

REVIEWS AND NOTICES.

The Flora of Switzerland, for the use of Tourists and Field-botanists. By A. Gremli. Translated from the fifth edition by Leonard W. Paitson. (London: David Nutt, 1889. 8vo. Pp. xxiv, 454. Price 7s. 6d.)

THIS book by Herr Gremli (originally issued in 1867) is well known to all who take an interest in Swiss botany, for it popularises the results of many special researches, and arranges them in a very convenient fashion for summer travellers and others who are not specialists. The sixth German edition has now appeared, and Mr. Paitson (who dates his preface from Davos) has translated the fifth, incorporating many later additions and corrections made by the author himself in the 1885 French translation, and in another work of his. A short introduction describes the main features of the Linnean and 'Natural' systems, and the outline of the arrangement according to the latter scheme which has been adopted in the book. Then come tables for determining the genus (forty-nine pages) and the species (385 pages) of any plant which may be gathered, while an appendix enumerates those which are not now to be found, or only doubtfully, in Switzerland. A full index completes this very handy edition of a standard book, which, we may mention, does not contain a single illustration or diagram from beginning to end. It will probably be used by many travellers, who will be very thankful to the author and translator for all the pains they have taken to produce this portable volume, which, according to the title-page, was printed at Zürich.

Winterbilder aus der Schweiz (La Nature Suisse en Hiver). (Zürich: Orell, Füssli & Co. 1889. 64 francs.)

THE contrast between winter in England (at least in the midland and southern counties) and winter in Switzerland has been dwelt on repeatedly. It is now admitted by everyone that, while the higher mountains in Switzerland lose much of their picturesqueness in winter and are much dwarfed, the valleys at their feet gain much, particularly in the way in which the frosted pine-trees and buildings are relieved against the white expanse around them. Thus trees, and to a certain extent houses, are the most striking feature in a winter's view, and they form the principal objects in the very beautiful series of thirty-two views before us. They are enclosed in a sort of portfolio bearing the simple title transcribed at the head of this notice, and represent various scenes in the cantons of Zürich, Glarus, and Graubünden. Some represent roads winding through villages, and everyday events in their winter setting; others bring before our eyes the monarchs of the forest, silvered with the snow which weighs down their branches, and standing out grandly against the pale blue winter sky (*e.g.* 13, 14, and 15); others again show us gaunt rock faces encrusted with snow, which bring out the fissures and wrinkles in them. The distant views in the Engadine and the portrayal of waterfalls seem less successful than the others. No. 24, a chalet near Davos, is very pretty, and so is the tangled Glarus forest with the glimpses of sunshine shown in Nos. 30 and 31.

As a whole, the series seems the best collection of winter views that we have yet come across, reproducing the very startling and vivid contrasts of light and shade, while the inevitable monotony of a uniform white surface is agreeably diversified by some figure or building, and the marvellous brilliancy of the sky is excellently rendered. Those who know Swiss scenery in winter will recognise the truth of these prints (which it should have been stated are reproduced in colours), while to others they will convey part of the indefinable charms of a winter in the more alpine parts of Switzerland.

Zeitschrift des Deutschen und Oesterreichischen Alpen-Vereins, vol. xx. 1889.

This volume is larger than any of its predecessors. It extends to no less than 556 pages, of which the larger half has but little to do with mountaineering, though relating to the Alps. This is a source of congratulation to those who regard the earlier stage of devotion only to mountains and glaciers as the glacial period and rejoice that the dwellers in the Alps are receiving at last some attention. Let us pass from the late to the early period. Thus Dr. Freiherr v. Stengel writes on 'Alpine Economy and Tenant Right' more with the object of suggesting modes of collecting materials than of fully discussing so complex a subject; Carl Freiherr v. Gumpenberg on the 'Drama' amongst the peasants of South Bavaria and Tyrol. These performances seem to have been formerly much more common. As we find them now at Oberammergau and Brixlegg, they can only be regarded as survivals, and would probably ere this have disappeared, but for the attention and curiosity of tourists. Professor H. v. Ritter writes on 'Music in the Alps'; Dr. R. Wehmer on the treatment necessary in case of illness or accident in the mountains; a kind of ambulance lecture which all might study with advantage; Dr. Heinrich Noë on 'Bathing Establishments in Tyrol and Carinthia.' Those who are only acquainted with the modern luxury of Levico or the Brenner will be surprised to hear that there still exists a 'Bad' where the patients have themselves to heat the water by placing hot stones in it, and that the virtue resides in these stones, which are of a species of *Grauwäcke*. This is the Karlsbad (1700 metres=5577 feet), under the Königsstuhl in the Murthal.

