(11,353′—3,460·5 mètres—Von Sonklar) is not more than from 50 to 100 feet lower than that of the Adamello, in which case its height would be about 11,600 or 11,750 ft. (3,535·5 or 3581·5 mètres), according to which of the two determinations of the latter is adopted The view from the Adamello was of enormous extent, the Grand Paradis and Grivola (distant more than 150 miles) being clearly made out. It comprised, besides all the principal peaks of the Monte Rosa, Bernina, and Orteler groups, part of the Bernese Oberland, the Dolomites, Ziller Thal Ferner, Gross Venediger, and Gross Glockner, the last-named being especially distinct.

Brenta Alta, *August* 9.—Messrs. Ball and W. E. Forster, with Matteo Nicolasi of Molveno as porter, made the first ascent of the Brenta Alta from Molveno. Having no guide, and clouds being on the mountain, they had a good deal of difficulty, and lost time in finding their way; but they recommend future travellers to ascend this valley immediately south of that leading to the Bocca di Brenta; at the head of the valley to keep to the right, north of a projecting rock, till two high glaciers are sighted, above which rise the cliffs of the peak; then crossing the left or southern arm of these glaciers, to aim at a small cleft in the cliffs, the climb up which for the first hundred feet is the only difficult part of the ascent.

*** *This summary will be continued in the next number, should notice of any further New Expeditions reach the Editor.*

NOTES AND QUERIES.

The Fatal Accident on the Matterhorn.—The following most interesting letter from Mr. Whymper appeared in the 'Times' of the 8th of August :—

'Sir,—After the direct appeals which I have received from the President of the Alpine Club and from yourself to write an account of the accident on the Matterhorn, I feel it is impossible to remain silent any longer, and I therefore forward to you for publication a plain statement of the accident itself, and of the events that preceded and followed it.

'On Wednesday morning, the 12th of July, Lord Francis Douglas and myself crossed the Col Theodule to seek guides at Zermatt. After quitting the snow on the northern side we rounded the foot of the glacier, crossed the Furgge Glacier, and left my tent, ropes, and other matters in the little chapel at the Lac Noir. We then descended to Zermatt, engaged Peter Taugwalder, and gave him permission to choose another guide. In the course of the evening the Rev. Charles Hudson came into our hotel with a friend, Mr. Hadow, and they, in answer to some inquiries, announced their intention of starting to attack the Matterhorn on the following morning. Lord Francis Douglas agreed with me it was undesirable that two independent parties should be on the mountain at the same time, with the same object. Mr. Hudson was therefore invited to join us, and he accepted our proposal. Before admitting Mr. Hadow I took the precaution to inquire what he had done in the Alps, and, as well as I remember, Mr. Hudson's reply was, "Mr. Hadow has done Mont Blanc in less time than most men." He then mentioned several other excursions that were unknown to me, and

Digitized by Google

added, in answer to a further question, "I consider he is a sufficiently good man to go with us." This was an excellent certificate, given us as it was by a first-rate mountaineer, and Mr. Hadow was admitted without any further question. We then went into the matter of guides. Michel Croz was with Messrs. Hadow and Hudson, and the latter thought if Peter Taugwalder went as well that there would not be occasion for anyone else. The question was referred to the men themselves, and they made no objection.

'We left Zermatt at 5.35 on Thursday morning, taking the two young Taugwalders as porters, by the desire of their father. They carried provisions amply sufficient for the whole party for three days, in case the ascent should prove more difficult than we anticipated. No rope was taken from Zermatt, because there was already more than enough in the chapel at the Lac Noir. It has been repeatedly asked, "Why was not the wire-rope taken which Mr. Hudson brought to Zermatt?" I do not know; it was not mentioned by Mr. Hudson, and at that time I had not even seen it. My rope alone was used during the expedition, and there was—first, about 200 ft. of Alpine Club rope; second, about 150 ft. of a kind I believe to be stronger than the first; third, more than 200 ft. of a lighter and weaker rope than the first, of a kind used by myself until the Club rope was produced.

'It was our intention on leaving Zermatt to attack the mountain seriously—not, as it has been frequently stated, to explore or examine it—and we were provided with everything that long experience has shown to be necessary for the most difficult mountains. On the first day, however, we did not intend to ascend to any great height, but to stop when we found a good position for placing the tent. We mounted accordingly very leisurely, left the Lac Noir at 8.20, and passed along the ridge connecting the Hörnli with the actual peak, at the foot of which we arrived at 11.20, having frequently halted on the way. We then quitted the ridge, went to the left, and ascended by the north-eastern face of the mountain. Before 12 o'clock we had found a good position for the tent, at a height of 11,000 ft.; but Croz and the elder of Taugwalder's sons went on to look what was above, in order to save time on the following morning. The remainder constructed the platform on which the tent was to be placed, and by the time this was finished the two men returned, reported joyfully that as far as they had gone they had seen nothing but that which was good, and asserted positively that had we gone on with them on that day we could have ascended the mountain, and have returned to the tent with facility. We passed the remaining hours of daylight—some basking in the sunshine, some sketching or collecting, and when the sun went down (giving, as it departed, a glorious promise for the morrow) we returned to the tent to arrange for the night. Hudson made tea, myself coffee, and we then retired each one to his blanket bag; the Taugwalders, Lord Francis Douglas, and myself occupying the tent, the others remaining, by preference, outside. But long after dusk the cliffs above echoed with our laughter and with the songs of the guides, for we were happy that night in camp, and did not dream of calamity.

