myself to a banquet at a famous Japanese restaurant, which (like our 'Cock' or 'Cheshire Cheese') prides itself on keeping up old traditions. The room we dined in was walled by silver panels delicately painted with flowers; it looked out on a broad moonlit river hung with lanterns. The viands were choice and rare, the speeches models of brevity. I may venture to quote that in which my health was proposed: 'One has come down to us from 20,000 ft., but the love of Beauty and Pure Colour will soon carry back the mountaineer to his own sphere.' I was further charged to convey to the parent Club the cordial greeting of one of its youngest children.

After the speeches some charming ladies executed the Chrysanthemum Dance, while the photographer took a flashlight view of the company. Unfortunately he failed. It was the only mishap of an interesting evening. I cannot therefore reproduce the scene. To do so adequately, however, might have required a Super-Whistler.

I cannot conclude this brief note on my modest excursions among the mountains of Japan without recalling the universal kindness and courtesy of all we met, whether in inns or on the open road. The Japanese have for centuries been mountain pilgrims; they are now, for better or worse, adopting also the European point of view and treating their Alps as a play-ground. The idea of hill-climbing has to them never had any of the foolishness which it carries to some less intelligent people, and they are most ready to help any strangers who come among them, particularly Englishmen introduced by Mr. Weston, whose name is a household word in the Highlands.

Climbs in the Swiss Part of the Mont Blanc Range.

By J. W. WYATT.

THAT part of the Mont Blanc range which lies to the north of the Glacier d'Argentière does not appear to be so frequently visited by members of the Club as the more famous parts of the chain. It is, however, the happy hunting-ground of members of the Swiss Alpine Club, particularly those from the neighbourhood of the Lake of Geneva. Almost all the peaks are visible from the slopes of the Vaudois hills, and the Tour Noir itself can be seen from the streets of Montreux and Clarens.

Although none of the peaks reach the height of 13,000 ft. and the glaciers are comparatively small, the district has quite a character and charm of its own. With the exception perhaps of the Aiguilles d'Argentière and Chardonnet, the Tour Noir and the Aiguilles Dorées, none of the climbs are difficult, and as a centre for guideless expeditions it is hard to beat. It is served by three well-appointed huts—the Saleinaz, the Orny and the Dupuis ; these, in the height of the season, are apt to be unpleasantly crowded, particularly the Dupuis, but I hear it is likely soon to be doubled in size.

I would recommend anyone visiting the district to provide himself with Albert Barbey's Map of the Chain of Mont Blanc, scale 1/50,000, 3rd edition, 1910 ; it is very complete and brought right up to date ; also with that excellent little guide, 'La Partie Suisse de la Chaîne du Mont Blanc,' by Kurz et Colomb, last edition, published in 1900.

Lac Champex, one of the gems of Swiss scenery, is the only centre. I had visited it twice before, in 1904 and 1909, but, beyond the Aiguille d'Argentière and the Aiguilles Dorées, had done very little climbing there ; having however rented a chalet for the summer seasons of 1912 and 1913, I determined to explore the neighbourhood more fully. Another reason attracted me to this part ; when at school at Lausanne in 1874, I was fortunate enough to have as my French tutor Emile Javelle, whose descriptions of this district in his classic work 'Souvenirs d'un Alpiniste' everyone will remember and appreciate who, like him, loves the mountains.

My first visit was in 1904 with W. H. Gover. Driven away from the Riffelhaus early in September by bad conditions and unsettled weather, we shifted our quarters to Lac Champex, hoping for better luck ; all we were able to do, however, was a guideless climb over the Pointe d'Orny, as the weather broke again with much fresh snow and drove us home. In 1909 W. H. Gover, C. H. Brook and I spent a few days there on our way to the Bernese Oberland ; we had, as guide, Joseph Georges of Evolena, and managed two good climbs, the traverses of the Aiguille d'Argentière and the Aiguilles Dorées.

