

of his axe is No. 2 in the report of the A.C. Committee (see 'A. J.,' vol. i. p. 255).

CORRECTION -- FURGGEN RIDGE OF MATTERHORN. — 'A. J.,' vol. xx. p. 19, line 18, should read as follows: 'Therefore I had sent a party of men, led by David Maquignaz, to the top of the Matterhorn by the usual route. While we were resting on the "Epaule" this party descended . . .'

SKJURSNÖESTIND. — 'A. J.,' vol. xx. p. 48. We learn from Mr. G. Hastings that he made this ascent on September 8, 1897, found the vestiges of a cairn on the top, and heard of at least one person who had been up before. He found the height to be 3,800 ft.

REVIEWS AND NOTICES.

Zeitschrift des Deutschen und Oesterreichischen Alpenvereins, vol. xxx., 1899.

THIS volume has twenty-three full-page illustrations and sixty-eight others in the text. There are also four maps in the text, and attached to the volume is a beautiful map of the Fervall district (1 : 50000), between the Arlberg Pass and the Paznaun Thal, W. of Landeck. The illustrations are largely from the pictures of Mr. E. T. Compton and the photographs of Herr F. Benesch. They are both good mountaineers as well as artists. It almost seems as if the former made excursions on purpose to illustrate special tours. This is notably the case with the articles on the mountains of Glarus and of the Thannheim district. Many of the papers, however, connected with the Alps only refer indirectly to mountain-climbing. Such are the article by Herr John Ranke on the 'Pre-historic Inhabitants of the Eastern Alps,' of Herr E. Richter on the 'Formation of Hills and Valleys,' of Herr Fritz Eck on 'The most Important Mountain Observatories.' Of these the oldest was a convent on the Hohen Peissenberg (3,160 ft.), S. of the Ammer See, near Weilheim. Here observations were taken from 1761 of the barometer, thermometer, hygrometer, rain-fall, wind, &c. The highest in the world is on Pike's Peak, at a height of 14,144 ft.* France exceeds all other countries in the number and completeness of her meteorological stations. Herr Johann Alton contributes a second article on the social and economic condition of the inhabitants of Enneberg (near Bruneck). This is in many respects interesting, but it is sad to observe how largely the farms are mortgaged. This is, indeed, the case over the whole of Tyrol. Herr Hans v. Zwiedineck-Sudenhorst has a third article on the French Wars in the Eastern Alps. Professor Dr. Max Hairhofer writes on 'Sport.' After describing a number of different kinds

* The observatory on Mt. Blanc is, of course, higher, but it is generally considered to be a failure.

of sport he concludes that the sport of the future will be 'flying.' Herr G. Strele writes on the best mode of preventing the ravages of mountain torrents. The story is still the same. The streams must be attacked at their source, and artificial falls constructed in the bed, to prevent the water coming down so fast. This is illustrated from the stream Vanoi, near Caoria (Brentathal). Herr Obermayr (Roy. Bav. lt.-col.) describes the Ordnance maps of the principal European countries. He gives a simple mechanical method of estimating heights, and also by the barometer; also different methods of orientation when the compass is wanting. Herr Max Ebeling describes an ascent of Mt. Ararat (5,156 m. = 16,917 ft.), made on September 30, 1897, from a bivouac (about 3,000 m. = 9,843 ft.). They were accompanied by an escort of Cossacks, for fear of molestation by the Kurds. The ascent from this point took 11½ hrs. The view is, in its way, unique, as the top is upwards of 14,000 ft. above the surrounding plain. Faithful Armenians believe that the mountain never has been, and never will be, ascended. Herr Hans Loretz and his friend, Ed. Wagner, effected, on September 2, 1898, a traverse of the Weisshorn by the S.W. ridge from a bivouac on the S. of the Schallihorn glacier. Many difficulties were encountered, and the ascent took 11 hrs. In estimating the claims of Mr. Davidson's party in 1877 and of Mr. Broome in 1895 to have made the first ascent by this ridge he concludes that the former made the first ascent by the S.E. face (? flank), and the latter the first ascent by the S.W. ridge.

The late lamented Herr Ludwig Purtscheller describes a number of ascents in the Glarus group in 1897 and 1898. He ascended alone the western peak of the Grosse Windgelle, the most difficult climb in the Maderanenthal. He complains that the guides demand 20 francs extra for the passage from the eastern to the western peak, thus raising the whole cost of the expedition to about 100 francs. He himself effected the traverse in 15 min. He forgets that the guides may have charge of a tourist not so sure-footed and expert as he himself is. His most lively experience was in passing from the Cavestraupin to Cavestraugrond (Brigels). An overhanging rock had compelled one party to make a circuit of 2 hrs. and another to turn back. He did not wish to do either of these things, and managed to lower himself down about 30 ft. Herr M. v. Prielmayr writes on the Adula group, whose principal summit is the Rheinwaldhorn. The best starting-point for excursions is Hinterrhein, and these are much facilitated by the Zapport Hut (1,956 m. = 6,418 ft.). Dr. C. Blodig, who has so often been the companion of Herr Ludwig Purtscheller, describes a number of excursions in the Fervall group (S. of St. Anton, on the Arlberg). He hopes to direct the attention of mountaineers to a comparatively neglected district. The three articles which follow may be described as guide-books to the districts of which they treat. The excursions in them are arranged in order of difficulty, and every peak and pass is described. In this manner the mountains of Thannheim (S.W. of Füssen) are treated by Herren Max Forderreuth

