

I emerged upon the plain of Kashmir at Ganderbál, where I halted for breakfast under the shade of one of those stately *chunárs* or plane-trees which clustered in groves and formal gardens on the shores of the far-famed lake, and about the crystal fountains of the Thelum, are almost the only surviving monuments of the taste and luxury of the old Moguls. So much of the renowned valley as was visible from this point seemed comparatively bare, and in its lower parts unpleasantly marshy, but there was a charm in the soft balmy air, and in the silvery girdle of surrounding snowy mountain, which quickly dispelled all trace of the first natural feeling of disappointment. Towards evening I came to the crazy capital, and threading its narrow lanes to the broad highway of the smoothly flowing Jhelum, gave myself over into the hands of an eager crew of Srinágar *mánjis* or boatmen—sauciest and yet most insinuating of oriental *gamins*—who, with many a snatch of boisterous melody, paddled me up, under the venerable bridges of deodar logs, above the city to the well-known reach overshadowed by tall poplars and backed by a lofty spur from the eastern mountains. And there I found sweet respite from my wanderings in the only vacant one of the seven or eight little tenements which old Ghooláb Singh, of jovial memory, built to house the visitors he so ostentatiously welcomed of that nation of rovers to whose possibly mistaken generosity he was indebted for his fairest of all mountain kingdoms.

THE TÖDI AND ADULA GEBIRGE. By A. W. MOORE.

ALTHOUGH, since its first authentic accomplishment in 1837, the ascent of the Tödi has always been a popular expedition with Swiss mountaineers, yet the peak was, until quite recently, comparatively neglected by our climbers. The district in which it lies is, indeed, rather out of the beat of the great crowd of tourists, and, until the appearance of Mr. Forster's paper in the first series of 'Peaks, Passes, and Glaciers' in 1859, the merits of Stachelberg as a mountaineering centre were little known. A few English parties, I believe, at long intervals, slept at the Sand Alp, with a view of attacking the Tödi, but either from bad weather or other causes the expeditions were without result. In 1863 the whole district was thoroughly explored by the Swiss Alpine Club, which earned the gratitude of all mountaineers by erecting a commodious 'cabane' in a convenient position on

the Grünhorn, on the left bank of the Biferten Glacier, some three hours above the Ober Sand Alp. In the following year Mr. Tuckett crossed the Porta da Spescha, but the ill fortune of his predecessors stuck to him, and the weather was too bad to allow of his climbing the Tödi *en route*. So it came to pass that, up to the summer of 1865, the summit of that mountain remained untrodden by an English foot, and it was the knowledge of this fact which induced Mr. H. Walker and myself to select Stachelberg as the starting-point for our campaign of that year. We hoped to ascend the Tödi from there, and descending on the south side into the Vorder Rhein Thal, reach Andeer on the Splügen road, on our way to Pontresina, through the little explored group of mountains of which the Rheinwaldhorn is chief, and which are known collectively as the 'Adula Gebirge.' This programme we carried out in the expeditions which I am about to describe.

Having left London on the morning of the 18th June, we drove up to the Baths of Stachelberg late on the following evening, and found Jakob Anderegg awaiting our arrival. We had determined to make rather a bold experiment, and endeavour to effect the various expeditions which we contemplated during the season with only his assistance, dispensing with the services of local men, except in the shape of an occasional porter to carry our baggage up to chalets, &c. The complete success which attended the experiment is evidence enough of Jakob's merits, which are moreover sufficiently known by this time to most of the readers of this volume. No time was lost in commencing operations, and at 7.25 A.M. on the 20th we started for the 'cabane' erected by the Swiss Club on the Grünhorn, intending to sleep there and attack the Tödi on the morrow. As two days' provisions had to be taken, and we were otherwise heavily laden, we had instructed Jakob to engage a man as beast of burden as far as the hut, taking care to secure, if possible, some one acquainted with the ground above the Ober Sand Alp, as the way was understood to be rather intricate, and we had no very precise notion of the exact position of the hut. He now produced a man, a native of Berne, who had quitted his own canton, and been settled for some years in the Linth Thal. This individual professed to know all about everything; but the sequel proved that he knew nothing about anything, and I suspect that Jakob, in his desire to serve a compatriot, made his inquiries rather superficial, and was only too glad to take the fellow's knowledge for granted.

Instead of reaching the Ober Sand Alp by the usual path

up the valley, with which we were both acquainted, we determined to follow a route which, though more laborious, would probably be more interesting, viz., by the Altenoren Alp and Clariden Firn. The main outlet of that extensive field of névé is to the north-east towards the Altenoren Alp, but it sends down several small glaciers in an easterly and south-easterly direction into the deep hollow in which the Ober Sand Alp is situated. Up to 1864 the only known way of reaching the Clariden Firn from the Linth Thal was from the Sand Alp, by climbing the steep grass slopes below the ice at a point where a small stream, the Beckibach, flows down them; but in that year Mr. Tuckett proved its perfect accessibility from the Altenoren Alp, and a combination of the new and old routes struck us as promising an interesting walk. The lower chalets of the Altenoren Alp are perched on a broad shelf of pasture, plainly visible from Stachelberg, on the top of the tremendous cliffs which frown down upon the Pantenbrücke, and are approached by a good but steep path. We reached them at 10.45 in three hours' very easy walking, and another hour up a wild glen, at the head of which was the glacier, took us to the upper chalet, a deserted and ruinous hovel, where we halted for half an hour. The rocks of the Altenoren Stock, on the south side of this glen, are rather curious. When first seen they appear to form an absolute wall, cut clean away from top to bottom, down which no living thing could creep; but on looking back from the head of the glen, this apparent wall resolves itself into a series of steps, separated by great broad shaly ledges, easily accessible one from the other, so that there would be no difficulty at all in gaining the summit. More than an hour of laborious walking over slopes of shale and snow was required before we reached the foot of the glacier, which terminates in a tongue of ice, squeezed in between rocks, and too steep to be climbed except by means of much step-cutting. This was fortunately unnecessary, as on the left bank there was fairly easy access to the level surface above, over slopes of hard shale, stones, snow, and finally moraine, and a stiff scramble landed us on the ice at 1.15. The glacier is very unlike most of its kindred; there is no ice-fall worthy of the name, but long slopes of névé stretch away towards the Clariden Grat with a regularity broken only by a few crevasses. With these slopes we had now nothing to do. Being on the left bank, we had merely to cross to the right where the névé curled over towards the Sand Alp free from any bounding ridge. The ice was perfectly level and easy, and at 2.10 we were standing on the further side, on

the rocks above the Beckibach, in a state of bewilderment at the magnificence of the scene before us.