'We were astir long before daybreak on the morning of the 14th,

Digitized by Google

and started directly it was possible to move, leaving the youngest of Taugwalder's sons behind. At 6.20 we had attained a height of 12,800 ft., and halted for half an hour, then continued the ascent without a break until 9.55, when we stopped for fifty minutes, at a height probably of about 14,000 ft. Thus far we had ascended by the north-eastern face of the mountain, and had not met with a single difficulty. For the greater part of the way there was, indeed, no occasion for the rope; and sometimes Hudson led, sometimes myself. We had now arrived at the foot of that part which from Zermatt seems perpendicular or overhanging, and we could no longer continue on the same side. By common consent, therefore, we ascended for some distance by the arête —that is by the ridge descending towards Zermatt—and then turned over to the right, or to the north-western face. Before doing so we made a change in the order of ascent; Croz now went first, I followed, Hudson came third, Hadow and old Taugwalder were last. The change was made because the work became difficult for a time, and required caution. In some places there was but little to hold, and it was therefore desirable those should be in front who were least likely to slip. The general slope of the mountain at this part was less than forty degrees, and snow had consequently accumulated and filled up the irregularities of the rock face, leaving only occasional fragments projecting here and there. These were at times coated with a thin glaze of ice, from the snow above having melted and frozen again during the night. Still it was a place over which any fair mountaineer might pass in safety. We found, however, that Mr. Hadow was not accustomed to this kind of work, and required continual assistance; but no one suggested that he should stop, and he was taken to the top. It is only fair to say that the difficulty experienced by Mr. Hadow at this part arose, not from fatigue or lack of courage, but simply and entirely from want of experience. Mr. Hudson, who followed me, passed over this part, and, as far as I know, ascended the entire mountain without having the slightest assistance rendered to him on any occasion. Sometimes, after I had taken a hand from Croz or received a pull, I turned to give the same to Hudson; but he invariably declined, saying it was not necessary. This solitary difficult part was of no great extent, certainly not more than 300 ft. high, and after it was passed the angles became less and less as we approached the summit; at last the slope was so moderate that Croz and myself detached ourselves from the others and ran on to the top. We arrived at 1.40 P.M., the others about 10 min. after us.

'I have been requested to describe particularly the state of the party on the summit. No one showed any signs of fatigue, neither did I hear anything to lead me to suppose that anyone was at all tired. I remember Croz laughing at me when I asked him the question. Indeed, less than ten hours had elapsed since our starting, and during that time we had halted for nearly two. The only remark which I heard suggestive of danger was made by Croz, but it was quite casual, and probably meant nothing. He said, after I had remarked that we had come up very slowly, "Yes; I would rather go down with you and another guide alone than with those who are going." As to ourselves, we were arranging what we should do that night on our return to Zermatt.

Digitized by Google

'We remained on the summit for one hour, and during the time Hudson and I consulted, as we had done all the day, as to the best and safest arrangement of the party. We agreed that it would be best for Croz to go first, as he was the most powerful, and Hadow second; Hudson, who was equal to a guide in sureness of foot, wished to be third; Lord F. Douglas was placed next, and old Taugwalder, the strongest of the remainder, behind him. I suggested to Hudson that we should attach a rope to the rocks on our arrival at the difficult bit, and hold it as we descended, as an additional protection. He approved the idea, but it was not definitely settled that it should be done. The party was being arranged in the above order while I was making a sketch of the summit, and they were waiting for me to be tied in my place, when some one remembered that we had not left our names in a bottle; they requested me to write them, and moved off while it was being done. A few minutes afterwards I tied myself to young Taugwalder and followed, catching them just as they were commencing the descent of the difficult part described above. The greatest care was being taken. Only one man was moving at a time; when he was firmly planted the next advanced, and so on. The average distance between each was probably 20 ft. They had not, however, attached the additional rope to rocks, and nothing was said about it. The suggestion was made entirely on account of Mr. Hadow, and I am not sure it even occurred to me again.

