



LE MINY BLAV VJ MESSUS DE LA VILLE DE SALAYNE
Dedicé à Son Altesse Royale Monseigneur le Prince de Piémont par son humble vassal
Antoine P. de la Roche

Reproduction of an old print from the collection of R. W. Lloyd.

THE
ALPINE JOURNAL.

NOVEMBER 1930.

(No. 241.)

DR. PACCARD'S 'LOST NARRATIVE.'

SOME ADDITIONS AND CORRECTIONS.

By E. H. STEVENS.

(References to pages or notes, without further specification, apply to the article under the above title in 'A.J.' 41, 98-156. In the notes to the present paper :

Dübi = Dr. H. Dübi's *Paccard wider Balmat*.

G. M. (1) = De Saussure's *Journal d'un Voyage . . . à la Cime du Mont-Blanc*, edited by Gaillard and Montagnier.)

AS a result of further consideration and research, various points affecting Dr. Paccard's narrative and his relations with Balmat have emerged, which I venture to put before the readers of the ALPINE JOURNAL, in the hope that they may be found to cast some interesting light on the early history of Mont Blanc.

§ 1. In the Chronological Table on p. 154, I have credited Balmat with six complete ascents, viz. Nos. I, II, III, VI, VII, IX. To these must certainly be added No. V (Woodley). Mr. Montagnier's reprint¹ of the most detailed of Bourrit's many accounts of this expedition has made it clear that Jacques Balmat, 'dit le Mont-Blanc,' with two other Balmats (Dominique and Alexis) and J. M. Cachat ('le Géant,' also called by Bourrit 'Sans Peur,' because of his daring leadership

¹ *A.J.* 30, 120.

in Bourrit's crossing of the Col du Géant), attained the summit with Woodley, while Balmat 'dit des Dames,' le grand Jorasse, and Tournier 'l'Oiseau,' with Bourrit and his son, only reached the Petits Mulets. Further, Balmat's MS.² mentions an ascent—which I will call VIIa, and which readers might add to my table—by five men on July 25, 1811, 'to set up the signal by order of the French Government of Bonaparte.' Nothing else seems to be known of this, though Mathews³ says 'it is well known that the Emperor Napoleon ordered an iron cross to be erected on the summit.' Anyhow it is likely that Balmat was one of the five men. Of ascent VIII (Rodatz) we have apparently nothing but the bare entries in Paccard's diary ('note de Cachat le Géant') and in Balmat's MS., but again it is likely that Balmat was one of the guides. Thus he took part in I, II, III, V, VI, VII, IX certainly, and probably in VIIa and VIII, or nine ascents in all. As he claimed to have made two ascents on August 8, 1786, that would give the total of ten claimed for him as stated in Mr. Montagnier's note.⁴

§ 2. While referring to Balmat, I may call attention—as, I think, has not been done before—to the amount of cash he received for his first ascent. The 'gratification' obtained for him from the King of Sardinia by Bourrit was 10 pistoles = 240 francs.⁵ The sum collected for him in Germany by von Gersdorf was 102½ thalers, or about 400 francs.⁶ As to the reward offered by de Saussure, there seems to be no contemporary mention of its amount. The only evidence that Balmat actually received it is Bourrit's letter (August 13, 1787) to Miss Craven,⁷ in which he tells her that de Saussure had given Balmat what he had promised. The only precise statement I have found is in a strange anonymous narrative of the first ascent published in the 'Juvenile Miscellany' (London, 1842), and reprinted by Dübi.⁸ This narrative claims to be based on an interview with Balmat in his old age, and thus is constructed on the model of Dumas's tale, which it follows in general outline, but from which it differs in numerous details; frequently for the better. It includes a conversation with Pierre Balmat, who died in April 1827, and therefore cannot be later than the summer of 1826, which suits well enough the author's

² See note 4, and C. E. Mathews's account of the MS., *A.J.* 21, 410.

³ *Loc. cit.* p. 412.

⁴ *A.J.* 32, 41 (*q.v.*).

⁵ *G. M.* (1), p. 42.

⁶ Dübi, p. 117.

⁷ Dübi, p. 92.

⁸ Dübi, pp. 290–295.

description of it as an 'extract from my old journal.' I agree with Dübi in thinking that it is, in part at least, authentic, and represents an earlier—and, on the whole, more credible—version of Balmat's story than that which he told a few years later (when Paccard was dead) to Dumas. In this narrative Balmat is made to say that the reward was two guineas. 'I dare say, Sir, you think two guineas a small sum, and so should we now, but in 1786 it was a great deal of money to poor crystal-hunters.'⁹ Guineas probably stands for louis or napoleons, and the reward would thus be 40 francs, or say a week's pay for a guide—de Saussure paid his men 6 francs a day.¹⁰ If the story has any foundation, the sum seems small for a prize offered, even when he was only twenty-one, by a man like de Saussure. He himself called it 'une récompense assez considérable.'¹¹ One might wonder whether Balmat said *dix*, and was misunderstood by his interviewer, who remarks that Balmat was one of the fastest talkers he ever heard, and who perhaps thought he said *deux*. Anyhow the three sums amounted to some 700 francs, more or a little less—a handsome total for a young Chamonix peasant in 1787.

§ 3. In my former article I emphasised the importance of Balmat's certificate of October 1786, and showed its value as a complement to the story Dr. Paccard told de Saussure. There is a remarkable fact about this certificate which seems to have escaped notice. The ALPINE JOURNAL of August 1892 contains an account¹² from the diary of the Earl of Minto of his ascent of the Breithorn in 1830. He had with him J. M. Couttet as chief guide, and eight others 'selected by Coutet [*sic*] as the *élite* of the Chamouniards.' Among these were Julian Devoussoud (Lord Minto's spelling of the name of Dr. Paccard's son-in-law) and Ambroise Paccard, the Doctor's son, of whom Lord Minto writes as follows: 'Ambroise Paccard, whom I had engaged to accompany me to observe the barometer at Zermatt during our ascent of the mountain, is the son of the celebrated Dr. Paccard of Chamounix, who divides the honour of the first ascent of Mont Blanc with old Jacques Balmat. Paccard asserts that more of the merit of this first ascent is due to his father than has usually been assigned to him; that the course by which the ascent was effected was in truth

⁹ This description of himself seems to me a mark of genuineness. See notes 93, 94.

