

myself at Crosthwaite Vicarage, Keswick. Cheques should be crossed National and Provincial Bank of England.

H. D. RAWNSLEY.

SULITELMA (*A. J.* vol. xx. p. 277).—For Swedish peak (1,878 m. = 6,159 ft.) read North Sulitelma (1,908 m. = 6,241 ft.), which, it has since been found, was the peak ascended. This latter and not the Swedish peak is the culminating point of the range, and there seems no doubt that the ascent described was the first.

The above correction must also be made in all cases where the 'Swedish peak' is mentioned (pp. 276-8).

LAGKOFEL HÜTTE.—Very early this spring the Lagkofel Hütte, belonging to the Akademische Sektion, Wien, of the D.Oe.A.V., was destroyed by an avalanche. The position of the hut was such that its loss could only be accounted for by a catastrophe of exceptional magnitude. Mr. Rickmers, who visited the spot to look for a new site, found the assumption fully borne out by what he saw. The avalanche had evidently been of the kind called 'Staublawine,' because it consists of powdery snow. It is this particular species which produces enormous air-pressure. The hut had been knocked into small splinters, which were well churned up with the mass and evenly distributed throughout the entire length of the avalanche, reaching down as far as the Confinboden. The quantity of snow is such as to give one the impression of a small glacier, especially as a crevasse about 15 ft. deep has been formed in the middle.

It is unlikely that a similar site will be discovered, uniting the same advantageous position with freedom from the same risk. The nearest Alp, the Confinboden, would offer the simplest, though less ambitious, solution.

W. R. R.

REVIEWS AND NOTICES.

Zeitschrift des Deutschen und Oesterreichischen Alpenvereins.
Vol. xxxi. 1900.

THIS volume, like its predecessor, has twenty-three full-page illustrations; but those in the text are now 101, being a large increase. There are also forty maps and plans. The principal illustrations are either from the pencil of Mr. E. T. Compton or from photographs by Herr F. Benesch. Herr F. Burckhardt describes the observatory on the Zugspitze. This is built at the W. end of the Muenchener Haus, and its flat roof rises 1 m. above the summit of the mountain. It is made secure by sixteen wire ropes, which are fixed 1 m. (40 in.) deep in the rock, and pass through the wooden sides of the building to the platform. There are, besides, two wire ropes which pass right over the platform.*

* The necessity for such precautions is shown by the case of the hut on the Fochezkopf (9,480 ft.) for the Wiesbachhorn, which was absolutely blown away last December for a space of more than 20 yds. by a gale from the S.W.

The cost was 1,000*l.*, divided about equally between the cost of materials, transport, and putting up. The observatory on Ben Nevis (4,406 ft.) cost 12,500*l.*; that on the Puy de Dôme (4,796 ft.), 11,800*l.*; that on the Pic du Midi (9,438 ft.), 11,208*l.*; that on the Säntis (8,202 ft.), 3,500*l.*; on the Sonnblick (10,171 ft.), 7,250*l.*; on the Schneekopf (3,280 ft.), 2,250*l.*; on the Brocken (3,740 ft.), only 500*l.* The cost of maintenance is comparatively small, being only 400*l.* per annum—less than any except the Säntis, Sonnblick, and Brocken—whilst on the Puy de Dôme and Pic du Midi the cost is respectively 1,500*l.* and 1,750*l.*; on Ben Nevis the cost is about 500*l.* per annum.* Professor Dr. R. Wettstein writes of the scientific objects to be attained by Alpine gardens. These are much more common in the Western Alps, but are mainly devoted to the preservation of the rarer species. He suggests that such gardens should be formed near Schutzhütten, where they could be more easily attended to. Plants should be brought hither from both higher and lower stations, and their changes observed. The formation of hybrids might be also observed, and for this purpose plants should be selected which have as yet shown no tendency to such changes. Such a garden is to be formed near the Bremer Schutzhütte in the Gschnitzthal, near Steinach, on the Brenner. A letter is inserted from Herr Anton E. Schönbach to Professor E. Richter on the study of 'folklore.' Nothing of importance has yet been done in the E. Alps, and the need of action is every day increasing as the yearly increasing tourist flood tends to wipe out old customs. Previous study is required on the part of observers, and much care is necessary in verifying statements. A case is known in which a series of observations on one district were printed as belonging to another. Herr Albert Penck describes the surface formation of the Herzegovina. This is a Karstland, the Dinaric Alps being a continuation of the Southern Limestone Alps, and, as in the Karst, the surface is much cracked and broken. The rainfall almost immediately disappears beneath the surface. There is only one valley with a regular stream, the Narenta, which has no branches, but has many springs in its bed, and receives others from both banks. Herr A. Rothpletz contributes observations on the geology of the Rätikon (between Bludenz and the Prättigau), made in three expeditions in the neighbourhood of the Scesa Plana, with various plans and sections.

