

REVIEWS AND NOTICES.

Stubai: Thal und Gebirg, Land und Leute. (Leipzig: Duncker & Humblot.) 36 M.

If this magnificent work is to be followed by similar 'monographs' on the other valleys of Tyrol, those who like to keep up their Alpine libraries will tremble for their pockets. Not only will the cost of the volumes run to a considerable sum, but their bulk will necessitate operations in bricks and mortar more extensive than the average householder can contemplate without terror. It appears to owe its inception to two events: the opening of the new Dresden Hut in 1887, and the celebration, in the following year, of the fortieth anniversary of the accession of his Majesty Francis Joseph I. Now as every year new huts are opened in most valleys, and an anniversary of the Emperor's accession is celebrated in them all, one does not see why a 'Gesellschaft von Freunden des —thals' should not also come into existence in them all, with the object of doing for its own valley what Herr Carl Gsaller, Professor von Dalla Torre, and their friends have done for Stubai.* The valley would indeed have had a fair share of literary fame had nothing been written on it since the appearance, now more than a quarter of a century ago, of the well-known work by Herren Barth and Pfaundler. But no doubt its easy access from Innsbruck brought it early into notice, while, once discovered, its extraordinary beauty would prevent its ever being overlooked again. It is hardly too much to say that in this respect it is the ideal Alpine valley. It is just of the right length to allow the snowy peaks at its head—the highest of which, most delicate in form, lies almost symmetrically in the axis of the valley—to show plainly from the lower end without too severely limiting the view; the minor summits, being of limestone, are bold and craggy in outline; the lower slopes are fertile, and the villages well-to-do; and, by a fortunate accident of the ground, the floor of the valley slopes *upwards* for some miles towards its mouth (the stream, of course, flowing through a deep ravine), so that the view from that point embraces the whole of its broad lower portion as a foreground, and extends some way into the narrower part; the peaks and glaciers, as has been said, forming a noble background. The valley is, therefore, one possessing every attraction for the summer holiday-maker, and by no means devoid of incitements for the climber. The peaks, it is true, are not 'first-class' in point either of height or of difficulty. The highest does not much exceed 11,500 ft., and there is an easy way up most of them. One peak, indeed.—the Hohe Villerspitze (3,104 m.)—is said to be a difficult rock-climb, and no doubt among the limestone precipices of the Serleskamm a gentleman might break his neck with neatness and despatch; but none of the

* We prefer to keep the old, or at least usual, spelling, which has the authority of Barth and Pfaundler, and comes nearer to the local pronunciation *Stubach*; at all events until some good etymological reason is given for the change.

glacier peaks has any reputation as a 'problem.' Nevertheless, a climber of the 'old school,' whose main object is healthy exercise among beautiful scenery, will find them worth a visit.

We have said little about the book itself. Indeed, it is hard to know where to begin. Every subject that an Alpine valley can suggest is fully treated in it. First, we have the topography, set forth in many cases with the minuteness of a special guide-book; with full particulars of ascents, first and other. This is copiously illustrated with photogravures from drawings by Mr. Compton and others, and from photographs. Of the former, perhaps the most beautiful is the view of the Fernau-Ferner, with the Schaufel-Spitze at its head. There are also woodcuts innumerable scattered throughout the text. Next we have geology, with a full map; then botany, zoology, agriculture and forestry, history, ethnology, philology, art, industry, and trade. Here, again, illustrations are plentiful. Professor von Defregger contributes one of his energetic groups, showing Hofer on the road from his headquarters at Schönberg, addressing his men before the fight on Berg Isel. There are also some delightful reproductions (apparently) of pictures representing the 'Schützencompagnien,' or local militia, performing evolutions. Herr Christian Schneller writes the chapter on the local dialect and place-names. In the case of the latter, he takes a different view to Steub, who saw Romance derivations everywhere, and tries, whenever possible, to find (what seems far more probable) a Teutonic origin for the names of villages and homesteads. In the statistical chapter we learn that for more than a century the population of the valley has been decreasing. It is less by more than one-eighth than it was in 1780. This might be expected; but it is curious to find, in a land of compulsory military service, that the male population considerably outnumbers the female. These few points will show the variety of the subjects dealt with in this most interesting book.

Dizionario Alpino Italiano. Da E. Bignami-Sormani e Carlo Scolari.
(Milan: Hoepli.)