¹⁰ See p. 122 of former article.

¹¹ *Voyages*, § 1102.

¹² *A.J.* 16, 146.

suggested by Dr. Paccard from the observations he had made from the Brévent. However, Paccard has promised to furnish me with very full details from his father's papers.' [*Editorial note*: Among Lord Minto's papers there is a copy of the *Journal de Lausanne* for May 12, 1787, containing a certificate signed by Jacques Balmat to the effect that Dr. Paccard's previous study of the route, and his resolution during the ascent, had contributed materially to the success of the expedition.] This note appeared in August 1892. Whymper published the certificate in the first edition of his 'Guide to Chamonix' in 1896. One can hardly believe that he overlooked the note in the ALPINE JOURNAL, but it is almost equally difficult to suppose that, if he had seen it, he could have failed to mention the reference which must have put him so directly on the track leading to his dramatic discovery of the significant correspondence in the *Journal de Lausanne*.

§ 4. Lord Minto's further references to Ambroise Paccard¹³ include some interesting points. 'Ambroise Paccard is an intelligent man, with an education superior to that of his neighbours at Chamounix, where he keeps a cabinet of natural history. He brought me two relics which I value much—one a letter from Saussure to his father, and the other the identical coloured paper carried up by his father on the first ascent of Mont Blanc as a standard of comparison of the colour of the sky at different elevations.' [*Editorial note*: Through the kindness of the Hon. G. Elliot, this interesting relic is now the property of the Alpine Club.¹⁴] . . . 'I had taken up [the Breithorn] Dr. Paccard's coloured paper with me, but I had no opportunity of comparing it with the colour of the sky, as the light fleecy sky gave it something of a grey dimness. We did catch some glimpses of dark-blue, but still very far short of the intense indigo colour of the sky, which is so remarkable in clear weather from very great heights, and which had struck us so much on the summit of the Buet.' It is pleasant to hear that Dr. Paccard, who owed so much to his own father,¹⁵ gave his son a good education, and that the son inherited his father's interest in barometrical observations and in the natural history of his native valley.

§ 5. In Bourrit's account (referred to above, § 1) of his expedition with Woodley and Camper—which was doubtless led by Jacques Balmat—he describes how, on August 4, 1788,

¹³ *Loc. cit.* pp. 148, 230.

¹⁴ *Cf.* note 124.

¹⁵ *Cf.* p. 107 of former article.

they slept in their tents near de Saussure's hut on the (upper) Grands Mulets rocks.¹⁶ Next morning they took 5 hours to reach 'le Camp' (sc. the Grand Plateau), where they set up their tents and halted $\frac{3}{4}$ hour for a meal 'at 1455 toises above Chamouni.' This no doubt means that Bourrit thought, or *was told by Balmat*, that they were at the spot where de Saussure camped and slept on August 2, 1786, at a height which, he states in his 'Relation Abrégée'¹⁷ (published in 1787, and of course well known to Bourrit), he measured as 1455 toises above Chamouni and 1995 toises above the sea. This may help to account for Balmat's subsequent use of this figure (in 1830 or thereabouts) as the alleged height of his bivouac on June 8, 1786, though at the time he had told Bourrit he slept at a spot 'higher than the Dôme du Goûter'!¹⁸

After leaving the Grand Plateau, Bourrit's party began to straggle, Woodley, with Balmat and others, going on at a pace which, on the steep slopes and in the cold and violent wind that had risen, Bourrit and his son could not maintain. This separation annoyed Bourrit greatly, and may perhaps have started or contributed to the coolness that set in between himself and Balmat (see p. 143 of former article).

After sleeping a second night at the (upper) Grands Mulets, the party 'descended along the glacier squeezed in between the Grands Mulets and the bases [*sic*] of the Aiguille du Midi. This glacier is the most astonishing that I know [deep defiles, walls 400 ft. high, gloom, sunshine, precipices, horrors, dangers, pyramids, labyrinths, azure piles, black crevasses, huge towers threatening destruction, glacier splitting beneath their feet!]. It is the most beautiful thing I have ever seen.' This seems to have been the first passage of the glacier towards the Pierre Pointue, which had been partly reconnoitred by Dr. Paccard,¹⁹ and afterwards became the regular approach to the Grands Mulets. It was again followed on the descent, fourteen years later, by the next party, viz. that of Dorthesen and Forneret (also led by Jacques Balmat), in spite of the consequent necessity of abandoning provisions they had cached on the Montagne de

¹⁶ This, as Mr. Montagnier points out, is probably the first occurrence of the name Grands Mulets in Alpine literature. Paccard himself does not use it till 1802, in his lengthy account of the ascent (VI) by Dorthesen and Forneret.

¹⁷ Reprinted in his *Voyages*, Vol. IV. Cf. Whymper, *Guide to Chamouni*, p. 31.

¹⁸ See note 4, p. 99.

¹⁹ *A.J.* 41, 139.

la Côte.²⁰ It would be interesting to know whether the opening sentence of the quotation really means that the party descended the steep slopes at the back (E.) of the Grands Mulets chain on to the wildly crevassed upper part of the Glacier des Bossons. If so, it would have been a remarkable piece of work. Bourrit's language certainly rises to a higher pitch of excitement than he attains elsewhere (though he had crossed the Col du Géant the year before), and even for him seems excessive for the ordinary route through the 'Junction.'