Herr Dr. Max Eckert describes the Gottesacker plateau, a 'karrenfeld' on the Hobe Ifen, W. of Oberstdorf. Most Alpine tourists are familiar (sometimes in an unpleasant way) with this limestone formation, which resembles a petrified glacier. The clefts in this are sometimes 70 ft. in depth. The origin is due to subterranean pressure, owing to the inhomogeneous character of

Had the gale been from the S.E. the hut would have fallen down the mountain. On the S.W. side the hut was secured by wire ropes, but these proved insufficient.

* Nothing is said about the instruments, and these must largely affect both original cost and maintenance.

the limestone, and the softer parts are subsequently eroded by water.

Herr Dr. R. Klein writes of the 'Nordföhn' in the Tragössthal, a weather-study in this remote valley, which enters the valley of the Mürz near Bruck. The valley is backed on the N. by the range of the Hochschwab (7,475 ft.) which for a long distance does not fall below 2,000 m. (6,562 ft.). The Föhn is generally regarded as a warm wind coming from the African desert; but it appears that, under the same conditions, the same phenomena will present themselves from whatever quarter the wind blows. In Tragöss, when the Nordföhn blows, the temperature is higher in winter and lower in summer than on the N. of the mountains.

Herr Dr. Emil Hagenau writes on Alpinism—almost entirely a product of the nineteenth century. Before that time the mountains were generally regarded with horror, whereas now they are seen with admiration and delight. Mountain-climbing is not only conducive to bodily health, but to mental improvement, increasing presence of mind, self-control, sympathy with others. The change of feeling about mountains, added to the increased facilities of travel, has led thousands to visit the Alps who would otherwise never have left home, and has brought a great increase of prosperity to the districts visited.

Herr Friedrich Müller describes the Kačna Jama (Snake-hole), a cavern in the Karst, near Divazza (seventh station from Triest on the way to Laibach). Here the Reka reappears after leaving the grottoes of S. Kanzian. These are about two miles S.E. of the station, whilst the entrance to the present cavern is 10 min. to the S.W. It was explored in 1890 and 1896. The depth is 213 m. (700 ft.), and the length explored about 1,200 m. ($\frac{3}{4}$ mile). The Reka was long ago supposed to flow in this cavern, and a legend says that once a pair of oxen fell in here and were fished out of the Timavo (the stream supposed to be the Reka emerging from the rocks near Nabresina, 16 miles distant).

Herr R. Schmidt describes the Pitzthal, a valley now much more frequented since the erection of several Schutzhütten at high elevations in the upper valley. He gives many interesting particulars of the manners and customs of the inhabitants. The glacier formerly came nearly to Mittelberg (it is now about three miles distant), and the inundations from it caused great damage. A procession went annually to the glacier, where a pulpit was hewn out of the ice, and prayer was offered to avert the disasters. Now the procession goes only as far as Mittelberg.

Herr Jean Habel describes a number of expeditions made in the Rocky Mountains between 1896 and 1899. The chief of these was an expedition lasting fifteen days up the North Fork Valley, from Field station. The highest point reached was a point (2,860 m. = 9,382 ft.) in the ridge W. of Mt. Balfour (2,855 m. = 9,366 ft.).

Herr W. R. Rickmers describes the exploration of the Karschthal, a mountain group E. of Batoum. The particulars of this exploration have already been laid before the Alpine Club.

