

the hot sun. Hills of similar character to the one we were on stretched W. and E. of us; while to the S.W. we could see the fine range of the Rhodope mountains crowned by the conspicuous summit of Musalla (9747 ft.).¹ This was an old friend, as we had climbed it in the summer of 1926. It lies 33 miles S.S.E. of Sofia and is the highest mountain in the whole Balkan Peninsula. The next highest is the Mitka summit of Olympus (9726 ft.), and after this comes the central peak of Korab (9213 ft.) on the Albanian-Jugoslav frontier.

We descended by much the same way as we had come up; but, as we had plenty of time, we followed the main gorge right down to the Monastery of Bodgorica which we were anxious to visit. We got back to Kalofer at 6.30 P.M.

Useful maps for travel in this district are: the sheets Pleven (42°, 43°) and Tirnovo (43°, 44°), 1 : 200,000, of the *Kartographisches früher Militärgeographisches Institut* in Vienna, and the sheet No. 83 of Freytag and Berndt's *Autostrassenkarten*, 1 : 300,000.

C. M. SLEEMAN.

L. A. ELLWOOD.

JUNGFRAU BY THE N.E. ARÊTE ATTAINED FROM THE NORTH.

FOR the writer the summer season of 1933, in 20 years' experience, stands pre-eminent in satisfaction and enjoyment. This was chiefly due to the excellence of the weather. In a strenuous month we were not turned back on a single expedition; and for me this was unprecedented. On the worst day we had, two members of the party traversed the Mönch from the Jungfraujoch. One member of the party, D. Lewers, succeeded with Adolf Rubi in accomplishing two difficult routes on the Jungfrau and Wetterhorn, although it was his first season in the Alps. These climbs are recorded elsewhere in the JOURNAL.² Among other things the season included the *Andersongrat* of the Schreckhorn, the Rottal ascent of the Jungfrau, the traverse of the Eiger by the Eigerjoch and the crossing of the Aletschhorn from Concordia to Belalp. But I think the most enjoyable trip of a very interesting series was this ascent of the Jungfrau from the Eigergletscher *via* the Guggi hut and N.E. arête. I had listened to Dr. Lauper's very entertaining paper (delivered so admirably in English to the Club) and was particularly attracted by this route up the Jungfrau.³ We had also met him and his party once or twice during the 1932 season and heard of their prowess.

¹ *A.J.* 39, 86.

² *Loc. cit.*, 45, 384-5; 46, 203-4.

³ *A.J.* 45, 44-62, illustration facing 48. See also 44, 325-7, illustration facing 325.

We had meditated upon the route, but I personally considered these meditations as belonging rather to the realm of fantasy than of reality. What I had heard and seen of the N.E. ridge had given me a very wholesome respect for it. For example, I knew that another party (not Lauper's) had spent 17 hours on it in 1932.

Eventually, after discussion with Adolf Rubi, we decided to go up by Lauper's route as far as the first great gendarme on the N.E. ridge and descend thence to the Jungfraujoch. This we thought would be a pleasant route and would give us a chance of viewing the N.E. arête.

The party consisted of Dr. Duncan Murdoch of New Zealand and myself with Adolf Rubi of Wengen as guide. We started from the Guggi hut at 4 A.M. on August 10, and descended the uncomfortable shaly gully to the Guggi Glacier. The ascent of the icefall presented no difficulty and, crossing the schrund at the base of the Schneehorn, we ascended rocks to the shoulder of that peak. Here at 7.30 in the sun we had some breakfast and put on crampons. Just a year before we had had breakfast at this point when descending the Jungfrau *via* the Silberhorn.

About 8 A.M. we started up the steep slope leading to the great gendarme on the N.E. ridge. This slope proved to be icy and Adolf had soon to begin cutting; even with crampons this became necessary for the whole length of the slope—a considerable stretch of cutting. Lauper's party evidently found this slope in better condition.

We took to the rocks at their lowest point, and found they needed much care; for here they stood in disintegrating tottering columns, some of which we pushed out of the way, sending them thundering down to the glacier below the Jungfraujoch on the N. side. At 10 A.M. we attained the top of the great gendarme on the N.E. ridge. The day was perfect, calm and warm; Adolf estimated 6 hours to the top of the Jungfrau. We had taken 6 hours hitherto; adding $1\frac{1}{2}$ hours for the descent to the Jungfraujoch would make a round 14 hours in all.

As so often happens, the climb turned out rather different in character from what I had imagined. I anticipated 6 hours of strenuous climbing with very little respite, and of continuous severity. Actually taken as a whole the climb was less difficult than I had imagined. There were stretches of quite moderate work. On the other hand there were *three* places which I found very hard and on two of them I was pleased to be able to dispense with strain on Adolf's rope. My boots were ill-fitting and this added to my troubles. Rubbers would have been a tremendous advantage in these places under the conditions. The rock is steep (vertical in one step), hard and smooth, the holds—or what do duty for such—small and rounded. However in these places the rock was dry and warm; whereas there was a good deal of snow and ice elsewhere. So that on these critical steps conditions were ideal.

At one awkward point (not one of the 'three') we were surprised

to find a lonely and useful piton fixed: surprised because apart from it there was no sign of human invasion of the ridge.

We arrived at the Central Tower (about half-way) at 1 o'clock and congratulated ourselves on being up to Adolf's schedule.

The last of the three difficult steps is that leading up to the Wengern Jungfrau, but although the most imposing it is the least difficult of the 'three.' Viewing the Jungfrau from the Kleine Scheidegg or Wengen, one does not realize how much higher the real summit is than the apparent summit (Wengern Jungfrau) seen from there.

After the Wengern Jungfrau the ridge flattens out and merges into the upper snow plateau or Hochfirn. Crossing the snow plateau we realized that we were not as fresh as we had been at 10 A.M., but we mounted the summit rocks and reached the top of the Jungfrau at 4 P.M., nicely up to schedule.

This was the fifth occasion I had stood on the fine summit and, as the others had been matutinal, the great panorama had a changed aspect illuminated by the declining sun. The weather was still fine, but a cold mist was beginning to blow over the summit. Very well content, we had some food and a smoke and then descended in leisurely fashion by the usual route to the Jungfraujoch.

We had followed the route taken by Dr. Lauper's party the year before and were very pleased to make the second traverse of this route and thus follow in the footsteps of so illustrious a caravan.

Their time on the ridge, $3\frac{1}{2}$ hours (without halts), was much faster than our $5\frac{1}{2}$ hours (also without halts) and yet we thought we were moving very well. But Lauper's was undoubtedly an unusually strong party and I think our time is not discreditable by comparison.

I can endorse Dr. Lauper's recommendation of the expedition as a very attractive one given reasonable conditions. Good weather seems to me essential: there is no way off the ridge once you are on it, and if the difficult rocks became snowy or glazed one would be in a precarious plight. Views in both directions are of course very fine, and over a good part of the route the climbing is not severe enough to preclude enjoyment of them. I believe, however, that this was the only ascent of the N.E. ridge in 1933. The route lies on the *crest* of the ridge all the way: to attempt to traverse on either side would, I think, be hazardous. I must refer to the guiding of Adolf Rubi; on this expedition as on others he represented the last word in efficiency from every point of view. It must be noted too that this was but the second time the ridge had been accomplished by a single guide with two amateurs.⁴

M. BEVAN BROWN.

⁴ See *A.J.* 35, 169-72, when the *entire* ridge was followed from the Jungfraujoch.—*Editor.*