In estimating exposures at high altitudes, therefore, a meter of this type should be employed; we have no evidence that the rate of darkening for the ultra-violet radiation is of the same order, and therefore has the same value on the slide-rule, as is the case for visible light, but since the paper is affected, the calculated exposures will be more nearly correct than those given by the other two types.

OLAF BLOCH.

ŠPIK, BY THE N.W. FACE.1

[In 1925 the guide Angelo Dibona and Frau Escher climbed the N. face of Špik (2472 m. = 8100 ft.) as far as the system of ledges leading right to the N.W. edge of the said face. Then, following these ledges, they traversed the lower part of the N.W. flank diagonally upwards, attaining the W. arête, whence the summit was reached.

A year later Messrs. De Reggi and Deržaj attempted the direct ascent of the N.W. face, but were baffled by the great overhang which extends across the whole width of the face about half-way up.

The summer of 1931 keeping us prisoner at home, we were compelled to seek for the unsolved problems left in our native mountains, and discovered to our astonishment that no further attack had been made on the Spik's N.W. face since 1926.]

RAINDROPS beat upon the window-panes of our compartment in the train as we travelled to the station of Gozd-Martuljek, on the Upper Sava. Our prospects for the next day were certainly not promising. Yet we decided to climb as far as the foot of the face, descending again in the morning if there should be no improvement in the weather. After two hours of tramping through the wet we reached the high-level corry of Pod Srcem, under the N. flank of Spik. As everything was sopping we had no great choice of sites for a bivouac and contented ourselves with a slightly overhanging rock, under which we found a dry spot where we could sit and lean back. We covered ourselves with our tent-sack and went to sleep until 4 A.M.

It had stopped raining, mist there was none, so off we went. We packed up quickly, and ascended to the snow gully to the right of the green bluff, piled against the N. face of Spik. The yawning gaps in the edges of the snow threatened to delay us greatly, so at 5 A.M. we took to the rocks to the left of the gully and climbed up to the face by the bluff and its exposed ridge. Keeping to the

¹ The party consisted of Madame Debelak, MM. E. Deržaj and Ž. Šumer, July 5–6, 1931. See, in general, A.J. 39, 138–40, with illustrations.

right, we soon reached the system of ledges at a small notch in the

N.W. edge.

We crossed a wide runnel, then an edge, and by a convenient traverse with good holds reached a deep, diagonally slanting chimney. Over pink slabs we climbed into the upper and more difficult part. Ingress was blocked by a chockstone, but we were able to slip through a narrow hole behind it. A shallow, slightly inclined runnel took us to the foot of a pinnacle which is plainly visible from the valley.

Here we climbed to the left towards the N.N.W. edge, and then on to an overhang with the strata tilted downwards. I capitulated at once, as I have had ample experience of such places on this kind of face, and I know them to be impossible. My friends, however, succumbed to temptation. Seen from below, these steps really look most inviting. You perceive lots of sharp edges. But if you look at them from above you realize that they are all holdless slabs.

I returned to our platform, and while carefully securing the others, I watched them with amusement and admiration trying in vain to reach even the smallest hold beyond the last foot-rest. Finally Sumer traversed, secured by a double rope, obliquely upwards to the right, over extremely exposed rock but with good holds, to an edge where he drove in a piton, after which he turned left in a curve to a small notch above the overhang. We lost much time here, especially in hauling up of our packs.

From the notch we climbed diagonally to the left by a narrow ledge to a boss, and over that to a shallow connecting crevice; thence straight up difficult rocks to the entrance of a deep, damp, roofed chimney reaching half-way up the overhanging bulge in the

middle of the N.W. face.

The chimney is not negotiable, so we left it to the right and attacked the overhang in the face. But even Deržaj's acrobatic skill failed on this occasion. I left the chimney, traversed to the left by a narrow ledge round the corner and so to a spot below, which I found the last piton driven in by De Reggi and Deržaj in 1926. My friends let themselves down by the rope, and presently we stood all three together below the very step which had compelled our predecessors to beat a retreat three years ago. We turned into a shallow vertical chimney which, slightly inclined to the right, flattens out into a crevice seaming the overhang. Turning left upwards by a difficult and exposed traverse, we reached the chimney at the point where it becomes a mere crack. The right-hand wall is smooth and unpleasantly overhanging, while the angle is not sufficiently acute to permit a straddle.

Secured by a piton, Sumer held Deržaj, who was called upon to show his proficiency. After a struggle he attained the crack, his left shoulder braced against the wall, his right foot vainly seeking some hold higher up. At last his *Kletterschuhe* secured hold. Very slowly he worked upwards, but before Deržaj's full weight was

brought to bear upon the precarious hold the latter broke out and his foot slipped. I saw Deržaj brace his left shoulder with a supreme effort against the wall, and then slowly subside back to his former

position.