There are only two articles describing separate mountain

ascents. Neither of these is new, but both are very interesting. The first is the ascent of the Matterhorn by the Zmuttgrat, by Herren Hans Lorenz and Ed. Wagner. They started on September 9, 1898, from a bivouac about 3,000 m. (9,843 ft.) at 4.10 A.M. The Italian summit was reached at 2.50 P.M., and the Swiss summit at 8 P.M. After a halt of half an hour they began the descent. The path was so good that they soon took off the rope. The old hut was reached at 5 P.M. Here a halt of 15 min. The new hut at 6.40 P.M. and Zermatt at 9 P.M. The second is the traverse of the Aiguille de Grepon by Lieut. W. Lohnmuller and Oscar Schuster on August 11, 1897. This is the first traverse by German tourists. It is one of the most difficult known. The views* of the three 'Abseilstellen' on the descent are remarkable. They had two ropes, 88 yards and 97 yards in length, and it was fortunate, for at one of these places the rope would not come away, and they had to abandon it. The traverse was made by a French party on the same day in advance of them. Herr Frido Kordon describes a tour in the Reisseck group, N.W. of Gmünd (near Spital on the Drave), in August 1899. The highest summit is the Keisseck (2,959 m. = 9,708 ft.). He was accompanied by Mr. E. T. Compton, by whose pencil the article is finely illustrated.

Herr F. Benesch describes a nine days' tour in the Riesenferner group, in which he ascended the Hochgall, Wildgall, and others. He had rather an unpleasant experience on the descent from the Lenkstein. A wide crevasse could only be crossed by leaping on to an edge of ice projecting from the further side. As the rope had been left behind this was rather a ticklish matter.

The remaining articles describe mountain groups, and contain accounts not only of the ascents made by the writers, but also of many other ascents made in the group. They may almost be regarded as guides to the districts of which they treat. Herr H. Krautz thus describes the group of the Loferer Steinberge, S.W. of Lofer (Saalachthal, S.W. of Salzburg). This group is so small that a tourist can easily make the circuit in a day's walk. The highest summits hardly exceed 8,000 ft. The opening of the Schmidt-Zabierow Hut will no doubt increase the number of tourists. There are many pleasant spots near, the most picturesque being S. Ulrich on the Pillersee.

Dr. Karl Blodig contributes a first part of his ascents in the Rhätikon (1886-1889). In 1888 he effected the second ascent of the Drusenfluh (2,829 m. = 9,280 ft.). The first ascent was made in 1870 by the guide Ch. Zudrell alone. This was long doubted, till in 1888 the letters 'C. Z. 70' were found cut on the rock.

Dr. Th. Christomannos describes the Latemar group, which is conspicuous from many points near Bozen, though not so much so as the Rosengarten. It is bounded by the Karer Pass, the Avisio in Fassathal, and the S.W. branch of the Eggenenthal. It was

* The photographs were taken by M. Al. Brault, one of the French party who preceded them.

visited frequently by geologists (Richthofen and others) about 1850, but seldom by mountaineers, owing to the superior attractions of the Rosengarten. Its highest summit, the Diamantispitze (2,864 m. = 9,395 ft.) was first ascended by Gustav Euringer in 1885, a second time by Demeter Diamantidi in 1891. Dr. Christomannos made various excursions between 1894 and 1900 to complete the exploration of the group.

Dr. Karl Bindel has a second article on the Sella group in which he describes many separate ascents. The highest point, the Boëspitze (3,152 m. = 10,341 ft.), was attempted by the well-known mountaineer J. J. Weilenmann. The first ascent was made by Paul Grohmann in 1864. There is plenty of fine climbing in the group. The Zehnerspitze (2,917 m. = 9,571 ft.), Mittagszahn (2,870 m. = 9,417 ft.), and the Murfraitthurm (2,721 m. = 8,927 ft.), are especially difficult. There is a fine panorama of the group by Emil Terschak.

Herr H. Steinitzer contributes a minute description of the Carnic 'Voralpen.' These lie between the Tagliamento, the Piave, and the plain country to the S. He was accompanied in many tours by Herr R. Reschreiter, whose drawings illustrate the article. Some English tourists have visited the district, John Ball, Messrs. Gilbert and Churchill, F. F. Tuckett; but very few others, and it has been almost entirely neglected by German tourists. The mountains are not so high as the Dolomites of Cortina, the highest, the Cima dei Preti, being only 2,703 m. (8,868 ft.), but the scenery is equally fine as the valley level is lower.*

Herr Adolf Gstorner similarly describes the western portion of the Julian Alps. The boundaries of this are the Gailitzthal and Savethal from Pontafel to Weissenfels, the Planitzthal, Koronitzthal, Isonzo to Zaga, thence across to the Canale di Resiutta, and the Fella valley to Pontafel. The chief summits are the Mangart (2,678 m. = 8,785 ft.), and the Wischberg or Jof di Montasio (2,752 m. = 9,028 ft.). The district is more visited than the Alps of Carnia since there are two Schutzhütten, on the Mangart (6,560 ft.), and on the Wischberg (5,980 ft.). Attached to the volume is a map of the Eastern Alps (western portion) 1,500,000; on which the shelter huts are marked in red in different ways according to their capacity for entertaining tourists.

