

ALPINE NOTES.

ALPINE INNS AND HUTS.—A new inn (*Hôtel du Dôme*) is to be opened at Fee (Saasthal) early next July. It is a substantially built house, containing sixty bedrooms. The site is close to the village church, three-quarters of an hour above Saas, and the cost is to be borne by the Commune. An Alpine inn in the neighbourhood of such magnificent scenery has long been required, and will be very useful to all visitors of the district. The landlord of the inn at Ried (*Lötschthal*) is building a hut in a depression on the left bank of the Nest glacier, about 3 hrs. above Ried. It will greatly shorten the time required for the ascent of the Bietschhorn.

F. T. WETHERED.

Saas.—As the inn here at one time did not enjoy a good reputation, and is liable to further disparagement by comparison with the new *hôtel* at Fee, it is due to its present most deserving and obliging owners to record its improvement in their hands. It is now, for one of the smaller mountain inns, both cheap and comfortable, the pension rate being only six francs. The landlord is a good and experienced guide.

Visp.—The *Hôtel des Alpes* by the railway station is a clean and cheap little inn, which, by its airy situation, removes the unpleasantness of sleeping at Visp.

Vals.—*Valsertal*.—A deserving little inn, 'Piz Aul,' cheap and clean, and with a particularly obliging landlord. Excellent trout was to be had (1879). This pretty and little known valley deserves a visit. I found a very interesting walk from Hinterrhein to Disentis by the Vals, Vrin, and Somvix valleys. By the Fanella Pass, a variation of the Valsberg recommended by Mr. Ball, with a good view from point 2,839 mètres; west of it, about 5 hrs. to Vals. To Vrin (a very poor village inn), by Furth, about 6 hrs. From Vrin over Piz Cavel (9,659 feet) to Tenniger Bad (6 hrs.?). The path leaves that of the Dicarut Pass at Buzatsch, keeping low down by the stream to the Ramosa Alp. From the top is an interesting panorama. The descent is down a snow slope to the Fuorcla de Cavel (which may be also easily reached by the same route without ascending the peak, or by Val Cavel). At the quaint and primitive baths is homely accommodation (about 2½ hrs. from Disentis).

Al Ponte, Val Devera.—There is now at this pretty Alp a little inn where night quarters may be had.

A. CUST.

The *Stabilimento* at Ceresole (Val Locana) has been enlarged by the addition of a capacious *salle à manger*, and the landlady of the *Hôtel de la Grivola* at Cogne proposes to build a large dining-room in the garden on the sunny side of the house, commanding fine views up the Valnoutey.

G. YELD.

Travellers in the Cottians may be glad to know that very fair accommodation may be had at the Croce Bianca at Césanne and at the Refuge Isoard on the col of the same name. Pilatone's *Albergo del Gallo* at Crissolo (the starting point for Monte Viso) can be recommended, and is already largely frequented by Italians seeking to escape from the heat of the plain. The *Albergo Alpino* on the Piano

del Re (five minutes from the sources of the Po) is admirably situated, and offers fair sleeping accommodation and food; the landlords—the brothers Genre—are very obliging, and the prices moderate, especially when it is remembered that the inn is at a height of 6,696 feet above the sea. The Sacripante hut of the Turin Section of the Italian Club was opened last summer. It is about 5 hrs. from Crissolo or Castel Delfino, and not far from the Fontana di Sacripante. It is built on a shelf of rock and can only be reached conveniently at present by a détour, though a few steps cut in a rock wall would make it much more accessible. It is furnished in the usual way, and is quite water- and wind-tight. From it the top of the Viso may be easily reached in 3½ hrs.

In Dauphiné, I found that the alterations of the Hôtel Juge at La Grave had been completed, there being now a large new dining-room and a small terrace. The Hôtel de l'Ours at Briançon has changed hands, and is not improved by the change. The Restaurant de la Gare at Clelles (starting point for the Mont Aiguille), and the Hôtel Jouglard at Orcières, are tolerable country inns; while the Hôtel de la Poste at Corps aspire, not without some degree of success, to be more. The Hôtel des Alpes (Chez Bonnafoux) at Mens, a great Protestant centre in bygone days, offers fair accommodation. The auberge Chez Arlaud at St. Jean d'Arves and the chalet of the Société des Touristes du Dauphiné (close to which the Society has just erected a second building with four rooms) on the plateau of the Sept Laux offer sufficient if somewhat rough accommodation, but in the case of the latter the prices are decidedly too high, even when we take into account its distance from a village (6 hours) and great elevation (7,159 feet).

