

arriving in Switzerland, he said, they were like the muddy Rhône on its entrance into the Lake of Geneva, but on quitting it they resembled the noble river that rushed and sparkled under the bridges of the city. M. Xavier de Blanc, who followed, paid many compliments to England and the English; and the company was also addressed by the representatives of Austria, Italy, and Spain. The proceedings were characterised by great enthusiasm; and as the afternoon wore on the Winkelried steamer, chartered expressly for the occasion by the chairman, arrived below the hotel, and, decked with banners from stem to stern, bore off the guests to the charming grounds of M. de Saussure, at Genthod, where another *fête* had been prepared. The guests entered the grounds at Genthod in procession, preceded by a band of music playing a march composed by Madame de Saussure specially for the occasion. The grand avenue and grounds were lit up by innumerable lanterns, and a delightful evening was spent, many of the guests being invited to inspect the numerous relics of the great De Saussure, still carefully preserved at the beautiful villa which he formerly inhabited. These relics included many scientific instruments made with his own hands, and the very shoes which he wore on his memorable ascent of Mont Blanc. Night came, and the Winkelried, now glittering with Chinese lanterns, bore back the whole Alpine fraternity happy and contented to Geneva.

The efforts made by the Reception Committee for the comfort and entertainment of the numerous visitors to the Congress were beyond all praise, and special thanks are due to M. Freundler for his indefatigable personal exertions.

The writer of these lines gratefully acknowledges the extreme courtesy and kindness which he received from his Alpine brethren of all nationalities during his stay at Geneva, which were more than sufficient to convince him that the English Club still holds the first place amongst European climbers; and it was with a warm heart that on Monday, August 4 (on his way to Mr. Wills's charming *châlet* at Sixt), he stopped at St. Jeoire, and flashed a last message of courtesy and goodwill to his many friends at Monnetier, where the visitors to the Congress held their final banquet, after spending a happy day amongst the 'dizzy heights' of the Salève.

C. E. M.

NEW EXPEDITIONS IN 1879.

THE Expeditions recorded in the following pages are believed to fall under the definition given in an early Number, that is to say, not to have been previously accomplished by English mountaineers, or noticed in the Journal. For the sake of unity and convenience of reference several of Mr. Coolidge's expeditions (e.g. Mont Mounier, Col de Valasco) are placed here instead of under 'Alpine Notes.'

In the cases where foreign climbers had preceded the writers, reference has, as far as possible, been made to the original accounts.

*Maritime Alps.**

MONT PELAT (French map, 3,053 mètres=10,017 feet; Piedmontese map, 3,048 mètres = 10,000 feet).—August 7. Mr. W. A. B. Coolidge with the two Almers were most hospitably received at Barcelonnette, by the resident members of the French Alpine Club on August 1. Having stopped there two days to assist at the 'fête patronale,' they left early on August 4, and went in 4 hrs. 10 min. by Enchastrayes and the Col de Fours to Fours (it may be useful to note that the inn is at Le Collet, and not at the hamlet marked Fours on the French map), proceeding the same day in 5 hrs. 10 min. to Allos by the Col du Talon (Col du Tarron of Bourcet's map). Leaving Allos on August 6, they followed the usual path by Champ Richard to the Lac d'Allos (2 hrs. 50 min. from Allos), the view of which is very disappointing after the descriptions in the guide-books. In 50 minutes from the lake they gained the Pas de Lausson of the French map (Bourcet's Le Loussoun or his Col d'Aloz, and the Col d'Esteng of the Piedmontese map), which overlooks a small lake. A succession of thunderstorms forced them to abandon, pro tem., their intention of ascending the Mont Pelat; descending a short way, they traversed a ridge on the left, and in 1 hr. 10 min. from the Pas gained the highest house of the hamlet of Esteng, not far from a little chapel, and within a short distance of the sources of the Var. The weather being much finer next day, August 7, they remounted in 1 hr. 45 min. to the Pas de Lausson (2,609 mètres = 8,560 feet). From this point a traverse over stones and round the head of a glen led them in 35 minutes to the foot of the Pelat. Climbing over a rather jagged buttress, they reached a basin to S.E. of the peak, climbed thence over *débris* to the crest of the E. arête and along the ridge to the highest summit, marked by a great wooden cross, reached in 1 hr. 35 min. from the base, or 3 hrs. 55 min. from Esteng. The view included the Chambeyron and Font Sancte group, as well as some of the Dauphiné peaks and the Viso, and a desolate region to the south, in which the Tinibras, the Monte Matto, and the Argentera could alone be identified. The villages of Allos and Champ Richard were visible, as well as the Lac d'Allos; but the sea could not be distinguished. There is a lower summit of the Pelat to the W., also visible from Allos. The Pelat seems to be the peak called on Bourcet's map the 'Montagne de la Grande Roche d'Aloz.' It does not, as has been stated, immediately overhang the Lac d'Allos. Returning to the base of the peak in 50 minutes, the party struck up to the left, and in half an hour reached the Col de la Petite Cayolle (whence the Viso is visible), passing several small lakes. A succession of glissades over snow led in 25 minutes to the lakes on the Col de la Cayolle, the watershed between the Bachelard torrent and the Var, and the most frequent route between the Var valley, Fours and Barcelonnette. From the Col 20 minutes sufficed to reach the 'Sources du Var,' and

* The northern limit of the *Maritime Alps* is placed in the following Notes at the Col della Maddalena, and not as in the 'Alpine Guide' at the Col de Longer. The former division is in agreement with nature itself, and in every respect more convenient.

Esteng was regained in 35 min. more or 2 hrs. 40 min. from the top of the Pelat.

MONT TINIBRAS (3,031 mètres=9,945 feet, French Map; 3,032 mètres=9,948 feet, Piedmontese Map; 3,040 mètres=9,974 feet, S. Robert; 3,115 mètres=10,220 feet, 'Le Alpi,' p. 764).—*August 9.* The same party, on August 8 mounted in 2 hrs. 35 min. from Esteng to the Col de Jallorgues (2,529 mètres=8,298 feet), through a very wild and desolate gorge. The Viso is the chief object seen from the col. The descent, almost entirely along the left bank of the torrent, through the pretty valley of Jallorgues, to S. Dalmas le Sauvage, occupied 2½ hours. In 45 minutes the bridge over the Tinée was reached, when a very picturesque wooded gorge led in an hour to the large but miserable looking village of S. Etienne.

Starting from S. Etienne early on August 9, they mounted by a stony path past the houses of La Balzia, through fields and up very steep slopes, high above the torrent in the Vallon de Tinibras, as far as a grassy shoulder commanding a good view of the upper part of the valley, reached in 2 hrs. 5 min. from the village. Traversing the rocky slopes by means of a faint track, they reached the lower Lacs de Tinibras in 50 minutes. Thence, bearing slightly to the right, they mounted by a sort of broad couloir or wall composed of stones intermingled with patches of snow to an upper basin (40 minutes); whence the cairn on the summit (visible from the lakes from far below) was reached in 50 minutes (4 hrs. 25 min. from S. Etienne) by the ridge overlooking the Lac Fero and the easy rocky face. The view included the Dauphiné and Maljasset peaks, as well as the Monte Matto, Argentera, Pelat, and Mont Mounier. By a scramble along the ridge to the N. of the cairn, a fine view down the Val Stura was gained. There are several neighbouring pinnacles (some with cairns), which nearly approach the Tinibras in height. It is believed that a small bit of the sea was seen. On the cairn is engraved the date (1835) of its erection; there is also a triangle drawn in tar or black paint on a neighbouring rock.

The party descended by loose rocks and snow to the Lac Fero in 40 minutes. The Lac Petrus was reached in half an hour more. Then, bearing to the left, they followed a track through the woods, and descended over steep bare slopes, exposed to the hot afternoon sun, reaching S. Etienne in 2 hrs. from the Lac Petrus, or 3 hrs. 10 min. from the top of the Tinibras. The ascent throughout is steep and monotonous. The descent by the Lac Fero is *not* recommended. This peak was reached in 1865 in 7 hrs. from S. Etienne by Count Paul de Saint Robert. He ascended by the Lacs de Tinibras and descended by the Lac Fero, and was fortunate enough to enjoy a very fine view of the sea and of the chain of the Alps to beyond Monte Rosa.

MONT MOUNIER OR MONT MEUNIER (2,818 mètres=9,246 feet, French and Piedmontese maps, 2,843=9,818 feet, 'Le Alpi,' p. 778).—*August 11.* The same party effected the ascent of this point, the highest between the valleys of the Var and of the Tinée. Starting from the hamlet of Roja or Rouja (3 hrs. from S. Etienne, the gorge of the Roja being

very fine), they mounted through the Vallon de Sellavieille of the French map, traversed a rocky barrier at its head by means of a steep track rather to the left, and so reached an upland basin at the W. foot of the peak. Ascending through this, and not being quite certain of the topography, they attained the shattered ridge at its head, which turned out to be the N.W. arête of the Mounier, and was followed to the great cairn on the summit, reached in 3 hrs. 40 min. from Roja. It would be quite easy to mount from the upland basin straight up the W. side, and the way up from the S. from Péone or Beuil is even easier, lying almost entirely over grassy alps, which extend to within a very short distance of the summit. Near the large cairn there is a smaller one, and a little stone hut large enough for one person. Though the party reached the summit before 7 A.M. and remained there 5¼ hrs., the view was very much limited by clouds; but can scarcely include more than the Dauphiné, Maljasset, and Valdieri peaks, with a small bit of Monte Viso. The S.E. view was very imperfect, but different bits of the coast were seen at various times. The party on the descent followed the N.E. arête for some way to the edge of the great rock wall, which supports the peak on the N.E. They were thus forced to make a fatiguing traverse round the head of an alpine valley, and by grass slopes and pastures regained the main ridge near a cairn-crowned knoll, supposed to be the Tête Sadour (1 hr. 20 min. from top). They then followed a track on the right, which led them into another valley and through woods, and over extremely hot bare slopes, to the hamlet of Isola in the valley of the Tinée, 3½ hrs. from the summit of the Mounier. The descent to Isola is steep and uninteresting.

COL DE VALASCO, OR DE' LAUS, OR BASSA DE DRUOS.—August 12. The same party, starting from Isola, mounted by the path through the Vallone di Ciastiglione, which is rather picturesque in its lower part. Leaving to the left the paths leading to the Bagni and to Santa Anna di Vinadio, they reached the ruined hut at the entrance of the Vallon del Rio das Verps in 2 hrs. 45 min., and in 50 min. more, after crossing the stream several times, the highest group of huts, then occupied by the cows. Twenty minutes farther on, after crossing a stream, they hit on a royal hunting path, which led them in half an hour to the Colle di Merciera ('Le Alpi,' p. 774, 2,359 mètres=7,740 feet) of the Piedmontese map (perhaps the same as the Col de Mercure of Bourcet's), overlooking the Vallon de Molières. Here they luckily met two of the royal gardes-chasses, who cleared up the intricate and puzzling topography. Without crossing this col, they followed another royal hunting path, which mounted along the W. side of the chain past the Laghi di Terra Rougia, sending off a branch to the Vallon del Rio Freddo, to the pass marked Bassa de Druos on the Piedmontese map reached in 1 hr. 5 min. from the Colle di Merciera. A huge 'pyramide' marks the col, which was called Col de' Laus (or Lacs) by the gardes-chasses, and is apparently that called Col de Valasco by M. Joanne ('Provence Alpes Maritimes,' p. 412), and alluded to by Mr. Ball ('S. W. Alps,' p. 18). It is very possible that this pass is identical with the Passo di Valle Oscura ('Le Alpi,' p. 494), which is indicated as connecting the valleys of the Tinée and the Gesso, and as being covered with

perpetual snow. The ascent from Isola had occupied $5\frac{1}{2}$ hours. The descent, along an excellent path, in many places still covered with snow, was perfectly straightforward. In 25 minutes the lowest of the five lakes in the Val Scura was reached; whence by zigzags, through scattered pines, the level of the Val di Valasco was attained in 50 minutes, the king's shooting-box in 25 minutes, and the Bagni di Valdieri in 50 minutes more, or $2\frac{1}{2}$ hours from the pass.

