THE WESTERN FACE OF MONT BLANC.

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Some new Ascents and Passes in the Chain of Mont Blanc. By A. Adams-Reilly. Read before the Alpine Club, June 6, 1865.

On Monday, 4th July of last year, I descended on Chamouni from the Col du Géant in a most unhappy and misanthropic state of mind. I had left it, on my arrival from England a week before, with two important objects before me: the transaction of certain topographical business, and the training of my muscular system, preparatory to some expeditions which Mr. Whymper and I had planned in the chain of Mont Blanc. Both objects, however, had been miserable failures, especially the first; for I had sat for the best part of two days on the top of the Aig. de Berenger in two snow storms; I had explored the Gl. de Trélatête in a thick fog; and I had made a reconnaissance of the Aig. de Trélatête without being able to see any practicable way up it. In short, I was a miserable man; and when I found Whymper just arrived from Dauphiné with a great bag of peaks and passes, I confess my feelings towards him were a compound of envy, malice, and all uncharitableness—unchristian, but sincere.

However, I hoped that better days were in store for me; and, having been joined by Mr. Moore, accompanied by Christian Almer, we slept next day at the châlets of Les Ognons, *en route* for the Aig. d'Argentière. But my bad luck stuck to me still. . . . Next day, a melancholy party sat on the top of the Col du Chardonnet, munching legs of poulets with very blue lips, and unable to gainsay Christian Almer's opinion that it would be insanity to try the arête, which rose before us, at

any time; and especially now, when a bitter wind was cutting slices off the séracs, and whirling them playfully about. So Moore went down the other side of the col to Orsières, and though Whymper and I made a desperate fight to gain the summit by another route (that afterwards successfully followed by us), our old enemy the wind, and a schrund of unique construction, drove us back when only half an hour from the top: so we marched down again, crossed over by the châlets of La Pendant to the Chapeau, and reached the Montanvert at eight, where we slept.

The next morning we spent in one long siesta on the grassy slopes of the Montanvert. The society was agreeable, the beer was fair, and ice was plenty; but the recollection of our evil beginning was a bitter drop in our cup—I mean, metaphorically, for had it been actually so it would, at least, have improved the beer. The next 'course' on our list was the Col de Triolet, and as François Couttet (who had been my guide the day before) was called away by domestic business, he being unhappily afflicted with matrimony, I replaced him by Michel Payot—not the celebrated guide of that name, but a novice, educated by M. Loppè, and a novice who promises great things. Whymper had Michel Croz, and we also took Henri Charlet as porter. Our preparations were soon made, but the day was so lovely that we made a late start.

'The crimson rays of the declining sun' were behaving as they usually do, when five individuals of prepossessing appearance were seen making the best of their way across the upper part of the Mer de Glace, in the direction of the Couvercle. I say 'were seen,' for we passed a distinguished party of foreigners who were returning late and footsore from the terrific danger of the Jardin, and who pulled up and stared at us as if we were, what they evidently considered us to be, lunatics of the deepest dye. The evening closed in rather a chilly manner, and as the remains of the disastrous wind of the day before still lingered about, we preferred making use of the shelter afforded by the Aig. du Moine, to trying the more exposed slopes of the Jardin. It was nearly dark before we found a gîte, for there were so many that it was difficult to chose; but we found one at last—no great things in its way, however; and after the usual fire-lighting and eating, turned in—not before Whymper had startled our 'corps des guides' out of all propriety by surreptitiously casting into the embers a screw of red-fire, which lit up for a moment a wilder and more beautiful transformation scene than Grieve or Telbin ever saw, even in dreams.

I cannot say I passed a very comfortable night—most em-

phatically I did not. I felt as if I was lying on a knobby block of Wenham Lake ice, and spent the night in devoting every part of my person in succession to be gently but perseveringly iced by the rock on which I lay—always feeling strongly inclined to brain Whymper with my boots, as he not only slept, but, I am compelled to say, snored, in a provokingly comfortable manner. But at length morning came, and we got off at half-past five. One of those lovely clear mornings, the freshness of which is a night's rest in itself.

We soon reached the foot of the steep glacier which descends from the col, and for some time mounted it easily, as the crevasses were choked with snow; but we were soon brought up by an immense gap—one of those displacements of the whole glacier which are met with when the stream is at the same time heavy, steep, and narrow. We got over this obstacle by turning its flank, and cutting up a frozen avalanche which filled the space between the rocks of Les Courtes and the glacier; but we soon met with another and similar one, which crosses the ice-stream a little below the top. These two crevasses are the only difficulties to be met with on the north side of the col, and it is probable that each year they must be circumvented in a different way. In 1863 we had crossed the lower one easily, but were obliged to avoid the other by cutting up a dangerous slope of ice on the western side; now, however, we found it just bridged at one point by a friendly avalanche, forming an unstable ladder, by which we mounted.