The new *Refuge de la Pilatte* (also called Refuge du Carrelet) was opened last summer. It lies on the right bank of the torrent coming down from the Glacier du Vallon, close to the point where it issues into the valley. When I slept there in the middle of July, the roof was wanting, but was to be constructed in a few days. The hut is a fair-sized one, and is very substantially built. It is well placed as a starting point for the Ecrins by the new route, and for the various passes into the Vallouise and the Val Godemar.

Fair quarters may be obtained at Favre's Hôtel de la Vanoise at Pralognan, the Alpine centre of the Tarentaise: the proprietor has recently constructed a large building containing a dining-room and several other rooms exclusively reserved for travellers. W. A. B. C.

The Italian Club some years ago constructed a refuge an hour from the summit of the Marmolata, but being hewn out of the rock it is inconvenient and small. Herr Finazzer of Livinalongo has now built a little inn or hut near the Fedaja huts. It contains six beds and twenty mattresses, and the proprietor intends to station there during the summer season two persons to supply provisions and shelter at a moderate rate. It was visited by about 200 tourists last summer. It is proposed to construct next summer a new hut on the Italian side of the Matterhorn at the foot of the 'Great Tower;' but it is feared that the funds in hand may not suffice to defray the expenses of transport, &c., the timber being already prepared.

The Turin Section of the same Club has also opened the Rifugio

del Crot del Ciausiné, at the head of the Val d'Ala (Valli di Lanzo), which will probably help to make this district better known to climbers.

The Società degli Alpinisti Tridentini has built a hut (their first) on the Molveno side of the Bocca di Brenta (20 minutes east of the pass), intended to facilitate the ascent of the Cima Tosa. There is no charge for using this hut. The same Society hope to open next August huts at the head of the Val del Laris and of the Val della Mare, to facilitate more especially ascents of the Caré Alto and Monte Cevedale.

To the 'Alpenclub Oesterreich' we owe the 'Wienerhütte,' opened last August. It is situated at the head of the Pitscherthal (Zillertal district) It is meant especially to shorten the ascent of the Hochfeiler, the monarch of the district. Twenty persons can find shelter in it, and it is said to be very well fitted up. In the same district the Prague Section of the German Club has built the Olperer hut above Breitlahner (cf. vol. x. 102).

The Swiss Club have built a hut near the Corbassière glacier.

In Dauphiné the Isère Section of the French Alpine Club has at last succeeded in purchasing a hut in the Combe de la Lavey, which is fitted up in the usual way and was opened at the end of August. The Refuges Lombard (for the S. Aig. d'Arves), Joinville (near Lac de l'Eychauda), and Chancel (near Monétier) have been completely finished by the Briançon Section, and were used by several parties last summer.

This does not pretend to be a complete list of all the new huts opened or in progress during the past year; but the details given above will serve to show the great and increasing activity of the foreign clubs.

THE ROUTES UP THE ROSSBODENHORN.—The published accounts of ascents of the Rossbodenhorn are so short—sometimes conflicting, sometimes merely unintelligible—that in the 'Zermatt Pocket Book' I was only able to pay the mountain the beggarly compliment of a few lines. Good fortune and research of the conversational kind have brought various facts to light which perhaps, if printed together, may not be altogether without interest. I am unable to get any rational account of the route by the S.W. arête—that ordinarily followed—though one would have thought that amongst the numerous climbers who have passed that way there must have been one provided with a watch and a pencil.

Rossbodenhorn, 13,085 ft.—3,988 mètres.

1. By the N.W. arête—

a. From the Rossboden Pass (Dr. Burckhardt, July 26, 1880—private information). Follow the ridge all the way, going over the peak 3,537 mètres, and reaching the summit in about 3 hrs.

b. From the Fletschhorn glacier. (Information received from Mr. Cust.)