MONTE MATTO, OR ROCCA DEL MAT (3,087 mètres=10,128 feet, Piedmontese map; 3,118 mètres=10,230 feet, 'Le Alpi,' p. 764, and Saint Robert; 3,125 mètres=10,253 feet, Isaia).—August 14. The same party ascended this peak. Starting from the Stabilimento of Valdieri, they followed the path up the Val di Valasco for an hour, till just below the plain on which the king's shooting-box stands. They then struck up to the right, by one of the royal hunting paths, which mounts by a succession of zigzags. At the point where it splits into two branches (reached in 1 hr. 25 min.) they took the right-hand branch, which soon, however, came to an abrupt end; and they then mounted nearly straight up over stony slopes and regained the left-hand branch, which makes a wide sweep, and then circles round to the right. They gained in this way the ridge overlooking the Vallone di Cougne (1 hour), (whence a faint track led down towards the valley), and then climbed over *débris* and snow to the ridge at its head, separating it from the Vallone della Meris, leading down to the Gesso at Santa Anna (20 minutes). From this col, whence there is a fine view of the Viso and of the two Chambeyrans, as well as of some lakes in the Vallone della Meris, a scramble up some steep rocks led to slopes of *débris*, whence the 'signal' on the summit is visible, and an easy walk over snow and rocks led to the E. summit in 40 minutes from the col (4 hrs. 25 min. from the Bagni). The 'signal' is very substantial, and is flanked by two minor pyramids. The view is very interesting. Among the nearer ranges visible are the Viso, the Chambeyrans, Les Baus, the Glacier Blanc in Dauphiné, and the Maritime Alps. The Argentera, seen across the valley of the Gesso, appears to especial advantage; in fact the ascent of the Matto was made by the advice of Count Paul de Saint Robert, in order to study this little-known group. The Stabilimento is very well seen from the top. The cairn contained the cards of several Italian climbers. Descending to the notch between the two summits, the party in 20 minutes from the E. top, gained by steep but good rocks the W. point, which is decidedly the highest. There was no cairn on the summit; and as Signor Marinelli seems to think that it had not been climbed at the time of his visit to the 'signal' in 1877, the party feel justified in claiming to have made the first ascent of the highest peak of the Matto. The Stabilimento was also visible from this point. Returning to the notch between the two peaks in 10 minutes, they kept rather more to the left than on the ascent, avoided the steep rocks mentioned above, and descended direct into the Val di Cougne (40 minutes). As the descent straight down to the Gesso would have lain entirely over fatiguing slopes of unstable rocks, the party, after going down the valley for a short distance, followed a steep track to the right, which led them round steep slopes and across a minor gorge to the Gias (châlet)

Cougne on the royal hunting path, which had been followed in the morning (45 minutes). Half an hour sufficed to reach the level of the Val di Valasco, and 40 minutes more the Stabilimento, which was regained in 2 hrs. 35 min. from the W. summit. The ascent may be effected direct from the Stabilimento by the S.E. face, but looks very steep and stony. The route actually followed is circuitous, but perfectly easy. It is very exactly described by Signor Damiano Marinelli, who effected the ascent by this way on August 4, 1877.*

MONTE DELLA STELLA (3,236 mètres=10,617 feet, 'Bollettino del Club Alpino Italiano,' No. 18, p. 361; 3,271 mètres=10,732 feet, Isaia); ROCCA DELL' ARGENTERA (c. 3,300 mètres=10,827 feet, Saint Robert).—August 18. The same party explored the range, containing these peaks, the highest summits of the Maritime Alps, south of Barcelonnette. Starting from the Stabilimento of Valdieri, they mounted the zigzag path through the Vallon Lourousa for 1 hr. 35 min. as far as the highest huts. They then, acting on the advice of Signor Cesare Isaia, the Secretary of the Italian Club and President of the Turin Section, who happened to be staying at the Bagni, and courteously communicated much valuable information, resolved to seek a new route up the Stella. Crossing the stream, and mounting to the right over snow, *débris*, and a royal hunting path, they reached in 30 minutes the edge of the little glacier of Argentera, which is apparently the same as 'li Gelas di Lourousa' of the map. Mounting this without trouble for 35 minutes, they gained the base of a long steep couloir of snow, to the left or N. of which rises the double-peaked Monte della Stella. They crossed the bergschrund by a snow bridge, and ascended the couloir, passing four isolated rocky masses, some way beyond which (1 hr. 15 min.) they took to the rocks on the left, and gained the N. arête (30 minutes), whence an easy scramble brought them to the summit (10 minutes), in 4 hrs. 35 min. walking from the Bagni. The highest ridge is composed of two rocky points, both of which were visited and crowned with cairns. The first ascent was made, on July 11, 1871, by Signor Isaia, who crossed the Colle di Lourousa to the Val della Ruina, and mounted by the E. face. He was followed by an Italian officer, engaged in surveying the country. In the ascent here described, a new way was struck out. Signor Isaia a few days previously had reached the summit of the couloir, but had been stopped on the rocks leading up to the Stella, owing to the inexperience of his guide, a local man.

The party were greatly astonished to find that the Stella was not, as is generally believed, the highest summit of the Valdieri *massif*, the view from the Matto having left the question in doubt. South of the Stella, and separated from it by the snow couloir they had climbed, rose a rocky mass, with several summits. These were clearly higher than the Stella, so it was resolved, as there was plenty of time, to explore the entire ridge. Descending in 15 minutes over broken rocks to the head of the snow couloir, the party then traversed the easy rocky E. slope under the nearest of the summits (seeing a herd of twenty chamois on a snow slope in the Val

* *Bollettino del Club Alpino Italiano*, No. 34, pp. 190-1.

della Ruina), gaining the top of the second peak in 15 minutes from the couloir. Here a fresh difficulty arose, in the shape of a third peak, still farther south, and apparently even higher. This was gained in its turn in 25 minutes by a traverse of the western slope, a descent on to the E. slope for a few steps, and a rather difficult reascent to the N. ridge, whence the rest of the climb was easy. Beyond this peak is a shoulder, and the ridge then descends steeply, rising again in the Cima di Nasta, climbed by Mr. Freshfield last year. It may remain in doubt for the present, which of the two peaks of the Argentera climbed is the highest, and which has the right, therefore, to be considered as the monarch of the Maritime Alps. It is probable, however, that this honour belongs to the last climbed and most southerly point. No traces of man were found on any of these peaks, on all of which cairns were built. The distant view was unfortunately very cloudy, and limited to some of the Dauphiné and Maljasset peaks. When fine, the sight of the sea should cause the panorama to be unique in the Alps, as to the north, this range can be seen from Monte Rosa and Monte Generoso. Returning in 30 minutes to the central peak, the party reached the head of the couloir in 40 minutes, climbing on the way a peak just north of the couloir, *vid* the S. ridge, in order to complete the exploration of the mountain. This point is little inferior in height to the two others and is higher than the Stella. The snow in the couloir being very hard, a good bit of the first part of the descent was effected over the rocks of the base of the Stella, until the morning's steps were reached. The bergschrund was crossed in 1 hr. 20 min. from the summit of the couloir, the path in the Vallon Lourousa gained in 25 minutes, and the Stabilimento in 55 minutes more, or 2 hrs. 40 min. from the summit of the couloir, and 3 hrs. 45 min. from the most southerly, and probably highest point of the Argentera. A more direct route through the Val dell' Argentera may possibly be effected; but from above the rocks look rather steep. As no traces were found on any of the three peaks of the Argentera, and as neither Signor Isaia (who knows this district better than any other amateur), nor the people at the Stabilimento had heard of any previous ascent, the party feel justified in claiming to have made the first ascent of these three points—the highest summits of the Maritime Alps. The Monte della Stella and the snow couloir can be well seen from the highroad to Cuneo, a few minutes below the Stabilimento.

CIMA DEI GELAS (3,180 mètres = 10,433 feet, Piedmontese map; 3,218 mètres = 10,558 feet, Saint Robert).—August 22. The same party, starting from the inn at the Sanctuary of la Madonna di Finestre (3 hours above S. Martin Lantosque), followed the path to the Col di Finestre for 40 minutes, then, bearing to the right, traversed several spurs to a number of small lakes (30 minutes), above which was a large frozen one (35 minutes). Rounding a spur, and keeping always to the right, they gained in 25 minutes the crest of the ridge overlooking the Val Gordolasca, at the N. foot of a point crowned with a stoneman (*not* the Cima di Mont Colomb, which was seen still farther south). Then following the ridge to the left, an easy walk of loose rocks brought them, in 25 minutes, to a summit crowned by a stoneman, and well seen

from the inn, which had been pointed out to them as the Cima dei Gelas (2 hrs. 35 min. from the inn). The true Cima dei Gelas, however, towered up a good bit higher, and some way farther to the north. From this false summit there was a fine view of the sea, of the great E. rocky face of the Argentera, and of the frozen Lago Long at the head of the Val Gordolasca. Returning to the base of this peak in 25 minutes, they then traversed the slopes to the right, and reached in 15 minutes a stream flowing from near the foot of the Gelas. Following this, and mounting over snow, they attained in 10 minutes a curious little snow-filled hollow or plain, forming the extreme head of a branch of the valley of the Vésubie: on one side it overlooks the Lago Long, which lies at a great depth below; on the other, the Cima dei Gelas rises abruptly; straight ahead an easy ridge leads up to a stoneman on the main arête to the E. of the Gelas. The party followed this ridge towards the stoneman for some way, 20 minutes, in order to examine the Gelas, which from this side appears as a steep double-headed rocky summit, a snow couloir leading up to the notch between the two peaks. Leaving the knapsacks, they crossed some snow-slopes to the base of the couloir, mounted up it some way, and then took to the rocks on the left, which were broken, and though steep much easier than they had appeared from below. In this way the left-hand or S.W. summit was reached in 25 minutes from the bags. As it was slightly lower than the other point, they only halted to build a cairn, there being no trace of one; and in 10 minutes gained the higher peak—the true Cima dei Gelas—by descending over broken rocks to the head of the couloir, and then reascending. They had thus taken 1 hr. 45 min. from the false summit, or 4 hrs. 20 min. walking from the inn, which was perfectly well seen from the summit. It may assist future travellers to know that the Cima dei Gelas is the stone-crowned peak seen most to the left from the inn, it being well understood that it is to the right of the depression of the Col di Finestre. The ascent was made in 1864 from the inn in 5 hrs. by Count Paul de Saint Robert, who seems to have followed the route just described, except of course the détour to the false peak. It is believed that the peak has been reached several times from St. Martin. Among these ascents was one made on August 18, 1877, by M. A. Bétrix, a member of the Bernese Section of the Swiss Alpine Club.* No names were found in the ruined cairn on the summit, but only the wooden frame of a thermometer (maker's name effaced), on the back of which was carved 'F. Peillon, 1874,' the name probably of some chamois-hunter. There was a high cold wind blowing on top, and frequent showers of rain fell, but the view was so exceedingly interesting that a tolerably long halt was made. First of all was the perfect view of the sea obtained, the high wind keeping the horizon quite clear. It was the only time during the tour of the party in the Maritime Alps that it was possible to identify in a satisfactory manner the portions of the coast seen. There were the chain of the Esterels, the bay of La Napoule (Cannes itself could not be distinguished), the Lérins Islands, the promontory of An-

* *Jahrbuch des Schweizer Alpenclub*, xiii. p. 653, and private information.

tibes, and the Var just at the point where it flows into the sea, Nice itself being hidden by a low ridge. The sight was most beautiful, and one long to be remembered. Towards the N. the distant view was concealed by clouds; but the three summits of the Argentera, the most southerly peak seeming to claim supremacy, and the double one of the Stella were well seen. A long stretch of the Valley of Entraque, and the zigzags of the Col di Finestre were visible far below. To the E. the cone of the Mont Clapier rose across the Val Gordolasca, the Cima del Caire Cabret being between it and the view point. It is believed that from the actual summit of the Gelas the Ghiacciaja della Maledia was not seen, but this is not certain.

In 25 minutes the knapsacks were regained by way of the couloir, and in 5 minutes more the stoneman on the main ridge already mentioned. In this stoneman was found a bit of paper with the name of an Italian lieutenant, and a fragment of a Kentish paper, dated Canterbury, July 31, 1879, with the note in pencil 'Baptistin Plent avec Dr. Müller.' It did not appear why either of these parties had come up here: the descent to the N.W. Ghiacciaja della Maledia would lie down very steep rocks. As the party wished to sleep as high as possible near the N. foot of the Mont Clapier, they did not attempt the direct descent (which would have led them down to the track of the Col di Finestre), but after some reconnoitring descended on to the rocky slopes above the Lago Long, traversed them obliquely for some way, and regained the main ridge (40 minutes), possibly at the Col de la Feusse of M. Bétrix. They were now above that part of the glacier which bears the words 'della Maledra' in the map, and succeeded in gaining its surface, after going a short distance along the ridge, and then descending by steep rocks (25 minutes). This route sounds complicated on paper, but is easily understood when one is on the spot. Descending the glacier without difficulty, keeping rather to the right, and encountering a herd of 20 chamois, they soon reached its junction with a large glacier flowing directly from the base of the Cima del Caire Cabret, (from which the former is separated by a buttress not indicated on the map), and quitted the ice in 20 minutes from the time they had taken to it. Descending snowy and stony slopes, they soon came across traces of man, followed several sheep-paths, and at length, fearing to reach too low a point in the Vallone di Mont Colomb, bore far to the right, and by a fatiguing traverse through brushwood, interspersed with smooth faces of rocks, reached the 'Gias del Murajon' (50 minutes from glacier), where they were well received. They had only been 2 hrs. 45 min. walking from the summit of the Gelas; but much time had been necessarily consumed in reconnaissances, as the route to be taken was not always to be found on the first attempt. It may be added, that a fine view of this part of the chain, including the two glaciers, is to be had from Entraque, or the bridge between that place and the town of Valdieri, by which the main road between the Baths and Cuneo is joined.

MONT CLAPIER (3,046 mètres = 9,994 feet, Piedmontese map; 3,018 mètres = 9,902, 'Le Alpi,' p. 762); PASSO DI PAGARI, OR DEI GELAS DI BELVEDERE, PASSO DI MONT CLAPIER, PASSO DI LUSIERA.—August 23.

The same party, starting from the châlet of Murajon, followed the zigzag path up the valley, and in 35 minutes, traversing the 'Passo del Murajon' (wrongly marked in the map as *below* the châlet of the same name), gained the head of the valley—a desolate, stony tract, flecked with snow. The Clapier was not visible, and it was resolved to gain the main ridge as soon as possible. Accordingly, leaving the direct course to the Passo di Valmasca or dei Gelas ('Le Alpi,' p. 494), which is just south of the Cima del Lago Agnel, they struck up to the right in 10 minutes by one of the king's hunting paths in very bad repair, which led them in 1 hr. 10 min. to the edge of a small glacier, just indicated on the map, E. of the Cima del Caire Cabret. Mounting along this, and rounding a buttress coming down from the left, they gained in 40 minutes (2 hrs. 35 min. from the hut) the crest of the main ridge, at the spot marked as 'Passo del Pagari' in the map, overlooking the Val di Mont Clapier. From this point, which is called 'Passo di Pagari, o dei Gelas di Belvedere' in 'Le Alpi,' p. 494, a fine view of the Clapier and of the Val Gordolasca is gained. Descending in 10 minutes by rocks and grass to the snow at the head of the Val di Mont Clapier, the party then bore to the left across snow towards the base of the Clapier, passing at no great distance from a narrow notch in the rocky ridge just N.W. of the Clapier, which would lead to the glacier N. of the Clapier, of which mention will be made later on. The ascent of the final cone of the Clapier over the loose rocks and *débris* of the W. face was perfectly easy, the summit being reached in 1 hr. 5 min. from the pass, or 3 hrs. 40 min. from Murajon.