§ 6. In Paccard's account of his reconnaissance by the Tacul basin²¹ some points deserve further discussion. First as to the position of the 'cahute' (hut) in which he slept, '*on the moraine of the Tacul, below the [Aiguille] Noire, at a place where two glacier valleys meet.*' If, as would be otherwise very probable, this place was at or near the Lac du Tacul, it is rather surprising that Paccard does not mention the well-known Lac, but defines the spot as 'below the Noire,' which I believe is not visible from the Lac, and the foot of which is a long way (about 1000 ft.) above it. De Saussure,²² relating his ascent in 1788 to the Col du Géant, describes the place with his customary precision: "We slept in our tents at the Tacul; this is the name of a grassy basin, on the shore of a little lake, enclosed between the end of the Glacier des Bois and the foot of a rock which bears the name of Montagne du Tacul." He does not mention the Noire, which was probably much less well known than the Tacul. On the first passage of the Col du Géant, Cachat and Tournier bivouacked (June 27, 1787) near 'l'Echelier' (les Echelets), and next morning, by a forced march of 4 hours, got 'under the foot of the so-called Aiguille Noire.'²³ As Paccard's barometric measurement (allowing for the fact that he got the Montanvert 130 ft. too high) made his sleeping-place some 300-400 ft. higher than the Tacul, it is perhaps likely that the 'cahute' was on the moraine near the junction of the Glacier des Périades with the Glacier du Géant. This would also suit better the wording of their next morning's work, which is literally 'we went on a few steps (quelques pas), nearly as far as the Noire.' This, however, must not be pressed too hard, as they 'crossed a large number of covered crevasses.' I do not know whether there are, or were, any

²⁰ *A.J.* 30, 128, 129.

²² *Voyages*, § 2027.

²¹ § 4 of former article, pp. 110-114.

²³ *A.J.* 34, 367.

huts at the place suggested—there certainly were at the Tacul.

§ 7. In the former paper I omitted from this section of Paccard's diary a passage which I did not then fully understand, but which is now clear to me. It follows on the mention of his sleeping at the 'cahute': '*Above the glacier which crowns the region of our hut one sees Mont Blanc showing its rounded, snowy top as it does when seen from Chamonix; behind it there is an aiguille almost bare of snow, at least towards the Val d'Aosta, which M. de Saussure probably took for Mont Blanc. It is said that seen from les Courtes [sc. the Glacier de Talèfre] this summit appears higher.*' Now, in the account of his ascent of Mont Blanc, de Saussure writes as follows²⁴: 'The summit ridge falls steeply to the north, but to the south on the contrary the slope is quite gentle, 15° or 20° at most, and lower down forms a cradle, the slope rising in the opposite direction, *i.e.* towards the south, where it forms, above the Allée Blanche, a lofty point, under which is a snowy gable ['*avant-toit,*' literally 'eaves'], and under this gable are the rocks which I saw from the Cramont and took for the summit, because they hid from me the actual snow summit. This projection to the south is the reason why, when one looks at the top of Mont Blanc in profile from the east or from the west (*e.g.* from the St. Bernard or from Lyon), one sees below the summit a sort of hook or upturned nose, standing out towards the south.' This is all most precisely stated, both by de Saussure and by Paccard, whose 'aiguille almost bare of snow, at least towards the Val d'Aosta,' is therefore the Mont Blanc de Courmayeur, which is also 'the mountain behind Mont Blanc' towards which, he says, the widest of the 'vallons' from the Glacier du Tacul runs.²⁵ As to the relative heights, Mont Blanc de Courmayeur looks from some directions nearly as high as Mont Blanc—it is only 200 ft. lower—and if it were thought to be further off might well be supposed to be higher. In any case it is only an 'on dit.' See further § 13 below, with illustration.

There remains an interesting question. The passage which explains Paccard's reference to de Saussure's mistake about the summit is in Vol. IV of the 'Voyages,' which was not published till 1796. Was the sentence in Paccard's diary not written till after 1796, or had Paccard heard about de Saussure's observations on the Cramont (which were made in 1774 and

²⁴ *Voyages*, IV, § 1992.

²⁵ § 8 below.

1778) from de Saussure himself—probably at their first interview (August 1784), a few weeks after this expedition of Paccard's (p. 114)? The latter alternative seems much more likely, and it is pleasant to think of such an exchange of experiences between the older and more travelled Professor and the eager young Doctor.

There is, however, one other phrase in this section of his diary which might be thought to suggest the probability of later revision or addition, viz. Paccard's reference to the Col du Géant, '*the route [to or from Courmayeur] which is visible beyond the [Aiguille] Noire, where the innkeeper Abondance of Courmayeur is said to have come in pursuit of a bouquetin, and to have looked down the whole valley of Bayer [sc. the Mer de Glace].*'²⁶ The first recorded crossing of the Col was in June 1787, whereas the passage just quoted belongs to Paccard's diary for 1784. But Mr. Montagnier's exhaustive study of the subject ('A.J.' 33, 323, and especially 34, 359) conclusively supports the suggestion in my note 56, that Dr. Paccard knew of the reputed pass from his father. The following interesting passage from Bourrit²⁷ throws light on Paccard's statement: 'Behind this valley [the Mer de Glace] is situated the district of Cormayeur in the Val d'Aosta, which is only at the most eight leagues from Chamouni. Now the tradition among the inhabitants of the two countries is to the effect that formerly they had intercourse with each other by passing through the midst of the ice valley. The greffier [=Recorder] of Chamouni, whom I have consulted, and who has the old documents in his hands, has confirmed this. . . . To this testimony I will add that of Mr. "Patience" of the big house [? inn] in Cormayeur, who, having ascended to hunt bouquetin, discovered in the direction of Mont Mallet [sc. the Aiguille du Géant] the environs of our glacier through a gorge which he reckons to have been the former passage.' The 'greffier' or Recorder of Chamonix is Dr. Paccard's father, the secretary and Royal Notary of the valley. 'Patience' was the nickname of a chamois-hunter of Courmayeur, named J. L. Jordanay, who had acted as guide to de Saussure and to Bourrit. His adventure must be the same as that quoted by Paccard, but whether he had another nickname—'Abondance'—and was an innkeeper as well as a chamois-

²⁶ P. 112 of former article.

²⁷ *Nouvelle Description des Glacières et Glaciers de Savoie* (1785), tome III, p. 72.

hunter, or whether the variety of name and occupation attributed to him is simply the result of a confusion or blunder, I do not know.

