

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.

ARARAT 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

of General Chodzko in 1850; as also of the English party, whose ascent, made in 1856, has recently been fully described in the 'Geographical Society's Proceedings,' vol. xxi. No. 1; for although they started from Bayazid on the SW. of the mountain, they do not seem to have attacked the SW. side of the cone, but to have followed, apparently by chance, the path of Abich up its SE. slope. To anyone looking at Ararat from the Aras plain on the N. or E., the NW. ascent seems the easiest, for the snow slopes there, although long, are mostly gentle. Abich, indeed, tells us that he failed on this side owing to the steepness of the ice; but in 1844 mountain climbing, and especially snow work, was still in its infancy, and a party of three or four good walkers, with a rope and ice axes, ought to find this route sufficiently simple. To a solitary climber the fatigue of step-cutting would no doubt be very great, and I had reason to be glad that fortune led me to try the cone on its SE. declivity, where it is possible to make one's way to the summit with very little of that kind of labour.

My friend and I started from Aralykh, a Russian military station on the right bank of the Araxes, where we had been most hospitably entertained by the colonel in command, at 8 A.M., on the morning of Monday, September 11, 1876, with an escort of five mounted Cossacks, who were supposed to be needed as a protection against robbers. We marched at first nearly S., over a very gentle slope, towards the foot of the mountain, then SW. up a slightly steeper incline; and a little before noon began to mount more rapidly, traversing the ESE. declivity in a transverse direction, and keeping behind a great lumpy buttress which reaches a height of some 7,300 feet. Passing a small Kurdish encampment, we reached, at 2 P.M., the highest Cossack military post. Here at a spot called Sardarbulach, where is one of the few springs to be found on the mountain, eight or ten men are stationed on the open alpine pasture that separates Great and Little Ararat. The height is nearly 8,000 feet above the sea, but the air is so clear that one neither perceives how far distant one still is from the base of the proper cone of Great Ararat, nor can believe that its summit is 9,000 feet above the spectator. Everyone had told us that success depended entirely on being able to sleep high, as near the snow line as possible, and we were therefore anxious to push on at once. Horses, however, could not be taken further; the Cossacks refused to carry even the trifling load of provisions and wrappings required for sleeping in the open air, and by the time that Kurds had been collected and a bargain made with them it was past four o'clock, too late

to get far up before nightfall. Reluctantly, therefore, we halted at Sardarbulach, and got some sleep from nine o'clock till midnight. At 1 A.M., the crescent moon having risen high enough to give a little light, we set off with four Kurds carrying our baggage, and no less than seven Cossacks, why, it would be hard to say. Our interpreter was not strong enough to accompany us, so being unable to speak either Russian or Kurdish we had no means of communicating with any of our party, who merely knew in a general way that we wished to go to the top, and that they were to come as far with us as they could or pleased. The progress of this caravan over the rocky ground, traversed by rough volcanic ridges, which we had to cross in our north-western course towards the cone from Sardarbulach, was very slow, not only owing to the darkness, but also because the Cossacks insisted on sitting down to rest whenever the track became steeper than usual. At 7 A.M. the whole party stopped at a height of about 12,000 feet, just where the first patch of snow appeared, laid down the sleeping apparatus, and made it quite clear to us that they would go no further. My friend, who was not in training for a long climb, concluded to remain here with them; and at 8.15 A.M. I left him, having persuaded, by pantomime, one Cossack and one Kurd to accompany me upwards. There was of course no path, and the directions obtained in Tiflis from one of General Chodzko's companions were so vague that one was practically forced to guess at the line to be taken from the direction and structure of the rock ridges which run up the face of the cone. Striking first to the W., round the head of a small valley, where the loose stones and sand made the way very laborious; then to the NW. straight up along one of these ridges; and then across a steepish snow slope to gain another ridge further to the west, which seemed more promising, we found ourselves at 10 A.M. at the foot of a broken cliff which looked not exactly dangerous but a little troublesome. Here the Cossack and Kurd halted, nor could any persuasion induce them to come a step further. I am no disciple of that gospel of mountaineering without guides which Mr. Girdlestone has preached so zealously by example as well as precept. But if there is any justification for the practice, that justification exists when guides are not to be had. Moreover, as neither the Cossack nor the Kurd had ever been there before, they could not really have been of any use, except that in case of a mishap, two of us might have carried the third down or taken news to the party below.

