The bodies were recovered by a party of men from Val Savaranche where Gerard and Bovard were buried in the little cemetery beside the four Englishmen who lost their lives on the N. face of the Petit Paradise

The order of roping was obviously wrong and undoubtedly contributed to the fatal issue of the accident.

NEW EXPEDITIONS IN 1914.

Alps of the Grisons.

JUPPERHORN (3151 m. = 10,335 ft.) BY W. ARÊTE.—On July 22, 1914, Messrs. Rodk. Williams, A. N. Solly, and G. A. Solly, starting from Cresta-Avers reached the summit by the hitherto unclimbed W. arête in about six hours. It took about two hours to get to the more easterly of the two little lakes on 'Auf dem Bande.' Near the lake the ridge dips a little before rising to the final point that overlooks the valley.

'From the lake we went over scree and some snow to the ridge, reaching it just past the first tower above the lowest point. From there we kept as nearly as possible to the ridge, traversing occasionally for a short distance, generally on the S. side. The mountain has a reputation for being rotten, but the rocks did not seem to be more loose than is usual on ridges seldom or never climbed, and in most places they were not very difficult. At one point you have to go through an archway, and coming through the arch there appears to be a very steep drop, but there is no real difficulty; at another point there is a grand view through a needle hole of perpendicular cliffs on the southern face of the mountain. Not far from the top comes the only real difficulty—a very steep tower of reddish rock and about 60 ft. in height. There is a crack in the rock at the steepest point where an arm can be jammed in, and then a foot, otherwise it would hardly be practicable. When we got to the top sleet was falling, and we only got glimpses of the other ridges, so we returned by the ridge that we had come by. We descended the tower by a looped rope. A little lower down, and before coming to the archway, we left the ridge, and descended some steep snow on its N. side, keeping on the snow until we were only about 20 min. from the lakes. In a less snowy year, or later in the season, there would be much less snow, and it might be quicker to adhere to the ridge.'

G. A. S.

CENTRAL CAUCASUS.

Adai (Uilpata) Group.

BUBISKHOKH, 14,874 ft. (?).—This is the fine peak called the 'Double Peak' in Messrs. Freshfield and Sella's great work on the 'Exploration of the Caucasus.' It is one of the highest—probably second in height—of the group. It is situated at the head of the Bubis glacier on the Asiatic side, but its main watersheds are those of the great Karagom and N. Tsaya glaciers on the European side of the range. The Grand Combin-like mass of Tvilisis Mta (unascended) greatly obscures views of it from the S. It was ascended on July 20, 1914, by a party consisting of Rembert Martinson, Harold Raeburn, R. C. Richards, and H. Scott Tucker. Leaving a high camp 9300 ft. just above the lowest icefall of the Tsaya glacier at 1.5 A.M., the route followed led through the second icefall and across to the foot of Woolley's Rock, the end of the spur separating the N. and S. Tsaya glaciers.

Climbing this spur by means of an easy snow gully, later probably ice and scree, access was gained to the almost flat névé of the N. Tsaya glacier above its very formidable icefall at 4 A.M. The whole length of the glacier was then traversed below Adai and the 'Shoulder' to the foot of the enormous snow couloir which separates the two peaks of 'Double Peak.' This couloir is about 3000 ft. high and is set at an angle of from 50° to 55° (clinometer). Bergschrund 9.40. Ascent to the col was made mainly by the couloir. An attempt was made to utilise the rock ridge on the left (south); this had to be abandoned owing to the excessive steepness and rottenness of the rocks. Fortunately the snow on the ice just held, though thin, and the col was reached at 12.30 about. This S. route will probably be impossible late in the season and after much fine weather. From the col a corniced steep snow arête led easily to the summit, a sharp rock peak covered with new snow, 1 P.M. Return was made by same route, and high camp regained at dark, 9 P.M. Snow very bad and soft.

