the sun was just rising. Building a cairn, we climbed on, traversing to the right by good footholds round the corner and into a narrow, vertical chimney, very difficult in its upper part. Two comparatively easy cracks took us to the triangular terrace in the N.N.W. edge. Along the right side of that we climbed through a precipitous runnel with few and untrustworthy holds. The shelving terrace terminates in a chimney in the third great overhang of the face. Entrance to this chimney is by an overhanging step. After several failures, Deržaj succeeded in turning this obstacle by the right. With great difficulty he climbed into the chimney, which we soon left, clambering out to the left by a crevice to avoid the overhang. Here serious trouble ended. Moderately difficult rocks brought us to the right of the final pinnacle of the N.N.W. edge, followed by shelving slabs and easy blocks to the summit.

It was 7.30 a.m. The actual climb had taken us 20 hours. Under normal conditions a party of two should manage it in something like 10 or 12 hours. The route is very difficult throughout, with two extremely severe steps; it is no whit less interesting than the

N. face.²

MARKO M. DEBELAK.

[The translation we owe to the courtesy of Mrs. Copeland.— Editor.]

Explanation of the Illustration.

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O-H-S (-+-+-+-), Dibona-Escher route, 1925.

E-D-H-K (----), De Reggi-Deržaj attempt, 1926.

B-O-G-S (-----), Debelak-Tominšek, 1926 (first direct N. face route).

G-F-S (-----), Villach party's variant of N. face route, 1929.

A-K-S (-------), Deržaj-Debelak-Šumer, 1931 (first direct N.W. face route; += bivouac, described in the paper).

D-F (+++++++), Jesih-Lipovec, 1931 (N. face route variant).
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FUORCLA SCERSCEN-BERNINA.

I SHOULD like to make a few comments upon the article on the Fuorcla Scerscen-Bernina by Colonel Strutt, published in the last number of the Alpine Journal. This article was the outcome of an exchange of private letters in which I pointed out to the

² Also accomplished for the first time by Madame Debelak, then Mme. Pibernik.—A.J. 39, 138–41.

¹ A.J. 43, 319 et seq.

author of the Climbers' Guide of the Bernina 2 why totally different indications for the N. face of the Fuorcla (the highest pass in the Central Alps and one of the noblest in the whole chain) are given in the Italian Guide Book 3 from those contained in the English Guide Book. I still hold to my original opinion, as Strutt observes.

In preparing the Guide Book of the C.A.I., I have taken the greatest care to revise and personally weigh all the information which I have been able to obtain from collaborators, from mountaineers whose opinions I have sought, and from printed sources, of which latter the most recent and reliable is Strutt's Climbers' Guide.

A personally acquired knowledge of the N. side of the Fuorcla Scerscen-Bernina has led me to the conclusion that an ascent of this side by the route described in the English Guide was not a question of difficulty; the ice-veritable buttresses of overhanging ice—made it a sheer impossibility. I had already completed my guide-book, but this problem, placing me in a position of such decided variance with the authoritative literature on the subject, remained open. My chief and worthy collaborator, Aldo Bonacossa, was to have a meeting with Martin Schocher, the great guide of Pontresina, who a quarter of a century earlier (August 12, 1885) had accomplished the only ascent of the Fuorcla from the Swiss side together with Mr. Williams. I begged Bonacossa to clear up the question with Schocher's help; and the latter's reply was that the ascent had not been accomplished direct from the higher part of the Vadret da Tschierva to the Fuorcla, but by the western slopes of Piz Bernina, just about where five years earlier, on August 15, 1880, the two parties—Wainewright with the two Grass, and the Tauscher-Geduly couple and Professor Minnigerode with Dangl and Pinggera—had already ascended. The 1885 party ascended directly above the zone of the overhanging ramparts of ice by the same slope of Piz Bernina, then bore to the right following a practically horizontal course in the direction of the Fuorcla Scerscen-Bernina, arriving by the upper slopes above the impassable ice walls.