Ascend from Saas to the Trift Alp, cross the bridge over the Trift Bach, and mount tree-covered slopes to the upper level, where a second bridge must be crossed. Reach the moraines at the lower foot of the glacier S.W. of the Rossbodenhorn and, crossing the stream, gain the ice as soon as possible, in 2 hrs. from Saas. The glacier rounds over to a level plateau stretching to the ice-falls of its two branches, which are divided from each other by the rocks at the foot of the S.W. arête of the mountain. Bear to the left towards the rocks forming the right

bank of the north ice-fall. There is a stony gully in these rather to your left as you stand looking at the ice-fall. The foot of the gully will be reached in 1 hr. from the foot of the ice, and it may be ascended in $\frac{3}{4}$ hr. more. If the snow on the N.W. face of the peak is in good condition, it appears to be well to take to it at once on reaching the top of the gully; if it is not, leave the gully about three-quarters of the way up and bear to your right, mounting by a sort of rib of easy rocks and thus reaching the N.W. snow-face higher up. Once on the face, which is much crevassed and abounds in steep slopes, go across it, mounting all the time till you get on to the N.W. arête, and by it reach the summit in $1\frac{1}{4}$ hr. from the top of the stone gully. Total ascent—5 hrs.

In the descent it is not easy to hit the top of the rock rib or stone gully, though it is impossible to go far wrong. The former may be seen from the slopes of the N.W. face, but it scarcely projects above the snow. Descent to Saas by this route, $3\frac{1}{2}$ hrs.

2. By the E. arête. This arête is a short snow ridge, connecting the summit with the point 3,850 m.; it is from the latter that the N.E., E., S.E., and S.W. arêtes radiate.

a. Reached from Simplen by the S.E. arête.*

Reach the foot of the Laquin glacier by the Fletschjoch route. Ascend by the hard and often loose rocks of the S.E. arête to the point 3,850 m., and then pass along the easy snow ridge in 20 m. to the highest point. Total time from Simplen, 9 hrs.

b. From Saas.

Follow route 1 b to the glacier, and mount it towards the ice-fall of the N. branch. Get off the ice on to the rocks on the l. bank of the ice-fall by a difficult scramble and ascend them, bearing to the r., so as to be ready to exchange them for the level plateau of snow above the ice-fall of the S. branch as soon as that is surmounted. The ascent of the rocks will take 1 h. Now go due E. over level snow towards the Fletschjoch, which will be gained in 1 h. Thence turn north up easy slopes to the short E. arête, which should be struck about 5 m. below the highest point, and an easy hour from the col.

c. From Simplen by the N.E. arête.†

Starting from Rossboden châteaux, keep along the left side of the Rossboden glacier for three-quarters of an hour, and then cross it to the base of a spur falling northwards from the N.E. ridge of the mountain. Ascend along the left side of this spur for $1\frac{1}{2}$ hour, then along its crest, or to the right of it, for $1\frac{1}{2}$ hour more till the N.E. arête is reached. Following this for about 1 hr. and ascending a short steep snow-slope, the point 3,850 will be attained, and from it the summit will be won in about 20 minutes more. 'The whole route is delightfully simple and easy.' It is possible that some such route as this was followed by Herr Amherdt (August 28, 1854; 'S. A. C. Jahrb.' vi. 512), of whose expedition no details have been recorded.

3. By the S.W. arête.

* Messrs. Cox & Gardiner, July 5, 1876; *Alpine Journal*, viii. 106, 150.

† Mr. J. Eccles, August 12, 1881; *ibid.* x. 405.

Get on to the rocks at the foot of the S.W. arête, as in Route 2 b, and follow them all the way to the summit. W. M. CONWAY.

TÊTE DU SALUDE.—It will be recollected that in 1879 and 1880 two parties claimed to have reached a point which they called by this name ('A. J.' x. 94-5). Their accounts could only be reconciled by supposing that they referred to different summits, and my experience last summer enables me to confirm this conjecture. On July 8, having ascended direct from the 'great chasm' to the S. mentioned by Mr. Cust, I found that gentleman's card on the peak he had climbed. This point is really the lowest of the three pinnacles of the Loranoure. According to the guide Gaspard, it is this summit which, properly speaking, is the Tête du Salude, a name which has been wrongly transferred by the makers of the French map to a point (that ascended by M. Vincent) much farther N. and very much lower. The three peaks of the Loranoure, when seen from different directions, are almost as confusing as the three summits of the Pic d'Olan were to the early explorers of Dauphiné. W. A. B. COOLIDGE.

ROCHER DE PLASSAS (9,400 ft.).—Pralognan has already found its Gornegrat in the local Mont Blanc. The Rocher de Plassas may, I think, claim to be its Mettelhorn. If we may believe my immediate predecessors—a French party—it had never been climbed till 1881, and it is certain that the French engineers chose the lower and much less eligible Dent Portetta for their signal, which looks as if they had thought the higher point inaccessible. Its bold crags are in fine weather the most conspicuous near object in the view from Pralognan, rising immediately opposite the village.