We now leave the inhabitants and come to natural phenomena. Three articles are devoted to meteorology. Herr F. Auerbach writes on 'Weather Stations'; Herr J. Hann on the 'Meteorology of the Sonnblick'; Herr A. v. Obermayr on 'Electrical Displays' (*Elmsfeuer*) in the Alps. Austria has the greatest number of mountain stations, the highest, and the oldest. That on the Hoch Obir (2141 metres = 7020 feet) was established in 1846, though only completely fitted up in 1879. The highest in Austria is that on the Sonnblick (3100 metres = 10,165 feet), which was built and fitted up in 1886 at a cost of nearly £500. Twelve instruments have to be observed three times daily, though some of these are self-registering. The height of this observatory has afforded great facility for observing the displays of electricity which occur frequently in these elevated regions. The highest station in

Switzerland is on the Sentsis (2503 metres = 8215 feet), opened in September 1882. This cost £2,400, and is kept up at an annual cost of £280. The highest in France is on the Pic du Midi du Bigorre (2877 metres = 9373 feet). This is the most expensive and elaborate of all the stations, having cost £12,000, and involving an annual outlay of £1200. It is accessible by a good road, whilst that on the Sentsis can only be reached by a mule track, and that on the Sonnblick only on foot with difficulty. The still more elevated station on Pike's Peak (4360 metres = 14,100 feet) has been abandoned. All these high stations, including that on Ben Nevis (1883), are of too recent a date to give any valuable results.

Herr M. Neumayr takes us over much old ground on the subject of 'Mountain Eboulements.' However great are the disasters of later times, they seem to have been much surpassed by prehistoric cases. Thus the débris of the fall at Goldau is estimated at 10,000,000 cubic metres; that at Elm at 15,000,000; and that of the Diablerets at 50,000,000; whilst the débris of that of Flims extends in breadth from the 'mayens' of Flims to Versam, and in length from Ilanz to Bonaduz, and its mass is estimated at 15 cubic kilometres (15,000,000,000 cubic metres). Herr Ratzel writes on the 'superior limits' of natural phenomena in the Alps. Dr. Carl Moser describes the ice-caves of the Tarnovaner and Birnbaumer Wald. Herr F. Seeland contributes another chapter (No. X.) to his study of the Pasterze Glacier. Prof. E. Richter reviews the Alpine literature of the past year. Dr. H. Finkelstein introduces us to the group of the Mte. Fresone (2673 metres = 8769 feet) lying E. of Breno, between Val Canonica and Giudicaria; Herr Julius Pock to the little-known districts of the Mte. Lessini (13 Comuni). Both the regions here described are almost completely unknown to tourists.

Herr Otto v. Pfister having lost his favourite guide, Kederbacher of Ransau (who has undertaken the charge of the Watzmann Haus), had to content himself with a tour between the Ill and the Inn, in the course of which he ascended the rarely visited Hennenkopf (3033 metres = 9951 feet), between the valleys of Samnaun and Paznaun.