The 'signal' is of very massive construction, and is flanked by two smaller pyramids. A few steps below is a small hut, roofless, but filled with clean fresh straw, which would be of use to any one proposing to witness the sunset and sunrise from this point, the most southerly summit in the Alps, the height of which exceeds 3,000 mètres (= 9,843 feet). The weather was perfect, and the view remarkably fine. The sea view was much more hazy than from the Gelas, and included about the same extent of the coast. But the great feature of the panorama was the grand spectacle of the whole chain of the Alps, from Dauphiné and the Viso to the Grande Casse, Mont Blanc, and Monte Rosa. The last range, in which the Matterhorn, Dent Blanche, Weisshorn, Breithorn, Twins, Lyskamm, and all the peaks of Monte Rosa itself were clearly identified, was most striking, soaring into the clear air, undimmed by the slightest vapour, across the impenetrable haze which, as usual, veiled the plains of Piedmont—a fairy-like vision, never to be forgotten. Nearer at hand were the Argentera, Gelas, and Caire Cabret. The last-named peak is very slightly higher than the Clapier. The Lago Long and the Val Gordolasca, whence came up the tinkling of the cowbells, the Lago Bianco and the valley of Entraque, were also included in the view, while to the E. a tangled mass of rocky peaks (many crowned with cairns), gradually decreasing in height, and among which none claimed supremacy, extended to the Col di Tenda.

Having spent 2½ hrs. in enjoying this wonderful panorama, the party, wishing to reach the Valmasca, descended for a few minutes along

the E. arête, until it became very jagged, then creeping down a narrow gully effected an exceedingly difficult descent down the very steep smooth rock wall to the glacier lying just N. of the Mont Clapier. These rocks are by far the most difficult bit of climbing which the party came across in the Maritime Alps. They spent 2 hrs. 50 m. in getting from the summit on to the glacier. Crossing the glacier, they reached in 10 minutes a col at the very head of the glacier, overlooking the extreme N.E. angle of the Val Gordolasca, which commands a fine view of the Viso, the two Chambeyrons, and of the Clapier, the rock wall, down which they had just forced their way, appearing most formidable. Halting a few minutes to watch nine chamois which were on the very top of the Cima di Lusiera and the manœuvres of two hunters who were stalking them, the party reached in three minutes across loose rocks a col just N. of the Cima di Lusiera, overlooking the extreme head of the Valmasca. Descending by snow slopes to a little lake, they followed the stream flowing from it, across a low buttress, down to a large frozen lake on the E. side of the Passo di Valmasca (20 minutes). Glissading down the snow, which entirely filled the bed of the stream, they gained the magnificent Lago Agnel, beyond which to the right were two other fine sheets of water. Following a track on the left bank of the lake they reached a ruined hut near its E. extremity, in less than an hour from the second pass. In 15 minutes more they gained the level of the main valley, and in half an hour more crossed by the third bridge to the right bank of the stream. Following a rough path high above the stream, they passed through fine woods and picturesque scenery, traversed a low shoulder, and descended into a rather extensive plain (55 minutes) dotted with châteaux. Traversing this, always on the right bank of the stream, they were forced by the approach of darkness to halt for the night at a house above a whitewashed building forming part of the hamlet of La Maddalena, where they were most hospitably entertained (20 minutes). They had been about 3 hrs. from the pass and 6 hrs. 5 min. from the top of the Clapier. The pass which leads from the Ghiacciaja di Mont Clapier to the Val Gordolasca may be named provisionally Passo di Mont Clapier; and that which properly leads from the Val Gordolasca into the Valmasca, Passo di Lusiera. It may be added, that the Piedmontese map is very fairly accurate in its delineation of the Gelas and Clapier group. The number of cairn-crowned peaks, which is rather bewildering, shows that the engineers have really taken some pains to survey this district. The Valdieri *massif* was being re-surveyed this summer. It is believed that the northern glaciers of the Gelas and Clapier group have not been previously explored, and that no published account exists of ascents of either of these two peaks. The Mont Clapier is well seen from the low Col della Madonna between the town of Valdieri and the Val Stura.

The following morning the party reached the Stabilimento Idropatico at S. Dalmazzo di Tenda in 2½ hrs. fast walking, by a stony path, shaded in the lower part by fine chestnuts.

On August 24, the same party visited the Laghi delle Meraviglie at the head of the Vallauria or Val della Miniera di Tenda, in order to

examine the mysterious rock drawings; and on the 25th went up to the inn on the Colle di Tenda. From this point they worked their way northwards to the foot of Monte Viso, over a succession of little-known passes:—viz. Colle del Sabbione to the town of Valdieri (4 hrs. 10 min. up, 5 hrs. 20 min. down), Colle della Madonna to Demonte in Val Stura (1 hr. 15 min. up, 1 hr. 50 min. down), Colle dell' Ortiga to Pradlèves, in the beautiful Val Grana (2 hrs. 40 min. up, 2 hrs. 40 min. down), Colle di Sibolet to Prazzo in Val Maira (5 hrs. 35 min. up, 3 hrs. 40 min. down), and Colle della Bicocca to Castel Delfino, in Val Varaita (5 hrs. 25 min. up, 1 hr. 45 min. down).

'From a climber's point of view the Maritime Alps cannot compare with other mountain groups; the views, however, are very fine, and, as they include the sea, probably unique, since—if we disregard the poets who have seen Venice from Mont Blanc—from no other Alpine summits (save the Viso and the Southern Dolomites) is the sea within range of vision, and from these it is far more distant. The flowers are very beautiful, and the valleys picturesque, though extremely warm in August. The inns almost everywhere are very fair and cheap, and, what is an attraction to some, the district is absolutely free from tourists. The weather is remarkably settled. From July 24 to August 31 we did not suffer from more than three wet days, besides two or three thunderstorms or showers. It may be useful for future travellers to note that, on the French side of the chain a passport is indispensable, and that a certificate of membership of the French Alpine Club is very useful. On the Italian side papers were never asked for. It will be found best to start early in the day, even for a short pass, and to rest on the higher slopes in the cool mountain air. Possibly June or September would be better months for exploring the district, but some of the Bagui do not open before the very end of June. I do not pretend to have completely explored this interesting group. Much still remains to be done, especially round Vinadio in the Val Stura, and at the head of the Val Maira; while even the environs of Valdieri are scarcely known, save to Signor Isaia, and possibly one or two other members of the Italian Club.'

W. A. B. C.

Cottian Alps.

COL DU VALLON LAUGIER.—*July 23.* Mr. Coolidge, with the two Almers, starting from Guillestre, mounted along the right bank of the Rioubel torrent, and passing through rather picturesque scenery reached in 2 hrs. 45 min. the lonely hamlet of Escreins, whence there is a fine view of the Pointe de la Font Sancte, the highest peak of the 'massif de Ceillac.' They had intended to cross to the valley of the Ubaye by the Col des Houerts (Bourcet's Col des Orches), but were dissuaded from doing so at Escreins. They accordingly followed a rough track, which led them in 1 hr. 5 min. past a seemingly impassable rocky barrier to the Vallon Laugier proper. Ascending through this first valley, always on the right bank of the stream, and passing through a miniature gorge, they reached in 35 minutes a stone hut at the entrance of a long and desolate upland valley, at the head of which was

the Col, gained in 1 hr. 25 min. more, the last part of the ascent being over snow slopes. It lies a little to W. of 'La Mortice—Signal' of the French map. A short descent over snow led to a wild glen strewn with huge blocks fallen from the surrounding peaks. Having ascertained from a shepherd that the direct descent led to the village of Grande Serenne, which was too far down the valley to suit them, the party in about half an hour from the pass struck to the left over a level plateau—a shoulder of the Grand Caire—and effected a very fatiguing and somewhat difficult descent over very steep grass and rocky slopes to the level of the Ubaye, not far from the Pont Voûté (or Pont du Croûtas), reached in 2 hrs. 35 min. from the pass. They then mounted by the ordinary path to Maljasset, the chief hamlet of the Commune of Maurin or Mary, at the extreme head of the valley of Ubaye. Total walking—Escreins to pass, 3 hrs. 5 min.; from pass to level of valley, 2 hrs. 35 min. This pass is not noticed in the guide-books or marked on the maps, but is well known to the people of the district. It may be named provisionally Col du Vallon Laugier.

POINTE DE LA FONT SANCTE OR DE LA FOND SAILETTE (3,370 mètres = 11,057 feet).—July 25. The same party made the second ascent of this peak, but by a new route. Starting from Maljasset, they followed the usual path to La Barge, and a few steps beyond struck up to the right by a faint track along the side of the torrent coming down from the Vallon Claus. In 1 hr. 10 min. from Maljasset they gained the opening of this secluded glen, the head of which is closed by a very fine rocky wall extending from the Panestrel to the Font Sancte. Mounting to the right, they passed over the summit of a prominent grassy mound, and thence by *débris*, rocks, and snow gained (in 1 hr. 50 min. from the opening of the Vallon Claus) the crest of the great E. arête of the Fond Sancte. The way thenceforward lay at first over snow slopes on the N. side of the arête, and then along the crest of the ridge, many pinnacles having to be surmounted or circumvented, though no very great difficulties were encountered. A number of cairns were erected on different points in this ridge. The ascent of the highest summit was effected by a very steep rocky wall, the rocks, however, affording good hand- and foot-hold. It was reached in 2 hrs. 35 min. from the time the ridge was struck. M. Novarese's pyramid and card were found on the top. The view was very fine, including the Dauphiné, Tarentaise, Mont Blanc, and Monte Rosa groups, besides the Monte Viso, Grand Ruben, Aiguille de Chambeyron, and many other peaks of the Maritime Alps. The villages of Ceillac, Escreins, and La Barge were all visible. A rocky point slightly to the S., which is very conspicuous from the Vallon Claus, is decidedly lower than the Font Sancte. Making a slight détour by the N.W. face, to avoid the last steep bit, the party then descended from the very base of the highest summit to the head of the Vallon Claus in 50 minutes by a well-filled and most convenient snow couloir, which, owing to their ignorance of the exact lie of the ground, they had not utilised in the morning. From the base of the couloir Maljasset was regained by the previous route in 1 hr. 25 min. Total walking—Ascent, 5 hrs. 35 min.; descent, 2 hrs. 15 min.

The Font Sancte is the highest point of the range to the W. of the

valley of the Ubaye. It is the meeting point of the valleys of Ceillac, Escreins, and Maurin. Bourcet's map marks its portion quite accurately; and from this map it will be seen that it is not identical (as has been maintained) with the Pointe des Orches, to which Baron von Zach assigned the absurd elevation of 3,995 mètres ('Le Alpi che cingono l'Italia,' p. 782), a height attained in reality by no peak nearer than the Pointe des Ecrins in Dauphiné.

A peak of this mountain, 100 feet lower than the highest point, was climbed, *vi* the Col de Girardin, and 'the S. arête' (query Eastern), from Maljasset, on July 18, 1865, by Messrs. R. W. Taylor and W. G. Adams, with J. B. Sinond.* They called it Pointe de Sainte Anne, from the chapel at the N. foot, and assigned to it a height of 11,278 feet. The first ascent of the highest summit was made from the Escreins side (by which the way does not seem difficult), by M. Henri Novarese, of Turin, with Emile Pic, of La Grave, on August 5, 1878; the view, however, being entirely concealed by clouds. M. Novarese and M. Guillemin call it Pointe de la Font Saille. This group has been hitherto much neglected. Apparently the only articles relating to it are a description by M. Novarese, in the 'Durance' of Embrun (numbers of 17-31 March, 1878), of an attempt in 1877 on the Henvières (3,273 mètres), a lower summit of the group, and some articles in the 'Durance' (August 10, 1879, and following numbers) by M. Lagier. On August 2, 1878, M. Novarese made a new pass between Escreins and the Ubaye valley, and climbed a point between the Font Sancte and the Henvières ('Durance,' Sept. 8, 1878). The peasants of the neighbouring valleys go on pilgrimage to St. Ann's Chapel on July 26. The name of the peak may possibly have some connection with the lake near the chapel.

POINTE DE MARY (3,129 mètres = 10,266 feet).—July 24. Mr. Coolidge, with the two Almers, starting from Maljasset, at the head of the valley of the Ubaye, in the department of the Basses Alpes, crossed the Ubaye, and then mounted a wooded shoulder above the marble quarry at the entrance of the Combe de Mary. Passing a ruined chalet, they ascended gradually over *débris* and snow to the W. arête, by which the summit was easily gained in $2\frac{3}{4}$ hours from the village. There is a stoneman on the top of this point, which, unnamed in the map, is known as the Pointe de Mary at Maljasset, from which it is very conspicuous. It is admirably situated as a belvedere for the neighbouring summits, and should certainly be visited by anyone proposing to explore this district. The view also included Monte Rosa, the Matterhorn, Weiss-horn, Dent Blanche, the Grande Casse, as well as the Dauphiné peaks and the Viso. This summit is destined to become the Gorner Grat of Maljasset. The return, shortened by glissades, was effected in an hour. No previous traveller seems to have visited this unequalled view point.