At our feet, in a deep hollow, some 2,000 ft. below, were the chalets of the Ober Sand Alp, with the cliffs of the Tödi behind them, and, more to the left, the grand line of precipices which circles round from the Selbsanft to the Biferten Stock, on the right bank of the Biferten Glacier. There was nothing else; but no similar view in other parts of the Alps has left on me a greater impression of perfect sublimity. The distance from our position to the summit of the Tödi is almost exactly 4,500 mètres, or rather more than $2\frac{3}{4}$ miles, and of the mountain's 11,887 ft. of actual height more than 5,600 ft. were before us, the elevation of the Sand Alp being 6,258 ft. We were ourselves at a height of 8,491 ft., and so were in every respect in the best possible position for appreciating the real form and grandeur of the mountain. It is not a 'peak,' but a broad bastion of rock, so steep on the north side, at which we were looking, that very little snow can lie, and the glaciers are consequently insignificant. As one amongst many higher mountains the Tödi would not perhaps be considered very remarkable, but standing as it does, almost perfectly isolated, and overtopping all its neighbours, there is not a more noble object in the Alps. Steep slopes of grass, gravel, and shale, lay between us and the Sand Alp, and down these we started at 2.30. It was easy work, and at 3.15 we reached the chalets, the walk from Stachelberg having occupied about six hours; but we had travelled slowly and lost time in various ways.

At 3.35 we commenced climbing the slopes behind the chalets in the supposed direction of the 'cabane,' where we were to pass the night. Our porter was here discovered to know nothing whatever of the country, so we had to exercise our own judgment as to the way. Before leaving England, I had read up pretty thoroughly all that has ever been written on the subject of Tödi ascents, and had in consequence a tolerably accurate idea of the proper line of march for a certain distance. The ground was very steep, and the work, after our rapid descent from the Clariden Firn, rather severe. I had a private source of misery in the fact that, in addition to my own load, I had slung round my neck our Russian furnace or 'Teufel,' as Jakob had christened it, of which I had, in a moment of weakness, volunteered to relieve that worthy. The chronic throttling, which was the result, was bad enough, but endurable compared with the jerk with which the machine would at every favourable opportunity swing round from my

back to my front, and, hitting me violently in the stomach, summarily 'bag' what little wind the steepness of the ascent had left me. At 5.50, we reached the top of (I believe) the Ochsenstock, and held a council as to where we ought to go next. Up to this point, I believe that we had followed the proper way, but we were now completely puzzled as to the direction to take. To our right front was a steep and crevassed glacier which flows down from the north-east face of the Tödi, and is represented on the map as terminating a short way above the level of the Biferten Glacier. In fact, however, it actually joins the Biferten Glacier, the lower portion of which was just visible in the gorge below us. I fancied the 'cabane' to be somewhere on the other side of this glacier, and that we ought to cross it; but this course did not look promising, and our porter insisted strongly that the proper way was to the left. This I was certain could not be the case, but he succeeded in humbugging Jakob, and the two set off in that direction to search. A description of our wanderings would be uninteresting; suffice it to say that at 7.30 we were no nearer the 'cabane' than we had been two hours before, and accordingly, having found a tolerable hole, resolved to bivouac. We might have been much worse off, as we had shelter from everything except driving rain, of which there appeared to be no chance; there was plenty of firewood about, and water within easy reach. A fire was lit, the 'Teufel' set to work, and a good brew of soup prepared; we then rolled ourselves in our plaids, and with some difficulty managed to squeeze into the hole, which, with accommodation for two, had upon this occasion to receive four occupants. The cold until early morning was not severe, and on the whole we were not more uncomfortable than is usual under such circumstances.

At 3.0 A.M. on the 21st we very unwillingly emerged from our lair, and, shivering, took up our position round the fire for breakfast. Some hot wine and water put a little warmth into us, and, at 4.10 on a perfectly cloudless morning we started, after dismissing our porter, who had proved neither useful nor ornamental. We were in happy ignorance as to the way we ought to steer, but finally determined to cross the lateral glacier before mentioned and see what lay beyond it. A short ascent took us on to the ice, but we soon began to doubt the wisdom of the choice we had made. The glacier was very steep and crevassed, and the more we looked the less obvious did it become what we were to do when the other side was reached. It was at length resolved to get down at once to the main Biferten Glacier which was below, on our left, as we

knew that, once on it, we should have only to find a way somehow to its head. We therefore turned downwards, but the ice was so steep and hard that getting along without cutting steps was difficult and uncomfortable. On the surface were a good many small stones, still fast bound by the night's frost, and by making use of these as stand-points we got along pretty well, and were approaching the Biferten Glacier, when Walker put his foot on a stone which seemed secure, but was really glazed by a thin film of ice. In an instant he fell with great violence, and commenced an involuntary descent of the slope, but managed to get the point of his axe into the ice and stop himself; but he was unable to move hand or foot, and so lay prone, with his face to the ice, holding on until help came. Jakob on seeing him slip made an effort to catch at and stop him, but in so doing lost his own footing, and unable to recover himself rolled headlong over. In vain did he brandish his axe right and left, in hope of finding some hold—the slope was too steep and the ice too hard—so down he went helplessly over the sharp stones in his course, until the slope became more gentle and he stopped. During this startling performance I was the only member of the party on my legs, and therefore the only one able to appreciate the position of affairs, Walker being so situated that he could see nothing, and only hear the clatter caused by Jakob's fall. For a few moments I was horribly alarmed, as it seemed impossible for a man to roll nearly 100 feet over such ground, and escape serious injury. But so it was, for Jakob quickly picked himself up, and announced himself unhurt except by a few cuts about the hands. He then released Walker, we resumed our way, and at 5.10 reached the Biferten Glacier at a point just below its central ice-fall.

We made straight for the foot of the ice-fall which stretched completely across the glacier, leaving, so far as we could see, no space on either side by which it might be turned. The piece of work which ensued was sufficiently difficult and exciting, but our leader rose to the emergency, and scented out a way with marvellous sagacity, never losing an inch of ground. We were approaching the top of the fall, and expecting shortly to emerge on to the plateau which was visible above, when our progress was stopped by a crevasse of more than ordinary size which we found it impossible either to cross or turn. Success was not hurriedly despaired of, but our situation was too critical to allow of prolonged hesitation. We were not standing on firm ice but over a huge chasm, choked with débris much of which had evidently not long fallen. Where this

fragile roof was less compact than elsewhere we got exquisite but far from reassuring glimpses into the blue depths below. The sun was blazing full upon us from a cloudless sky, and the water was streaming from the icicles which fringed the threatening pinnacles that impended over us. If we could not advance, it was plain we ought not to dawdle where we were, as every moment's delay made even retreat more dangerous; so we yielded to fate, and began to retrace our steps along the devious path which had cost so much trouble to make. A sharp look-out was kept on either side for a practicable opening in the maze, but none such appeared, and, at 6.45, when about half-way down, we halted for breakfast in a very 'blue' frame of mind. As we ate, we moodily reflected that an hour and a half of arduous work had not to all appearance advanced us one step on our way, and the possibility of utter failure loomed before us with unpleasant distinctness. At 7.15 we resumed our march, and had not descended many yards when a promising opening in the ice on our left tempted us aside. Our prospects changed instantaneously, as nothing but a stretch of moderately-broken glacier intervened between us and a series of slopes of avalanche snow which lay between the ice-fall and the rocks on the left bank of the glacier, and had either escaped our notice or been invisible from below. While steering for this promising highway, I caught sight of something perched on the cliffs in front of us, which I at first thought was merely a large rock, but it gradually assumed an appearance suspiciously like the anxiously looked-for 'cabane.' I pointed out the object to my companions whose keener vision at once confirmed my suspicions. There in very truth, with the Swiss Federal flag floating over it, was the little building, pretty much in the position I had always supposed, but we remained as puzzled as ever as to how it should be approached from the Ochsenstock. Our failure to find it had cost us three precious hours of the early morning, besides an entirely needless risk in the ice-fall, which we ought never to have touched. However the way was now straightforward enough, and we zigzagged steadily up the steep slopes of hard snow towards the plateau below the upper ice-fall, until at 8.0 we were at the foot of a spot famous in the annals of Tödi ascents, the so-called 'Schnee Runse.'