and August Weissler. The mountain forms are picturesque, and the climbs sometimes lively enough, and sometimes made more difficult by going the wrong way. Thus in the descent from the Hochgimpelspitze, at a point where a sudden drop occurred of some 30 ft., after lowering his friend the second man found no means of attaching the rope. Half an hour's labour was required to hack out of the ridge a nut about 1 in. broad and 2 in. deep. As it was before he reached the bottom he swung free in the air. The same difficulty was overcome the reverse way later by the first man standing on the uplifted hands of the second.*

The Dolomites of Lienz, lying between the valley of the Drave and the Lessachthal, are similarly described by Herr Philip Wilhelm Rosenthal. The highest summit, the Sandspitze, is only 9,350 ft. high, yet this comparatively small group has three huts, at heights of 5,928, 7,990, and 8,805 ft. respectively, the last being only 100 ft. below the top of the Spitzkofel. The Sella group is described by Dr. Karl Bindel. This group of mountains, lying just S. of the Grödner Joch, was comparatively neglected by tourists until the building of the Bamberger Hut in 1894 led to its exploration. The scenery is as beautiful and the mountain forms as striking as any part of the Dolomites.† A concluding article on the Rosengarten group is contributed by Herr Hans Forcher-Mayr and Dr. Th. Christomannos. The Grasleitenspitzen and the peaks of the Junge Schlern seem almost as difficult as the famous Vajolettspitzen. The Mugoni Kamm was specially explored by Dr. Christomannos in order to make this paper complete. J. S.

From the Alps to the Andes. By Mattias Zurbriggen. London: Fisher Unwin. 1899.

It is understood that once upon a time one of the Continental Alpine societies started the brilliant notion of 'Herrenbücher.' It was plausibly argued that as it is desirable that a guide should produce on demand his 'Führerbuch,' recording his performances and the more or less valuable appreciations of his employers, so is it only reasonable that the obligation should be reciprocal, and that the guide, when invited by a stranger to convoy the latter up a difficult peak, should be entitled to some information about the aspirant in the shape of the candid opinions of his former guides. So far as is known the scheme came to nothing, but the thought was a kindly one, and the compilation of imaginary 'Herrenbücher'

* *Vide* the frontispiece of *Zeitschrift*, 1895, where Dr. Blodig is holding up Herr Purtscheller at the 'mauvais pas' on the Southern Aiguille d'Arves.

† This article, as well as the two preceding, are illustrated by maps of a very simple but very intelligible character. The mountain ridges are represented by thick black lines; the summit, by circles or triangles; the passes, by two cross lines; roads, by double or single, continuous, or dotted lines; streams, by waving lines. It would seem that such maps might be adopted to diminish the cost of the new edition of Ball, though hardly in keeping with the only volume which has yet appeared.

is an idea which must have considerable charm for those of us who are pleasantly conscious of each other's shortcomings.

The next best thing would be a book by a first-rate guide, anecdotal in form and uncompromising in spirit. This book would give us the writer's frank opinion upon the relative merits of guides and amateurs, with illustrative examples; it would display the real attitude of the guide towards his employment and his employers; it might even give us some idea of the subject of the endless, and apparently amusing, discussions which rage whenever two or more guides are in conclave, and which cease uneasily on the approach of the complacent Herr.

Such a book will probably never be written. For obvious reasons no guide could afford to write it until he had definitely retired from his profession, and as a rule the talents of the fraternity are not of a literary character.

However this may be it is certain that the book under review does not fill the gap in our Alpine literature, but, nevertheless, it is a most interesting production.

Zurbriggen stands in the front rank of his profession: his experience has been vast and varied, his performance splendid, and he possesses an intelligence and an education of a quite exceptional character. He is probably better equipped for authorship than is any other living guide, and although his book has no doubt been slightly touched up, and even padded, it is easy to see that in the main it is his own, and most creditable it is to his powers of observation and expression.

The bulk of the volume is occupied with the expedition to the Himalayas with Sir Martin Conway, and those to New Zealand and South America with Mr. FitzGerald, and the interest of the actual narrative is necessarily somewhat discounted by the fact that these expeditions have already been dealt with in volumes of colossal dimensions. The point of view is, however, different, and the treatment refreshingly compact.

The rest of the book is devoted to various other journeys overseas and in the European Alps, and to autobiographical details.