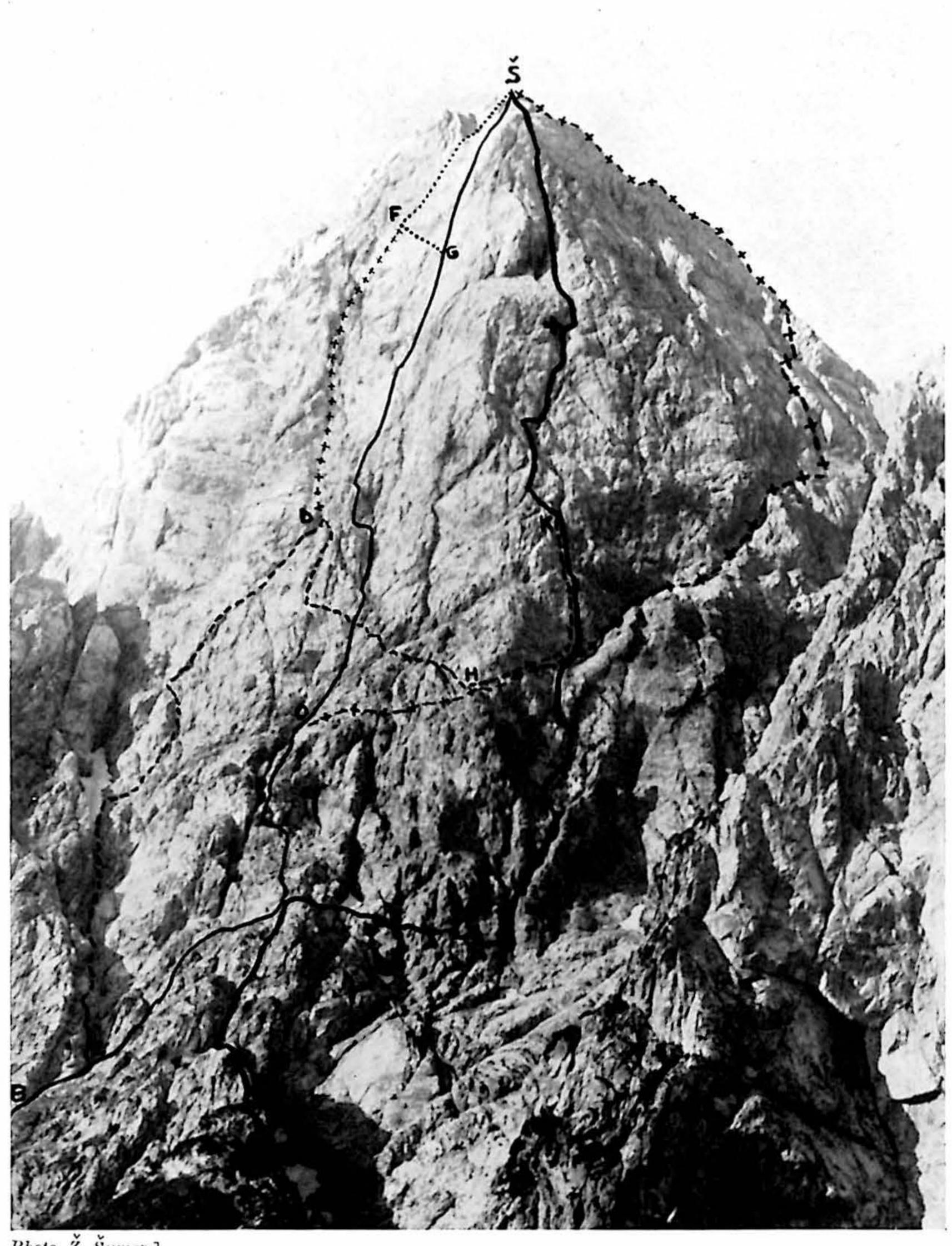
Those were tense moments. Cautiously Deržaj freed the hammer from his belt and, notwithstanding his unstable position, beat out a step for himself. Again his right foot travelled upwards. We saw the shoe grip the artificial step and Deržaj jerk himself up. The upper part of his body disappeared; his feet clawed frantically for holds, slipping, yet finally clung somewhere and drew up. A pair of felt soles and Deržaj's spasmodic breathing—nothing more. At the end of an eternity the dirty soles vanished and a hoarse expletive relieved the strain. This was an exceedingly difficult step, even for us who followed and had the advantage of being held from above. We then found ourselves in a comfortable, gently inclined angle. We built a cairn and rested.

There was no extremely difficult rock-work ahead of us, and we hoped to reach the summit before nightfall. We climbed hurriedly, straight upwards, till a vertical rock pulled us up. Clinging to a crack we realized that further progress was impossible here. To our left was the edge; to the right it looked as if there might be a chimney penetrating the second overhanging bastion of the Špik. Retreat was mentioned, but before admitting defeat we could try

the last possibility.

It was long past sunset. In uncertain twilight, by an exposed traverse, I groped my way cautiously to the chimney. Access to it was very difficult. I found no spot where I could secure myself, but eventually climbing farther in found decent anchorage. Sumer traversed next and Deržaj followed. We climbed out of that chimney by the right, circumvented an overhang and found ourselves in a series of perpendicular cracks. Slowly we groped our way upwards, making liberal use of pitons, feeling rather than seeing the rock. A black and enormous overhang confronted us. The edges ended in a great boss. From its upper edge we crossed a small overhang and got on to a tiny shelf under the overhang. A small recess suggested a bivouac. Impenetrable night brooded over the Martuljek Peaks—nothing visible anywhere. We examined the rock by the light of an electric torch. Then each of us drove a piton into a suitable crack, and we tied ourselves on for the night. Groping with our hands we cleared the place of stones, and all three sat down sideways on this minute level ledge. Our feet dangled down into the darkness. It was 11 P.M.; we were too tired to eat, but slept soundly, untroubled by dreams or fancies. Once I awoke and thrust my head out of the tent-sack into the piercingly cold night air. The Martuljek range lay bathed in moonlight: vast and menacing, the shadow of the Spik pyramid lay on Rušine.

We woke at 4 A.M. Above us, the sky was clear and bright; below us, the face fell away into the blue twilight of the valley;



Photo, Ž. Šumer.]

ŠPIK, N. (LEFT) AND N.W. FACES, SHOWING VARIOUS ROUTES.

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.