At 8.30 we reached the little plateau which forms the summit of the col, and from which rises the black rocky peak without a name, which is seen from the Jardin. We first made our way to the side overlooking the Gl. d'Argentière, but we did not stay there long, for the wind of yesterday had found us out, and was playing round us in furious gusts, which felt like douches of iced-water; moreover, we were rather anxious to see what our prospects of descending were like. So we crossed over to the south-western side, descended a few feet to a little nest of rock which afforded comparative shelter, and unpacked our eatables, Croz wisely remarking that we could eat and reconnoitre at the same time. I confess that, of the two, the eating was the most satisfactory, for the great wall of ice, spotted all over with projecting rocks, went sheer down so steeply that we could only see about half of it, and were left in blissful ignorance of what precipices might possibly cut us off from the snow-fields below the head of the Glacier de Triolet. However, there was, at least, one point in its favour: there was no embarrassing choice of routes; so we set off, and cut

quietly down from rock to rock, getting on very comfortably, though rather slowly; there was no precipice of *roche moutonnée*—the whole thing, in fact, was constructed in a most gentlemanly way, and we reached the bottom in rather less than an hour.

From this point long slopes of névé descended, crossed by more bergschrunds than I ever saw together. It gave one the idea of being a sort of hospital or refuge for decayed bergschrunds, and, judging from the numbers which had taken refuge in this secluded arm of the glacier, the destitution prevailing among these interesting objects in the rest of the chain must be appalling—every type was there, from the disreputable old party with a long beard of icicles, to the trim precipice freshly powdered with snow; and we had no sooner tumbled over one, than we came to another which we had to go round, and then to another which we had to crawl over, and so on. Our lives were made a burden to us with bergschrunds, and we were very glad when we reached the more broken but less troublesome ice of the glaciers, at the end of the short spur which separates the steep ice stream we had descended from the basin of the Glacier de Triolet. The secondary peaks which surrounded the basin were very difficult to recognise, as their forms are quite different when seen from the Talèfre; but if we were right in determining the position of the Col de Pierre Joseph, its southern side is quite practicable. It is the same sort of thing as the Col de Triolet, but, if anything, easier.

The glacier at this point was much broken, and we passed an ice-arch of singular beauty; but as the crevasses became more complicated, we soon after quitted the glacier on its eastern side, and descended avalanche slopes between the moraine and the glacier, until we had passed the icefall, when we took to the rocks. We passed along these until stopped by a large gully which we could not get across, and could only circumvent by climbing up beside it to a most abominable height. We then rather lost our way. Payot kept following delusive and imaginary goat-paths, and we wandered about rather vaguely until noon, when the sun became much too hot for comfort, so we halted on a great promontory overhanging the glacier, and went to sleep for an hour. We then descended to the level of the glacier, and followed the moraine until we had nearly reached Val Ferrex, when we crossed the end of the ridge, and descended on the terminal moraine of the Glacier de Mont Dolent. To avoid its foaming stream we crossed the tail of the glacier, above the cavern from which it issued, and arrived at the châlets of Praz de Bar at four.

We had only had nine and a half hours actual walking, and had still plenty of time to descend to Courmayeur; but the recollection of the Argentière was a sore point, and before attacking the slightly dubious Trélatête, we thought it would be just as well to bag the Mont Dolent, a peak which, although not very difficult, was new, and ought, if it acted up to its position, to command a magnificent view; so we provided the best substitute in our power for the table d'hôte of the Courmayeur Hotel, by sending an emissary for milk and châlet produce, and made ourselves comfortable in the still unoccupied vachère of Praz de Bar.

The next morning broke rather badly, having a tendency to wind, with which we could willingly have dispensed; but after a great brew of hot milk, we got off at four, and making a *cache* of our sacs and superfluous baggage, we crawled up the black shaly ribs of the Petit Ferrex. When we had nearly reached the summit of the pass, we turned to the left, and mounting diagonally the rocky buttress of the glacier, found ourselves, after a couple of hours, comfortably deposited on the upper névé of the glacier, above its ice-fall, which is remarkably steep and broken.

The whole bed of the glacier slopes upwards from the ridge separating it from the Glacier de Triolet, to the lofty and jagged rocks which carry on the Swiss boundary line from Mont Dolent to the Petit Ferrex; but its surface is broken by rolling hills and valleys, until a large rognon of rock is reached, beyond which the head of the glacier lies, forming a little circular basin into which strike, on one side, the roots of Mont Dolent, and on the other, those of the Aig. de Triolet; while between them stretches the rocky curtain which closes the head of the Glacier d'Argentière. As to the possibility of crossing this, I am scarcely sanguine. Cols there certainly are, and on the south side comparatively easy; but the man who ventures to try them from the Argentière, must have a fine taste in couloirs, and set very small value on his neck.

