

NEW EXPEDITIONS.

WESTERN ALPS.

DAUPHINÉ DISTRICT—BRÈCHE DE VALSENESTRE (8,642 ft. ?), *June 27*.—Miss Brevoort and Mr. Coolidge, with Christian and Ulrich Almer and two Grindelwald porters, Rudolf Kaufmann and Christian Roth (C. Almer's son-in-law), crossed this little-known pass from Bourg d'Oisans to Valsenestre. The party drove up the road to Venosc as far as Les Ougiers, then crossing the Vénéon, ascended by a stony path to the Lovitel châteaux, on the shore of the lovely lake of the same name, in little over $1\frac{1}{2}$ hr. from the bridge; and a somewhat exciting voyage on a leaky raft brought them in $\frac{3}{4}$ hr. more to the S. end of the lake. Mounting through a stony vallon, they turned up to the left, and aimed at a depression in the ridge, which was reached by shaly slopes, rocks, snow-slopes and a small couloir in about $3\frac{1}{4}$ hrs. walking (as seen from the lake the col is to the extreme left). Then turning sharply to the right the party effected a somewhat difficult descent down steep rocks, traversed an upland valley, and when they reached a range of precipitous rocks separating the upper and lower portions of the vallon, bore to the left, luckily striking a path which wound down the rocks in a very curious way, and led them down to the village of Valsenestre (chez Joseph Blanc Vial) in about 3 hrs. from the pass. The pass is better known on the S. side as the Col de Lovitel, but is not often traversed by the natives, the Col de la Muzelle being the ordinary route taken; yet the beautiful position of the lake should serve to make this pass better known.

COL DU VALLON (c. 10,000 ft.) AND POINTE DE MARGUERITE (10,667 ft.), *June 30*.—The same party, starting from a bivouac about $4\frac{1}{2}$ hrs. walking from Valsenestre, effected a new pass to the head of the Vallon de Lanchatra. The pass was reached in about $1\frac{3}{4}$ hr. walking by crossing a steep ice-slope, seen from the village, climbing the rocks on its right bank, and then bearing over snow-slopes to the col, which is somewhat SE. of the point marked 3,251 mètres in the French map. Just before reaching the col the party made the first ascent of this point in about 25 min., and named it Pointe de Marguerite. The descent from the col to the Glacier du Vallon was rather difficult, lying over very steep rocks, and for some time it was doubtful whether it could be effected at all. The glacier was reached in about 2 hrs., traversed, and a bivouac on a great buttress marked on the French map found in about an hour more. From this side the col appears as a square gap above a range of steep rocks. One or two of the points of the Glaciers de la Haute Pisse seemed higher, or nearly as high, as the Pointe de Marguerite, from which an exceedingly fine view was obtained.

ROCHE DE LA MUZELLE (11,349 ft.), *July 2*.—Mr. Coolidge, with the two Almers, after an unsuccessful attempt by the NE. ridge and N. face the day before, succeeded in making the first ascent of this peak direct from the Glacier du Vallon. Starting from the above-named bivouac, the party mounted the glacier to the base of the peak in an

hour and ten minutes. Ascending a steep arm of snow which runs a short distance up the face, they took to rocks on the right, making for a sort of snow couloir; crossing which they then bore to the left, and reached what was apparently the highest peak, to the left of a curious notch in the ridge, in 50 min. from the base. The weather being extremely unfavourable, no view whatever was obtained; but the clouds lifting disclosed a higher peak still more to the left, which was reached without difficulty in a few minutes. To remove all doubts the party then explored the whole ridge and built three stone men on the two points already mentioned, and on a third, but much lower one, which, as seen from below, strongly resembles a tower of rock. The descent was effected by the same route, the bivouac being regained in a furious storm in $1\frac{1}{2}$ hr. from the summit first reached. The position of the peak, as the last high summit of the Dauphiné Alps towards the west, renders it probable that a very fine view would be gained from the top in ordinary weather. The rocks of the face were good, but very steep near the glacier and just below the summit.

LES BERCHES (c. 10,000 ft.), July 3.—The whole party, starting from the same bivouac, mounted over the Glacier du Montagnon, and in 2 hrs. gained a notch between two very conspicuous rocky pinnacles, locally known as Les Berches, probably the patois form of La Brèche. Bearing to the right, a descent over steep rocks and snow-slopes was effected to the Vallon de la Pisse, and the cabane marked in the French map was reached in $1\frac{1}{4}$ hr. from the pass. Then keeping far to the right a track was found, which brought the party down to the lower part of the valley (which is cut off from the upper part by very steep rocks) in another hour. A scramble down stony slopes led to the regular path in the Val Jouffrey, which brought the party to the village of Le Désert en Val Jouffrey (chez la veuve Joseph Bellieu) in less than 4 hrs. walking from the pass. From the time the party left the cabane a tremendous storm raged, which forced them to take refuge for a time under some great boulders.

After being detained at Le Désert a day by bad weather, the party drove in a hay-cart to La Chapelle en Jouffrey and Entraigues in $3\frac{1}{4}$ hrs., and in 7 hrs. more reached Bourg d'Oisans by the beautiful char-road of the Col d'Ornon, having exchanged the hay-cart for a char at Entraigues; though, owing to the mule being tired, a longer time was consumed in driving over the col than would have been required to walk over it.

COL DES CHAMOIS, July 13.—The same party, with the exception of Ulrich Almer, effected a new pass from the Glacier des Etançons to the Glacier des Cavales. Starting from a bivouac under the rocks on the E. side of the Vallon des Etançons (used by the same party in 1873 and 1874), they mounted to the glacier of the same name, and in about 3 hrs. reached the crest of the ridge to the N. of the Col des Cavales by a broad snow couloir, well seen from the opposite side of the valley. The pass was named Col des Chamois, because very recent traces of chamois were found all the way up the couloir and down the other side. The descent lay down a great snow couloir and over a branch of the Glacier des Cavales to a rocky slope,

reached in $\frac{3}{4}$ hr. from the pass. The ordinary route of the Col des Cavales was then joined (traces of a party which had crossed it the day before being found), and La Grave reached the same evening.

COL D'OLAN, *July 6, 1875.*—Messrs. R. Pendlebury and A. Cust, with Gabriel and Joseph Spechtenhauser as guides, starting from the châteaux of La Lavey at 3.43, reached by the Glacier des Sellettes the NW. base of the Pic d'Olan at 9.15. Finding the arête of the mountain (which appeared to rise about 1,000 ft. above them) impracticable from the amount of snow on it, they made their way down by a very steep descent, occupying 5 hrs., to the head of the Val Jouffrey. An easier and more direct passage seemed to exist more to the N. Their object being to reach La Chapelle in Val Godemar, they proceeded to cross the Col de Turbat, which presented little difficulty, the final ascent to it requiring less than an hour's walking. Leaving the col at 5, they reached their destination at 8.20. The 'Alpine Guide' appears to underestimate the height of the Pic de Turbat above the pass, and still more so the time required from Le Désert to La Chapelle, which is given (on Joanne's authority) as 4 hrs.

PIC D'OLAN, *July 8.*—The same party, having passed the night at a shepherd's hut by the Clot Torrent, starting at 3.10, reached the bottom of the rocks of the Pic d'Olan on the S. side at 6. The rocks proving extremely hard, the final ridge was not gained until about 10. The weather being misty and threatening, a descent to the Glacier des Sellettes as contemplated could not be attempted, and only one of the travellers reached the actual summit, which was approached from the ridge by a 50 ft. climb of very grave difficulty. The descent from the mountain required all the skill of the Spechtenhausers, and was effected in a violent storm of thunder and hail. The final ridge was left at about 12.30 P.M., the base of the rocks was reached at 6, and La Chapelle about 8.30.

COL DE L'HOMME (11,155 ft. ?).—La Grave to Val d'Arsine. This pass was crossed on July 2 by Signor A. Martelli, with Maquignaz and Carrel, of Val Tournanche.

MONT CENIS DISTRICT—BESSANESE (12,040 ft.), VALLE D'ALA, *July 24.*—Signor A. Balduino, with Antonio Castagneri, of Balme, as guide, made the first ascent of this peak from the Italian side.

HIGHEST OF THE THREE DENTE D'AMBIN (11,096 ft.), VAL DI SUSA, *August 10.*—This peak was ascended by Professor M. Baretta, with the guide Sibille, of Chiomonte.

