

In extenuation may I plead that to describe avalanches and snowcraft—each in some twenty minutes, is rather like attempting to explain wireless or ballistics in a few sentences. Snowcraft has meant a lifetime study for men who have felt at the end that they have but made a beginning. May this, too, be my excuse tonight.

OLD FRIENDS AND NEW HUTS,

MAY-JUNE 1947

By E. H. PECK

AFTER eight years' absence from the Alps, a kindly Providence brought me to Geneva to work during April and May, and on finishing work there I was able to take three weeks' leave at the very best period of the year. A few week ends well spent from Geneva in brushing up one's skiing on the Rochers de Naye and the Brévent, together with some exhausting early morning scrambles on the Salève, were valuable training which enabled me to extract the utmost from the holiday that followed. Perhaps the most interesting of these excursions from Geneva was an unpremeditated ascent of the Haute Cime of the Dents du Midi early in May when the small snow traverses and the scramble through the Pas d'Encel, of which I retained childish memories of 23 years before, gave a foretaste of greater things to come, while the climb of the 2200 metres from Champéry and back in a single day made a good contribution to training.

Meanwhile, weeks of fine weather slipped by in Geneva, and I fretted with anxiety lest both my earlier plans for a skiing holiday and my subsequent ones for climbing should be thwarted by some untimely break in the weather, but these fears proved wholly unjustified. While in Geneva I had already noticed the growing popularity enjoyed by spring skiing and ski mountaineering among the Swiss, as compared with the comparative obscurity of this aspect of Alpine sport in the days before the war. In particular an all-Swiss version of the 'Haute Route,' running from Verbier in the Val de Bagnes to Saas, had been worked out and was being followed by skiers until late in May. Also, the war had kept the Swiss and more particularly the Genevese, whose natural playground was Savoy, within their frontiers. This led not only to a fuller development of spring skiing but also to the construction of a number of new huts by the Swiss Alpine Club; thus the Velan and Vuignettes huts, as well as the enlargement of the old Bétemps, now known as Monte Rosa, were completed during or shortly after the war and were intended to meet the needs of spring ski mountaineers rather than of summer climbers.

It was nevertheless with some doubts both as to the practicability of our enterprise and our own capacity to carry it out, that Tim Marten and I found ourselves one Saturday afternoon in May in the train to Orsières with the overambitious plan of climbing the 1700 metres to the Orny hut with less than four hours to go before darkness. It was thus with some relief that the spin of a coin led us to adopt the alternative of Mont Velan whose attractions were warmly described to us by a Swiss fellow traveller. The post bus took us on to Bourg St. Pierre, and a three hour tramp up the Valsorey glen, ending with a wearisome clamber up a steep slope of 'rotten' snow superimposed on rhododendron bushes, finally brought us at 9 P.M. to the Velan hut just as darkness and a snow drizzle closed in. This hut, not marked on the Siegfried map, is situated at 2580 metres on the west moraine of the Glacier du Tseudet and was built by the Geneva section of the S.A.C. in 1944. Before this the Velan tended to be rather neglected owing to the length of the approach routes from the Grand St. Bernard or Bourg, but its wonderful ski slopes have now made the tour extremely popular among the French Swiss.

Sunday morning dawned bright and cloudless and we were away by 6 A.M. well ahead of the two or three other small parties. Thanks to the frost of the previous night it was easier to walk carrying ski on the crisp surface of the Glacier du Tseudet than to trust to the slippery uncertainties of skins. Rather more than an hour's easy going saw us to the foot of the steep little Col du Tseudet which leads over to the Valsorey glacier. The ascent was in fact simple enough but, encumbered with ski and sticks, one was not sorry to grasp a fixed rope for the last few icy steps at the top. On the E. side the snow had already softened in the morning sun and the descent was straightforward, though as a precaution I left my rope as a *main courante* for the parties following us. After a pleasant halt we continued up the billowing slopes of the Glacier de Valsorey above and below a few steep ice walls with apparently toppling séracs but nowhere as yet any danger signs of crevasses, save one vast schrund choked with snow into which one had to descend and scrape painfully but not perilously up the further frozen side. Finally the frontier ridge came in sight and the domed summit of the Velan separated itself from other pretenders. The last steep pull up to the summit plateau was a sore trial to half-trained muscles, but by 11 A.M. it was possible to look down on the one side to the Great St. Bernard Hospice and on the other to the factories of Aosta, while away in the E. misty clouds were driving across Monte Rosa and the Matterhorn. Nearer at hand the black wall of the unfamiliar S. side of the Grand Combin dominated the view.