'I was, as I have explained, detached from the others, and following them; but after about a quarter of an hour Lord F. Douglas asked me to tie on to old Taugwalder, as he feared, he said, that if there was a slip Taugwalder would not be able to hold him. This was done hardly ten minutes before the accident, and undoubtedly saved Taugwalder's life.

'As far as I know, at the moment of the accident no one was actually moving. I cannot speak with certainty, neither can the Taugwalders, because the two leading men were partially hidden from our sight by an intervening mass of rock. Poor Croz had laid aside his axe, and in order to give Mr. Hadow greater security was absolutely taking hold of his legs and putting his feet, one by one, into their proper positions. From the movements of their shoulders it is my belief that Croz, having done as I have said, was in the act of turning round to go down a step or two himself; at this moment Mr. Hadow slipped, fell on him, and knocked him over. I heard one startled exclamation from Croz, then saw him and Mr. Hadow flying downwards; in another moment Hudson was dragged from his steps, and Lord F. Douglas immediately after him. All this was the work of a moment; but immediately we heard Croz's exclamation Taugwalder and myself planted ourselves as firmly as the rocks would permit; *the rope was tight between us, and the shock came on us both as on one man.* We held; but the rope broke midway between Taugwalder and Lord F. Douglas. For two or three seconds we saw our unfortunate companions sliding downwards on their backs, and spreading out their hands endeavouring to save themselves; they then disappeared one by one, and fell from precipice to precipice on to the Matterhorn Glacier below, a distance of nearly 4,000

Digitized by Google

feet in height. From the moment the rope broke it was impossible to help them.

'For the space of half an hour we remained on the spot without moving a single step. The two men, paralyzed by terror, cried like infants, and trembled in such a manner as to threaten us with the fate of the others. Immediately we had descended to a safe place I asked for the rope that had broken, and to my surprise—indeed, to my horror—found that it was the weakest of the three ropes. As the first five men had been tied while I was sketching, I had not noticed the rope they employed, and now I could only conclude that they had seen fit to use this in preference to the others. It has been stated that the rope broke in consequence of its fraying over a rock: this is not the case; it broke in mid-air, and the end does not show any trace of previous injury.

'For more than two hours afterwards I thought every moment that the next would be my last; for the Taugwalders, utterly unnerved, were not only incapable of giving assistance, but were in such a state that a slip might have been expected from one or the other at any moment. I do the younger man, moreover, no injustice when I say that immediately we got to the easy part of the descent he was able to laugh, smoke, and eat as if nothing had happened. There is no occasion to say more of the descent. I looked frequently, but in vain, for traces of my unfortunate companions, and we were in consequence surprised by the night when still at a height of about 13,000 feet. We arrived at Zermatt at 10.30 on Saturday morning.

'Immediately on my arrival I sent to the President of the Commune, and requested him to send as many men as possible to ascend heights whence the spot could be commanded where I knew the four must have fallen. A number went and returned after six hours, reporting they had seen them, but that they could not reach them that day. They proposed starting on Sunday evening, so as to reach the bodies at daybreak on Monday; but, unwilling to lose the slightest chance, the Rev. J. M'Cormick and myself resolved to start on Sunday morning. The guides of Zermatt, being threatened with excommunication if they did not attend the early mass, were unable to accompany us. To several, at least, I am sure this was a severe trial; for they assured me with tears that nothing but that which I have stated would have prevented them from going. The Rev. J. Robertson and Mr. J. Phillpotts, of Rugby, however, not only lent us their guide, Franz Andermatten, but also accompanied us themselves. Mr. Puller lent us the brothers Lochmatter: F. Payot and J. Tairraz, of Chamounix, also volunteered. We started with these at 2 A.M. on Sunday, and followed the route we had taken on Thursday morning until we had passed the Hörnli, when we went down to the right of the ridge and mounted through the séracs of the Matterhorn Glacier. By 8.30 we had got on to the plateau at the top, and within sight of the corner in which we knew my companions must be. As we saw one weather-beaten man after another raise the telescope, turn deadly pale, and pass it on without a word to the next, we knew that all hope was gone. We approached; they had fallen below as they had fallen above—Croz a little in advance, Hadow near him, and Hudson some distance behind; but of Lord F. Douglas

Digitized by Google

we could see nothing. To my astonishment, I saw that all of the three had been tied with the Club, or with the second and equally strong, rope, and consequently there was only one link—that between Taugwalder and Lord F. Douglas—in which the weaker rope had been used.

'The letters of the Rev. J. M'Cormick have already informed you respecting the subsequent proceedings. The orders from the Government of the Valais to bring the bodies down were so positive, that four days after the events I have just related twenty-one guides accomplished that sad task. The thanks of all Englishmen are due to these brave men, for it was a work of no little difficulty and of great danger. Of the body of Lord F. Douglas they, too, saw nothing: it is probably arrested in the rocks above. No one can mourn his loss more deeply or more sincerely than myself. Although young, he was a most accomplished mountaineer, hardly ever required the slightest assistance, and did not make a single slip throughout the day. He had only a few days before we met made the ascent of the Gabelhorn—a summit considerably more difficult, I believe, to reach than the Matterhorn itself.