To us, however, they were not conspicuous. When (about 9 A.M., September 9 last) François Devouassoud and I left the inn, clouds hung low on all the aloses, and so unpromising was the weather that François declined to take any provisions or his axe, and insisted on borrowing two umbrellas, marching all day with one under each arm.

We soon turned up the steep zigzags which lead to the haybarns of Les Saulces, where peasants were engaged in the incongruous task of cutting grass, off which the snow had first to be shaken. The mists had now lifted sufficiently to encourage us to go on to the col lying N. of Mont Blanc de Pralognan.

Between the huts and the ridge we remarked a profusion of *Edelweiss*, which I have hardly seen equalled unless on the Sea Bianca near Crissolo, and the extraordinary number and depth of the conical cavities formed in the limestone rock, which here take the place of the parallel fissures of the Sixt limestone. The adjacent peaks were now clear. The local Mont Blanc, however, did not tempt me in comparison to the higher and bolder crag on our right, which we now saw for the first time. Half an hour's walk among fresh snow and rocks brought us to the point visible from below, which proved to be the S. and lower end of a long and sharp crest, at the farther end of which a stoneman indicated the summit. The ridge is easy where practicable, but in two places it is broken by gaps, to turn which it is necessary to descend on to the Pralognan face. The view from the top embraces all the neighbouring peaks, and the broad green alps and warm-coloured

hills seen above and beyond Brides add by contrast to the savage grandeur of the rocks and glaciers of the Vanoise and Grande Casse. Mists deprived us of any panorama, but the map sufficiently proclaims the isolation, and therefore the advantages of the Rocher de Plassas.

In returning we entirely avoided the ridge by descending directly from the summit a very steep grass slope, until it was easy to traverse at a level above the precipices on the Pralognan side to the southern end of the crest. Here we crossed the ridge of the mountain, and keeping under the western cliffs of the Rocher de Plassas, and above the Petite Val, traversed rich pasturages to the northern base of the Dent Portetta, where we recrossed the chain, finding an easy and pleasant descent to the road 20 minutes below Pralognan.

The excursion occupied in all some seven hours' walking. It has no difficulty for steady climbers, but is not to be recommended to persons unused to mountains or subject to giddiness. D. W. FRESHFIELD.

COL D'OTEMMA.—Mr. J. B. Parish and I, with Jean Maître as guide, crossed, on August 25 last, a pass which is apparently to be identified with the Col d'Otemma marked on the Federal map (original survey), though in position different, being a gap E. instead of W. of the rocky point shown on the map in the centre of the snowy ridge between the Bec de Blancien and La Sciasso. The descent on the south was by an easy snow gully, whereas that from the spot indicated on the map looked comparatively difficult.

We ascended the eminence W. of the col under the impression that it was the highest summit of the Sciasso, but an adjoining eminence further W., though lower, appears to be that so called.

After the descent of the considerable moraines of the Gl. de la Sciasso, a path was found on the right bank of the stream leading to the châteaux of Les Boetta in about 2¼ hrs. from the col. From a bridge below these we found an upper path round the hill-side and across a brow towards Prarayen. The pass forms a fine and easy route from Arolla to Bionaz, requiring, with snow in good condition, say 6¼ hrs. up, 3½ down. The view is interesting. A. CURT.

PHENOMENON ON THE AROLLA GLACIER.—On the Arolla glacier, a few hundred yards from its foot, and nearly midway between the two banks, is a large ice-cone covered with stones. Every stone in the heap is water-worn; many of them fully deserve the name of pebbles. And yet the stones of the moraines near at hand, like those of most moraines, are angular; it is the exception to find any which have their corners rounded off. By what process came that one little heap of stones to be smoothed and rounded, when the other stones on the same glacier, fallen from the same rocks, have escaped? One naturally thinks of a *moulin*; but there are no surface streams for a long distance up the glacier, in the line in which these stones must have descended. They must, I think, from their position, have fallen originally above the slight ice-fall due north of Mont Collon. But if they had been ground in a *moulin* on the higher level of the glacier, one would think they must have been dispersed in descending even a slight fall.