The new hut erected by the section Amberg in the Sulzthal (Oetzthal) enabled Herr Pallocsay to effect the first ascents of the Schwarzwanter (3066 metres = 10,059 feet), of the Weisskogel (3282 metres = 10,768 feet), and others. Dr. S. Finsterwalder in the course of his measurements of the Vernagt Ferner made several new ascents, amongst which were that of the Hintergralspitze (3325 metres = 10,909 feet) and the Plattekogel (3428 metres = 11,247 feet). Dr. Ludwig Darmstädter made some interesting ascents in the group of the Geisler Spitzen (Grödenthal), particularly that of the Gran Odlä, and an attempt on the very difficult 'Punta delle cinque Dita.' In these the guide Stabeler of Pflersch especially distinguished himself. Dr. W. Strauss, in 1886 (September 7-14), ascended four of the principal summits of the Bernese Oberland with the guides Kederbacher and R. Kaufmann. Considering that all these are ascended by well-known routes, he seems to have met with exceptional difficulties, due partly to the time of year when the ascents were made. Herr R. v. Lendenfeld

relates an excursion in the Alps of New Zealand, in 1883, with an ascent of the Hochstetter Dom (2840 metres = 9317 feet), the only high summit of these Alps ascended up to that date, though Mr. Green, in 1882, nearly attained the summit of Mount Cook. Bergschrunds of enormous size (e.g. 70-90 yards wide, with the upper edge 40 yards above the lower) formed the greatest difficulty the party encountered. Perhaps the most interesting paper is the account of the tour of Dr. Carl Diener and Herr Ludwig Purtscheller in the Val de Bagnes in July 1888. Along with the guide Preis (Punz), of Ramsau, and without any local guide, they made from the Hôtel Gétroz (2150 metres = 7050 feet) seven ascents in eight days. Several of these were, both as regards ease and difficulty, in marked contrast to previous ascents. The concluding and most arduous expedition was the ascent of the Grand Combin by the Col du Sonadon, and the Combin de Valsorey. Leaving the Hôtel Gétroz at midnight on July 29, the Col du Sonadon was reached at 5.30 A.M., and the final rocks of the Combin de Valsorey at 9 A.M. These were in the worst possible condition, every hollow and crevice being filled with fresh snow, whilst a raging storm hardly allowed them to advance. More than an hour was spent in the passage, and the Aiguille du Croissant was then reached at 11 A.M. Here the storm allowed them to remain only a few minutes. Wishing to avoid the rock passage, they endeavoured to circumvent the Combin de Valsorey and descend to the Col des Maisons Blanches, but were driven back. The descent of the rocks (though not much exceeding 100 metres) took $1\frac{1}{2}$ hour. The Col du Sonadon was reached at 4.10 P.M., and the Hôtel Gétroz at 10.30 P.M. In all these ascents Herr Purtscheller was the leading spirit, and his study of the Alpine literature of the district was more complete than usual. His notice of previous ascents of the Grand Combin extends to no less than eight closely printed octavo pages. This volume besides numerous illustrations in the text has a coloured frontispiece by Mr. E. T. Compton, of the Hinter-Sulzthal. In the folding-case are also several panoramas and a map of the Karwendel mountains on a scale of $\frac{1}{80000}$.

Mittheilungen des D.Oe.A.V., 1889.

In this fortnightly publication are recorded the doings of the sections of the D.Oe.A.V. and the principal expeditions made by their members. In many cases the same expeditions are mentioned over and over again as made by different tourists. More than twenty winter ascents are recorded. The Schreckhorn was ascended four times and the Mönch once. Dr. Walter Schulze's paper on the glacier passes in Switzerland which were commonly used in old times has been already noticed in the 'Alpine Journal.*' Amongst new or notable expeditions may be mentioned the following:—The first ascent of the Kleine Falbon Spitze, in the Rosengarten group, was made by Herr Johann Santner (Botzen) alone on September 6, 1888.

Dr. Carl Diener with Veit Innerkofler on June 7, 1888, made the

* *Alpine Journal*, vol. xv. p. 75.

first* ascent of the 'Terza Grande' (2586 metres = 8479 feet), and on June 9, that of the 'Croce dell' Oregione' (2420 metres = 7940 feet), both in the Sappada group. The Dachstein was ascended from the south side by Herren R. Schmitt and Fritz Drasch on July 14, 1889, and the Klein Zwölferkofel by the latter alone from Sexten on July 31.

In an ascent of the Eisthaler Spitze (Hohe Tatra) in July 1888 Mr. John Ball's card was found on the top with the date 1840.