After passing the rognon I have mentioned, and breakfasting near it, we turned towards the foot of our peak, and mounting terrace after terrace of beautiful névé, came to a large bergschrund at 9. Here business commenced, and Croz accordingly harnessed himself in front, lighting his pipe in the dignified and impressive manner always assumed by him under similar circumstances. We diverged to the right to cross the bergschrund, and then mounted to a sort of col, at the spot where Mont Dolent separates itself from the boundary ridge, and rises steeply up in an independent *massif*. We overlooked

the Swiss glacier du Mont Dolent, which pours steeply down from the ridge, fed by the mere handfuls of snow which alone can find a resting-place on these, the most jagged and splintered rocks in the chain; while beyond, the Combin and Velan showed above the purple Alps which divide the intervening valleys. The rocks of Mont Dolent fell steeply down, too steeply to climb, so we cut up beside them; slowly, as the ice was hard, and very big steps advisable. As we got higher, we met with a small quantity of negociable rock, and at length reached the south corner of the summit-arête, when the highest point appeared to be at the northern end of the ridge, and distant some 50 or 60 yards.

The ridge was certainly a prize arête. It had a large and ingeniously built corniche all along it, apparently constructed of trifle, through which one's baton continually went through into space in unexpected spots. It was like a working model of the Jungfrau, and the actual summit was of the ultra-conical order, affording only room for one person at a time, and not enough for him. We reached it at a little before 11.

I had been disappointed in every attempt to find a point which commanded anything like an adequate view of the eastern glaciers and peaks of Mont Blanc; on that side of the chain the summits lie so near to one another, and the ridges separating the glaciers are so lofty, that such a point was not easy to find . . . but I found it in Mont Dolent. Situated at the junction of three mountain ridges, it rises in a positive steeple far above anything in its immediate neighbourhood, and certain gaps in the surrounding ridges, which seem contrived for that especial purpose, extend the view in almost every direction. The precipices which descend to the Argentière I can only compare to those of the Jungfrau, and the ridges on both sides of that glacier, especially the steep rocks of Les Droites and Les Courtes, surmounted by the sharp snow-peak of the Aig. Verte, have almost the effect of the Grandes Jorasses. Then comes the mighty rock of the Triolet, which, seen from this point, will challenge comparison with the Aig. du Glacier; and then, framed, as it were, between its massive tower and the more distant Jorasses, lies, without exception, the most delicately beautiful picture I have ever seen—the whole *massif* of Mont Blanc, raising its great head of snow far above the tangled series of flying buttresses which uphold the Monts Maudits, and supported on the left by Mont Peteret and the mass of ragged aiguilles which overhang the Brenva. This aspect of Mont Blanc is not new, but from this point, its *pose* is unrivalled; and it has all the superiority of a picture

grouped by the hand of a master, over the wild chaos of rock and snow which composes many mountain views. Passing from the chain itself to more distant mountain systems, the view is as extensive, and far more lovely than that from Mont Blanc itself. The Combin and Velan, close at hand, reclining on the hazy snows of the glaciers of Bagnes; the Oberland,—Monte Rosa, always so lovely, and here lovelier than usual, as the dark rock of the Matterhorn stands closely contrasted with its masses of pure snow; the Alps of Cogne, of the Tarentaise, of Dauphiné, and a forest of their scarcely-named Italian brethren.

We quitted the summit at a quarter past 11, descending by the same route by which we had mounted. . . . The snow was very soft, but the slopes were steep, and we were occasionally able to relieve the monotony of our way by a sitting glissade. We reached the Petit Ferrex at a little before 3, and then in the cool evening, walked down the valley to Courmayeur, which we reached at a quarter to 7, having spent in actual walking nearly twelve hours.

The next name on our list was that of the Aig. de Trélatête, a peak about which I felt much interest, and not a little curiosity; for its existence was almost the only thing that seemed to be known about it, and that fact had to be hunted down through a cloud of aliases. Of its form and structure I knew little, and could find out nothing more, and the French engineers appeared to be in great doubts as to which of its three peaks was the highest. As the topography of the peak was so doubtful, we thought it best to bivouac as high as possible, and allow plenty of time for possible difficulties, especially as the weather had an evil look . . . a great deal of iron grey mist about, with an occasional shower of small rain; but we started, nevertheless, with the effeminate addition of another porter and a load of straw, and arrived at the Lac de Combal in a damp condition. The prospect was gloomy, thick mists covered everything which rose above the surface of the valley; and as to plunging into the cloud which covered Mont Suc, it was hopeless. So we began to examine the moraine of the Miage, and became every moment more impressed with its resources for bivouacking; fuel was abundant, every second rock formed a natural and, in many cases, an artificial cavern; and when at length we lit upon a little habitation, half hut, half rabbit-burrow, constructed by some ancient berger of luxurious habits, the question was decided, and we resolved to bivouac where we were. The rain passed off, though the clouds remained, and after I had enjoyed a delicious swim in the Lac du Combal,

