4. FROM THE GRÜTLI TO THE GRIMSEL.

By R. W. Elliot Forster.

Sonnenberg — The Uri Rothstock — Engelberg — A Thunderstorm — The Stein Glacier — The Thierberg — The Triften Joch — The Glacier of the Rhone.

It is rather the fashion now-a-days to believe nothing. Now I, on the contrary, believe a good deal; — I believe that Homer and Julius Cæsar both lived; I believe in William Tell; all the learned arguments of Archbishop Whately have failed to convince me that an emperor of the name of Napoleon did not reign over the French in the beginning of this century; and I likewise believe in Walter Fürst, Werner Stauffacher, and Arnold von Melchthal. Considering, however, the great historical infidelity which at present prevails, it is refreshing to find that a far different spirit animates the Helvetian youth.

The field and wood on the Lake of Lucerne, known as the Grütli, or Rütli, have recently been purchased, chiefly by means of a subscription raised in the Swiss schools; the ground has been prettily laid out under the auspices of the Government; and the authorities, with great good taste, have stopped the erection of a place of entertainment, which a speculative Swiss hotel-keeper was building, and which would have had the effect of turning the hallowed shrine into a tea-garden. It would scarcely be possible to perpetuate a testimony to the existence of the three great

founders of Swiss liberty in a more effectual or more graceful manner than by preserving intact the spot where those heroes first swore to rescue their native land from foreign thraldom.

Early in the month of August, 1861, I landed at the Grütli from Brunnen, on my way to the new *pension* at Sonnenberg, on the Seelisberg, where I intended passing a few days to get myself into training for a walking tour. The most desirable of these Swiss boarding-houses appear to be little known to the majority of British tourists; and, although I should be extremely sorry to introduce Brown, Jones, and Robinson to all my mountain haunts, I think that it is only Christian charity to inform the hundreds who annually melt in the broiling sun of Geneva, Vevay, Interlaken, and Lucerne, that there are such places as Champéry and Comballaz in the west, and Sonnenberg, Engstlen, and the Frohnalp in the centre of Switzerland, where, in addition to being housed and fed, they can freely breathe.

On Sonnenberg I had now especially fixed my eye; and, not having been well for some time, I began operations by running up, in half an hour, a somewhat precipitous path, said to be the very path by which Arnold von Melchthal was in the habit of reaching the Grütli from his home in Unterwalden, and which most persons usually take an hour to ascend, and sometimes, as appears from the stage directions in Schiller's "Wilhelm Tell," by the aid of a ladder.

The day was hot, and the effect was pretty much the same as that produced by the first part of a Turkish bath. Finding a delightful little lake—the Seelisberger See,—not far from the *pension*, I jumped into it and performed part two, and then completed the course by lying down in the sun to warm myself. I derived so much benefit from the process that I repeated it, and in four days I was ready

for anything. I ought, however, to add, that in all probability the good fare at Sonnenberg, and the pure mountain air that is inhaled at every breath, contributed not a little to perfect the cure. I can recommend the establishment of M. Truttmann, who is a member of the Cantonal Government of Uri, to English travellers. They will find there good accommodation at a very moderate rate, amidst scenery of great beauty. The house is perched on a rock immediately over the Grütli, and commands a lovely view of the Lake of Lucerne, into which a stone might almost be thrown from one's bed-room window, but, at the same time, it is sufficiently high up not to be affected by the damp air which often pervades the banks of the lake after sunset. The excursions to be made in the neighbourhood are numerous, and not difficult. Two or three of the walks, as a retired Indian officer told me with great delight, are "on the flat;" and some of my fair readers, if I am fortunate enough to have any, will be glad to hear that they will find grasses and ferns without end, to say nothing of cyclamens and other Alpine flowers, and they may repose themselves under the shade of maple, ash, lime, beech, or walnut trees, without fear of being molested.

I could have remained there with pleasure for a fortnight, and might possibly have done so, had not the Uri-Rothstock, whose proud summit I saw every morning from my window, constantly reminded me that I had once vowed (it is unnecessary to state under what circumstances) to walk to Engelberg from Isenthal, going over its highest peak *en route*, and thence to proceed to the Grimsel by the glacier of Trift. The weather was magnificent, and the time seemed now to have arrived for fulfilling my vow; so I bade farewell to M. Truttmann on Monday, the 12th of August, and started for the valley of the Isen.

It is a charming walk from Sonnenberg to Bauen on the Lake of Lucerne, whence it took me about two hours and a half to reach the Adler, at Isenthal, at which nice, clean, primitive little inn I put up for two nights. The landlord, Joseph Imfanger, a well-known chamois hunter, who afterwards acted as my guide to the Uri-Rothstock, and who, now that his father is nearly superannuated, is the only man in the place who can be relied on in difficult expeditions, was from home when I arrived; but I received every attention from the hostess, and from the veteran old Carl Imfanger, her father-in-law, who related a number of sporting anecdotes which had occurred, or which he stated had occurred, "in the days when he was young." I was also very much patronised by the daughter of the hostess, a young lady of four years of age, who lionised me about whilst her mother was preparing my supper; and, amongst other things, she showed me the paws of an enormous bear, which had been shot by her father a few days previously, and which were hung up at the entrance of the village as a trophy.