GRAND RUBREN OR RIOBURENT (French map, 3,341 mètres = 10,962 feet; 'Le Alpi che cingono l'Italia,' p. 764 (Turin, 1845), 3,369 mètres = 11,054 feet). (PEAK of 3,396 mètres = 11,142 feet, French

* *Alpine Journal*, ii. 207.

map).—*July 26.* The same party, starting from Maljasset, followed the path up the valley past the Lac du Paroird as far as the bridge leading to the right bank, near a marble quarry (1 hr. 25 min. from Maljasset). They then ascended steep and stony grass slopes to the upper entrance of the valley (25 minutes), crossed the stream to a road from a quarry, and soon reached the 'cabane des bergers' (15 minutes). Continuing to mount along grass slopes on the right bank of torrent, they bore gradually to the left, and by snow and *débris* reached (40 minutes) the edge of a great basin immediately to the south of the Rubren. Descending into this, they traversed snow-fields and mounted by snow and *débris* to the crest of the N.W. arête, just at the base of the final cone (1 hr. 5 min.), which was reached in 20 minutes more, or 4 hrs. 10 min. walking from Maljasset. There is not the slightest difficulty on the whole ascent. The summit is crowned by a massive 'signal,' built by the Italian engineers. The view was extremely fine; including the Viso, which from here shows to great advantage, Monte Rosa, Matterhorn, Dauphiné, Maurienne, Tarentaise, and Levanna groups. It is singular that this peak has not hitherto attracted greater attention. The only published account of the mountain seems to be the paper by M. François Arnaud, describing the ascent effected by himself and a party of friends on October 9, 1875.* After a long stay on the top, the party descended in 15 minutes by the S. arête to near its lowest point, whence, in 20 minutes, passing some small lakes, they reached the depression between the Rubren and the 'signal'-crowned peak, marked 3,396 mètres on the French map; the summit of which was reached in 15 minutes more. The view was similar to that from the other point, save that the Viso was even grander, and that two villages (probably La Chianale and La Maddalena Ruetta) in the Val Varaita, and some châteaux in the Vallon du Rau of the Piedmontese map, a branch of the Val de Bellino, were clearly seen.

Returning in 20 minutes to the lowest point in the S. arête of the Rubren, they regained the path in the valley of the Ubaye in 1 hr. 30 min. and Maljasset in 1 hr. 15 min. more, or 3 hrs. from the top of the Rubren. This expedition is strongly recommended to future travellers.

It may be noted that the Piedmontese map utterly ignores the existence of the Rubren, and that Bourcet's map spells the name 'Rieubrenque.' The Rubren is the pyramid crowned by a stoneman, which is seen from Maljasset at the extreme head of the valley.

AIGUILLE DE CHAMBEYRON (3,400 mètres=11,155 feet, French map).

July 28. The same party made the first ascent of this peak, the highest summit between Monte Viso and the Mediterranean. Starting from Maljasset, they mounted, through the Combe de Mary, to beyond the second hut, then bearing to the right and crossing two streams they reached the lowest of the Lacs de Marinét in 1 hr. 55 min. from the village. As the prospects of a successful attack from the north or east seemed doubtful, it was resolved to make an attempt from the west or south. In 50 minutes from the lake, over *débris* and snow, they reached the ridge at

* *Annuaire du Club alpin français*, ii. (1875), 237-242.

the head of the Vallon de Chillol. Mounting along it for 20 minutes, in the direction of the Aiguille, they then circled round the head of the Vallon de Chillol by means of steepish snow slopes on the N.W. flank of the Aiguille; and, climbing some rocks, reached a second ridge, overlooking the Vallon and Glacier de Chauvet in 50 minutes from the first ridge. Having ascended a snow slope immediately to the E. of the second ridge, they then took to the rocks, and after a rather difficult climb, including the crossing of several steep couloirs, they gained the westernmost and lower summit of the Aiguille (1 hr. 25 min. from second ridge). After building cairns on this and another point five minutes distant, they succeeded in descending by a slope of loose stones to the Glacier de Chauvet in 20 minutes; and in 10 minutes more regained the highest ridge, at the upper end of a very steep snow couloir, which is well seen from the north side. In this way a great tower on the ridge, which seemed to bar further progress, was turned. The party now mounted over a snow slope, which from below seems like a sort of 'Glacier Carré' on the rocky face of the Aiguille, and then scrambled up the rather difficult final rocks, of a reddish colour: thus reaching the true summit by the W. arête and face in 40 minutes after having regained the crest of the highest ridge, though it was thought that it would take far more time (6 hrs. 35 min. from Maljasset). Despite the late hour at which the summit was reached (1.20 P.M.), there was not a cloud in the sky, and the marvellous view included all the chief summits of the Pennine, Graian, and Tarentaise Alps, the Dauphiné group; the Viso, the Maritime Alps, and the immediately surrounding peaks being seen to especial advantage. A large cairn was constructed on the narrow space afforded by the summit. Returning in 40 minutes to the head of the above-mentioned couloir (the final rocks and snow requiring care in the descent), the party then descended straight to the Glacier de Chauvet, which is much larger than the map would lead anyone to believe, and glissaded down it. A short ascent brought them in 20 minutes to the ridge between the Vallons de Chauvet and de Chillol. Following their former route, they gained in 30 minutes the ridge overlooking the Combe de Mary, in another half-hour the Lac de Marinnet, and in 15 minutes more the track in the Combe de Mary, whence an hour's stroll brought them into Maljasset—3 hrs. 15 min. from the summit of the Aiguille. The return route should be adopted on subsequent ascents. It may be possible to ascend direct from the Glacier de Marinnet by the couloir already mentioned, but it is very long and extremely steep, especially at its upper end. However, the return to Maljasset could be made by the Glacier de Chauvet. The fact that the district has been so rarely visited by mountaineers can alone explain why this fine peak had not hitherto been conquered.

POINTE HAUTE DE MARY (3,212 mètres=10,539 feet, French map). *July 29.* The same party made the first ascent of this peak. Starting from Maljasset, they followed the ordinary path to the Col de Mary for 1 hr. 10 min. and then bore to the left over grass slopes and a very fatiguing succession of large unstable boulders of rock, towards the base of the desired peak. By means of a couloir, they then attained (1 hr. 55 min.)

the depression between the *Pointe de Mary* (3,129 mètres) and the *Pointe Haute de Mary*. They had hoped to find an easy route up the N. face, but after some investigation renounced this idea, and mounting a short distance along the ridge, descended to the western side of the mountain. The difficulty was how to attain a snow-field lying on the S. face of the peak. The party gained, by a steep snow slope, the ridge of a buttress, pierced by a curious natural hole in the rock, from which they succeeded with considerable difficulty in descending into and traversing a steep and narrow couloir, exposed to falling stones. The rocks on the other side proved much easier than they had seemed from below, and the snow-field was gained in about 1 hr. 50 min. from the depression between the two peaks. The summit, the easternmost and highest of three very shattered and unstable rocky pinnacles, was reached by a rough scramble in 20 minutes more. The view was similar to that gained from the other peaks in this district. The highest summit consists of two prongs, on each of which, as well as on the depression between them, cairns of no great size, owing to the insecurity of this lofty perch, were built; on the Western, also, were left nine feet of Mr. Buckingham's Alpine rope, together with the names of the party. Returning by the same route, the party regained the snow slope below the pierced ridge in 50 minutes from the summit, the traverse of the rocks being decidedly difficult, though not very long. From this point they descended by snow to the great collection of unstable boulders mentioned above, rejoining the path of the *Col de Mary* in 1 hr. 10 min., and reaching *Maljasset* in half an hour more. Total walking—*ascent*, 5½ hrs.; *descent*, 2 hrs. 30 min.

This was the last expedition made by the same party during their stay at *Maljasset*. They were favoured throughout by magnificent weather, and were thus enabled to commence the exploration of this district, hitherto utterly neglected by climbers, and which is still far from being exhausted.

BREC DE CHAMBETRON (3,388 mètres=11,116 feet, French map).—*July 31.* The same party made the second ascent of this peak—the first by a traveller. Starting from the village of *S. Paul-sur-Ubaye* (about 2½ hrs. below *Maljasset*), they followed the path up the valley to the village of *Grande Serenne*, crossed the *Ubaye*, and mounted by a rather stony path to the charmingly situated hamlet of *Fouillouze*, above which the *Brec* rises in all its majesty (1 hr. 45 min. from *S. Paul*). After keeping along the path by the right bank of the torrent for a few minutes, they took to a very rough and fatiguing track up steep stony slopes, which led them (1 hr. 40 min.) from *Fouillouze* to the *Lac Premier*. They then rounded the base of the *Brec*, passing several small lakes, and reached the ridge at its N. foot (1 hr. 15 min.), overlooking on one side the frozen *Lac des Neuf Couleurs*, and on the Italian side another small lake, not very far from the *Col de la Gippiera* of the maps. The *Aiguille de Chambeyron*, from which this side of the *Brec* had been carefully studied, rose steeply to the North. Crossing snow slopes to the foot of the Italian or E. face of the *Brec*, they then climbed across the face by easy loose rocks and four short couloirs or bands of snow to a conspicuous snowy ridge, not far from the *S. arête*. Mounting along this ridge, the slope becoming

finally very steep, they reached the lower end of a short narrow gully (not well seen from below), at that time partially filled with snow. Access to this gully was closed by a huge boulder, to scramble on to the top of which was the sole difficulty of the expedition, and was effected by means of an awkward step or two. The gully was climbed in a very few minutes, and the party reached the highest ridge between the two summits, that to the left or S., which is the highest, being reached in 1 hr. 45 min. from the Col de la Gippiera. The view, which was rather cloudy, included Monte Rosa, the Dauphiné peaks, Fouillouze, Grande Serenne, S. Paul, and some villages in the Val Maira. The summit ridge is composed of a spacious plateau gently sloping towards the west, with a largish patch of snow at its lower end. About its centre a large cairn has been built, and two others stand on the two summits on the E. rim of the plateau, i.e., exactly on the watershed. A large red flag and a card were left on the S. point; and having visited the two other cairns, the party returned by the same route to the Col de la Gippiera in 1 hr. 15 min. In 40 minutes more Lac Premier was passed, and thence Fouillouze was reached in 1 hr. 5 min., the rocky slope being exceedingly annoying on the descent. Thirty-five minutes more sufficed to reach the bridge over the Ubaye at Grande Serenne, and in three-quarters of an hour more S. Paul was regained: where the complete success of the ascent, despite all predictions to the contrary, had created considerable excitement, the highest point being plainly seen from the village. Total walking—ascend 6 hrs. 25 min., descent 4 hrs. 20 min. The ascent from S. Paul is longer and more fatiguing than would appear from these times, which are rather fast. Future travellers are advised either to sleep at Fouillouze, or to descend to the highest châteaux in the Val Maira.

The Brec was considered inaccessible till 1878. On July 20, 1878, the first ascent was effected by two natives of Fouillouze, Joseph Risoul and Paul Agnel, stimulated by the reward offered by the Barcelonnette Section of the French Alpine Club. Starting from Fouillouze at 11 P.M. they followed the route described above as far as the great boulder in the gully, when they struck to the right, over very steep rocks to the N. arête, and in this way reached the summit about noon. Having built three large cairns, they regained Fouillouze at 9 P.M., having surmounted, according to their account, unheard-of difficulties. 'I may state that before our ascent these two men were unwilling to indicate to us the exact route which they had taken. This we learned only on passing through Fouillouze after our ascent. We found the climb rather long, though offering no serious difficulty; our success was no doubt due to the close examination of the Brec which we had made from the Aiguille a few days before. It may be noted that Bourcet's map marks only the "Pointe de Chambeyron," by which the Aiguille is meant. It does not show the Brec, which on the Italian map is called "Roc de Chambeyron." The Brec is best seen from Grande Serenne or Fouillouze, and is a very fine rock peak.'

W. A. B. C.

COL VIEUX (2,738 mètres=8,983 feet).—*September 3.* The same party, having reached the Col Agnel from Castel Delino by the ordinary path, and wishing to reach Abriès that evening, traversed the slopes to the right, and gained in 30 minutes the Col Vieux, where the

Dauphiné peaks, with the addition of the Olan, are nearly as well seen as from the Agnel. On the col there are remains of the entrenchments of the Spanish troops, thrown up during the war of the Spanish Succession. A rough track, gradually becoming a good path, led, in 2 hrs. 20 min., leisurely walking, along the base of the curious Roche Taillante, by the Lacs de Foréant and d'Egourgeou and the chalets de Médille, through a picturesque gorge to La Chalp in the Guil valley, whence Abriès can be reached in 1 hr. 20 min. by the char road. It is said to be even shorter to mount the ridge to W. of the two lakes, about half way between them, and to descend along the torrent de Ségur to Ristolas, 40 minutes from Abriès. By either route Abriès can be easily reached in a day from Castel Delfino, without losing the very grand view of the Dauphiné peaks from the Col Agnel, or the sight of the N. face of the Monte Viso from the upper valley of the Guil; and as the Col Agnel is a mule-path, while the direct route, the Col de Vallante, is not, the walk, though rather longer, is much easier for poor walkers, or in case a traveller is indisposed.