PIERRE MENEUE (11,750 ft.), VAL DI SUSA, *July 13,* was ascended by Dr. F. Vallino, Signor S. Paronea, Dr. P. Gallo, with P. Medal, of Millaires, as guide.

GRAIAN ALPS.—PUNTA DI GAY (11,810 ft. ?), IN VAL D'ORCO, *June 14.*—Signori Luigi Vaccarone and Paolo Palestrino, with Antonio Castagneri, of Balme, as guide, and two porters, reached this peak.

BECCA DELLA TRIBULAZIONE (10,825 ft. ?), VAL D'ORCO, *June 14.*—Signor L. Vaccarone, with Castagneri and one of the porters, also ascended this peak.

BECCA DI MONTANDENI (13,123 ft. ?), N. OF THE GRAND PARADIS, *June 16.*—The same party made this ascent.

PUNTA DI CERESOLE (over 11,800 ft.), July 5, 1874.—First ascent from the SE. This summit is a double tooth, the western point being the highest. The two are separated by a broad snow-trough falling on to the Gh^o. di Noaschetta. Signor Baretti, with Antonio, Andrea and Guiseppe Castagneri (of whom he speaks well) as guides, ascended by this trough. The final peak presented serious obstacles. 'Walls of rocks, very steep snow in bad condition, then more rocks; at last the top. It had been ascended some days before by another and easier route from the SW. Our ascent was for five hours a duel *à l'outrance* against the noble mountain.'

COL DELLA CIAMARELLA. BONNEVAL TO BALME, BETWEEN THE CIAMARELLA AND ALBARON, ASCENDING BY THE GLACIER DES EIVETTES.—This pass was crossed on July 12, by Signor A. E. Martelli, with Carrel and Maquignaz, of Val Tournanche.

COL DE LA GRANDE ROUSSE, July 22, 1875.—The Misses Pigeon, with the guides Daniel Ballay and Jean Joseph Maquignaz, started from the chalets (Alpe Neuve?) 2 hrs. from l'Église in Val Grisanche, and reached the summit of the col in 4 hrs. 25 min., including a halt. There was a fine view of the Mont Blanc range and the Grandes Jorasses during the ascent of the glacier, but on the summit it was cloudy, and a snow storm came on, hiding the view of the astounding precipices of rock that descend almost perpendicularly into the Val de Rhêmes. Happily the weather cleared during the descent, so as to reveal them in their grandeur. Five to six hours must be allowed for the rocks, from the summit down to the small glacier; after this some difficulty was experienced in finding a passage through the lower precipices overhanging the valley, and much time lost by going too far to the right. The weather was again bad, and much rain fell. Notre Dame de Rhêmes was reached before dusk. Good quarters are to be found at the Curé's house, but fresh meat must not be expected. The Val de Rhêmes well deserves a visit; and there are other passes by which it can be reached. The Col de la Grande Rousse, on the Val de Rhêmes side, affords most interesting rock-climbing, but of a kind as difficult and dangerous as can well be found. It was taken for the first time on August 4, 1874, by Signor Martelli, Signor Barale, and l'Abbé Gorret, with J. J. Maquignaz and Salomon Meynet. This is the second passage, therefore it has not before been traversed by English. It lies between the Bec d'Invergnon and the Bec de Glaçon, and it may help to determine the position of the col to mention that the little lake in the Val de Rhêmes was seen below during the greater part of the descent. It was very difficult to obtain local information, and the peaks and passes between those two valleys are called by different names in each valley. The Bec d'Invergnon is also called Grande Rousse and the Pointe de Torrent. From the account given in Vol. ii. of the 'Alpine Journal,' it seems that Messrs. Nichols, Blandford, and Rowsell in 1864 ascended the Val Grisanche side of this col, in their ascent, to within thirty feet of the Bec d'Invergnon. The Italian travellers gained the very summit of the peak on the same day last year that they made the first passage of the Col de la Grande Rousse.

COLLE DELLA TRIBULAZIONE, August 2.—The same party started

from Cogne at 2.30 A.M., and ascended the Col de Grancrou. After descending on the other side, about three-quarters of an hour, they turned off to the left and crossed a small col S. of the Colle della Tribulazione, and at 2.30 P.M. reached the châteaux of 'Muande di Tellecio,' in the Val Piantonetto, 12 hrs. from Cogne, including halts. The next day they crossed the Col de Tellecio, ascending *en route* La Tour du Grand St. Pierre, on the summit of which they stayed 1 hr. 20 min. Cogne was reached in 12½ hrs. from the châteaux, including 3½ hrs. spent in halts. Seventeen Bouquetins were seen on the moraine of the Tellecio glacier. This expedition is suggested to those who wish to combine three of the best excursions from Cogne, without making the long descent to the Val d'Orco.

GRAND PARADIS FROM CERESOLE, July 19.—Mr. Pendlebury's party, reinforced by the Rev. C. Taylor and by a person known at Ceresole as a local guide, who made himself useful as a porter, started from some châteaux (apparently lower down than those called Il Broglio) near the head of the Vne. del Roc, and less than 2½ hrs. from Ceresole; and, passing over a low col to the Pian del Lago, made for the Col du Mont Corvé. Thence crossing the upper basin of the glacier of the same name to the foot of the Grand Paradis, and ascending obliquely to the left to the ridge which bounds the glacier on the N. and runs due W. from the S. end of the central mass of the mountain, they reached the summit by the latter (the ordinary way from Val Savaranche). Walking time (exceptionally slow) châteaux to col, 4¼ hrs.; to ridge 1¾ hr.; to top about 2½ hrs. The whole route was perfectly easy. The descent was made to Val Savaranche.

MONT BLANC GROUP.—AIGUILLE DU MIDI.—FIRST ASCENT BY THE EASTERN ROCKS.—On July 31, the Rev. F. T. Wethered, with François J. Devouassoud and Michel Balmat, reached the summit of the Aiguille du Midi by the eastern face of the central peak. Having slept at the Montanvert châlet the previous night, they arrived at the base of the Aiguille by the Géant glacier and Vallée Blanche. 'Instead of taking to the southern face, which is the ordinary route to the summit, we ascended the snow slopes on its right, and having struck the arête lying eastward from the Aiguille, came round to its northern side, with the intention of descending between the highest and a lower peak (nearer Chamonix), and then scaling the rocks to the "Allerhöchste Spitze." Finding this impracticable, on account of loose snow in the couloir—a very steep one—we retraced our steps, making straight for the eastern face of the central and highest of the three peaks which together are called the Aiguille du Midi. The summit of this was reached after a stiff climb of about half-an-hour up and over some of the largest granite blocks I have ever seen. The descent was made by the usual (southern) rocks; the snow in the couloirs was fresh, and progress accordingly slow.'—F. T. W.

AIGUILLE DE BLAITIÈRE (11,591 ft.), September 7.—Mr. Coolidge's party effected the third ascent of the highest point of this mountain, *viâ* the Glacier des Nantillons. On reaching the snow ridge between the two summits, Miss Brevoort, with the two Almers, ascended the highest point (of which the second ascent had been made by Mr. Coolidge with

C. Almer and Kaufmann on July 31), Mr. Coolidge, with Roth, going up the point seen from Chamonix (which was first ascended in 1873). The two parties could converse with ease from their respective pinnacles, and remained for some time in contemplation of the glorious view; then uniting again at the base they gained Chamonix the same night.

PENNINE ALPS.—THE GRAND COMBIN, FROM THE COL DU SONADON, August 16.—In the August number of the *Alpine Journal*, this excursion is described, and a suggestion is made that it could be taken from the Valsorey châteaux, instead of encamping on rocks higher up. The Misses Pigeon took it this summer from comfortable quarters at Bourg St. Pierre itself, and found that they accomplished it easily, starting at 1 A.M. and returning at 6.45 P.M. Of this time 1 hr. and 20 min. was spent on the summit, and 1 hr. 50 min. in other halts. The day was extremely hot, with scarcely a breath of air even on the top; and one of the travellers and one of the guides were very unwell that day, so that less time would be sufficient under more favourable circumstances. They descended by the old route, and the Col de la Maison Blanche to Bourg St. Pierre, as they wished to see that side, but as séracs are likely to fall in the afternoon, the guides consider the descent by the new route safer, as well as shorter.

