ hr. and Argentière in 1¾ hr. more.

AIGUILLE D'ARGENTIÈRE. August 3.—Messrs. G. H. Morse, J. H. Wicks, and C. Wilson ascended this peak by way of the arête leading from the Col du Tour Noir. The summit ridge of the Aiguille d'Argentière may be said to consist of three points—a N.W. rock point (where the cairn is), a S. point (also of rock and as yet unclimbed), and a central or highest point, which is entirely snow-covered. The central and southern peaks are separated by a well-marked gap, and from the latter the main ridge of the mountain runs almost due E. to the Col du Tour Noir, at which point the direction of the watershed again turns S. It is necessary to allude to the above topographical details, as Mieulet's map is far from accurate, and the Siegfried map, though correct as far as it goes, shows no detail on the French side of the ridge. Starting from the Pavillon de Lognan, the party followed the usual Col du Tour Noir route by the Glacier des Améthystes, but shortly (10–15 minutes) before arriving at the col they turned to their left (N.) up a rib of rock, and struck the arête of the Aiguille d'Argentière just to the left of a minor point which forms the N.W. boundary of the col. Keeping to the ridge as much as possible, but turning the first pinnacle on the Swiss, and all other difficulties on the French, side, they arrived at a snow saddle below the S. peak. This point they skirted on the N. side by cutting for about 50 yards in very hard ice at the top of a steep slope leading straight down to the Saleinaz Glacier, about 3,000 ft. below. The 50 yards took 2¼ hrs. On reaching the arête between the S. and central peaks the party descended for a few minutes to the gap, from which the final summit was easily scaled. Exclusive of halts, 6¾ hrs. were taken from the Pavillon de Lognan to the saddle at the foot of the S. peak, and thence 2¾ to the top.

This expedition is certainly an interesting one, especially if the descent be made by the usual route (N.W. arête), the plan adopted on this occasion. Another party might find it possible to traverse the S. peak on the French side, or even more probably to climb right over it; and, if successful, they would very likely save much time, as the Saleinaz side, which faces N. and is very steep, must usually consist of hard ice.

MONT PERCÉ, OR LE TUNEL (3,262 m. = 10,682 ft., I. map). July 23.—Mr. Alfred Topham, with Jean Maître, made the first ascent of this point. They left the chalets of By at 4 A.M., and mounted grass slopes until just under the Trois Frères (M. Cordina, I. map). Hence they traversed the snow-slopes in a northerly direction to the foot of the Mont Percé. Passing below the hole in the mountain, they ascended a gully to the N. arête, by which they reached the summit at 7.45. Here they built a cairn. The descent was made by the S. arête, and By regained at 2 P.M.

LES TROIS FRÈRES (3,269 m. = 10,707 ft.).—This is the point

immediately north of the Col de Valsorey, but it is called on the I. map 'M. Cordina,' and on the S. map 'M. Capucin.' The latter two points are to the S. of the col, and have already been ascended. On July 24 the same party, with Pierre Maurice, made the first ascent of this point. They left By at 3.40 A.M., and ascended the grass col leading to the Col de Valsorey. From here they followed to the S.E. arête as far as possible. They then traversed the face of the mountain in a northerly direction for half an hour over slabs until they gained a large patch of snow directly under the depression in the ridge between the highest and the two other Frères. From this point they ascended straight up by the slabs to a long chimney which leads to the depression, 8 A.M. They followed the arête to the top, 9.45 A.M.; left summit, after erecting cairn, at 11 A.M.; regained depression at 1 P.M., snow-patch at 2.10 P.M., arête above grass col at 3.30 P.M., and By at 5.20 P.M.

MONT FAUDERY (3,330 m. = 10,924 ft.). *July 26.*—The same party made the first ascent of this peak.* They left By at 4 A.M., following the route to the Col de Fenêtre as far as the Alp de Fenêtre. They crossed the base of Mont Gélé, and ascended to the upper snow-fields of the Glacier de Faudery at 6.15. Crossing the snow-fields, they made for an immense snow gully which leads to the ridge on the S. of the peak (7 A.M.), and ascended it on its N. side for 100 ft. They then had to cross it, as the N. side is exposed to frequent and heavy falls of stones, and ascended again until opposite a rock gully two-thirds of the way up. Recrossing, they climbed for half an hour, and then by easy rocks gained the summit at 9.15. They built a cairn. Left again at 10.45, reached bottom of couloir at 1.15, and regained By at 4.15 P.M.

THE GRAND COMBIN (4,317 m. = 14,163 ft.). *August 14.*—Messrs. Slingsby, Hastings, and Dr. Collie made a new route up the Grand Combin by climbing the large rib of rock west of the lower Sonadon glacier, and then by a steep face of firm rocks direct up to the east end of Isler's shoulder without touching the upper Sonadon glacier at all. From the shoulder the mountain was climbed by the usual route by the south face of the Combin de Valsorey. This route is shorter and more interesting than those usually taken from Bourg St. Pierre, as some nice and easy rock-climbing is added.