we transacted a severe supper, and smoked the pipe of peace beside a large fire of juniper boughs, amid the myriads of sparkling glowworms which inhabit the moraine. Our gîte was most comfortable, and I confess I was not the first to turn out next morning to examine the state of affairs . . . but when I did, I found them rather depressing than otherwise. It had rained a good deal during the night, and looked as if it had only knocked off work to breakfast, and intended to resume business immediately. The clouds enveloped Mont Suc in a modest drapery, which only permitted its ankles to be seen, and formed a great lead-coloured arch from the Pyramides Calcaires to Mont Percé, making the Col de la Seigne look like the entrance to the Infernal regions. Of course nothing could be done, so we made a big fire and yawned thereby with great perseverance until noon, when the clouds began to change their hue from black to white, then to thin, and finally to boil away, crashing and curling like animated wool, among the splintered peaks of Mont Broglia. Our guides had gone off to a châlet on the opposite Alp to seek society for themselves and stores for us; and soon after their return we got under weigh, and quitting the great moraine, wound up a sheep track towards the upper slopes of Mont Suc.

As seen from the Lac de Combal, the summit rocks of Mont Suc are cleft by three ravines; that in the centre is both larger and bolder than either of the others, and beyond its rocky walls appear glimpses of a sort of wild 'unbekanntes land,' a chaos of snow patches, moraines, and footsteps of old glaciers, which we hoped would afford us a suitable spot for our next bivouac.

After mounting a little precipice of 'roche moutonné' over which tumbled a small cascade, we advanced into the jaws of the ravine, a marvellously wild spot, with steep walls of rock, and a floor of débris slopes in a state of unstable equilibrium, crossed by small terraces of grooved and polished rock. On the left we passed a deep-looking cave; it was the mine mentioned by De Saussure, from which the ores of lead and silver were carried down on men's shoulders for many miles over precipitous rocks and rugged moraines, before even a mule track was reached. . . . It would have formed a splendid gîte, had it not been half filled with snow, but though this circumstance rendered it well adapted for domestic purposes as a cool cellar, it was decidedly unavailable as a bedchamber. So we mounted higher and higher, but though we opened out and advanced in skirmishing order, we could not find a single spot which afforded any shelter; so that at last I began to think that we should get to the top of the Trélatête before we stopped. We did not get

quite so far as that, but we got right to the top of Mont Suc, and at length found a resting-place a few feet below the summit of the ridge which sends its unrivalled precipices swooping down to the Miage.

The situation was not at first sight particularly luxurious; There was no cover, and the only shelter was afforded by a large rock which formed a wall on two sides. We should have fared but badly, only for Whymper's skill, who brought to bear on existing circumstances the experience of many Matterhorn bivouacs. Our plaids were soon sewn together and artistically disposed, with the assistance of our glacier-cord, into the form of a tent of snug and inviting aspect. We likewise numbered amongst our impedimenta that marvellous and necromantic, not to say hanky-panky, tin canister invented and patented by him, which contains in its bowels a complete 'batterie de cuisine;' and every part of which becomes, according to the position in which it is held, a saucepan, coffee-pot, gridiron, 'bain marie,' or warming pan. Its external envelope was soon singing and bubbling over our frugal fire, with a purée of hot wine, sugar and cloves, and we agreed altogether that it might have been worse—much worse. Before turning in, I mounted the few feet which remained to the summit of the cliffs overhanging the Miage. . . . Mont Blanc was shrouded in a dusky veil of mist, and light fleecy clouds hovered over the great rift that lay between us, cloven by the patient march of the snows of a thousand years. . . but towards the south there was not a cloud: the moonbeams brought into strong relief the dark shaly peaks which surround the Cramont, slept quietly on the snowy winding-sheet of the Ruitor, or plunged into the misty depths of the Allée Blanche.

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The summit of the outlying mass which I have called Mont Suc is formed by an enormous crête or cake of névé, from which no glaciers descend except of a most elementary character, though there are abundant traces of former ice streams. It is cut off from the upper névé of the Glacier de l'Allée Blanche, or rather its north-eastern tributary, by a ridge of rocks which starts from the Miage precipices, and cuts it across at right angles. We left our gîte soon after 4, and having traversed the summit of Mont Suc to the ridge in question, we descended a highly respectable couloir, and found ourselves on the Glacier de l'Allée Blanche, just opposite the foot of our aiguille.

But we were by no means certain as to the best point from which to attack it. Of the southern face, I only know that it was very dubious, as the only means of approach would be by

cutting up very steep slopes garnished with hanging séracs; while my theories as to the eastern side had received a severe shock from the fact of my having been utterly unable to discover when exploring the Miage, the immense glacier which I had supposed to descend from that side—we resolved however to try its eastern face, and having coasted a great mamelon which overhung the Miage, we mounted, with some curiosity as to what we should find on the other side, a snowy mound, forming the eastern extremity of a curtain of snow, which extended from the Miage precipices to the aiguille, and closed our view in front.