The 13th of August, 1861, was a memorable day for Isenthal,—a large armed force passed through it in full marching order, carrying all the means and appliances that modern science has devised to gain a battle, as well as to alleviate the consequences of a defeat; the former—the rifles, the cannons, the powder and other ammunition—greatly stimulated my *Volunteer* ardour; but I confess that when I surveyed the latter—the lint, the ambulance, the knife, the saw, and other agreeable-looking surgical instruments—it rather took the edge off my martial appetite. Two hundred men actually encamped in the village, and a precious noise they made. I had retired to bed early, as I was to start at 2 o'clock the next morning for Engelberg, and I was desirous of getting a

few hours' sleep; but this I soon found was utterly impossible, so I resigned myself to the serenade which the band kept up under my windows until past 11, and at 1 o'clock I got up.

There are two routes by which the Uri-Rothstock can be approached from Isenthal — the one by the Higher Valley, known as the "Gross-Thal," which lies rather to the westward, and the other by the "Klein-Thal," which is immediately opposite the village, and ascends in a direct line from N. to S. I was strongly advised to go by the Gross-Thal; I was told that it was much easier — that it was *ganz bequem;* and, when all other arguments had appeared to fail in making any impression on me, I was informed by my hostess that a bishop had once been that way! This clenched the matter: I said that I should not presume to walk in the footsteps of the prelate, and that the Klein-Thal was the road for me; and accordingly by the Klein-Thal I went. I rather suspect that the military had not limited their jollification to listening to their band, that they had indulged in something more exciting than music, and that the host had kept them company; so I was not at all sorry when the latter told me, just as we were about to start, that he would take his stable-boy to carry my knapsack, and that he himself would carry the provisions. It is only just, however, to mention, that they did not require or expect any additional remuneration for this, and that when, on parting, I gave the boy two francs for *Trinkgeld*, both he and his master appeared to be pleased and surprised. My agreement with Imfanger had been, to give him twenty francs if I took him on to Engelberg, and ten francs if I sent him back from the Uri-Rothstock, which was what I intended doing, unless the weather turned out badly. At 2.10 A.M. we started. It was not very dark, and we de-

termined not to take a lantern, which, perhaps, was rather imprudent. In the woods we took off our coats, and could distinguish each other by means of our light-coloured shirt-sleeves, and, barring the chance of being shot by the sentinels on leaving the village, and that of being drowned in one or two torrents into which we were nearly precipitated, we did not incur much danger from the want of light.

After walking up the Klein-Thal for two hours and a half over grass and through a forest, we came to a steep wall of stratified limestone, which forms the northern boundary of a field of ice and snow extending from the Gutschen, or Gitschen, to the Uri-Rothstock; down this wall, or screen, trickles the water from the melting of the snows above, so that the footing is not very good, and we were often obliged to pull ourselves up with our hands along the shelving rock on our right. Under this rock we sat for some time watching the rising sun, as it tinted in succession with a rosy hue the different peaks around us. Soft and beautiful as is a fine autumn sunset, in a mountainous country I prefer the effect of sunrise, as in the morning the atmosphere is so much clearer, and the outlines are so much sharper, than is the case after the mid-day sun has called forth the vapours from the valleys beneath. It was just 6 A.M. when we left the rock and took to the snow. Here, of course, the rope was produced, and we proceeded in single file, Imfanger being first, and I coming next; the boy, who followed me, held the rope in his hand, but he preferred not being tied. Many persons fancy that they are safer when the rope is not tied around them; but on snow this is a great mistake, for it is of immense advantage to have both your hands at liberty, and if you fall into a crevasse you are very likely to lose your hold of the rope at the moment you most want it. The boy was a mere volunteer, so I let him do as he liked; but I

