

climb it. During the last five hours of the ascent a different route from that taken by Mr. Vines was followed, the summit ridge being, in consequence, struck some half-mile to the S. of the point previously reached, and nearly midway between the two highest eminences. The party proceeded along a narrow snow crest to a summit, hitherto untouched, about fifty feet lower than the point ascended by Mr. Vines and Zurbriggen.

Proceeding afterwards to Tierra del Fuego an expedition was made to Mount Sarmiento, which proved to be a very fine mountain, but of unexpected difficulty. A practicable route was, however, found up it, and followed to a height of about 6,000 ft., the height of the mountain being about 7,000 ft. At this point the climbers were driven down by a violent storm of snow and wind, which rendered further progress impossible and lasted for several days.

The altitudes thus far deduced are based on the readings of a mercurial barometer, but in the Bolivian Andes a careful triangulation was made and materials obtained for as many as eight separate measurements of Sorata and about as many of Illimani.

PACCARD *v.* BALMAT.

A NOTE BY DOUGLAS W. FRESHFIELD.

*Si quid novisti rectius istis,
Candidus imperti; si non, his utere mecum.*—HORACE, *Ep.* i. 6.

THE documents brought together by Mr. C. E. Mathews in his interesting volume on 'The Annals of Mont Blanc' seem to me to point to a conclusion—at any rate to suggest an hypothesis—with regard to the rival claims of Dr. Paccard and Jacques Balmat which is, I believe, novel, and which I should like to put forward for consideration. No doubt, with the possibility always before us of the discovery in some bound-up volume of last century pamphlets of the missing account by Dr. Paccard of the first ascent of Mont Blanc, it would be imprudent to dogmatise. Still, we have contemporary evidence which indicates clearly what claims Dr. Paccard made immediately after his ascent, and what is likely to be the purport of his more detailed narrative.

The plan I have gone on in framing my explanation of the parts played by the two pioneers has been to rely chiefly on the more or less contemporary documents, the recent reproduction of one of the most important of which we owe to Mr. Mathews.

We are all, I think, greatly indebted to Mr. Mathews for having been the first to reduce to something like its true value the monstrous farrago of nonsense which that illustrious romancer, the elder

Dumas, gave to the world, forty-six years after the event, as Balmat's story. I have little doubt—there is evidence to indicate it*—that some such story as that repeated in 1832 and 1854 by Dumas and Carrier (who was the son of one of the guides engaged in the attempt of June 1786) was handed about in writing by, or on behalf of, Balmat at an earlier date. I regard it as almost certain that Dumas carried away a copy of this narrative, and did not rely solely on his notes of an interview for the material of his own romance. Many of the absurdities he set down Balmat cannot properly be held responsible for. The guide was a child in the hands of the first of interviewers and the greatest of story-tellers. But Carrier's narrative may fairly be taken as an authentic reproduction of the account of his adventure Balmat in his later years, and after Dr. Paccard's death, desired to put forward.

For the moment, however, I shall dismiss these documents, printed respectively forty-six and sixty-eight years after the events, and deal only with what may be called contemporary records. I place in this class Paccard's MS. note book, De † Saussure's letter of August 18, 1786, to the Chamonix innkeeper, his 'Relation Abrégée d'un Voyage à la Cime du Mont-Blanc, 1787,' and the fourth volume of his 'Voyages,' 1796, Bourrit's letter of August 20, 1786, Bonnet's letter of August 18, 1786, and the correspondence published in the spring of 1787 in the 'Journal de Lausanne,' which includes the Balmat declarations. ‡

It is too often forgotten that to achieve any good result from an enquiry of this nature it is essential in the first place to dismiss from our minds modern glosses, to discriminate between the different classes of documentary evidence, and, above all, to force ourselves, as far as we can, to enter into the position—the way of looking at things and using local nomenclature—of the writers of the documents we are consulting.