The Drei Schuster Spitze was ascended from the Innerfeld Thal on August 1, 1888, by Herren Zilzer and Schmitt with Pietro Dimai. The ascent by this route had been unsuccessfully attempted by Herren Purtscheller,† Schulz,‡ and Zsigmondy, and by the late Herr Winkler alone. On the third attempt the party took the precaution of sending a guide to the summit by the ordinary route, who directed them how to proceed in the final part of the ascent.

In the Zillerthal group the first ascent from the west of the Olperer (3489 metres = 11,447 feet) was made by Lieutenant Claus and Herr G. Heischmann on July 11, 1889. From the Ochsen Hütte in Alpein they ascended the Wildlahner Ferner and gained the ridge near the Olperer by a steep and partly glazed *Rinne* with much difficulty. The Fussesstein (3380 metres = 11,090 feet) was ascended from the Ochsen Hütte by Herren K. Schulz and O. Knorr with the *senner* Franz Ofen on July 19, 1887. This had been before effected by Herren Purtscheller and Zsigmondy on August 8, 1881, by a much more difficult route. The passage from the Olperer to the Fussesstein, mainly along the ridge, was effected by Herr F. Dyck with the guide Hans Horhager on August 28, 1887. This passage took only 2¼ hrs., whilst Dr. G. Lammer, who made the traverse the reverse way and alone, keeping more closely to the ridge, took no less than 6 hrs.

Dr. Ludwig Darmstädter, with the guides Stabeler and Luigi Bernard, besides making several new ascents in the Rosengarten and Geissler Spitzen, found on July 9, 1889, a new route up the Cimon della Pala free from the danger of falling stones. This was made from near the Travignolo Pass by the north-east face of the Cimon. The climb, however, seems in parts to be much more difficult than by the ordinary route. This ascent was repeated on July 22, 1889, by Messrs. Scriven, West, and O'Sullivan.§

* [The pinnacle reached by Dr. Diener seems to be, at present at all events, higher than that climbed by Mr. Holzmann in 1880 (see *Alpine Journal*, vol. x. p. 106). Judging from Dr. Diener's sketch in No. 292 (March 15, 1890) of the *Oesterreichische Alpen-Zeitung*, the difference can hardly be more than a very few feet; and it might easily happen that a sharp frost would dislodge enough stones from the higher to put it into the second place. Would Mr. Holzmann then be able to claim the 'first ascent,' or would it be necessary for him to repeat his climb if he wished for that honour?—ED.]

† This gentleman, after his ascent of Kilimandjaro, has just returned to Europe. On February 27 and 28 he was welcomed at meetings of the Technical Club and the Alpen-Verein (section Botzen).

‡ Herr Schulz complains of some remarks on his passage of Monte Rosa from Macugnaga, but it must be understood that his statement as to the absence of danger in the expedition referred only to the conditions of weather and snow under which he made it.

§ See *ante*, p. 151.

No less than twenty accidents are recorded, in which twelve lives were lost. Some of these are hardly to be classed as mountaineering accidents, but arise from illness and other causes. Some again ought almost to be regarded as suicides, notably that of Herr Kanitz on the Rax Alp on March 25, 1889, who refused to be roped in the dangerous (at that time) descent of the 'Teufels Badwanne.' J. S.

Geologische Uebersichtskarte der Alpen von Dr. Franz Noë. (Wien, 1890. Eduard Hölzel. Price, with folds guarded, 10 m.; whole mounted on linen, 14 m.)

A geological map of the whole Alpine chain, on a moderately large scale, has long been required by students, but the task of preparing it has presented formidable difficulties. So far as regards the secondary and later deposits, there is a general agreement, but authorities differ widely over the crystalline rocks. To attempt even a petrographic map of them—that is, one which simply records the main varieties of rocks as they occur in the Alps, without regard to theories of geologic age—is very difficult without a personal acquaintance with the rocks themselves, because it is necessary, in order to harmonise the maps of different districts, to know exactly what the authors mean by their various types. We are disposed to think that Dr. Noë's map shows some traces of this want of personal knowledge, which occasionally causes him to confuse rocks that are separable, and to distinguish those which in reality are identical. Still, instances of this, fortunately, are neither numerous nor serious, so that his map, on the whole, appears to give a very fair idea of the distribution of the leading types of those crystalline rocks which in the Alpine chain form the foundation of the comparatively unaltered sedimentary masses. In regard to the latter also we think that Dr. Noë's subdivisions may be criticised sometimes for a want of symmetry; for example he divides the Trias into three parts, but does not separate the Neocomian from the Cretaceous.