Das Matterhorn und seine Geschichte. Von Theodor Wundt. (Berlin. 1895.)

Die Jungfrau und das Berner Oberland. Von Theodor Wundt. (Berlin. 1897.)

Engadin-Ortler-Dolomiten. Von Theodor und Maud Wundt. (Stuttgart. 1900.)

In these beautifully illustrated volumes Major Wundt has broken somewhat fresh ground in the realm of alpine literature. His

How neglected the district is, appears from the fact that not a single name within its limits is found in the pages of *Baedeker's Eastern Alps* (1895), whilst in *Ball's Eastern Alps* (1873) there are at least two pages (§ 62, Route I., Longarone to Sacile).

previous works, which have received favourable recognition in these pages,* were more purely pictorial, were presented in a form not easily handled, and were of a nature likely to appeal to the few rather than to the many. The volumes before us are convenient both to look at and to read, are uniform in size and general get-up, and are, we understand, intended as the first instalment of a work in which, under the general title 'In Luftigen Höh'n,' it is hoped successively to deal with all the well-known districts of the Alps. Each volume may be said to fulfil a three-fold purpose, forming, in the first place, an illustrated guide book to the districts treated of; recording, secondly, the trips on which the photographs, which so profusely adorn its pages, were taken; and giving, in the third place, a *résumé*—sometimes scanty, but sometimes, as in the case of the Matterhorn, very ample—of important and interesting points connected with the alpine history of the neighbourhood.

It is, perhaps, as picture books that the British reader will chiefly appreciate these works, though the text, often interesting and always bright, will not fail to instruct and amuse those who may find time to read, or even to skim it; while to those who wish to use the volumes as guide books the text and illustrations so complement and amplify each other as to give, taken together, a vivid picture and a clear topographical idea of districts previously unknown to the reader. Major Wundt and his wife (whose services are recognised on the title-page of the third volume) are keen climbers, skilled photographers, and clever bookmakers. They have a definite aim in view, and possess the energy, as well as the ability, to carry it out efficiently. They may be heartily congratulated on the work they have accomplished, and may feel assured that their readers will welcome further instalments with interest and appreciation.

Each of the three volumes before us consists of about two hundred pages, artistically bound and beautifully printed, in Latin type, on excellent paper. Skeleton maps, original in design and remarkable for their power of conveying at a glance the lines of the chief ridges and sub-ridges, have been introduced into the two latter volumes, and will doubtless form an important feature in others yet to come. The illustrations are so numerous and so varied that it is impossible, in a notice like the present, to do them anything like justice. Vignettes and small views of huts, hotels, guides, climbing incidents, &c., are freely scattered through the books on almost every page, while the quarter- and half-page photographs, and the beautiful full-page plates, always artistic and admirably reproduced, and often delicately tinted in faint shades of blue, green, grey, or sepia, combine to make these volumes take a very prominent place among the many beautifully illustrated books which alpine literature now boasts. We heartily wish Major Wundt the success which he deserves, and learn with

* *Alpine Journal*, vol. xvi. p. 341, and vol. xvii. pp. 146, 374.

pleasure that there is some prospect of these works appearing in an English dress. C. W.

From the Cape to Cairo. By E. S. Grogan and A. H. Sharp. 8vo, pp. 378; ill. (London: Hurst & Blackett. 1900.) 21s. net.

We mention this book not for what it contains, but for what is omitted. Mr. Grogan, a member of the Alpine Club, walked through Africa from the Zambesi to the Nile. On the way he passed under the range of Ruwenzori, but he disappoints us in giving us only a borrowed illustration and an apology, in the preface, for his having done no climbing, owing to the superior attractions of big game shooting. He bears out what Mr. Moore found as to the invisibility of the range on account of atmospheric disturbance by heat, for though he was some time in its neighbourhood he only once saw it. Some details are given of the volcanoes further south. The interesting record-breaking which the book describes we have not to do with here.

The Yosemite, Alaska, and the Yellowstone. By W. H. and S. K. Wiley. 4to, pp. 230; ill. (London: Offices of 'Engineering.' 1894.)