Mont Blanc had in 1786 already been reconnoitred from the Savoy side from three directions and seriously attacked by two distinct routes. § Dr. Paccard had himself examined all three routes. || The Glacier du Géant had been reconnoitred; the Vallée de Neige

* M. Durier's *Mont Blanc*, p. 118 First Edition, p. 106 Fourth Edition, 1897. *The Annals of Mont Blanc*, p. 103.

† According to French rule the prefix *De* is only to be used after titles or baptismal names. But it was used at Geneva a hundred years ago, and by Horace-Bénédict de Saussure himself on all occasions. I have after some hesitation preferred the more polite local custom to the rule. After all Geneva is not part of France.

‡ The note that opens this correspondence is subsequently referred to by the Editor as Dr. Paccard's; but there is strong internal evidence that if the Doctor supplied the material the Editor arranged the form, and in doing so made one or two of the blunders into which Swiss editors were apt to fall in such circumstances. See *Alpine Journal*, vol. viii. Appendix, p. 66.

§ The statement imputed to Paccard, quoted by Leschevin in 1812, that 'he had three ways in view, but Balmat decided his choice,' cannot justify the inference M. Durier (p. 109, Fourth Edition) draws from it. The three ways may have been those mentioned above, or the two routes converging on the Dôme and the Vallée de Neige route.

|| See MS. *Note-book*.

—that is, the depression under the Dôme which now forms part of the Chamonix route—had been explored nearly as far as the Petit Plateau, and abandoned on account of the sufferings of the explorers from the supposed ‘stagnation of the air.’ There remained the route by the Aiguille du Goûter. By this the top of the Dôme had been reached, starting from the Pierre Ronde, above the Col de Voza and at the base of the Aiguille du Goûter.

In June 1786 it was believed at Chamonix that the only route to the top of Mont Blanc lay over the Dôme and by the Bosses ridge. The race on June 8* between the two parties of guides was to settle whether it would not be possible to reach the Dôme more quickly from the Montagne de la Côte than from the Pierre Ronde hut. M. Durier is under a misapprehension (springing possibly from Carrier’s narrative) when he writes of this expedition as intended to test the merits of the Vallée de Neige route. That was not at all in question. No one would go from the Grand Plateau to Mont Blanc by way of the top of the Dôme. The guides took the route shown in red on M. Durier’s map, and in black on Mr. Mathews’s, straight up the N. slopes of the Dôme, which is the only route still at all times safe from avalanches.

Here I must ask for my readers’ particular attention, since on the proposition I am about to lay down my argument in great part rests. An eighteenth-century writer, when he speaks of the Aiguille route, means that by the Dôme and the Bosses ridge, whether the Dôme is approached from the Montagne de la Côte or the Col de Voza. When he speaks of the Montagne de la Côte route simply, without reference to the Dôme, he means the way by the Vallée de Neige and the *ancien passage*, the valley route as distinguished from the ridge route. The following sentences, unless mere blunders—and De Saussure does not blunder—illustrate this usage. De Saussure writes, ‘Believing always that it was only by the Aiguille du Goûter that the summit of Mont Blanc was accessible, they divided into two parties to test the two routes that lead to the Cime du Goûter.’ And we find in Balmat’s declaration, ‘As Dr. Paccard intended to go in the direction of the M. de la Côte, a route we had thought impracticable from Mont Blanc on June 8 previous, I doubted of the success of his enterprise.’ This passage has no meaning unless the M. de la Côte route or direction is taken as equivalent to the Vallée de Neige route and the *ancien passage*.†

Minor discrepancies in the early narratives I must for the present put aside. There is, I believe, only one apparently fundamental difference. De Saussure claims for Balmat that he discovered ‘the route since followed, and the only practicable one.’ Paccard produces a declaration, signed before two witnesses by Balmat, attesting Paccard to have been the discoverer of the *ancien passage*. What the flighty and impressionable Bourrit has to say on this matter at different periods is suggestive and noteworthy.

* Paccard’s MS. diary settles the date, disputed by M. Durier.

† The sentence as it stands is, no doubt, obscure. What the guides saw ‘from Mont Blanc’—that is, from their highest point—must have been the broken snows of the *ancien passage* on their left.