Until last year, when Mr. Freshfield found a way up it, the great upper ice-fall of the Biferten Glacier was supposed to be impassable. It certainly seemed so when we looked at it; but it must be remembered that in June 1865, owing to prolonged hot and dry weather, all ice-falls were unusually bare of snow,

and therefore at their worst, while the season of 1866 was signalised by continuous bad weather and consequent excess of snow. To gain the nevé above the ice-fall, it has always been considered necessary to take to the rocks on its left bank, at a point generally known as the 'Schnee Runse.' A great spur is thrown out from the Tödi towards the ice-fall, and forms the south side of a ravine which runs deep into the heart of the mountain. The head of the ravine lies immediately underneath the summit of the Tödi, and is overhung at a great height by a small steep glacier, blocks from which periodically rake the depths below. The rocks on the south are lowest where they abut against the ice-fall; where they merge in the main cliffs of the Tödi they are much higher, and are crowned by a mass of broken séracs. At some point along their face there is access to the plateau above the fall, presenting I believe no particular difficulty, but exposed to the fire of these several glaciers. We were a good deal puzzled as to the true point of attack, and commenced operations by climbing along the base of the rocks on the south side of the ravine, but soon crossed to the north side, intending to work up to its head, and scrape through a cleft between the séracs crowning the western end of the southern spur and the cliffs of the Tödi. But on closer inspection the feasibility of this seemed doubtful; so we recrossed over a mass of avalanche débris, and made for what looked like an accessible point in the rocks on the south side. Before turning upwards it was necessary to pass along the face of the cliffs, nearly on a level; and, while so engaged, my equanimity was disturbed by the sudden fall of a stone as large as a cocoa-nut between Walker and myself. Walker being in front was happily unconscious of the intruder; but I, who had seen it almost graze the tip of my nose, experienced a momentary sensation the reverse of pleasant. The rocks proved more troublesome than we had expected, and at last led us to the foot of a *cheminée*, which appeared to be the only route available for further progress. This *cheminée* was the most extraordinary place of the kind I ever was in, being almost perpendicular, and so confined that a good deal of diplomacy had to be used in order to move in it at all. But its most startling features were reserved to the last. Near the top a biggish stone had fallen from above and got jammed, and to advance it was necessary to squeeze through the small passage left between the stone and the back of the gully. Here just for one step the rocks gave no support at all, but there was a lump of old snow (the remains probably of a larger mass) sticking to the cliff, on which, by exercising great contortions

of the body, it was possible to rest the foot. Making use of this, Jakob and Walker passed up, and after the former had gone on a little further, and made himself 'fest,' I followed. By a scientific wriggle I reached the snow, and leaning my whole weight on it, was giving the heave up necessary for the next step, when it suddenly gave way and slithered down the rocks. I should have followed suit, so far as the rope would have allowed, but for a curious circumstance. Already during the ascent I had once or twice stuck fast, and now that all support was gone from my feet, I found that—thanks to the bulky load on my back—I was jammed hard and fast between the sides of the *cheminée*: my legs dangled free, but I could not have fallen had I wished to do so. I regret that I am unable to explain by what means I escaped from this remarkable position, and am not hanging there to this day. I have a vague recollection of making frantic exertions, and at last emerging from the hole, when I found Walker standing on a knob of rock, holding on to nothing in particular. The only position available for me was the stone in the mouth of the gully, which had a tendency to 'wobble,' but was really firm enough for all practical purposes, and on it I accordingly perched myself, wondering exceedingly what was going to happen next. Some twelve feet of perfectly vertical rock still intervened between us and the top of the cliffs, and this, immediately over our heads, there was no possibility of scaling without assistance from above. On our left was a rounded ledge, only a few inches wide, leading to a more practicable point, along which Jakob had already crept, and now stood adjuring us to follow. Walker looked at me, and I looked at Walker, after which expressive performance we mildly protested. Above the ledge the rock was too smooth to give handhold, while below it was a more absolute precipice than I have often seen. We pointed out to Jakob the objectionable character of the place, but merely got for a reply 'Kommen Sie nur, Sie fallen nicht,' which though consolatory was not convincing. Walker however magnanimously resolved to risk the thing, and crawled along to where Jakob was standing, an operation which I did not care to watch. His successful accomplishment of the passage relieved me from the necessity of attempting it, as he and Jakob were then able to climb to the top of the cliffs, and help me straight up from where I was standing. We were now, at 9.20, on the crest of the spur, and close to the séracs before alluded to. Assuming that they finally merged in the névé of the Biferten Glacier, we attacked them and after much winding about and step-cutting found ourselves, to our no small satis-

faction, on the snow-fields above the ice-fall. It was 9.55, and we had thus taken two hours to effect a passage which can, I believe, be accomplished by the initiated in half that time.

Now at any rate our road was plain enough, as we had only to toil up a succession of snow-slopes of no great steepness, which swept round to our right delightfully free from difficulty. At 11.0 we reached a point on the field of névé forming the head of the Biferten Glacier, nearly in a line with a well-marked depression between the Piz Urlaun and Stockgron—the Porta da Gliems, through which we hoped, later in the day, to descend to Disentis. As we sat, the Porta da Gliems was on our left; on our right crevassed snow-slopes stretched away to a ‘grat’ with the two principal peaks of the Tödi at either end, the Piz Russein, or highest peak, at the western end, and the Tödi proper at the eastern; and in front was the ridge connecting the Stockgron and Piz Russein, which cuts off the head of the Biferten Glacier from the Russein Thal. There are several depressions in this ridge, but the best marked is close under the Stockgron—the so-called Porta da Spescha, which was crossed by the Swiss Alpine Club in 1863, certainly for the first time this century. The heat during the last two hours had been most intense, and we, being out of condition and very heavily laden, had felt it severely; so much so that when first we halted, I had doubted whether I should be able to accompany Walker and Jakob to the top of the mountain. But half-an-hour’s rest, and a good dose of lemonade powder mixed with snow—a delicious combination which I strongly recommend to general attention—served to recruit our exhausted energies, and at 11.30 we set off again, leaving our baggage on the snow to await our return.