ZERMATT DISTRICT.—COL DE LA ZA, August 11.—Mr. A. Cust, accompanied by Fr. (Weisshorn) Biner, went from Arolla to Zermatt by a new route. They left Arolla at 3.22 A.M., and ascending above the hotel at first directly and then to the left, reached at 7.37, by an oblique ascent to the right presenting no difficulty, a slight gap in the ridge connecting the Dent Perroc with the Aig. de la Za, but lying nearer to the latter. A 50 min. climb along the ridge brought them to the base of the Aig., after ascending which (ascent 30 min., descent 33 min.), they traversed continuous snow slopes to a point in the ridge running E. from the place marked 3,507 on the Federal map. An easy descent from here led in about an hour from the Aig. (over soft snow) to the ordinary route for the Col d'Hérens, a short way E. of the Col de Bertol.

The name, Col de la Za, is proposed for what is a perfectly easy and safe passage over the range of the Grandes Dentes, in the neighbourhood of the Aig. de la Za. It should be mentioned that the gullies immediately S. and N. of the Aig. are more direct. Of these the former has never been attempted, owing to the obvious risk of a cross fire from the summit above it on the S.; up the latter the landlord of the hotel once recently conducted a gentleman in making the ascent of the Aig., and found it not free from falling stones.

The view from the col eastward is incomparably finer than that from the Col de Bertol.

BEC DU CRETON (12,253 ft.), VAL TOURNANCHE, July 27.—Signor G. Corona, with P. Maquignaz, reached this peak, one of the Jumeaux lying between Breil and the Val Pelline.

CIMA DI JAZZI, FROM MACUGNAGA, August 27, 1874.—Signor G. Spezia, with B. Andermatten and G. Burghener, left the A. del Monte Moro at 1.45 A.M. As far as the Roffelstafel Alp they followed the

path to the New Weissthor, thence turning to the left they climbed straight up the mountain, reaching the top at 11.30 A.M. The party descended to Mattmark by the ordinary Weissthor route. S. Spezia joins in the complaint made by Mr. Brooksbank (*Alpine Journal*, vol. vii. p. 128), of the confusion produced by the name Weissthor being applied to three passes, and suggests that by calling the pass now commonly used between Zermatt and Macugnaga the Passo di Roffel, or Roffeljoch, the name 'New Weissthor' would be confined to the pass to Saas, which alone traverses the 'arête blanche.'

MONTE DELLE LOCCIE (12,467 ft.), *September 3, 1874.*—Signori A. Grober and G. Antonelli, with Giuseppe Necer as guide, left the Vonflue Alp at 3 A.M. In 1 hr. they reached the Glacier de Vigne. At 5.30 they were on the Col delle Loccie. By cutting about 200 steps they reached in 45 min. from the pass the Monte delle Loccie. The view of the southern glaciers of Monte Rosa is described as very beautiful.

THE GABELHORN FROM THE WEST.—On August 16, Mr. J. H. Kitson and the Rev. F. T. Wethered, with Christian Almer, Ulrich Almer, and Christian Bohren, left Le Mountet at 2 A.M., intending to make for the steep ice-fall which descends from the foot of the western arête of the Gabelhorn on to the southern side of the Durand glacier.—'Fearing avalanches, we soon altered our course to the right, and bearing well to the west, passed pretty close under the Roc Noir, and so mounted the ridge between the Gabelhorn and Dent Blanche, striking it some little distance to the E. of the Col Durand. Thence, turning eastwards, and ere long leaving the point marked 3,744 in the Federal map behind us, we had reached the base of our peak—*vid* some very steep snow slopes—by about 6.15 A.M., where we made a short halt. The summit of the Gabelhorn was gained at 9 A.M. The weather was glorious; the view magnificent. A good deal of snow was lying on the sides and top of the mountain. In the descent towards Zermatt, the NE. arête was in such bad order that it was necessary to force the very steep snow slopes on the northern side, and for about an hour great caution was required. Having at length been lowered over the cornice by Christian Almer—a sheer drop of 20 ft.—we found the Gabelhorn glacier much crevassed, and, like Messrs. Hoare and Hulton last year, experienced some difficulty in its descent. Almer's tact was remarkable throughout the day. He had not been on the mountain before, but was never at a loss for ways and means. Our route from Le Mountet to the base of the western arête, although longer in point of distance, is much safer than that taken by Messrs. Hoare and Hulton, and in point of time is the shorter of the two. (*Conf. Alpine Journal*, vol. vii. pp. 153-4).—F. T. WETHERED.

ARBEN JOCH—On July 8, Mr. W. E. Davidson, accompanied by Laurent Lanier, of Courmayeur, and a porter from Vissoie, left Zinal at 2.45 A.M., intending to cross to Zermatt by the Col Durand. They followed the usual route as far as the 'Roc Noir,' when, as there was every appearance of a fine day, they determined not to lose so favourable an opportunity of making the first passage of the Arben Joch,

explored on the Zermatt side by Mr. Whymper last year, and suggested by him in the February number of the Journal.

‘Accordingly we turned to the left, bore diagonally across a snow plain, and passing beneath a range of enormous ice-cliffs, which rendered a direct approach to the col impossible, arrived without difficulty at the foot of the NW. face of the Gabelhorn. Here we turned to the right again to avoid the stones and pieces of ice which were coming down in numbers from the Gabelhorn, and began to cut our way through the ice-fall, passing upwards between two gigantic tiers of ice-cliffs, which were in a most unstable condition. The passage of the séracs was a work of much difficulty, and would certainly have never been accomplished had it not been for Lanier’s very great skill and determination. It was not until 2 P.M. that we reached the plateau above the ice-fall, and we were then compelled, by the size and number of the crevasses, to bear to the left a long way out of our course until, at a point about 300 ft. below the western arête of the Gabelhorn, we crossed the bergschrund which guards its NW. face. The final slope was hard ice, and it cost us $1\frac{1}{2}$ hr. of constant step-cutting to gain the ridge, which we did at the commencement of the arête. Passing along this ridge we gained the actual col (which is between the two points marked 3,651 and 3,744 mètres on the S.A.C. map) at 5 P.M. The descent was by steep but easy rocks to the Arben glacier, whence the route to Zermatt, which was reached at 8.45 P.M., presents no difficulty whatever. We encountered a most violent thunderstorm on the col, and had no view. The col is about 50 ft. lower than the point marked 3,651 mètres, and may be therefore estimated at 11,930 ft. It should be taken from Zinal to Zermatt, as all the difficulties are on the Zinal side; and moreover, the descent through the ice-fall late in the day would be attended with serious danger.

‘Time—From Zinal to Col, 13 hrs. actual walking; Col to Zermatt, 3 hrs. 20 min. actual walking.

‘The point marked 3,744 is known as “*Mont Durand*,” and has, as far as I am aware, never been ascended. The *Pic* or *Pointe de Zinal* (which in the account of the ascent of the Gabelhorn, at page 153 of the *Alpine Journal*, was confounded with *Mont Durand*) is the highest point in the ridge, which extends from Schönbühl to the Dent Blanche. The actual summit consists of a pointed and almost perpendicular rock, and has been only once ascended—by M. Javelle and Jean Martin, of Sierre, in 1873. The Zinal Joch (described in No. 44 of the *Alpine Journal*) is between this point and the Dent Blanche.’

A NEW PASS BETWEEN THE PARROTSPIITZE AND THE LUDWIGSHÖHE, 4,415 MÈTRES, OR 14,486 FT.—Signor L. G. Prina, director of the Varallo section of the Italian Alpine Club, and a member of our own Club, sends a note, of which the following is a translation:—

‘I had for some years felt desirous of exploring the magnificent glacier enclosed between the rocks of the *Pointe de Giordano* and the *Vincent Pyramide*, and extending along the sides of the *Schwarzhorn* and *Ludwigshöhe* towards the *Parrotspitze*, where it changes its name from *Gl. de Piode* to *Gl. des Vigne*, and with the *Gl. des Embours*

furnishes the sources of the Sesia. The lower end of the Gl. de Piode is frequently visited by tourists from the hotel at Alagna, 9 hrs. sufficing easily for the whole excursion. But the upper portion of the glacier, where it breaks into superb séracs, and its wavelike undulations are seamed by deep and formidable crevasses, had never been trodden by human feet. Between the Vincent Pyramide and the Schwarzhorn this glacier is united to the Gl. de Lys, and thus to the upper plateau of Monte Rosa by a steep ice-wall. This was the point I proposed to attack. I communicated my ideas to Signor Farinetti, "directeur du C. Alpin Italien," and a first rate mountaineer, with whom I had frequently found myself in the glacier excursions, which, under his escort and guidance, are often made from Alagna by youthful climbers and courageous young ladies. Signor Farinetti strongly encouraged me to carry my idea into execution.

