

as darkness would have overtaken him before reaching the Club hut; others are of opinion that he fell into a crevasse on the Blümlisalpfirn, below the peak. A full account of the search is given in No. 8, 1896, pp. 81-3 of the 'Alpina,' the organ of the Swiss Alpine Club. In the January number of the same paper (p. 10) it is stated that Herr Franellich had climbed Mont Blanc, the Matterhorn, &c., without guides. But that is quite a different thing from venturing to climb *alone* in the early winter, perhaps on glaciers which are not in themselves difficult, but at that season very treacherous. Solitary climbing has thus claimed yet another victim.

At the beginning of last October it was stated in the Austrian Parliament by one of the members that since 1889 there have taken place on the Raxalp no fewer than thirty-seven fatal accidents, while eleven persons were severely hurt; of this number of accidents twenty-seven and three respectively took place in 1896. The Raxalp (highest point 6,591 ft.) is a favourite resort of holiday-makers from Vienna. Bädeker describes it as a plateau (whereon are many hay huts and an inn) with steeply-sloping sides, up which tracks have been made. It would thus appear that it is not the High Alps only which are the scene of fatal accidents among the mountains, and newspaper writers would do well to bear this in mind when penning sensational articles for popular consumption.

ALPINE NOTES.

NOTES FROM COGNE.—It would seem that the Herbetet is often struck by lightning, for when I climbed this attractive peak, on July 25 this year, my guides, Albert and Benedikt Supersaxo, of Saas, who, with Mr. F. W. Oliver, made the first ascent by the S. arête on September 20, 1895, were surprised to find that nothing was left of the cairn that they had on that occasion rebuilt upon the summit.* Perhaps the disappearance of the pinnacle which played a prominent part in the first ascent of the Grivola in 1859† may be due to the same cause. I have often thought it would be interesting if a record of some prominent and familiar summit could be kept, and the changes in its shape noted from year to year. In default of a sketch or photograph a short verbal description might suffice; and I hereby make my contribution to the subject. 'On July 18, 1896, the summit of the Grivola was a delicate crest of snow, some 10 yards long, highest at the E. end, where it culminated in a fine three-sided point. This crest of snow was about 4 ft. high on the S.E. side, resting on rock.' Perhaps some one

* *Alpine Journal*, vol. xviii. p. 94.

† *P., P., G.* vol. iii. p. 336.

who visited the summit later in the season will record what he observed.

Visitors to Cogne often complain of the discomforts of the Pousset and Herbetet huts, but there is surely no need to sleep out either for the Grivola or Herbetet. Leaving Cogne at 2.15 A.M. in brilliant moonlight, and crossing the E. arête low down in passing from the Herbetet Glacier to the Dzasset Glacier, we easily reached the Col Bonney at 8.30, in 10 min. less than 6 hrs. of actual going. From Col Bonney to the summit, by the S. arête, took us just 2½ hrs., of which 15 min. were spent by the guides in pulling down the cairn they had built last year on the 'Grosser Thurm,' and rebuilding it a few feet further south, in a position where it is better seen from the summit, for it appears that the local guides and *gardes-chasse* are disinclined to believe that this arête has ever been climbed. The weather was perfect, and we basked on the summit for more than an hour, and then came down the eastern arête. (Time from the summit to Herbetet Glacier, 1 hr. 40 min.) I must confess that, with the exception of the traverse on the E. side of the 'Grosser Thurm'—along which a bouquetin or chamois had preceded us—and the short pitch near the summit, so graphically described in the paper above referred to,* I thought the S. arête distinctly easier than the eastern. The two together form a delightful expedition. (Time, excluding halts, from Cogne to the summit by Col Bonney and S. arête, 7 hrs. 50 min.; and from summit to Cogne by eastern arête, 4 hrs. 35 min.) The guides assured me that on the S. arête we followed precisely the route that they had discovered with Mr. F. W. Oliver in September 1895.

On a less perfect day we ascended Punta Lavina by the N. arête, which seems the obvious course to take from Cogne, descending by the W. face and Lavina Glacier. I counted seven species of flowering plants in bloom on the rocks just below the N. summit (10,799 ft.). A few days earlier I had noticed *Saxifraga oppositifolia* growing luxuriantly on the rocks quite half-way up the S.E. face of the Grivola, and therefore not less than 12,000 ft. above sea level. I never found it at such a height before; and a passage in Mr. Freshfield's 'Exploration of the Caucasus' † makes me think that the fact may be worth recording. There is certainly no need to sleep out for the Punta Lavina, for, though we only left Cogne at 6 A.M., being doubtful of the weather, we easily reached the S. (and highest) summit before 12.30, having spent fully an hour in halts and watching a great herd of chamois. At the King's hunting lodge in Cogne I saw five skulls of bouquetins, with skin and hair attached, that had been found this year among avalanche *débris*. The mortality from this cause must be considerable, for the Cogne valley, where these heads were found, is only a part of the district they inhabit. Nor can I understand why bouquetins should suffer more from this cause than chamois.