De Saussure's acceptance of Balmat's claim to have been the discoverer of what the former calls 'the only route' to Mont Blanc must seem at first sight, if not conclusive, at any rate the most weighty evidence in Balmat's favour as discoverer of the *ancien passage*. But it appears to me that all those who have hitherto dealt with the controversy have overlooked the very important passage in the 'Voyages,' where the route discovered is more particularly described. De Saussure writes:—

'There is a remarkable circumstance connected with the discovery of this route, that it is that which appears the most natural to those who look at Mont Blanc from Chamonix, and *that it is also that which was taken by those who first attempted to ascend the mountain*. Its abandonment had been due to a singular prejudice. As it follows a kind of valley between great heights, it had been fancied to be too hot and too little ventilated. Yet this valley is very wide, very open to the winds, and the ice which forms its floor and sides is hardly the material to heat it. But fatigue and the rarity of the atmosphere caused in those who made the first attempts that exhaustion of which I have often spoken, and they attributed their discomfort to the heat and the stagnation of the air, and thenceforth, in their attempts to reach the top, made use only of such open and isolated ridges as that of the Goutér.'

Let us now turn to Bourrit.* He writes:—

'The route which M. Paccard took is no discovery of his; it is the same which the head of the guides, Michel Paccard, his cousin, has constantly declared to be the best, it is that which others have since tried, and which I tried once myself. Finally, it was in part by this route that Balmat, who, three weeks before the ascent of Dr. Paccard, had lost himself by night on Mont Blanc, descended. Balmat, who observed in these circumstances what remained to be done to reach the top, returned convinced that the next attempt would be successful.'

In after years Bourrit practically admitted Dr. Paccard's claim. In 1808 he wrote, 'Dr. Paccard must share the fame of Balmat; if, indeed, as we have reasons to believe, he was not its originator' ('la première cause').

In 1808, in the third edition of his 'Itinéraire de Genève,' &c., p. 170, Bourrit, in describing the attempt of 1775, is still more explicit.

'Telles furent les circonstances de leur tentative, dans laquelle ils échouèrent par le changement du temps plus que par d'autres causes: mais ce qu'il y a de bien remarquable c'est la constante opinion qu'ils ont toujours eu qu'ils avaient trouvé le seul chemin par lequel on peut atteindre la sommité du Mont-Blanc, opinion qui s'est trouvée fondée; en sorte qu'on peut les regarder comme les précurseurs de ceux qui ont achevé la conquête de ce fameux sommet. Ces précurseurs étaient Michel Paccard et François

* Letter to the *Journal de Lausanne*, March 3, 1787.

Paccard, auxquels s'était joint un autre guide et Mr. (*sic*) Couteran.*

Is it not clear that these quotations refer, not mainly or exclusively to the *ancien passage*, but to the new route as a whole, and in particular to the opening of the Vallée de Neige; the direct route now used between the Grands Mulets and the Petit Plateau. The *ancien passage* is not a valley overlooked by heights; it had never been attempted before. It was the lower part of this route that had been tried and pursued nearly as far as the Petit Plateau, to 'the snow arch which covers the rocks at the foot of the little or second Mont Blanc.'†

My hypothesis is as follows:—On June 8, 1786, Balmat left his companions near where the Cabane Vallot now stands, and went on to the rocks at the base of the Bosses on pretence of looking for crystals. After the rest were out of sight he made (as Carrier recounts) a determined attempt on the Bosses ridge. He was stopped, we are told, by the *Pointe Rouge*. If this is not a confusion with the Rochers Rouges it may indicate that he gained the foot of the last steep slope where one of the Courmayeur routes now reaches the ridge. Bad weather was coming on. He had no axe. He turned, but with a full conviction that under better conditions and with a companion success was possible. The storm of sleet and hail caught him on his descent. He missed the tracks, and came down on the Grand Plateau, where he was benighted.‡ Did he next morning reconnoitre and climb the *ancien passage*, or did he—as Dumas reports—go straight home, discovering on the way the practicability of approaching the base of Mont Blanc directly by the Vallée de Neige without making a *détour* over the Dôme?