§ 8. As a result of further consideration, and a most helpful discussion with my friend M. Morin, A.C., G.H.M., I can now give a much more precise explanation of the brief but pregnant passage in which Paccard states his conclusions as to the possibility of finding a way up Mont Blanc from the upper basin of the Mer de Glace. The passage²⁸—with slight improvements in the translation of the first and last sentences—runs as follows: '*This route [sc. from the Tacul upwards] then brings one to a glacier, above which is a snow plain, on which about several valleys ('vallons') that go in the direction of Courmayeur. The widest valley runs straight to the foot of the mountain behind Mont Blanc, and appears to bend to the right towards Mont Blanc behind a granite aiguille which hides it [sc. the widest valley]. This valley lies so deep below the mountain slopes (which themselves rise to what seems an enormous height above it) as to suggest that it could only lead to Mont Blanc by a very steep couloir. To attempt this route it would seem that the easiest way would be by the valley in the background, or else near Courmayeur by the passage which is visible beyond the [Aiguille] Noire. . . .*' Now, (a) that the 'snow plain' is, as stated in my note 51, the wide, gently sloping upper basin of the Glacier du Tacul, is confirmed by a note in the *Journal de Lausanne* of July 8, 1787,²⁹ on the first two crossings of the Col du Géant: 'The Tacul presents at its highest point a snow plain, admirable for making observations.' (b) The '*valleys going in the direction of Courmayeur,*' we now suggest, are the well-marked snow slopes leading up to gaps in the highest (southern) rim of the Tacul basin, several of which afford passes to the Brenva valley and therefore to Courmayeur. There are five of these, viz. (1) to the left of the Grand Flambeau, (2) between this and the Aiguille de Tour, (3) between the latter and the Aiguille d'Entrèves, (4) between this and the Tour Ronde, (5) to the right of the latter. The widest of these is No. 5. It runs at first straight towards Mont Blanc de Courmayeur—which, as shown in the preceding section, is undoubtedly what Paccard means by '*the mountain behind Mont Blanc*'—and then appears to turn to the right towards Mont Blanc itself, behind

²⁸ *A.J.* 41, 112.

²⁹ Quoted by Mr. Montagnier in *A.J.* 34, 366.

the striking little pinnacle, now called the Petit Capucin, which stands at the base of the great ridge (bearing higher up the Capucin and the Aiguilles du Diable) of Mont Blanc du Tacul. The '*very steep couloir*' which Paccard rightly guesses could alone lead hence to Mont Blanc is that which runs up from this S.W. bay of the Glacier du Tacul to the crest between Mont Blanc du Tacul and Mont Maudit. It was first climbed by F. A. Bowlby and J. Stafford Anderson, on August 29, 1888.³⁰ Donkin's photograph at p. 114 of my previous article shows all this (except the '*steep couloir*') perfectly. Thus '*the granite aiguille which hides*' the glacier bay leading towards the summit of Mont Blanc is the Petit Capucin, and the suggested route rises to that great N.E. ridge of Mont Blanc, running down over Mont Maudit and Mont Blanc du Tacul, which in recent years has attracted so many climbers.³¹ (c) As a means of access to this route Paccard suggests either '*the valley in the background*' ('*la vallée du fond*')—which I take to be the Brenva valley—or '*the passage visible beyond the Aiguille Noire,*' which, as explained in § 7 above, is the Col du Géant. We now know that these are possible routes, though in actual practice the passes near the Tour Ronde are more useful as affording access from the outskirts of the Tacul basin (e.g. from the Torino hut) to the upper Brenva valley than in the reverse direction. Paccard was doubtless led to suggest these routes because he had found—as many others have since found—that '*the approach to Mont Blanc on this side* [*sc. by the séracs du Géant*] *is difficult,*' and he might well imagine that one of the other possibilities he recognizes might prove to be easier, as indeed the Col du Géant is.

It would be difficult, I think, to find in Alpine literature another passage bearing on a great mountaineering problem which contains in such brief compass so much accurate observation, sound judgment, and fertile suggestion.

§ 9. One of the most puzzling passages in this section of Paccard's diary is his reference to the '*aiguille percée.*' His words are as follows: '*Behind the aiguille percée we counted three granite aiguilles which are not seen from Chamonix; all the others are also thus doubled* [or '*understudied*'] *several times; a vast number of these granite aiguilles are visible, and*

³⁰ *A.J.* 14, 151.

³¹ The exegesis now offered of Paccard's text involves, of course, the abandonment of the direct reference to the Brenva valley suggested in notes 54, 55.

this is the best place in which to study the rocks of this kind.'³² Originally I was so impressed by the way in which the Glacier du Tacul is shut in by the three striking little peaks of the Grand Flambeau, the Aiguille de Toule and the Aiguille d'Entrèves, that I was impelled³³ to take these for Paccard's 'three granite aiguilles invisible from Chamonix,' and consequently regarded the Tour Ronde as his 'aiguille percée' *behind* which he counted his three—*behind* meaning, as in § 7 above, 'on the side remote from Chamonix.' But although the peaks in question stand up so boldly when seen from a lofty and distant viewpoint (as in Donkin's photograph at p. 114), it must be admitted that they would be much less conspicuous, even if visible at all, from the slopes of the Tacul basin. Moreover, they are a long way from the rock peaks of the Chamonix Aiguilles proper, to which Paccard seems to regard them as belonging, and being largely snow-covered are unlike them in appearance.

Mr. Sydney Spencer suggested to me that the 'aiguille percée' might be the Grépon, being so called from the hole—Burgener's famous 'Kanones Loch'—by which the passage from the Nantillons to the Mer de Glace face is effected, and which 'is well seen from the Mer de Glace.'³⁴ Mr. Spencer remembers clearly noticing this hole from the neighbourhood of the Lac du Tacul, and seeing the sky through it. This attractive idea suffers from two drawbacks. It affords no easy explanation of the 'three granite aiguilles behind it which are invisible from Chamonix,' since any peaks likely to be described as 'behind' the Grépon are all visible from Chamonix except the Requin. Moreover, the mountain was already well known (under the name of Charmoz, which it bore till soon after Mummery's ascent in 1881), even in 1742, when Peter Martel describes and names it,³⁵ of course from local information. It must have been quite familiar to Paccard and his experienced guide, Pierre Balmat, and they would certainly have called it by its name rather than have spoken of it vaguely as the 'perforated aiguille.' I may add that, as M. Couttet tells

³² Here again the translation is made more precise than in my original article (*A.J.* 41, 112). The fact is that the more one studies Paccard's text, the more one realises that it deserves the most exact interpretation.

³³ See note 59, *A.J.* 41, 112.

³⁴ *A.J.* 10, 357.