Schocher's clear and definite reply to Bonacossa removed a serious obstacle to the completion of my work. In the preface to my guide-book I expressed my indebtedness to Schocher, as also later on, in referring to the source of my information, i.e. "from indications specified by the guide Schocher." This is the only occasion, amongst the hundreds of itineraries described, that I have done this, to show my appreciation and to emphasize the reliability of my source.

³ A. Corti, *Guida dei Monti d'Italia*: Regione del Bernina, Alpi Retiche occidentali (Brescia, 1911).

² E. L. Strutt, The Alps of the Bernina W. of the Bernina Pass: Part II—The Range from the Muretto to the Bernina Pass. Conway and Coolidge's Climbers' Guide (London, 1910).

In August 1911, while the printers were finishing the guide-book, I met Schocher at the Rifugio Marinelli: he had come with a French climber and a guide, Simon, of Chamonix, to traverse the Scerscen-Bernina. My friends Sala and Veroni and I had intended making the same ascent on the same day. Lest it should appear, however, that we were following the guides' party, and to avoid having two parties out on the dangerous slopes of Scerscen, I at once told Schocher that we would defer our climb, and he showed much pleasure at this decision. A few glasses of Valtellina wine helped us to pass a pleasant afternoon on the rocks near the hut. I repeated my thanks for the information about the Fuorcla Scerscen-Bernina and expressed my surprise at what had been written in previous publications. Schocher's remark was simply: 'Unmöglich!' The simple word of that great mountaineer was sufficient to banish all further doubt on the matter, rendering any linguistic attainments

on my part quite unnecessary.

In Strutt's last article a recent letter from Mr. Williams is inserted which would tend to confirm the description in the English Climbers' Guide. The article is accompanied by photographs on which is traced the route which Williams claims to have followed in 1885. The information supplied by such an authority as Schocher cannot be questioned and, undoubtedly, it is practically impossible to make an ascent by the route traced on the photographs. A first-hand acquaintance of the spot leaves no room for doubt. Under particularly favourable conditions it might perhaps be possible for strong climbers to ascend the slopes directly under the Fuorcla or by hugging Piz Scerscen, but it will certainly never be ascended in the direction indicated on the photographs. Lastly, it is not unlikely that in 1885 the then untouched S.W. arête of the Bernina may have been the desired objective and not the Fuorcla, which had already been reached from the S. side in 1875 by Held. It is probable that Schocher at least had this end in view, and he achieved it. The Fuorcla represented only the lower portion of the new route to the highest peak. Schocher could not have had in view in 1885 that route which Professor Graham Brown (to whom Strutt alludes) achieved forty-five years later: the novelty about the latter's performance was the scaling of the last few dozen metres to the summit; for until the accomplished ascent of 1930, it was unanimously accepted (see English and Italian Guide Books) that the Bernina had been ascended on its western side by the two 1880 parties.

Strutt alludes to Marcel Kurz's opinion as to the possibility of Williams's route. This opinion was formed looking from the Pizzo Bianco and from the Scharte and is valueless, since the lower part of Williams's route cannot be seen from the N. or 'Bianco' arête, or

from the Scharte, owing to the intervening ramparts of ice.

In connection with what my friend Strutt has written regarding Kurz's recent observations, I should like to refer to my 1918

account 4 of the delightful and interesting route to the Piz Bernina which my friend Sala and I first accomplished in 1914 by the S. couloir of the Fuorcla Scerscen-Bernina and the shoulder. I had then determined the height of the Bernina 'Shoulder' to exceed 4000 m. (I should now incline to make it 4020); whilst the height of 3885 m., which up till then was unanimously accepted as the height of the 'Shoulder,' really applies to the Fuorcla, to which this article refers.

I am sorry to be in such open contest with my old friend Colonel Strutt, the greatest authority on the Bernina, but the foregoing remarks are based on ascertained facts.