seldom allow a regular guide to keep the rope in his hand. If my host had at any time felt the effects of the potations of the night before, the sharp, keen air of the glacier had now entirely brought him round, and his ear caught the distant whistle of the chamois as rapidly as his eye distinguished the treacherous snow that covered the *bergschrund*. We had a large plateau of névé before us, which we were obliged to ascend almost as far as the Geisshörnli, a peak immediately in our front, although our course eventually lay much more to the right; as a wall of ice, several hundred feet in height and nearly perpendicular, separated us from the glacier which descends from the eastern shoulder of the Uri-Rothstock, and which it was necessary for us to cross in order to reach the desired summit. We ran along for some time under this ice-wall; but, before we had gone far, we had the clearest possible notice that it would be safer to keep more out in the centre of the névé, as we came upon the remains of an avalanche which had only recently fallen, and the blocks of ice, some of which weighed more than a hundredweight, and which, falling on snow, had not been ground to powder, as is frequently the case, did not look at all inviting. Nearly all these pieces of ice were angular, and many of them were square, and about the shape and size of an ordinary Paris paving-stone. Towards the middle of the plateau we found some large crevasses, which extended from E. to W. for a considerable distance, and which might have delayed us a good deal; but the snow was firm, and we generally could jump them without making any great circuit. On one occasion, however, the edge gave way with the boy, and from the tug he gave the rope I think he must have been glad to have had a good hold of it.

We proceeded to within a few hundred yards of the

Geisshörnli, when we turned to the westward, and keeping the Uri-Rothstock rather on our right, we crossed a low ridge of rock, and found ourselves at the very foot of the cone.

This cone, which it took us about fifteen minutes to get up, is the highest point of the Uri-Rothstock, which forms so prominent an object in most of the views from the Lake of Lucerne. The top, chiefly composed of a reddish kind of limestone, is seldom entirely covered with snow; indeed, on two sides, the north and the east, no snow could lie, as the rock is there almost perpendicular. The cone can only be ascended from the S.; but on that side there is no difficulty whatever: the incline is very gradual, and there are a number of small flat stones, as well as shaly matter, which make it easy going.

It was just 8 A.M. when we reached the summit, and we were quite ready for our morning meal. Ham, veal, chicken, were successively tried, and highly approved of, and we had just finished a bottle of Roussillon, when I perceived, what I at first thought must be some stray goats, ascending the W. side of the mountain. One glance with the telescope, however, soon showed that no goats could live on such a spot; and in a few minutes I reported to my companions that fourteen chamois were coming up the cone. English deer-stalkers can easily understand the excitement of the party; no one uttered a sound, but an impotent lament at not having a rifle was the idea that simultaneously rushed to the mind of each. The chamois were coming down wind, and had evidently not discovered us; for the sense of smell is so acute in the chamois, that it depends almost as much on scent, as on its bright black eye, to escape from its great enemy, man.* On they came

* It is confidently asserted that chamois can scent a man at a distance of more than a mile, and that it frequently happens that a whole herd will

in a close, compact body, a fine old male, with a white throat and forehead and splendid horns, leading the way, until they were within 200 yards of the spot on which we were standing. As far as we could judge, there were only three or four males; as, however, the females have horns, it is very difficult to distinguish the one from the other. The coat of the leader was almost black, and I could perfectly see the dark band that encircled his forehead and cheeks, as for an instant he looked up and surveyed us with unfeigned astonishment. Of course his gaze lasted but for an instant, and then, followed by the rest, he dashed along a narrow ridge on the north side of the mountain, which was apparently only a few inches in width. We were immediately above this ledge, and we threw one of our wine bottles into the midst of the herd, at the same time giving such a *view-halloo* as I should think had not often resounded in these regions. The chamois did not lose their footing; but their consternation was so great that, like a panic-struck army, they no longer obeyed nor understood the commands of their chief, and they were scattered in every direction, several of them again coming within rifle-shot of us. We watched them for a long time, and as two of them crossed at full speed the snow-fields we had just come over, I had an opportunity of forming some estimate of the pace at which they went. I should say that they did a mile in something less than three minutes; but as one of them, a male, stopped once or twice, for a few seconds, in order to call some of his terrified, or faithless, wives (I know not which), I am inclined to put down their pace as at the rate of twenty-five miles an hour. This chamois, regardless of the example shown him by the present Sultan,

cross a mountain ridge to avoid a party of hunters whom they have neither seen nor heard.

did not seem inclined to reduce the ladies of his hareem to so low a number as one; and having arrived at the centre of the glacier he came to a halt, called, or rather whistled, louder than before, stamped his feet, and even retraced his steps for a short distance, with an air which implied, that some one would suffer for it if he were not instantly obeyed. In a little while three females left the shelter of a shelving rock, under which they had taken refuge, and joined him; and the party, now five strong, galloped off towards the Gutschen. At *Treibjagden*, or *battues*, both in Bavaria and in Styria, chamois have rushed by me at a distance of one hundred yards or less; but I never saw a herd deliberately approach me so near as these did.