It was therefore necessary to go on alone, and after getting

entangled among some rather nasty rocks, I turned off to the left (west) and began to ascend a very long and straight slope of loose volcanic stones, lying at so high an angle that progress was extremely slow. The difficulty of breathing, which had begun to be felt at 12,500 feet, was here more serious, and though it was not accompanied by headache or the other symptoms of mountain sickness, the general sensation of fatigue was so great that I did not expect to get more than a thousand feet further. To escape the censure of Mr. Leslie Stephen and those other high authorities who have of late so wisely set themselves to discourage rash climbing, let me say that I had resolved to stop whenever a 'bad place' presented itself or three o'clock arrived; and both legs and lungs were so exhausted that either occurrence would have been almost welcome. The stone slope became so tiresome that at last I turned off to another rock-rib still further to the west, halting at intervals to erect piles of stones to mark the track, a piece of caution which involved a good deal of delay. Immediately to the west lay a profound and savage gully, beyond which rose another towering range of abrupt red pinnacles. Up this rock-rib, which might be called a sort of broken arête, nearly free from snow, I kept steadily for some 800 feet, till it landed me on the edge of a precipice from which the snowy summit, or rather the place where it must lie, since there was a great deal of cloud about, was visible perhaps 1,000 feet higher. Retracing my steps a little and climbing along the edge of a rather treacherous little ice slope, where one was luckily able to get some hand-hold on the rocks that enclosed it, I found myself in a sort of snow basin immediately to the SE. of the summit. It would have been possible to ascend from here up a slope of névé, but this, though quite practicable for a party, seemed too steep for a single man, who might not have found it easy to stop himself if he had once gone off. Fortunately, there was on the E. side of this great slope a declivity of friable rocks, whose angle, about 35° , would have made them easy climbing if only they had been firm enough to give good foothold. As it was, they were troublesome, though not dangerous, and made one's progress upwards provokingly slow. The extraordinary thing was to find them bare of snow at a height greater than that of Mont Blanc. It would probably have been better to have stuck to the top of what I have called the rock-rib which I had previously followed, instead of descending into the basin and keeping up these rocks; but as I was sure of being able to advance over them, and could not tell from below that there might not have been cliffs to stop

me on the rock-rib, it seemed safer to choose these rubbly rocks, disagreeable as they were. But future travellers may be recommended to try the rock-rib by preference. Nearly an hour was spent on these rocks, and as I supposed that beyond them there was probably a pretty long snow slope, success seemed again to become doubtful, for the clouds were thickening and there was little time left to try back in another direction if the one first taken did not lead to the highest peak. Rather to my surprise, the slope of snow which I reached at the top of these rocks was very gently inclined, and after walking over it for six or seven minutes, the ground began to fall away to the north and east; it was clear that here, at last—it was now 2.20 P.M.—was the summit. Its height has been variously calculated at 16,965 feet, 17,112 feet, and 17,260 feet. It is double, the NW. summit higher (so far as I could judge after ascending both) by some 30 or 40 feet, and entirely covered with snow. The cold was so intense, a violent west wind bringing up thick clouds from the plains below, and the consequences of getting benighted on the mountain might have been so serious, that prudence forbade a long stay; so starting to descend about 2.40 P.M., I followed the same track down for about 1,200 feet, and then, seeing what seemed a shorter cut, struck off more to the ESE., mostly over broken rocks, and without any greater mishap than breaking off the spike of my ice-axe on a snow slope—it had been ill fixed by a military carpenter at Aralykh—reached my friend and our 12,000 feet high camping ground (to which the Cossack and the Kurd had found their way back from the place where we parted), at 6.20 P.M., just as it was getting too dark for walking on rough ground. We lay down there in the open air till 1 A.M. (the provisions were exhausted, so it was lucky that we were not hungry); then made our way by the faint morning moon down to the tent at Sardarbulach, and reached Aralykh at 3 P.M.

Want of time obliges me to omit further details respecting the physical character of the mountain, the precise line of route to be recommended, and the previous ascents made, which, however, may perhaps appear in a short account of my journey which I hope before long to publish. Meanwhile, it may be worth while to remark that the route which I took in descending, which was a good deal shorter than that taken in ascending, seems to lie between those of Abich and Chodzko, which were apparently more to the west, and that by which Messrs. Freshfield and Tucker made their gallant attempt, under great difficulties from illness and want of time, in 1868. The rocks

on this latter route, as described by Mr. Freshfield, seem to be more difficult than those which I found, and when Mr. Tucker had got above them, he evidently had to traverse a much longer snow slope than either Abich or I did. It is true that they were here early in June, when there is much more snow about than in September; but after comparing notes with them I feel little doubt that they took a line immediately up from a remarkable conical projection (called by my Cossacks the monastery), which stands out of the face of the mountain at a height of about 13,300 feet, and is probably an old cone of eruption.* The snow on the upper part of the slope which leads from this point to the summit seems to be permanent through the summer, and the slope itself is steep enough to require step-cutting most of the way. I did not, surveying it from a distance, notice any crevasses on it. Parrot, however, mentions one or two large ones which he encountered on the great northern snow slope, and which at first alarmed him. Considering that his expedition was made in 1829, when hardly anything was known about mountain climbing, that he had twice failed before, and on one of those occasions had had a nasty slip which might easily have cost him his life, it is impossible not to feel warm admiration for his spirit and constancy, and a corresponding indignation at those persons, some of them men of note, who branded him as an impostor and denied that he had reached the summit at all. Too late for his own satisfaction, for he died four or five years after his exploit, his veracity and reputation have been completely vindicated by subsequent ascents.

EARLY ASCENTS OF ARARAT. By the EDITOR.

No authentic and complete list of the early ascents of Ararat has yet been published. The Russian and German ascents have been doubted in England; the English have by a singular chance remained almost unknown in our own country as well as in Russia.

Major Stuart's narrative of an ascent made by a large English party in 1856 has lately been published (Royal Geographical Society's Proceedings, vol. xxi. No. 1). The writer expresses strongly his disbelief in any previous ascents—except Noah's. The reason he offers for his incredulity is the positive assurance given him by an

* It was on these rocks, conspicuous in the plate to 'The Central Caucasus,' that I halted, and over them that my companions climbed to the upper snow slopes.—D. W. FRESHFIELD.