

where the moraines are of grey protogene, and of stones giving only tones of black. When he wants colour he has to snatch it from the depths of the crevasse. In the Engadine the moraines yield in abundance hues of red, green, and yellow. How I longed, when standing last year on the Morteratsch, where the Pers glacier scatters on all sides, with lavish splendour, its marvellously coloured stones, for the pencil of a Loppé to record the scene!

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THE EIGER FROM THE EIGER JOCH. By G. E. FOSTER.  
Read before the 'Alpine Club,' March 6, 1877.

PROBABLY many of the present members of the club can, like myself, trace at least a part of their mountaineering zeal to the appearance of 'Peaks, Passes, and Glaciers.' I certainly had crossed my first pass long before its publication, but during an enforced absence from Switzerland, the taste for climbing would probably have died a natural death had it not been fanned to new vigour by the perusal of these fascinating volumes. Even now I often turn to them in search of information and inspiration.

In the spring of '74, somewhat jaded by a hard winter's work, I was lazily skimming the pages with my summer's plans in mind, and already in fancy breathing the invigorating glacier air, when I came upon Mr. Stephen's admirable account of his passage of the Eiger Joch. It occurred to me that a new expedition of high merit might be made, by ascending from the Viescher Glacier those rocks the proposal to descend which drew a 'volley of unreportable language' from the Chamonix guides who accompanied Mr. Stephen's party. That we could ascend where Ulrich Lauener proposed to descend was a not unreasonable supposition. Once reach the joch, I thought, and it would be hard lines if we could not pass along the arête to the summit of the Eiger.

The idea was so fascinating that after administering an awful oath of secrecy to Hans Baumann, I broached my plan to him with all the eloquence my imperfect knowledge of German allowed, and was not a little disgusted to find that he by no means took kindly to it. He knew the place well, and even if it were possible to cross the glacier to the foot of the rocks, which he very much doubted, I might rely on it there was no climbing the rocks themselves. Disappointed as I was, for I never knew Baumann express a positive opinion on such a subject without good reason, I still resolved to go and see, as, at

the worst, it would supply a pleasant excuse for a training walk, and I was painfully aware how much I was out of condition. Accordingly the next morning I started with a friend for the Eiger hole, and in truth my opinion of the hardihood of those whose Alpine zeal had led them to pass the night there was greatly raised, for a more wretched camping-place I never saw. On leaving it we passed along the rocky slopes to the left, till we obtained a full view of the crags I wished to inspect. The verdict was at once 'utterly impossible;' not even a cat could stand on those polished slaty cliffs, and I fear I anathematised Ulrich Lauener as fervently as did Mr. Stephen's Chamonix guides. There was no mistake, one of my pet excursions was wiped out of my programme. For some time I sat gazing sulkily, when the idea suddenly struck me that by sleeping at the Bergli hut on the Mönch Joch I could easily reach the real joch, pass the ridge between that and the apparent joch, and from there attack the longed-for arête. With revived hopes I laid my modified plan before Baumann. To my delight he closed warmly with it, only bargaining that we should try it in settled weather, as the arête was long, and the passage from joch to joch emphatically 'der Teufel.'

Alas, the weather! How many an Alpine man has longed to be like Theodore Hook, and go 'weather or no'! In '74 the early summer was of that treacherous sandwich description in which the fine days represent the thin slices of meat between thick hunches of cloud and rain. Towards the end of my trip my patience was exhausted, and I resolved, *coûte qui coûte*, at least to make a start on the first fine day. Hoping against hope, I toiled up to the Bergli hut on a broiling afternoon in the beginning of August, and with that peculiar selfish feeling of which we are all aware when a stranger enters our special railway carriage, found it already occupied by three Americans with their guides. No doubt they regarded me with similar amiable feelings. As soon as I could reconcile myself to the inevitable, I found that fate had been kind to me in giving me most agreeable companions. New to Alpine work they turned in at 8.30 so as to make a long night of it. We followed an hour later, and packed like sardines in a box, they soon found sleep an impossible luxury, and, like Mark Tapley, came out jolly under adverse circumstances. To us the night passed quickly in an incessant stream of capital Yankee stories, and I was not surprised to hear the men grumble the next morning because the shaking of our laughter had interfered with their sleep. At 2 A.M. my friends turned out, but early as it was the experienced eye saw signs of trouble to come, and at

4 o'clock, when we parted to our respective undertakings, a gale was blowing with a decided tendency to sleet.