J. S. MASTERMAN.

* *Alpine Journal*, vol. xviii. pp. 93-4.

† *Exploration of the Caucasus*, vol. i. p. 43.

A PRÉSENT TO CHRISTIAN ALMER.—We are asked to state that it is proposed by some of his friends to make a present of a sum of money to old Christian Almer on his golden wedding. A certain sum has already been subscribed, and any further contributions will be received by the Assistant-Secretary, at the Club Rooms, and acknowledged in these columns. The list will be closed at Christmas.

LIBRARY.—The Honorary Librarian has to thank those members who have sent him for the Club set copies of the 'Journal,' in covers as issued, in response to the notice in the last number. The parts still wanting are, 21, 32, 33, 35-37, 63, 64, 67, 78, 79.

WILDSTRUBEL DISTRICT.—THE DAUBENJOCH.—This pass (about 2,900 m.) affords the most direct communication between Montana and the Gemmi. From the Hôtel du Parc, Montana, proceed N.E. through pastures and forest, and cross the Sinièse torrent at a point a little N.W. of the chalets of Plumagy, where it receives a 'bisse' (shown by a blue line on the Swiss map) which, deriving its water from the Raspille torrent near the chalets of Nousey, winds round the slopes of the Petit Mont Bonvin, just below the Plateau de Mont Tubang. Follow the course of the 'bisse' to near Nousey, where cross the Raspille by a bridge and take a herdsman's track, ascending E. to the opening of the Varneralp. Skirt this N. to where the stream issues from the Varnerkumme; follow the stream, and afterwards climb easy shale slopes to the ridge (about 2,600 m.) between the Trubelstock and Zayettazhorn. An easy descent down snow and shale slopes leads to the Trubeln, a curious circular basin well worth visiting, lying between the Zayettazhorn, Trubelstock, Schwartzhorn, Daubenhorn, and Loshörner. Ascend shale slopes N.E. to the joch (about 2,900 m.) between the Daubenhorn and the slightly higher, but unnamed, point marked 2,981 on the Swiss map. Descend N. by easy slopes of snow and shale to the Lämmernboden, whence follow the S. bank of the stream to the Gemmi (H. Wildstrubel).

Time about 8 hrs.*

THE LARSCHITRITT.—This pass (about 2,600 m.) is the most direct route between Montana and Leukerbad. From the Hôtel du Parc, Montana, proceed as in previous route to the Trubeln, whence descend S.E. by steep grass slopes, upon which in the summer months a few goats obtain a precarious subsistence. These slopes terminate in rocks of the usual Gemmi type, near the falls of a torrent which descends S.E. from the point marked 2,486 on the Swiss map. At the lowest edge of the grass slopes a rock 'traverse,' and two or three steps cut by the goatherds in the face of the rock, give access to some steep slopes and easy rocks, by

* The Daubenjoch can be conveniently taken from the Gemmi to Sierre by quitting the Montana route a little S. of Nousey, and thence following the path leading S. through Miège. Time about 7 hrs. If it is desired to reach Souste or Salgesch, the Varneralp should be traversed S.E. to the chalets of Keller, and the path thence taken to Varen, near Leuk.

means of which the apparently impracticable cliff is turned. The route then doubles N.E. under the foot of the cliff, and soon afterwards descends a second cliff by a very steep but short grass couloir, about 100 yards S. of the torrent descending from the Daubenjoch. Cross the torrent and strike herdsman's tracks leading by a series of grass terraces to Füss, and thence into the old Gemmi mule road.

Time between Montana and Leukerbad from 7 to 8 hrs.

The Larschtritt route is easier to find if taken from Leukerbad, and can be traced with the help of a field-glass from the road between Leukerbad and 'the ladders.' Taken from above, it might be difficult to strike the two points where, only, the cliffs can be descended.

The pass offers a convenient variation of the ordinary route between Leukerbad and Sierre.