The 3rd September, the weather appearing settled, I engaged the well-known guide, Joseph Guglielmina, of Alagna, and the same evening we left for Bors. My guide's brother, Pierre, joined us as a volunteer, and we took besides as porter, Romelli Archange. In two hours we reached Bors, 700 mètres above Alagna, where we retired to sleep at 8.30 P.M., with every prospect of a fine morning. At two o'clock, however, the sky was partially covered by clouds borne rapidly along by a north wind. Despite the uncertainty of the weather I determined to start, and about 2.45 A.M. we left the Bors Alp. At 3.20 A.M. we reached the Voudeck. By the pale light of our lantern we crossed the stones and débris and forded the Sesia; and, about six, after climbing the steep and lofty rocks which divide the Gl. de Piode, and near the top form almost a medial moraine, set foot on the ice and roped ourselves. J. Guglielmina led, I followed, his brother and the porter brought up the rear. Whilst roping we had time to watch three chamois who, when disturbed, went off at full speed up the rocks of the Parrotspitze. We were now frequently obliged to make great circuits to avoid the crevasses. Often it was necessary to cross ice-bridges of perilously slender proportions, where a sure eye and a firm foot were very requisite. The crevasses constantly increased in number, and the séracs became more and more imposing, and not always practicable. Having already spent much time and cut 200 steps in the ice, we decided to take to the rocks of the Pointe Giordano and Vincent Pyramide, by which we might more easily gain the upper part of the Piode glacier, whence we should be able to see whether the passage between the Vincent Pyramide and the Schwarzhorn was practicable, or failing this, whether a pass could be forced between some of the neighbouring and higher peaks of Monte Rosa.

The weather continued favourable, the clouds which were still driven before a north wind becoming lighter. We climbed the rocks rapidly, from time to time taking shelter under projecting crags from the showers of stones which fell from above. After more than an hour's stiff and risky work we crossed on a snow-bridge the "bergschlund," 13 ft. wide, and returned to the glacier, which we crossed with tolerable ease to a point opposite, and not far distant from the great "couloir," between the Pyramide Vincent and the Schwarzhorn.

Neither this nor the rocks on either side of it offered any hope of a passage. We next studied the Ludwigshöhe; there also there seemed no possibility of attaining the "grand plateau" of Monte Rosa. Without allowing ourselves to be discouraged we made for the rocks below the great glacier between the Ludwigshöhe and the Parrotspitze, with the determination to find a way by it. It was already 1 P.M. when we began the ascent of these dangerous rocks, on which small avalanches of ice and stones frequently troubled us with their attentions. One of them left me a "souvenir" in the shape of a bruise on the leg, which forced me to halt for ten minutes. Amongst the rocks we had to climb steep snow-beds, rendered difficult by the softness of the snow which slipped away under our feet. By 3 o'clock we were within about 300 ft. of the ridge of Monte Rosa, between the two peaks already mentioned. An ice-slope of 35 degrees now appeared, and cost us much time. The brothers Guglielmina exerted all their strength to hew good steps, since had one of us slipped he must have dragged the others to the bottom of the precipice. We approached quite safely the top of the ice-slope. But our work was not yet over. The slope was crowned by a huge irregular "corniche" hung with immense pendent masses, which threatened at every moment to fall on our heads.

'The sun was hidden, and the cold was severe. We felt nearly exhausted by hunger and fatigue; but the perseverance and *sang froid* necessary to carry to a successful issue any difficult enterprise did not fail us. After twenty minutes' hard work with his axe, J. Guglielmina succeeded in breaking a hole through the menacing "corniche." We could see the sky above us, and the sun shining on the plateau. We began to feel the pleasure of success, and J. Guglielmina at this moment pushing his way through, cried with all his lungs, "Victory, Signor Prina, we have done it. Viva! Viva!" We all followed him through the hole, climbing on all fours. Our excitement was indescribable, and the guides embraced me and wished me to give my name to the new pass. In place of my own name I suggested that it should be called, after my daughter, the Ippolita Pass.

'It was 5 o'clock when, the last difficulty conquered, we stepped on to the Grand Plateau. The view was magnificent. The Matterhorn seemed to provoke me to its assault. A light but bitter breeze made the thermometer fall to 3° degrees below zero. The late hour and the cold forced us to hurry our descent, and we bade a speedy farewell to the pass, distant about 160 ft. from the Parrotspitze, 4,443 mètres, and between it and the Ludwigshöhe 4,324 mètres.*

'Running, sliding, and sometimes wading up to our knees in snow, we crossed to the Lys Joch, whence we descended by the glaciers de Lys, du Garstelet, d'Indren and d'Embours, leaving the snow about 7.30 P.M. We took off the rope which had been in use since 6 A.M., and lighting our lanterns, passed the miner's house above the

* As Signor Prina gives the height of 4,415 mètres for the pass, it is evident the point of passage is on the shoulder of the Parrotspitze and not the depression between the two peaks.

"des Pisse," fall and took the col beside the Hofelhorn, between the valley of Bors and that of Ollen, reaching Alagna at 10.30 P.M.

'I am glad to be able to confirm the good reputation as a first rate guide won by Joseph Guglielmina, the chosen companion of M. Sella. Peter is a pleasant fellow, and as guide is following in the steps of his elder brother. The porter, Romelli, also is fairly up to his work, and a sturdy walker. He got well over the dangerous spots, although he had lost his alpenstock early in the day.'—L. G. PRINA.

FADERJOCH, *July 25, 1875.*—Mr. W. W. Simpson, with Ulrich Almer, and Franz Burgener as guides, left the little hotel on the Mattmark Lee at 5 A.M., climbed and followed along its summit the ridges between the valley and the Schwarzenberg glacier to the upper snow of the Seewinen glacier; mounted over moderate snow-slopes to the summit of the pass, which is between the Faderhorn and the Rothhorn. There was a large bergschrund immediately below the summit, but as it was almost completely choked with fresh snow they crossed it with ease, and reached the top at 8.20 A.M. The descent to Macugnaga lies over a short but very steep snow-slope to the rocks, which, though steep, are not difficult. Macugnaga was reached at 11.45 A.M., after 6¾ hrs. easy walking; later in the season the huge crevasse would probably present some difficulty, and the slope on the Macugnaga side in some seasons may be ice instead of soft snow. Franz Lochmatter, of the Monte Rosa Hotel, Macugnaga, stated that it was the first time the col had been crossed by a traveller, adding, that if known at all, it was only to chamois-hunters.

THE DOM—A SECOND ROUTE FROM SAAS, *Sept. 3.*—Messrs. Alfred D. Puckle and Walter B. Puckle, guided by Johann Petrus, of Stalden, and accompanied by Lorenz Noti, a chamois-hunter of Stalden, as second man, made this expedition.

'Petrus, while out after chamois, some two years before, had been about a third of the way up these rocks, and had then formed the opinion that the Dom might be scaled this way. He had much wished us to make the attempt with him, and with this intent we arrived at Saas on August 30. That night there was a heavy fall of snow on all the mountains round, and it was only after waiting three days a trial appeared possible. The night of September 2 we slept on the rocks of the Eggfluh, above Fée. Leaving our bivouac at the rather late hour of 5.15 A.M. the following morning, we hugged the ridge of rocks (Eggfluh) as long as we could, crossed the glacier high up, found the snow on it in capital order, had no trouble with the bergschrund, and reached the base of the Dom's eastern wall of rock at 7.15, right under the "höchste spitze." We then went right at it; indeed we have never gone straighter at anything. We found a great deal of new soft snow, which gave very bad hold, and some iced rocks; speaking generally the rocks were sound, though one great lump was rolled down and struck the last man (A. D. P.) heavily on the knee. At 9.30 we gained the point previously reached by Petrus (which proved to be about one-third the way up the rocks). The work continued much the same all the way, rock and patches of snow alternating; over the snow we followed pretty closely a fresh chamois track. The slope was very

steep indeed; we from time to time measured the angle roughly with our axes, and estimated it generally at as much as 50 degrees, and at times as considerably more. The icy masses on the summit ridge were almost constantly in sight above us, and occasioned some misgivings of a fall (a large avalanche swept down about 50 yds. from us); we, therefore, allowed ourselves only two short halts, together 40 min. The ice-ridge at the top gave us no trouble, and, surmounting it, we found ourselves within about 50 yds. of the summit, which consisted of snow, overtopping by some 6 ft. the little cairn of stones a few yards beyond. The time was 2.40 P.M., being 7 hrs. 25 min. from base of rocks, and 9 hrs. 25 min. from the Eggfluh. It had proved, with the snow in the state it was, the hardest prolonged climb either we or our guides had ever had, though Petrus had been ten times up the Matterhorn. The view was magnificent, but the cold so intense we could stay only 10 min., and then set off down the other side (the usual route) through Randa to Zermatt, which we reached at 10.30 P.M., after dark floundering through the pine-woods above Randa.