We then saw our way more clearly. The arête on which we were (and which was a very respectable one, as arêtes go) led right up to the first peak of the aiguille. The second was just visible behind it, and the third a little to the right; the three forming the semicircular back of a glacier basin, the contents of which streamed past our feet, and apparently down to the level of the Miage—though I afterwards found that they were cut off from it by a perpendicular precipice of great height. It was impossible to tell which of the three peaks was the highest . . . . The French engineers had been unable to determine that, so the only course before us was to arrive at the truth by an exhaustive process: to take No. 1, and if that did not do, to proceed to No. 2, and so on.

But our route was pretty clear, so we ate our meat with joy and thankfulness and set off up the arête, to which we kept until it showed symptoms of abandoning its previously respectable character, and began to develop a tendency to corniches, and other disreputable courses. We therefore declined its further acquaintance, and taking to the flat ice-slopes, mounted them diagonally, winding in and out among some fine séracs, until at half-past 8 a furious gust of wind announced that we had reached the top of No. 1.

No. 1 was clearly not the man. It was a very estimable peak in its way, but No. 2 was evidently higher. As to No. 3, it was some distance off. . . 'Les absens ont toujours hauteur,' and it was impossible to say whether its slight inferiority to No. 2 was actual or only apparent. So off we set for No. 2.

Our path was not difficult to find, for a narrow-edged arête led from No. 1 to No. 2, and over it the wind was careering playfully, catching up the surface flakes of ice, and sending them off whirling and tinkling through the air, like a flight of pigeons. Croz went on to cut steps while I sketched, and when he had nearly done his work we started. We had first to descend a little distance, and then, coming to a sort of pit or fur-

row in the ice at the lowest point of the col, we faced the arête, and mounted it easily, crouching down every now and then to avoid the furious gusts of wind. We reached the summit of No. 2 at nine. There was no doubt about it this time. So we planted our drapeau, and two large uncut red pocket-handkerchiefs of Courmayeur manufacture floated from the *höchste spitze* of the Trélatête. The next thing of course is to describe the view. All views from Alpine peaks are beautiful, and I have seen many more beautiful than this; but I cannot describe the impression made on me by the great panorama of the western precipices of Mont Blanc.

For four years I had felt great interest in the geography of the chain; the year before I had mapped, more or less successfully, all but this spot, and this spot had always eluded my grasp. The praises, undeserved as they were, which my map had received, were as gall and wormwood to me when I thought of that great slope which I had been obliged to leave a blank, speckled over with unmeaning dots of rock, gathered from previous maps—for I had consulted them all without meeting with an intelligible representation of it. From the surface of the Miage I had gained nothing, for I could only see the feet of magnificent glaciers, but no more; but now, from the top of the dead wall of rock which had so long closed my view, I saw those fine glaciers from top to bottom, pouring their streams, nearly as large as the Bossons, from Mont Blanc, from the Bosse, and from the Dome, and my first thought was . . . no wonder the Miage has scooped out such a rift, and spread such miles of moraine at its feet, when it has such feeders as these.

As the western face of Mont Blanc has been seldom described, I shall devote a few words to its structure.

The head of Mont Blanc is supported on this side by two buttresses, exclusive of the ridge of Mont Broglia, between which vast glaciers descend. Of these the most southern takes its rise at the foot of the precipices which fall steeply down from the Calotte, and which can scarcely support a few clinging masses of sérac; and its stream, as it joins that of the Miage, is cut in two by an enormous rognon of rock. Next, to the left, comes the largest of the buttresses I have spoken of, which almost forms an aiguille in itself; being cut through by several smaller glacier streams, and rising about half-way up into a well-defined rocky summit. The next glacier descends from a large basin which receives the snows of the summit ridge between the Bosse and the Dome, and it is divided from the third and last glacier by another buttress,

which joins the summit ridge at a point between the Dome and the Aig. de Bionnassay. The ridges are both large and broken systems of rock, and their combined mass must, I think, equal the whole of the Tacul. The third glacier demands special attention; it is the 'corridor' on which Mr. Tuckett looked with wistful eyes from the Col de Miage, and by which he hoped to ascend Mont Blanc, a feat now shown to be perfectly practicable. It lies between the last buttress and the ridge which joins the Col de Miage and Aig. de Bionnassay, and on being carefully examined was pronounced decently practicable, the only doubtful point being its lower ice-fall.

In all other directions our view was most extensive. We stood on the highest peak west of Mont Blanc, with the exception of the Aig. de Bionnassay, and far overtopped the Aig. du Miage and Aig. du Glacier.