A chilly wind and the prospect of an early last bus from Bourg St. Pierre made us hurry down. Thanks to the cold the snow was in perfect condition and there was little but aching ankles and thighs to delay the nearly endless series of linked turns. The choked crevasse was passed in a few moments and the subsequent series of *schuss* and zigzag down to the Col du Tseudet was pure joy. The traverse of the

col took as long as in the opposite direction but the snow on the glacier below had transformed itself into a delightful *sulz* which though slower gave excellent running. After a brief halt at the hut we embarked on the slope up which we had toiled the evening before. Carefully keeping to a narrow gully of firm snow we finally landed up among the rhododendron at the bottom with muscles racked by the multiplicity of turns. It was then a question of best foot foremost down the pleasant gentian-strewn path to Bourg St. Pierre, which was reached just in time to gulp down a glass of *fendant* at the Hôtel du Déjeuner de Napoléon Premier before the post bus whirled us back to Orsières. An unusual lack of coordination between Swiss trains gave us fifty minutes in which to round off a perfect day with an excellent dinner at Lausanne station.

This foretaste of the higher hills and the realisation that a combination of skiing and climbing was still possible, despite the advanced season, determined Tim Marten and myself to make the most of the leave which was to come to us a week later. As a start we decided to base ourselves on the Riffelberg and agreed to meet there on Whit Sunday, May 20. I was only able to leave Geneva on that day but reached Zermatt in time to enjoy the never failing charm of the evening stroll up to the Riffelberg, over a Riffelalp carpeted with sulphur anemones and bell gentian in full bloom, while the circle of well known *Viertausender* peaks fought their battles with the evening cloud. The Riffelberg itself was innocent of all but a few rapidly melting patches of snow and it was at once clear that the Théodule Pass must be our objective for the next day. Alas, the temptation of a train up to Rotenboden made us start rather late, with the result that the steep descent of the Moritzloch (tiresome when carrying ski) and the traverse of the snow free Gorner Glacier occupied us until 10 A.M. and we accordingly faced the seemingly endless plod up the Lower Théodule Glacier in the blazing heat of a May noontide with disastrous effects on our complexions. Finally the old (now deserted) *albergo* on the actual pass came into sight, but the track we were following bore leftward across the snowy waste to the rocks of the Testa Grigia, now the summit station of an Italian aerial ropeway from Breuil. A crop of buildings crowd on the few feet of snow free rock : on one side of the frontier live two Swiss frontier guards in their well built hut and on the other their Italian colleague (in American uniform) and one Marco, the indispensable stationmaster-cum-meteorologist, carry on an existence the tranquillity of which is occasionally interrupted by floods of carolling and irresponsible Italian skiers arriving by *téléférique*. Unfortunately there is no regular hut in which to spend the night, although as we learnt later an 'arrangement' can be made with Marco whose tales of the Italian maquis fighting and the German attacks on the *téléférique* are worth listening to and whose *risotto* is worth eating. On this occasion, however, we were much too late in the afternoon for any good skiing and so Tim and his wife went down to Breuil while I skimmed back alone down the glacier where the evening *harsch* was just

beginning to form. All but the most gingerly executed turns were out of the question, but the uncrevassed side of the glacier permitted some delightful straight running at speed in which the infinitely delicate grading of the thickness of the crust was actually perceptible. So down to the Gorner Glacier and back to the Riffelberg by the exhausting little path up the Gagenhaupt.

Tim Marten and I had agreed to meet the following day at the Bétemps hut. Collecting as much food as possible I wandered pleasantly along the path from Rotenboden to Gadmen and then in the ankle deep slush of the afternoon across the decomposing Gorner Glacier and up the little moraine to the Bétemps. I found this hut renamed 'Monte Rosa' since its enlargement in 1940 when a stone building was constructed round the old wooden hut which still forms the dining room. Its popularity has increased principally as a result of spring and summer skiing and it is now one of the largest of the Swiss club huts. Monte Rosa, I was informed, has become virtually a ski climb and is now probably climbed more often between January and June than between July and December.