Petrus's leading during the ascent was admirable; we had not to retrace a step. Of his general merits, after three years' varied experience, we cannot speak too highly. Noti proved an excellent man on rocks.'

CENTRAL ALPS.

BERNESE OBERLAND—FIRST ASCENT OF THE BLÜMLIS ALP FROM THE TSCHINGEL GLACIER, *July 20, 1874.*—'Having passed the previous night on the rocks of the Gamchilücke, I and my brother, F. C. Hartley, with Peter Rubi and Rudolf Kaufmann, started at 4.30 and proceeded along the Tschingel as far as the second bay formed by spurs of the Blümlis Alp running out on to the glacier. From this point a band of easy rock runs up to a small *sattel* (to the east of the final peak), which was reached at 8, and the top at 9 A.M. If we had descended the same way, some serious danger from falling stones and a thorough soaking would have been avoided; but not having been on the mountain before, we took the old route by the Dündengrat.

'On July 6, 1874, I and my brother, with Peter Rubi and Peter Kaufmann, left Alpighen, on the Wengern Alp, at 5 A.M., to reconnoitre the eastern arête of the Eiger. Proceeding up some avalanche débris, and under a small glacier, we turned to the left along some easy rocks until 10 o'clock, when we doubled back across a snow-slope as far as the foot of a large ice-slope, which stretched up to the final arête of the *Mittelegi*. At 11, Peter Kaufmann commenced cutting straight up, and at 4.30 P.M. we reached the arête; the formidable steepness of the slope forbidding a halt or a change of leaders. The rocks on the other side were luckily easy, so (the Eiger, of course, being given up) we descended to the Kalli glacier and the route from the *Mönchjoch*, reaching the *Bäregg* at 6, and *Grindelwald* at 7 P.M.'—F. W. HARTLEY.

THE MÖNCH FROM THE EGGISCHHORN TO THE LITTLE SCHEIDECK.—The first passage of the *Mönch* from the Eggischhorn to the Little Scheideck was effected by the Rev. F. T. Wethered, with Christian Almer and

Christian Roth, on August 24. Leaving the Faulberg hut at 1 A.M. they reached the rocks, (3,350 in the Federal map), at the base of the arête which rises from the Jungfrau Joch to the summit of the Mönch, at 4.57 A.M. Keeping for the most part on the top of the snow-slopes immediately under, and to the south of, the rocks and sometimes on the arête itself, they came at length to a buttress, which turned their course on to the northern face of the mountain, and so reached the summit, (in 2 hrs. and 13 min. from the rocks above mentioned, including a halt of 18 min. for breakfast,) without difficulty. The wind was piercingly cold, and after about a quarter of an hour spent on the summit, they returned to the buttress and continued the descent down the northern slopes. If the snow on these had not been in good order, it would have been impossible to proceed downwards, on account of their steepness. The angle at which they lie must *average* considerably over 50° , and in some places is at least 60° . The rocks at the foot of the slopes were gained in 5 hrs. 10 min. from the summit, including halts, and the Hôtel Bellevue was reached at about 5.30 P.M. The weather was favourable while the mountain was being traversed, a heavy storm coming on as Mr. Wethered and his guides reached the Little Scheideck. 'The summit of the Mönch has, I believe, been reached before by the arête which rises from the Jungfrau Joch: I venture to recommend this route strongly. Another party—Englishmen—ascended the mountain from the Faulberg, on August 24th, by the ordinary way. We did not meet on the summit; but I have since compared notes with them, and find that our time from the base to the summit was appreciably less than that which they took in the ascent. The descent of the Mönch to the Little Scheideck has not been attempted before: it is only practicable when the snow is in very good condition. Step-cutting was continuous on August 24th: Almer indefatigable.'—F. T. WETHERED.

THE GROSS NESTHORN FROM THE SE.—Friday, August 27, Messrs. R. Durnford and T. Hamond left the Bel Alp at 3.45 A.M. with Anton Ritz and Aloys Pollinger as guides, and passing along the small glacier which runs parallel to the Ober Aletsch Gletscher, arrived at the foot of that descending from the SE. base of the Gross Nesthorn at 6 A.M., where a halt was made for breakfast. 'At 6.30 we commenced the ascent of the glacier, which rapidly rises to the rocky base of the mountain, and after 2 hrs. walking crossed the bergschrund by a good snow bridge, and began to mount the rocks below the points where the rock arête descending to the Ober Aletsch glacier joins the main peak. We found the rocks steep, but solid; and after passing up a good cheminée and bearing somewhat to the right, reached the arête without difficulty, and continued to pass along it till the rocks became smooth slabs of granite lying at a very steep angle. It then became necessary to leave the rocks and take to the steep snow-slopes on the right, which rapidly became hard ice and entailed a considerable amount of step-cutting. About 10 we arrived at a point where a mass of ice projects from the face of the mountain, on the left side forming a cliff overhanging the slope. We determined, if possible, to avoid this danger by passing to the right, and across a very steep shoulder of ice above, where we hoped

the slope would become less precipitous; but after some step-cutting, which was made extremely difficult by the abruptness of the slope and the projection of the ice-cliff on the left, we gained the top of the shoulder only to find that it ended in an almost perpendicular wall of ice above, while the slope below became even steeper than before. This made it necessary to let ourselves down one at a time to the spot where we first attempted to pass under the ice-cliff. The overhanging wall made this operation extremely difficult; but it was safely accomplished, and at 11 we proceeded to try the only other course, viz., that already condemned as impracticable, owing to its being commanded by the top of the dripping ice-cliff. The slope was hard blue ice, and could not have been at a less angle than 70°. However, we passed on with all speed and got by in safety, so that at 12.15 we were enabled to halt for food on a kind of small plateau at the top of this slope and immediately above the rocky tooth which from below appears to be the summit of the mountain. The top was reached from here by a short and easy snow-slope at 12.40, and the descent made in 1 hr. to the glacier by the usual route, glissading being practicable a good part of the way. The Bel Alp was reached at 5. It is possible that by keeping more to the left in approaching the base of the mountain a way might be found by the rocks which would land the traveller on the plateau above mentioned. Should this be done, the expedition would no doubt become a favourite one from the Bel Alp, owing to its shortness as compared with the ordinary route and the magnificent view which the peak commands; but we think that for obvious reasons our course cannot be recommended.'

TITLIS DISTRICT—FROM STEIN TO THE WENDEN GLACIER, *July 21.*—T. C. V. Bastow and T. A. Lacey left Stein at 4.30 A.M. and mounted due north on to the Oberthal glacier, reaching a gap in the ridge of the Urathorner 6.30. 'In one hour we descended some steep rotten rocks on to a small glacier without a name, which was connected with the Wenden by a steep ice-fall above the ridge of rocks marked in the Dufour map 2,671 mètres. This and the rocks proving impracticable, we descended and tried the lower ice-fall, which ends in 300 feet of ice-cliffs, down the right bank of which on to the rocks we made our way. The rocks were very bad, and it was 11 o'clock before we reached the foot of the Wenden glacier, after 4½ hrs. of incessant exertion on this little glacier. This gap in the ridge of the Urathorner would, however, be very useful if there were snow enough to descend the upper ice-fall of the little glacier without a name, as ten minutes would then probably suffice for a glissade on to the Wenden glacier, and the long route from Stein by the G'schlotten See would be avoided in crossing the Wenden Joch, or ascending the Titlis from the south, or in crossing the Titlis Joch to Engstlen. A heavy axe is indispensable, and the rocks require a rope.'