POINT 3,195 M. (=10,482 ft.), I. Map, AND COL (about 10,540 ft.) BETWEEN DÔME AND PUNTA DE CIAN (Punta de Chavancour and Col de Cian †). *June 27.*—Mr. C. H. R. Wollaston, with Augustin Gentinetta and Joseph Biner, of Zermatt, left Prerayen at 3.20 A.M., and following the route taken by Mr. C. G. Monro and party in August 1892, leading

* From a careful inspection of maps and photographs it appears clear that the peak ascended by Mr. Topham, and called Mont Faudery in the Italian map, is not the same as that attacked by Messrs. Monro and Jones (see No. 120). Their peak is point 3,327 of the I. map, or the next to the S. of Mont Faudery, which, according to Mr. Topham's observation, it decidedly exceeds in height. Mont Faudery is the curious three-pronged summit seen on the left in the cut on p. 360, and the point reached by Mr. Topham is the right-hand prong.
† See pp. 263 and 368.

to the Col de Chavancour, they crossed to the E. side of the glacier, about 30 m. below the col, and reached the rocks of the N. face of the lower of the two points forming the Punta. These they proceeded to ascend, but were soon forced down and round to the W. face, until they reached a broad snow couloir separating the two points. Bad snow and falling stones made this couloir unsafe, so the rocks on its left were ascended until it could be crossed just below the top, whence an interesting scramble up the somewhat rotten and not quite easy rocks of the W. face led to the top of the higher and more southerly point. The descent was made by the N.S. face to the head of the couloir, where the route of the ascent was regained.

On quitting the rocks the party went in a N.E. direction, and skirting high up round the slopes of the Dôme de Cian they reached the Col de Cian, which they crossed, and a splendid glissade landed them at the foot of the Balansegno Glacier, whence they proceeded, by way of the Fontanella and Col de Dza, to Breuil. The whole expedition, inclusive of some 4 hrs. halts, occupied nearly 15 hrs.

Mr. C. G. Monro appears to have solved the mystery attaching to the name 'Mont Redessau.' This peak is no doubt Point 3,217, I. map (to the N.W. of the Col de Chavancour), and it is called by this name in the I. map, and also in the Val Tournanche, if the information of some natives, who were met at Breuil, can be relied on.

THE QUEEN OF ITALY'S ASCENT OF PUNTA GNIFETTI (MONTE ROSA).—On the evening of August 15 her Majesty the Queen of Italy left Gressoney for the Punta Gnifetti (4,559 m.), on the summit of which has been recently built the new observatory hut, 'Regina Margherita,' constructed by the Italian Alpine Club.

After a two days' stay at the Chalet de Stafel the royal party moved to the Capanna Linty (3,100 m.), in the neighbourhood of which a camp had been established. Thence the Queen started on the morning of the 18th, at 4.30 A.M., attended by her Excellency the Marchesa di Villamarina and by Prince Strozzi, and accompanied by Miss Villamarina and by Baron Peccoz.

After climbing the rocks at the foot of the Gastrelet Glacier, and leaving Capanna Gnifetti (3,647 m.) to the left, her Majesty arrived at the Lys-Joch (4,344 m.) at 9.30 A.M., where she was met by Signor Gaudenzio Sella and by Signor Vittorio Sella, who photographed the party. From this point the Queen walked very quickly to the foot of the Punta Gnifetti, which she reached exactly at 12 o'clock.

Her Majesty was received at the top of Punta Gnifetti by Signor Costantino Perazzi, Signor Gaudenzio Sella, and Signor F. Gonella, members of a special committee appointed by the Italian Alpine Club for the construction of the cabane. Signor Perazzi made a short speech, expressing admiration of the courage her Majesty displayed, and gratification at the great interest she always took in mountaineering and science. At 2 o'clock the committee took leave of the Queen, who, with her party, remained in the cabane for the night. F. G.

SCHILDHORN (10,515 ft.) ('No information.'—Eastern Pennine Guide). August 7.—Mr. A. H. Tubby, with Xaver Andermatten, left Saas Grund at 3.30 A.M., ascended to the Ried Pass, and from there to the

summit of the Ulrichshorn, which was reached at 10.30. Remaining there for half an hour, and then striking across the head of the Kied, they ascended the Balfirnhorn by its S.W. face, and arrived at the top at 12.5. Traversing the ridge of that peak, they crossed the snow-slope in a N.N.E. direction, leaving the lower summit of the Balfirnhorn on the left, and descending somewhat for 15 minutes. They then struck up an easy snow-slope, and arrived at the top of the Schildhorn at 1.5. From the summit they passed along a snow arête, still bearing N.N.E. for 20 minutes, and then turned E. down the snow-slope until the edge of the rocks was reached at a point marked by a 'stone-man.' The descent was made over steep and rather rotten rocks and pastures, bearing E., to the village of Bider, and so to Saas Grund, which was reached by easy stages at 5.30 P.M. Three peaks, one of which is presumably new, from the absence of any traces of any previous party, were thus ascended in one day.