Tim Marten joined me in the evening and in spite of a disconcerting drizzle we resolved on an early start. A glance out of the window at 3.30 A.M. showed that the intense blackness over the Lyskamm was not cloud but blue sky from which the stars had almost paled, and by 4 A.M. we were away as the rosy flush of dawn touched the highest snows of Castor. Unfortunately the frost had set in too late for the snow to bear, and while skins could not be worn comfortably, progress on foot met with frequent patches of breakable crust. Leaving to the right the tracks leading up the highly crevassed Grenz Glacier, where a number of unfortunate fugitives from Italy lost their lives during the war, we floundered up to the top of the rocks of the Obere Plattje and there thankfully found the snow would bear. The flattening out of the Monte Rosa Glacier described by Kurz as '*une dédale de crevasses où il vaut mieux s'encorder*' appeared to us no more than a few humps with one or two warning gaps. And so on up slope after slope for a long while in the shadow of the great bulk of Monte Rosa until the Silbersattel, slung between Nordend and Grenzgipfel, came into sight and with it the sun. A great bergschrund stretched across the high glacier 'combe' making the Silbersattel inaccessible to skiers this year, so we swung righthanded to the Satteldohle, climbing on ski up the steep slope to the lip of the little bergschrund just below the saddle itself. Leaving our ski we edged cautiously round the upper edge of the schrund, and after a few steps on the shifting powder snow which overlaid the icy crust we emerged on the warm rocks of the col and looked down on the Grenz Glacier where the ski tracks of recent parties twisted through a maze of crevasses to the Lysjoch and to the Capanna Margherita, perched so oddly on the summit of the Signalkuppe. From the Satteldohle steps had been cut up the ridge to the Dufourspitze, but as they were filling with drifting powder snow and as our poor nailing seemed inadequate for such work, we felt that the

height already reached (4354 metres) was sufficient for our state of training and decided on an immediate descent before the snow became too soft. Regaining our ski below the bergschrund we found, save for a few hundred feet of breakable crust, the descent in perfect condition and abandoned ourselves to the joys of a steady succession of linked turns on hard crust, followed by a more wearisome struggle with the softening *sulz* as we neared the hut, which was reached by 12.30 P.M. after a 1500 metre descent.

Tim Marten had to return to the Riffelberg the same evening, but I was so attracted by the area that I determined to stay a second night at the Bétemps and to try my hand at a solitary climb and ski run on the following day. I reckoned the Cima di Jazzi would be a safe choice and by 6 A.M. I was down by the Gornersee and starting up the steep moraine knife edge which leads to the upper reaches of the Gorner Glacier and the wide snowfields of the Weissgrat. Once on the glacier it was possible to forge steadily ahead over a series of snowy waves, keeping the magnificent buttresses of the Nordend on the right. I had half expected other parties to be making for the Cima but I found myself entirely alone in the solitude of the vast white slopes. This complete isolation, at first awe inspiring, was a luxury which could be afforded while the snow remained hard and the crevassed areas readily distinguishable. And so, topping the broad snow rump which divides the Findelen and Gorner basins, I crossed to the foot of the Cima di Jazzi and carried my ski up the final slope to the summit, there to enjoy to the full the classic view from Bernina to Mont Blanc while fleecy clouds filled the Macugnaga and other Italian valleys below. In particular I was interested to note the N. and E. faces of Monte Rosa and the difficult frontier ridge from the Jägerhorn to the Nordend, first climbed by Ryan in 1906 and now being popularised by Zermatt guides as a first class climb under the name of Katrinagrat. But I could not dally on the summit and soon after 9 A.M. I began the swinging drop to the upper Findelen Glacier; then the traverse to the point not far from the Alt Weisstor followed by a delightful series of *schüsse* down the concave slopes and a tricky runout between the moraine and the icefall of the Gorner Glacier. I was back at the Riffelberg for lunch and after scrambling down through the flowers and larches took tea in Zermatt.