We turned at once due north, and for some time walked on over the snow-slopes, with a comfortable conviction that the two peaks we were approaching were the two principal summits of the mountain, the Piz Russein and Tödi respectively, when our confidence was shaken by the appearance of another peak to the south of, and at right-angles to, the supposed Piz Russein, which looked so offensively high that we were seized with a horrible suspicion that *it* must be the real ‘höchste Spitze.’ The doubt was most annoying, for on emerging from the Schnee Runse we had fondly imagined that no further mistake was possible. We had been prepared for the presence of two peaks of nearly equal height with a ridge between them, but the apparition of three peaks, with of course two connecting ridges, entirely upset all our calculations. Our original conclusion was right, as I at least ought

to have known perfectly well; but we allowed ourselves to be seduced by the imposing appearance of our new friend, and turned towards the slope leading up to the saddle between it and our first love. A steep wall of snow or ice lay below this, the ascent of which offered little difficulty, although at some points the snow was in a tricky state, and at others steps had to be cut. The saddle was soon gained, and our mistake at once made evident. On our left was the delusive peak which had misled us, rising little more than 100 feet above our position, while on our right a sharp snow arête led up towards the Piz Russein. The error was of little consequence, as the arête, though rather narrow, proved perfectly easy; we trotted merrily along it, having the Russein Thal at vast depth below on our left, and cutting a few steps here and there, until at 1.20 we reached the wished-for summit, a widish snow-ridge, on which we could all stand in comfort.

We had thus gained our end, but with an expenditure of time and labour quite disproportionate to the height of the mountain, which is only 3,623 mètres, or 11,887 feet. In the course of the expedition we had indeed made every mistake which it was possible to make, crowning all by at last reaching the summit from a direction diametrically opposite to the usual one. We had certainly found our own way, and felt proportionately conceited; but on the whole I should recommend future comers, who may make the ascent from Stachelberg, to sink the conceit, and take a local guide. One result of our errors was that we got no view. The clouds had risen since the morning, and we had scarcely time to get a glimpse of the second peak, or Tödi proper—which is very little lower than the Piz Russein—and the graceful snow-peak of the Biferten Stock beyond, when mist enveloped us and blotted out everything. The temperature was very different from what it had been a little earlier, so having shivered for ten minutes, and finding that there was not much prospect of a clearance, we turned to go down at 1.30, and regained our baggage at 2.5. After fifteen minutes' halt we again reluctantly assumed our burdens, and started across the plateau towards the gap between the Piz Urlaun and Stockgron. For some incomprehensible reason the Federal engineers have called the latter peak Piz Russein—a name which is universally applied to the highest point of the Tödi, whereas the Stockgron has been recognised by all explorers of the district from Placidus a Spescha downwards. To have made straight running for the col would have involved some descent and re-ascent, so we steered for a point on the north-east face of

the Stockgron, and thence at 2.45 dropped down on the pass, a small snow plateau with a big crevasse in the middle of it. For some years past the existence of a pass across the chain at this point had been known, but we were the first persons who actually crossed it, with the exception perhaps of the indefatigable Placidus a Spescha, some time towards the end of the last century.

Just as we reached the col slight snow began to fall, so, as nothing was to be seen, we commenced the descent without delay by a steep ice-slope, which led down to the Gliems Glacier at its extreme north-western angle. There was a good deal of soft snow on the ice, necessitating caution; but keeping well to the right under the rocks of the Stockgron, we passed the steepest portion, and then, striking away to the left, were able to glissade on to the level plateau below. We were in a sort of bay, the main glacier falling away rather steeply to our left. Our first idea was to go straight down it to its extremity; but Jakob's eye was caught by a remarkable breach in the rocks on its right bank, towards which, at his suggestion, we turned. At 3.10, in only twenty-five minutes from the col, we stepped from the névé into this curious opening, which was not many yards wide, and found ourselves looking down into the upper Russein Thal. A not very steep slope, strewn with broken rocks, fell away from our feet, promising an easy descent, and down it, after ten minutes spent in looking about us, we started. Care was necessary to avoid dislodging the loose stones, which were ready to start off at less than a moment's notice; but there was not the slightest difficulty, and we were soon at the bottom of the rocks. Snow-slopes followed, and a succession of glissades down them took us to the first grass, whence a regular high road led towards the valley. We were on a grassy ridge, falling away rapidly on either hand, and had only to follow its crest, descending steadily until near the bottom, when we bore away to the right, in order to hit the valley at a favourable point for crossing the numerous small streams which flow into the main torrent. The distance was longer than we had supposed; but at 4.40 we were fairly in the valley, and at 4.55 reached (I believe) the highest chalets on the Russein Alp, the descent from the summit of the Piz Russein having occupied only three hours of actual walking. The herdsmen received us civilly, supplied us with milk, and lent us a small boy to carry our traps to Disentis, for which place we started at 5.25. The valley, as far as its junction with the Vals Cavrein and Cavardiras, is fine, and the view up those savage glens is striking; but lower

down it becomes uninteresting, and continues so until the Vorder Rhein Thal is approached, when the scenery improves again. The final gorge is magnificent, and the view looking up from the bridge, which carries the diligence-road across its mouth, superb. The cliffs, with pine trees clinging to every available ledge, tower on either side to a vast height, while the torrent of no mean size thunders below. We fell into the main road at 8.5, and at 9.0 reached Disentis, where we found comfortable quarters at the 'Condrau zur Krone.'

We had intended to devote the next day to finding a passage to Olivone in Val Blegno, across the hitherto untraversed Medel Glacier, but our two first walks had been so much longer and more laborious than we had anticipated, that we determined to get a good night's rest at Disentis, and in the afternoon go up to the highest occupied chalets near the glacier. The morning of the 22nd was therefore passed in delightful idleness. We ascertained from the civil landlord that shortly before a party of the Swiss Alpine Club had been exploring the Medel Glacier, but had been persecuted by bad weather, and consequently accomplished nothing important. The glacier lies in a direct line between Disentis and Olivone, and it was clear from the map that a pass across it, if practicable, would in point of distance be a much shorter route between those places than the circuitous mule-track of the Lukmanier. We had had a good view of the glacier while descending the Russein Thal, and did not anticipate much difficulty in the expedition, which however, lying over entirely new ground, promised to be interesting. Having secured a porter to carry our baggage as far as the chalets, we left Disentis at 2.50 P.M. by the usual path to the Lukmanier. The village is built high above the left bank of the Vorder Rhein, which has cut for itself a deep gorge, into which it is necessary to descend, and then climb the opposite side. This is a rather long operation, and it takes a good hour to reach the little hamlet of Mompemedels, on the right bank. Thenceforward the path, which is stony and bad, continues to mount for some distance, and then descends to the level of the Mittel Rhein, rather above the village of Curaglia, where it crosses to the right bank. Here we left the Lukmanier path, and turned into a glen which opens out to the south-east, and is closed at its head by the main Medel Glacier. The first ascent from Curaglia is steep, but as soon as the valley is fairly entered, the walking becomes very pleasant, the path mounting gradually through pleasing scenery. At 5.50 we reached some chalets, where there were cows, and halted there for the

night, the next chalets being still unoccupied, and only an hour higher up. We retired early to our hay, which was plentiful and clean, and before going to sleep heard a genuine 'Ranz des Vaches,' but were not so impressed as I suppose we ought to have been, possibly owing to the inferiority of the performer, who started well, but broke down miserably before the end of each blast of the horn.