The scale of the map, 1 in 1,000,000, or roughly 16 miles to the inch, reconciles as far as possible the antagonistic requisites of distinctness of detail and handiness of size. Its value is greatly increased by the extension of the colours to the Jura, to the Dalmatian Alps as far as Spalato, and to a little of the left bank of the Danube; but, unfortunately and rather inconsistently, the colours stop a short distance west of Savona, though a large piece of the Apennines falls within the sheet. We trust that in future editions this defect may be remedied, though we admit that this complaint is rather like 'looking a gift horse in the mouth.'

A short descriptive pamphlet accompanies the map, including a preface by Professor Suess.

Though, as has been said, we think one or two matters of detail open to criticism, we are none the less sensible of the great merits of Dr. Noë's work, and feel sure that all students of Alpine geology will owe him a debt of gratitude for the result of so much conscientious labour, which, we may add, can be obtained at a price surprisingly small.

T. G. BONNEY.

Mountaineering in Colorado. By Frederick H. Chapin. (Boston, 1889.)

This handsome little volume is in part a republication of several papers contributed by Mr. Chapin to *Appalachia*, the journal of the Appalachian Mountain Club, with the addition of much new matter. We are inclined to believe that its appearance coincides with the commencement of a new epoch in American mountaineering, and that the exploration of the central ranges of the United States, hitherto conducted by the admirably organised Government surveys, will in future be undertaken by individual enterprise or by clubs similar to our European Alpine clubs. Should this anticipation be justified, its realisation will in no small degree be due to the precept and example of the author of this book. That the exploration of the interior ranges of the Rocky Mountains, and the ascent of some of the more important peaks, should have been almost exclusively the work of the members of the several surveys is no matter for surprise. Of course a few of the more prominent summits of the front range of Colorado, being near to the plains and to settled-up districts, had already been ascended before the organisation of the surveys; but until quite recently the difficulties of approaching the more remote ranges and the attendant expense of transport rendered access possible to few. No stations existed except near the outside ranges, and these afforded no convenient base of operations except to the neighbouring peaks. It was necessary to obtain outfit at Cheyenne, Denver, or Pueblo, and the costly and vexatious accompaniment of a pack train was indispensable, even for a comparatively short campaign. The rivers were at times a serious obstacle, compelling many a tedious *détour*, indeed, at times causing the failure of the expedition. With the rapid extension of railroads in this region during the past ten years many hindrances have vanished, but in all cases where tents are requisite, which is often, a small pack train will still be necessary.

Mr. Chapin has made other ascents in various parts of the Rocky Mountains, but his present volume is exclusively a record of excursions and ascents made in the summers of 1887 and 1888 in the extreme northerly part of the East Colorado or front range, which here encloses Estes Park on the north, south, and west, comprising Long's Peak and the mountains northward, until they begin to sink down to the plateau crossed by the Union Pacific Railroad. It may be mentioned in passing that Mr. Chapin is in error in attributing the correct determination of the height of Long's Peak (14,271 feet) to a later date than 1879. This altitude was fixed by Hayden's Survey in 1873 and 1874, and is found in the map accompanying the report of the latter year. Unfortunately the memoir is not provided with a map—a serious omission—and as access to the maps of King's and Hayden's Surveys is not always to be had, and in these only two of the peaks described are indicated, it is difficult and at times impossible to trace the various routes with any degree of accuracy.