Leaving the Saleinaz Cabane on August 13 at 3.30 A.M. for the Aiguille d'Argentière, we ascended the Saleinaz glacier to the bergschrund at the foot of the Couloir Barbey, named after M. Albert Barbey who made the first ascent by this route in 1884. We were followed by two young Englishmen, without guides, who asked if they might be allowed to take advantage

of our tracks ; they did not appear to have had much experience of the high Alps and showed, I thought, a considerable amount of pluck in undertaking an expedition of that nature —whether combined with wisdom or not is another matter.

Shortly after entering the couloir, which is steep and mounts for over 2500 ft. straight up to the summit arête, we heard a loud hum, like an enormous bee, close beside us and saw a stone, the size of a plate, whiz past over our heads ; the sun had struck the rocks at the head of the couloir and showed us that we would have been safer to have made an earlier start ! We bore off as soon as possible out of the danger zone up the right hand branch of the couloir to the rock buttress which forms the N.E. arête of the mountain, reaching it at 7.30 A.M. We climbed it for two hours, first over rock and then over steep snow, to the northern end of the summit ridge ; ten minutes along this ridge, which was heavily corniced throughout, brought us to the highest point by 9.40 A.M.

At 11 o'clock we started down the N.W. arête ; it was steep, icy and, in one or two places, rather nasty. Passing close beside the grand hanging ice-falls which form such a feature on the N. face of this mountain, we crossed the head of the great couloir that runs up from the Chardonnet glacier and turned off the arête, to the left, down a rib of broken rocks and snow that divides the upper portion of the glacier into two halves. We had to descend for some distance to turn this rock-rib and mount for three-quarters of an hour to the Col du Chardonnet which we reached at 2.15 P.M., and the Saleinaz hut at 4.20 P.M.

On our way down we had noticed what looked to us like two ladies in black, with very short skirts, making their way slowly up to the col ; these turned out to be two priests from, I think, Martigny, with their cassocks tucked up, on a holiday tour over the Col du Chardonnet and the Fenêtre de Saleinaz. They were a pleasant pair and we exchanged greetings and cigars while resting on the col.

The following day we left at 4 A.M. for the traverse of the Aiguilles Dorées. This fine rock arête consists of an extraordinarily narrow and fissured ridge of granite pinnacles and needles, nearly a mile long and extending from the Col Droit to the Fenêtre de Saleinaz. It runs due east and west and is divided into two unequal portions by a snowy shoulder or col, called the Col Copt ; the western part contains the higher summits, Aiguille de la Varappe, Aiguilles Penchées and Tête Biselx, and the eastern portion, the Trident, Aiguille Javelle,

and Tête Crettex. The rocks and holds are excellent and sound and it affords the finest rock climbing in the district.

After a short three hours' trudge up the glacier, we reached the Col des Plines at the eastern extremity of the ridge; leaving our rücksacks we roped and climbed a steep ice couloir on the Trient side to the arête, where the interesting part of the climb begins. A succession of three steep chimneys led us to the first peak, the Tête Crettex; we passed underneath the Aiguille Javelle, as it was occupied by a noisy party of climbers and to have waited for them would have delayed us too long. From the Col Copt a short but steep blue ice-slope, requiring careful step-cutting, and a snowy shoulder brought us to the foot of the Tête Biselx, the top of which we reached at 10.18 A.M. Although only the second summit of the group, the Aiguille de la Varappe overtopping it by about 25 ft., it is by far the most imposing of the two and marks the central point of the ridge.

From the Tête Biselx we traversed a long and narrow ledge across the precipitous S. face of the mountain with one or two awkward places; one in particular I remember where we had to jump from one side of a steep cleft or couloir to the other and trust more or less to Providence to land safely on a solitary foothold on the further side! We joined the arête again at the Aiguilles Penchées, between which and the Varappe there was a considerable gap; in negotiating this we should have had to cross to the north side over some steep slabs, sloping the wrong way and covered with ice and *verglas*. These did not look very safe, so we decided to leave the Varappe alone; we returned to the Col des Plines by the way we had come and reached Champex, *via* the Cabane d'Orny and the Col de la Breya, at 6 P.M., the state of our fingers and clothes testifying to the exceeding sharpness of the rocks!