'I was detained in Zermatt until the 22nd of July, to await the inquiry instituted by the Government. I was examined first, and at the close I handed in to the Court a number of questions which I desired should be put to the elder Taugwalder; doing so because that which I had found out respecting the ropes was by no means satisfactory to me. The questions, I was told, were put and answered before I left Zermatt; but I was not allowed to be present at the inquiry, and the answers, although promised, have not yet reached me.

'This, Sir, is the end of this sad story. A single slip, or a single false step, has been the sole cause of this frightful calamity, and has brought about misery never to be forgotten. I have only one observation to offer upon it. If the rope had not broken you would not have received this letter, for we could not possibly have held the four men, falling as they did, all at the same time, and with a severe jerk. But, at the same time, it is my belief no accident would have happened had the rope between those who fell been as tight, or nearly as tight, as it was between Taugwalder and myself. The rope, when used properly, is a great safeguard; but whether on rocks, or whether on snow or glacier, if two men approach each other so that the rope falls in a loop, the whole party is involved in danger, for should one slip or fall he may acquire, before he is stopped, a momentum that may drag down one man after another and bring destruction on all; but if the rope is tight this is all but impossible.

'I am, Sir, your obedient servant,

'Haslemere, Aug. 7.' 'EDWARD WHYMPER.'

FATAL ACCIDENT ON THE RIFFELHORN.—The following particulars of this melancholy occurrence are extracted from a letter from the Rev. J. M'Cormick, dated Zermatt, July 19, which appeared in the 'Times' of July 24:—'The Rev. J. Robertson and Mr. Philpotts, who were staying at the Riffel Hotel, yesterday evening, at bedtime, missed their friend Mr. Knyvett Wilson. The night was spent in looking for him, and the search was continued at daybreak. The body was eventually

Digitized by Google

found on the rocks of the Riffelhorn. Mr. Wilson had mounted this rock with some of his friends in the morning, taken the proper precautions of having guides and a rope with them. He must, in the absence of his companions, have climbed up it again without rope or guide, lost his hold in coming down, and fallen backwards on his head. Death must necessarily have been instantaneous.'

Fatal Accident on Monte Rosa.—On July 27, Messrs. H. J. and J. F. Bailey, with three guides and two porters, started to ascend Monte Rosa. Much fresh snow had fallen, and, when below the Saddle, they started an avalanche, by which they were carried down the slope, and all more or less buried, excepting two of the guides. These succeeded in extricating the whole party with the exception of one porter, whose body was found the next day six feet deep in snow, near to the place where the avalanche commenced.

Second Ascent of the Matterhorn. — On July 9, Signor F. Giordano of Turin arrived at Breuil in the Val Tournanche. He engaged all the best guides of the valley, and, on the morning of the 11th, despatched a party of seven of them to attempt the ascent of the Matterhorn by the southern arête. They were furnished with two mule-loads of provisions, and took a variety of implements—hammers, chisels, &c., besides a large quantity of rope. They were instructed to seek a route to the summit, and to work with their tools on all difficult places, so as to render the way more easy. After their task was accomplished, they were to descend to Breuil, and to conduct Signor Giordano to the top. On arriving at the summit on the 14th, Mr. Whymper went to the westerly end of the ridge that forms the top of the mountain, looked for these guides, and perceived them at a distance of at least 1,500 ft. below. His shouts soon attracted their attention; they descended almost immediately, and reported to Signor Giordano what had occurred. That gentleman was, not unnaturally, dissatisfied with the result of their labours, and caused a party of four—viz. J. A. Carrel, G. B. Bich, A. Meinet, and A. Gorret—to set out again on the 16th. He wished to accompany them himself, but, says the 'Gazetta di Torino' of July 24, 'on account of the bad weather and uncertainty of the route, they refused to allow Signor Giordano, or any other traveller, to be of the party.' It appears that the four guides passed the night of the 16th in a tent on the highest of the three platforms constructed by Mr. Whymper at different times on the southern arête, started at 5 A.M. on the 17th, and reached the summit at about 2.30 P.M., during the final part of the ascent passing by ledges round the face of the mountain, and climbing the last few hundred feet by the same route as that followed by Mr. Whymper and his companions. They remained there but a short time, reached their tent at 8 P.M., and Breuil at noon the next day.

However much the guides may have improved the southern arête, it is not probable that this route will be often followed, as the southern side of the mountain is raked day and night by incessant falls of stones, while on the northern route no risk is run from this source.