TRAVERSE OF THE MITTELGRAT AND ASCENT OF THE NOLLENHORN (10,463 ft.) ('No information.'—Eastern Pennine Guide). August 9.—The same party left the hotel at Saas Grund at 5 A.M., and reached the Plattje (not that at the shoulder of the Mittaghorn, but on the opposite side of the valley) at 7.30 A.M., where they breakfasted, and reached the edge of the ridge at 9 A.M., at a spot marked by a stone-man. The ridge was at first very narrow and knife-like, but was then succeeded by rotten rock. The first tower was easily passed over, but the second required turning, first traversing the base on the N.E. aspect, and then passing through a gap, making a traverse over the S.W. aspect of the rocks. Here the rocks are smooth and in large slabs, so that for about 8 or 10 feet there is no foothold, and one has to work along with one's hands, grasping the ridge. The edge of the grat is then gained, the third tower turned by a traverse on the N.E. face, while the fourth and fifth towers were passed over. Thence the summit of the Nollenhorn was easily gained by the N. ridge at 1.15 P.M. The actual 'going' time from the Plattje to the top of the Nollenhorn was $4\frac{3}{4}$ hours. The descent was made by the W. arête of the Nollenhorn to the Saasthal, and Saas Grund reached at 4.30 P.M. Andermatten stated that he did not know of any previous traverse of the Mittelgrat in its whole length, although it has doubtless been crossed at two or three spots in passing from the Saasthal to the Furgthal. He describes it as 'sehr interessant,' very similar to the Egginergrat, but longer. It is certainly a rock climb worthy of attention.

MONTE LEONE.—The Lepontine guide states that the summit of this mountain has hitherto been attained only from the Alpen Glacier at its S. foot, since when another route has been found direct from Veglia.

A third route, differing from either of these, was followed on August 11 by Mr. Victor H. Gatty, with Luigi Zurbrücken and Constantin Pioher, of Binn. Leaving the Simplon hospice at 3.10 A.M., the Kaltwasser Glacier was ascended to within 10 m. of its highest point, under the main S.W. ridge of the peak; the bergschrund was crossed immediately beneath the point 3,398 m., and steps cut up the steep ice slope of the

N. face in 2 hrs. to the ridge, which was followed in $\frac{3}{4}$ hr. to the summit. The descent to the hospice by the same route occupied $4\frac{1}{2}$ hrs., including halts.

VORDER HELSEN (3,109 m.=10,200 ft.). *July 8.*—The Rev. C. J. Buckmaster and the Rev. G. Broke, with a porter, made the first ascent of this peak. Leaving Binn at 2.10, they halted for 25 minutes at the Kummenbord hut at 4.20. The long jagged ridge which runs northward from the peak is seamed by a huge gully, nearly opposite Kummenbord, and they ascended just to the S. of this in $1\frac{1}{2}$ hour to the arête, along or just below which they proceeded in $1\frac{1}{4}$ hour to the top over easy but very loose and rotten rock. No trace of any previous ascent could be found. At the N. end of the summit ridge a large stone-man was built, which was plainly seen from Binn. The descent of the arête took $\frac{3}{4}$ hour, that of the face 55 minutes.

PASS BETWEEN MITTAGHORN (OBERLAND) AND POINT 3,681 OF THE ANENGRAT (ANENJOCH?). *August 14.*—Messrs. E. F. M. Benecke and H. V. Reade left the Concordia hut at 3.20 A.M., and, after following the route towards the Lötchen Lücke for some time, turned to the N.W. up the Ebnefluhfirn, and reached the Ebnefluhjoch in $4\frac{1}{2}$ hours. They then traversed the E. snow-slope of the Mittaghorn for 45 minutes to a broad snow col S. of that peak. From this they descended at first over rocks, which were very loose, but nowhere difficult, and afterwards over steep snow in 2 hrs. 40 min. to the Anenfirn. The latter, which was remarkably free from crevasses, was crossed in 1 hr. 15 min., and Ried reached in 3 hrs. 20 min. more. Total time, $11\frac{1}{4}$ hours.

About an hour could be saved by going direct to the pass as soon as the crevasses of the Ebnefluhfirn are crossed; but it is well worth anyone's while to go to the top of the Ebnefluhjoch, on account of the very striking and curiously ugly view.