At 5 A.M. we stood on the Eiger Joch, and were half frozen by the blast that poured through. Standing on the brink of the vast precipice which had taken Mr. Stephen's party so long to climb, with the bitter gale piercing us to the bone, and the mist boiling up as from a by-no-means extinct volcano, the prospect of the descent was not encouraging, nor did the ridge between the two passes look more inviting. As there was no other alternative but retreat, Baumann, with a grim allusion to his bargain for fine weather, at once began step-cutting along the face, descending a little so as to get as much out of the wind as possible. Were I of a mathematical turn of mind I could have exercised the talent by counting the steps we cut. Indeed, I did begin, but adding one a minute is apt to be tedious when continued for hours, so I quickly concluded to leave it alone and go without the information.

The work was an unusually long piece of step-cutting, rendered really formidable by the steepness and hardness of the ice slope, and the necessity for dodging among the rocky fangs of the gigantic teeth that stud the ridge. Still, though exciting enough to those that take part in it, in description such work cannot be otherwise than monotonous. One incident, however, I may venture to describe, as it led to one of the most daring feats of mountaineering I have ever seen. We were passing along the face of the slope, and had just turned one of the rocky promontories already spoken of, when our way was stopped by a deep and broad gully in the ice, whose sharp side made nearly a right angle with that on which we stood. If you will fancy yourselves passing along a house wall, here and there knocking out bricks for foothold, a little bothered by the necessity of getting round the windows, and suddenly brought to a stand by the corner of the house, it may give some idea of our position.

Baumann cut an unusually good step, with a firm grip for his right hand above it, and then leaning round the corner, with his axe in his left hand, cut another on the other side, but with all his skill found himself unable to pass from one to the other. At length cutting a hole on the further side for his left hand, he literally took his axe between his teeth, grasped firmly with his hands one on one side of the corner, the other on the other, and fairly swung himself round till he could gain the necessary foothold. Once firm, he cut another step or two, gathered in the rope to help me as much as possible, and called on me to follow. Now I must frankly confess my heart had

been in my mouth during his progress, and I had to screw my courage to the sticking point before I tried the passage, as a slip must inevitably have been fatal to the whole party. I first attempted to hold my axe as he had done, but only succeeded in nearly dislocating my jaw, so taking it between my right thumb and fore finger, I swung round, and found myself to my great relief safe in the step on the other side. When the porter had safely passed the *mauvais pas* I felt happier, and Baumann resuming his step-cutting, we reached the joch without any further special difficulty.

In such a gale the Eiger arête was clearly impracticable, so descending by step-cutting till we found snow, a rapid glissade took us to the level of the glacier. Here we at once halted for breakfast, and found that the passage of the ridge had taken us 5½ hrs.

We had now to descend the great ice-fall of the Eiger Glacier, but it would be too bad to inflict on you the oft-told tale of how we did an ice-fall. The one in question found us ample amusement for a considerable time, till we were stopped by a crevasse apparently too wide to jump. After Baumann had very carefully explored right and left in vain, he pulled up at the narrowest point, and proposed to spring over. I remarked on the objectionable character of the landing, a narrow edge with a large crevasse on the other side ready to catch waifs and strays; but after a moment's hesitation he exclaimed 'Es muss gehen,' sprang, and landed safely, while with a sharp pull at the rope I stopped his headlong descent into the crevasse beyond. I then reminded him that I was not an athlete of the first water, and that if I did not jump short I should inevitably spring over. He looked uncomfortable, still 'es muss gehen,' and over I went, most unluckily cannoned against him, and after an agonising period, in which we performed acrobatic evolutions of a most exciting character, found ourselves balancing on opposite sides of the edge, and gladly recovered our footing without further testing the strength of the rope. Luckily the porter was less clumsy, and we soon stood on a mass of *débris* which we had seen frequently added to during the last half-hour. This we descended with a rush, and being now comfortably wet through by the driving rain, sought the shelter of the nearest crevasse for another meal, after which, having found with difficulty a dry match, we consoled ourselves with tobacco as we took short cuts to Grindelwald.