On Friday, May 30, Tred Clarke joined us from Geneva for a week end and with the Martens we once more made the hot ascent of the Lower Théodule Glacier, being surprised and slightly alarmed to find that some of Monday's upward track had already dropped away into unpleasant looking depths. In fact this part of the glacier was rapidly uncovering itself and a few days later this route had nearly assumed its summer appearance so that it was advisable to make the *détour* by the Gandegg. On arrival at the Testa Grigia we persuaded the admirable Marco to find us accommodation, and beds were produced in a strange room reached by an adventurous and in part icy descent through the bowels of the *téléférique* station. Sleep was, however, difficult at

3500 metres and it was with some relief that we left our electrically heated chamber at 4 A.M. to breathe the frosty air of the Plateau Rosa. As we breasted the hard snow slope to the Breithorn plateau we were greeted by the sun rising over Monte Rosa and Lyskamm. Leaving ski at the foot of the final slope of the Breithorn, we clambered to the summit ridge on foot, finding again that inadequately nailed boots and ski sticks demanded extra caution on one or two icy passages. The view was cloudless but a deep haze obscured the Italian plain and the remoter peaks of the Alpes Maritimes: the N. face of the Graians, however, showed a considerable expanse of snow. Skiing back to the Testa Grigia on snow that was still frozen hard we were in time to see the first morning exodus of Italian skiers, before continuing with a slow running descent to Zermatt over the melting Upper Théodule Glacier. Ski had to be carried as soon as the Leichenbretter rocks were reached, but the Furggbach bridge (removed for the winter) had not yet been replaced and the passage of the not too substantial snow bridge put one in mind of the accident of the previous year when one of the Swiss frontier guards broke through and was swept under the snow, but miraculously survived.

My object in going down to Zermatt at this stage was to find a guide for the second part of my leave as Tim Marten and Tred Clarke were both returning to work in Geneva. I was fortunate in being able to engage Arthur Sigrist, one of the younger generation, keen, quietly competent and a pleasant companion. After having arranged for him to join me the following evening (Sunday) at the Schönbühl hut, I left the same afternoon for the four hour walk up to the hut which I found entirely deserted. It was still the old wooden building, though I understand that plans for its reconstruction are under consideration. I was thus able to enjoy a second luxurious dose of solitude, for no one came to disturb my isolation throughout Sunday, as I lazed on the grass and rocks of the Schönbühl and watched the avalanches pour down the Zmutt ridge and the Dent d'Hérens, sheep and marmots being my only living companions.

Arthur arrived about six in the evening, and on Monday morning we took the usual summer route up the Stockje close beside the icefall of the Stock Glacier, although the normal practice with ski is to make the long détour by the upper reaches of the Zmutt Glacier. At the head of the Stockje we put on ski and threaded our way through the wide but readily visible crevasses to reach in $3\frac{1}{4}$ hours the summit of the easy Tête de Valpelline with its startling view of the diamond-headed Dent d'Hérens. The run down over the frontier to the upper Tsa de Tsan Glacier was, if anything, still a little too hard, but muscles stood up better to the strain both of this and of the ankle racking side-slipping involved in the subsequent descent of the steep W. side of the Col du Mont Brûlé, thus passing back into Switzerland at the head of the Arolla Glacier. The snow was here already soft and a meal at the foot of La Vierge refreshed us for the baking climb up to the Col de l'Evêque. Too lazy to try the rocks of the S. face of the Evêque,

we contented ourselves with a short snow climb up the easternmost of the Pointes d'Oren on the frontier ridge, before ploughing across the great expanse of the upper Mont Collon Glacier and up to the new Vuignettes hut. This fine stone building, completed in 1945 by the Monte Rosa section of the S.A.C., was with its spring mattresses and gas cooker a comfortable contrast to the straw palliasses and iron stove of the old Refuge Jenkins where I spent two nights in 1939. The latter still stands close by but will soon disappear as firewood.