The season of 1912, as most of us found by bitter experience, was about the worst on record, even worse than that of 1910; although I was for over two months at Champex, I was unable to do any high climbing and had to content myself with botanising and rock-scrambling in the Val d'Arpette and the Combe d'Orny. Of these rock scrambles there are many, some quite interesting, and the views fine.

The traverse of the Mont Catogne, from the Col de Bonhomme along the arête to the highest point overlooking Martigny, is quite worth doing, and is, besides, very interesting for lovers of Alpine flora. Unfortunately I am not a geologist, but the formation is such that the flora of the limestone districts

as well as those of the primary rocks grow together ; Edelweiss is found in quantity, also *Potentilla grandiflora, Draba tomentosa, Androsace imbricata* (syn. *argentea*) and many others. I have also found there the pure white varieties of *Silene acaulis* and *Aster alpinus.*

The traverse of the Pointe des Ecandies from the Col des Ecandies to the Fenêtre d'Arpette, or *vice-versâ,* and the ridges on both sides of the Val d'Arpette, are worth exploring for off-day scrambles. The traverse of the Pointe du Zennepi, the highest point on the N. side of the valley, from the Fenêtre d'Arpette, following the arête more or less all the way to the top and returning to Champex by the wild little Lac du Dru and the Pointe de Bovine, makes a particularly fine walk. Another good climb from the Val d'Arpette is to cross the ridge of the Aiguilles d'Arpette, on the S. side of the valley, over the Aiguille d'Orny, returning by the Col d'Orny and the Fenêtre du Chamois. This last was practically the only decent expedition I was able to do from Champex that season.

Those who visit this district for climbing pure and simple when the hotels are full to overcrowding, and the epidemic of tourist fever runs through the whole native population, can have little idea of the quiet seclusion and charm of the place out of the regular season. In May and early June the weather is generally fine and the air bracing, and a walk from Orsières to Martigny, through Champex and down the Durnant valley, is delightful. The open glades in the larch woods are full of sulphur anemones and bell gentians, and the flatter meadows painted in sheets of pink with the little *Primula farinosa.* The mountains look their best before the summer sun has had time to melt the snows, and fine glissading can be enjoyed on most of the moderate slopes.

The most beautiful effect I have ever seen in the way of flower painting was on a walk I took with my wife up the Val Ferret from Praz de Fort during the latter half of June. It would be difficult to find in Switzerland a more beautiful expanse of meadow land coloured by masses of sub-alpine flowers of every kind and hue ; sheets of the white Paradise Lily, Phyteumas in variety, *Campanula rhomboidalis, Salvia pratensis, Rhinanthus, Pedicularis,* Hawkweeds and a host of others—a veritable paradise of flowers !

In addition to the usual examples of Swiss flora, the warmer slopes of the Vals Ferret and d'Entremont have a distinct admixture of plants of a more Southern origin ; that handsome vetch, *Vicia onobrychioides, Hyssopus officinalis, Ononis natrix,*

Campanula spicata, Euphrasia lutea, &c., are common on the warm dry slopes between Champex and Orsières.

Last season, 1913, although a distinct improvement on 1912, was very unsettled and the conditions rarely good. The month of June however was fine and the mountains in order, and some good expeditions were accomplished by those able to climb then. Having vainly waited all through the previous summer for the Tour Noir and the Aiguille du Char donnet, two climbs I had wished to do for a long time past, I determined to take the first opportunity of fine weather and suitable conditions.

On June 30, therefore, I engaged Maurice Crettex as guide, and started off from Champex soon after noon, *via* Praz de Fort, up the Saleinaz glen and reached the Cabane before half-past five. It was particularly beautiful that afternoon, a brilliant blue sky and a cool north breeze, blowing up the valley, tempering what is usually a hot and tiring walk. The Alpine rhododendrons on the slopes above the Saleinaz ice-fall were in full bloom and toned admirably with the cold green of the seracs below.

We had the hut to our two selves, the caretaker had not yet come up, but it was clean and in excellent order. Crettex, who is an indefatigable worker and a host in himself, soon had everything ready; we turned in early as we were to be up again by 11 o'clock.