UNTER WELLHORN (2,688 m.=8,815 ft.). *August 7, 1893.*—Messrs. C. E. Freeman and H. C. Bowen, with Heinrich and Simon Zurflüh, of Meiringen, made the first ascent of this peak. They left the Rosenlauri Hotel at 4.15 A.M., and, diverging from the path to the Great Scheidegg, reached the Schönbühl Alp. From the alp the route turns east, and goes by a well-defined track to a grass col behind the small peak, looking towards the hotel, which is marked 1,918 on the Federal map. This col was reached in 1 hr. 50 min. from the start. Thence they followed a track, used formerly by carriers of iron ore, which first goes nearly straight up the mountain, then makes several zigzags, and finally turns due east. In 35 min. they came to a gap in the path, over which it is necessary to stride with care, and in 35 min. more to two small iron mines, where the path ends. Here they entered a gully which leads up towards the peak, and climbed it for 20 min., till they came to a place where there are two jammed stones. As the gully seemed likely to be impracticable further up they left it just above the stones, and decided to try the N.E. ridge, which was easily reached in 5 min. by turning straight to the left. They got on to the ridge by a well-marked

notch, and now came in sight of the Rosenlauri Glacier. The top was reached in 50 min.—*i.e.* at 9.45—the time from the hotel, exclusive of halts, being 4 hrs. 15 min. There are some steep bits in the couloir and arête, and a good deal of care is necessary, on account of the rottenness of the rocks and the number of loose stones.

As the mountain presents no real difficulty by the route described above, and as it is very conspicuous and quickly reached from the hotel, it is strange that it has not been climbed before. It appears, however, to be inaccessible either from the Rosenlauri Glacier or from the S. by the Welli Grat. The name 'Unter Wellhorn,' though not recognised on the Federal map, appears to be in common use at Meiringen.

PIZ LASCHADURELLA (3,054 m. = 10,020 ft.) *September 8.*—Messrs. G. W. Prothero and Walter Leaf, with Leonhard Guler, of Klosters, made the first ascent of this peak. Leaving the Ofen inn at 5.45, they reached Val Flur by the old road, and ascended it and slopes of débris and grass on its W. side to a prominent tower on the S. ridge of the peak; they then traversed nearly horizontally till they reached a couloir which took them again to the S. ridge, a few easy minutes from the top. Return by the same route. Times: ascent, $4\frac{1}{4}$ hrs.; descent, $2\frac{1}{4}$ hrs.

PIZZO DELL' ACQUA (3,127 m. = 10,260 ft.) *September 9.*—The same party ascended this peak. Leaving Ofen at 5.23, they reached the bridge over the Spöl at 6.33, followed the path into the Val dell' Acqua, and mounted by moraine and glacier to the foot of the E. ridge of the peak. This was gained just E. of the first prominent tower by snow-slopes and rocks. The tower was turned by the S. face and the ridge followed to the top. Times: ascent 6 hrs., descent $4\frac{1}{2}$ hrs. No trace of a previous ascent was found, but the guide Krapacher, of Bormio, states that he had already gained the top from the opposite (W.) side with Signor Cederna, of Milan.

PIZ MURTARÖL (3,177 m. = 10,423 ft.) *September 13.*—The same party ascended this peak from S. Giacomo di Fraele. They mounted by a grassy buttress, screes, and rocks to a small snow col W. of the summit, which was gained by the loose but easy rocks of the S. face. Time: $4\frac{1}{2}$ hrs. In descending the S. face was traversed by slopes of débris till the col immediately S.E. of Piz la Monata was reached ($1\frac{1}{2}$ hr.), then by Val Murtaröl to the Münster Alp (1 hr. 25 min.) and by the Buffalora pass to Ofen (3 hrs.). A stone-man was found at the top, and Krapacher stated that the peak had been ascended more than once; but no previous record appears to exist. It is called Monte Cassina on the Italian side.

PIZ TAVRÜ (3,168 m. = 10,394 ft.) *September 15.*—Mr. G. W. Prothero and Guler made the first ascent of this peak. A path leads from the Buffalora Wegerhaus up the Val Nuglia, following the left bank of the stream to the foot of the peak. The ascent was made by a grass ridge leading to the rocks of the S.E. arête; thence the rocks were skirted to the foot of the central southern couloir, up which and up the rocks above it an easy way led direct to the summit. Time from Buffalora (exclusive of halts) 3 hrs. 10 min. There was no difficulty

anywhere. The descent was made partly by the eastern arête, partly by traversing its southern slope, and lastly by a couloir which ends just north of the col to the east of the mountain. Thence the route to Scarl is easy. A more direct ascent might be made by one or other of the couloirs which seam the precipitous northern face, but these couloirs are very steep, end (apparently) in ice, and are more or less swept by stones.

FUORCLA TAVRÜ (about 2,880 m. = 9,450 ft.).—This pass is not mentioned in the guide-books or S. map, but seems worth recording as the direct way from Ofen to Scarl. Messrs. G. W. Prothero and Walter Leaf, with L. Guler, reached the top on September 16 by the path on the lower side of the Val Nuglia in $2\frac{1}{2}$ hrs. from the Buffalora inn, and Scarl in $1\frac{3}{4}$ hr. more. The gap immediately E. of Piz Tavrü was crossed, but another further E. would probably form the best passage in the opposite direction.