³⁵ See Mathews, *Annals of Mont Blanc*, p. 351; Gribble, *Early Mountaineers*, p. 114.

me, nothing is known at Chamonix of such a name as 'aiguille percée.'

I have to thank M. Morin—who has an unsurpassed knowledge of the whole region—for another suggestion which I think finally clears up the question. On the N.E. ridge of the Requin is a very remarkable gendarme, now to be known as the Capucin du Requin, the top of which is shaped like a flower-pot, overhanging on all sides. Below this top the gendarme is pierced by a conspicuous hole, which is clearly visible from the moraine above the Tacul, and was actually traversed on the first ascent.³⁶ This hole is much nearer to the Tacul, and more likely to catch the eye of a climber passing that way, than the lofty and distant hole on the wall of the Grépon. Again, the description of 'perforated aiguille' is much more likely to be applied to an otherwise unknown rock-needle than to an already well-known peak like the Grépon. On this explanation the '*three granite aiguilles behind the perforated aiguille*' would be the Requin and the two lofty and conspicuous points on the ridge running from it to the Aiguille du Plan, viz. the Grand Gendarme d'Envers du Plan and the Pain de Sucre. These three are practically the *only* prominent peaks of the whole group which are invisible from Chamonix or its neighbourhood, and they lie exactly 'behind the Capucin du Requin.'³⁷ The only objection I can think of is that in this case 'behind' (*derrière*) would be used in its ordinary sense—'behind' from the observer's point of view—and not, as elsewhere, meaning 'on the side remote from Chamonix.' The inconsistency is trifling, and the meaning perfectly natural as applied to objects relatively near at hand. Finally note the aptness of Paccard's observation that the summits of this remarkable group tend to duplicate themselves, the various ridges bearing pairs or triplets of peaks of similar form and character but varying altitude. The great ridge of the Plan is only the most striking instance of this general principle. In Paccard's words, '*all the other aiguilles have also in the same way their duplicates,*' or, we may say, 'their understudies.' Much of the activity of modern

³⁶ By Mlle. Brunaud with Alfred Couttet—who spent many hours of three days in exhausting efforts to throw a rope over the top—on July 17, 1928. See *La Montagne*, 1930, p. 45, where the hole is called 'a lean-to ('un auvent') formed by a huge block of rock.'

³⁷ These points can be identified on Donkin's photograph at p. 114.

climbers in this region—particularly of the members of the 'Groupe de Haute Montagne' of the C.A.F.—has been devoted to climbing and naming these subordinate peaks.

§ 10. The remaining point for discussion is the interpretation of Paccard's phrase, '*nous avons couché derrière l'Aiguille du Midi.*' This follows his reference to the 'aiguille percée' and the 'best place in which to study these granite aiguilles,' and is immediately followed by the words 'where we saw nine chamois.' I have suggested³⁸ that on the descent from the Tacul basin near the Aiguille Noire, he crossed over to the left bank of the glacier—partly to look more closely at the great group of Aiguilles, partly, perhaps, to find an easier descent—and *rested* at the Rognon, or more likely the Petit Rognon, which he might naturally describe as 'at the back of the Aiguille du Midi,' *i.e.*, as already explained in other cases, on the side of the Aiguille du Midi remote from his home at Chamonix. There are two objections. In the first place, he does not actually mention crossing the glacier nor define his resting-place more closely. One must remember, however, that his journals are really only memoranda, which would doubtless have been expanded and rearranged if ever published, and that the rock islands in question were only named much later. Secondly, one would naturally take 'nous avons couché' to mean 'we *slept*' (passed the night). The substantial reasons I have urged³⁸ against this, and for the meaning 'we lay down or *rested*,' are, I venture to think, very strong. But the linguistic question remains, *viz.* whether 'nous avons couché' could normally mean to French readers anything but 'we slept,' and this is a question only to be answered conclusively by those to whom French is their native tongue. Dr. Dübi says 'no'; so does M. Morin, and so do two other French friends of mine, MM. Desclos and Janelle, both of whom are distinguished French and English scholars. On the other hand, the dictionaries (*e.g.* Littré, Gasc) admit 'to rest' as one meaning of *coucher*. Moreover, Dr. Paccard, though an educated man, was a Savoyard of the eighteenth century, and employs some words in a sense in which no Frenchman would generally use them. The most striking case is *rester* (with auxiliary *avoir*) meaning to take or spend a certain time, *e.g.* 'deux guides ont resté près d'une heure depuis votre station pour atteindre le sommet'; 'je restai une heure dans cette montée le long du glacier'; 'nous

³⁸ In note 61, *A.J.* 41, 113.

avons resté trois heures passées pour y monter'; 'Voyage au Mont Blanc. Resté deux jours'; 'ils ont resté une heure et un quart pour faire la tournée.' (He also uses *rester*, with *être*, in the ordinary meaning to stay or remain.) As M. Desclos writes to me, *ab uno disce omnes*, and in view of this striking example, I think—and MM. Desclos, Janelle, and Morin agree—that we need not be deterred from accepting the desired meaning of 'nous avons couché' on the ground that it does not conform to the common French usage. With the meaning 'we rested,' the whole passage falls easily and naturally into place—without it, all is confusion.

§ 11. In the last part of this section of Paccard's diary (p. 114), I think I may have slightly misrepresented the original in the effort to compress it and arrange it more clearly. The following is a more complete and literal translation. 'We saw them [the herd of chamois] above and beyond the Pierre à Béranger, where they climbed a steep snow slope in order to cross the snow and go to the valley of the Glacier de Talèfre. We found some crystals beneath this glacier. We went to gather some dwarf *Achillea* on the moraine below the Pierre à Béranger. Then we crossed this glacier by the Col de [gap in the MS.] to a little plain below the Aiguille where there are several huts . . . [At the end of the section] we found, below the Glacier de Talèfre, where we dined, some rock specimens, [several named].' It will be observed that Paccard does not mention the Jardin—which by this time was pretty well known—and refers to an unnamed col. It is therefore perhaps more likely that he did not (as I had suggested) go up to the Pierre à Béranger and the Jardin—which would have been rather a work of supererogation after the heavy labours of the morning—but, after lunching and finding some crystals and rock specimens near the base of the moraine, went a little way up it to get the *Achillea*, then returned and crossed the glacier and the moraines to the little plain below the Aiguille du Moine, near where the present route to the Couvercle starts up. M. Morin tells me that there are one or two big mounds on the moraine here, and that passing between or just above them would be like crossing a little col, which, however, would not deserve or have received a name.