Alpine Byways: X.—*The Bregenzer Wald.*—The entrance of the Tyrol most quickly and easily reached from England is that by the

Digitized by Google

picturesque town of Bregenz, which lies on a shelf of rock at the head of the Lake of Constance. Few travellers, however, pass this way, probably because there is a long and dreary stretch of high road to be traversed before the valley of the Inn and the region of the High Alps can be reached. The following pages will show that the pedestrian may land at Bregenz, and yet avoid his arch-enemy, M'Adam, by a day or two's ramble through a lovely district of the lower mountain region.

The high road from Bregenz to Innsbruck runs at first due south to Feldkirch, where it turns east, and so across the Arlberg Pass to Landeck. The valley of the Bregenzer Ache forms the base of the right-angled triangle, at whose right angle is Feldkirch, for some two-thirds of the distance between Bregenz and Landeck. It is by this route I wish to guide the reader; he will find it shorter in distance and far more beautiful in landscape than the high road; and, moreover, it is one of the most old-world districts even in old-fashioned Tyrol, or rather out of Tyrol—for we are still in Vorarlberg, which, though always coupled with Tyrol in maps and guide-books, history and government, is technically distinct.

The traveller bound for the Bregenzer Wald follows the Innsbruck road as far as the bridge over the Ache; but after crossing this river he takes a lane to the left. This lane does not follow the course of the stream, but forms the chord of the great arc which the river here makes. After passing the village of Schwarzach, it leaves that paradise of horseflies the valley of the Rhine, and mounts the range of hill round the end of which the Ache curls before falling into the main river. Almost on the top of this low pass lies the little village of Alberschwende, and its decent inn the Taube. The traveller can follow the road hence to Schwartzenburg, or better, take a charming short cut across the ridge of the Lorena; all sloping pastures on the side of Alberschwende, all dark fir-wood on that of Schwartzenburg, and from its summit he may look far away over the Bavarian uplands.

The Hirsch at Schwartzenburg looks most comfortable, and can be reached by an easy afternoon's walk from Bregenz. Crossing the river and climbing the hills to the east, a pleasant walk of some six hours leads to Staufen, a station on the line between Lindau and Immenstadt. If we follow the char road by the main stream, the gully soon narrows to a gorge; and after this is passed, the bases of the Canisflüh, enormous walls of rock, seamed with the courses of winter avalanches, hang over the road on its western side. Mellau is the best centre for excursions hereabouts; of these the best known is the ascent of the Mittagspitz, which summit may also be reached, and in a shorter time, from Damils on its southern side. Our road follows the left or western bank of the Ache, so does not pass through the chief place of the valley, Bezau, which is situated on the right bank. The election of the Landamman takes place, or used to take place, in this wise. After three candidates have been selected by some preliminary process, the men of the district meet in the market-place, where stand three trees of preeminent size, and at a signal the supporters of each candidate

Digitized by Google

cluster round a different tree. There is, I believe, some sort of vehicle between Bezau and Bregenz four days a week in about six hours.

Our road, after passing Mellau, crosses the river, passes Au, famous for its good inn—the Rössle, and then Schoppernau, whence a pass leads into the Bavarian Mittelberg Thal, down which lies Obertdorf, a great summer head-quarters of the Bavarian townsfolk. The frequent occurrence of this termination 'au,' 'meadow by a stream,' in the Bregenzer Wald marks the character of the valley—a succession of little river-side plains each with its village, and gorges between. After Schoppernau the road rises more steeply. About half-way between Schoppernau and Im Schrecken, about an hour from either, is a little bath, the spa of these parts; beyond this the road rises more sharply still, plunges into dark forest, and so climbs to the Schrecken, a village of a few cottages, a church, and an inn, in the middle of the grandest mountains of the Bregenzer Wald. When we were there last year, the village, church, Gasthof, and all, was being rebuilt after an entire destruction by fire; but the natives were as hospitable as ever, and our landlord found fresh clothes for the party, which had arrived drenched from head to foot.

At the Schrecken ends the valley of the Ache. From this place mountains in plenty can be climbed; the Widderstein is said to be the noblest, but rain and cloud prevented our forming any opinion. There is a choice of ways hence. The traveller may pass the village of Krumbach, and the low col beyond, and keep down the Lech Thal towards Reutte; or he may leave that valley at Stog, and cross the Kaiser Joch to Petneu on the Arlberg road; or he may cross the same ridge lower down into the valley of the Inn below Landeck. From the same village of Krumbach he may pass between the Widderstein and Gaisberg into the Mittelberg Thal. Again, from the Schrecken he may reach Bludenz by the Walser Thal, or he may follow our track of last year, and turn south, crossing one low pass into the Tannberg, or upper valley of the Lech, then passing the little hamlet of Am Lech, and crossing a second low pass to Stuben on the Landeck road. If he be bound for Landeck, let him remember to leave this last path immediately after it begins to descend to Stuben, to cross the stream by which it runs, and so to strike across slopes covered with Alpine roses to a point near the summit of the Arlberg road, above the succession of zigzags behind Stuben. F. L. Latham.