To the three places named on this title increasing attention is each year being paid by the climber, and any volume containing illustrations and descriptions of the scenery will be looked at with interest. This book gives an account of a tourist trip. It contains the record of only one climb to 11,000 ft., and that was on the railway, while of the passengers who tried to ascend a little higher 'some found the rare atmosphere a severe tax on their respiratory organs.' The illustrations are very numerous and the mountain and rock views would be of considerable value were the printing of the plates not so indifferent as it is.

Hunting in Many Lands. 8vo, pp. 447; ill. (New York: Forest and Stream Publishing Co. 1895.)

This is one of the volumes on sport of 'the Boone and Crockett Club.' The chief item of interest here to the reader of the 'Journal' is H. L. Stimson's 'The Ascent of Chief Mountain, Montana,' pp. 220-237, with two good illustrations of the great rock crown that forms the top portion of the mountain. The ascent seems to have afforded some good rock-climbing during the final 1,500 feet. There is a local legend that many years ago an Indian braving the spirit of the summit, who repeatedly threatened to hurl him down, safely reached the top. There are other articles in the volume that will appeal to the mountaineer who is also a sportsman. These are 'A Bear Hunt in the Sierras,' 'Big Game of Mongolia and Tibet,' and 'To the Gulf of Cortez,' which last describes the shooting of mountain sheep.

Belledonne et les Sept-Laux: Montagnes d'Uriage et d'Alleverd. Par Henri Ferrand. 4to, pp. 122; plates. (Grenoble: Gratier. 1901.)

This is a beautifully printed and exquisitely illustrated work. Reasonable objections may as a rule be made to a scattered

arrangement—or rather lack of arrangement—of illustrations upon a page so as to interfere with the continuity of the letterpress, but here one is perhaps thankful that this style has been adopted. The text meanders among dainty views of lakes and cascades, flowers, peasants, rocks, and snow peaks, while the full-page plates preserve the feeling of expanded and continuous beauty which every mountainous country yields. This is certainly a book that ought to be in the possession of all who care that mountains should in literature receive only that reverent and respectful treatment that is their due at the hands of an enthusiastic admirer. This Monsieur Ferrand is; and it is hardly necessary to add that in his hands the text is fit accompaniment to the illustrations. The work is issued in various styles at prices varying from 20f. to 50f.

Die H6chsten Teile der Seealpen und der Ligurischen Alpen in physiographischer Beziehung. Von Dr. Fritz Mader. 8vo, pp. 235. (Leipzig: Fock. 1897.)

Those who can read German, and are also interested in the southern portion of the Western Alps, will do well to see this book. A description is here given of the district orographically and geologically, of its climate, rivers, lakes, and mountains, the climbs already made and those still to be made. A great deal of information, which is all of interest, is brought together, though the unfortunate absence of an index or a map makes it difficult for the reader to find his way about. There are twelve illustrations of mountains from photographs by the author, from whom the work is to be obtained direct (Rue d'Augsbourg 1, Nice) for 3f.

Die Alpen. Sammlung G6schen. Von Dr. R. Sieger. 8vo, pp. 170; map, ill. (Leipzig: G6schen. 1900.) Pfg. 80

A good introductory handbook dealing with the Alps in general in every aspect, except that of climbing, which is considered to be of too special an interest to be brought into a short popular work. The division of the Alps here used is that of Dr. B6hm, who makes only two main divisions, the Eastern and the Western Alps, including in the latter what we more commonly know as the Central Alps.

The Indian Borderland. 1880-1900. By Col. Sir T. H. Holdich. (London: Methuen. 1901.) 15s. net.

Mount Omi and Beyond: a Record of Travel on the Thibetan Border. By A. J. Little. (London: Heinemann. 1901.)

In Tibet and Chinese Turkestan. By Capt. H. H. P. Deasey. (London: Unwin. 1901.) 21s.

The literature that deals with the special interests of the climber in the vast mountain regions of Central Asia is as yet very small in amount, and our knowledge must still be gained from the reading of works on general travel. Among these the three named above will be found useful.

Col. Holdich's valuable record of survey work will be read throughout with interest, but especially the chapter in which are described his experiences on the Pamirs, on which he and his party were nearly isolated by a snow storm.