The discussion of these points (§§ 6–11) has been rather minute and lengthy, but I hope not without interest, especially as revealing the extraordinary accuracy with which, in spite of equally remarkable brevity, Dr. Paccard made and recorded his observations.

§ 12. I was able to pay a brief visit to Chamonix last year, and go over some of the ground referred to in these narratives. I ascended the Montagne de la Côte, and can fully endorse Mathews's recommendation of it³⁹ as a most charming and repaying walk. There is a good path from les Bossons, and it was interesting to compare this with de Saussure's notes of his ascents in 1786⁴⁰ and 1787.⁴¹ (Everything that follows in this section between inverted commas is quoted from de Saussure.) As he says, one leaves the high road to Geneva and takes the path that leads to the Glacier des Bossons, presently turning to the right to the houses of le Mont. De Saussure describes the further ascent—on which he was able to ride for half an hour—as leading by the torrent from the Glacier de Tacconnaz up a wild débris valley, then rising above the glacier to a spring, returning for a few minutes to the moraine, and finally leaving it to ascend the Montagne de la Côte to the left. The present mule-path evidently avoids these difficulties, not going so near the Glacier de Tacconnaz, but following the same general direction, and at one corner affording a striking view of the dazzling cataract of the Glacier de Tacconnaz, crowned by the snows of the Aiguille and Dôme du Goûter. After turning decisively to the left, the path crosses to the other side of the Montagne de la Côte, rounds a huge hollow falling steeply to the Glacier des Bossons, and reaches a steep corner above the second plateau and crossing place of the Glacier des Bossons, where, on a little made terrace, there is now a refreshment house called the Chalet des Pyramides. The site and the distances suggest that here or hereabouts was de Saussure's 'mauvais pas.' In 1786, he says in his diary 'a ladder had been left here by the guides. As Bourrit⁴² came here without a ladder, I should have feared that the guides would take it amiss and form a bad idea of my strength and courage if I had seemed to need help at this spot.' On his next year's expedition he writes⁴³: 'Half an hour after leaving the glacier [de Tacconnaz], one arrives at the foot of a lofty, almost perpendicular rock, which blocks a deep and narrow couloir. One can only get out of the

³⁹ Mathews, *Annals of Mont Blanc*, p. 31.

⁴⁰ G. M. (1), pp. 43, 44 (hitherto unpublished extract from de Saussure's diary).

⁴¹ G. M. (1), pp. 12–14 (diary), and *Voyages*, §§ 1966–1971.

⁴² With Paccard and three guides in September 1783. See § 3 of the previous article (*A.J.* 41, 109).

⁴³ *Voyages*, § 1968.

couloir by climbing this rock; the passage is called the *Mapas*, or *Mauvais Pas*. A ladder had been placed there with the idea that I should need it, but as I feared to give my guides a bad opinion of me if I used it, I passed by the side of the ladder without touching it.' Very human touches, especially the reference to Bourrit, who on a previous occasion had made impertinent comparisons between de Saussure's climbing powers and his own.⁴⁴

Above this one still 'passes by narrow ledges above lofty slopes which might be a little alarming for unaccustomed heads,' and reaches 'a sharp [little horizontal] arête, with a precipice to the right above the glacier [de Tacconnaz], and steep grass slopes on the left.' Above this 'steep slopes of 50°, where, however, nailed boots go perfectly well,' bring one to a grotto⁴⁵ or little cave, where de Saussure slept on August 20, 1786, being driven down next morning by 'horrible rain.' A col not far above this gives access to a peak (one of many summits on the ridge) which affords a view that much impressed de Saussure. The slanting beds of the great ridge on the other side of the Glacier de Tacconnaz attracted his attention, as they had Paccard's. The latter notes⁴⁶ that these beds are inclined away from Mont Blanc. 'But,' says de Saussure, 'the strangest view is that to the N.W., along the ridge itself. Big, sharp-cornered rocks, piled up in bold heaps, crown the ridge, looking strange and wild; the fair and smiling meadows of les Houches seem to be divided by these barren rocks, forming a striking contrast with them. One of these blocks, which has a jutting corner overhanging the precipice, is called the "Bec à l'Oiseau." There is a tale that a shepherd climbed this for a wager and sat down on top, but on standing up slipped, and was killed on the spot. . . . I amused myself with watching, at a great depth below my feet, some tourists painfully crossing the lower plateau of the Glacier des Bossons, leaning on their guides, and probably getting ready to tell on their return a swelling story of their courage and of the dangers they had run.'

De Saussure's grotto was probably the place that Paccard calls 'la Tournelle,' where he and Bourrit slept in September 1783. Paccard's barometrical measurement makes it about

⁴⁴ See note 90 (*A.J.* 41, 122).

⁴⁵ The present path, which was restored by the C.A.F. in 1910, passes, I think, below this grotto.

⁴⁶ Dübi, p. 259.



Ruskin's CREST OF LA CÔTE
(from 'Modern Painters,' Vol. IV.).



Photo, J. Hawksley.

PACCARD'S GÎTE on the MONTAGNE DE LA CÔTE.

550 toises above Chamonix, while de Saussure found the col (which is a little higher) to be about 600. Paccard calls his sleeping-place a 'cabane,' as de Saussure also does several times. From the col de Saussure, in 1787, went up to the top of the Montagne de la Côte in 83 minutes (about the same as I took, going quietly, but having, no doubt, a much better path than existed 140 years ago), while Paccard and Bourrit—always a slow goer, especially in the morning—took 2 hours from the 'cabane.' M. Couttet, who has been kind enough to make inquiries for me, reports that the name of la Tournelle is now completely unknown, but the little col is called Col de Leschaux.