My belief is that he went home, satisfied that the Bosses ridge

* Of course everything Bourrit writes must be taken with due allowance for the writer, his constant vanity, and his feelings varying with the moment. He must soon have had some quarrel with Balmat, whose cause he so warmly took up in 1786. On p. 232 of the first edition of his *Itinéraire* (1791) we read, 'Ce fut ma quatrième tentative' (that from the Col de Voza side), 'qui fait craindre aux guides de Chamonix qu'on n'allât à Mont-Blanc par un autre côté que celui de leur vallée. Dès lors ils essayèrent encore d'y parvenir, et l'un d'eux ayant vu le Mont-Blanc de très près en prit une seconde fois la route de compagnie avec M. Paccard, ce qui leur réussit.'

In the third (1808) edition the part of 'Balmat is even more severely minimised. We are told that 'trois guides et un homme qui ne l'était pas encore' were all benighted in an attempt; that 'le plus incommode de sa course' was attended by Dr. Paccard, and suggested to him a fresh attempt; that on his return Paccard wrote to Bourrit the details of his success, and sent them to him by his guide, whom Bourrit conducted to Geneva to see De Saussure. Balmat is never mentioned by name.

After this it is tolerably clear that Bourrit is a witness whose evidence is worth next to nothing when his feelings are concerned, and, as Principal Forbes says, 'he conveys the simplest facts through a medium of unmixed bombast.'

† Paccard's MS. *Note-book*.

‡ I attach no weight to the hour (4 P.M.) given (by Dumas alone) for Balmat's return to the spot where he left his comrades. There is no hour given in the earlier accounts, and the references to 'times' are discordant.

was not impracticable, that he had found a shorter approach to it, and also that in case of necessity a man could spend a night on the upper snows without serious consequences. These were great results, which fully account for De Saussure's statement that this attempt decided the successful one so soon to follow it.

Balmat's next care was to find a companion with whom he might share the glory without also sharing the reward. Dr. Paccard was in all respects suitable; by selecting him Balmat turned a dangerous rival into a volunteer assistant. The couple started. Balmat* meant to try again the Bosses Ridge; Paccard had another plan. The Doctor, who was five years the older man, prevailed; the *ancien passage* was attempted and conquered. The new route as a whole was thus completed from the Grands Mulets to the top. Balmat deserved credit for a part of it; but he could not rest satisfied without claiming credit for the whole. Paccard then asserted his claim to the discovery of the final portion. *Hinc illa lachrymæ!*

It may not be difficult to raise difficulties with regard to this explanation, to contest it in detail. Some friendly critic may possibly suggest that my case is open to the objection that I pick and choose my evidence, that I alternately cite and discredit the same witnesses. Further examination will, I believe, show him that I have not done so. Bourrit, be it remembered, I regard as a hostile advocate, the first source of the mystification. My attempt has been to show that he speedily threw up his client's case, and adopted a view consistent with that expressed by De Saussure. I have discredited no important statement other than Bourrit's, made by the eighteenth-century authorities. I have, it is true, suggested a reason for a deficiency in those narratives. I have indicated a motive adequate to account for Balmat's conduct in saying so little at the time of his attack on the Bosses ridge, and reserving, till his claim to be the discoverer of the *ancien passage* had been generally conceded, any detailed account of an adventure so much to his credit. Universal agreement is not to be expected. But I challenge any unprejudiced student to find a better hypothesis, or one that will fit so well with the conflicting stories told at the time and afterwards.

The chief merit of my hypothesis is that it is the only one consistent both with De Saussure's statement as to the 'new route' and with Dr. Paccard's behaviour in obtaining from Balmat the declaration he published in 1787. Everything we know of the Doctor indicates that he was an honourable man. Mr. Mathews declares of one of the entries in his journal: 'This account is invaluable for its directness, simplicity, and truth. It tallies in almost every detail with that of De Saussure.'