Apart from this defect, the book is a distinct gain to mountain literature. It is pleasantly and simply written, with a complete

absence of exaggeration, and it is clear that Mr. Chapin is a careful observer. The illustrations, which are both numerous and good, are reproductions from photographs taken by the author, who has been exceptionally fortunate, both in the nature and selection of his subjects. Two of these are quite unique: one, of three mountain sheep, whose unusual curiosity rendered a near exposure possible, and the other a 'grizzly,' whose nearer approach was not much desired. Both incidents are well told. The excitement of photographing such subjects clearly surpasses that of hunting them. It is unfortunate that the bear, a large one, comes out small in the photograph. He could not be taken nearer than 200 feet—possibly quite as well for the operator, as the arms of the party comprised nothing more formidable than a shot-gun and a knife.

Although glaciers have almost vanished in the Rocky Mountains, there is no district where their former extension can be so plainly traced. The scanty rainfall is favourable to the preservation of the ancient moraines, whose size and form have, in many instances, been only slightly altered by subaërial erosion. These remains of old glaciers are well exhibited in the district described in this book, but are on a larger scale in the more central parts of Colorado, while in the Wind River Mountains of Wyoming lateral moraines of 1000 feet and upwards are found, some of them grassed over, but preserving their original shape, the glaciers which formed them having shrunk back 18 or 20 miles into the recesses of the range.

Mr. Chapin has given much attention to these phenomena and describes a few small glaciers which had not previously been known. The origin of the largest of these he attributes, not to direct snowfall, but to accumulation by the constant drifting of snow over a wide depression of the ridge. It is hardly doubtful that more important glaciers will be discovered in the more central parts of Colorado, especially in the Elk Mountains. The working out in detail of this 'massif' will present many features of interest, and since the recent extension of the Denver and Rio Grande railroad system its exploration should now be comparatively easy.

A detailed list of the plants found in the Estes Park district—the work of Mrs. Chapin—is an appropriate ending to this interesting volume.

J. E.

I Pericoli dell' Alpinismo e Norme per evitarli. Da Cesare Fiorio e Carlo Ratti. (Turin: for the Italian Alpine Club. Price 2.50 lire.)

Signori Fiorio and Ratti, with the modern Italian affection for statistics, have compiled a table of nearly all the fatal accidents which have occurred in the Alps since 1856, and have prefixed to it 210 pages containing a discussion of the causes of danger in general, and of the best means of counteracting them. That the ground over which they travel is pretty wide will be seen when we mention that short sight has a place among the former and diet among the latter, so that the book might almost be called 'The Climber's Universal Adviser.' It is, indeed, a mine of interesting chat on nearly every subject connected with mountaineering, from the short trousers

called *knikerbokers*, which are much worn 'nelle grandi stazioni estive,' but regarded by the authors as a trifle ostentatious, to the ever fresh subject of mountain-sickness; as to which they take, in the main, a common-sense view, holding that the best antidote is training and a reasonable attention to food. It is pleasing, by the way, to learn that the disorder is known in Central Asia under the name of *Tunk*. Though the 'phonetic degradation' is considerable, we may surely recognise in this a familiar, if undignified, ailment of our own land. Winter expeditions and guideless expeditions also come in for discussion. The book, though it appears to have been compiled with care, is not free from slips. We do not know what authority the authors have for saying that Prof. Balfour and Petrus 'fell from a crest of ice in which they were cutting steps.'* In the table of fatal accidents we miss any mention of those by which Mr. Royds on Mte. Salvadore, and Mr. Douglas in Vorarlberg, lost their lives. *Per contra*, by the insertion of *e* between his Christian name and surname, the guide, Cyprian Granbichler, killed on the Hochjoch in November 1868, is made into two people. The accident to Mr. Watson is wrongly dated 1865 (see p. 156).

The chief reflection, however, to which this book gives rise is: Have we not had almost enough books about the dangers of the Alps? We are not always writing on the dangers of fox-hunting, football, archery, golf, and other favourite exercises. It must be said, indeed, that these books are chiefly written by natives of countries where exercises admitting of the element of danger are not much practised; not, of course, from any want of courage, but simply because it is not 'their way.' So, perhaps, when they do take up an amusement in which that element undoubtedly exists, they are more apt than we to dwell on it and make it the subject of treatises. For Englishmen, Mr. Stephen's chapter on the 'Dangers of Mountaineering' may be taken to have said all that is necessary on the matter. As a test of the practical benefit likely to ensue from the compilation and study of these treatises, it is perhaps sufficient to point to the melancholy irony of fate which has linked the name of one of them ('Die Gefahren der Alpen') with that of Emil Zsigmondy.