We started at 3.40 A.M. on the 23rd, without the porter, and an hour's walk through not very interesting scenery took us to the last chalets on the Plattas Alp, built in the centre of a little green plain at the very head of the valley, and commanding a good view of the glacier. Its central portion is very much shrunk, and terminates on the brow of steep ice-ground rocks, but right and left the ice streams down into the valley, the branch which comes down on the east side being the most extensive and descending lowest. The landlord at Disentis had told us, as the experience of the Swiss Club party, that we should not be able to get on to the ice from the head of the valley in which we were, but must pass through a gap in the ridge on its left side, and keep along the west face of that ridge until it merged in the snow-fields. The gap referred to was now close on our right; but a survey of the glacier failed to reveal any necessity for the very considerable détour which the adoption of the course recommended would involve. It seemed possible to get above the steepest part of either branch by means of snow-slopes between the ice and rocks, but as we knew our proposed col to be more in a line with the head of the eastern branch, we determined to try our luck in that direction. We accordingly followed a faint track, whose zigzags could be traced up to a depression in the ridge on the right side of our valley, separating it from the Val Lavaz. I have rarely seen a more beautiful glacier than this eastern branch of the Medel Glacier, by the side of which we mounted. It descends into the valley in a broad tongue of ice, of great steepness and exquisite purity, and is indeed a reproduction on a larger scale of the tourist-haunted end of the Rosenlauri Glacier; there is no terminal moraine, the lateral moraine is insignificant, and the ice itself is unsoiled by dirt or stones. At 5.35 we got on to the snow between the hill-side and the glacier, crossed it and the moraine beyond, and then took to the ice, which rose in front steep but pretty well covered with snow. A few crevasses had to be passed, and some steps cut, but Jakob chose his route well, and by 6.50 we had left the steepest part of the way behind us, and felt justified in halting till 7.10 for breakfast. That finished we

had but to plod slowly and laboriously over snow-fields, whose only prominent feature was their enormous extent. We made for a col immediately to the east of the tiny giant of the district, the Piz Medel, 10,509 ft. in height, whose ascent we had contemplated. It was evidently very easy of access by a gentle slope of snow, but an envious cloud had perched itself on the summit, so we determined to leave it alone, the idea of expending time and labour on so insignificant a novelty, with the certainty of seeing nothing for our pains, striking us as too absurd to be seriously entertained. Some of the crevasses in the névé were rather troublesome, but altogether our progress was singularly easy and uneventful, and at 8.5 we reached the col. The watershed is equally accessible at all points, so for comfort's sake we established ourselves on some rocks a little to the west of the actual pass, which we christened Camadra Pass from the name of the glacier on the south side. Its height cannot be less than 10,000 ft., as the summit of Piz Medel was certainly not more than 500 ft. above us. I cannot say much about the view, as since the early morning clouds had risen, and we saw very little except towards the north, where the Tödi was conspicuous.

On the south side the small Camadra Glacier fell away very steeply towards Val Blegno, and at 8.30 we commenced the descent in that direction. Scrambling over the rocks immediately below us on to a snow slope beyond, we descended it for a short distance and then, turning sharp to the left, passed down a broad and rather steep gully filled with the soft snow, on to the extreme eastern branch of the glacier. This scarcely showed a single crevasse, and stretched right away down to the valley more like a steep snow slope than anything else. It was just the place for a glissade; so off we started in the approved style, roped as we were, but keeping the pace moderate for fear of hidden crevasses. Passing the end of the glacier, which dies out almost imperceptibly, we continued our course over the snow slopes below it, until the decreasing inclination of the ground stopped us. We were at the extreme head of Val Blegno, at the foot of the steep and dreary ascent to the Greina Pass, our glissade having extended almost without interruption for at least 3,000 ft. The head of the valley is very stony, but the ground was a blaze of gold, being densely covered with a tiny yellow flower which seemed to thrive with the greatest luxuriance in the most unpromising places. We soon found a faint track, which, as well as the scenery, improved as we descended, and brought us at 11.10 to Ghirone, the first village. Soon after passing through it, we

were stopped by an old and dirty native, who took Walker aside confidentially, and, holding out his unclean palm in a suggestive manner, offered to show him what he called a 'splendid hole,' imagining from our gear that we were on the look-out for eligible mining speculations. We undeceived our disinterested friend and interpreted his offer to Jakob, whom it struck as a most sublime joke,—indeed he never quite got over it, and lost no opportunity of referring to it, especially whenever we happened to be interested in holes from a camping-out point of view. Beyond Ghirone the valley contracts to a mere gorge, on emerging from which Olivone is seen at a great depth below, and beyond it the smiling expanse of the lower Val Blegno almost as far as Bellinzona. The path descends by steep zigzags to the village, which is built on both sides of the stream, and at 12.35 we entered its only inn, on the right bank, kept by one Stefano Bolla. Its external aspect was not encouraging, and did not prepare us for the clean salon within, nor for the very tolerable dinner with which we were subsequently served. The presiding genius was an ancient individual with stupidity marked on every feature of his venerable countenance, who spoke only a lingo of the vilest Italian *patois*, and very little of that. The only thing intelligible we could elicit from him was, that we should certainly not be able to find anyone to carry our traps up to our proposed night-quarters, all the men being busy cutting hay. Our programme for the next two days was rather extensive. We proposed to sleep in the highest available chalets in Val Carassina, a considerable glen which opens out into Val Blegno opposite Olivone, and is closed at its head by the extensive Bresciana Glacier flowing down from the western face of the Rheinwaldhorn;—effect the ascent of that peak on the morrow, and, descending to the Rheinwald Glacier, find a pass into Val Malvaglia, which debouches into Val Blegno about two thirds of the way between Olivone and Biasca;—and the next day make another pass to the Zapport branch of the Rheinwald Glacier, and so to Hinterrhein and Andeer. Now it was clear from the map that the ascent into Val Carassina must be very steep, and we had no desire to half kill ourselves by carrying up, on a broiling afternoon, our usual burdens *plus* two full days' provisions which it would be necessary to take. The information given us by our host was therefore particularly unwelcome, and we were waiting for dinner in rather a sulky humour, when we were rejoiced by the appearance of an active bustling waiter, probably old Bolla's son, who amongst his other virtues spoke French, and

soon set our minds at ease. The porter turned out to be merely a question of francs, and was stated to be procurable enough, if we did not mind paying a little more than usual, which of course we did not, so one was quickly found. Enquiries about the Rheinwaldhorn had not much result; the existence of such a hill was admitted, but it was stated to be quite inaccessible from this quarter; some distinguished person had tried to get up, and failed after undergoing terrible perils; and *we* had better not attempt it. This intelligence did not spoil our appetites, and at 3.10 we left Olivone, in a state of repletion which, having regard to the nature of the walk before us, made the engagement of the porter more than ever a subject of congratulation.