We left next morning twenty minutes after midnight. There was no moon, but the stars were brilliant, the air crisp and the snow hard and in good condition. Skirting round the Tita Neire and the Petit Darrei, we reached the foot of the Col de la Grande Luis. The bergschrund here confronted us with a wall of ice some 20 ft. high, and it took us a little time in the dark to discover where we could cross; in one place a conical snow-slide had reduced the overhang to some 10 to 12 ft. and by cutting a few hand- and footholds and wedging our axes in the ice-wall, we got up without much difficulty. We worked up the steep slope to the col with the lanterns hanging round our waists, the only sounds being the chip, chip, chip of Maurice's ice-axe above me and the swishing of the snow and ice past me into the darkness below. We reached the top of the col at 3.20 A.M., just as dawn was breaking, and were met by a bitter north wind—it was much too cold to halt.

The usual way from here to the foot of the Tour Noir is to traverse under the rocks of the Grande Luis and work round



J. W. Wyatt, photo.

Tour Noir, from Petite Fourche.



J. W. Wyatt, photo. Swan Electric Engraving Co. Ltd.

N. E. arête of the Chardonnet.

below the Col de la Neuvaz, but the wind was too strong for this to be pleasant, so we cut down an exceedingly steep ice-slope to the upper basin of the Neuvaz glacier. The rising sun now caught the rocks of the Tour Noir and the hanging ice-falls of the Mont Dolent across the seracs of the glacier, and made them very beautiful; the Val Ferret was filled with rolling mists, and above them rose the Combin and Mont Vélan with the Cogne mountains in the distance.

We crossed the glacier to the foot of a rock buttress that runs straight up to the Col Supérieur du Tour Noir and there halted for breakfast, having been going steadily for four and a half hours. For an hour and a half we climbed this buttress which, although steep, was quite easy; there was no *verglas* but much snow on the rocks, and as we neared the top we had to fight against strong gusts of wind whistling down on us.

On breasting the col we had a magnificent view of the Aiguille Verte arête, its grand ice-couloirs glistening in the early morning light, framed in between the Tour Noir on one side and the Aiguille d'Argentière on the other. A solitary chamois was having a morning walk on the upper névé of the Glacier des Améthystes below, and, on hearing our shouts, disappeared in great bounds over the edge of the ice-fall. The Aiguille d'Argentière from this side presents quite an unusual appearance: a succession of dry red cliffs capped by a bonnet of snow, as described by a Swiss climber, 'elle fait un peu l'impression d'une vieille Anglaise désséchée'!

From the col we enjoyed a short hour's climb up an arête of steep but firm rocks, and reached the top at 7.45 A.M. I felt that one of my ambitions had been successfully accomplished. Curiously enough there was little or no wind on the summit and we were able to enjoy a good rest and the view, which is of quite a special character; the atmosphere was perfectly clear; we saw the Bernese Oberland, the Lake of Geneva, the Jura, the Cogne mountains and a bit of the Dauphiné. The striking part of the view, however, is that of Mont Blanc itself, flanked and guarded by ranges of pinnacles and aiguilles in all directions, with the upper basin of the Argentière glacier in the foreground surrounded on all sides by almost vertical rock and ice-walls. This view and the impression it gives one is admirably described by Javelle in his account of the first ascent.

We started down at 8.25 over some very steep rocks to the commencement of Javelle's 'vire.' Under ordinary conditions this ledge is, I believe, quite simple to find and to follow, but

we found it buried in snow and had to feel our way at every step ; I was struck with the ease with which Crettex seemed to pick it out and guide me down it. The ledge is very narrow and by no means horizontal, and wriggles along a precipitous face of rock, with a drop of from 2500 to 3000 ft. to the Neuvaz glacier below ; the rocks however are so sound and the holds so good that there is no real difficulty about it.

By 9.45 we were on the Col d'Argentière, where the view of the series of aiguilles and peaks is even more striking than from the Tour Noir itself. We had a quick descent to the glacier d'Argentière, the last half in two rapid sitting glissades, interrupted in the middle by having to negotiate a bergschrund. A hot but very grand walk of an hour down the glacier brought us to its junction with the Chardonnet glacier, where we halted for our big meal of the day. Our shortest way back from here, in point of distance, would have been to cross the Col du Chardonnet and Fenêtre de Saleinaz, but Crettex said it would take less time and be less fatiguing to go *via* the Cols du Pesson and du Tour.