The following day could be counted among the best. Leaving the hut at 6.30 A.M. we were on the top of the Pigne d'Arolla by 8 and soon after were enjoying the steep swinging descent on ski back to the hut. Then on down over the perfect snow of the Glacier de Pièce, running out into the moraine, and so down through the feathery larches to the hotels of Arolla. The green meadows, the trees and the flowers were a rest to eyes tired with the glare of the high snowfields in June, while an excellent lunch provided by the Anzevui family restored our strength for the exhausting afternoon's walk up to the Plan de Bertol. We were, however, able to tackle the second half of the way to the Bertol hut on ski and so, with less effort than expected, by 6 P.M. we were opening the door of that quaintly perched eyrie. On Wednesday we had to return to Zermatt for Arthur to be in time for the Corpus Christi festival on June 5, but before setting out across the Glacier du Mont Miné we made a rapid dash on foot across the hard early morning snow to the foot of the Aiguille de la Tsa. We thus had the satisfaction of a good climb up the warm yellow-brown rocks of that pinnacle and saw its shadow pointing high up on the alp by the Pas de Chèvres while Arolla slept in darkness below. Here again ski boots were at a clumsy disadvantage on the more delicate footholds. Though we had left our ski below the hut the return to the Bertol rocks did not take long and by 8.15 A.M. we had started out, this time on ski, over the broad expanse of the Glacier du Mont Miné and by 10 had reached the summit of the Tête Blanche and were looking over at the Tiefenmatten face of the Matterhorn.

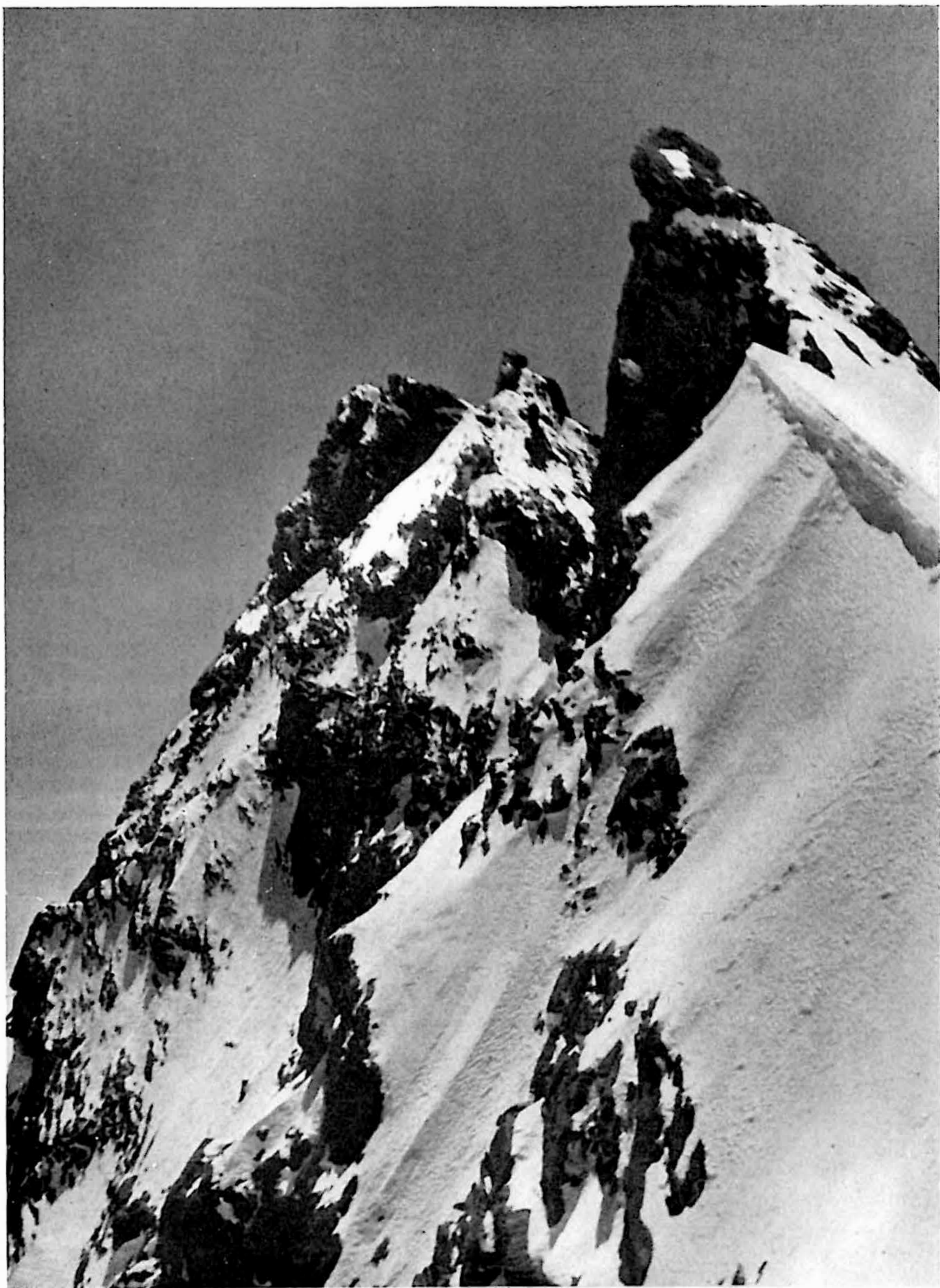
The Col de la Tête Blanche is naturally taken by skiers in preference to the slightly rockier Col d'Hérens and the descent on ski over the Stock Glacier by our route of two days previously was a matter of less than fifteen minutes. Once on the Stockje rocks we again followed the summer route to find the steep slope, regarding which Arthur had some misgivings, in perfect *sulz* condition, giving that ideal surface for turns and the best finish that could be desired to the season's skiing. So back to lunch at the Schönbühl hut and down the long path to Zermatt just as the first drops were falling from the gathering thunderclouds.