The Val Carassina does not open into the Val Blegno in a well-defined gorge, but terminates above steep cliffs, over which the torrent from the glaciers of the Rheinwaldhorn leaps in a single bound of 700 or 800 feet to join the main stream of the Brenno. The path into the valley is therefore, as might be expected, exceedingly steep; it mounts along the left bank of the torrent almost like a staircase, turning and twisting about in the most reckless way, and ingeniously circumventing smooth faces of rock which from below seem to bar all progress. The scenery is very picturesque; trees cling wherever there is space; great boulders are scattered about on every spot of level ground; close by, the torrent plunges down with a roar almost deafening; while at every upward step the view, looking back towards Val Blegno, becomes more extensive and beautiful. At 4.50 we reached the chalets of Compièto, 2,258 ft. above Olivone, in the middle of a charming little green plain, through which the stream meanders gently, unconscious of the terrific plunge before it. There were cows here, but our destination was higher up; still, with milk to tempt us, it was impossible to resist a halt in such a delicious situation. We were in the centre of an amphitheatre, almost completely enclosed, so that it was hard to discover in which direction our road onwards lay. Above Compièto the valley turns abruptly from north-east to nearly due south, and at the angle the gorge is so confined, that no one ignorant of the peculiar conformation of the ground would suspect its existence. The plain in which we were communicates with Ghirone by a low grass col to the north, in a line with the natural prolongation of the upper valley, at the head of which a similar col leads to Val Soja. The valley is therefore like a trough open at either end, the col to Ghirone representing one opening, and that to Val Soja the other, the real outlet towards Olivone being far less marked.

At 5.15 we resumed our way, and skirting the head of the amphitheatre along the right bank of the stream, commenced a second ascent, which was to take us to the upper reach of the valley. After the first steep bit the path led through a pine wood, along the side of a ravine, through a cleft in which, so small that a moderate-sized boulder would block it up, the torrent finds its way from the upper to the lower level, as before, in a single leap. Beyond this ravine the valley becomes almost level; and at 5.50 we reached our destination, the Bolla Alp, from which we looked over the col towards Ghirone to the glaciers at the head of Val Blegno, and were able to identify our entire line of descent from the Camadra Pass, which looked excessively steep.

We passed a comfortable night, and started again at 4.10 on the 24th, without the porter. An hour's walking over nearly level ground brought us to the last chalets on the Bresciana Alp, where we came in sight of the tail of a glacier high up the steep grass and stone slopes on the east side of the valley. This evidently belonged to the northern branch of the Bresciana Glacier, but as the Rheinwaldhorn was known to be at the head of the extreme southern branch, we thought it most prudent to get as near as possible to the head of the valley before turning up towards the ice. Beyond the alp the path gradually died away, and we lounged along over rough and broken ground of a hummocky character until, at 5.50, we were close to the low ridge separating Val Carassina from Val Soja. Seeing from the map that the Bresciana Glacier did not come down into the valley, but terminated abruptly on the top of cliffs, we had been prepared for some difficulty in getting on to the ice. We now therefore saw with great satisfaction a 'live' moraine, high up in an angle of the hill, which looked as if it must belong to the main glacier, and would give access to it at a point considerably above its termination. At any rate it was an object to steer for, and it was unanimously agreed to climb the hill-side towards it. While examining the ground below the moraine, our attention was attracted by three dots moving up the slopes in the direction which we proposed to follow; and the telescope revealed them to be three men armed with guns—a discovery which did not much affect Walker and myself, but threw Jakob into an extraordinary state of perturbation. He instantly set them down as evil-disposed persons, who had got wind of our plans at Olivone, and come out to waylay and murder us like the unfortunate Hanoverian on the Col Torrent in 1863. That tragedy created a great sensation throughout Switzerland, especially among the guides, as a

class, and many of them have not to this day recovered from the alarm which such an event naturally caused. Jakob did not express his fears in words, but his constant halts to examine the objects of his suspicion through the telescope, his soliloquies, and his indecision as to the line of march, were sufficient evidence of what was passing in his mind. In spite of all delays, however, and the steepness of the slopes, he could not prevent our gaining on the enemy, or rather on one of them who lagged behind—of course to watch our movements, while the rest of the party put themselves in ambush to receive us. He made a final and desperate effort to avert our impending fate by an unnecessary *détour* of about a quarter of an hour, but at 7.5 we reached the base of the moraine, on the top of which was seated one of the would-be murderers, who to our innocent eyes appeared to be a very harmless 'jäger' of the better class of peasants. He was as civil as his astonishment at our appearance, in a spot where probably no traveller was ever seen before, would allow, and certainly succeeded in disguising his felonious designs wondrous well. After a few minutes' conversation we wished him and his friends 'good sport,' and passed on, Jakob quaking visibly, and evidently expecting each moment to be his and our last.

We had struck the moraine just at the proper point, and found, as we had expected, that we were on the right bank of the southern arm of the Bresciana Glacier, some way above its end. We kept along the crest of the moraine for some distance, and at 7.20 halted for breakfast, Jakob, still uneasy, taking care to select a spot where we should be safe from a shot from behind. Our position commanded a fine view of Monte Rosa, the Mischabel range, and the Bernese Alps, which towered into the clear morning air free from cloud or mist; but a bitterly cold wind made inaction unpleasant, so we cut our meal as short as possible, and, having put on the rope, took to the ice at 7.40. The glacier was smooth and uncrevassed, and we kept straight up its centre towards the base of a considerable ice-fall, which stretched from the right bank about three-fourths of the way across. Under the left bank the ice, though steeper than elsewhere, was less broken, and promised a tolerably easy passage to the upper *nevé*. Although we encountered no serious difficulty, yet the work was sufficiently troublesome, much step-cutting being necessary, and some of the crevasses requiring no little diplomacy to pass. As we approached the *nevé* the chasms increased in size, and one, combined with a low but steep ice-wall beyond it, gave us the only really *mauvais pas* on the expedition. But our

progress, though slow, was steady, and on reaching the upper snow-fields our hearts were gladdened by the appearance of the object of our ambition, the Rheinwaldhorn itself. It was our first view of the peak, and certain fears of possible difficulties which had haunted us were at once dissipated, as snow-slopes of no great steepness stretched up to its very summit, now not far above us. Our direct course would have been to have borne away to the right to the summit, but the snow proved to be in very bad order, so we preferred keeping straight on towards a low ridge of rocks considerably to the left of the peak. Floundering laboriously through the soft snow, we reached them at 9.45, and found ourselves looking down a precipice upon the extensive Lenta Glacier, which flows from the northern face of the Rheinwaldhorn into one of the many branches of the St. Peter's Thal.