H. B. GEORGE.

DEATH OF MONSIEUR DESOR.—We regret to announce the death on

February 22 last of Mons. Edouard Desor, whose name is so well known in connection with early Alpine history. Born in 1811 of a refugee Huguenot family which had settled in Hessen-Homburg, he originally devoted himself to the profession of the law, but at the instance of Elie de Beaumont abandoned it for the study of geology, and executed a French translation of Ritter's 'Erdkunde.' Having been introduced to Agassiz of Neuchâtel by Prof. Vogt of Bern, he became a Neuchâtelois by adoption, and took an active part in the remarkable observations on glacial phenomena conducted by Agassiz, Duchaillier, and other scientific men, on the Unteraar Glacier, 1841-4, with which are associated the construction of the Hôtel des Neuchâtelois under a block of the moraine, and the Pavillon Dollfus Ausset (1845). On August 28, 1841, with his two friends and the late Principal Forbes, he made the fourth successful ascent of the Jungfrau. On August 8, 1842, with Escher von der Linth and Gérard he made the first ascent of the Lauteraarhorn, the lower end of the Schreckhorn ridge; and on August 27, 1844, with Dollfus and others, the first ascent of the Rosenhorn (one of the Wetterhörner), ascending by way of the Gauli Glacier, and descending by the way of the Weitsattel and Renfen Glacier to the Urbachthal. Full accounts of his Alpine explorations and observations appeared in his 'Excursions et Séjours dans les Glaciers' (1844) and 'Nouvelles Excursions et Séjours dans les Glaciers' (1845). He went to America in 1847 with Agassiz, but when the latter refused to admit his claim as an independent researcher, regarding him still as a pupil, he separated from him, and after holding several geological posts in Pennsylvania, returned in 1852, on the death of his brother, who left him a considerable fortune, to settle down at Neuchâtel, and devoted himself to Swiss politics, in which he played a great part. This interfered with his scientific labours, though he explored the Sahara with Escher von der Linth. As a geologist he attained a high rank by his contributions to various questions of physical geology, stratigraphy, and palæontology, devoting himself in the latter department to the study of the Echinoidea. Among his other works we may mention 'Système glaciaire, ou Nouvelles Etudes et Expériences sur les Glaciers actuels' (in conjunction with Agassiz and Guizot in 1847), 'Der Gebirgsbau der Alpen' (1865), 'Echinologie Suisse' (1869-71), and 'Le Paysage Morainique' (1875).

WINTER EXPEDITIONS IN THE ALPS.—Since the publication of our last number, many remarkable winter expeditions have been reported. First in date among these comes the splendid series of 'courses' made by Mr. C. D. Cunningham, the following details as to which are chiefly taken from an article by that gentleman in the pages of a contemporary. He went up to the Grands Mulets on January 20 with the intention of attempting Mont Blanc, the ascent of which in winter has hitherto been accomplished but once—by Miss Straton on January 31, 1876; but the snow was so very heavy that it was resolved to defer the attempt, and the party spent the next week in making the 'tour du Mont Blanc' by the Bonhomme, Little S. Bernard, and Col du Géant, the weather being very fine and the difficulties encountered apparently insignificant. On January 29 Mr. Cunningham once more slept at the

Grands Mulets, finding the snow hard and firm. On the 30th his party, consisting of himself with Léon Simond, Edouard Cupelin, and An. Boesonney, started at 4 A.M., reached the 'Corridor' about noon, and the summit of Mont Blanc at 2.30 P.M. Severe cold was experienced in the 'Corridor,' but the temperature on top is described as being that of a greenhouse on a winter's day. The view was very grand and extremely clear, except in the direction of Geneva. Starting again at 3 P.M., the Grands Mulets was regained about 7 P.M., the descent to Chamonix being effected the next morning. Mr. Cunningham, on February 1, made the ascent of the Buet, in company with a number of members of the Mont Blanc section of the French A. C. Leaving Chamonix at 2 A.M., the Pierre à Bérard was reached at 9.30, but, owing to the very soft state of the snow, the summit was not reached till 3.35 (thermometer -4° centigrade). The view again was unclouded and of great magnificence. Chamonix was re-entered at 11.20 the same evening. Mr. Cunningham then paid a visit to Zermatt (crossing the Théodule), and, returning to Chamonix, on February 15 made the ascent of the Aiguille du Moine.