CEVEDALE (3,762 m. = 12,340 ft.) BY N.E. RIDGE. *August 2.*—Messrs. L. Friedmann and A. von Krafft left the Schaubachhütte at 6 A.M. Owing to bad weather and soft snow it took them $5\frac{1}{2}$ hrs. to reach the saddle between the middle and eastern peaks. From this an hour's step-cutting in hard ice brought them without difficulty to the summit of the middle peak. [This route, though taken by Herr O. Schuster in 1889, and very probably by others, does not seem hitherto to have been recorded.]

VORDERE MADATSCHSPITZE (3,101 m. = 10,170 ft.) BY THE N. FACE.—The same with Dr. Christomannos, of Meran, left Franzenshöhe at 4.15 A.M., crossed the Madatschferner without ascending, and climbing through a narrow gully reached at 8 A.M. a broad ledge of débris visible from Trafoi. From this point they ascended pretty straight over extremely rotten rocks, but with serious difficulty, reaching the summit at 11 A.M.

PIZ MONDIN (3,163 m. = 10,375 ft.). *August 25.*—Mr. L. Friedmann and Dr. Christomannos, with Alois Kuntner, of Sulden, made what appears to be the first ascent since that of Coaz in 1849,* of this, the beautiful peak which is conspicuous as you go up the Upper Innthal for some distance before reaching Finstermünz. They slept at the Mondin Alp, 2 hrs. above Martinsbruck, and starting at 6.10 A.M. ascended in a N.W. direction by slopes of grass and débris to the ridge stretching S.W. from the summit. At 8.30 they reached the point marked by a surveyor's cairn, from which the summit appeared as a steep rock tower 100–120 ft. high. Following the ridge they turned one pinnacle by its right side, and climbed the final tower without any difficulty worth mentioning. The true summit was reached at 10 A.M., and before leaving it the party had added materially to its elevation by the erection of a stone-man 6 ft. high.

SULDENTHAL.—A new hut has been built at the foot of the Hintere Grat of the Ortler, greatly facilitating ascents by this interesting route. It is a hut of the Swiss type, not a small inn, and exceptionally

* *Ueber Eis und Schnee*, ii. 217.

well furnished. The Payerhütte, on the usual route, which is a 'bewirthschaftete Hütte,' is a place to be avoided. It is ill kept in comparison to other such huts, and usually crowded to excess.

The new hotel referred to on p. 175 has now been opened. A regular post runs to it from Meran and from Landeck. H. B. G.

CIMA DELLE COMELLE. *June 27.*—Mr. and Mrs. L. Norman Neruda having made the ascent of the Cimon della Pala without guides, on the descent reached the Passo Bettega at 8.30 P.M. They left for the Cima delle Comelle at 8.40, and arrived on the summit at nine o'clock, their intention being to cross the peak and make straight for the Rosetta Hut, where the night was to be spent. But after climbing down for some time they came to a precipice, or what in the scant moonlight appeared as such, and seeing a broad shale-covered ledge leading downwards from east to west on the south side of the mountain, they took to it. For some time the way was quite easy, but gradually the ledge began to slope outwards and became very narrow, until at last it practically disappeared under a low overhanging rock. Under this Mr. Norman Neruda at last succeeded in passing and reaching a cave, from where the descent on to the path (leading south to San Martino, north to the Passo Bettega, and east to the Rosetta Hut) is quite easy. The point described is one of great difficulty, and it took a long time to pass it. Having broken his watch pressing against the rock, he is unable to tell the time of their arrival at the hut, but judges it to have been about 11 P.M.

CIMA WILMA (about 9,090 ft.). **FIRST ASCENT.**—This is a peak situated north from the Cima di Canali, from which it is separated by a great cleft. On July 6 the same party, with Antonio Tavernaro as guide, left San Martino at 7.20 A.M. and reached the Passo di Ball (which, owing to the complete melting away of the snow over which the way up usually leads, was in itself quite a laborious ascent) at 9.55 A.M. Foot of the mountain (Lago di Pradidali), 10.16–10.50. First rocks, 11.10. Now up through a chimney sloping north to south on the west side of the mountain until it forked, when they took to the left 'prong,' ascending partly in the chimney and partly by the rocks on their left, they followed the chimney right up to a 'forcella,' and turning to the right stood on the summit of the Cima Wilma at 1.20 P.M. They left at 2.20 by the same route, and recrossing the Passo di Ball, arrived at San Martino at 9.18 P.M. The ascent is interesting and, were it not for the great distance from San Martino, it would undoubtedly be frequently repeated.

FIGLIO DELLA ROSETTA. NEW ROUTE. *July 19.*—The same party left San Martino at 9.17 A.M. Foot of mountain, 10.30–10.45. Foot of large stone couloir on the west side of the mountain, 11.5. They climbed straight through the broad chimney reaching its top by traversing from right to left on the stone wall on their left, and retraversing a little higher up. From here they walked over easy ground in a northerly direction for a few minutes, and finally arrived at the summit after climbing up a steep chimney affording an excellent scramble. Summit at 12.40. (Another party, consisting of Mr. Leon Treptow and his guide, Antonio Dimai, followed in their steps. They left

at 1.40 P.M., ascended the Cima Cuseglio through Mr. Wood's chimney (the third ascent, so far as known, by that route) and made their way down to the Forcella Cuseglio over a route taken once before by Madame Immink (but in the reverse direction). San Martino, 8.5 P.M.)