This little book is a new departure in guide-book making; for though the alphabetical arrangement is found in some of the very early Swiss guide-books, their scope and aim are so different from those of the work of the two Italian engineers that they can hardly be regarded as its predecessors. Of the two collaborators, Signor Bignami catalogues the peaks and passes all along the Italian frontier with some of those belonging to the Apennines; while Signor Scolari takes the valleys, but does not go beyond the province of Lombardy. Thus 'Valtellina' appears, but not 'Valpellina.' Neither confines himself strictly to political boundaries. Thus 'San Gottardo' is given, though both ends of the pass are in Switzerland. So, again, the Sulden Thal, and other valleys whose upper end abuts on Italy, though they are wholly outside of its frontier, find their places in the second part. The general aim has been to give in the case of peaks and passes the following information: Height above sea, the subdivision of the Alps to which the point belongs, the nearest place which can be reached on wheels (with its height, and the valley in which it lies), the time required for the

ascent or passage, reckoning from the last-mentioned point, with a mention of the places where inns and guides may be found. Mule or foot paths, where they exist, are also recorded. In the second part (valleys) the facts given are naturally somewhat different. We are told, with regard to each valley, into what main valley it opens, its direction, its neighbours on either side, the nature of the road which traverses it, the passes leading out of it and the peaks surrounding it, with occasional information as to routes. We can imagine that as a handy book of reference the 'Dizionario' may be very useful, though it is difficult to believe that it can ever take the place of a guide-book arranged in the way that is now usual. It may be added that the book contains upwards of 300 closely-printed pages (5½" by 3½"), is strongly bound in cloth, and costs 3.50 fr.

The New Tourist's Map of Switzerland. The New Tourist's Map of the Austrian Alps. 1s. 6d. each. (Cassell & Co., Limited. For the Atlas Publishing Co.)

On p. 270 of vol. xiii. of this journal Mr. Coolidge called attention to the excellence of some of the Alpine maps in Andree's 'Allgemeiner Hand-Atlas.' An English edition of this atlas is now being brought out; and we have received from the publishers sheets 53 (Switzerland, 1 : 800,000) and 49 (Austrian Alps, 1 : 1,125,000) mounted and folded for the use of travellers. We can safely assert that they merit all the praise which so experienced a student of maps as Mr. Coolidge was able to give them. Considering the smallness of the scales—respectively, 1 in. to 12½ and 17½ miles—the amount of information which they give is remarkable; and for a general view of the arrangement of mountains and valleys, even to the smallest ramifications, they are quite unsurpassed of their kind. The only fault we can find is that the tints have been made rather heavier than in the German edition, which makes them somewhat less pleasant to the eye.

With Sack and Stock in Alaska. By George Broke, F.R.G.S.
(London: Longmans. 1891.)

This little book is so fresh and simple that one does not feel inclined to deal severely with it, although rather more care and pains would have greatly improved it by retrenching its excessive colloquialism, as well as by adding details upon matters which the author must have noted, though he has not mentioned them. He gives us little impression of the character of the scenery, and not much of the native population, while the most insignificant incidents, such as the slipping of a bag of oatmeal into the water, or the snoring of a companion (not but what a snoring companion is a fearful thing on a journey), are fully recorded. However, as we have said, the unpretentiousness of the work disarms the critic, and, although much of it is spent upon trivialities, it is by no means dull, and gives a lively picture of the kind of hardships and difficulties which the explorer has to encounter in Alaska. Besides cold, the chief of these are the total absence of men accustomed to snow and ice work, and the distance from any base of operations where

supplies can be had, making it necessary to carry all the stores for long distances, with considerable risk while the transit is by sea, for the coast is often exposed, and with serious slowness of movement when journeying by land, because there are, of course, no regular trails, seldom even the rudest sort of track, and the scrub is often extremely dense. Thus a great deal of time must be allowed for every enterprise, and if stores are lost, or any other mishap occurs, it may prove fatal to the expedition, because the providing of fresh stores or other necessaries may need a journey of some four hundred miles to Sitka, the northernmost emporium on the coast.