Starting off again at 11.50, we had a hot and most disagreeable climb of about 2000 ft., across boulders, scree and soft snow, to the Col du Pesson, followed by an hour and a half's tramp across the Glacier du Tour, under a blazing sun, which was anything but pleasant. We passed under the whole length of the Chardonnet arête, looking very grand but forbidding, and I wondered if it would be my luck to climb it this year after waiting all last season in vain.

From the Col du Tour we crossed the plateau du Trient to the Fenêtre du Chamois ; the upper part of the couloir was ice, and we had a solid hour's step-cutting till the snow was soft enough to glissade in one long and delightful swoop right into the head of the Arpette glen. We reached Champex at 8.10 P.M., after nearly twenty hours' steady going.

A day or two afterwards E. T. Compton came to stay with me for a fortnight's sketching, and, on July 13, he and I and a friend, Cooke-Smith, went up to the Dupuis hut. The next morning Cooke-Smith and I started in good time for an attempt on the Grande Fourche ; this proved too much for us. Crossing the Col du Tour, we reached the foot of the mountain but took to the rocks too much to the left ; they were covered with ice and *verglas* and it was a case of step-cutting and clearing the ice from the rocks most of the way. The rocks got steeper and in worse condition, so we turned back and

had instead an interesting little climb from the Col des Fourches over the Petite Fourche and the Tête Blanche.

The day had been fine so far, but the sky clouded over rapidly and a high wind sprung up. Onésime Crettex and a porter were to join us at the hut that evening for an attempt on the Chardonnet, but, as the weather got worse and more threatening, we decided to go back. About half-past six we met them on the moraine below the Orny hut ; they evidently had no thought of turning back, and, as both Compton and Cooke-Smith did not relish the tramp up again with the prospect of bad weather on the morrow, I returned with the guides to the Dupuis hut, hoping against hope that the luck might be with us.

We passed an uncomfortable night, very cold and windy, and the next morning we were in a thick mist with driving snow squalls, so that the Chardonnet was out of the question. It cleared up more or less about 11 o'clock and I suggested to Crettex that we might try the Aiguille Javelle which I had missed when traversing the Aiguilles Dorées four years before. He had made the first ascent of this aiguille in 1896 and was nothing loth.

We started off at 12.15 and in half an hour reached the Col Droit, whence an hour's traverse along an interesting ledge overhanging the Saleinaz glacier brought us to the foot of our climb. The crux of the climb consists of a chimney between two columns of rock, in two pitches and about 50 ft. in height. A wedged ice-axe enables one to enter the chimney —there are no holds and it is a case of back and knee work the whole way, except that, as in the Mummery crack on the Grépon, a meagre foothold enables one to regain one's breath half-way. The upper half is still more difficult, the sides are not parallel and, if you do not fall outwards, you are apt to get so wedged between the rocks that you cannot move up or down.

It was beyond my powers and I had twice to '*faire le poisson*,' as Crettex sarcastically described it ! After the chimney a scramble round one or two huge cubes of granite, first poised over the Trient plateau and then hanging over the Saleinaz glacier, and we were on the top. It took us 35 minutes to get up from the foot of the chimney and 25 minutes to get down ; we reached the Col Droit again at 3 P.M., and returned to Champex by the Trient glacier and the Col des Ecandies. I managed to strain my back rather badly and that, combined with a chill caught in the hut the night before, laid me up

for nearly a fortnight of fine weather with a severe attack of lumbago. I had ample opportunity to realise that, at fifty-five, such fancy climbs ought to be left to younger men!

Another spell of bad weather followed and I did not get on the mountains again till August 17, when I went up once more to the Dupuis hut by the Fenêtre du Chamois with Joseph Pellouchoud, a young guide from Champex, for two days' climbing on the Grande Fourche and the two Darreis. There were thirty-five in the hut that evening, twenty-five to thirty being the maximum number the hut will hold with comfort, and we passed in consequence a very unpleasant night.