The Gamchi Glacier.—In passing from Mürren to Kandersteg on the 29th August, 1864, I took a new route between the Seefinen Furke and the Dündengrat, by winding round the Büttlaszen, keeping for some time not much below the level of the Furke, then descending very rapidly until I came in sight of the Gamchi Glacier, still much below me. In about 2½ hours from the Furke I reached the glacier, crossed it without difficulty at a point much above its foot, and ascended to the Dündengrat. This route, though probably longer, must involve less fatigue than the enormous drop into the depths of the Kienthal, and the equal reascent on the other side, and it is certainly far more interesting. Three chamois passed me on the glacier within 100 yards.

Mr. Hayward left me on the right bank of the glacier, and in about

Digitized by Google

three hours passed through the Gamchi Lücke to the Tschingel, and reached Kandersteg in about sixteen hours and a half from Mürren. This must be nearly a maximum time, for the snow was very deep and in its worst condition. THOMAS BROOKSBANK.

THE GESCHENEN-LIMMI.—*From Stein to Geschenen.*—On the 15th August I came from what is about the most comfortable mountain-house in Switzerland—the Engstlen Alp—by the Sätteli Pass to the Stein Alp—less than six hours. This pass is little known; it is in every respect very beautiful, and from the col and on the somewhat sharp descent the views across the Gadmen Thal are very fine. I went to Stein, in order to cross thence to the Geschenen Thal, a route long since pointed out, but never crossed until last summer. Whether anyone had preceded me I cannot say; for though I heard at the inn that some foreign gentleman had intended to do it, and the 'Fremdenbuch' at Stein corroborated this by an entry under the column 'Allant à' of the word 'Geschenen,' I could never hear more on either side; and it is possible that he intended to go by the Susten, and to sleep at Geschenen, that he might explore the valley above it.

The early morning of the 16th was not fine enough for a new glacier-pass—so I spent the day in ascending the Heuberg, visible to the NE. from the knoll in front of the inn—a peak marked 2,593 metres (8,507 feet) on the excursion map of the Swiss Alpen-club, which Mr. Meyer Bischoff, its late president, was kind enough to send me in November last, before its publication. It gives a comprehensive view of everything from the Spizliberg to the Radlefshorn; and the whole of the many-branching Stein Gletscher lies so plainly before you, that the accuracy of Mr. Ball's description in his 'Central Alps,' p. 137, is seen at a glance. The view on the other side, which comprises the Wenden Glacier and the Urath Hörner, though fine, is disappointing, as these completely shut out what ought to be the great feature; I mean the Titlis. The ascent requires about two hours; and it is best made by mounting almost to the top of the Susten Pass, and then climbing over the grass as best you can.

On the 17th I started at 3.45 with Kaspar Blatter, my constant companion, and Kaspar Luchs, son of the landlord, taken *ad hoc*. Our route was that mentioned by Mr. Ball (p. 138) as the one adopted in 'Subsequent Ascents' of the Sustenhorn, and I will therefore only say that it is most varied, and that the time occupied by me from the inn to the 'Limmi' (as they call it—Limmi being a word I never met with except in that valley, and equivalent to lücke, fenêtre, gap) was, exclusive of halts, 3 hrs. 50 min., of which the ascent of the Thierbergli was for good 90 min. excessively steep, and very deep in snow. I think the Limmi must be about 10,300 feet; the Susten or Gletscher-horn (11,519 feet) being an hour and a half above us, as Blatter, who had twice made the ascent, told me. The descent into the Geschenenthal looks perpendicular, and at the point where we stood I do not think it very practicable—but we walked for a quarter of an hour towards the Sustenhorn, and then found the snow-slopes less precipitous. We descended quickly over these, and the glacier and its moraine (2,777 m.=9,110 feet), halting considerably below it upon some cliffs, whence

Digitized by Google

the view was indeed glorious. A vast glacier, the Kehle, after a magnificent descent from the Thierberge on our right, lay like a placid lake still several hundred feet below us; across it was the great ridge of the Winterberge, down whose black rocks five tributary glaciers poured upon the Kehle.