The 'objective' of Mr. Broke's journey was Mount St. Elias, long reputed to be the loftiest mountain on the North American Continent, though some United States surveyors have lately, with commendable impartiality, reported that they find it, so far from being 19,000 feet, actually lower than Orizaba and Popocatepetl in Mexico. His party—for, owing to the loss of his snow spectacles, he was unable to join in their last climb—succeeded in reaching a point nearly 12,000 feet high on its southern side, but doubted whether the summit could be attained on that side, and were indeed not very sanguine as to its accessibility either from the south-east or the south-west, the parts turned towards the sea. They heard a story from the natives that its slopes were much more gentle in the other direction, but had no chance of verifying this, as a circuit to reach those slopes might have meant a delay of several weeks more, and the season for mountaineering is short in these high latitudes. Although Mr. Broke does not write very hopefully about the mountain, the difficulties do not seem greater than those which have often been overcome elsewhere. With a more thorough exploration of the approaches and plenty of time, neither the distances nor the acclivities need affright and alarm our alpinists. It used to be supposed that Mount St. Elias was a volcano, but Mr. Broke more than doubts this, reporting all the rocks which his party saw as shale, apparently carboniferous, or sandstone, though he mentions that he picked up 'pieces of red amygdaloidal lava' from a moraine, which might indicate that a circular hollow lying on the south side of the mountain, and called by them 'the Crater,' was really of volcanic origin. The point is one of much interest, which it ought to be easy to determine, so it is a pity that none of the party seem to have possessed geological knowledge.

J. B.

My Home in the Alps. By Mrs. Main. (London: Sampson Low).

It would not, perhaps, be strictly true if (adapting a remark made by the late Master of Trinity with reference to quite another person and subject) we were to say that Mrs. Main has discovered the Alps and is making them known to the polite world; but there can be little doubt that on her must fall some portion of the responsibility for the existence of the tourist who 'must do the Matterhorn some time or other, you know,' or who, on seeing from afar the medial moraine of a glacier, inquires whether it is a carriage-road or a bridle-path. No doubt, for those who are gifted with the power of fluent expression it is difficult to enjoy in silence; but if they will let all the world into

the secret of their enjoyment, the world will insist on trying to share it. For a long time Alpine literature was of a quasi-esoteric character, and Alpine climbers were the subjects of good-humoured banter, while such admiration as they inspired was chiefly of the kind known as 'mutual.' But when ready writers took up the subject, aided, perhaps, by the 'new journalism,' for which the esoteric has neither charms nor terrors, then railways to Zermatt and Grindelwald became only a question of time. However, in justice to Mrs. Main, we must say that she does her best to educate those whom the climber of the old school must admit to be his masters—those whose competition regulates prices, whose convenience fixes 'the season,' whose demand creates the supply. In her present book she discourses on guides, glaciers, avalanches, Alp-life, sometimes with the special view of eradicating popular errors on those subjects. Whether there are really 'many persons' who hold the opinions on some of them—e.g., guides—which she sets herself to correct is a question which she has more opportunities of deciding than we; but if there are, her book is certainly not uncalled for. Incidentally she tells some amusing anecdotes, as of the guide who was found hauling up the Breithorn an exhausted tourist, in spite of piteous entreaties from the victim that he would turn back, and justified himself by saying, 'Er kann gehen, er muss gehen—er hat schon bezahlt!' In her desire to correct false impressions she once or twice goes a little too far on the other side. For instance, it can hardly be said that an 'alp' has nothing whatever to do with the Alps. Whatever may be the derivation of the perplexing word, it is pretty certain that one use of the name comes directly from the other, and quite certain that 'alps' under that name are met with in the Alps wherever German is spoken, and in some parts where it is not; but out of the Alps nowhere.

The book ends with some accounts of climbs, chiefly made in autumn—a season which Mrs. Main with good reason commends. The lover of the Alps, however, who cares for something besides climbing, and does not enjoy her privilege of dwelling all the year round among them, will not always care to wait till the glory of the summer is quite past.

New Fragments. By John Tyndall, F.R.S. (London: Longmans.)

Though only a small portion of this volume is devoted to Alpine matters, its appearance will be welcomed by all members of the Club as some indication that the veteran climber and man of science whose name stands on the title-page has rallied from the illness which caused so many months' anxiety to his friends. The contents have, indeed, all appeared elsewhere; but we may take it that the labour of preparing them again for the press and correcting the proofs must have demanded, if not robust health, at least a fairly advanced stage of convalescence. The greater number of the papers—on the Sabbath, on Goethe's 'Farbenlehre,' on Count Rumford, and so on—call, as has been said, for no remark here; though we may pause for a moment to admire the ingenuity of the method by which (as described in 'The Rainbow and its Congeners') the Professor succeeded in reproducing

in his laboratory 'a mixture of fog and drizzle like that observed from the door of our Alpine cottage.'