We left next morning at 4.15, under a watery moon and a most unpromising outlook, but the day turned out fine. The Grande Fourche from the glacier du Tour is a good climb, and the rocks were in much better order than when Cooke-Smith and I attempted it. The climb consists of steep snow couloirs and rocks till a sort of shoulder is reached high up on the W. arête, from which there is a short half-hour's easy scramble to the top. The summit is curious, consisting of two huge slabs of granite perched like sloping tables; we got there at 7.30 A.M. and spent a pleasant hour enjoying the view, which is fine and extensive, the Aiguilles du Chardonnet and d'Argentière being particularly well seen. We examined with interest the Chardonnet arête on our way up; it looked in very bad order and uninviting, with heavy cornices between the gendarmes, and Pellouchoud was of opinion that it would not be possible for some time. The descent to the Saleinaz glacier, although easy, is steep and intricate; you have to search for the way down snow gullies and round rock-ribs. We reached the Saleinaz Cabane without incident at 10.30 A.M.

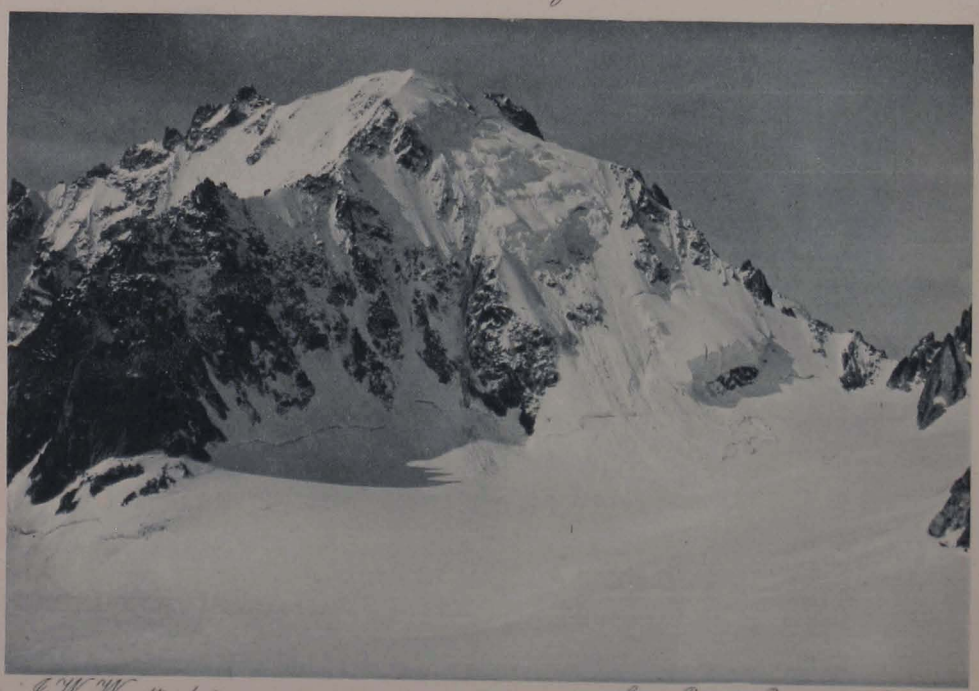
The Grande Fourche must offer, I should think, a considerable variety of short scrambles on both the N.W. and S.W. faces; it may also be climbed from the Fenêtre du Tour by the W. arête itself. Brook tells me he twice attempted it from the Tour side, in each case by a different route and different again from the one we took.

The halo round the moon had not been without reason, for towards evening the sky clouded over and it blew in squalls, rained, and snowed all night. After sunrise, however, it cleared up a little, and at 6.15 we were able to make a start, accompanied by a pleasant young Swiss from Fribourg who had wanted to do the Tour Noir, but the fresh snow that had fallen put that out of the question.



J. W. Wyatt, photo.

Mt. Blanc and Aiguilles,
from the Col d'Argentière.



J. W. Wyatt, photo. Swan Electric Engraving Co. Ltd.

Aiguille d'Argentière,
from the Saleinaz Glacier.