A most daring expedition is the crossing of the Matterhorn by Signor Vittorio Sella on March 17-8 last. Signor Sella had already made two attempts in February (on one of which the Italian hut was attained). Accompanied by J. A. and Louis Carrel he left the Broil inn at 11 P.M. on March 16, the night being very fine. The Glacier du Lion was gained just before 3 A.M., the snow near it being in a very powdery condition, and the Col du Lion reached at 6 A.M., the party up to this point having walked by lantern-light. The rocks were then attacked, and, says Signor Sella, 'no extraordinary difficulty' was encountered, so that at 10 A.M. the party reached the Pic Tyndall and halted for breakfast. The passage of the ridge was somewhat awkward, but the rocks of the final peak were free from snow, and the summit was gained at 2 P.M. The air was perfectly still and the view cloudless. A flag was hoisted, which was seen from Zermatt. After a short halt the descent of the Zermatt face was commenced, hardly any snow being found on the arête. This side of the mountain was already in the shade, but the way was fairly easy until after the 'shoulder' was passed. From that point numerous serious difficulties had to be overcome, the frozen-in stones giving great trouble. The Swiss hut was reached at 7.30 P.M., and after a very uncomfortable night Zermatt gained the next day. On March 19 the party recrossed into Italy by the Théodule. Signor Sella states that he suffered scarcely at all from the cold, save near the Glacier du Lion. This expedition is beyond a doubt the most remarkable that has ever been made during the winter season, and on behalf of the Alpine Club we most warmly congratulate Signor Sella on his magnificent feat.

On April 8 Prof. Wach of Leipsic with Christian Almer ascended the Wetterhorn in 4 hours from the hut. Snow in excellent condition. On February 8 an Italian party ascended the Ciarnarella (3,698 mètres), one of the chief summits of the Levanna group.

Early in February Herr Brun climbed the Vorab (3,025 mètres) from Flims, and on February 3 Herr A. Rzewuski and Pfarrer Gregori, of

Bergün, ascended Piz Albula (Piz Uertsch 3,272 mètres), the temperature on top being -10° centigrade; on February 13 two tourists from S. Gallen ascended the Tödi, and descended by the Porta da Spescha to Disentis; and on February 15 Herr Rzewuski ascended the Tinzenhorn (3,132 mètres) from Filisur, the snow being very soft.

In the Eastern Alps, the Gross Glockner was ascended on February 6, by six Heligenblut men, and the Hochfeiler on March 8, by Herr Julius Meurer and two friends. Even the great Dolomite peaks have not succeeded in repelling the winter invader. Lieut. Paoletti, with San Vito guides, climbed on November 26 the Croda Marcora, or Sorapis (3,291 mètres), and on January 15 the Antelao (3,320 mètres 15 hours up). On February 5 Herr R. Isaler alone with A. Lacedelli of Cortina repeated the ascent of the Antelao, taking 14 hours from Cortina (temperature on top -2° centigrade). Lieut. Paoletti, nothing daunted, made a successful attack on the fine peak of the Pelmo; and on February 21 Signor Alvera, with P. Dimai, gained the highest peak of the Monte Cristallo in $8\frac{1}{2}$ hours from Cortina.

Of another expedition Mr. E. T. Compton sends the following account:—‘The ascent of the Zugspitze (3,116 mètres = 10,224 ft.), the highest summit of the Wetterstein group, and above Partenkirchen in S. Bavaria from the north side, which was first made (direct) by the writer in 1878, was undertaken by him with Johann Ostler, *vulgo* Koser, on January 28 this year.

‘Leaving the inn at the Eibsee at 5 A.M., and traversing the Zugwald in utter darkness, we emerged before daybreak on the more open Thörl track, where the snow began to be deep and “salzig,” and reached the rocks under the Ehrwalder Köpfe, after some heavy wading, at 8.15. Here the crampons were buckled on, as the exposed rocks were here and there glazed, and one or two of the ledges which are perfectly simple in summer demanded care when covered with a sloping drift of still loose snow. After entering the Schneekahr the snow was in better condition, covering most of the entirely superfluous wire rope and ladder. Higher up, however, we had to resort to cutting steps, and did not reach the summit till 2.40 P.M.; the ascent occupying very nearly twice the time taken on the former occasion. The temperature at the top was -2° Réaun. in the shade, but warm sunshine and almost complete calm made it far more enjoyable than is usually the case in summer. The view at the same time, except over the plain, which was enveloped in low blue mist, was perfectly clear and most picturesque under the low sun. The snow being intolerably soft on the south side, we were forced to cut our way down rather to the westward of the usual route in the shade of a projecting buttress, passing the spot where Koser’s brother lost his life three years ago. This had the additional disadvantage of involving two hours’ laborious tramp across the Schneeferner ere we reached the Knorrhütte. In the hope of finding water we forced our way on by moonlight as far as the new hut on the Unteranger; but the Partnach was frozen and snowed up, so we made the excellent stove do double duty in providing snow water for culinary and ablutionary purposes.’