Of the two Alpine papers, the first, entitled 'Life in the Alps,' was written for the Boston 'Youth's Companion.' It is an account in the Professor's well-known descriptive style, perhaps with rather less of the illustration of scientific laws from familiar phenomena than we are used to find in his writings, of his life and surroundings at Alp Lusgen. Avowedly written for persons to whom the Alps are not familiar, there is naturally not much in it that is new to the Alpine *habitué*; but we note one curious observation, which seems to have been added since the paper was originally published. Few people, we take it, have any idea that the stones and boulders which lie about in a grass couloir are, even when they appear to be reposing tranquilly on the grass, in reality pursuing a steady course downwards. Yet that this is so seems pretty certain; not only because above and behind the larger ones a 'grass-covered furrow' is usually to be found, but because 'sods and smaller stones are piled up in front.' So gradual is the motion that the grass has time to grow up behind the stone, and no trace of fresh earth can be seen in its rear.

The second and longer paper, 'Old Alpine Jottings,' appeared some five-and-twenty years ago in 'Macmillan's Magazine.' It is full of interesting reminiscences—one of the most entertaining, perhaps, being that of the author's first visit to Switzerland in 1849, when he walked from Basle to Zürich, went up the Rigi, lost his way between the Rhone Glacier and the Grimsel (a district in which, judging from another incident related in this paper, he seems to have a knack of losing his way), and lastly caught the steamer at Neuhaus by the process of leaping on board from the quay after the vessel had started. The remainder of the paper deals for the most part with matters which will be already familiar to the reader of the Professor's other published works, but which are none the less interesting in their new combination.

A Tramp to Brighton. By E. S. Kennedy. (London: Simpkin, Marshall & Co.)

In spite of its second title, 'De Profundis ad Suprema,' this little book has nothing to do with the Alps. Indeed, its only claim to notice in these pages is that indicated in the old University phrase, 'founder's kin.' The list of our original members is getting so short that we can hardly pass over in silence anything which serves to remind us that any one of them, especially one who in old days deserved so well of the Club as Mr. Kennedy, is still in the land of the living. As a matter of fact, the book is an account of the way in which, some thirty-five years ago, the author went to work to reclaim a thief. In accomplishing the task he went through some queer adventures, and made acquaintance with some decidedly 'queer coves.' Among other incidents we have a visit to a professional garotter; a supper given by the author to some eighty guests, all of whom were what is technically called 'on the cross'; a 'friendly lead' for the benefit of a pal 'in trouble,' and so forth. The tramp to Brighton, which the author made in company with his particular *protégé*, was

the last stage in the process of reclamation. We are glad to find that it answered, since by that time Mr. Kennedy seems to have become so thoroughly initiated into all the arts cultivated in Whitechapel that, if he had not induced his friend to come 'on the square,' the reader is tempted to fancy that he might himself have gone 'on the cross,' in which case the Alpine Club would, in all probability, have prematurely lost a valued member. Though, as we have said, the experiences related are of a generation back, there is probably much in them which would still deserve the attention of social reformers.

Les Vingt-deux Années du Père Tasse à Chamrousse. Par Henri Vincent.
(Grenoble, 1891.)

The illustrations by M. Emile Guignes, always clever and often felicitous, are, on the whole, the best part of this volume. In the text we have an average specimen of modern French light writing, scrappy and sometimes irritating, but at any rate not dull. The only passage to which any mountaineering interest can be ascribed (and that by straining a point) describes the difficulties of access to a small mountain inn when it is snowed up, and also of coming down from it. We are grieved to see a writer of French prose picking up the cast-off clothes of the lower sort of English comic journalist. 'Des représentants de la race porcine' (meaning thereby pigs) reads like a translation from some sporting paper of the Pickwick generation. But we are not entitled to assume that M. Vincent takes his own prose seriously. The visitors' book at the inn aforesaid (Roche-Béranger on Chamrousse) gives occasion for some fairly good diversion. M. Vincent seems to know English well, and one Englishman has won his approval by writing in this book 'Dam (*sic*) the Germans!' against some entries in ill-spelt German, and certainly in the worst possible taste, purporting—and, it is to be hoped, only purporting—to be made by Prussian officers of some standing. F. P.

Le Alpi Occidentali nell' Antichità : Nuove Rivoluzioni. Pel Dott.
Gio. Allais. (Turin: Bona.)