Tirol, Südbaiern und Salzburg. Von Th. Trautwein. (Augsburg: Lampart. Pp. 538.)

Illustrierter Führer durch die Oetzthäler und Stubai Alpen. Von Heinrich Hess. (Vienna, Pest, Leipzig: Hartleben. Pp. 270. Price 3 fl. = 5.40 m.)

Kleiner illustrierter Führer durch Salzburg. Von Julius Meurer. (Same publishers. Pp. 142.)

Campiglio, Arco, Riva, und Garda-See. Von Julius Meurer. (Vienna, Austrian Tourist Club. Pp. 160.)

We must not leave these books unnoticed any longer, but space will not allow us to do much more than draw attention to them. Herr Trautwein is an old friend. The present (1889) is the eighth edition of his guide-book, in some respects, perhaps, the most practical in existence. It is, of course, intended for the pedestrian rather than for the mountaineer, but all mountain routes are duly noticed, and the

* See *Alpine Journal*, vol. xii. p. 532.

regulation labels of 'beschwerlich,' 'schwierig,' 'gefährlich' affixed with discrimination. The maps are clear and, for the most part, accurate, though Franzenshöhe on the Helvis is called Franzensfeste; a name which belongs to a very different place. We cannot agree with Herr Trautwein's advice to shut the window when passing through the Arlberg tunnel. Our experience is that the passage of the tunnel—smoke being shut off and good ventilation maintained—affords the only chance of a breath of clean air between Bludenz and Landeck.

In the case of the other three books on our list, the names of the authors are a guarantee that the information contained in them may be trusted. Herr Hess and Herr Meurer probably know the Eastern Alps as well as any man. Both, too, are practised mountaineers, so that, while the easy-going tourist will be content with his Trautwein or Baedeker, those who wish for a guide to the higher regions will seek rather to Meurer and Hess. The Oetzthal guide of the latter is about as complete as a guide-book can be. Of course there are a few slips, which will doubtless disappear in the second edition. The Sonklar Scharte has three different heights assigned to it in the space of four pages. On p. 249 a rather serious error is made as to the position of the Oberetten-Jöchel* (this, in spite of local nomenclature, seems now to be fixed as the name of the pass), which has been quite correctly given on p. 240. In the map of the northern part of the Stubai group, following p. 184, the new Amberger Hütte is marked considerably too far up the Sulzthal. It is interesting to learn that there is still a corner of the group which is 'touristisch unbekannt.'

Of Herr Meurer's two little books the first deals with a district which, for the most part, belongs to the region below the snow-line. The northern slopes of the Venediger (12,000 ft.) are within the frontier of Salzburg and some part, though not the highest, of the Glockner group. The most important peak wholly within the limits of the province is the Wiesbachhorn (3577 metres = 11,736 ft.), which, by the way, is oddly called Wischbachhorn in the map appended to this volume. But the limestone ranges to the north offer a good deal of 'fine confused' climbing, and the country is generally interesting. We would ask Herr Meurer whether it is not a pity in a guide-book, and especially an Alpine guide-book, to take any account whatever of political boundaries. It is poor comfort to the tourist who is crossing from, say, the Pinzgau to the Zillerthal to be told in effect, 'Now you are in Tyrol. You have got three hours more to go before reaching your night quarters; and you may find the way for yourself.' Both this and the last-mentioned book are copiously illustrated, after the fashion of Austrian guide-books. The Campiglio guide-book, by the same author, contains short directions for all the principal expeditions to be made in the Presanella and Brenta groups; some account of the geology, botany, and zoology of the district; the guides' tariff; and a number of very pretty phototype illustrations, much above the average in merit. The map shows the extent in this district of the 'Wegmarkirung,' which, like other aids to the incapable tourist, is becoming far too common in the German Alps.

* See *Alpine Journal*, vol. x. p. 104.