Crossing over the Col de Planereuse, we mounted up the Planereuse and Darrei glaciers to the middle of the horseshoe formed by the ridges of the two Darreis ; from here we cut up a steep snow-slope to the N. arête of the Grand Darrei and followed it over rocks and a sharp snow arête to the top, which we reached at 8.40 A.M. By this time the sky was clouded over, snow showers were passing over the higher peaks, and all except the nearer ones were blotted out ; the Tour Noir, rising boldly in front of us, was liberally besprinkled with fresh snow and looked wicked and forbidding. We had three-quarters of an hour of interesting climbing along the ridge to the top of the Petit Darrei, from which a quick descent of 1¼ hours took us back to the hut. We tried a short cut through the gap between the Tita Neire and the Petit Darrei, but were confronted by a yawning bergschrund which drove us back to the Col de Planereuse, the way we had come. This traverse makes an interesting expedition and is quite short ; including halts we took 2 hrs. 25 mins. from the hut to the Grand Darrei and 2 hrs. 35 mins. back over the arête of the Petit Darrei ; but I think we went rather quickly.

After this the weather became more settled and the conditions better, and I grew anxious to have a try for the Chardonnet. Onésime Crettex could not come as he was too busy with his bazaar, so I engaged his brother, Emile, with whom I had traversed the Aiguille d'Orny the year before.

We left the Dupuis hut at 2.55 A.M. on August 23, a brilliant moon above and the snow crisp under our feet—everything seemed propitious. Crossing the Col du Tour and the head of the glacier, we reached the foot of the Aiguille Forbes at 4.5 A.M., where the climb proper begins.

The N. face of the Chardonnet is protected by exceedingly steep ice-slopes and hanging ice-falls, except in one place where a large rock buttress protrudes about half-way up the face ; this buttress we turned on the left by threading our way through the seracs and crevasses which skirt the Aiguille Forbes. From the top of this buttress runs a steep knife-edged snow arête to the top of one of the ice-falls, from which an easy snow-slope leads up to the N.E. arête between two gendarmes of rock, a little less than a quarter of the way along the ridge from the point marked 3695 on the 1910 Barbey map.

We took 1½ hrs. to reach the arête ; as we got higher the state of the snow got worse, the rocky gendarmes were plastered with snow, and we could see huge cornices hanging over both flanks of the mountain. The approach to the summit is

jealously protected and guarded by obstacles of all sorts, rock pinnacles, sharp snow arêtes and cornice-capped couloirs; the whole ridge is very narrow, the inclination of the ice-slopes on the N. face very great, and on the S. side the face of the mountain is seamed with a succession of rock-ribs and snow gullies running sheer down to the glacier below.

Where the rock was clean or where we could traverse on to the S. side, we got on fairly well, and worked our way slowly and carefully for about an hour, till we had to traverse on the N. face; here the snow was dangerous and inclined to slide from under us, while, ahead of us, we had a nearer view of a series of cornices that looked most uninviting. Crettex thought the state of the snow might let us get up, but doubted our being able to return with safety—it was getting worse as the sun rose higher; accordingly we reluctantly, but I think wisely, retraced our steps. I judged we had got about one third of the way to the top.

A few days after I met Crettex in the village, who told me, with a very long face, that an Italian, with his cousin Jules Crettex, and a porter had just been up; I saw Jules Crettex who said he had had to cut away the tops of the cornices in order to pass underneath them, that it was very hard work, and that they would never have got up had they not been a party of three!

I had promised my wife to take her up the Aiguille du Tour, so on August 25 I went up with her and Emile Crettex once again to the Dupuis hut; having been up the N. Aiguille three days before on our return from our abortive attempt on the Chardonnet, I went up the S. Aiguille while she went with Crettex up the higher point. We returned to Champex through the Fenêtre de Saleinaz, the Saleinaz glacier and Praz de Fort.

The evening of September 3 saw me again at the Dupuis hut with Emile Crettex. I won't say we had made up our minds to reach the top of the Chardonnet this time or perish in the attempt, but our feelings were somewhat akin to that! The next morning was perfect and absolutely still; we left at 3.45 A.M., followed the same route as before and struck the arête at 6.45.