This was my last expedition that year. In '75 I went to the Wengern Alp, intending to take up my work where I left it, but the weather was fatal. Last summer I again returned,

only to be stopped once more by a gale, for, from its exposed position, the Eiger is much troubled with wind. Not liking to be beaten, I again climbed the green slopes of the Wengern Alp on Sunday evening, July 30, and the next morning started at 2.15 A.M. with as bright a promise of fine weather as ever cheered the heart of a mountaineer. To be sure it was warmer than I liked, but experience had taught me that the glorious frosty mornings, which used to send us on our way rejoicing, were things of the past; and often have I looked at the shrunken glaciers, and wondered whether there was any connection between the two changes, or whether both were acted on by the same power; or yet again whether they were cause and effect, and if so, which was which; but this is a subject which I must leave to our scientific members.

In addition to the promise of fine weather I had a private source of consolation, as the Misses Pigeon were intending to make the ascent by the ordinary route, so that I was sure of well-cut steps to aid my descent. I arranged with them to jödel when they reached the summit, which I assumed they must do before our party, though they started somewhat later. We advanced rapidly in the bright moonlight, and passed the ice-fall of the Eiger Glacier with more ease than I expected, and at 6.55 were on the Eiger Joch.

Before examining our route we cast a glance to the right, where the rocks fell with a steepness almost justifying the expletives of the Chamonix guides. The arête itself presented no difficulty, as, though mounting fast towards the Eiger, the slope towards the Wengern Alp was slight. Higher up it abutted on an impracticable tower of rock, but a ridge to the left, which joined the real arête above the tower, offered a means of circumventing the difficulty, if, as I hoped, it was possible to pass from one to the other. We lost little time in looking about, as Baumann almost immediately led upwards; but I was disappointed to find step-cutting at once needed, as from the heavy snowfall of the spring I had not expected it so soon.

We mounted steadily, patches of rock relieving now and then the labours of step-cutting. At the foot of the tower the passage from one ridge to the other presented no great difficulty, and soon after rejoining the real arête we were startled by the jödel of our friends. A second shout was clearly not from the summit, a third showed they were still ascending. Baumann was instantly inspired with a most un-gallant resolution to be first. He cut steps like mad, and we soon caught sight of our fair foes on the other arête.

They spirted and we spirted, and in spite of woman's rights and man's chivalry, we beat them by a yard.

We passed a very pleasant three-quarters of an hour in the warm still air, enjoying a perfect view, then descending quietly, reached the hotel together, amidst an expenditure of gunpowder which showed the landlord's high estimate of lady mountaineers.

I feel I owe the club an apology for a narrative of an ascent which, though new, is so free from special difficulties, unless it is considered essential to take it from the real and not the apparent Eiger Joch. Still it makes a pleasant change on the orthodox mode. For the consolation of those members who appreciate an expedition in proportion to the chance it affords of breaking their necks, I may add that careful examination has given me great hopes that the Eiger may be ascended by the Grindelwald ridge. Starting from the half-way house to the Wengern Alp, a line marked by a little water-course, and a good deal of avalanche snow, may possibly afford a means of reaching the great ice slope so conspicuous from Grindelwald. This, from its size, steepness, and position, must be a most formidable and not improbably an insuperable obstacle; but if practicable, it affords the only means of avoiding the difficulties of the arête, and beyond it there is nothing serious. At the same time I am bound to say that my utmost powers have failed to persuade the best guides to try it, and undoubtedly it presents difficulties, particularly in event of failure, which render it judicious to think twice before trying it once.

#### THE ASCENT OF ARARAT. By J. BRYCE.

**A**RARAT is a huge conical, or rather dome-shaped mass, descending in comparatively gentle slopes and terraces to the NW. and N., but very steeply in all other directions. Towards the NE. and E., where it is pierced by a profound chasm, it presents magnificent black precipices, capped by ice-beds of enormous thickness; and from this side the summit is quite inaccessible. On the opposite or SW. side, the slope is less abrupt, but this side is in Turkish territory, and is therefore in many respects less convenient for the traveller. The ascents, so far as I know, have all been made either from the NW., which was the route taken by Parrot in his third and successful attempt, or else from the SE., the line of Abich (the distinguished geologist who has done so much for our knowledge both of Armenia and the Caucasus) in 1845, and