No winter has probably ever been signalized by so great a number

of Alpine ascents, a fact due partly to the mildness of the weather, and partly (we would fain hope) to an increasing appreciation of the Alps in their winter dress.

ALPINE ART.—Probably most lovers of the Alps have already admired Baroness Helga von Cramm's renderings of Alpine flowers, whether on Christmas cards or at the Art exhibition of the Alpine Club. This accomplished lady has lately published by subscription (apply to Mr. Samuel Jennings, 16 Duke Street, Manchester Square, W., price 1*l.* 1*s.*) a volume entitled 'Sunbeams from the Alpine Heights.' It is made up of twelve plates, on which are figured in colours after original sketches thirty-one of the most striking and best-known Alpine flowers. The brilliant hues of our old friends seem a little startling in this foggy climate of ours, but the sight of them recalls many pleasant days spent among the mountains, and increases our desire to revisit old haunts or explore new ones. By this publication Baroness von Cramm has conferred a great obligation on those who have once seen the glorious blossoms, all the wonders of which it is impossible to reproduce by artificial means, and she will open up a new world to those who have not yet had the good fortune to visit the mountains in early summer, when the Alpine meadows are carpeted with a many-hued assemblage of flowers.

Mr. W. F. Donkin's remarkable Alpine photographs are by this time so well known that it may seem almost impertinent to allude to them. But for the benefit of those members of the Club and foreign climbers who have not had the good luck to see the originals at one of the Club meetings, it may be useful to point out the most remarkable in the collection of the reduced size, a catalogue of which appeared in our November number. As curiosities and as in themselves very striking, those taken from the summits of the dome (Nos. 20 *a b*, 21 *a b*) and of the Weisshorn (No. 18 *a b*) undoubtedly take the first rank. But we confess that there are others which commend themselves even more strongly to us; *e.g.* the Matterhorn (No. 4 *b*), the Bridge in the Zermatt Valley (No. 11), the Rothhorn from the snow arête (No. 17), the wonderful glacier pictures of Monte Rosa (5 *b*) and of the Gorner Glacier (16), Monte Rosa from Macugnaga rising out of the clouds (No. 24 *a*), the Gabelhorn and the Dent Blanche from the Mountet hut (35 *c d e*), the Péteret (40 *a*), and the Aiguille Verte (44). But the list must vary according to each man's individual preferences, and he will be most delighted and charmed who becomes the possessor of the whole series. Thanks to Mr. Donkin, we can live over again many stirring adventures among the high Alps, while wondering at the extreme patience and delicate skill which has enabled him to surpass all his predecessors in the line of Alpine photography, and to bring before us such 'counterfeit presentments' of our old friends. Ambitious persons may perhaps surprise Mr. Donkin's secret in the very interesting though brief description of the process he employs, which he has contributed to the 'Year Book of Photography' for 1882 (Piper and Castle, 5 Castle Street, Holborn). We hope soon to give our readers fuller information by publishing the interesting

paper on 'Alpine Photography' which he recently read before the Club.

PROFESSOR FOREL ON GLACIERS.—It is fair to Professor Forel to state that, in a subsequent number of the 'Archives,' published prior to the appearance in these pages of our notice of his article on glacier motion (p. 416), he had modified his theory in the direction suggested—that is, by making greater allowance for the effects of ablation and the increase in it which necessarily follows the descent of the glacier into warmer regions. We regret that the October number of the 'Archives,' containing Professor Forel's P.S., had not come before our reviewer when he wrote.