ADAI-SONGUTA PASS—FROM TSAYA TO KARAGOM.—Reached from Tsaya (Adai) side, but not crossed. From a camp about 9500 ft. on highest grass below hanging terminal icecliffs of Adai glacier, the same party started at 3.5 A.M. on July 15. Holding to left below the rock walls of the great S.E. spur of Adai, they ascended the r. moraine of the glacier, then the glacier itself in the direction of the S. buttress of Songuta. In the direction of Adai the route is barred by a steep cliff, over which pours the ice from a broad shelf of névé on the N.E. face of Adai. This fall is merely the overflow of Adai's N.E. névé and hanging glaciers. The main stream passes through a gap between the mountain and its S.E. spur and falls into the N. Tsaya glacier. It may possibly

afford an easier route to the A.-S. col and Karagom glacier than the Adai glacier. Climbing up the lower rocks of the Songuta buttress (something like the ordinary route of the Gabelhorn) for about 1000 ft., just as the rocks became somewhat hopelessly steep, a narrow ledge bearing left was hit upon, which led below overhanging rocks into a snow couloir, above the vertical ice-crowned cliffs on the left (W.). This led easily to the circular snow basin below the col. The actual col being crowned by gigantic cornices and many signs of avalanches about, a turn was made to the right and the watershed ridge gained by one of Songuta's narrow pinnacled rock arêtes.

From the ridge the descent upon the névé of Karagom appeared easy. Owing to exhaustion caused by the very severe labour of forcing the passage through soft snow, the ascent of Songuta itself was not tried. The peak does not appear easy, especially when, as on this occasion, the steep rocks are covered with fresh snow and ice.

The return was made by same route, and the upper camp reached at 7.20 P.M. The height of the pass is about 13,000 ft. This is a very fine but difficult pass upon the S.E. or Tsaya side. The problem of an easy Tsaya-Karagom pass is not yet solved. The easiest—in appearance—lies between Bubis and Tvilisis, across the head of the Bubis glacier.

TSAYA-KARISSART PASS (about 13,000 ft.).—This is the col immediately W. of Tsaya Khokh. It presents no serious difficulties, and is said to be occasionally crossed by hunters. The same party reached it, starting from the main camp at 6300 ft. on July 12, during a preliminary reconnaissance of the Tsaya group. It and the Tur Pass reached last year are both convenient ways of crossing the ridge of the aiguilles between Tsaya and Kamuntao (Dunti). They both lead to the Karissart glacier from snow gullies (small 'glaciettes') on the Tsaya side.

A party of *tur* seen here. Left Tsaya Forest Camp 3.15 A.M. Arr. col. 2.55 P.M.

KARAGOM KHOKH (14,805 ft.).—This is the second or third highest peak in the whole group. The name is also applied to the fine peak of Burdjula (20,42 S. = 14,294 ft.). It would be preferable, however, to allow the last named to retain its southern, Asiatic, name of Burdjula and transfer its northern or European designation to the magnificent unnamed peak which is triangulated in the Russian 1 Verst map 2115 S. = 14,805 ft. On Freshfield's map this range is styled Karagom. It is situated immediately E. of the enormous (4000 ft.) icefalls of the Karagom glacier. On Merzbacher's map it is called Skatikom (unascended), but that map is quite as inaccurate here as in the rest of the group. Skatikom is the fine peak lying about 4–5 versts S.E. of E. Karagom, and near the E. extremity of the Karagom névé.

The northern wall of the great névé of Karagom is composed of four mountains: Karagoms (2) West and East, Vologata (new name proposed), and Skatikom. The watershed then swings S. to join the Tsaya spur in Songuta.

VOLOGATA (13,700 ft. about).—The name is proposed for the fine rock peak lying between Karagom East, = 14,805 ft. (Russ. 1 Verst), and Skatikom = 14,602 ft. (Russ. 1 Verst). The glacier flowing from its névés on the N. is called by the natives Vologata. The same party ascended Vologata and Karagom main peak (E.) on July 28, 1914.

High camp was left at 1.15 A.M. It was placed on grass at 9000 ft. on the N. side of the small N. Karagom glacier which joins the main stream just below the upper icefall. This N. Karagom glacier has evidently much receded of late and has enormous moraines on its r. or north. The moraines were ascended, and the ridge (Sandur) running N. from Vologata-Karagom gained up steep scree and finally snow, ice, and rocks, loose but not difficult, 7.30 A.M. 12,050 ft. After building a cairn on the ridge its narrow arête was followed to the steep slopes leading up to the main ridge

Snow here soft and rather inclined to avalanche. No serious difficulty, however, was experienced in finding a way through a small hanging glacier, and up an easy snow-and-rock arête to the main ridge, 9.40 A.M. From here the party turned left (E.) and after an interesting climb on a narrow and pinnacled snow-and-rock arête reached the summit of Vologata at 11.20.