The ethnology of the Alpine countries is an exceedingly interesting subject, to which justice has as yet hardly been done. Of the forty-eight Alpine tribes whose conquest by Augustus was recorded on the trophy whence Turbia took its name, by no means all have been locally identified—which alone shows how much is still to be learnt. The origin of many place-names, too, is still quite obscure, and a study of these in the intervals of climbing might throw valuable light on ethnological problems. Dr. Allais does not enter very much into this part of the question, but discusses rather the distribution of those tribes in the Western Alps whose names have been recorded, with some observations on their customs, social organisation, and so on. Whether he can sustain the claim made in his sub-title to have revealed any new information is a question which may be left for experts to decide. Incidentally he discusses certain famous passages of the Alps, among them, of course, Hannibal's, giving his verdict in

favour of Mont Génèvre.* His accuracy is not always above suspicion, as when he turns C. Plinius *Secundus* into 'C. Plinius II.' (on the analogy, we presume, of a *Vincent* Philippon whom he mentions, who seems to have had a fancy for writing himself '2,000 Philippon), and some of his etymologies are undoubtedly wild. But his book is evidently one which all who are interested in the subject should read.

Mittheilungen des D. Ö. A. V. 1891.

Many of the points of interest in this publication have already been referred to in the pages of the 'Alpine Journal.'

Winter tours are becoming more frequent. The Riffler (10,560 feet), in the Tuxer Kamm, was ascended on January 1, 1891; the Gross Glockner (12,460 feet) on December 27, and again on December 29, 1890; the Habicht (10,742 feet), in Stubai, on December 25, 1890; the Grand Paradis on January 25, 1891; the Adamello on February 25, 1891. The well-known Herr Merzbacher, in 1890, made a number of ascents in North Africa and the Pyrenees. Here he reached the Postillon de Nethon four times, but on each occasion was prevented by bad weather from reaching the summit of the Pic de Nethon.

Sixteen new huts were opened in 1890. Of these the highest is the Refuge Vallot, at a height of 4,450 m. (14,600 feet), within one and a half hour of the summit of Mont Blanc. The greatest novelty is a hut built on the Übelthal Ferner (Ridnaun), at a height of 3,400 m., by Professor C. Müller, of Teplitz, which is lined with cork slabs, and is said to be both very dry and very warm.† The number of the refuges in the Alps now amounts to nearly 600, and many of them offer very superior accommodation. Such, for instance, are the Rifugio Vittorio Emmanuele, which is described as a 'palace,' or the Dresden Hut in the Stubai. The Franz Senn Hut, near the Schwarzenberg Joch (Stubai), has been taken over by the Innsbruck section of the D. Ö. A. V., who propose to construct a path to it which will be continued by the Section Amberg to their hut in the Sulzthal.

The new hut, Erzherzog Johann, on the Adler's Ruhe, was opened on June 29, 1891. About thirty persons were present. This hut and the fittings cost upwards of 560*l.* Amongst a number of new ascents is chronicled that of the Cima del Largo, in the Bergell Alps, by Herr v. Rydzewski. Was not this mountain ascended long ago by members of the Alpine Club? ‡

Amongst mountain ascents by new routes, perhaps the most interesting is that of the Kleine Zinne from the north, by Dr. Hans Helversen, on July 28, 1890. To judge by the sketch, this seems to have been very difficult. From the Patern Sattel the party went round the north base of the peak, and ascended the couloir between

* For a discussion of this question, see *Alpine Journal*, vol. xi. pp. 267 sqq.

† *Alpine Journal*, vol. xv. p. 558.

‡ [Herr von Rydzewski's Cima del Largo (3,188 m.) is a minor peak to the N. of Pizzo Bacone. Mr. Freshfield's Cima del Largo (3,402 m., see *Italian Alps*, p. 77) seems to be now called C. del Castello.]

the Grosse and Kleine Zinne nearly to its head. Here, turning left, they climbed along the base of the cliffs to a platform immediately under the summit. The ascent was then made by the left of the two cracks (Rinne) which traverse the almost vertical face. The climb was more difficult because Dr. Helversen had left his climbing-shoes (scarpetti) behind. The height of the final cliff appears to be about 300 feet. Dr. Helversen also effected, on July 30, 1890, the ascent of the Zwölferkofel from the Giralba Joch.