This time we were successful and reached the summit at 9.25, after what the French would call *une traversée aérienne*. We passed under the cornices that Jules Crettex had hacked away—a truly Herculean task! The condition of the snow was much better than before; we were able to follow the

arête and traverse the various gendarmes most of the way, at one time looking down the stupendous ice-slopes of the N. face, at another clinging on to rocky ledges with our legs dangling over the Chardonnet glacier. The most difficult part of the climb was the crossing of the snow gullies and arêtes separating the different obstacles that the mountain places in one's way. The traverse of the big snowy gendarme, just below the summit and shown well in the accompanying photograph, was the last difficulty we had to contend with; from this to the top was comparatively easy. As from all the peaks in this district, the view is both grand and extensive; the Chamonix valley lies at one's feet with the village of Argentière *à pic* below.

We left the top reluctantly at 10 o'clock and took 2½ hrs. to traverse back along the arête. We avoided the traverse of the big white gendarme by turning it on the S. side, crawling on all fours through a curious cleft in the rocks, half filled with ice and known locally as the *vire à quatre pattes*, and then by a hand traverse along a narrow ledge to the arête again. The condition of the snow was altering for the worse with the heat of the sun and we had some awkward work crossing the snow couloirs, only one of us moving at a time. I have a vivid recollection of one of these where I had to stoop under an overhanging cornice, the snow soft and inclined to slip away; I remember looking down and wondering, if the snow did go, where I should fall to and what I should strike before the rope got taut—I wished we had been a party of three instead of two!

We got to the hut again at 2.50 P.M., had an hour's rest and refreshment, and then went down to the Cabane d'Orny where my wife was waiting for me for a traverse of the Portalet the next day. We had got in the Chardonnet only just in time, for that evening it blew and rained all night and delayed our start the following morning till 9.30 A.M.

The face of the Portalet opposite the Orny hut, another of Javelle's first ascents, is worth doing; although steep it is not difficult. We followed Javelle's route, the best way up. Crossing the bergschrund at the foot of the slope, the climb consists of a steep rib of loose rocks and snow and joins the main arête just to the west of a pinnacle of rock known as *La Chandelle du Portalet*. We reached the top at 12.45, unfortunately enveloped in a mist which only afforded us glimpses of what must be a fine view. We came down the other side through driving snow and wind and tried to cross

the Col des Ravines Rousses ; we got down a short distance but the rocks were loose and rotten, covered with ice, and it was very cold, so we came up again and went round by the Col des Plines, the ordinary way down.

This ended my climbs for last season ; pleasant days and delightful experiences, the memory of which will always be refreshing to look back upon.

The Volcanoes Bromo and Krakatau : a brief Account of a Visit to them.

By the late Dr. TEMPEST ANDERSON.

FROM Tosari, near Surabaya, in Eastern Java, Dr. Tempest Anderson, who was accompanied by Mr. Leslie Taylor, of Clare College, Cambridge, wrote as follows :

'I have visited the (at present) most active parts of Goentoer (Kawah Kamodjan), Papandajan and Galoengoen (Telega Bodas), and am waiting to go to Penandjaan and Bromo from here on an early day. The mode of procedure in all these has been the same : start two or three hours before daybreak ; ride eight or ten miles in a conveyance of which the English farmer's tax-cart is a roomy, comfortable, and generally improved edition ; meet guides and horses (previously ordered) about daybreak, then ride over mountain paths, often through magnificent tropical jungle, to the foot of the final cone, or sometimes to the crater itself. Except in the case of Papandajan, where the fumes keep down the vegetation, the inside as well as the outside of the craters are covered with impenetrable jungle, which would require a large force of men with hatchets to make a path. For this reason if for no other we did not get to the highest crater of Galoengoen, but we saw a very beautiful crater lake (Telega Bodas), with many bubblings of gas, and the water all milky with sulphur. Dr. Brouwer, of the Geological Survey, collected some specimens there for us, but generally everything is covered with vegetation growing in red clay (weathered tuff), and very occasionally weathered and decomposed lava. Goentoer has a large crater with several craterlets in the bottom, mostly with mud puffs or