But all this time the wind was buffeting us most unmercifully, and casting sharp cheese-plates of ice against the backs of our necks, and other tender portions of the human frame, and we began to think of getting down again. If we had adopted a scheme strongly urged by one of the party, and attempted to cut down the windy side of the peak to the Glacier de Trélatête, with a view to sleeping at the pavilion of that name, I should now probably have to relate a series of thrilling incidents, extending over a period of twenty-four hours or so; but if our descent *was* tame and monotonous, we at least did *not* pass a supperless night on the rocks of the Aig. de Berenger, like another distinguished party on a subsequent occasion. We retraced our steps along Mont Suc, and crossing the Col de la Seigne, found more hospitable quarters at Les Mottets, whence we next day reached Chamouni by the Col de Mont Tondu.

Our campaign in the chain of Mont Blanc was now drawing to a close; Whymper was due in the neighbourhood of the Matterhorn, and I was to join him at Zermatt a few days after with a convoy of important stores. We had only time for one more peak, and had we succeeded before with the Aig. d'Argentière, we should have tried the Verte. As it was, however, we attacked the former again, this time successfully, and it fully repaid us for the 'double toil and trouble' we had had.

The only difficult portion of the ascent lies behind the arête of rock which stretches from the Col du Chardonnet almost to the summit. I had thought it possible to pass from the col along the summit of the ridge, but on examination we found it could not be done, and were therefore obliged to ascend the steep glacier which flows from its foot, and mount it by means of a rather difficult couloir.

From this point to the commencement of the summit arête, the route lies up a steep ice wall, which resembles, far more than the Mur de la Côte, Albert Smith's highly coloured picture of the last named spot. It falls sheer down to the Salena, and about half-way up, is crossed by a bergschrund of such peculiar construction as to merit a few words of description. In our former attempt on the Aiguille we had it at its worst, and I shall therefore recur to the state in which we found it then, as a specimen of how bad it *can* be.

We were cutting slowly up the slope, clinging to it with great difficulty, as the blast threatened every movement to jerk our frozen toes and fingers out of their insecure hold, when our guides, who were about 50 feet above, gradually ceased to make any progress at all, and remained stationary, cutting steps now on the right, now on the left, but in vain; for at each stroke, the axe broke through the thin crust of frozen snow, which bridged over an enormous chasm, the extent of which we could not guess, as no external peculiarity of the névé betrayed the hollow which lay beneath. They were in fact working on a thin crust of snow tilted up to an angle of 53°, with nothing underneath; and we, although 50 feet below them, appeared to be in the same position, for on handling without that tenderness which was necessary a step which served me for hand-hold, my arm plunged through the crust into empty space—and I certainly expected every instant that the whole surface which supported us all, weakened as it was with steps, would break through. In this agreeable position we froze for half an hour, but neither Croz nor Couttet could reach the limits of the crevasse, or find any spot where the crust was sufficiently firm to afford any hopes of crossing it: and then as I felt my feet losing all sensation, in a suspicious manner, and recollected the delicate tread which such a ticklish ladder would require in descending, I lifted up my voice, and suggested a retreat—a course which no one vehemently opposed. It was time, for we had had nearly enough of it, and one of Couttet's hands was frostbitten, but by excessive friction with snow, all evil results were prevented. In our second attempt, we found the spot where we had been fallen in, but were still unable to judge of the size of the crevasse.

The summit of the aiguille is a lovely arête stretching in a slight curve from north to south for some hundred yards, and the view which it commands of Mont Blanc, the Aig. Verte, and the Chardonnet, exceedingly fine.

I now come to my last expedition; in some respects the most

interesting of all, as it solved an old problem which dates from the foundation of the Club—I mean the possibility of ascending Mont Blanc from the Glacier de Miage. Mr. Tuckett had struck out the exact route I followed, but he had supposed the glacier which rises eastward from the foot of the Col de Miage, to be contained within the spurs of the Aig. de Bionnassay, and expected to gain the arête leading to the Dome by passing diagonally across the side of this aiguille. We all remember the expedition which started four years ago for the purpose of following this route, and we all remember the accident which prevented its success. I met Mr. Birkbeck at Chamouni in the beginning of August, and he eagerly fell in with my proposal to visit the same ground again; not with any view of ascending Mont Blanc, but to try whether a route over the Dome would not be, after all, a good substitute for the Col de Voza, Mont Vorassay, and the other disagreeable attributes of the Col de Miage.

Accordingly, on Friday, August 5, Mr. Birkbeck and I tore ourselves reluctantly away from a very pleasant picnic on the Col de Bellevue, and leaving the fascinations of civilized society, plunged down the pine woods to Bionnaz; feeling painfully conscious amongst other things that milk, beer, vin rouge, and St. Peray, albeit qualified with coffee and certain petits verres, do not, as the Americans say, 'pack' with sufficient docility to render very agreeable an uncommonly hot walk all round Mont Vorassay to the châlets of Miage.