Two interesting Jubilees have recently been celebrated.* The veteran Professor F. Simony, whose name is inseparably connected with the Dachstein Group, made his first visit to the Karl Eisfeld in September 1840, and his latest in September 1890, at the age of 77. His prophecies about the glacier have been fulfilled. It is rapidly melting away, and the final tongue, separated from the upper portion by a cliff, is only a heap of rapidly dissolving fragments. The first ascent of the Gross Venediger was made by Dr. Anton v. Ruthner, Freiherr v. Gravenegg, and others, on September 3, 1841.† These two gentlemen are the only survivors of the party, and they were present on the occasion of the Jubilee in 1891. They both came with a numerous party to the Kursinger Hut (8,714 feet), in the Obersulzbach Thal, on September 2, 1891, but did not join in the ascent of the Gross Venediger, which was made on September 3 by upwards of one hundred persons.

The exploration of the grottoes of the Reka, near S. Canzian, was resumed in 1890, and a further distance of $1\frac{1}{4}$ kilometre ($\frac{3}{4}$ mile) was explored. In the course of this the largest hall yet seen was discovered, 1,000 feet in length, 70–100 feet broad, and 200 feet high. It is called the Rinaldini Dom. At the twenty-fourth waterfall was a lake whose exit was only found by floating corks with lights upon them. The outflow was by a small arch, which barely afforded a passage to the boats. This led into another great hall and another lake, at whose end the stream was completely blocked by a great accumulation of small wood (Reisig). The stream was, however, regained by a passage above, but progress was soon stopped by a third lake without any apparent exit. This was on October 5, 1891. Since that time the attention of Section 'Kustenland' has been directed to making the caverns more accessible. The small band of workers who have for years devoted the intervals of business to the work of exploration, has just lost one of its most zealous members, Bergrath A. Hanke, who died December 3, 1891.

At Ober-Urem, about five miles above S. Canzian, the Reka loses a part of its water through cracks in its bed. When the water is low, the millers of S. Canzian increase their supply by partially filling up the cracks. The corporation of Trieste, which has long been anxious for a good water-supply, proposes to stop up these cracks entirely, and to construct an aqueduct from Ober-Urem to bring water into the town. The authorities of the 'Süd-Bahn' object to the plan, asserting that the water which passes through the cracks in the bed of the Reka

* *Alpine Journal*, vol. xv. p. 349.

† *Alpine Journal*, vol. xv. p. 556.

supplies the springs at Aurisina (between Trebich and the Timavo), from which they obtain a water-supply. To test the question, a quantity (10 kilo = 22½ lbs.) of fluorescein and (6 kilo = 13½ lbs.) of caustic soda was put into the Reka at Ober-Urem on June 12, 1891, at 8.30 P.M. Observers were stationed to watch from 6 A.M. to 6 P.M. on June 13 at the Lindenhohle, near Trebich (the stream in which is supposed to be the Reka), at the springs of Aurisina, and at the mouth of the Timavo (near Monfalcone). No discoloration, however, was observed at any of these places. An independent observer, however, who was sent to the S. Canzian grottoes, discovered that the progress of the discoloured water was much slower than was expected. The discoloration did not reach the entrance of the grottoes until 6.45 A.M. on June 13, having thus taken ten hours to traverse less than five miles. In the cavern itself the coloured water advanced only 1 kilom. (5 furlongs) in 1½ hour. The green colour remained intense for six hours. Further experiments will therefore be necessary to settle the matter.

The greater number of the accidents in the year 1891 have been noticed in the 'Alpine Journal.* Most of them, as the editor remarks, might have occurred on Dartmoor as well as in the Alps. For some of them the system of marking routes now so much in vogue is to some extent responsible. Herr Holst on August 13, 1891, started alone from Moistrana to cross the shoulder of the Terglon by the Deschmann Hut to Bad Veldes. He wore shoes without nails, carried only an umbrella, and was very insufficiently supplied with provisions. He passed the Deschmann Hut, and then seems to have missed the way and followed a track (also marked) which descends by a difficult footpath into the Vratathal. Here the body was found on September 4. It was in a sitting posture. One shoe was off and the other untied, and he had plainly died from exhaustion or some kind of fit. A similar accident occurred on the Hochkönig. Herr Edgar Krickl (Wien) ascended the mountain from Mitterberg on August 19, 1891, and was not again seen alive. The body was found on September 8 in a sitting position in a hollow of the rocks. His knapsack was beside him, and he had evidently taken shelter from a storm; had, it is supposed, fallen asleep, and been frozen to death. On September 20, 1891, two tourists perished on the Glärnisch, but no particulars are given. The bodies of Paganini and Leusch, who were lost on the Säntes in October, 1890, were found in June, 1891, in the Schwarzen Tobel. The body of Paganini was in a sitting posture leaning against a rock. His ice-axe and overcoat lay beside him; both hands were in his pockets. He was sheltering from the storm which surprised them, and had fallen into a fatal sleep. The rope round his body led the searchers to a snow bed, in which the body of Leusch was found. These accidents show us how essential is the advice given by Mr. J. H. Wicks † at the close of his paper to weigh carefully your own and your companion's powers, and to keep a sharp look-out on the weather.