CIMA DI PRADIDALI FROM PASSO DI BALL. *August 12.*—The same party having made the ascent of the Campanil di Pradidali and returned to the Passo di Ball, wished to climb the Cima di Pradidali straight from the pass. They left the Passo di Ball at about 12.30 P.M., and made for the long couloir which leads from the foot of the mountain to what from there looks like the summit. They had to climb to the right of the chimney for some time, there being no possibility, apparently, of getting into the chimney lower down. The last 100 ft. of the chimney were of very great difficulty, the chimney overhanging and being closed by a huge boulder, under which it was necessary to climb out of the chimney in order to get on to it (the boulder). From this point—or rather a little higher—they traversed on the N.E. side of the first peak of the series of peaks constituting the top ridge of the mountain until they got into a chimney between the first and the second peak. Descending by the chimney, they found themselves in a semicircle formed by the several peaks of the mountain. From hence they ascended through another chimney, to the left of which they saw the true summit with its stone-man, and reached the top at 3.45 P.M. They left at 3.55, went back into the semicircle, and returned to San Martino by what would be called 'the ordinary way.' This way, however, has only once been taken—in 1874 or 1875—and this ascent was the second. The new route is very difficult, and, although it is risky to compare one very difficult ascent with another very difficult one, it may safely be said to be the most difficult in the Pala group, and more difficult than that of the Fünffingerspitze.

CAMPANIL DI VAL DI RODA. *August 18.*—Leaving San Martino at 5.10 A.M., foot of mountain 7.55–8.25, the same party started by the ordinary way up, but, as the ice had melted away considerably, and as what remained of it was exceptionally hard for step-cutting, they took to the rocks on the right of the couloir. They later on got into a difficult chimney which led up to the lower peak, below which they traversed on the E. side of the mountain, joining the ordinary line of ascent some 30–40 ft. above the forcella between the Campanil and the Cima di Val di Roda. The summit was reached at 1.48. They left at 1.56; forcella, 2.35–2.50. On their way back to San Martino they ascended the Cima di Val di Roda by the route which Mr. Norman Neruda with Bettega found on July 15, 1892. The variant described is scarcely worth mentioning, but, as it is very difficult compared to the ordinary route (which is not many yards to the left), it seems as well to say something about it; at any rate it may save other climbers without guides several hours of pretty hard work.

SASS MAOR. NEW ROUTE AND FIRST TRAVERSE. *August 26.*—Mr. Norman Neruda left San Martino at 4.40 A.M. with Antonio Tavernaro. They got on to the shale at the foot of the N. side of the mountain at 7 o'clock. Up through a small chimney (the first to the left) slanting from left to right, which they followed until it forked, when

they took to the left 'prong,' which ends on a forcelletta. They now turned to the right, went up a steep chimney (good rocks), then upwards over some débris, and then traversed horizontally to the left, climbed up a large stone couloir, where they built a stone-man (7.57-8 A.M.). They continued their way along the left crest of the top of the couloir until they got to another forcelletta, from where they could see into the Pradidali valley. Below the forcelletta and to its right they entered a chimney (rest at top of chimney, 8.28-8.45). They now traversed to the right and went up through another difficult chimney, out of which they again traversed to the left under an overhanging rock; then up again to a tiny platform, after passing which they mounted to the left on to fairly easy rocks until the foot of a chimney was reached, 9.29-9.39. Up through the chimney, then traversing over a rock wall towards the left, and finally climbing through another small chimney and over easy rocks, the summit was reached (without anywhere touching the route) at 10.5. Left at 11.17, climbing straight down (a variant from the ordinary way). Reached forcella between their mountain and the Cima della Madonna at 11.55-12.5. They arrived in San Martino at 2 5 P.M., in 2 hrs. 28 min. actual walking.

The ascent by the new route is very interesting, and has been several times repeated. The credit for having found it out is entirely due to Antonio Tavernaro, who is specially recommended to climbers visiting the Pala group.

PIZZO DI MIEL. PROBABLY FIRST ASCENT. *September 8.*—Mr. and Mrs. Norman Neruda, together with Mr. and Mrs. Friedmann and Miss Cooke, ascended the Pizzo di Miel, which is situated between the Fradusta and the *Coston di Miel*. Leaving the Fradusta at 12.12 P.M. (which they had climbed with Mr. J. D. Rogers), they reached the Pizzo di Miel at 1.9 P.M., and built a stone-man, not finding one which would have suggested a previous ascent. They left at 1.23 and went down to the *Passo di Miel* (130), and up the *Coston di Miel* (1.35-1.50), where they found a stone-man. They returned to the Rosetta Hut at 3.15, left it at 5 P.M., and arrived at San Martino at 6.14.