Retracing the route as far as the junction of the N. ridge with the main mass, the lowest dip, about 12,700 ft., between Vologata and Karagom, was reached at 1 P.M. Snow soft and bad. Thence a very steep climb, mainly up snow on a corniced edge, led to the summit (rocks) of Karagom at 4.45 P.M.

Progress was slow, owing to the great care necessary in dealing with the cornice and to the bad condition of the snow. Leaving the summit, which commands magnificent views of the whole Karagom basin and of the Central Caucasus from Kasbek to Shkara and Dych Tau, at 5.15, the route of ascent was retraced. The tents were not regained till 10.40. The slow going was caused by the extremely trying and exhausting state of the snow, probably aided by a threatened storm, which, however, gave perhaps the most impressive and magnificent sunset ever seen by any of the Expedition.

Laboda Group.

LABODA (14,170 ft.).—The same party made on August 1, 1914, the first ascent of the highest summit of this group. The group is situated on the S. side of the Shtulu pass, between Digoria and Balkaria.

Leaving the Cossack post or 'karaul' at the foot of the Godi pass (Stir-Digor to Gebi) on the afternoon of July 31, they ascended the gorge of the Tana torrent past the wooded heights of Kubus.

Tents were pitched—on moraine—about 8100 ft., just N. of the ice-falls of the wide Tana glacier which pours off Tsitelli and Laboda.

Leaving the camp 3.45 A.M. on August 1, the party kept N.W. up a long hollow, partly filled with scree, partly with ice. On the left were the ice and partly exposed rock-cliffs of the Tana glacier. This glacier has evidently very much receded of recent years. At the top of the hollow a traverse to left (S.W.) placed them on the glacier above its steepest and most broken part.

They were fortunate in finding without serious delay a good route through a series of very deep crevasses, bridges often long and not too substantial. Higher up the glacier became easier. 7.50, 11,000 ft. The steep E. ridge of Laboda was then attacked and followed to the summit, a high, steep cornice of snow, at 12.45 P.M. The ridge was mainly of rock in the highest part, and gave some interesting climbing. Owing to mist, only partial views were obtained.

Tsitelli, to the S.E., the peak ascended by Messrs. Dent and Woolley with K. Maurer and S. Moor on August 1, 1895, was mostly covered with mist.

In Mr. Freshfield's work 'The Exploration of the Caucasus,' p. 264, it might appear that Laboda is the peak said to have been ascended in 1895, but Mr. Dent's sketch map and description in the ALPINE JOURNAL, vol. xix. p. 397 *et seq.*, makes it clear that it was Tsitelli which his party climbed.

HAROLD RAEBURN.

VARIOUS EXPEDITIONS IN 1914.

Pennines.

LYSKAMM W. SUMMIT (4478 m. = 14,688 ft.) FROM THE N.W.—On July 31, with Joseph Pollinger and Franz Imboden, I climbed the N.W. face of the Lyskamm by the route first made by Christian Klucker with Mrs. Roberts Thomson ('A.J.' xxi. 266), and since repeated by Mr. Meade with the two Blancs ('A.J.' xxv. 85–86).

The weather on the night of July 30 at the Bétemps hut was very bad, first heavy rain, then several inches of snow. In the early morning it was not until about 3 A.M. that it looked better, and we got off at 3.45.

We crossed the glacier and without difficulty made our way up the Felikjoch icefall. Then we debated whether to go for the Lyskamm or Castor, as the new snow made conditions bad. The weather looked so good, however, that we decided to try the Lyskamm, as we had been looking forward to it for weeks.

We turned to our left and soon reached the first steep snow under the lower icefall. Cutting our way up this, we got under the higher and greater icefall, and, passing under this up steep snow, we arrived