* *Alpine Journal*, vol. xv. p. 539.

† *Alpine Journal*, vol. xv. p. 343.

The shelter huts which are now so numerous, and which so materially lighten the labour of ascents, are generally provided with a box to receive the payments of visitors for the use of the building. There are also in many cases supplies of tinned meats and other luxuries which are paid for in the same way. These temptations have led in various cases to the breaking open and plundering of the huts. It is very difficult to detect the burglar, and such offences will probably become more common. It would seem much better that the supplies and boxes (if necessary) to receive the payments should be deposited at the nearest inn below the hut. The payments would be entered in a book and the landlord would make himself responsible. The making of ways up mountains and the marking of them continues to flourish. In Tyrol in the neighbourhood of centres like Innsbruck, Botzen, Trent, or Rovereto, there is hardly a walk that is not painted. Where the marking consists of a row of several colours it is important to keep in mind the order of the colours. The whole tendency is to destroy the independence of the climber, at least in all the ordinary excursions. Again, in the making of paths it is no doubt a good thing to improve a passage over a difficult spot; but it should be done judiciously. There are mountains which have been thus improved (!) which are less easy than they were at first. A notable case is the Serles Spitze, on which there was only one real difficulty—a cliff 12 or 14 feet high, where there used to be a ladder; for which a stone staircase was substituted about five years ago. At present the ascent of this mountain by the new path is decidedly less easy than it was twenty years ago.

J. S.

Mittheilungen des D. Ö. A. V., 1892. Nos. 1-6.

Herr G. Merzbacher contributes a series of articles on his tour in the Caucasus. He thinks that the difficulties of transport, &c., have been underrated, rather than overrated, by previous explorers. He was accompanied by Herr L. Purtscheller and the guides Johann Kehrer and Johann Unterweger, of Kals. The principal expeditions were as follows: On July 19 they bivouacked on the S.E. flank of Ushba, at a height of 2,460 m. (8,060 feet), to attempt the S. peak. Owing to bad weather, the start was not made until July 24, a little before 1 A.M. At 8.30 they reached a rock ridge which divides the glacier into two branches—one excessively steep, which led by a couloir to a gap in the upper ridge; the other terribly crevassed. They chose the former, and gained the couloir by a hazardous traverse under an icefall. The couloir was very steep (60°-70°), and required constant step-cutting. A strong wind blew the snow and ice into their faces. At 19.30 the gap was reached (4,512 m. = 14,800 feet). It was bitterly cold; the rocks above were overhanging and coated with ice. They doubted if the rocks could be ascended, even in fine weather. They turned back at 11, and found the descent of the couloir even more difficult than the ascent. The bivouac was not reached until 9.30 P.M.

On August 18 they ascended Elbruz from a bivouac on the N. flank (3,550 m. = 11,643 feet). Starting at 1.15 A.M., the summit