MONTE VISO FROM THE NORTH (3,840 mètres=12,599, Piedmontese map; 3,845 mètres=12,615 feet, French map).—*September 5.* The same party effected the second ascent of Monte Viso from the north. Starting from a bivouac near the lake on the Italian side of the Col de Vallante (about $5\frac{1}{2}$ hrs. from Abriès), they mounted in 1 hr. 20 min. over *débris* and a long snow slope to the Col du Viso, between 'le Sedie Cadreghe' and the Viso itself. Thence they mounted, by easy rocks and a short couloir, to the northern face, reaching in 30 minutes from the col the upper rim of M. Guillemin's 'glacier en V.' The rocks of the great couloir leading to the upper névé being partially glazed with ice, the base of the couloir was traversed (the only approach to difficulty on the entire expedition), and the rocks to the right of it climbed without any trouble. The upper strip of névé was thus reached in an hour from the 'glacier en V.' Cutting straight up the slope to the upper rocks, the party, when nearly opposite a curious point in the jagged ridge above, resembling an inverted bell, bore to the left to the crest of the arête, and then doubled back till immediately under the above-mentioned point. A few steps revealed the easily accessible double-peaked summit ridge of the Viso, the left hand, or W. summit (that with the statuettes of the Madonna) being reached in 1 hr. 20 min. from the upper névé, or 4 hrs. 10 min. walking from the bivouac. The quick time may be attributed partly to the fact of the rocks being entirely free from snow, and partly to previous knowledge of the exact details of the route furnished most courteously by M. Guillemin. The view was entirely concealed by clouds. After having visited both peaks, the party descended by the ordinary route—a most easy, fatiguing, and tedious walk over loose rocks—to the great snow slope in the Vallon delle Forciolline in 1 hr. 35 min. from the summit. They had intended to cross by the shattered ridge to the west of that valley to the Col de Vallante, and so regain the Refuge des Lyonnais the same night; * but the

* *Annuaire du Club alpin français*, iii. (1876), 276–280.

weather becoming very unfavourable, they were forced to descend through the Forciolline valley in heavy rain by a very faint track, and found refuge for the night at one of the chalets at the junction of that valley and the Vallon de Vallante. Next day, in bad weather, they reached the Col de Vallante in 2 hrs. 5 min., the Refuge des Lyonnais in an hour, and Abriès in 3 hrs. 5 min., or 6 hrs. 10 min. from the chalets.

The first ascent of Monte Viso from the north was effected on August 12, 1879, by MM. Paul Guillemin and A. Salvador de Quatrefages, with Emile Pic of La Grave, after many gallant attempts in 1877 and 1878.* They followed the route described above, but stopping frequently to take photographs, employed 12 hrs. 10 min. (including halts) from the Col de Vallante to the summit, near which they were forced to bivouac, having encountered most serious difficulties. Under ordinary circumstances an active walker could probably make the ascent in a day from the Refuge des Lyonnais, a hut fitted up by the French Alpine Club in the upper valley of the Guil, high above the right bank of the stream, about $1\frac{1}{2}$ hr. below the Col de Vallante. It may be of use to note that the char road, in the valley of the Guil (which will ultimately be carried over the Col de la Traversette), extends at present a long way beyond La Chalpe—in fact, to within an hour of the Refuge des Lyonnais.

Dauphiné District.

TÊTE DES FÉTOULES (3,465 mètres=11,369 feet).—July 6. Mr. Coolidge, with Christian Almer and his son Christian, made the third ascent of this peak, and the first in one day from S. Christophe. Starting from S. Christophe, they reached in 1 hr. 10 min. by the usual path, the bridge over the Vénéon, leading to la Lavey. Following the path for 25 minutes farther to a rocky hollow, they then struck up to the left over *débris* and rocks, so as to gain the upper part of the mountain. In 2 hrs. 15 min. they had rounded a spur coming down from the Tête du Crouzet, and in 30 minutes had reached the right bank of the Glacier des Fétoules. Crossing the glacier in 45 minutes, when not far from the Col des Fétoules, they struck up the snowy face of the mountain, taking to the N. arête in 35 minutes, and reaching the summit in 50 minutes more. There was a cold wind, but the view was very fine. Total walking—ascend (slow) 6 hrs. 30 min.; descent 3 hrs. 10 min.

The first ascent was made on August 29, 1876, in 3 hrs. 35 min., walking from la Lavey, *vid* the N. arête, by M. E. Boileau de Castelnaud, with the two Gaspards.† The second ascent was made on the same day, an hour or two later, by M. Albert Guyard, with Henri Devouassond and Auguste Cupelin, who mounted from Les Etages to the Col des Fétoules at the N. foot of the peak, ascended it by the N. arête, and descended to la Lavey.‡

* *Annuaire du C. A. F.*, iv. (1877), 222-230; v. (1878), 42-57.

† *Annuaire de la Société des Touristes du Dauphiné*, ii. (1876), 123-125.

‡ *Annuaire du Club alpin français*, iii. (1878), 217-220.

TÊTE DE L'ETRET (3,563 mètres = 11,690 feet); **COL DE LA LAVEY** (3,320 mètres = 10,860 feet).—*July 8.* The same party, starting from S. Christophe, followed the usual path to the châteaux of la Lavey, and continued to mount along the side of the stream for about 50 minutes beyond. Then striking up to the left, they climbed over a buttress of the Etret, not far from the foot of the Glacier du Fond, and in 1 hr. 20 min. reached the right bank of a very broad, short glacier between the Etret and the Rouies, which the maps absolutely ignore. In 30 minutes the upper plateau was reached, and the party, bearing far to the left, gained in 50 minutes a point near the crest of the S. ridge of the Etret, where the knapsacks were left. An hour's walk over snow led to the foot of that peak; the second ascent of which was then made in 1 hr. 25 min. by the rocky SW. face, which is not so formidable in reality as it seems to be when seen from a distance (5 hrs. 55 min., walking from la Lavey). The view was fair, despite a slight snow storm. The first ascent was made by the same route on September 4, 1876, in 5½ hrs. walking from la Lavey, by M. E. Boileau de Castelnaud with the Gaspards.* Returning in 55 minutes to the knapsacks, they then traversed the snow-covered glacier to the right, and in 30 minutes gained the Col de la Lavey—the second passage (first crossed and named by MM. F. Perrin and A. Salvador de Quatrefages, with the Gaspards and Roderon, on June 28, 1878).† The Col is the W. edge of a little plateau of snow (called Col de l'etr on the map) enclosed between the Pointe des Etages, the Sommet des Rouies, the head of the Glacier du Vallon des Etages, and the Glacier du Chardon. In a few steps the previous year's route up the Pointe des Etages was rejoined, and an easy descent effected to the Glacier du Chardon, which was quitted in 50 minutes from the Col, the descent being very hurried, in consequence of unfavourable weather. La Bérarde was gained in 1 hr. 40 min. more, the party being considerably delayed by not being aware that the bridge opposite the village had been washed away, which obliged them to retrace their steps for a considerable distance.

All the existing maps are at fault in their delineation of this part of Dauphiné, ignoring the glacier mentioned above, and placing the Tête de l'Etret much too far north. On the maps of the French engineers 'etr' should be corrected to 'Etret.'

PIC DU SAYS (3,472 mètres = 11,400 feet).—*July 11.* The same party effected the first ascent of this peak. Starting from La Bérarde, they followed the usual route to the Col du Says until within a short distance from the Col (2¾ hrs.) Then striking up to the right over *débris* and snow, they gained in 1 hr. 10 min. a sort of snowy amphitheatre, shut in on all sides by steep rocks. At the head of this was a steepish snow couloir, the base of which was reached in 35 minutes. The party ascended this couloir in 40 minutes, and then climbing up the rocks to the left—the N. arête of the peak—rendered rather difficult by the quantity of snow still lying on them, reached the summit in 55 minutes. Stopping a short time only, owing to the lateness of

* *Annuaire de la S. T. D.*, ii. (1876), 129–131.

† *Annuaire du C. A. F.*, v. (1878), 81–89. Cf. *Alpine Journal*, ix. 94.

the hour, they traversed the whole of the highest ridge, building several small cairns, and then descended in 45 minutes by the rocky E. wall, which was easier than was expected, to the snowy amphitheatre. The route of the Col du Says was regained by glissades in 40 minutes, and La Bérarde in 1 hr. 55 min. more, the return journey being greatly facilitated by the vast quantity of snow in the Vallon de la Pilatte. Total walking (fast, as doubtful weather had delayed the start till 9.30 A.M.)—up, 6 hrs. 5 min.; down, 3 hrs. 20 min.

The map does not seem to be quite accurate here, as it was not possible to identify the peak, marked 3,409 mètres; the S. end of the summit ridge, which was reached, is just at the angle, but is certainly not 63 mètres (= 207 feet) lower than the N. end.

LE PLARET (3,570 mètres = 11,713 feet).—*July 16.* The same party effected the third ascent of this peak. Following the ordinary path up the Vallon des Etançons for an hour, they then struck up the slopes to the left some way before reaching the Torrent de la Clause, and without the slightest difficulty reached the foot of the glacier in 1 hr. 30 min. over stony pastures and moraines. The remainder of the ascent was effected under a most powerful sun. One hour over snow led to the base of the peak, and the party then mounted a steep snow slope and rocks, and thus gained the snowy E. face, up which they mounted nearly in a straight line to the summit, reached in 1 hr. 30 min. from the base (5½ hrs. from La Bérarde). The heat the last part of the way up was excessive; on the summit the thermometer in the sun stood at 100° (Fahrenheit). The view was very interesting, particularly towards the Meije and the range on E. side of Vallon des Etançons. The descent to La Bérarde by the same route, including a détour to examine the scene of M. Cordier's fatal accident, occupied 2 hrs. 40 min.

The first ascent of the Plaret was effected on June 7, 1877, by M. Henri Cordier, with Jakob Anderegg and Andreas Maurer. They mounted by the S. arête and descended by the N. arête. After having quitted the glacier, M. Cordier unfortunately lost his life by falling through a hole in a snow-trough into the glacier torrent.* The second ascent was made by M. Henri Duhamel with Giraud-Lézin, on August 12, 1878. From the base of the glacier on the descent they traversed the side of the mountain to the Tête de la Maye (2,708 mètres = 8,885 feet), a knoll above La Bérarde, commanding a fine panorama, and up which a good path has been constructed by the Isère Section of the French Alpine Club, by which the summit is reached in 1½ hr. from the village. M. Duhamel employed 4½ hours up the Plaret and 2¼ hours down.†

LE PAVÉ (3,831 mètres = 12,570 feet).—*July 19.* The same party effected the first ascent of this summit, which had been ignored by all maps previous to the excellent one published by M. Duhamel in the last number of this Journal. Starting from La Bérarde, they followed the usual track up the Vallon des Etançons to near the foot of the

* *Alpine Journal*, viii. 285.

† *Annuaire du C. A. F.*, v. (1878), 117–121.

Meije (4 hrs.), then bore to the right, and mounted by a steep snow-covered glacier (a tributary of the Glacier des Etançons), to an upper plateau, at the head of which rose the desired peak, which from this side appears as a rocky knob, whereas from the Lautaret Hospice its lozenge-shaped snowy face is rather conspicuous. After a détour to the ridge to the S. overlooking the Glacier des Cavales (the 'Col' of M. Duhamel's map), the party then mounted in 50 minutes by a snow couloir to the crest of a buttress, and then took to the rocks of the W. face on their right. So much snow lay on the rocks that serious difficulties were encountered, and 1 hr. 40 min. consumed in gaining the summit (7 hrs. 20 min. from La Bérarde). As the peak is shut in by the higher summits of the Pic Oriental of the Meije and the Pic Gaspard, the distant view is confined; but this is compensated by the extraordinary and marvellous glimpse of, so to speak, the internal topography of the Meije. The aspect of the great S. wall, the apparent insanity of attempting to reach the Glacier Carré even by the route now usually followed, and the curiously insecure appearance of the Pic Central of the Meije, combine to make the view from this point one of the most remarkable in Dauphiné. Its position also above three great glaciers renders the view of the highest topographical interest. After building a cairn, the party regained the crest of the buttress in 1 hr. 50 min. with considerable difficulty, the base of the peak in 35 minutes more, the Hôtel du Châtelleret mainly by glissades in 50 minutes, and La Bérarde in 1 hr. 25 min.; total descent, 4 hrs. 40 min. In a season when there is less snow on the rocks, the ascent would probably be found much easier. The name of the peak is derived from the supposed resemblance of a moraine on the Glacier des Cavales at its foot to a street pavement. Some authorities attribute the name to the Pic Gaspard.

PIC JOCELME (3,437 mètres).—Messrs. Charles and Lawrence Pilkington and Frederick Gardiner, *unaccompanied by guides*, made the first ascent of this peak on *July 12*. Seen from La Chapelle-en-Godemar, it appears to have two summits. To each of these a distinct name has been assigned by the French Ordnance Survey, the names Bonvoisin and Jocelme being respectively given. This is a mistake, as there is only one mountain known at Le Clot-en-Godemar as Pic Jocelme; the name Bonvoisin is given by the natives of Vallouise to a fine and higher rock-peak farther east. The Pic Jocelme must not be confused with the Pic Jocelme on the ridge of Les Bans, marked 3,585 mètres, the first ascent of which was made by the above party last year. The northern faces of the Jocelme fall precipitously to the Val des Bans and the Col du Sellar; towards Le Clot a broad ridge stands out, separating the valleys leading to the Cols du Loup and Sellar. This ridge rises sharply to the crest, a rocky edge, about half a mile long, running in a N.E. direction to the summit. From this ridge two spurs descend to the snow-field on the S., one from the S.W. end, the other from near the middle; beyond this second spur the S. face is covered with snow to the summit. Bivouacking under some rocks above the right bank of the glacier stream flowing from the Col du Loup, a start was made at 2.30 A.M. Mounting rapidly

up steep grass slopes directly above the sleeping-place, and crossing a kind of plateau, the broad ridge was struck in $1\frac{1}{4}$ hr. After keeping along it for half an hour, nearly two hours were lost in making a détour on the left to examine the N.W. face; not liking the look of it, the ridge was again taken, just where it begins to narrow. From here an hour's climb over excellent rocks led to the top of the first spur; on gaining which they were surprised to find that the S.E. face of the mountain was covered with snow and glacier; beyond which, farther to the S.E. rose a fine rock peak, afterwards found to be the Pic Bonvoisin of Vallouise, whose height and name are ignored in the 'Carte de l'Etat Major.' Descending on to the snow, the second spur was reached in half an hour, and the top in half an hour more; time 9.30 A.M. View good. The descent was effected by the snow-covered glacier, mentioned above. Passing first under the true Bonvoisin, then keeping well to the right, the route from the Col du Loup was joined, and the bivouac reached in 1 hr. 40 min. from the top. The ascent by the ridge is recommended; the view from it is beautiful; the climb pleasant. Those who do not object to being fleeced, will find fair quarters chez Jourdan at Le Clot.