On August 31, 1896, Mr. F. Corbett and Mr. W. H. C. Salmon visited the Trubeln from Montana; and on September 15, 1896, they, accompanied by A. Vocat, of Sierre, ascended the Larschtritt from Leukerbad to the Trubeln, and thence crossed the Daubenjoch to the Gemmi. Neither of the routes above described appeared to be known to the guides of Sierre or Leukerbad.

These passes, in combination with the Col des Audannes* from Montana to Zanfleuron, and the route thence by Cleuson, la Passière, and the Pas de Cheville, afford a convenient route between the Gemmi district and Bex, with good resting-places at Montana, Zanfleuron, and Gryon.

FREDERICK CORBETT.

CHANTON FUND.—We are requested to state that a fund is being collected for the guide Joseph Marie Chanton (or Schanton), of Mattsand, near St. Niklaus. Chanton was very badly hurt last winter while hauling wood from the forest. At present he can only walk slowly with a limp. He is forty years of age, and has a wife and six children dependent on him. Subscriptions (cheques and money orders to be crossed 'Messrs. Woodbridge & Co., Chanton Fund') will be gladly received and acknowledged by the Rev. Francis J. Tuck, Eton College, Windsor.

MR. FITZGERALD'S EXPEDITION TO THE CHILIAN ANDES.—We borrow the following note from the 'Geographical Journal':—'Mr. E. A. FitzGerald, who recently returned to England from his expedition in the New Zealand Alps, has started on a fresh journey, the main object of which is the ascent of Aconcagua, the highest summit of the Andes. The expedition consists of ten persons in all—Mr. Vine, geologist; Mr. de Trafford, surveyor; Mr. Philip Gosse, naturalist; and Mr. FitzGerald, with guides [Mattias Zurbriggen], and servants. From Buenos Ayres the party will proceed by railway to Mendoza. Here they will commence the ascent of the mountains, making direct for Aconcagua, and afterwards for the side valleys of the Andes. The objects of the expedition are scientific, and the ascent of the mountain will be made in a leisurely

* *Alpine Journal*, vol. xvii. p. 599.

manner. Mr. FitzGerald's object is to watch the effect of the various altitudes on the system, and from this to see whether it is possible to climb higher peaks in the Himalayas.'

REVIEWS AND NOTICES.

Ice-work, Present and Past, by T. G. Bonney, D.Sc., LL.D., F.R.S., F.S.A., F.G.S., Professor of Geology at University College, London, Fellow of St. John's College, Cambridge, and Hon. Canon of Manchester. London: Kegan Paul, Trench, Trübner & Co. (Limited), 1896. (295 pp. 24 illustrations.)

PROFESSOR BONNEY'S latest work is peculiarly valuable as presenting in clear and not needlessly technical language the ripe judgment of one specially qualified, both as an eminent geologist and an accomplished mountaineer, to pronounce an opinion on the subjects dealt with. If, indeed, the trumpet at times gives an uncertain sound on some of the numerous vexed questions connected with the formation of the Boulder Clays, the causes of Glacial Eras, &c., this is more than compensated for by a caution, and fairness, and confession of inability to speak the last word on many points, which add to the value of the author's judgment when—as in dealing with the subject of the agency of glaciers—he distinctly ranges himself in the ranks of those who, whilst admitting their abrasive power, deny their erosive action as a main factor in valley formation.

Beginning with 'Existing Evidences of Ice-work' we have two full and masterly chapters on 'Alpine Glaciers, Past and Present,' and 'Arctic and Antarctic Ice-sheets,' which will probably appeal specially to those familiar with the facts, and, therefore, to the readers of the 'Alpine Journal,' giving as they do a very interesting summary of the data, interspersed with allusions which relieve the mass of details from dryness. Commenting, for instance, on 'blocs perchés' he says 'most invaders set up monuments to commemorate their advance; the ice-king makes them memorials of his retreat.' Speaking of the valley of the Aar, he writes (p. 15), 'The dominant outlines of the valley are those indicative of the action of water, for it is V-shaped in section. It has been filled with ice, it has been modified by ice, but it has been blocked out by running water and the ordinary atmospheric forces. No one accustomed to travel in non-glaciated, as well as in glaciated regions can fail to decipher the familiar characters of ordinary rain and river action, though these are sometimes blurred by the palimpsest writing of the ice-scribe.' He subsequently (p. 21) quotes (from Heim) a calculation by Professor Helland, that all the glaciers of the Jostedal only remove annually a layer 0.008 inch in thickness from the entire surface beneath the ice, and from this a considerable part must be deducted as being derived 'from the stones which help in the work, or washed down by glacier streams from the surface of the ice, or swept beneath it as débris by lateral torrents.'