From that mountain two ridges diverge, one to the north-east, the other, on which we were, to the north-west; the former separates the Lenta and Rheinwald Glaciers, the latter the Lenta and Bresciana Glaciers; but both ridges merge in the steep snow-slope forming the northern face of the peak, the two last-named glaciers falling away in opposite directions from the point where the north-western ridge is lost. Turning along the ridge in a southerly direction, we followed it without any difficulty very nearly to the point where it disappears in the snow, and then traversed the face of the peak, here not more than a hundred yards across, to the ridge above the Rheinwald Glacier. This point was attained by Mr. Freshfield's party in 1864 from the Lenta Glacier, and has twice been reached from Hinterrhein by the Rheinwald Glacier, but it had never before been gained from Olivone. We had thus made a pass giving access to either the Lenta Thal or Hinterrhein, the actual col, which may conveniently be called Bresciana Pass, being at the point where the nevés of the Lenta and Bresciana Glaciers meet. We had struck the ridge much above its lowest point, and, turning along it to the right, a few steps up a broad slope of snow landed us at 10.30 on the summit of the Rheinwaldhorn, the not very lofty monarch of the Adula group, 11,149 ft. in height. The summit is a narrowish ridge of rock, running nearly north and south, and is crowned by a dilapidated stone man, in which was a canister containing the cards of our predecessors, Mr. Freshfield and his friends. Clouds had risen, and we were again unfortunate as regarded distant view. Near at hand the Guferhorn was a fine object, showing as a sharp and very elegant cone of snow above steep shaly rocks, and the

view over the vast expanse of the Rheinwald and Zapport Glaciers was very striking. The Federal engineers have made a great mistake in confusing these two glaciers under the single name of 'Zapport.' They are in fact perfectly distinct, the head of the western or 'Rheinwald' Glacier being cut off from the eastern or 'Zapport' by a well-marked ice-covered 'grat,' starting from a point near the Vogelberg, and extending to the rocky mass which is correctly represented on the map as dividing the lower portions of the two glaciers.

Our plan, as before stated, was to get down to the Rheinwald Glacier and steer for a broad depression at its head between the Rheinwaldhorn and Vogelberg, but nearer the latter; then if possible descend into Val Malvaglia, pass the night somewhere near the head of that valley, and in the morning ascend one of its lateral glens to a col which—it appeared on the map—ought to exist on the east side of the Vogelberg, and lead us to Hinterrhein by the Zapport Glacier. But the appearance of the weather was so threatening that we were more than half inclined to make at once for Hinterrhein, as, if overtaken by really bad weather in Val Malvaglia, we should be in a *cul-de-sac*, with no means of escape except by descending to Biasca and Bellinzona, to the utter derangement of all our plans for the future. Jakob however was disgusted at the idea of a change of plan, and we ourselves were very loth to abandon a section of our programme which, though not of first-rate importance, was of particular interest, taking us into an entirely unknown country, with a possibility of resulting in the discovery of two glacier routes between Hinterrhein and the Lago Maggiore, *vice* the carriage-road of the Bernardino Pass. We therefore determined to run the risk, and trust to a continuance of the comparative good fortune which had so far attended us.

We had supposed that, before turning down to the Rheinwald Glacier, it would be necessary to descend the ridge by which we had mounted, to a point rather lower than that at which we had struck it; but Jakob suggested that such a course would be very circuitous, and that we had better go down the steep rocks forming the eastern face of the peak, from the base of which the distance to our supposed col would be inconsiderable. This course we agreed to, although, considering our total ignorance of the ground, its prudence was doubtful, and set off at 11.15. The rocks proved very steep and rotten, but were not really difficult, the only risk being the usual one in such places, of knocking down the stones on each other's heads. So we got on pretty well, and worked gradually down

to the edge of a broad snow couloir, which struck Jakob as an admirable place to 'schleifen.' We were scarcely so impressed with its merits, as the snow was very incoherent and rested on hard ice, while there were some very ugly rocks below, and we therefore did not quite approve the proposed glissade. However off he started, but slipped instantaneously, jerked me, still hesitating, off my legs, and down we should have gone in a heap, had not Walker still had firm hold on the rocks and stopped us. Using rather more care we descended the couloir for some distance, then took to the rocks again, and lower down came to a second couloir, the snow in which was in better condition, but still far from safe. Unwarned by experience we again ventured a glissade, but had not gone many yards when we slipped simultaneously, and slid some way on our backs, before, by driving our elbows and heels into the snow, we managed to stop. The results of a prolonged roll might not have been very serious, but, taught wisdom by this second 'shave,' we abstained from further experiments until there was obviously snow enough to give footing and nothing below to hurt, when we let ourselves go, and at 12.0 shot on to the level surface of the Rheinwald Glacier. Winding round a rocky spur, and dropping over a rather complicated and troublesome bergschrund, we passed on our left a very palpable col at the point marked on the map 2,950 mètres. We might no doubt have descended from it into Val Malvaglia, but we preferred making for another and slightly lower col, a little further south, whose height is 2,928 mètres, or 9,640 feet. This we reached at 12.30, and having satisfied ourselves by a glance that the descent into Val Malvaglia would offer no particular difficulty, sat down on the highest rocks to christen our discovery and enjoy the view. A satisfactory name was not easily selected, but, seeing that the pass lies between the Rheinwaldhorn and Vogelberg, and nearer the latter than the former, we at last agreed upon 'Vogel Joch,' not that we were satisfied with that title, but it seemed the least objectionable of the few from which we had to choose. The weather had improved during our descent from the peak, and we now got an exceedingly fine, though still not cloudless, view towards the Oberland, the principal peaks of which showed to great advantage.

At 1.0 we started on our downward journey, and from the foot of the first snow-slopes commenced one of the roughest, moist toilsome, and altogether revolting descents I ever made. In spite of the steepness of the ground there was no difficulty; but the way lay over a succession of stony slopes, varied by

smooth faces of rock which had to be dodged, and covered, as we got lower down, by dense patches of rhododendron, concealing all the holes and pitfalls which abounded. Although going very leisurely we were shaken to pieces, and were delighted to reach at 2.30 a chalet on the left side of the sort of glen we had been descending, which we had seen from above, but which proved to be a ruined and deserted hovel, not apparently communicating by any path with anywhere else. A little lower down, however, we found a faint track which took us to the right side of the glen to a second deserted but more substantial chalet, whence a steep path led down to the main Val Malvaglia. We crossed the stream, and, climbing the slopes on the right bank, came at 3.35 to a magnificent alp—the Bolla Alp of the Federal map, where many cows were grazing, and where we therefore expected to procure both milk and information. No herdsmen were visible, and on investigation the chalets proved to be locked and without any sign of the recent presence of man; so, as milk was a necessity, Jakob proposed that he should bring to bear his experience on the cattle alps of his own Canton. The saucepan from the ‘Teufel’ was got out, and after several unsuccessful attempts to cajole one or other of the animals to submit to the operation of milking from the hands of a stranger, a docile beast was found and nearly drained dry before our thirst was assuaged. At 4.15 we started down the valley, hoping eventually to find some one who would direct us to the most eligible night-quarters. The glen up which our morrow’s route lay was visible on the opposite side of the valley, and we suddenly caught sight of three persons moving along the steep path leading up into it. As it was reasonable to assume they were going to some chalets, we instantly struck down to the bank of the torrent, and tumbling across it somehow scrambled along the steep slope on the other side, until we fell into the path where we had seen our friends. Although well made, its general inclination cannot have been less than 45° , and it went straight up with a noble contempt for zigzags, which said a good deal for the soundness of leg and wind of its constructors and habitual frequenters. We, less sturdy mortals, found the ascent severe, and rejoiced greatly when the gradient lessened, and after an interval of comparatively level, *i.e.* ordinarily steep walking, we came at 5.40 to a level plain, in the middle of which were the chalets of Pena. They had evidently not been visited this year, and we were rather puzzled what to do, when we were joined by an unprepossessing looking native, who, so far as we could make out from his almost unintelligible *patois*, did not belong to the