COL DES NAVETTES—CHAILLLOL CONE—MONTAGNE DE L'OURS.—The same party, *without guides*, made the first ascent of these peaks, and crossed a new col between them (for which they propose the name Col des Navettes), on *July* 15. Sleeping the previous night in a shepherd's hut, $1\frac{1}{2}$ hr. up the Val des Navettes from La Chapelle-en-Godemar, they started at 3 A.M. in very unsettled weather. Passing first over *débris* and avalanche snow to the head of the valley, then up the glacier, descending from the col between the Chaillol Cône and Montagne de l'Ours, the bergschrund was reached at 5.30 A.M. From this steep snow slopes lead up to the col; but as these slopes were covered with more than a foot of powdery new snow, they were obliged to keep to the left, and in attempting to cross to the col were forced on to the steep rocks, which were rendered so extremely difficult by snow and ice that nearly two hours were spent in reaching the ridge, a climb of about 150 feet; a few minutes more, and the col was gained. Time 9 A.M. While halting here, the mist lifted, disclosing the Chaillol Cone rising steeply up, the northern face guarded by dangerous snow. Leaving the col and passing round the southern base of the peak, an attack was made on the S.W. flank, and the top reached at 10.15 A.M., after a stiff climb of $\frac{3}{4}$ of an hour up steep loose rocks. The descent began at 11 A.M., and it was nearly midday before the foot of the final peak was regained; the col was reached in 20 min. more. Keeping along the ridge past the 'mauvais pas' of the morning, the Montagne de l'Ours (an insignificant peak marked on the Gap sheet of the 'Carte de l'Etat Major,' 3,211 mètres, a height probably belonging to the Vieux Chaillol), was reached without difficulty. From the top of this peak a steep snow slope led back to the 'bergschrund,' and in another hour the hut was regained. Time, 2.20 P.M. The Col des Navettes was afterwards completed by two of the party, *without guides*, on *August* 5. The ascent could be made direct from La Chapelle in 6 hrs., and Les Barelles-en-Champoléon reached in 3 hrs. more by de-

ascending straight down from the top over easy snow slopes, and keeping rather to the left over fine alps to the Châlets de Tourond, from which a good mule path leads down to the valley of Champoléon.

COL TUCKETT—CRÊTE DU GLACIER BLANC, or PIC DES AGNEAUX (Pic Signalé, 3,660 mètres).—Messrs. Lawrence Pilkington and Frederick Gardiner, *without guides*, made a new pass, which they wish to call Col Tuckett, effecting a new ascent of the peak marked in the map Pic Signalé, 3,660 mètres *en route*. Sleeping at the foot of the Glacier de Monestier in the Val di Tabuc, under a roof of fir and juniper, made by them on discovering the non-existence of the 'Refuge Chancel,' marked in M. Guillemin's map, a start was made on the morning of *July 30*, at 1.30 A.M. Mounting up the Glacier de Monestier for 1½ hr., and then bearing to the right across undulating snow fields, they struck the southern ridge of the Pic Signalé, reaching the depression nearest that peak at 6.45 A.M. Turning along the ridge, a climb of 40 minutes over loose rocks on the E. face, brought them to the top at 7.30 A.M. This being the highest point of the group NE. of Les Ecrins, the view is extensive, but not so grand as from the neighbouring and lower Pic des Arcas. On a cairn on the summit a champagne bottle was found, in it Mr. Coolidge's card. After staying an hour on the top, they returned in 30 minutes to the Col. From here a descent was effected on the western side. Keeping down for about 20 minutes to the head of an icefall, but not liking the look of it, they climbed over a ridge on the left and down a couloir and rocks on the other side to a lower snow field just under the icefall. From this the glacier broadens out, and was descended without any great difficulty, and the Hôtel Tuckett reached at 10.50 A.M., from which the usual way to Vallouise was followed. The exact height of the Col was not taken, but it cannot be much under 11,500 feet. M. Guillemin has restored the name Pic des Agneaux (see Bourcet's map) to the Pic Signalé, 3,660 mètres, which is the name given to this peak in Bourcet's ancient map of Dauphiné. This expedition can be strongly recommended, both for the interesting nature of the climb and the superb views on both sides of the pass and from the Pic Signalé.

PIC BONVOISIN (3,506 mètres); COL DU LOUP.—The same party, *without guides*, made the first ascent of this peak on *August 1*. This is the mountain known at Ville Vallouise (from which place it is very distinctly seen), as the Pic Bonvoisin; its name and height are both ignored by the French Government map, but the long eastern ridge is marked Crête de Bonvoisin. It is the highest point in the semicircle of peaks between the Pic des Opillous 3,506 and Sirac 3,438 mètres. The name Bonvoisin having been incorrectly given by the French surveyors to one of the secondary peaks of its neighbour, the Jocelme, the above party suggest that its proper name be restored to it. Sleeping at a shepherd's hut in the Vallon de la Selle, 2 hrs. above Entr'Aigues and 4 hrs. above Ville Vallouise, on the night of *July 31*, a start was made next morning at 1.30. After wasting 2 hours in trying a route pointed out by the natives, the Col du Loup was crossed at 8 A.M., probably at the same place taken by Mr. Coolidge. Hurrying

down the snow slope on the western side for nearly a thousand feet, they turned sharply to the right, up a steep arm of the glacier flowing from the Pic Jocelme, which landed them at the foot of the Pic Bonvoisin. On this side the mountain presents a rocky face very jagged at the top; to the right a bay of snow runs some distance up the face. This snow had been fixed upon as the route for the ascent, but as some falling stones were seen it was decided to try the rocks near the edge of it. Starting afresh at 10.45 A.M., and mounting for half an hour over rocks and snow they turned a little to the left up steep loose rocks, and in half an hour more a lower summit was ascended by mistake, from which the true summit was seen towering up in the direction of Vallouise. The ridge connecting the two peaks seemed to be a collection of small towers, at the end of which a large one rose high above the rest; beyond it was the top. After an hour's up-and-down climbing under the smaller towers, the foot of the large one was reached; then followed a rough awkward scramble to the arête beyond. Keeping along this (except where a cleft had to be passed by descending on the northern side), the top was reached at 12.20. It lies at the E. end of an almost level arête, the mountain falling away sharply on either side. Beginning the descent at 1 P.M., and returning to the foot of the big tower, the morning's route was followed until directly above the point where the rocks at the foot of the peak were ascended; striking straight down to these by a low mound-like ridge, the snow at the foot of the peak was regained at 3.20 P.M. The Col du Loup recrossed at 4.40 P.M., and the hut in the Vallon de la Selle re-entered at 6 P.M. This ascent could be made with less fatigue and in less time from Le Clot-en-Godemar; but it is not an expedition to be recommended, the danger from falling stones being quite unavoidable. The route taken on the descent is probably the safest.

PIC VERDONNE, OR CIME DE CHABOURNEAU (3,324 mètres).—The same party, *without guides*, made the first ascent of this peak on August 3. Passing the previous night in a ruined hut half an hour above Chaumelle in the Val de Champoléon they started up the valley at 1.40 A.M. Reaching in a few minutes the point where the stream divides, the branch running from the Pas de la Cavale was crossed (not without difficulty), and the left bank of the other followed to the head of the Vallon de la Pierre, as the N. glen at the extreme head of the valley of the Drac is locally called. (Bourcet calls it by the same name.) Making their way up the steep grass slopes beyond, they reached the easier slopes below the large nameless triangular glacier between the Pic Verdonne and the Crête des Bouchiers at 5 A.M.; here a good view of the peak was gained. Rising straight up from the glacier, it appears double-headed, the summit being on the extreme right. To the left the mountain sinks gradually down to a depression, from which a couloir falls to the glacier below; crossing the glacier and mounting this couloir the depression was reached at 6.15 A.M. Turning to the right, and holding a nearly level course over the steep loose western face, they struck up to the crest of the mountain beyond what had appeared a lower peak from the glacier on the southern side. In a few minutes more the top was reached by a good firm arête. Time

7.30 A.M. Remaining an hour on the top, they then descended by the same route, the depression being reached at 9.15 A.M., and the hut easily at 11 A.M. Rather more time should be allowed for this expedition, as the latter part of the ascent was much hurried to avoid falling stones which evidently fall later in the day. This peak is known as Pic Verdonne at Champoléon and Cime de Chabourneau at Le Clot-en-Godemar.

VAL CHAMPOLÉON; SIRAC (3,438 mètres); VIEUX CHAILLOL.—The same party, *without guides*, visited the Champoléon district, hitherto almost unknown to English travellers, and on August 4 made the second ascent of Sirac and the first from Champoléon. Passing the night of the 3rd at the miserable village of Les Auberts, they started at 2 A.M. up the Val d'Isora for the Col de Vallon Pierre, crossing which, and skirting under the S.W. ridge, they climbed slightly to the right of the western glacier, and completed the ascent by the route taken by Mr. Coolidge in descending. They returned to Les Auberts at 2.30 P.M.

On August 5, the same party, *without guides*, made the ascent of the Vieux Chaillol—first ascent by English mountaineers. The ascent is monotonously easy, and it has been frequently made by the people of the country. The monotony of the ascent is amply repaid by the superb view from the summit, comprising nearly every peak of importance in Dauphiné, and an extensive view of the hill and dale country to the south.

The Champoléon Valley had been entered from Vallouise by the Pas de la Cavale, a pass well known in the district. It is made up of two cols on either side of the peak, marked 2,897 mètres, at the head of the Val de Fournel. Another way of crossing over from Vallouise to Champoléon is by a col leading from the glacier S.E. of the Col du Loup to the glacier S.E. of the Pic Verdonne, locally known as Col du Loup de Champoléon. The head of the Val Champoléon is desolate in the extreme, the highest settlement is Chaumeille; but the mountaineer will find better quarters at Les Auberts, about $\frac{3}{4}$ hr. lower down the valley, from which there is a good mule path, leading in $1\frac{1}{4}$ hr. to Les Barels, from which the Val Godemar may be reached by the high glacier Col des Navettes in 9 or 10 hours. About six miles farther down than Les Barels very fair quarters may be found at the inn at Le Pont du Fossé.

Besides the new expeditions described in the foregoing notes, Messrs. Charles and Lawrence Pilkington and Frederick Gardiner effected the following expeditions *without guides* :—

July 7th.—Fourth ascent of the Aiguille du Plat, 3,602 mètres, ascending from and descending to St. Christophe, by Mr. Coolidge's route.

July 9th.—From St. Christophe to Le Désert-en-Jouffrey, by the Col des Berches.

July 10th.—From Le Désert to La Chapelle-en-Godemar, by the Col de la Vaurze.

July 17th.—Fourth ascent of the Pic Olan. Reached the central peak at 8 A.M., in $3\frac{1}{2}$ hrs. actual walking from the glacier. This is the

peak ascended by Mr. Pendlebury. The party was caught in a very severe snowstorm, and therefore unable to proceed to Mr. Coolidge's peak only about an hour distant; it seemed to them about 6 feet higher than the summit on which they stood; this, however, is a disputed point—Messrs. Guillemain and Salvador de Quatrefoies incline to the opinion that Mr. Pendlebury's peak is highest.

July 19th.—From Le Clot-en-Godemar to La Bérarde, by the Col du Says.

July 25th and 26th.—Fourth Ascent of the *Grand Pic de la Meije*, 3,987 mètres.

July 28th.—Crossed the Col des Cavalles from La Bérarde to La Grave.

August 2nd.—Crossed the Pas de la Cavale from Entr'Aigues to the Valley of Champoléon.

M. Duhamel sends the following notes:—

COL DES CORRIDORS DE LA MEIJE.—From the Glacier de la Brèche to the Rocher de l'Aigle—8 hrs. from the N.W. foot of the W. peak to the Rocher de l'Aigle. Guides, Pierre Gaspard and Giraud Lézin. A climb up ice slopes, exposed to continual falls of séracs—too dangerous to be recommended for repetition. This was the unanimous opinion of our party.

COL DE CLAIRE, between the Pic Gaspard and the Pic de Neige de Lautaret.—Ascent of 6 hrs. from Villard d'Arène to the col by the Glacier de l'Homme, up rocks and ice couloirs. Descent in 3 hrs. by the Glacier Supérieur des Cavales to the Refuge de l'Alpe. The descent is exposed to falls of rocks.

COL DE CASTELNAU, between the Pavé and the Col des Aigles (N. of the Col de Chamois).—5½ hrs. from Refuge de l'Alpe to col. Descent to La Bérarde 4 hrs. 30 min. Magnificent view.