BERNINA GROUP—VARIATION OF THE PASSO DI FERRO.—In August, Messrs. Thomas Cox and Frederick Gardiner, accompanied by the guides, Peter Knubel and Gabriel Spechtenhauser, left the village of Spino in the Val Bregaglia and ascended the Val Bondasca to the Lombardino Chalets, where they passed the night, and next morning started at 3.45 A.M. They reached the Passo di Ferro at 8.25 A.M. by the

left side of the Bondasca glacier, which they found much crevassed and in some places strewn with recently fallen stones. At the top of the pass they found the stone man erected by Mr. Freshfield's party in 1864. Wishing to reach the Baths of Masino by the Val Porcellizza, they descended from the Passo di Ferro for about fifteen minutes on the Bondasca glacier and made for a promising-looking gap to the west of the Monte del Ferro, which was reached without difficulty in half-an-hour. On the south side the descent for the first three-quarters of an hour was over loose and steep rocks. The Baths of Masino were reached at 3.30 P.M., nearly three hours being lost during the descent, owing to an accident which happened to Mr. Gardiner, who, near the top of the pass, had his head cut open and his spectacles smashed by a falling stone.

THE DISGRAZIA FROM VAL MALENCO BY THE VENTINA GLACIER AND SOUTHERN RIDGE, *August 29.*—Messrs. F. Pratt-Barlow and Still, with Jakob Anderegg and Peter Taugwald, attacked the Disgrazia from Chiareggio in Val Malenco by the Ventina Glacier, which was in its upper part very difficult and dangerous. They reached the peak at the south end of the arête at 12.30 P.M., and the summit at the other end, the only one hitherto climbed, at 3.30. The passage of the arête was the most difficult piece of work which any of the quartett had ever performed. The descent by the ordinary route was rendered dangerous from the excessively bad state of the snow, and being caught by darkness the party had to spend a night of much discomfort in pouring rain at the head of Val Sasso Bisolo.

BERGAMASQUE ALPS—GRIGNA FROM MANDELLO, *October 18, 1874.*—Signor G. Gavazzi, with the guide Grange of Courmayeur and a local porter, Primo Ballati, of Rongio, discovered two ways of reaching the top of the Grigna from the Lago di Lecco side by the Valle di Ferro. One of them was difficult and the rope was found useful. The second, however, was comparatively easy. The ordinary path from Varenna by Esino attacks the mountain by its NE. flank, and the possibility of ascending it from the lake by a more direct route has now been shown for the first time.

MONTE DELLA REDORTA, 9,775 FEET, *September 15, 1874.*—This peak, the highest in the Bergamasque Alps, has been attained by a party of the Italian Alpine Club. A large glacier has to be traversed to reach from the N. the pass between this peak and the Pizzo di Cocca. A short rough scramble leads to the top of the Redorta. It can be taken on the way over the pass from the Val Tellina to Bergamo. Luigi Ferneti of Gromo, and Antonio Cattaneo of Carona, were employed as guides.

ORTELER DISTRICT—THE ORTELER FROM THE HOCH JOCH, *June 15.*—Herr O. Schück with P. Dangl and Al. Pinggera as guides, reached the Hoch Joch from Sulden at 8.25 A.M. in 7 hrs. Climbing over snow and rocks, the party reached at 9.20 the southern point, followed the snow-ridge leading from it in a northerly direction and having got round a projecting point by its eastern flank, halted at 10.15 on a broader piece of the rocks which followed. Starting again at 11.5, they reached the snow-ridge falling from the upper Orteler plateau by a climb up steep but good rocks at 12.55 P.M. The summit was reached at

2.20 P.M. The party returned to Sulden by the ordinary route at 8.50 P.M. The great crevasse which barred the ascent last year was completely bridged over.

The Schrötterhorn and Schranspitze, the low summits between the Königsspitze and Monte Cevedale have also been ascended by German mountaineers, and the pass between the Schrötterhorn and Suldenspitze crossed. It is called the Schrötter Joch.

EASTERN ALPS.

OETZTHALER FERNER—HOCH WILD SPITZE, FROM THE LANGTHALER GLACIER.*—On September 11th, Messrs. Thomas Cox and Frederick Gardiner, accompanied by the guides Peter Knubel and Gabriel Spechtenhauser, left Gurgl at 2.10 A.M. to make the ascent of the Hoch Wild Spitze. Starting by candlelight, they reached the glacier shortly after daylight, and found it almost level for the first hour and a half. (The Eissee which sometimes forms at the foot of the glacier was empty this year.) Higher up the glacier becomes steep and crevassed, and near the peak the crevasses were somewhat troublesome. The summit was reached at 8.45 A.M., the last hour being over steep but easy rocks. From its position, the view of the Dolomites from this mountain is superb. They found on the summit, the stone man erected by Dr. Theodor Petersen, who ascended this peak from the village of Plan by the Kessel Ferner on July 20th, 1874, in 7 hrs. 40 min. Gurgl was reached at 2.35 P.M., the entire expedition having occupied 12 hrs. 25 min., of which 2 hrs. 30 min. were spent on the summit.

CENTRAL TYROL—THE HOCH GALL (11,200 ft. by aneroid observation, 11,228 new Austrian survey), August 27.—Messrs. H. A. Beachcroft and C. C. Tucker with François Devouassoud, and a young man named Ausserhofer of Rain, made an ascent of this peak, the first it is believed by English mountaineers.† The group of which the Hoch Gall is the culminating summit seems to have attracted less attention among English travellers than it deserves. Placed midway between the range of the Gross Venediger and the Dolomites of the Venetian Tyrol, and commanding a complete view of the Zillertaler Ferner from the Pfitscher Joch to the Krimmler Tauern, this small but comparatively lofty group possesses within itself beauties which in a district less amply provided with attractive scenery would have gained for it an assured popularity. As it is, although its chief village contains two very fair country inns, and portions of the group are now within three hours' walk of a railway station, simplicity of manners and reasonable prices still prevail, and contrast pleasingly with the comparative corruption which has invaded the once equally secluded dolomite region on the further side of the Pusterthal. It is a fine walk of some 3 hrs. from Taufers in the Ahrental to Rain, or as it is locally called,

* This peak must be distinguished from the Fend Wild Spitze, the highest of the group.

† See 'Jahrbuch' of the Austrian Club for 1869, and 'Zeitschrift' of the German Club for 1872, Heft iii., for accounts of German ascents.

St. Wolfgang. The path, which at first follows the north side of the Rainthal, in one hour from Taufers crosses to the left bank by a bridge carried across the brink of a fine fall, and thenceforth it follows the torrent closely. One of the noblest of glacier streams, this thunders down in one continuous cataract, beside which conversation is impossible except by signs. About half-an-hour before reaching Rain the top of the ascent is gained, and the rest of the way lies along level meadows to the foot of the eminence on which the village stands. The position of Rain is superb, and might excite the envy of more famous Alpine centres. It stands at the junction of two valleys. The first of these, descending from the north-east, is connected by a low green saddle with the head of the Deferegggen Thal. The second, a deep short valley, leads south-east direct to the foot of the Hoch Gall. This peak, which is in reality a long ridge rising gradually from north-east to south-west, is fully seen from Rain, and with its sharp snowcrest and ample expanse of glacier presents a spectacle of magnificence surprising for a mountain of such moderate height. It would appear easy to gain the ridge at the north-east or lower end and follow the crest to the highest point. A far more direct course is offered by a secondary ridge, which, descending from the actual summit towards the north-west, terminates in the direction of Rain in a sort of buttress or Hörnli. This was the route adopted in previous ascents, and it was decided to follow it on the present occasion.