The distant prospect from the Uri-Rothstock is not so extensive as that from the Titlis; but the near, or glacier view, is very grand. This mass of névé and ice forms a vast parallelogram, extending from the Gutschen to the Weissberg; and, with the exception of the Rothstock glacier, which is on the S. side of the snow-shed, and descends from the Engelberg-Rothstock to the top of the Herbis-Thal, chiefly consists of what Monseigneur Rendu, in his "Théorie des Glaciers," calls *Glaciers Reservoirs*, as opposed to *Glaciers d'Ecoulment*. The névé between the *Uri*-Rothstock and the *Engelberg*-Rothstock requires very nearly two hours to cross, and is known by the name of the *Blümlis firn;* it is, in fact, the "Jardin" of this part of the Alps. Near the Rothstock, I settled money matters with my host, and he and the *knecht* returned home by the Gross-Thal, whilst I shouldered my knapsack and proceeded towards Engelberg.

I had still a good piece of ice to go over; but, as I was well acquainted with the glacier of Rothstock, which I had explored in previous years, I took it very leisurely, and

collected a number of curious plants and mosses, with which the rocks, which here and there jut out above the snow, abound. On one of these isolated peaks I sat for nearly an hour, in thorough enjoyment of the scene around me. On my right stood the Engelberg-Rothstock, ineffectually trying to screen a loftier rival, its namesake of Uri, and beyond, that splendid wall of limestone (in some places upwards of 2000 feet in height) which extends westward as far as the Wallenstock; on my left rose the Weisstock and the Weissberg, whence descends in a graceful slope the snow-field, or *Glacier Reservoir*, which forms a lateral but important feeder to the Rothstock glacier; and, nearer still, the Gemsispiel, or Chamois' game, which three chamois abandoned whilst I was looking at it, seeking another play-ground on the opposite side of the glacier. Immediately in front of me were the mountains which form the western boundary of the Engelberger Thal, and, with the hooded Titlis and the rugged peaks of the Spannörter, complete the amphitheatre by which the upper part of that charming valley is encircled.

I descended the Rothstock glacier nearly to its lowest point, occasionally getting a glissade; and at 3.30 P.M. arrived at the first châlets. Here I was glad to have a halt, and in a few minutes I had disposed of a large wooden bowl of thick cream, which the chief *Senner* presented to me. The weather was still very hot, so I determined not to go down to Madame Cattani's excellent "Hotel et Pension de l'Ange" at once, and accepted an invitation of some of the cowherds to inspect their stock. In their pigs I did not take much interest; but the cows, most of which, I believe, belonged to the monks of Engelberg, were fine specimens of the Alpine breed. Here I witnessed one of those fights, so common in Switzerland, which take place between two cows for the command of

the herd. The vanquished cow, who had previously led the way with a haughty step, and would have instantly punished any act of insubordination in those over whom she ruled, now hung down her head, and submitted without a struggle to have her bell, the *insigne* of her rank, transferred to her conqueror.

Engelberg is reached from these châlets by a steep zigzag path which winds through the most luxuriant pasturages. Their exquisite verdure was so refreshing after the glare of the snow, that I lingered long amidst them, and the sun had already left the valley when I approached it; but the snowy peaks that surround it, reflecting, as they did, the bright ruby light, with which the whole western horizon appeared to be inflamed, bore testimony that, glorious as had been the morning greeting of the sun, scarcely less sublime was his eventide farewell.

The first part of my vow had now been accomplished, and I thought that I might well pause and make a few excursions in the neighbourhood of Engelberg before proceeding over the Trift glacier, which was to complete it. Time and space will not allow me to describe all my rambles in that delightful locality, but I cannot resist asking the reader to join me in a walk to the Surenen Egg, on account of the imposing meteorological phenomenon I there witnessed.

On Saturday, August 17th, I accompanied some friends, who were going to Altdorf by the Surenen, as far as the Egg, or summit of the ridge, which is almost immediately under the Blackenstock, and about four hours' walk from Engelberg. The Surenen is a wild, dreary pass, and, as I looked up at the precipitous sides of the Geissberg, the Grassen, and the Schlossberg on our right, and at the dark Blackenstock on our left, I could not help thinking that the locality would not be a pleasant one to be alone in on a

dark night. At the top of the pass I quitted my friends, and retraced my steps towards Engelberg. As I went, I fancied that I might vary my route, and proceeded, at a higher altitude, along the shoulder of the Weisstock, intending to descend by the Fürer Alp, near the farm of Herren Rüti.

Before I had made much progress on my homeward journey, the weather suddenly changed; and I perceived a thick cloud travelling at a rapid rate up the gorge below me. This cloud was intensely dark, and formed a splendid background to the flashes of lightning which, at short intervals, lit it up, now in a dazzling column hundreds of feet in height, now in a horizontal zigzag extending the whole length of the valley. I had only on one previous occasion been fortunate enough to witness a thunderstorm from above; and I surveyed the floating torrent of aqueous vapour, charged with electricity, hurled on, as it was, by the Föhn*, or south-west wind, which now blew a perfect hurricane, with mixed feelings of awe and delight. The noise of the thunder was almost deafening, and the sun, which had hitherto been shining over my head, soon became obscured by another mass of vapour which forced its way over the Weisstock, and uniting with the lower cloud, from which it had probably been torn, burst like a water-spout, and all around was deluged with hail and rain. I lay for some time with my face towards the ground, protecting my neck with my hands from the hailstones, many of which were as large as Minié bullets, and generally of a conical shape; but I was obliged to change my quarters, as a shower of stones, which had been detached from the