The path continues to ascend obliquely across the slopes between the Glacier des Bossons and the summit of the ridge. 'We passed below a deep cavern where Jacques Balmat had hidden a ladder and a fir pole for our use on the glacier. He found the ladder, but to my great regret someone had stolen the pole. It is strange that there should be robbers there—one can't call them *highway* robbers.' Then the path turns to the right, below (and to the south of) the highest and boldest of the peaks on the ridge, which de Saussure calls the Aiguille de la Tour. This is clearly the point marked Mont Corbeau on the French Government map (2332 m.). M. Couttet tells me that some old guides, and the inhabitants of the village of le Mont, still call this la Tour, while other guides give it the map name, and some think 'Bec à l'Oiseau' is the same peak—but this, I think, is certainly wrong. Most of these localities can be identified on Ruskin's beautiful drawing called 'The Crest of la Côte.'⁴⁷ The highest peak on the left is Mont Corbeau, the obvious col below it to the right is the Col de Leschaux, and the second peaklet above this col on the right is the Bec à l'Oiseau. The Chalet des Pyramides would come about $\frac{1}{8}$ in. to the right of the mid-point of the plate, and I believe the 'sharp arête' is in the second little gap above this to the left. In the background are boldly indicated the sloping beds on the Tacconnaz ridge which so struck both Paccard and de Saussure. The summit of the Montagne de la Côte is just beyond the top left-hand corner of the plate.

An ascent of about 1000 ft. more over roughish, stony slopes, with some snow patches, brings one to the top of the

⁴⁷ *Modern Painters* (library edition), vol. iv, p. 260. I have to thank Messrs. George Allen & Unwin for their kind permission to reproduce this illustration and for the loan of the block.

Montagne de la Côte (about 8500 ft.). Some 200 ft. below the top 'is a heap of granite blocks, drifted thither by the glacier. We hoped to find a shelter among these, where Dr. Paccard and Jacques Balmat had slept on the night before their ascent.' Whymper says that one of these blocks is 10 m. high by 9 m. by 14 m. The present path passes between two of the largest of these blocks, which lean together, forming a capital shelter. The C.A.F. have put up a tablet on the right-hand wall, stating that this was Jacques Balmat's *gîte*, August 7, 1786. Not a word about Dr. Paccard! One might almost think there was a conspiracy among French mountaineers to exalt Balmat at Paccard's expense.

Whymper speaks of a cairn on top, and the remains of a regularly built hut. Neither of these was noticeable when I was there. But the view is very striking, particularly of the Dôme and Aiguille du Goûter on the right, of the Aiguille du Midi on the left, and of Paccard's route in the middle. The view of the latter, looking up to the Grands Mulets and Mont Maudit, gives a vivid idea of the difficulties in the early part of their ascent which cost Paccard and Balmat so much time and trouble.

§ 13. After this trip I went up Mont Blanc by the ordinary route. In the upper part of the ascent to the Grands Mulets there were six fixed ladders crossing troublesome crevasses. It would be interesting to know how much time these saved—I should think at least an hour or two. I was fortunate in having very fine weather, and in finding no other party at the Grands Mulets or on the mountain next day. A well-trodden track to the Dôme du Goûter was conspicuous, exactly as marked DDD on the illustration appended to my former article.⁴⁸ In the evening a short-lived tempest blew up, which gave us gorgeous cloud-scapes, and, as the tempest passed over, a superb stormy sunset. On leaving the Grands Mulets (at 1.45 A.M.) we soon came into the line of Paccard's route as marked on the illustration, and followed it to a point a little beyond A. As we mounted to the Petit Plateau, passing close under the rocks to our right near A, I was struck with the accuracy of Paccard's description of the point reached by the guides in 1783, '*where the snow arches over the first rocks at the foot of the . . . Dôme du Goûter.*'⁴⁹ The Petit Plateau was nearly covered with avalanche débris, and of course we swung away to the left, outside P on the illustration. At the

⁴⁸ *A.J.* 41, 155.

⁴⁹ *A.J.* 41, 108.



Photos, E. Stevens.
Junction, Grands Muléts, Mt. Maudit
from top of Mt. de la Côte.



The Lower Ancien Passage.



Photo. E. Stevens.

Mt. BLANC de COURMAYEUR
from the Summit of Mt. BLANC.