Through a gully in the cliffs, slippery from the long rank grass, and then over gentle slopes, we descended swiftly to this glacier, kept upon its smooth surface to its terminal moraine (1,924 m. =6,312 feet), scrambled along this, and gained the valley, and in fifty minutes from quitting the glacier reached the Geschenen Alp. Here the Pfarrer has two beds, but (like Ancient Pistol of poor Master Fer) he demands 'egregious ransom,' as I am told. The chapel and cluster of huts stand on a little grass plain, from the lower end of which the view towards the mountains is again most splendid and quite new, for the ridge whence the tributary glaciers descend on the Kehle is here foreshortened and divides the head of the valley, and the eye commands both its branches, on the right to the Kehle and the Thierberge, on the left to the Winter and Damma Glaciers—dominated by the Damma Stock, 3,633 m.=11,920 feet. To a man who thinks he knows a good deal of the Alps this passage is nothing less than surprising; unknown, and almost unheard of, it brings home to him that their variety is infinite as Cleopatra's.

The whole Geschenenthal below the Alp ranks with the wildest in Switzerland, and about half-way down it there is a wonderful-looking gorge leading by the Wallenbühl and Kalchthal Glaciers, to the east side of the Susten Pass. The path is terrible for jagged and uneven stones, planted with their peaks upwards, like the mountains themselves; and as it was my first long walk that summer, I became somewhat tired and footsore in the two hours and a half it took me to reach the capital little Rössli at Geschenen.

The time of actual walking was—The ascent, 3 hrs. 50 min.; along the ridge, say 15 min.; the descent to the Kehle (very quick), 1 hr. 15 min.; in the glacier and its moraine, 30 min.; to the Alp, 50 min.; and to Geschenen itself, 2 hrs. 30 min. My halts were full 2½ hrs.

THOMAS BROOKSBANK.

With reference to the above narrative the following letter has been received by the Editor:

DEAR SIR,—As I notice in the June No. of the 'Alpine Journal' (p. 95) Mr. Brooksbank's passage from Stein to Geschenen Thal is mentioned as the first one certainly recorded, it may be worth while to say, that in the latter part of July 1863, I started from the Stein Inn (which I had reached by the Furtwang and Steiulmimi), with the younger Christian Lauener, and two youths from the inn, who had some local knowledge; ascended the Sustenhorn, crossed the glacier between it and the Thierberg, and descended into the Geschenen Thal about noon. We then mounted a path nearly south of the Geschenen Alp, and crossed by a well-marked opening in the ridge, dropping easily down on Realp in the Urseren Thal. I was unlucky enough to sprain my ankle badly on the last grass-slopes; otherwise the whole distance, with the ascent of the Sustenhorn, would have occupied not

Digitized by Google

much over twelve hours. I wrote at the time a short statement of the route in the Visitors' Book at the 'Lion d'Or,' Hospenthal.

Believe me, yours truly,

C. B. HUTCHINSON.

RECENT ALPINE PUBLICATIONS.—We have received the following letter from Mr. TUCKETT :—

DEAR SIR,—The existence of many valuable works bearing upon Alpine subjects is, I believe, from the fact of their being published abroad, more imperfectly known to the generality of our members than their merits deserve, and it has occurred to me that the 'Alpine Journal' might with advantage be made the medium of chronicling from time to time, and in the briefest manner, the appearance of such publications either abroad or in this country. As a specimen of what I propose, I enclose a list of recent books, pamphlets, and articles. If our members generally would contribute such information of a similar character as they may possess to be published quarterly, we should gradually accumulate some valuable materials for a catalogue of Alpine literature. Having had some share in compiling the list of books given in the introduction to Mr. Ball's 'Guide to the Western Alps,' I can speak feelingly as to the labour which the existence of such a collection would spare. I cannot but think that it would also help to do away with the too commonly existing notion that out of Switzerland there is 'not much to speak of' to be done in the way of mountaineering.—I remain, yours very faithfully,

F. F. TUCKETT.

Frenchay, near Bristol, August 9, 1865.

Ice-caves of France and Switzerland. A Narrative of Subterranean Explorations. By the Rev. G. F. BROWNE. Longmans and Co. 1865.

Frost and Fire; Natural Engines, Toolmarks and Ships, with Sketches taken at home and abroad by a Traveller (J. F. CAMPBELL). 2 vols. Edmonston and Douglas. 1865.

Topography of the Chain of Mont Blanc. (Principal FORBES.) North British Review, March, 1855.

Notes on the Shape and Structure of some parts of the Alps, with reference to Denudation. By J. RUSKIN. Parts I. and II. Geological Magazine, February and May, 1865.

Memoranda on the Summer Motions of some Glacier-Streams in Southern Norway. By C. M. DOUGHTY. Proceedings of the Royal Geographical Society, Vol. IX. No. 3, May, 1865.

Outline Sketches in the High Alps of Dauphiné. By the Rev. T. G. BONNEY. (Map and Text.) Longmans, 1855.

Deux Ascensions scientifiques au Mont Blanc. Par Ch. MARTINS (Prof. d'Hist. Nat. à Montpellier). Extrait de la Revue des Deux Mondes (15 Mars 1865).

Le Mont Rose et les Alpes Pennines; Souvenirs de Voyage. Par E. de LAVELUZE. Revue des Deux Mondes (15 Juin 1865).