Mr. Little, on his journey towards Tibet, passed close by vast snow-covered ranges which remain practically unexplored by Europeans, and he gives a very readable account of what he saw. We note that the Buddhists of Western China, following the practice common also to their brethren in Northern India and in Japan of choosing for their holy buildings positions that afford a wide outlook, have erected temples and monasteries on the summit of Mount Omi, which, according to Mr. Little's admittedly doubtful calculation (p. 86), lies at 10,500 ft.* This choice of site is in marked contrast with the European preference for the rich flats of a river-side, but accords with a common religious feeling which inclined Greek thought upwards to the peaceful summit of Olympus and compelled the nomad Hebrew to receive the law from the terrors of Sinai.

Between 1896 and 1899 Captain Deasey made journeys of exploration on the borders of Kashmir, Tibet, and Turkestan. He passed through much country not previously visited by Europeans, and carefully mapped out much that has hitherto been unmapped. He gives a very full and careful account of his expeditions, making it at the same time most useful in its details for any future explorer, and for the arm-chair traveller one of the most readable books of travel of some years past. The map is a careful piece of work and the illustrations are very good. The district is one of special interest to readers of the 'Journal,' and it is one where the traveller still finds that the inhabitants place every possible obstacle in the way of his progress. Any information which may be given about it is, therefore, of great value.

These books will anew impress upon the reader the fact that in at least one part of the world there is still very much for the members of Alpine clubs to climb and to explore.

The House on Sport. By Members of the Stock Exchange. 8vo, ill. (London: Gale & Polden. 1898.) 10s. 6d.

In this volume will be found an article on 'Mountaineering,' written by Mr. J. O. Maund and illustrated by Mr. McCormick. The article is the endeavour—and because of its quality should prove the successful endeavour—of an enthusiast to convey to the uninitiated some understanding of what mountaineering is, and of why it exercises so strong a fascination as a sport, despite its reputed dangers. Those possible dangers are illustrated by Mr. McCormick in six sketches, which are sufficiently alarming, one would think, not only to warn the novice against the rashness of ignorance, but even to dissuade him altogether from attempting

* Given as 16,500 ft. by an evident misprint, and on Mr. Little's map as 11,100 ft.

further climbing. The proceeds from the sale of the book are given to a Children's Dinner Fund.

Hannibals Alpenübergang: ein Studien- und Reiseergebnis. Von Josef Fuchs. 8vo, pp. 152; maps. (Wien: Koenig. 1897.) M. 3.50.

Professor Fuchs has made the latest contribution to a controversy that will continue for ever to exercise the ingenious scholar. He first goes fully into the question of the 'island;' and then, from local investigation as well as from literary research, argues for the claims of the Valley of the Durance and the Pass of the Mont Genève. He gives his reasons against the Mont du Chat, the Little St. Bernard, and the Mont Cenis, but not against the Col de l'Argentière, which is now, perhaps, the only serious opponent of the Mont Genève.

Armenia: Travels and Studies. By H. F. B. Lynch. 2 vols.; 8vo: maps, col. ill. (London: Longmans. 1901.) 42s. net.

Since Armenia is a country of mountains, these two handsome volumes, descriptive of Armenian travel, offer to the reader of the 'Alpine Journal' much that is of interest. The illustrations, taken from sketches and photographs, are excellent and numerous, and are printed in colours, mostly in slight tints, which relieve and please the eye, and help the mental imaging of the landscape, and especially of its architectural and rock features, though in the few plates where a closer imitation of nature has been attempted the result loses in effect. The volumes deal very fully with the Armenian people, their customs, history, and Church life, and with what especially concerns us here, the mountaineering and survey work done by the author. In 1893 Mr. Lynch ascended Ararat, and in vol. i. describes his ascent, but spoils the narrative by an indiscriminate use of both the present and the past tenses of his verbs. Twelve views, including the fine frontispiece, are given of the mountain. To the list of successful ascents given on p. 199 we would add, with some doubt as to the fact, the ascent by a girl of seventeen, recorded in the 'Alpine Journal' for February 1901, p. 336, and would note that Herr Oswald's ascent is described by Mme. S. Meunier in 'De Saint-Petersbourg à l'Ararat' (Paris, 1899). The chapter on geography at the end of vol. ii., dealing with the distribution of mountains in Europe and Asia, will set the reader's fancy at work on many fascinating questions as to the part which mountain barriers may play in the migrations of the human race and the formation of tribal and of national character. In the second volume will be found accounts of ascents and careful surveys, in 1898, of Sipan, Nimrud, and Bingöl.

The work is made complete by a careful index and a full bibliography of the literature relating to Armenia, in which all items referring to Ararat will be found gathered under that heading.