* The Föhn raged with fearful violence in many parts of Switzerland on this day, August 17th, 1861. At Interlaken upwards of thirty of the beautiful walnut trees, which formed one of its chief ornaments, were levelled to the ground in a few minutes.

rock above, selected the particular course in which I was for their headlong race. I took refuge below two of the largest of these stones, which, luckily for me, had become embedded in a mound of earth a little above; and, being now comparatively in a place of safety, I amused myself by endeavouring to count, however vain the attempt, the number of times the peals of thunder were re-echoed in the distance. The storm only lasted about twenty minutes, and, as may be supposed, I did not linger much on my way home.

From Engelberg I went to the Stein Alp on the Susten Pass, by the Joch and a little pass called the Sättli to the W. of the Gadmenfluh, which is well known to the natives, but which they are unwilling to show to strangers. By adopting this course, or by going over the Grassen, a fine glacier pass, a day's journey is gained in proceeding to the Gadmen Thal, and some parts of the scenery are very beautiful.

The Stein glacier descends from the snow-fields, which at an altitude of nine thousand or ten thousand feet extend from the Sustenhorn to the Thierberg, and, having forced its way through the buttresses thrown out from those mountains, in three nearly perpendicular ice-streams of upwards of one thousand feet in height, it again unites, and, in conjunction with the Steinlimi, a channel of névé inclining to the eastward, between the Thierberg and the Radolfshorn, flows on in a comparatively even and uninterrupted course to within two hundred or three hundred yards of the Stein Alp, the lower portion, like that of the Rhone glacier, resembling somewhat in form the paw of some gigantic antediluvian animal.

At the little inn at the Stein Alp I met General Dufour's son-in-law, Mr. Hardy Dufour, who for the last twelve years has been employed in preparing the beautiful map

of Switzerland which bears his name, and which he tells me he hopes to be able to complete by the end of the year 1862. He had engaged old Weissenfluh, the well-known guide, to go the next morning to some commanding elevation, in order to give him the names of the principal peaks in the neighbourhood, and for this purpose the Sustenhorn and the Thierberg had been proposed. He kindly invited me to join him—an offer I did not hesitate in accepting. Mr. Dufour was accompanied by his nephew, a young engineer from Neufchatel, and by a servant who has been with him in all his mountain expeditions. Old Weissenfluh—I beg his pardon, Johann von Weissenfluh—for I am told that he boasts of having noble blood in his veins,—was to arrive in the course of the night from Mühlestalden, where he resides; so that our party consisted of five in all. Long before daybreak Von Weissenfluh was hammering away at the door of the little inn, and very shortly afterwards we sallied forth, having despatched our *café-au-lait* whilst we were dressing. My preparations for the expedition had been very simple, namely, adding a bottle of wine to the provisions that had been prepared for the rest of the party, and which, as is almost invariably the case, were more ample than necessity required.

We crossed the brook in front of the inn, and went along the W. bank of the Stein glacier, under the Radolfshorn, called by Weissenfluh Radlefhorn, for about twenty minutes, and then descended to the ice and traversed the glacier, bearing towards the S.W., until we reached the mass, chiefly granitic, which separates the middle from the western ice-cascade, leaving the Steinlimi on our right. This rock, which in some places is exceedingly steep, is not difficult to climb, as small cavities have, in the course of ages, been made in its polished and striated surface. These cavities are often filled with

moss, and we used them as steps, sometimes placing the points of our feet, sometimes our hands, in them. Occasionally, it must be admitted, the moss came out of its receptacle and fell on the glacier beneath; and having lost all hold, down we came on our faces. We discovered various traces of serpentine, and often our compasses were so much affected by it as to be quite useless. It took us three hours and a half to reach the snow-plateau above the ice-cascades from the inn; and here we made a good halt, in order to prepare ourselves for the névé and snow we had now to encounter. Whilst we were discussing the Rhenish wine and cold mutton which our landlord had provided us with, we saw two chamois, and we afterwards followed their track as far as the *Kamm*, or col, between the Thierberg and the Sustenhorn. This Kamm is common to both mountains, and from it either summit may be reached.