ROCHER DE L'ENCULA. **COL DE PETIT PIERRE**, between the Rocher and Pic de Clochâtel.—5½ hrs. from La Bérarde to col, by Glacier du Vallon des Etages. Ascent of peak (the first recorded ascent) 1 hour; descent, by Glacier du Chardon to La Bérarde, 4 hours.

COL DE L'ÉTRET, between the Tête de l'Étret and the Pic des Etages. Ascent in 6 hrs., from La Bérarde; descent to St. Christophe in 5½ hours.

COL DE LA GANDOLIÈRE, between M. de Castelnau's Col de la Selle and the Tête de la Gandolière.—5 hrs. up from St. Christophe; 1 hour descent to the Hôtel du Châtelleret in the Vallon des Etançons.

Graian Alps.

POINTE DE CERESOLE, OR PIC DE LA LUNE (3,787 mètres).—*August 5.* Mr. G. Yeld, with Alphonse Payot of Chamonix, and Léon Guichardaz of Cogné (as porter), left a royal hunting chalet (in a semi-ruinous state) about 2 hrs. 45 min. from Cogné, at 3.15 A.M. Having climbed up by the buttress of rock between the ice-falls of the Tribulation Glacier, they reached the foot of the peak to the left of the Col Chamonir, and ascended—partly by snow, partly by rocks—to what seemed to be the summit, but when this was reached, it was seen that

the true summit was more to the east; this was reached in 15 minutes by an interesting rock climb. Approximate times: from ch  let to summit, about 6 hrs.; descent to Cogne about 5 hrs. This is believed to be the first ascent from Cogne.

ONDEZANA (circa 3,550 m  tres).—*August 7.* The same party left Cogne at 2.8 A.M. They struck the ridge which divides the Valeiglia from the Val Piantonetto almost halfway between the Ondezana and the Col Telleccio, and then passing along this ridge turned to the right, and struck the south-west ar  te of the Ondezana itself at 8.50. The view from this point was very fine. The summit, which was reached at 9.20, commanded a magnificent prospect, including part of the plain of Italy. They turned to descend at 11, and reached Cogne, without any hurry, at 3.43 P.M. This expedition can be strongly recommended. The climb, after the Valeiglia Glacier is reached, is interesting in itself, and the scenery equally so. In less snowy seasons it is possible that the couloir to the east of the Ondezana might offer a shorter route. The mountain has been several times climbed before, by Signor Baretti; from Valsoera, in 1877, by Signor Montaldo; and from Cogne from the S.W. in 1878, by Signor Marinelli.* Five bouquetins were seen on the ascent, and two on the descent.

GRANDE SERRE (3,600 m  tres).—*August 9.* The same party left the H  tel de la Grivola at 1.50 A.M. to make the first ascent of this peak from the Cogne side. Having ascended to the Col de l'Herbetet, they followed the ar  te leading up from it for some time, then traversed snow slopes on the Val Savaranche side; and again taking to the ar  te, reached the top at 9.25. They left the summit at 10.5, and crossing the Glacier de la Grande Serre struck the route of the Col de Lauzon, a little above the 'campement du roi.' Cogne was reached at 1.20 P.M. This peak was first ascended from the Val Savaranche side in 1875 by Signori Vaccarone and Gramalgia.†

GRAND PARADIS. FROM THE POINTE DE MONTANDAYN  .—*August 11.* The same party left a ch  let about 3 hrs. 20 min. above Cogne at 1.45 A.M. For about 45 minutes they followed the route of the Col de l'Herbetet, and then turning to the left gained the Dzasset Glacier. They then descended the cliffs which separate the Dzasset Glacier from the Plan de la Tribulation by a rather difficult couloir. The Pointe de Montandayn   was reached at 9.35. They then ascended the Grand Paradis by the great northern ar  te, keeping the actual ridge, except where they had to pass two patches of ice-fringed rocks, with a steep ice couloir between, which they crossed a little below the ar  te on the Val Savaranche side. The summit was reached at 11.46. They descended to Ceresole by the Col de Mont Corv   and Colle della Torre; but, owing to a dense mist which prevailed below the Breuil basin, did not gain the Stabilimento till 8.53 P.M. (having left the summit at 1.0 P.M.)

* *Bollettino del Club Alpino Italiano*, No. 39, p. 392.

† *Bollettino del Club Alpino Italiano*, No. 36, p. 500.

Mont Blanc District.

AIGUILLE DU DRU, W. PEAK.—On August 29 three Chamoniards—Jean Charlet of the Club Alpin Français, Prosper Payot, and Frédéric Polliguet—made the first ascent of this peak. It is seen from Chamonix in front, and to the left of the (67 feet) higher E. peak, which is also visible from the village.

AIGUILLE DU CHARDONNET.—On August 1 Mr. Percy W. Thomas, with Joseph Imboden and J. M. Lochmatter, made the first ascent of the Aiguille du Chardonnet from the Glacier du Tour.

Leaving Argentière at 2.40 A.M. they followed the right bank of the Gl. du Tour, and gained the summit at 11.10 A.M., the latter portion of the ascent being varied by a rock climb of unusual interest. They returned to Argentière at 3.25 P.M. This would appear to be the second time only the mountain has been ascended, no one having been up since Mr. Fowler made the first ascent from the Argentière Glacier in 1865. It is surprising that such an interesting expedition should have remained so long unnoticed, as not only is the climb not to be despised, but the view from the summit is superb.

AIGUILLE DE TALÈFRE (12,287 feet).—On August 25, 1879, Messrs. F. J. Cullinan, J. Baumann, and Gerald Fitzgerald, with Laurent Lanier and Emile Rey of Courmayeur, and Joseph Moser of Täsch, as guides, made the first ascent of the Aiguille de Talèfre.

Starting from the Montenvers at 2.15 A.M. they reached the lower end of the Glacier de Pierre Joseph, and ascending that glacier gained the rocky face of the Aiguille to the right of two broad snow couloirs, which descend from the Aiguille to the glacier. The party then bore to the left, crossed the two couloirs not far from their base, and ascending the rocks for a short distance, recrossed the left-hand couloir, and reached a small rocky ridge lying between the two couloirs. The party climbed along this ridge which led straight up to what had appeared to be the highest summit of the Aiguille; but on reaching it, another summit, apparently a few feet higher, to the north of, and joined to the first one by a short snow arête, was discovered. This latter summit was attained at 10.25 A.M. The view from the summit was very fine, and no difficulty was found in the ascent; but the rocks all through, though otherwise easy, were extremely unsound, and some danger from falling stones exists, in the descent especially, in crossing the lower part of the couloirs. Lanier led, faultlessly, throughout the expedition, which was planned by him.

Pennine Alps.

MITRE DE L'EVÊQUE.—Sept. 22. Mr. Cust, with the guides Jean Martin of Vissoie and Pierre Beytrison of Evolena, made the first ascent of the peak, intermediate in height and position, between Mont Collon and l'Evêque. The above name is proposed for it, as the mitre-like aspect of its double summit seen from the Arolla side may have aided the naming of its higher neighbour.

Leaving Arolla at 3.20 A.M. they ascended from the Arolla Glacier the broad snow couloir S. of Mont Collon to a gap at its head on the side away from the latter (5½ hrs. walking), utilizing the steps made

two days previously, when Mr. Cust, with Martin, crossed this gap, returning by the Col de l'Évêque, circumstances having then prevented a further attempt on the peak. The arête was followed to the final rocks, which were scaled by a difficult climb of some 25 ft. on the E. side. This may be avoided by a traverse on to the other side. The summit, a narrow point of rock, about 750 ft. above the col, was reached in 2 hrs. 9 min. from the latter. An easy descent was made on the W. side, partly by the rocks and partly by the snow couloir between the two summits in $\frac{3}{4}$ hr. to the foot. Missing the Col de l'Évêque in a thick mist, they descended from the main ridge directly by the rocks to the Glacier de Collon, reaching Prerayen at 6.10.

COL DES ROUSSES, COL DE BLANCIEN, BEC DE BLANCIEN.—Sept. 23. The same party made a new pass from Prerayen to the Otemma Glacier. Leaving Prerayen at 5 hrs. 40 min., they ascended a snow couloir on the W. side of the Combe d'Olen, opposite the Glacier de Collon, leading to an easy snow col at the head of a side valley descending to the Valpelline, above Bionaz. The couloir is broad and of a slight inclination; but its lower part being exposed to stones from the rocks at the side, it is desirable to pass it early. Walking time, to foot, 2 hrs. 5 min.; to top, 1 hr. 21 min.=3 hrs. 26 min. from Prerayen; height (by aneroid) about 10,950 ft. Easy snow slopes on the right led in $\frac{3}{4}$ hr. to a gap in the main ridge, height about 11,700 ft., commanding a splendid view, uninterrupted, except on the Blancien side. To this it is proposed to give the name *Col de Blancien*. The lower col is not likely to be used separately, but might be called *Col des Rousses*.

W. of the upper col is a low summit, which may be reached in a few minutes, forming the highest point of the main ridge at the head of the snow valley descending to the Otemma Glacier. Beyond this is a deep depression, in which lies the Col d'Otemma. E. is the S. summit, (of which the first ascent apparently was made by the present party), on the lofty ridge, nearly a mile long, variously called La Sengla and Bec de Blancien (Reilly). This ridge is rugged and broken in the middle, rising into peaks at either end, which deserve separate consideration. The Federal map gives the name La Sengla to the main ridge, and Blancien to that descending from the S. end to the Combe d'Olen. The former name being reserved for the higher N. peak, the name *Bec de Blancien* is proposed for the S. peak. It is 12,015 ft. in height, is easily reached from the col (in little over $\frac{1}{4}$ hr.), and affords a panoramic view of surprising beauty. The Otemma Glacier was reached by an easy descent in 37 min., and Arolla, by the Pièce Glacier, in $3\frac{1}{2}$ hrs. walking, from the col.

The Col de Blancien offers one of the finest passages in this part of the Alps. It may be taken from Arolla to Bionaz; but is especially available from Prerayen to Chermontane, the Otemma Glacier being reached in less than 5 hrs. from Prerayen.

Monte Rosa District.

MATTERHORN BY THE ZMUTT ARÊTE.—September 2, 3. Mr. A. F. Mummery, Alexander Burgener, T. Petrus, and A. Kentinetta, left a 'gîte' about 1 hr. above the Zmutt Glacier at 4.15 A.M., and climbing by easy

rocks on to the snow arête, reached the rocky teeth at the end of it without difficulty. Beyond these teeth the arête became impassable, and it was necessary to turn to the left up a very steep slope of loose rock mixed with ice and snow. From the top of this the arête was again followed for a short distance, when it became easy to turn to the right and climb straight up in the great couloir, on to the ledge traversed by the Italian guides in the first ascent from Breuil. Regaining the Zmutt arête at 1 P.M., the summit was reached at 1.45 P.M.

THE MATTERHORN FROM THE TIEFENMATTEN GLACIER.—On *Sept. 3* Mr. W. Penhall, with Ferdinand Imseng and Louis Zurbrücken, ascended the Matterhorn from the Tiefenmatten Glacier, reaching the top after Mr. Mummery's party.

'Leaving Zermatt at 10 P.M. on the 2nd, we went up the Zmutt Glacier to a point nearly opposite the Stockje; then climbed a snow slope on the left, above which some rocks soon brought us to the head of the Tiefenmatten Glacier, where we waited for daylight. We then crossed the face of the mountain diagonally to the gully on the right, or south, side of the Zmutt arête. The gully was passed almost horizontally, and we struck the arête near, but probably rather below, the point where the Italian guides got on to it in the first ascent from Breuil. The rocks of the face were steep and difficult, though for the most part firm. In the middle of the ascent we lost over two hours, having to retrace our steps for some distance.

'The time occupied from the glacier to the top was 10½ hrs., or, excluding halts and time lost, 7 hrs. actual walking.'

Mr. Baumann sends the following note:—

'On September 5, I engaged Petrus as leading guide, and started with my own guide, Emile Rey, at 3 P.M. for the Matterhorn by the new route. At 8 P.M. we reached our sleeping-place at the foot of the great ice slope which forms part of the Zmutt arête. At 4 A.M. on September 6 we commenced operations, and making use of the footsteps cut up the ice slope by Mr. Mummery's guides, reached the rocks at 5 A.M. In another hour we arrived at the overhanging rocks, a point which had been described to me as very difficult and even dangerous; but coming as I did straight from the really formidable rocks of the Dru, I found it simply an interesting rock climb, presenting no extraordinary difficulties. This point is turned by leaving the arête, and taking to the face of the mountain to the right of the arête; and I have the intention (if you can find space for me in the "Journal") of elaborating a view of the mountain from this side, and indicating the exact route followed by us. At 8.45 we arrived at the summit, having spent a good half-hour over breakfast. The actual climbing did not occupy more than 4½ hrs., and I am of opinion that this ascent by the Zmutt arête will in future become the favourite way of crossing the Matterhorn for those who appreciate a good and not too dangerous rock climb. The greater part of the ascent is effected on the arête, consequently the danger of falling stones is reduced to a minimum.'

THE WEISSHORN, FROM ZINAL.—*Aug. 12, 13.* Mr. G. A. Passingham, with Ferdinand Imseng and Louis Zurbrücken of Macugnaga, as guides, having slept at the base of the Zinal cliffs of the Weisshorn,

climbed straight up their face to the summit in $11\frac{1}{2}$ hrs. from the bivouac. They descended to Randa by the usual route. Full particulars of this difficult climb will be given in the next Number.