Starting from Rain at 3.20 in splendid moonlight the above party followed the valley for about one hour, and then climbed the slopes on its south-west side. Soon after leaving the forest they made for a tongue of glacier descending to the right of a bold lion-like head of rock. The glacier which was reached a little after seven o'clock was found to be level and little crevassed, and an hour's walk partly across it, and partly over stony but not difficult ground, sufficed to place the party at the foot of the buttress above mentioned. Opinions were here divided, but at last it was decided to climb the buttress itself, and follow the arête in its entire length. This, though a safe, proved a somewhat circuitous route, and a good deal of time was expended in crossing gaps in the ridge which might have been avoided altogether by striking the arête further back, and at some distance behind the buttress. Higher up, the ridge became too steep to be easily followed, and a short traverse across the steep face of the mountain to the right was made, the ridge being only regained at a few minutes distance from the actual summit. This was found to consist of a delicate crest of snow, recalling by its fine curves and the steepness with which it curled over on the southern side, the famous crest of the Wetterhorn. The view is extensive and remarkable, the aspect of the emerald lakes of Antholz lying at a vast depth beneath the spectator, being as strange as it is beautiful. In descending, the party, after the steepest part of the ridge had been passed, turned down on its left or western side and reached the glacier without difficulty, though with some slight risk from falling stones. A full hour was gained by adopting this route, which avoids the passage of all the ugly gaps intersecting the arête lower down. By the glacier lying between the Hoch Gall and the Wild Gall, a rocky

summit about 500 feet lower than its neighbour, a fine but probably difficult pass remains to be effected direct to the lakes of Antholz. The angle of the chain on its south-eastern face is everywhere steep, and nowhere perhaps steeper than at the point where the descent from such a pass would have to be made. The ordinary pass to Antholz, which was followed on this occasion, lies much further to the west, and close to the base of the Schneebigenock, the second in height of the summits of this group. From the pass there is a magnificent view of the Dolomites, over which the Tofana here seems to reign supreme. The descent, though steep and very rough, does not offer the slightest difficulty, and Antholz may be reached in less than three hours. The young man Ausserhofer who accompanied the party had made more than one previous ascent, and now knows the best and shortest route. He seemed to know the country and the other peaks of the neighbourhood well, and is strong, cheerful and capable. He is probably the best man in the neighbourhood for expeditions of any difficulty.

Times, exclusive of halts. To foot of actual peak $4\frac{1}{2}$ hrs. Ascent and descent of peak 5 hrs. Descent to Antholz 3 hrs.

CORTINA DISTRICT.—*August 30.*—The same party, without Ausserhofer, started from Schluderbach, at 6 A.M. Having reached the opening of Val Travernanza, they mounted that valley to its head. Keeping a course a few points W. of S., they reached the top of a line of cliffs overlooking the route of the Tre Sassi pass. Little difficulty was experienced in descending to the inn on the Cortina side of that pass, from which Caprile was reached by the ordinary route in about 3 hrs. By bearing a little more to the W. from the head of Val Travernanza a descent may be effected upon the actual summit of the Tre Sassi pass, and the route described above shortened by $\frac{1}{2}$ hr. In this way Caprile may be reached in about 9 hrs. walking from Schluderbach, and scenery of the first order enjoyed on the way.

PRIMIERO DISTRICT—PASSO DI SAN LUCANO, *September 1.*—The same party, with Battista della Santa of Caprile, started from Agordo at 6 o'clock, and mounted the Val di San Lucano to its junction with the Val d'Angoraz. Following the route of the Passo di Canale to the green plain mentioned by Mr. Holzmann (p. 469 of 'Ball's Eastern Alps'), they reached the eastern edge of the Primiero plateau between the eminences of the Coston di Miel and the Campo Boaro. From this point, which is about 8,600 ft. they found no difficulty in traversing the plateau from E. to W., descending to San Martino di Castrozza by the route of the Passo delle Cornelle. An early start for this pass is advisable, the long ascent (6,500 ft.) from Agordo being somewhat fatiguing when the sun is high. In any case the descent to San Martino should be delayed until evening, when the spectacle of range behind range in the glow of an Italian sunset will not easily be forgotten. The pass may be conveniently named the Passo di San Lucano, a name, it is believed, not yet appropriated. The time required for its passage is about 9 hrs., exclusive of halts.

The inn at San Martino, though still capable of improvement, is now good quarters for mountaineers. There are many comfortable bedrooms, and the wine and food supplied are very fair. The great

deficiency is to be found in the service, the whole of which is at present carried on by Cristoforo Bonat, the village schoolmaster of Mezzano. He is very active, intelligent, and willing; but he has more than he can manage on his hands, and he is not well supported. All the food, too, is supplied from the old kitchen, and each course of the evening meal has to be carried across to the new house through the open air, a process which causes at times considerable delay, as well as (in the keen air of San Martino) an appreciable diminution in the heat of the several dishes. Amendment was promised in these two respects. Even as it stands, it would be difficult to name a more fascinating headquarters for those who love to combine the colour of Italy with the keenness of Alpine air.

ATTEMPT ON THE PALLE DI SAN MARTINO, *September 2.*—During the passage from Agordo to San Martino, occasion had been taken to make a reconnaissance of the ridge connecting the Palle with the plateau. This ridge was found (as was expected) to be cut off from the main mass by an impassable chasm. It was observed, however, that the little glacier lying in the recess between the Palle and Cima di Rosetta terminated at its upper end in a steep couloir, running to a considerable height on the N. face of the Palle at a point beyond the last great gap in the ridge, and it was thought that by ascending it a way might be found to scale or turn the precipice (here reduced to a matter of a few hundred feet) against which it abutted. On the morning of the 2nd, the above party started at 6.30 from San Martino, and ascending to the plateau by the route of the Cornelle pass, reached the saddle connecting it with the Palle in 3¼ hrs. Some time was spent in effecting a descent to the glacier below. A steep rock-scramble led down to an ice-filled gully, cut off from the glacier by a formidable crevasse, the crossing of which gave occasion for a display of ingenious step-cutting, but also caused a vexatious delay.* A few minutes' walk across the head of the glacier sufficed to reach the foot of the couloir by which it was hoped to continue the ascent. There seemed no particular difficulty in crossing the bergschrund on the left; but that side of the couloir was so dangerously and continuously swept by falling stones, that it was evident that unless some more sheltered way could be found the expedition must be then and there abandoned. A passage was at last found on the further side of the couloir, between the ice and the rock, giving all the protection of a covered way, and by its means a higher and less exposed part of the gully was reached. The climbing from this point became increasingly difficult; the rocks were glazed with ice, and the angle of the mountain grew continuously steeper. The head of the gully was, however, reached, and the cliffs into which it melted carefully examined. Though probably feasible by such methods as those by which Dr. Grohmann conquered the Lang Kofel, these were found to offer too little handhold to be climbed in the ordinary fashion. To the right and left they were smooth, solid and unbroken, without a crack

* Any person desirous of making an attempt on the Palle by the route described in the text may reach this glacier from San Martino without ascending the plateau, by skirting the base of the Cima di Rosetta and climbing a somewhat steep wall beyond. Time would probably be gained by adopting that course.

or buttress to lend support to the climber. Under these circumstances, there was no alternative but to abandon the attempt. The return was rendered more arduous by a snowstorm which overtook the party, filling the footsteps and obliterating all traces of the ascent. The point where the ridge of the Palle joins the plateau was reached at 4.30, and San Martino a little before 7.

NOTE.—An anticipation is here expressed that the ascent of the Palle di San Martino from the N. will prove impracticable by ordinary mountaineering methods. From the route adopted in the attempt above described, to the SW. angle of the mountain, the climber is met by a sheer face of cliff between 2,000 or 3,000 ft. in height, and any attempt on this side must be hopeless. At its SW. angle the Palle is scored here and there by slight cracks and ledges, along which progress for a time might be made. They seem, however, to be cut off from below, from each other and from the upper part of the mountain by smooth faces of cliff apparently too high and steep to be successfully scaled. On the S. and SE. the rocks at the base of the Palle appear from below feasible, and even easy; but from any high point it is at once seen that the precipice that generally guards the upper part of the mountain rears itself here also to a vast height above the lower rocks, and a closer inspection shows that these are in fact cut off from the main mass by a chasm probably not less than 700 or 800 ft. in depth. On the E. side the reconnaissance has been less complete, and as this is the side on which Mr. Whitwell succeeded in gaining a considerable height, and expressed the opinion that 'by some such route as that last tried' by him the summit might be gained, and as Mr. Tuckett, who has examined the peak from the opposite Fradusta, declines to pronounce success in this direction out of the question, it is possible that here the cliffs may still prove practicable. The route to the top, if one exists on this side, will undoubtedly be a narrow and a difficult one. If the climber bears too much to the N. he will merely gain the ridge uniting the Palle with the plateau, and find himself cut off from the main mass by the clefts which have hitherto defeated all attempts in that direction. If too much to the S. he will probably find himself to have climbed the deceptive rocks which mask the S. and SE. faces of the peak and will still find himself outside the fosse and rampart which defend the real citadel.