* Gédéon Balmat (letter of January 16, 1839) is cited by M. Durier, p. 110, Fourth Edition, as stating that Paccard told a friend to look out for him near the Rochers Rouges, while Dumas represents Balmat as indicating 'the direction of the Dôme' as the side to be watched. I give this for what it is worth, which is, perhaps, not much.

Again, M. Henri de Saussure (the grandson of the philosopher), whose father was at Chamonix in 1787, and formed and transmitted to his son his impression of Dr. Paccard, writes as follows :—

‘J’ai prononcé le nom du docteur Paccard. Bien que j’aie plus particulièrement en vue les explorateurs Genevois j’éprouve le besoin de m’arrêter un instant sur ce sympathique caractère que sa modestie a trop fait oublier, et qu’on a eu le tort de laisser glisser au second plan derrière la personnalité un peu théâtrale de son compatriote Balmat. Paccard était un Alpiniste de beaucoup de mérite. Ce n’est point la tentation d’une récompense qui guida ses pas au sommet du Mont-Blanc, mais bien les généreuses aspirations d’un homme capable de comprendre la mission de la science et de la poursuivre avec abnégation. Il avait vite saisi la portée des études d’Horace-Bénédict de Saussure et s’était enflammé à son exemple pour les recherches de physique et d’histoire naturelle.’

A contemporary document of considerable weight is De Saussure’s letter to the Chamonix innkeeper Tairraz, written on August 18, 1786, five days after the ascent. De Saussure could not have seen Balmat when he wrote this; the latter returned to Chamonix on August 9, and we are told that he rested four days before he set out to claim the promised reward. De Saussure’s information came from Tairraz’s letter, written before the return of the adventurers, and reporting what Chamonix had seen through its telescopes.

De Saussure’s letter makes it perfectly clear that the innkeeper’s report of what Chamonix saw contained not a word of the Doctor’s breakdown. Here are his words (I use Mr. Whympster’s translation): ‘I myself wish to try the same route, not that I flatter myself I shall get to the top, for I have neither the youth nor the agility of Monsieur the Doctor. . . . I wish you to send at once five guides to level the way. . . . You can put at their head this Jacques Balmat who made the journey with Monsieur Paccard.’

De Saussure here emphasises two things, Paccard’s position—he is ‘Monsieur’—and his mountaineering capacity.

One more testimony we must not overlook. De Saussure’s uncle, the well known naturalist Bonnet, wrote as follows ten days after the ascent. I quote from the ‘Annals of Mont Blanc’:—

‘On the 8th a young doctor of Savoy, accompanied by a single *montagnard*, had first the glory of attaining that summit. His name is Paccard. The new route which he has discovered is not dangerous; my nephew has shown me a very careful map of the new route, which he received a few days ago.’

We find further, in the deposition made by Balmat, a statement that Dr. Paccard had previously studied the upper snows with a telescope. This is accidentally confirmed in a passage in a letter of Dr. Paccard of August 3, 1825, in which he speaks ‘of the steep slope above the Grand Plateau, which I was the first to ascertain to be accessible.’ *

* See the MS. *Note-book*.

In the face of this evidence is it possible to believe that Dr. Paccard deliberately extracted from Balmat, either by bribery or intimidation, or fraud, a false statement as to their shares in discovering the *ancien passage*?

I am, of course, aware that M. Durier believes in the substantial accuracy of the Balmat-Carrier-Dumas narrative. But in order to take this view he has to accuse De Saussure—of all people—of a ‘real injustice,’ of telling a story ‘on all points improbable,’ and of deriving this story against his own chief guide from Balmat’s rivals. M. Durier must excuse me if to one who has read hundreds of De Saussure’s letters, and made himself as familiar as a biographer may with his character—with his fairness, his thoroughness, his amiability—this accusation seems preposterous. At any rate I cannot entertain it, nor can I believe that Jacques Balmat, under any pressure, put his name to an untrue tale within a few weeks of his ascent and kept the truth for those who treated him at the *cabaret* more than forty years afterwards.*

To point out all the discrepancies and absurdities of the later narratives would take too much space here. We are told that Balmat recognised the crevasse, near which he slept at the foot of the *ancien passage*, as one he and his companions had crossed in the morning! But they had climbed over the Dôme du Goûter, and never been near the Grand Plateau. Balmat during the night is made to see the lights of Chamonix, and hear a dog barking at Courmayeur. Neither incident is, I understand, physically possible from the spot in question. The Carrier pamphlet states that Balmat forced his way up the *ancien passage* on the morning after his night out, contradicting the Dumas version, and then gives ‘the late hour’ as a reason for his not completing the ascent! I need go no further.