We held a council of war as to which was to be attacked; but when we heard from Weissenfluh that the snow on the loftiest peak of the Thierberg had not yet been trodden by human foot, whereas the Sustenhorn had, as we knew, been ascended four or five times, it did not require much deliberation in order to determine what was to be done: so the word of command was given, — "Right wheel, quick march!" and we started for the Thierberg. An hour's sharp walking due S. up the plateau brought us to the Kamm, whence we looked over into the Geschenen Thal; the chief objects of interest having been some enormous crevasses in the snow, which, on that occasion, we only looked at in a cursory manner, and principally for the purpose of avoiding them, but which we examined with great care on our way down. These crevasses were of an elliptical shape, and extended for several hundred yards horizontally across the snow. They were of no great depth, — probably not more than forty or fifty feet,— the bottom

floor being periodically covered with fresh snow in the same way as the plateau above. The southern or upper wall was much higher than the northern side, and each annual accession of snow was clearly delineated by a band, the space between the bands varying from about two to three feet, according to the severity of the winter, and also to the amount of superincumbent pressure, the lower layers being naturally more compressed than those above them. Weissenfluh, who had watched the progress of some of these basins, said that they were originally mere cracks or *faults* in the stratified snow, and that they gradually increased in width and became of an oval shape; which he, in some measure, attributes to the action of the wind, as well as to the heat of the sun. At the col we turned our backs on the Sustenhorn, and progressed westward for twenty-five minutes, until we had almost got round to the S. of the Mamelon we were about to storm. Here we took breath, and enjoyed the glorious prospect around us, minutely reconnoitring the upper end of the Geschenen valley, almost *terra incognita*, I believe, to the generality of travellers; and then, applying ourselves in earnest to the steep incline of snow on our right flank, in half an hour we gained the ice-escarpment, and in a few minutes waved our flag on the highest point of the Thierberg, or rather Thierberge (as three mountains bear that name), the two chamois, who had retreated before us to the very summit, having ignominiously fled; a magnificent lämmergeier hovered round the spot for some time, but at length he also flew away, persuaded probably that the position was untenable, and we remained in undisputed possession.

What I have perhaps rather figuratively called the ice-escarpment was an *arête*, or ridge of frozen snow, which runs along the top, and is so sharp that occasionally some of us found it more convenient to sit astride than to stand on it.

The Thierberg is only 11,136 feet in height, but, not being overlooked by higher mountains, it commands a magnificent view, especially to the S. and the E. The southern prospect includes the Valaisan Alps, from the Monte Leone to the Combin, and the eastern extends to the confines of the Tyrol and Carinthia. At our feet lay a sea of ice and névé, about twelve *stunden* in length from N. to S., and from three to five *stunden* in width

THE SUMMIT OF THE THIERBERG.

from E. to W., surrounded by peaks, the names of which Weissenfluh gave us in detail, and which will nearly all be found in the map which accompanies this paper.

The most prominent on the S. side were the Winterberg, the Schneestock, and the Galenstock, from whose snow-clad flanks descends the glacier of Dama, the Gorner of the Geschenen Thal, which is within a few hours of the

St. Gothard road, and yet is as little known as the Jökulls of Iceland. To reach the Furca by going over the Galenstock from Geschenen, would be an excursion well worth trying. From the Thierberg we perceived that most of the existing maps of Switzerland have robbed the canton of Vallais of a portion of its territory, and transferred it to Berne; the snow-shed, which ought to form the boundary line, extends from the Diechterhorn to the Schneestock, and not to the Galenstock, as commonly represented.

We remained more than an hour at the summit, and then descended by a short cut towards the crevasses. These we reached in less than thirty minutes, and three quarters of an hour more brought us to the rocks. An avalanche of ice had fallen since the morning. Most of the blocks, like those from the Uri-Rothstock, were angular, and bore testimony to the cleavage theory. Near the ice-cascades we had some splendid glissades, in which old Weissenfluh, notwithstanding his sixty-three winters, invariably took the lead, and at a little before 6 P.M. we got back to the Steinalp, having had a delightful excursion. Supposing time to be an object, either the Sustenhorn or the Thierberg might be ascended from Stein in less than six hours, or say, nine hours to go and return.

Weissenfluh claims the Trift as a *spécialité* of his own, and I believe that the glacier of the Rhone has very seldom been reached from the Gadmen-Thal except under his guidance. He has built a refuge, or *Jagd-Haus*, on the Windegg, a barren rock, which passes for "an Alp" or mountain pasture, to the W. of the Trift glacier. This hut, no doubt, has many a time been looked on with grateful eyes by the tired chamois hunter, or the half-frozen traveller, driven to seek there a night's shelter from the pitiless storm; but on ordinary occasions it does not seem inviting. It has neither door nor shutter of any

kind, and the roof and walls are not entirely water-tight. Two-thirds of the mansion are fitted up as a kitchen and *salon*,—that is, the furniture thereof consists of a *marmite* and a stool, and the remaining third, which is divided from the rest by a plank, forms the sleeping apartment, and is covered with dry fern and hay.