It would have seemed hardly worth while mentioning the ascent of the Pizzo di Miel, as it is only a small prominence of the E. ridge of the Rosetta plateau, but being indicated and named on the Austrian Generalstabskarte, and together with the *Coston di Miel* forming a not unimportant pass, it might have been wrong to leave it out. The height given on the Generalstabskarte, both of the *Coston di Miel* and the Pizzo di Miel, seems wrong, and undoubtedly the relative height of one to the other is wrong, the difference between the two being very slight.

The ascents mentioned were accomplished without guides, except where the contrary is stated.

CENTRAL CAUCASUS. GUL TO MESTIA. *July 23.*—Messrs. Newmarch, Solly, and Woolley left the camping place near the Gul Kosh and crossed the low pass which lies at the foot of Freshfield's Gulba on the S.S.E.

The descent on the E. of the pass is down a short snow slope to the

névé of a tributary of the Mestia Glacier, which it would be an interesting walk to descend through its whole length.

Not having time to do this, the party turned to the S.E., and crossing a second ridge descended on the S. side to the head of the Lendjer Glen. Here a track was found leading down pastures and through birch woods to Mestia, where Mr. Cockin (who had gone round by Betsho with the baggage) was rejoined.

This pass is probably not more than 10,000 ft. in height, and affords no scope for climbing; but it avoids a hot valley walk, and the fine views obtained make it more interesting than the ordinary route from Gul to Mestia.

TIKTENGEN PASS. *July 25.*—Messrs. Cockin, Newmarch, Solly, and Woolley went up the Zanner Gorge from their camp above Mujal, and bivouacked on the right bank of the Zanner Glacier about midway between the first and second icefalls.

Starting next morning at 1.30, they avoided the second icefall by keeping to the right moraine, and ascended the upper glacier to the point where it forks. Here they turned to the left (N.), and walking up easy snow slopes gained the pass at 7.15 A.M. The pass, the existence of which was discovered by Mr. Cockin in 1890,* lies immediately below Tiktengen on the S., and connects the basins of the Zanner and Thuber glaciers. Its height according to the Russian survey is 12,607 ft., and it commands most magnificent views. The descent on the western side was for about an hour and a half down the gently sloping névé of the Kitlod Glacier, a large branch of the Thuber Glacier.

At 11 A.M. the first of a series of icefalls was encountered. These caused considerable delay and were passed by keeping first near the right of the glacier and then crossing to the left bank.

At 3 P.M. the junction with the main Thuber Glacier was reached, when the ice was left for rhododendron slopes and pastures on the eastern bank, whence a path leads through the beautifully wooded Thuber Gorge to Mujal.

This expedition may be accomplished in about seventeen hours of actual walking.

July 29.—The pass was visited a second time with the object of ascending Tiktengen.

After leaving the pass at 6.45 A.M. the rocks of the S. face (which afforded good climbing) were ascended, and at 1.30 P.M. the western ridge of the mountain was gained and followed for about half an hour to a point apparently about 250 ft. below the summit. Here, however, the party were stopped by a rock tower which they were unable to surmount or turn, and eventually were obliged to descend.

NUAMQUAM PASS. *August 13.*—Messrs. Cockin and Woolley left a camp near the sources of the Ingur in the Upper Ushkul valley and bivouacked on rocks on the right bank of the icefall which descends from a bay between Nuamquam and a spur of Shkara. Leaving the bivouac at 4.15 next morning, they traversed the same rocks till it was

* *Alpine Journal*, vol. xv. p. 254.

possible to gain the névé at the head of the icefall. About midway along the ridge which encloses the bay is a point at which rocks descend to within a few hundred feet of the névé.

This point was chosen for attack, the crest being gained at 8.40 A.M. The view on the N. side was magnificent, taking in the Dych-su Glacier, Mishirgi-tau, Dych-tau, and the Giuliuchi group. The ridge was not crossed, but the descent on the N. side seemed very short to an extensive snow basin, from which an icefall descends to the Dych-su Glacier. This icefall would probably be most easily passed on the Shkara (W.) side.

The pass appeared to be about on a level with the summit of Chirivzek, and should therefore be near 13,000 ft.

These expeditions were made without guides, and—above the snow line—without porters.

Two attempts to ascend the S. peak of Ushba were defeated by the state of the snow, and one by bad weather.

An attempt to gain the névé at the head of the Adish icefall by the ridge which separates the Adish and Kalde glaciers was frustrated by bad weather, but the route was found to be inconveniently long and tedious. The depression on the main chain between Janga and Shkara was found to be inaccessible this summer, every approach being menaced by hanging séracs.

ALPINA.—Periodical Alpine literature has received an important accession during the present year through the appearance of this, the *Mitteilungen* or *Bulletin Officiel* (for it is bilingual) of the S. A. C. The first part was published on July 1, and it is continued monthly. Its special function is to deal with such matters as in this Journal are printed in smaller type, leaving, we presume, more detailed papers to the *Jahrbuch*. Considering the number of members which the Swiss Club contains, and the activity of many among them, there ought, we should imagine, to be no difficulty in keeping 'Alpina' well supplied with 'pabulum;' and we wish it all success.