was reached at 9.50. The cold was so severe that no observations could be taken. They left at 10.30, and reached the bivouac at 2 P.M. The most difficult expedition was the ascent of the northern and central peaks of Dongusorun. The southern peak of this mountain had been ascended from the S. side by Messrs. Donkin and Fox, and the party convinced themselves during their ascent of Elbruz that the only route was by the N. ridge. On August 21 they started from a bivouac (2,850 m. = 9,514 feet) at 2.40 A.M. A rock ridge was followed for two hours, then snow and glacier slopes. At 5.45 a rock ridge was gained which abuts right against the peak. This ridge was narrow and broken by all sorts of obstacles. It was worse than anything Herr Merzbacher had ever encountered. The rocks were covered with powdery snow, slightly frozen. Herr Merzbacher, who was last, broke through at a bad place, lost his balance, and slipped down the full length of the rope. Fortunately Kehrer, who was in front, was able to hold him. Immediately below the peak the ridge rose steeply in a series of smooth bossed rocks, covered with snow and ice. The ascent of these was plainly difficult and dangerous; a couloir which offered an alternative route was only to be reached by a dangerous traverse. Meanwhile Unterweger had climbed the first cliff, and thought it would be better farther up. The rest followed, to find things only got worse—advance was doubtful, retreat impossible. The ascent of 120 m. (393 feet) took two hours, and not for a moment were they out of danger. When the upper snow-slopes were reached they sank in deep, but it seemed an easy promenade to the N. peak, and along a broad ridge to the central peak (4,452 m. = 14,603 feet), which was reached at noon. There was a bitter north-west wind, which allowed only a few observations to be taken. The descent was effected by another route, and was attended with all sorts of difficulties. Not until 10 P.M. did they leave the moraine of the glacier at the head of the Nakra Valley, and sank exhausted on the first grassy spot. The cold compelled them to move at 1.30 P.M. They crossed the ridge into the Dongusorun Valley at 6 A.M., and reached their bivouac at 10 A.M. Thirty-one hours, of which five hours were halts (three and a half being the night's rest). Continuous bad weather drove Herr Purtscheller away on September 18. The guides remained with Herr Merzbacher. On September 29 a reconnaissance was made with the view of ascending Kasbek from the N. The ascent was effected on September 30, in twelve hours, and owing to favourable circumstances the descent took only four and a half hours. The final excursion was the first ascent of Gimarai-Choch (4,577 m. = 15,012 feet), to the west of Kasbek, on October 4. Starting at 12.30 A.M., the summit was reached at 9.50 A.M. Further tours were hindered by bad weather. A number (about twenty) of bronze and silver coins, chiefly Augustus and Diocletian, are said to have been discovered under the ice (*sic*) near the Col St. Theodule. This proves that the passage was used in Roman times and was then probably free from ice (?). [Did some modern collector lose the bag in a crevasse on his passage?]

In a book by Olaus Magnus, on the implements used by the Norwegians on their mountains in the sixteenth century, we see the ruder

utensils which grew into the present Alpine equipment (Steigeisen, &c.)—wooden soles set with spikes and strapped across the foot, long poles with a spike and hook, ropes and axes, &c.

No less than five bears were shot in the Trentino, in the winter of 1891-2—three full-grown (two being male, and one female), and two cubs. For the male bears a reward of about 30 gulden (2*l.* 10*s.*) is paid; for the female, 40 gulden (3*l.* 8*s.*); for the cubs, about half. The number shot in this district of late years averages about thirteen in ten years.

J. S.

Scenska Turistföreningens Aarskrift för Aar 1892.

Though the adventures and explorations which are so well recorded in the Swedish annual partake more of a sub-Alpine than of an Alpine character, there is yet much of especial interest to be gleaned by mountaineers who peruse its 400 pages. The enthusiastic Swedes wisely devote the bulk of their energy to the exploration of the wild region in Swedish Lapland, about lat. 67°, where, in addition to the serrated ridges of Sulitälma, and the large glacier Salajekna, which gives birth to the icy river Lairo, there are many other weird mountain ranges which are yet all but unknown. Six comfortable wooden huts have recently been erected in this wide district, which will prove to be a great boon to the traveller. Amongst other delightful papers, there is one on the Lapp 'gammer'—tents and huts—with illustrations of the details of construction of the framework of birch wood, which shows great ingenuity in combining the necessary strength with lightness. These 'gammer' are covered with reindeer-skin, birch-bark, sods, or wood, and some of them, when finished, may decidedly be termed picturesque, if not comfortable. There is a good paper on tourists' provisions, and general kit for the wilds. Others deal with Alpine botany. One describes a winter journey in Lapland. The subject of another is that of canoeing in Sweden, the writer of which is a thorough enthusiast, who possesses the happy knack of instilling some of his own enthusiasm into the breasts of his readers. He says that 'good humour need never be taken on a canoe voyage, as one gets it on the way.' The true sportsman, of course, always holds this maxim to be true, however much he may suffer disappointment. We heartily congratulate our Swedish friends upon the production of an annual which in every respect does credit to their Turist Förening, which now numbers over 4,500 members, and more especially to the editor and the writers of many most delightful papers, which deal with a most interesting country, so far but little known to the mountaineers and tourists who may yet wish to 'try Lapland.'

W. C. S.