It is impossible to reach the Grimsel in one day from the Steinalp Inn by the Steinlimi; so I determined to sleep at Weissenfluh's house at Mühlestalden, and to start from thence early the next morning. It was arranged that old Weissenfluh should go with me to the Hospice, and that we should be accompanied as far as the Jagd-Haus by his brother, who is a great mineralogist, and by his son Andreas, who was going on a chamois-hunting expedition.

At 1 A.M. on the 1st September we had some coffee and an omelette, and at 1.40 A.M. we started from Weissenfluh's house, Andreas armed with his rifle, the mineralogist with his hammer, I with my alpenstock, and old Weissenfluh with a lantern. We kept on the left bank of the Trift-bach, ascending by a steep path which leads to some pastures on the Stotzigrat; the Mährenhorn, the peaks of which are so leading a feature in the landscape between Hof and Guttanen, being immediately above us. At our feet was a dark gorge, through which the torrent has frayed itself a course, and of which we from time to time caught a glimpse. We passed more than once over some loose débris, which gave way under us, and the splash which ensued warned us of the consequences of dwelling too long on one stone. In three hours we reached the foot of the Trift glacier, and here we descended on to the terminal moraine. The moon was in her last quarter, and presented a beautiful phenomenon; the narrow golden crescent, with its pointed horns, gleamed in the deep azure sky, and the remainder of the disc, illumined by the

light reflected from the earth, was of a pale silver-like blue, the entire circle being distinctly visible. This effect is frequently observed when the moon is in her first quarter, but it is the privilege of the early riser to witness it when she is in her last phase. On this occasion the excessive pureness of the atmosphere, and possibly the quantity of snow that surrounded us, added much to the effect. I watched it until the rising sun extinguished the minor luminary and lit up the scene; and then I discovered that my companions had deserted me, and I hurried up the zigzag path which leads to Weissenfluh's hut. When I arrived, the fire had been kindled and the coffee was made, so that I had a very short rest, every one being desirous of making the most of the magnificent morning that, in 1861, ushered in the month of September. We ascended the eastern shoulder of the Windegg, and here I sat down to contemplate the wonderful panorama before me. To the left were the precipitous sides of the Radolfshorn, and the serrated crests which form the western portals of the Steinlimi; to the right all access towards the Rhone was barred by the Triftenstock, the Steinhausstock, and the almost perpendicular ice-cascade of the Trift glacier, or rather, I ought to say, the *higher* ice-cascade, as the Trift possesses two ice-falls; and in the centre stood forth, in bold relief, an apparently inaccessible spur of the Thierberge, to which, I have since heard, the name of Teltistock has been given, backed by the Winterberg and the Schneestock. I confess that for an instant I almost began to think that the Trift Pass was a myth; and the notion was not quite eradicated from my mind when old Weissenfluh told me that our course lay over that spur, which we should have to surmount.

We traversed the glacier of Trift some distance below its higher ice-fall in thirty minutes, going nearly S.E.; and

then (the Trift glacier having little or no lateral moraine) we mounted at once from the ice to the spur of the Thierberge. An hour's good climbing, often hand over hand, brought me to the top of the spur, and then I saw that the Triften Joch was a fact, and not a very difficult one. Before me was a gently-inclined plain of névé and snow, and at the end of it was a rock which I knew, from our observations from the summit of the Thierberg, was the culminating point of the col. Here I lay down and waited for old Weissenfluh and his brother, of whom I had more than a quarter of an hour's start. Andreas had previously left us, having got wind of a chamois towards the Steinlimi. Weissenfluh, when he arrived, pointed out the Furtwand, a sort of gully running W. from the Triftenstock, through which there is a track to Guttanen in the Ober Hasli.

The mineralogist was about to explore some of the holes and caverns with which the Thierberge abound; so old Weissenfluh and I wished him success, and, having tied the rope round us, we took to the snow, and at 10.30 A.M. we were sitting on one of the slabs of granite with which the western side of the Triften Joch is covered. Here is cleavage with a vengeance. Not content with splitting the blocks in *one* direction in the manner we have all of us witnessed in slate quarries, here Nature has turned out rectangular tables of stone, as neatly finished on all sides as if they had been cut with a chisel. Many of these slabs are from 6 to 10 feet in length, and from 3 to 5 feet in breadth, the thickness being from 12 to 18 inches. They are generally found in a horizontal position, and they appear to have been hurled down by some convulsion from the Diechterhorn. On one of the largest we placed our provender, and having cooled the excellent Beaujolais we had brought from the cellars at Hof in the

snow, we devoted all our energies to our *Mittagsessen*, a meal which, at an altitude of 10,000 feet, goes down with much more relish than it does at an altitude of 15,000, where one seldom has much appetite. A ledge of rock juts out from the Schneestock at a point nearly opposite these blocks of granite, and, with the snow which fills up the space between them, forms the boundary line that separates Berne from the canton of Vallais. This is the water-shed between the snows that feed the Trift and the Rhone,—the former a tributary of the Rhine, reaching the Northern Ocean,—the latter discharging its waters into the Mediterranean.