We were five in number, our guides being Michel Croz, Michel Payot the younger, and Marc Tairraz, and we were hospitably entertained in one of the châlets of that patriarchal village, which contains, I should imagine, more cattle, more pigs, more children, and more dirt, than any place of its size in Switzerland. The children are especially remarkable, as their countenances are generally decorated with a species of war-paint, produced by their custom of living on little black cherries, eaten out of a bowl, like soup, by means of a gigantic wooden spoon; with such an utter disregard of the stones as is at first sight positively startling.

We slept deliciously, wallowing in great waves of hay, and turned out in a cross and reluctant manner at half-past two next morning. I am certain I fell asleep several times as we tumbled over the curious collection of every known species of moraine which fills the upper part of the valley, and I remember on one occasion waking up and finding myself standing in a meditative attitude, ankle deep in a glacier stream. At last we got into a melancholy sort of trough between the moraine and the glacier,

and tramped moodily up it, while the morning broke in a depressing and hideous manner, flinging pale shades of green, suggestive of Asiatic cholera, over the snows of the Aig. de Miage. But at length we reached the upper plateau of the glacier: a ray of warm yellow sunlight shot over to Mont Joli and the smiling country beyond. I felt better. I was awake. I became actually hungry: we ran quickly over the crisp névé to the foot of the col, and after some little difficulty in crossing the bergschrund, halted on the rocks of the largest arête, and proceeded to breakfast. We then climbed leisurely up it, filling our pockets with crystals as we went, and reached the top of the col at nine.

First, we all took a long look about us, and then everyone proceeded to address the house. Our plans had been very vague, and we had thought of sleeping somewhere on the Southern Miage and taking a whole day for making a pass to Chamouni; but the guides were unanimous in opposing this, and gave their voices for making a push for the Dome, without descending at all. To this there was no opposition, but when the house went into committee on the bill, it appeared that everyone's theories as to where the Dome was were so remarkably vague and contradictory, that any resolution of getting there appeared rather difficult to carry out. Croz was perhaps the most imaginative of the party, for he had prepared himself for the occasion by a course of conversation and cognac with Mollard, the ancient chasseur of Bionnaz; and as the cognac had somehow got mixed up in his head with the conversation, his plan reminded me of the celebrated gentleman who tried to break the bank at Baden by means of an infallible theory of chances, of which he had dreamt after supping on lobster salad. I was as bad as the rest, for all my knowledge of the chain was completely at fault. I was sure of Mont Blanc, but where the Dome was, or the Bosse, or the Aig. de Bionnassay, I had not the faintest idea.

I made the most of the small knowledge I had, and pointed out Mont Blanc, but Croz received my opinion with derision—and insisted that it was the Aiguille de Bionnassay, and that the Dome was behind it, and quoted Mollard to such an extent that I am afraid I devoted the old gentleman to the infernal deities with great fervour. But Croz remained incredulous until I offered to back my opinion to any amount, and exclaimed in vehement but impure French—'Je vous betterai cent mille francs à cinq que c'est le Mont Blanc là-haut!'

At last I came to the conclusion that the Dome must be at the end of the ridge beyond the corridor, and that if it was not, it ought to be; so we resolved to start in that direction, and

while I sketched, Croz and Payot went off along the ridge towards the Aig. de Bionnassay, to see where we could best hit the glacier below.

They soon returned, having gained little information, and after a hasty meal we started at half-past eleven. Some rotten snow-slopes overhanging the head of the Miage brought us to the rocky sides of the Bionnassay arête, and we could now see the lower part of the lateral glacier, where it joins the main stream of the Miage. We looked carefully to see what capabilities of transit it presented, but the only route appeared to be right up the centre of an icefall, as its margin on each side was raked by stones and avalanches from the rocks above.

The arête gave us enough to do. The most promising routes placed us on the top of impracticable precipices, and we had often to retrace our steps; but at last we found ourselves comfortably on the glacier, well above the icefall, and we mounted long slopes of névé, whose monotony was occasionally enlivened by a little episode of sérac, or a large stone which plunged lazily down from the rocks on either side. As we gradually mounted we often turned to watch the Aigs. de Trélatête and Miage every moment developing fresh beauties, and we soon looked down the whole length of the Glacier de Trélatête across the sort of col where its head rests on the precipices of the Miage, and boils over them in a wild cataract of séracs.

It was awfully hot; the narrow corridor glowed like a furnace, and I made a frantic attempt to brew lemonade in my hypsometer, a process which resulted in about a tea-spoonful of liquid per man, when we could have drunk gallons. Meanwhile Croz, despising such trifles as thirst, worked on, zig-zagging slowly towards the curtain of snow which crossed the head of our glacier, extending from the Aig. de Bionnassay to the spot where the Dome *ought* to be. We saw him gain the foot of the wall, mount it, and look down the other side. We watched him with intense anxiety. He turned quietly to the left, and began to go along the arête straight for the Aig. de Bionnassay!