September 4.—THE SASS MAOR (9,500 feet by a single aneroid observation). The same party made the first ascent of this peak. Starting from San Martino at 5 A.M. they skirted the base of the Cima di Rosetta to a chalet where a path was found crossing at right angles the deep valley which carries off the water descending from the back of the Palle di San Martino and the Passo di Ball. On the further side of this valley or gorge the forest is thick, and it is difficult even in daylight to hit the most direct track while in the dark the task would be hopeless. The edge of the forest was reached at a charcoal-burner's shelter, when the nature of the work became abundantly clear. A wide but not very lofty range of cliffs lay directly in front, stretching from a point considerably to the right of the Sass Maor to the base of the Cima di Ball on the left. Above this wall the main mass of the Sass

Maor rose with a very much diminished front, breaking near the top into the two strange horns or gigantic fingers which make this peak so familiar to every one who has visited the Primiero valley. Leading upwards to the saddle between these two peaks, a wide, but shallow trough or depression was observable, seamed in two places by dark vertical chimneys or gullies indicating a possible route to the higher part of the mountain. The foot, however, of this depression would have been difficult to reach. The range of cliffs immediately below seemed impracticable, while to gain it from the right or left long and smooth faces of steep rock would have to be traversed. On the whole it appeared the most feasible plan to mount the lower range of cliffs at its N. end (close to the Cima di Ball), and leaving the depression between the two peaks of the Sass Maor well to the right to seek a way up the face of the left hand (which is also the higher) summit. A somewhat steep climb, the only difficulty of which arose from the cliffs being attacked too much to the right, placed the party on a shelf of mountain immediately below the ridge connecting the Sass Maor with the Cima di Ball. The movements of four chamois who fled to the summit of this ridge, but could apparently go no further, seemed to indicate that on that side the cliffs broke down sheer into Val Pravitale, and a reconnaissance in this direction showed this to be the case. The arête of the Sass Maor on this side was evidently hopeless. A narrow crevice leading straight up the face of the mountain was next tried, but it proved difficult, and as it threatened soon to melt into a smooth face of rock it was abandoned before much valuable time had been expended upon it. Further search to the right was repaid by the discovery of a cleft through which a small stream of water found its way down the face of the peak. It was conjectured that this water must result from the melting of some patches of snow which had been observed on the upper part of the mountain, and it was hoped that where so considerable a stream flowed gullies would be found deep and rugged enough for the purposes of the climber. An ingenious and not too difficult scramble up the course of this streamlet brought the party to a wild and narrow gateway immediately below the N. face of the peak. Peering over the sill of this gateway the party enjoyed a grand but disheartening view of the sheer face of the Sass Maor on the side of Val Pravitale. No way was left but to strike up a chimney which here furrowed the peak on the right hand. The lower part of this chimney was completely blocked by boulders, but it was found possible to creep under them, a manoeuvre which was repeated several times during the day. The chimney soon becoming impracticable was quitted on its left hand side and regained with little difficulty higher up. Here the inclination of the mountain was less steep, and in a short time the party reached a notch in the ridge connecting the two highest summits.

The position was a somewhat singular one. Having started from the N. base of the mountain the party had worked completely round its NW., W., and SW. flanks, and the rest of the ascent, if practicable, would have to be made by its southern or Primiero face. Immediately to the right and some 200 ft. below, lay the saddle between the two peaks so noticeable from below, and here therefore the route hitherto followed united itself with the possible way up the mountain.

by the depression or trough which had at first attracted attention. On the further side of the saddle rose the precipices of the lower peak of the Sass Maor, on this side perfectly smooth and sheer. In front, set as in a frame between the two peaks, was seen the Cima Cimedò, crowned by a flagstaff, the glen running up between that summit and the mass of the Sass Maor, and, beyond, the valley of Primiero bounded by a portion of the Vette di Feltre. Immediately to the left rose the steep face of the highest peak of the Sass Maor, to the consideration of which the party at once addressed themselves. Little more than 400 ft. remained to be done, but the accomplishment of this trivial height proved the hardest part of the day's work. It was a smooth face of rock of the same character as that which had proved fatal to the success of the party on the Palle. It was, however, not quite so precipitous, and there was occasional though minute handhold. At the most critical part a small fissure, the beginning of a rent, which will some day cleave once again the summit of the Sass Maor, lent a timely aid; and at 1 o'clock the actual highest point was attained. The moderate elevation of the peak was testified by the number of small plants found growing in the crevices of the rock; but if some disappointment was felt at the discovery that a peak which had cost eight hours' hard work did not turn 10,000 feet, an ample compensation was found in the noble view which its summit afforded. Placed at the S. apex of the great triangle of Primiero peaks, and sufficiently lofty to command every other neighbouring range (with the doubtful exception of Il Piz), the Sass Maor naturally commands a wide and splendid prospect. It is, however, the sense of utter and hopeless removal from the world below, resulting from the tower-like form of the peak, the sheerness of its sides, and its disconnection from any visible support, which renders the summit of the Sass Maor so tremendous and yet so fascinating a pedestal. The short September day admitted of but a brief sojourn, and half-an-hour saw the party working their way down the series of rock-faces and gullies, the discovery of which had cost so much trouble on the ascent. The base of the actual peak was reached before 5 o'clock. At the charcoal-burner's hut the shades of night were already closing in. It would have been folly to make a trial of the intricate forest paths which had been deciphered with such difficulty even in the morning light, and it was decided to descend at once to the main valley, and ascend to San Martino by the line of the old road. This, when reached, was found to be partly broken up, and was rendered still less delectable by trunks of trees laid across it gridiron-wise, a kind of corduroy especially undesirable after nightfall. San Martino was reached a little before 8. Of the 15 hours during which the party had been out, about $13\frac{1}{2}$ hours represented actual walking, halts accounting for the remaining $1\frac{1}{2}$ hour. It may be added that the second peak of the Sass Maor (about 200 ft. lower than the one ascended) seemed, on every side of which any view was obtained, to be quite impracticable.

PASSO DI BALL.—September 6.—The same party without Della Santa, started from San Martino to complete this pass, the gap between the Palle di San Martino and Cima di Ball. Mr. L. Stephen, it may be recollected, had accomplished its eastern half on the occasion of his

ascent of the Cima di Ball. But instead of descending directly from the pass, he turned up to the peak, and finally found a way back to Primiero, by its southern face ('Alpine Journal,' vol. iv., p. 391). Skirting the base of the Cima di Rosetta to a cow-chalet, the party climbed a steep face of rock, interspersed here and there with creeping pine. By this means a shelf of mountain was gained, from which it was obviously possible to reach either the plateau at the back of the Cima di Rosetta or the little glacier lying in the recess between that peak and the Palle di San Martino. At this point, too, the pass which it was proposed to cross, hitherto hidden, came into view between the Palle and the Cima di Ball. Two routes suggested themselves. It was easy to follow the base of the Palle until the slopes of débris near the summit of the pass were reached, but such a course seemed both circuitous and fatiguing, and it was decided instead to descend into a deep cleft, or watercourse, to the right, which though apparently more difficult, led straight upwards in the direction of the pass. The only obstacles met with in carrying out this plan were two enormous boulders which had completely blocked the cleft, one near its foot the other half way up. The first occasioned real trouble, the second, apparently more formidable, caused only a few minutes' delay. Easy slopes succeeded, and the summit of the pass (8,300 ft. by a single aneroid observation) was reached in little more than $3\frac{1}{2}$ hours from San Martino. Bearing to the right, the party found no difficulty in descending the couloir described by Mr. Stephen, to Val Pravitale, whence two hours' walk brought them to Primiero.

On the whole, this is the finest pass for a traveller going from San Martino to Primiero, although perhaps the Passo di Pravitale is to be preferred when the start is made from the latter place. The Dolomite scenery throughout is of the highest order, and its wild charm is enhanced by the magnificent echoes which haunt every recess of these strange mountains. Above all others in beauty is one gained from the actual summit of the pass, in which the voice, long after the nearer echoes have died, returns from the distant cliffs of the Cima di Canale.

THE APENNINES.

THE GRAN SASSO D' ITALIA (9,577 ft.).—Mr. Douglas Freshfield ascended, in May last, this peak, the highest of the Apennines. The neighbouring districts of the Abruzzi were explored, and the mountain sketched by Mr. E. Lear many years ago, but it is believed no Englishman had made the ascent before this year.

ICELAND.

THE VATNA JÖKULL.—Mr. W. L. Watts, whose account of an attempt to cross the Vatna Jökull in 1874 has already appeared in the Journal, was more successful this summer. In July last he accomplished this feat for the first time, crossing the hitherto unexplored jökull from S. to N., and examining the volcanoes to the N. of it.