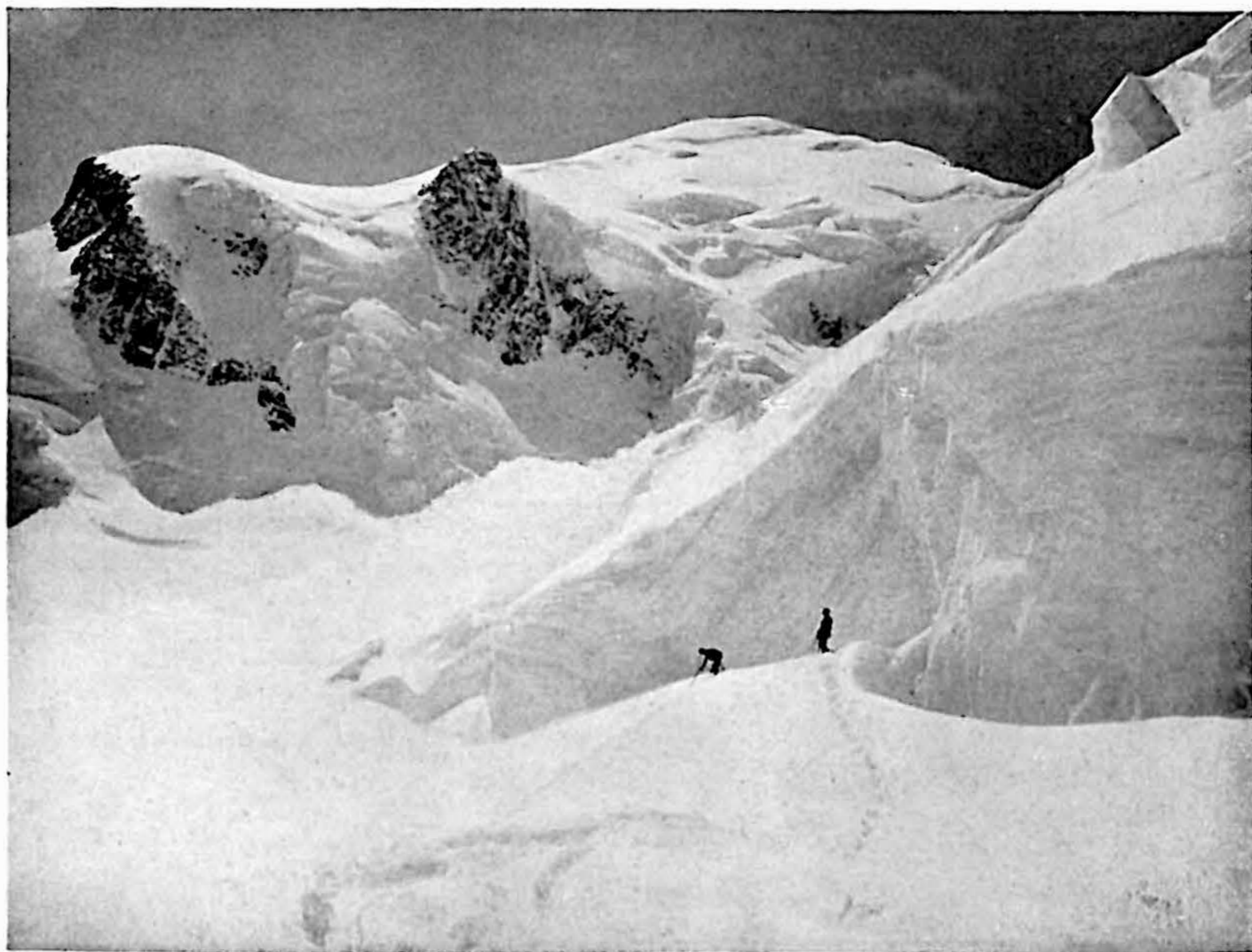


Photo. Abraham.

The Grand Plateau and the Lower and
Upper Anciens Passages.

rather troublesome corner above H, where one crosses the great crevasse to get on to the Grand Plateau and begin to turn up right-handed to the Col du Dôme, my guide—a very able and experienced Valais man—whispered, 'Don't speak,' and assured me afterwards that there was danger of a falling sérac. It is rather surprising that this old idea still persists. At the Refuge Vallot, where we made a halt for a second breakfast, we found workmen engaged in repairing the hut. It is being covered with thin sheets of brass to make it safer and more weather-tight. The workmen told us they were not responsible for cleaning out the hut. It is to be hoped that it will cease to deserve the appellation of 'the highest pig-sty in Europe.' The meteorograph from the Janssen Observatory on the summit, which was brought down when the observatory was taken to pieces and removed to the Vallot Observatory, is lying derelict on the snow between the Refuge Vallot and the foot of the Bosses du Dromadaire.

The snow was in good condition, and we reached the top in $8\frac{1}{4}$ hours from the Grands Mulets.⁵⁰ There was a cold wind, but I took some photographs, and paid special attention to the points arising from the observations of Paccard (§ 14 of my original article) and de Saussure. Paccard's description of the gentle slope to the south, and the 'rocks which rise in a sharp crest' beyond it—*i.e.* the Mont Blanc de Courmayeur—is quite precise, while de Saussure's fuller account of the same features (quoted in § 7 above) is a model of complete and accurate observation, as may be verified on the photograph herewith, and on M. Bregeault's profile view in his 'Chaîne du Mont-Blanc.' Again, Paccard's comparison of the Mont Blanc group to a '7' separating Savoy from the Aosta valley and Piedmont is, as one looks from the top, almost startlingly apt. But his other comparison, *viz.* of the course of the Rhône to a C embracing Savoy on the N.W., though

⁵⁰ This, of course, is slow time, but I was interested to find that in spite of my sixty-five years, and lack of practice—I had done no big climbs for seven years, and only three training walks before the ascent—I felt no excessive fatigue, and no trace of 'mal de montagne,' save a touch of headache below the Col du Dôme. On the top, too, I felt no distress, nor any difficulty in manipulating the camera. We had brilliant sunshine all day, but, in spite of using no cream or other protection for the face (except to wear goggles for a few hours), I experienced no ill effects of sunburn or snow-blindness. These trivial details are only mentioned by way of comparison with the experiences of the early climbers.

plain on the map, is not so easy to verify visually—at least I could not trace the course of the river, nor is it obvious on M. Helbronner's great panorama of the view from the top. One sees the Lake of Geneva as a long, narrow strip, curving like the back of a C among the lower ranges which here and there hide it. I suppose that a knowledge of how the Rhône actually runs, both above the lake (to Martigny) and below it (to the great bend at St. Genix), would be enough to complete the suggested comparison. Also it occurred to me that near sunset, as Paccard saw the view, the slanting light from the west might show up parts of the great river or its valley which are indistinguishable earlier in the day.

On the way down we made a long halt in the warm sunshine at the Refuge Vallot for lunch and photography, and there, and on the descent from the Col du Dôme, we had every opportunity to study '*the snows that cover the points of the central chain which runs towards the Aiguille du Midi*'⁵¹—*i.e.* as explained in note 82,⁵¹ the upper and lower Anciens Passages and the corridor.⁵² Their relation to the great mountain is best shown on Abraham's photograph herewith, which was taken from a point rather further north, but the other view gives a better idea of the lower Ancien Passage itself, which has a sufficiently formidable appearance to justify Marie Couttet's disbelief in its practicability as a way up Mont Blanc, though of course the details of the slope might vary from one season to another.⁵³ The view was taken from a little way above the Grand Plateau. From the same spot one could not but agree with Couttet's other verdict, as to the beauty of the Grand Plateau. As we gazed on it in the brilliant sunshine, its dazzling expanse, shut in by the stupendous snowy slopes around it, gave an almost overwhelming sense of serene and lonely grandeur, and I felt with Dr. Paccard that we had indeed come to 'another, heavenly world.'⁵⁴

⁵¹ *A.J.* 41, 117, 118.

⁵² This interpretation of Paccard's phrase '*les croûtes de neige des pointes*,' etc., is confirmed by another passage in his diary. Describing the ascent of Dorthesen and Forneret, he says '*ils s'élevoient sur une pente rapide [sc. the upper 'ancien passage'] le long du rocher [sc. the Rochers Rouges] qui est incrusté par les neiges du Mont-Blanc*' (*A.J.* 25, 617).

⁵³ Cf. note 113 (end).

⁵⁴ *A.J.* 41, 137.