A. CORTI.

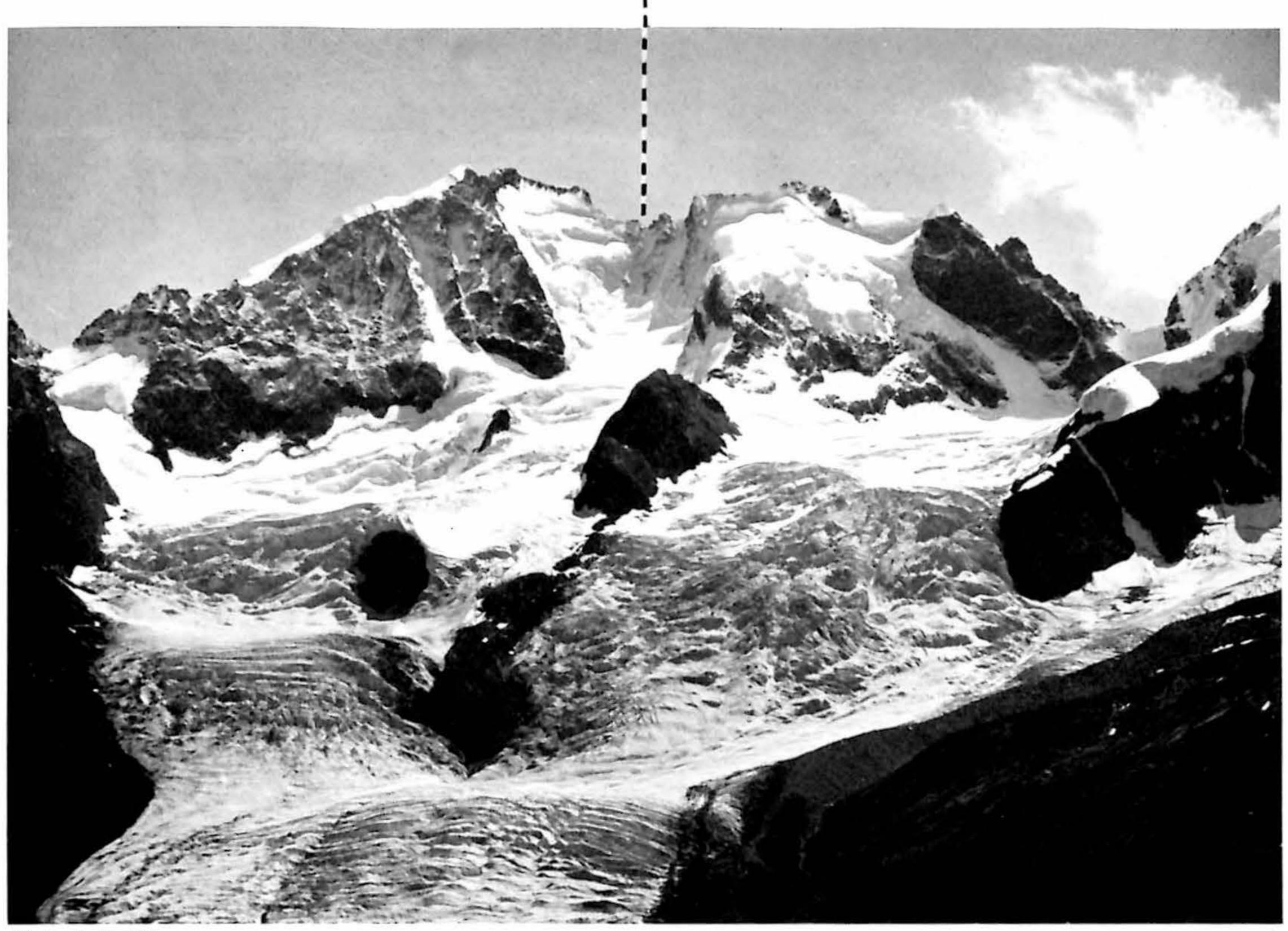
[I am very glad to publish Professor Corti's interesting note, especially as it gives me the opportunity of rectifying one error of mine to which Corti alludes. M. Marcel Kurz informs me that I misunderstood him when I stated ('A.J.' 43, 320-1) '. . . Kurz, from Pizzo Bianco, studied the route in question in 1931 and considers it still feasible . . .' He now states that he did nothing of the sort, and, as Corti points out, it is impossible from this point to view the lower northern slopes of the Fuorcla Scerscen-Bernina. That was also my opinion (in 1931), but I have not been up Piz Bernina by the N. arête since 1893!