THE LIBRARY.—The following additions have been made since July 15, 1893:—

Simony (Dr. Friedrich). *Das Dachsteingebiet: ein geographisches Charakterbild aus den Oesterreichischen Nordalpen*. 4to. Illustrated. Zweite Lieferung. Wien und Olmütz, 1893. (Presented.)

Meurer (Julius) und Rabl (Josef). *Der Bergsteiger im Hochgebirge. Alpin-touristische Schilderungen nach den Berichten hervorragender Hoch-touristen*. 8vo. Illustrated. A. Hartleben's Verlag, Wien, Pest, Leipzig. (Presented.)

Longworth (J. A.). *A Year Among the Circassians*. In two volumes. 8vo. Illustrated. London, 1840.

Coolidge (Rev. W. A. B.). *Entre Binn et Airolo (Alpes Lépointines)*. Reprinted from the 'Jahrbuch des S.A.C.' xxviii.

Gottlieb Studer dans la Tarentaise. Reprinted from the 'Jahrbuch des S.A.C.' xxviii.

Was ist eine 'erste Besteigung'? Reprinted from the 'Oesterr. Alpen-Zeitung,' No. 375.

Die deutschredenden Gemeinden im Grauen oder Oberen Bunde (Rhätien) der Schweiz. Reprinted from the 'Oesterr. Alpen-Zeitung,' Nos. 376 and 377. (Presented by the author.)

- Duparc (L.) et Mrazec (L.). Note sur les Roches Amphiboliques du Mont-Blanc.
 Les Massifs Cristallins de Beaufort et Cevins.
 Reprints from 'Archives des Sciences Physiques et Naturelles.' Genève, 1893.
- Trutat (Eugène). Les Pyrénées. Etude Géologique et Description Pittoresque. Illustrated. Pamphlet. Paris, 1892.
- Delebecque (A.) et Duparc (L.). Sur les Changements survenus au Glacier de la Tête Rousse depuis la Catastrophe de Saint-Gervais du 12 juillet 1892. Pamphlet. Paris, 1893.
- Richter (Prof. Dr. E.). Die Erschliessung der Ostalpen. Parts 13 to 15. Illustrated. Berlin, 1893.
- Il Viaggiatore nel Bellunese. Ricordo del xxv. Congresso degli Alpinisti Italiani, 1893. (Presented by the Sezione di Belluno del C. A. I.)
- Club Alpino Italiano. Bollettino per l'anno 1892. Illustrated. Torino, 1893.
- Société des Touristes du Dauphiné. Annuaire, No. 18, 1892. Grenoble, 1893.
- Norske Turistforening. Årbog for 1893. Illustrated. Kristiania, 1893.

REVIEWS AND NOTICES.

Beiträge zur geologischen Karte der Schweiz. Einundzwanzigste Lieferung. Geologische Beschreibung des westlichen Theils des Aarmassivs, enthalten auf dem nördlich der Rhone gelegenen Theile des Blattes XVIII. der Dufour-Karte, von Dr. Edmund von Fellenberg und Dr. Casimir Mœsch. I. Beschreibung desjenigen Theiles von Blatt XVIII., welcher zwischen dessen Nordrand, dem Südabsturz der Blumlisalpette (von Gasteren bis in's Lauterbrunnenthal) und der Rhone liegt, von Dr. Edmund von Fellenberg, mit petrographischen Beiträgen von Professor Dr. Carl Schmidt. II. Geologische Beschreibung der Kalk- und Schiefergebirge auf der Nordwestecke des Blattes XVIII., von Dr. Casimir Mœsch. (Bern: in Commission bei Schmid, Francke und Co. 1893.)

THE scope of this volume, the twenty-first of the memoirs issued by the Geological Survey of Switzerland, is expressed by its lengthy title; but many pages would be required if we attempted to give an adequate idea of its interesting and valuable contents. The first and larger part sums up the results of many years' labour by one who is no less distinguished as a geologist than as a mountaineer. Dr. von Fellenberg's route map, which incidentally illustrates the thoroughness of his examination, extends from the line of the Haslithal to that of the Gemmi Pass. His description is illustrated by several illustrations and diagrams, and by a separate atlas of nineteen plates. These include eleven mountain views printed from photographs, on which the names of the different rocks, and their lines of contact, as far as possible, are imprinted in colour. The numerous sections render the principal feature of the geological structure of the western part of the Aar *massif* sufficiently clear. Briefly stated, they lead to the following conclusions: Before the present Alpine chain existed a thick mass of sedimentary materials was deposited on a widely extended floor, consisting of much more ancient crystalline rocks. Of the former the oldest group is of Carboniferous age, but very little of this appears in the region described. It is followed by a group of rocks of much more frequent occurrence, though irregular in character, which are often inclusively designated