I was perfectly aghast! Could it be possible that Mollard was right after all, and the Dome over there? At all events, a few minutes would decide. We soon reached the head of the glacier, and halted beside a beautiful bergschrund over fifty feet high, fringed with millions of icicles, from each of which a tinkling drop fell. Croz came to a halt: we yelled at him, and he came down with some difficulty, starting an avalanche at every step. As soon as he came within hail, he was assailed with

vehement questions. 'What was the other side of the ridge?' Well, there was a precipice, nothing else in particular; but, at least, he had seen the Dome—far away to our right, in the direction, but not so near, that I had expected.

We soon mounted to the top of the ridge, at the south-east corner of the glacier, and found ourselves in a position of singular beauty. We stood just in the centre of the ridge which closes the head of the Glacier de Bionnassay, half-way between the Aig. de Bionnassay and the Dome, and the latter was there sure enough, at the end of the arête on which we were.

Everyone who has tried to map the Glacier de Bionnassay has found great difficulty in adjusting the ridge which forms its head. It evidently started on one side from the Aig. de Bionnassay; but where, and at what angle, it joined the main ridge was difficult to see. Some made it join the Aig. du Goûté; others the Dome; but usually in a straight line, like the Col de Miage. But this is not the case: it forms an angle, concave to the Glacier de Bionnassay, and from this angle starts the great buttress which separates the corridor from the Glacier du Dome —a singular instance of a considerable ridge meeting another at right-angles, and leaving on the other side no trace of its presence, by an aiguille, or at least a thickening of the ridge.

We passed on to the Dome. The *coup d'œil* of the Glacier de Bionnassay as we thus walked round its head, in some places actually overhanging it, was superb, and the view from the Dome, with which most of us are familiar, was no less so. We reached the Dome at five, and although the sun was sinking, I was anxious to try it, as it was evidently a shorter route to the Grands Mulets, than the old descent to the Grand Plateau. We met with no difficulty, and passing along the edge of the steep escarpment which overhangs the Petit Plateau, reached the level of the glacier just in front of the Grands Mulets.

The cabane was, as usual, full; but as it was a quarter to seven when we reached it, we could not accept the hospitable offers of its inmates. I do not suppose anyone ever tumbled over the séracs of the Bossons much quicker than we did, amid the rosy glow of the sun's parting rays. It was nearly dark when we reached the Pierre Pointue, but we provided ourselves with lanterns, and finally arrived at Chamouni at ten, having escaped what has been more than once the fate of late wanderers in the woods of Les Pèlerins, a bivouac within ten minutes' walk of your hotel.

I am aware that it is a very bold proceeding on my part, to walk over the top of the Dome, and call the thing 'a pass.' But though the idea may at first sight be startling, I think it will

prove a shorter route from Chamouni to Courmayeur than the Col de Miage. The actual distance is certainly less, and a night at the Grands Mulets or Pierre Pointue, with the splendid view from the Dome, is surely more interesting than the long land journey which intervenes between Chamouni and the Col de Miage. Be that as it may, it is certainly the highest, and in my mind the most magnificent, pass in the chain of Mont Blanc.

Col des Grandes Jorasses. By Arthur Milman, M.A.

ποιῆν τι δεῖ ἂς γόνυ χλωρόν.

A desire having been expressed by many members of the Alpine Club, that some further and more minute information might be given respecting an attempt which was made in the autumn of last year by a party consisting of Messrs. Alfred Wills, his brother A. Winkler Wills, F. Taylor, and the writer of this paper, with two guides and two porters, to force a way over from Chamouni into Italy, by the Glacier de Léchaud and the Col des Grandes Jorasses, I have drawn up the following short narrative of the expedition.

It will, however, I fear, be more than usually difficult to convey an adequate idea of that strange region of snow and ice, in the wild recesses of which we worked a devious and toilsome way. For though during a large portion of the one-and-twenty hours that we were on foot, we were climbing over a vast waste of glacier, that had till then, I believe, been quite unexplored; yet being, as it is, distinctly visible from many of those points of view which are most commonly visited from Chamouni, it is known, so to say, by sight to the majority of alpine tourists. And for that, among other reasons, there would seem to be neither need or occasion for any of those descriptive digressions upon the general features of the district and topographical details which sometimes serve to eke out a scanty material.

On Monday, the 5th of September—having once before been driven back by a tempest of snow, and sleet, and rain—we crossed over from the Vallée des Fonds to Chamouni, by the Col d'Anterne and Brévent, with the intention of spending a few days there, and of making some excursions—new excursions, if that were possible—among the neighbouring glaciers. We hoped also that, as we were ultimately bound for Courmayeur and the Italian valleys, we might be able to discover some