As regards the remainder of Corti's arguments, I agree that the Fuorcla Scerscen-Bernina is now, and has been for many years, inaccessible by the 1885 route. I can only trust that this rash statement of Corti's and mine will not provoke a 'modern' party to disgrace itself by an attempt. For the rest I stick to my guns:

- (1) Williams did take the route marked and described by him in 'A.J.' 43, 321-2.
- (2) Schocher agreed in this to me, the confusion arising from the fact (see 'A.J.' 43, 320) that Coolidge insisted on the original route being described in the Climbers' Guide, regardless of its having (1910) become more or less impossible. To Corti and Bonacossa, Schocher naturally described the only route suitable or available for description in the C.A.I. Guida.
- (3) The entire Tschierva slope of Pizzi Bernina, Scerscen and Roseg has changed to a remarkable degree since 1893, still more so since 1880 and 1885. In 1903, with the late Josef Lochmatter, I reached with comparative ease and great rapidity the snowy terrace just below the summit of Piz Scerscen. The terrace was attained by the *E. angle* of the N. face. This route was one taken originally on July 22, 1898, by Mr. H. C. Foster under Schocher's lead. It lies close to the foot of the Fuorcla Scerscen-Bernina. I have seen my

⁴ A. Corti: Pizzo Bernina, Prima ascensione per il canalone meridionale della Forcola Scerscen-Bernina, R.M. xxxvii, pp. 105-121.

Fuorcla Scerscen-Bernina



Photo, A. Corti.]

The Bernina-Scerscen cirque from the N. (Taken in 1906.)

1903 route frequently since and never has it appeared even remotely feasible.

Consequently, in snow and ice, it is impossible to declare a route,

now inaccessible, as having been equally so in 1885.

A further perusal of Mr. Williams's letter will, I trust, convince my friend of his error, noting especially the extracts from Williams's 1885 diary: '... we followed the Scerscen [i.e. "Ice-nose"] route for 4 hours. We then made straight for the Fuorcla Scerscen-Bernina...' Not a word about the western slopes of Piz Bernina. If conviction does not follow, in the most amicable manner we must agree to differ!

As regards the figures 3885 on the Siegfried map, so far as I can recollect we enquired (1908) from the Federal Topographical Bureau, Berne, to what point these were applied and were informed to the 'shoulder.' In any case, that important topographical feature is

to be remeasured.—E. L. S.

REPORT ON ROPE.

In 'A.J.' 43, 325–9, there is published a report on tensile tests of two samples of climbing ropes by the National Physical Laboratory. One rope was made by British Ropes Ltd. and is known as 'Frost's' rope, the other was supplied by Beale and is known as 'Beale's' rope. The test results are of considerable interest to mountaineers, but the letter from Messrs. British Ropes Ltd., dated September 7, 1931, which is appended to the report and contains their remarks on the results, includes a statement capable of misleading interpretation, which I think it is necessary in the interests of mountaineers to correct. British Ropes point out that the elongation of their rope under load is much less than that of the other make of rope tested, and that, in their opinion, 'this is of some importance, as it would tend to prove that Beale's rope is of a more spongy nature than ours.'

This statement suggests to the reader that a rope having a minimum of stretch is the better rope. It is this interpretation which I wish to correct, because the reverse is true. Engineers know that a rope which has the greatest stretch must be the safer rope to use. This fact can, I think, be better realized by other readers if the following remarks referring to the two makes of rope tested by the National Physical Laboratory are considered.

It will be seen by the National Physical Laboratory tests that the 'Beale' rope had a stretch of about 16 per cent. up to the point of fracture, whereas the 'Frost' rope had only about 9 per cent.—that is to say, up to the load required to fracture each rope the Beale rope stretched nearly 80 per cent. more than the Frost

rope.