De l'Origine des Lacs Suisses. Par Prof. B. STUDER. (Bibliothèque Universelle de Genève, T. XIX., p. 89.)

Itinéraire de la Suisse, du Mont Blanc, de la Vallée de Chamouni, et des Vallées du Piémont. Par A. JOANNE. 4me édition, avec 16 Cartes, 5 Plans des Villes, 135 Vues, et 7 Panoramas. Paris, 1865.

Jahrbuch des Schweizer Alpen-Club. Zweiter Jahrgang, 1865. Berne, 1865.

Schaubach. Die Deutsche Alpen. Vol. III. (Salzburg, Obersteiermark, das Oesterreichische Gebirge und das Salzkammergut.) Zweite Auflage. Jena,

Digitized by Google

F. FROMMANN, 1865. (The 2nd volume of this new and improved edition is in the press, and will be followed successively by the 4th, 5th, and 1st.)

Das Thal Bergell (Val Bregaglia) *in Graubünden*, Natur, Sagen, Geschichte, Volk, Sprache, &c., nebst Wanderungen. Von E. LECHNER. Leipzig. Engelmann, 1865.

Piz Languard und die Bernina-Gruppe. Von E. LUHNER. Zweite verbesserte und vermehrte Auflage. Leipzig. Engelmann, 1865.

Exkursionen um den Ortlis- und Adamello-Stock. Von Dr. O. G. LORENTZ. (Parts I. and II.) Petermann's Geographische Mittheilungen. Hefte 1 & 2. Gotha. Perthes, 1865.

Die Schweizer meteorologischen Beobachtungen. Nachträgliches zu den Bemerkungen von Dr. A. Mühry im 10ten Hefte. 1864. Petermann's Mittheilungen. Heft I. 1865.

Alpen-Geologie. Von Carl VOGT, Petermann's Mittheilungen. Heft V. 1865.

Die Grösseren Expeditionen in den Oesterreichischen Alpen aus dem Jahre 1864. Von Dr. A. v. RUTHNER, Vice-Präsidenten des Oesterreichischen Alpen-Vereins. Petermann's Mittheilungen. Heft VI. 1865.

Beiträge zur geologischen Karte der Schweiz. Herausgegeben von der Naturforschenden Gesellschaft. Zweite Lieferung. Geologische Beschreibung von Graubünden, mit 2 kolorirten Karten und vielen Durchschnitten von Prof. G. THEOBALD, in Chur. (1st Hälfte.)

Jahrbuch des Oesterreichischen Alpen-Vereins. Redigirt von Dr. E. V. MOJSISOVICS. Mit 8 Beilagen. Wien. Braumüller, 1865.

Berg- und Gletscherreisen in den Oesterreichischen Hochalpen. Von Dr. A. V. RUTHNER. Mit 6 Abbildungen in Farbendruck und einer Gebergskarte. Wien. C. Gerold's Sohn. 1864.

Oesterreichische Alpen. In Photographien. Aufgenommen von GUST. JÄGERMEYER. Jägermeyer & Comp. in Wien. 63 Blätter.

Höhenkarte von Vorarlberg nach den Bestimmungen des k. k. Quartiermeisterstabes und den Messungen des Herrn Schmidt. Von F. BURGALZ. Wagner, Innsbruck.

Hypsometrische Karte des Norrischen Alpen, entworfen von Schulz. Wein. Artona, 1865.

Das Maltathal. Gestaltung, Gewässer, Klima, Flora. Vom Pfarrer P. KOHLMAYR. Klagenfurt, 1864.

ERECTION OF A HUT ON THE FAULBERG.—Mons. Wellig, the landlord of the Hôtel de la Jungfrau, on the Eggischhorn, has erected an excellent hut on the rocks of the Faulberg, rather lower down, *i.e.* nearer to the glacier, than the old cave, which has hitherto been the only shelter available for mountaineers aiming at the great peaks and passes accessible from the Aletsch Glacier. The hut will accommodate six persons comfortably, and is furnished with a stove, saucepan, cups, and other conveniences for cooking, in addition to seven blankets and a quantity of straw.

PROPOSED ENGLISH CHURCH AT ZERMATT.—It is proposed to build a church at Zermatt, for the use of the numerous English visitors to that place; and a suggestion has been made that it should be erected as a memorial to the late Rev. Charles Hudson, Lord Francis Douglas, Mr. Hadow, and Mr. Knyvett Wilson, the victims of the recent melancholy accidents. The Church is to seat 200 persons, and can be built for 2*l.* 10s. a sitting. Contributions will be received by the Rev. J. M'Cormick, 4 Wells Road, St. John's Wood, and the Rev. L. White, 9 Serjeants' Inn, Fleet Street.

Digitized by Google