We have here, surely, a fine specimen of the origin and growth of a legend. We can follow all its various stages. Boasts made by Balmat prejudicial to his companion reach Dr. Paccard’s ears, the Doctor compels his guide to make a declaration of the facts; Balmat gives De Saussure a true account of how he was caught in a storm, lost the tracks, and had to spend a night on the ice (like Mr. Nettle-ship’s party), at first exaggerating only the importance of the completion of the Petit Plateau route to the Grand Plateau, and not saying a word as to any climb above the Grand Plateau; then after Paccard’s death improves this story in his written records into Carrier’s version; at last in his old age forgets and varies his own fiction, making his imaginary climb up the *ancien passage* take place on the evening of the snow storm, falling into the truth as to his return to his home, and letting loose his tongue in self-glorification at his companion’s expense.

The myth we have been investigating is summarised in the

* I cannot believe that Balmat did not know what he was signing before two witnesses on stamped paper. He was no fool, and was educated enough to write letters, even letters to the newspapers.

inscriptions under two portraits of Balmat. On the one contemporary with the events we read, 'Dr. Paccard, accompanied by Jacques Balmat, crystal hunter, of the Valley of Chamonix, reached the highest summit of Mont Blanc.' A lithograph published after Balmat's death bears the imprint, 'J. Balmat, first guide to Mont Blanc, who alone climbed this mountain, hitherto inaccessible, August 8, 1786.' So the story grew.*

IN MEMORIAM.

JOHN HOPKINSON.

IN the last number of the '*Alpine Journal*' † there was given an account of the saddest of all Alpine accidents—that by which John Hopkinson and three of his children lost their lives. It is not necessary to return to this matter, the shock of which can never be forgotten by some of us; but it is desirable to put on record in these columns some account of the life of one of the most distinguished men who have ever belonged to the Club.

John Hopkinson was born on July 27, 1849. He was the eldest son of Alderman Hopkinson, of Manchester, a distinguished citizen and an ex-mayor of that city. He was educated at Lindow Grove School and at Queenwood, and at sixteen went to Owens College. In due time he was entered at Trinity College, Cambridge, and in 1871 went out as Senior Wrangler and first Smith's Prizeman. While he was still at Cambridge he took his degree of Doctor of Science at London University. The first of the long series of his scientific papers was also published about this time. At the end of his brilliant career at Cambridge he went, early in 1872, to Messrs. Chance Brothers & Co., of Birmingham, the well-known lighthouse engineers, and remained with them for about six years. During this time he devised many improvements in lighthouse machinery, especially from the optical point of view, dealing in these improvements with questions which could only be handled satisfactorily by a man possessing his already splendid mathematical attainments.

In 1878 Hopkinson removed from Birmingham to London, not severing his connection with Messrs. Chance, but commencing to build up for himself the independent business as a consulting

* It would be very useful if some enterprising publisher would put together and print in a small volume all the contemporary authorities I have cited. The Alpine Club might doubtless be induced to allow Dr. Paccard's MS. Notebook to be reprinted in the collection. M. Durier should also be invited to reproduce the letter of Gédéon Balmat he more than once refers to. The search for Dr. Paccard's missing pamphlet should be persevered in. It is described by Leschevin: '*Premier Voyage fait à la cime de la plus haute montagne du continent, par M. le Dr. Paccard, Lausanne, 1786,*' in 8vo. De Saussure in 1787 speaks of accounts of his predecessors' ascent having appeared in '*divers ouvrages périodiques.*'

† *Alpine Journal*, No. cxlii. p. 266.