chalets, but was employed in watching goats on the mountain side, and, attracted by the unprecedented apparition of strangers, had come down to look at us. He at first insisted that we could not get into any of the chalets, but was finally induced to assist in a burglarious assault on one of them, the door of which at last yielded to the gentle pressure put upon it, and admitted us into an airy barn, where there was a little old hay which made a couch just a degree softer than the bare and dirty boards. On the whole there was not much to complain of, and we were thankful enough for such a solution of our difficulties. Our friend, having brought us a quantity of goats' milk, wished us good night, and left us to our well-earned slumbers, which lasted till 2.45 A.M. on the 25th, when we rose as fresh as larks.

At 3.55 we started, having first secured the door of the chalet so as to look as nearly as possible in the same condition as before our rather violent entry. The glen above the Pena Alp presented a scene of savage desolation, being enclosed by an amphitheatre of black shaly cliffs, over which streamed numberless waterfalls. According to the map, above these cliffs there was a tract of level ground at the base of the final slopes at the actual head of the glen, and over-night we had been considerably puzzled as to how we ought to steer in order to attain this. Now however the difficulty, like many difficulties in more important matters, vanished on being fairly grappled with, and a rough track revealed itself, winding up the slopes on the north side of the glen, which led us at 4.50 by a devious and sometimes unpromising course to a point above the cliffs which had appeared so formidable, at the edge of a rather extensive plain, on the other side of which were the chalets of Guimello, at a height of 6,773 feet. On all sides except that by which we had approached, the plain was surrounded by long steep slopes of shale and débris, interspersed with patches of snow. Immediately on our left was the fine dark pyramid of the Vogelberg, to the south-east of which was the only considerable bit of glacier visible, with an undeniable col at its head, which the map and compass showed must be the one for which we were looking. Strange to say, this glacier is not marked on the Federal map, the general accuracy of which in this district, as elsewhere, is astonishing, but the névé of the Zapport Glacier is represented as just curling over the ridge on the Malvaglia side, and then dying away without giving rise to any defined glacier. On the opposite side of the glen the 'terrain' is laid down accurately enough, as on that side there is merely a fringe of névé over which it would be possible to pass at almost any point into Val Calanca. One such pass is

certainly known to the natives, as our friend of the previous night had assumed, as a matter of course, that we were bound to Val Calanca, and was proportionately astonished on hearing that our destination was Hinterrhein. The glacier below our col appeared to be most accessible from its right bank under the Vogelberg; so we abandoned the path which crosses over to the chalets, and turned up the slopes forming the base of that peak. We had not gone far when a shouting was heard behind us, and looking back we discovered our native with something in his hand, which proved to be a large can of goat's milk. Finding us flown from the chalet, he had given chase along the steep and difficult path we had traversed—a piece of good nature which almost made us register a vow never again to judge of a man from his outside, as that of our friend was far from fascinating. We managed to spend half-an-hour very pleasantly, and, in the course of it, were joined by a 'jäger,' armed with a gun of portentous length, on the look-out for chamois. He was not so good a specimen as the murderers of Val Carassina, and did his best to persuade us to go to Val Calanca instead of to Hinterrhein, declaring that our proposed route was impracticable, notwithstanding the evidence of our eyes that on this side, at any rate, it was eminently easy. On our two friends taking their departure—the one to his hunting, and the other to his goats—we resumed our way up the slopes, which were steep but easy enough, and at 6.40 halted for breakfast on the moraine of the glacier. At 7.20 we took to the ice, keeping close under the rocks forming the southern arête of the Vogelberg. Although the inclination was very trifling, yet the col was concealed from us by undulations in the névé, and, as usual under such circumstances, the distance was greater than it had appeared from below. A few crevasses had to be passed, but none gave any trouble; and at 8.10, in less than $3\frac{1}{4}$ hours actual walking from Pena, we reached the crest of the ridge, close to the first rocks of the arête of the Vogelberg, and found ourselves, as we had anticipated, at the very head of the Zapport Glacier. We estimated the height of the pass at about the same as that of the Vogel Joch, or 9,600 feet, and unanimously agreed upon the name 'Zapport Pass' as appropriate and tolerably euphonious.

Clouds as usual spoiled the view; so, as a bitterly cold wind was blowing, and the appearance of the weather was generally vicious, we made no prolonged halt, and at 8.20 set off down the Zapport Glacier. The névé crevasses in its upper portion were superb, but we avoided them without difficulty, and having found an easy passage through the great central

ice-fall on its left side, got, at 9.5, on to the lower portion of the great rocky mass which separates the Zapport and Rheinwald Glaciers. The top of this was a sort of plateau covered with loose stones, and overgrown with coarse rank grass, and proved to be cut off by a precipice from the valley of the Rhine, into which we wished to descend. We were some time in finding a way down, but at last discovered a steep and stony gully, which led us to the bottom at 9.50. The most troublesome part of the day's work was now to come. We were on the right bank of the deep ravine locally known as 'die Hölle,' through which rushes the infant Rhine, a muddy and unromantic-looking stream, and had to get across by some means to the left bank. Of the details of this operation I will give no particulars. How, with infinite trouble and difficulty, we succeeded in attaining 'Paradis,' a blasted and sterile alp—how, having done so, our immediate anxiety was to find our way out again—and how we lost both time and temper in accomplishing this—it is unnecessary to describe. Suffice it to say that at 10.45 we escaped from our embarrassments and reached the Zapport Alp, where we halted just long enough to allow Jakob to milk a goat for our benefit. The valley below the alp is particularly uninteresting; on either side are dreary slopes of stones and shale, those on the south side furrowed by numerous torrents from the Zapport Glacier; of vegetation there is little or none; and the furious stream of the Rhine, often bridged over by the remains of avalanches, runs riot over the broad tract of sand and stones which forms its bed. The view, looking back of the Zapport Glacier, with our pass conspicuous at its head, scarcely redeems the walk from dullness; the path too is of the vaguest and stoniest character, and reminded us strongly of Dauphiné in general and the Vallon des Etançons in particular. We made one halt of thirty minutes to finish the scanty remains of our provisions, and at 1.25 reached Hinterrhein, where the uninviting portals of the 'Poste' received us, while a char was being prepared to take us on to Splügen and Andeer. We arrived at the latter place at 5.45, and at the Hotel Fravi were once more surrounded by all the luxuries of civilization, which were welcome enough after our three days of wild life amongst the 'Adula Gebirge.'