It is interesting to note that Zurbriggen has by no means spent all his life among the mountains, tending goats and hunting chamois, after the manner of the traditional guide. On the contrary he left his Alpine home as a youth and spent many years in wandering about the world and exercising all kinds of urban handicrafts, then went home to Macugnaga and straightway began to act as guide on such expeditions as the ascent of Monte Rosa by the S.E. face. Indeed, his apprenticeship would seem to have been little or none, and in a very few years he was in the first flight, his career by no means bearing out the theory that guidecraft is acquired only by lifelong devotion to the mountains.

The book is, of course, excellently got up, and the illustrations, if not always original, are good.

Chamonix and the Range of Mont Blanc. By Edward Whymper.
Fifth Edition. London: John Murray. 1900.

Zermatt and the Matterhorn. By the same. Fourth Edition.
Same Publisher.

These well-known guide-books, which have, as usual, been brought up to date, are published earlier this year. We have examined them with pleasure, and notice several new features of interest in them—*e.g.*, at pp. 164 and 165 of the 'Chamonix Guide' will be found a useful list of villages and hamlets, &c., in the Valley of Chamonix. The list of guides has been corrected to January 1900. There is a full account (p. 153) of the new *Rifugio Torino*, erected a little below the summit of the Col du Géant, on the Italian side, by the Turin Section of the C.A.I., at a height of very nearly 11,000 ft. above sea level. We have heard this refuge highly commended, and the *tarif* certainly seems moderate, not to say very moderate, by comparison with that of the Grands Mulets, which is nearly 1,000 ft. lower than the *Rifugio*. The inn on the Tête Rousse (10,400 ft.) is described as having reasonable prices.

We learn from the 'Zermatt Guide' that the number of visitors to Zermatt in 1899 exceeded the total of 1898, which was itself unprecedented. Many English travellers of an earlier generation will hear with pleasure that a subscription is being raised for the erection of a memorial to the late M. Alexandre Seiler and his wife. Contributions, we understand, may be sent to Dr. Courten, Zermatt.

The Yorkshire Ramblers' Club Journal, vol. i. No. 2. London:
T. Fisher Unwin. 2s.

This second number of the 'Yorkshire Ramblers' Club Journal' quite reaches the high standard of the first. Mr. Horace Walker contributes a capital paper on the 'Growth of Mountaineering' from the earliest times to the Conquest of Kenya. Mr. W. Cecil Slingsby treats with enthusiasm of 'Mountaineering in Norway in 1899,' though there are mournful words as to the advent of science among the mountains in the shape of the cream-separator, whereby the greatest luxury of the sæters, the *romme kolle*, has disappeared. There are interesting papers by Messrs. E. Calvert and F. Ellet on 'Gaping Ghyll Hole' and 'Long Kin Hole,' with many illustrations. The Lake District is not neglected; and the record of the Club's work both at home and abroad must be highly satisfactory to the members.

Die Hochgebirge der Erde. By Robert von Lendenfeld.
Freiburg i. B.: 1899.

The ambitious and difficult task which the author of this book set himself has been well carried out. Mr. Lendenfeld wishes to

present to us in a compact manner all the high mountain ranges of the world. Nothing is more forcibly conveyed to the reader who turns over these pages than the fact that climbing outside the Alps has only just begun. Of the five hundred pages nearly half are devoted to the Alps, and all our explorers have not been able to proportionately balance the remainder—a remainder large enough to swallow the European systems very many times indeed. The two parts likewise differ as to the sentiment which they awaken in us; the feeling caused by the first is retrospective, whereas the second is decidedly suggestive in its effect. The one reminds, the other hints and promises; here we know, there we hope to know.

I think one may fitly call this compendium 'A Manual for the Study of Orology.' As such its subject can be said to be the teaching of the undergraduate in the art, and the provision of a 'repetitorium' for the professor. The absence of all bibliography goes far to justify the simile. Neither the beginner nor the expert could be well served in this respect within the scope of the book. I recommend it to the climber as a companion for his reflections on the past and his dreams of the future.

W. R. RICKMERS.

Beiträge zur Kenntnis der Spanischen Sierra Nevada. By J. J. Rein.
(In 'Abhandlungen der k. k. Geogr. Ges. Wien,' 1, 2, and 3.)

This is an excellent and interesting monograph on the highest chain of the Iberian Peninsula. Professor Rein draws a very scientific picture, topographical, meteorological, geological, botanical, &c. Even mountain-sickness is alluded to. The bibliographical appendix is quite a revelation.

W. R. RICKMERS.

Bibliotheca Geographica. By Otto Baschin. Vol. v. 1899.

All students of geographical literature ought to know this excellent list, which is published by the Gesellschaft für Erdkunde in Berlin.

W. R. RICKMERS.

PROCEEDINGS OF THE ALPINE CLUB.

A GENERAL MEETING of the Club was held in the Hall of the Club on Tuesday evening, February 6, at 8.30, the Right Hon. James Bryce, *President*, in the chair.

Messrs. W. G. Adams, T. C. Fitzpatrick, G. L. Stewart, and G. W. Young were balloted for and elected members of the Club.

The HONORARY SECRETARY read a statement from the Committee with regard to the editorship of the second volume of Ball's 'Alpine Guide.' Mr. SCHUSTER afterwards made a few remarks.