On the Trift plateau we discovered a large number of moths, driven there by the hurricane. These moths, some of which were of great beauty and of considerable size, were in a wonderful state of preservation, and their convoluted * wings were not in the slightest degree damaged. We found each individual imbedded in a small hollow in the snow, caused, no doubt, by the absorption of the sun's heat, and subsequently deepened by his genial rays, more merciful to its remains than the remorseless wind, which had brought it to this desolate spot to perish of starvation, had been to it whilst alive.

After a parting look at the Thierberg, for which I could not but feel a kind of affection, we descended the southern slope of the Joch to the glacier of the Rhone, keeping rather to the left, and passed immediately under the Galenstock. This noble mountain, to look at which one always feels half inclined to walk backwards when descending the Rhone valley, may easily be ascended from the Furca; but it seems to be quite inaccessible from the northern and western side. Between the Galen-

* *Crenellated*, or crenated, means *indented*; *convoluted* means gathered round their bodies; this, no doubt, preserved them from destruction.—*Author.*

stock and the Gerstenhorn we came upon some awkward crevasses, and, under the influence of the mid-day sun, the ice-bridges had melted considerably, and were not very safe. I went through twice; but Weissenfluh pulled me out cleverly by a jerk of the rope, upon which, although tied round him, he kept his hand.

THE TRIFTEN-JOCH AND THE RHONE GLACIER FROM THE SOUTH.

The Rhone glacier is certainly one of the finest in Switzerland. Every one who has crossed the Grimsel and the Furca must have been struck with the graceful slants of its névé, the wild configuration of its seracs, and the terrific violence with which it ploughs up the sward at its foot; but, to be able to form any adequate idea of its

grandeur, it is necessary to explore it in all its length and breadth. Sitting under the Galenstock, and looking up at the lofty peaks that surround the Joch, one may well be seized with a feeling of admiring delight, something, as poor Talfourd so beautifully expressed it, between the affection with which we embrace the earth, from which they are uplifted, and that mere transient admiration we feel while we watch the clouds with which they mingle.

We descended nearly as far as the ice-cascade, and then, turning due W., we crossed the glacier and ascended a flank of the Saasberg, a little above the Meienwand. It had taken us three hours and a half to get to this spot from the Joch: here we sat down, and I surveyed, with great delight, the Monte Leone, the Mischabel, the Weisshorn, the Matterhorn, and the other giants of the Vallais to the S., and the monarch of the Oberland,—the Finsteraarhorn,— to the W. I also endeavoured to trace out the line by which the French General, Gudin, in 1799, reached the plateau above the Grimsel from Guttanen, avoiding the Hospice, which was in the hands of the Austrians. This is one of the greatest military Alpine feats that have ever been performed. The French followed the stream which flows from the little lake of Gelmer, ascended the glacier above the lake, climbed over the shoulder of the Gelmerhorn, and then surprised the Austrians by coming down on their rear by the Rhone glacier and the Saasberg.

There is no regular path from the Saasberg to the Hospice, or, at all events, we could not find any, and we descended to the Kleiner See pretty nearly by the same course as that by which the Saasbach reaches it, old Weissenfluh singing and *jödelling* all the way. It was 4.30 P.M. when we got to the lake; and, although I was not at all fatigued, still, after having been out fifteen hours,

"*on n'est pas fâché d'arriver*," as my old guide very properly remarked. As we approached the Hospice, we found the usual number of guides and porters assembled at the door; "Trift," "Triften Joch," was uttered in divers quarters, the direction whence we came, and the rope coiled round Weissenfluh indicating pretty clearly what we had been about; and when we ascended the steps, I perceived at once, by the manner of the landlady, that our line of march met with her entire approval, and that by adopting it I had risen considerably in her estimation. I am not particularly partial to the Hospice of the Grimsel, and had it not been the starting-point for the Strahleck and the Ober-aar Joch, I do not think that I should have honoured it much of late years. On my last visit I had cut down the price of one of the guides of the establishment for a journey over the Ober-aar Joch, and I did not exactly know how I might be received; so it was very satisfactory to see that all was *couleur de rose*. "From the Trift?" was put inquiringly by the hostess. To this I nodded in the affirmative; upon which, pushing aside several unfortunate tourists from the Furca and Münster, who were patiently waiting in the passage to know whether they had any chance of a bed, she preceded me, with considerable dignity, to one of the best apartments in the house, and leaving me in possession, retired with a bow to order a foot-bath and other luxuries, which she thought the exigencies of the case required. But the greatest compliment was yet to come. Some ladies, desirous of ascertaining the name of the eminent personage on whom so much attention was lavished, inquired who it was. The answer was given in a mysterious sort of whisper,—"*Das ist der Forster!*"