SWISS SKETCHES.—At the 'Graphic' Gallery, 190 Strand, there is now on view a large collection of water-colour drawings of Alpine scenery and people by Mr. W. L. Thomas. Mr. Thomas is the manager of the 'Graphic' newspaper. But visitors who go to his gallery expecting to see something in the sensational style we generally and not altogether unjustly associate with our illustrated newspapers will come away disappointed. Mr. Thomas knows Switzerland well; his exhibition is the fruit of 'ten years' holidays,' both in and out of the fashionable season; and he prefers to dwell on the native life of the country rather than on the incidents which attend the passage of the autumnal tourist. There is little in his collection to suggest the feasts and perils of the Alps, and what there is is not striking. For a runaway diligence—if runaway diligences must be drawn—we prefer Gustave Doré; and we altogether object to the attempt to enforce the sad associations of the Matterhorn by exhibiting in the foreground of a sunny sketch of the mountain the lifeless body of a young traveller. We object the more because the particular foreground on which the victim has been projected is apparently the middle portion of the Gorner Glacier! Among the more ambitious landscapes a general view of the Falls of Schaffhausen and a clever literal drawing of the Gorge of Pfeffers may be singled out for praise. Many will be attracted also by a very singular and ingenious sketch of a difficult subject—a valley at the base of a mountain seen from the summit of the latter—the vale of Goldau from the Rigi-Kulm. But it is not in his larger works or in drawing the great peaks that Mr. Thomas' strength lies. The sense of distance and atmospheric gradation is here sometimes wanting. He seems most at home and happiest in small highly finished pictures of some village or lake scene among the lower mountains. Few artists have given so much care and feeling to the bright flowers and brighter sunshine of a Swiss garden, or of the 'Lake of Geneva on a hot day' (No. 32). There are plenty of illustrations too of Swiss life, its simple pathos and homely humour—the child among the flowery groves; the priest rolling with his own hands his wheelbarrow up his garden path; its labours varying with the season—the hay harvest in June, the descent of the timber sledges when the winter has smoothed all the paths with snow. Nor does Mr. Thomas refuse his pencil to tourists of the softer sex, to whom he offers ample reparation in his flattering portraits for the outrages of Parisian caricaturists.

D. W. F.

MR. WHYMPER'S EXPLORATIONS IN THE ANDES.—In my itinerary it has not been possible to include any reference to the results obtained on the journey. Amongst the principal may be mentioned:—

1. A series of angles taken by theodolite for the positions of the great peaks.
2. A series of observations of mercurial barometer for the altitudes of 110 places, and numerous observations by aneroid for intermediate points.
3. Observations on the boiling-point of water at great elevations, in comparison with readings of the mercurial barometer.
4. Observations on blood-temperature at great elevations.
5. A series of 100 photographs, including negatives of the summits of Chimborazo and Cotopaxi.
6. Collection of rock specimens, including samples of the rocks from all the highest points attained.
7. Zoological collections, amounting to about 8,000 specimens (probably about 1,000 species), including butterflies, beetles, &c., from 16,000 feet. Locality and altitude recorded in every instance.
8. Botanical collections from the highest positions visited; localities and altitudes recorded.
9. Collections of antiquities, amounting to more than 500 specimens, principally in pottery and stone.
10. Collections to illustrate the products of the country.

E. WHYMPER.

MOUNTAINEERING WITHOUT GUIDES.—The numerous splendid ascents without guides achieved of late years by some of the more enterprising members of the Club seem to have stimulated the zeal of their foreign rivals. A proof of this is the long list of expeditions in the Eastern Alps made by the brothers Zsigmondy (alone, or occasionally with a friend, but without guides) between July 14 and September 18 last. Among the more remarkable ascents are those of the Cevedale, Königspitze, Ortler (from the Hochjoch, descent to Sulden 16 hours' walking from the Il Pastore hut in the Zebruthal), Fusstein (first ascent from Alpein), Olperer, Hochfeiler, Thurnerkamp, Rossruckspitze (first ascent from north), Dreischusterspitze, Gross Venediger, and Gross Glockner.

ACKNOWLEDGMENTS.—Mr. Craven has received for the 'Christian Inäbnit Fund' (page 366), and forwarded to Grindelwald, the sum of 88*l.* 6*s.*, contributed by members of the Club and their friends.

PROCEEDINGS OF THE ALPINE CLUB.

A General Meeting was held on January 31, 1882, Professor Bonney, F.R.S., *President*, in the chair. Messrs. Gerald Balfour, Benjamin Cotton, Walter S. Gibson, Legh S. Powell, G. Chetwynd-Stapylton, H. Chetwynd-Stapylton, A. Gurney Smith, Major J. W. A. Michell, and the Rev. F. M. Govett, were elected members of the Club.

Mr. D. FRESHFIELD, in the absence and on behalf of Mr. F. POLLOCK, *Honorary Librarian*, called attention to the extraordinary list of books