ALPHUBELHORN.—‘On August 8 I left the Täsch Alp Châlet at 3.55 A.M., accompanied by the guides Peter Taugwalder and Abraham Imsegg, for an ascent of the Alphubelhorn by the western face. We followed the ordinary route to the Mischabel Joch for a short distance, and then crossed the Weingarten Glacier to a point nearly under the summit of the mountain. We attacked the rocks at 6.55, and found them continuously difficult throughout the ascent, for not only were they much glazed with ice, but the dip of the strata was outward: we observed, however, exceptionally few falling stones. Two short ice couloirs were ascended with considerable labour and expenditure of time; a third proved to be impracticable, and we were obliged to retrace our steps as far as the bottom of the second one. We then took a northerly course, which led us along some narrow ledges of rock, and eventually found a passage to the summit, which was not gained till 4.45 P.M. We descended to the Alphubel Joch, and had some little trouble on a steep snow wall not far from the summit. I believe now that had we followed the northern arête to the Mischabel Joch, we should have saved time considerably; as it was, we did not reach the Täsch Alp until 8.55; Zermatt, until 11.15.

‘This expedition affords an admirable rock climb, and is well worthy of repetition.

W. W. RICHMOND POWELL.’

THE NADELHORN.—On *September 7* Messrs. W. Penhall and A. F. Mummery, with Alexander Burgener and Ferdinand Imsegg, ascended the peak marked Nadelhorn, 4,334 mètres, in Dufour’s map. Sleeping 8 hours above Randa, in the Dürren valley, they went up over some loose rocks for 2 hours, then crossing a small snow-field, climbed an interesting rock slope to the north-western arête, which was then traversed to the top. In the descent they made straight for the right bank of the Hohberg Glacier.

The ascent occupied 6 hrs., and the descent 4 hrs.

The ‘Alpine Guide’ says that this peak was ‘probably’ reached by Mr. Chapman in 1856 from Saas, and Studer* mentions an ascent in September, 1858.

FLETSCHHORN, from the upper level of the Laquin Glacier.—*August 29*, Mr. F. Mummery, Alexander Burgener, and Augustin Kentinetta left a ‘gîte’ on the N. bank of the Laquin Glacier at 3.30 A.M., ascended by the Fletsch Joch route till opposite two large couloirs leading up the Fletschhorn; having climbed the arête dividing these couloirs, they struck straight up the face of the final peak over extremely smooth rocks; the top of these being attained, a short ice arête led to the highest point.

THE WEISSMIESJOCH.—On *September 10* Messrs. R. Gaakell and M. Holzmann, with J. P. Zurbrücken as guide, and Ferd. Furrer as porter, having ascended the Weissmies by the usual route from Saas, descended on the other side, partly over rocks, partly over snow slopes, into the Zwischenbergen valley, to about 1,000 feet below the

* *Ueber Eis und Schnee*, ii. p. 53.

Zwischenbergen pass, where the trough of the valley for a short distance bends to the S., in order to go round the rocky spur projecting in the same direction from the Thälhorn. They there turned to the left, and gradually re-ascended over some *débris* to a small glacier on the W. side of that spur. Near the upper end of the glacier they climbed through some rocks to a depression in the ridge, between the Weissmies and the Thälhorn, less than $\frac{1}{4}$ mile to the W. of the latter peak, and about 11,050 feet high, reaching the crest in 2 hrs. 5 min. from the top of the Weissmies. A very steep ice slope, which early in the season may be of snow, descends to the Laquin Glacier. Instead of turning to the right, where the slope leads unbroken to the névé of the glacier, Zurbrücken preferred to go down to the left towards the bergschrund, as a few patches of rock jutting out from the ice, and some broken séracs, which at one time partly blocked up the Schrund, promised to shorten the time of step-cutting. It, nevertheless, took 2 hrs. before they gained the lower lip of the Bergschrund. Thence, they descended as much as possible by the left side of the Laquin Glacier, and arrived without further obstacle in 1 hr. at its foot. Instead of descending into the Laquin valley, they crossed over the left moraine, kept high above the left bank of the valley, along the stony pasture of the Hohsaas, struck into a track which for some time follows an old aqueduct, and, turning into the valley of the Doveria, descended by the chalets of the Wengen Alp in $2\frac{1}{4}$ hrs. to the village of Sempeln.

It appears that the Weissmies has been ascended from the Laquin Glacier directly by the rocks, but at a considerable distance to the N. of the pass described. Tschudi, who has adopted the name of Weissmiesjoch for the pass made by Messrs. King and Riddell, between the Thälhorn and Tossenhorn, although Ball, with Mr. King's sanction, has more properly called it 'Thäljoch,' erroneously states that this pass leads over the Laquin Glacier, whilst in reality it touches only the Thäli Glacier.

Bernese Oberland.

KASTEN JOCH.—On Friday, August 22, the Rev. F. T. Wethered and Mr. E. P. Wethered, accompanied by two guides of Guttannen, crossed from the Oberaarhütte to the Äggischhorn by a well-marked Joch, situated directly to the south of the Oberaar Joch, and forming an outlet from the extreme S.W. corner of the Oberaar Glacier, on to the Studer Firn. 'The pass is separated from the Oberaar Joch by a peak, well delineated in the Federal and (English) Alpine Club Maps, but no name is given to it by either authority. It is, however, denoted as the Kastenhorn in the "Panorama from the Äggischhorn," hanging on one of the inside walls of the "Hôtel de la Jungfrau." The Joch is flanked on the south by the W. end of the ridge which bounds the Oberaar Glacier along its entire right bank. I estimate its height at from 250 to 300 English feet in excess of the Oberaar Joch. The ascent presented no difficulties of any sort owing to the excellent condition of the névé on the upper (S.W.) slope of the Oberaar Glacier, and the descent from the Joch to the Studer Firn, although steep, was quite easy.

'The route from the Oberaarhütte is identical with that of the Oberaar Joch for about $2\frac{1}{4}$ hrs. Then, diverging to the left on nearing a broken part of the glacier, the summit of the pass was reached up steep névé, which must sometimes be ice, in $1\frac{1}{4}$ hr. more. On gaining the Studer Firn, opposite the Rothhorn (3,549 mètres, Fed. Map), from the Joch, we struck again into the usual Oberaar Joch route and followed it along its weary way to the Äggischhorn hotel. The pass which forms the subject of this note would appear to have been crossed some ten years ago by two Grindelwald guides and a traveller in mistake for the Oberaar Joch, which they missed in a fog between the Äggischhorn and the Grimsel; but, as it is altogether unchronicled, and as the Joch itself, although well defined and altogether distinct from the Oberaar Joch, is entirely ignored—nameless and heightless—by all the accredited maps and guide-books, I make no apology for cataloguing it amongst the "New Expeditions" of 1879, as a useful Oberland pass, and calling it "the Kasten Joch."

F. T. W.'

Lepontine Alps.

LEBENDUN PASS.—*October 7.* Mr. Cust, with Imboden of Andermatten as porter, leaving Andermatten at 3.35 A.M. reached at 7.53 the pass leading from the Lebendun Valley to the Hohsand Glacier E. of the Ofenhorn. This easy pass is unnamed, and should be called the *Lebendun Pass*. The Hohsand Glacier having been crossed, the nameless depression between the Blinnenhorn and Rothhorn was reached in 1 hr. 10 min., walking from the glacier without difficulty. View good. The descent was made by the Gries Glacier and back to Tosa Falls. This glacier route is a fine day's excursion from Tosa Falls for those who do not wish to cross to the Valais.

ANTABIA GLACIER PASS.—*Oct. 8.* The same party, starting from Tosa Falls and bearing from the Castello ridge in the direction of the Tainierhorn till the upper glacier was gained, reached the depression between the Basodine and Tainierhorn. From there they ascended the S. summit of the Basodine, easily reached, and commanding all but a small section of the extensive view from the higher N. summit. Returning to the col, they found easy access to the Antabbia Glacier by a convenient chimney immediately N. of the Tainierhorn ridge in a low rock wall.

This pass, for which the above name is proposed, is situated between the Basodine Pass and the Tainier Pass (ascending from Fruthwald), and offers an agreeable and considerably the most direct passage between Tosa Falls and Bignasco.

Tödi District.

OBERALPSTOCK.—On *August 12*, the Rev. F. T. Wethered and Mr. E. P. Wethered, with A. Baumann of Amsteg, ascended the Oberalp-stock, *vid* the Regenstalden Firn, a route which had, to their knowledge, only been used once before (by Mr. Holzmann), and then as a descent.

'Crossing the Rupleten Alp diagonally from the Waldibalm Châlets, we reached the foot of the Regenstalden Firn, with the Bander Stock

on the E., and thence took to the névé. At first the slope was gentle, but afterwards became very steep, and we were driven eventually on to the rocks upon our right, which run down towards the Maderanerthal. (These were the first rocks we touched in the ascent.) Alternating between these and the snow, we reached at length the summit of the ridge in which the névé culminates lying north of a depression, from which—first a lower, or northern, and then, immediately behind it, a higher and southern peak rises from the snow. This latter is the true summit of the Oberalpstock. We had some difficulty in rounding the E. basement of the first of these two peaks, on account of having to pass along the upper edge of an extremely steep snow-field, which heeled uncomfortably over to a *Schrund* immediately beneath our line of progress. Skirting thus the first peak, we reached before long a narrow col, which separates it from the actual highest peak; and after a short scramble up good rocks, found ourselves upon the summit. Mr. Sowerby ventures a doubt as to the practicability of reaching the highest point from the Maderanerthal direct, on account of the probable impossibility of crossing the depression between the ridge and the summit peak.* In the condition of the snow just under the northern peak as we found it, the transit to the base of the other and more southern was rather difficult, but did not detain us long. We had hoped to ascend the northern peak as well, but, being rather late, had reluctantly to give up the "double event." The northern peak remains untrdden so far as I know. I recommend the ascent from the Regenstalden Firn, in preference to the Brunni Glacier route. We descended by the latter to the hotel in the Maderanerthal. F. T. W.'

Örteler District.

ÖRTELER, FROM ENDE DER WELT FERNER.—On June 27, Herr Otto Schück, with Peter Dengl and Peter Reinstadler, started from Sulden at 1.30 A.M. to make a push for the summit of the Örteler, by the great couloir leading up from the Ende der Welt Ferner. 'Mounting through the woods of the Kuhberg, we reached this glacier at 3 A.M., and at 3.30 the base of the couloir; in ascending which the next 7½ hrs. were spent, always cutting up well to the left of the deep trench carved out by stones and avalanches in the centre of the gully, down which the powdery snow of the upper slopes flowed continuously like a river. The day being gloriously fine and the snow in first-rate order, we reached, without any incident worth mention, the top of the couloir, where it melts into the final slope of the mountain. For about 300 ft. we continued step-cutting up this face; then with a view to shorten the work, we made for the cliffs to our left, obtaining, however, nothing save a considerable loss of time and a very stiff scramble up the glazed and rotten rocks. Crossing again to the snow, we got to a little lateral gully of remarkable steepness, bounded by a low ridge of snow, which proved to be hollow underneath. Up this snow-crest we worked, until it again abutted against the rocks, which we clambered straight

* *Alpine Journal*, vol. iii. p. 266.

up to the summit-ridge, reaching it about 15 yards N. of the actual top. (Time, 1.15 P.M.) The descent was taken by the ordinary way to Suldén. Peter Dangel, who led splendidly all the day, proved to be first-rate as ever.

'It has been said that stones and avalanches are liable to be so frequent on this route, as to make unjustifiable the risk incurred in the expedition. I am not prepared to express any opinion on this subject; at any rate, it is tolerably sure that in bad weather, or in a less perfect condition of the snow, the risk of stones and avalanches in the couloir will be a considerable one. Yet future travellers will do well not to take to the rocks on either side, but to follow the gully from bottom to top.'

Primiero Dolomites.

CIMA DI CANALI.—August 30. Mr. C. C. Tucker, with Michele Bottega of San Martino, made the ascent of the peak, known in the country by this name, probably the fourth in height of the Primiero summits. It is situated on the spur overhanging Val Pravitale and to the S.W. of the Cima di Fradusta, and consequently does not correspond to the C. di Canali of the old Lombardo-Venetian survey. In the new Austrian Map the name is given to the Cima di Fradusta with a height of 2,927 mètres. 'Starting from San Martino at 3 A.M. we reached the Passo di Ball (Rodera) at 5.25. The Cima di Canali was climbed from the little lake lying between it and the Palle di San Martino, first by a steep snow gully, and afterwards by the sheer and difficult rocks on its left-hand side. These led to a secondary summit, from which the true top was gained without serious difficulty at 9.15. No indication of the peak having been climbed was found on the summit, and neither my guide nor Santo Siorpaes had heard of any previous ascent. The height of the peak may be taken as about 10,000 ft. It probably out-tops the Cima di Fradusta by a few feet, but the superiority is at best a trifling one. The descent was made by the same route, and San Martino reached at 3.15 P.M. The expedition is a very fine one throughout, and here and there of considerable though not excessive difficulty. Michele Bottega proved himself upon this, as well as upon other expeditions, an active and competent cragsman, as well as a cheerful and pleasant companion.'

ALPINE ACCIDENTS IN 1879.

THE past season has been unusually fruitful in accidents to mountain travellers; but they have, with two exceptions, not been 'Alpine accidents' in the sense in which we use the word. They have happened on car-roads, on mulepaths, or among the slopes of the lower mountains to tourists who, from botanical zeal or lack of a guide, had wandered from the track. Among the deaths chronicled under this heading in our daily papers were those of two wild-haycutters, and of a peasant employed in cutting glacier ice for export in the Oberland.

Of the three deaths which occurred above the snow-level, two only