The weather remained fine, however, for the feast of Corpus Christi, but heavy rain in the night and following morning brought snow down to the Riffelalp and our plans for climbing had to be seriously revised. On Saturday I struggled up one of the minor peaks of the Unter-gabelhorn in six or eight inches of new snow and a chilly wind, to watch

the snow plume blowing off the Matterhorn. On Sunday, June 8, however, Arthur reckoned it would be worth going up to the Trift hotel for an attempt on the Obergabelhorn on Monday. An ominous wind howled round that dismal and empty hostelry as we tried to sleep, and when we set out at 2.30 A.M. black streamers of cloud were tearing across the sky from the W., enveloping everything above 3800 metres. We made good progress up the wearisome moraine and by 4.30 had reached the Eseltschuggen rocks, where I was glad to see that a site for a new hut has been staked out and I understand construction may begin in 1948. It was cold and sunless but the deep snow which had drifted into the glacier corrie below the Triftjoch gave us plenty of warming exercise and made us regret that we had abandoned ski. We were glad to reach the rocks of the Wellenkuppe and found them little more than flecked with snow and sheltered from the wind, so that the climb up the firm rough profile was pleasant enough. The snow ridge and summit were, however, a blur of mist and driving snow, so we returned to the highest rocks to give the weather half an hour's chance to clear. By 8.15 blue sky had indeed penetrated the mist and we returned to the summit but only to see the gendarme and the Obergabelhorn ridge plastered with new snow and belaboured by a steady westerly gale which had in a few minutes numbed our noses and fingers. The prospect of two or three hours' unsheltered climbing under those conditions made us reluctantly turn back and plunge down to Zermatt, there to lunch under a sweltering blue sky which made the arctic conditions of a few hours earlier almost unbelievable.

Arthur suggested that, even if the gale were to continue to blow on the following day, the E. side of the valley would be more sheltered and, as I was anxious not to waste a day, we agreed to go up to the Fluhalp the same afternoon and to attempt the traverse of the N. ridge of the Rimpfischhorn which had not so far been done this year. In order to save time, he proposed that we should make use of the ski lift (*sans* snow, let it be understood) which the Zermatt commune has built through the forest to the alp above Findelen; I was thus introduced to the latest peril confronting the stranger in the Alps and a worthy follower in the tradition of 'small animals,' drunken diligence drivers, aerial funiculars and Alpine post buses. Clinging precariously to a piece of wood shaped like an enlarged ice-axe and about as uncomfortable to sit on, the unfortunate victim is expected to dangle his feet on the ground and be dragged up some 700 metres of forested mountainside in little over fifteen minutes. Although I was informed that it was quite easy if one knows how, the inexperienced traveller finds himself, as I did, desperately running at top speed to keep up with the unrelenting rope and arrives exhausted and bewildered at the top. I was hardly able to stagger along the easy path to the Stellisee and had barely recovered by the time we reached the new and comfortable Fluhalp inn which we again had entirely to ourselves.

In spite of evening signs of wind, the morning promised fair with a thick blanket of mist over the Zermatt valley and a cloudless sky above.



Photo, E. H. Peck.]

RIMPFISCHHORN—NORTH RIDGE—JUNE 1947.

By 6 A.M. we were threading our way through the maze of tumbled rocks below the Pfuhlwe gap ; by 8 we had reached the end of the long snow crest of the Rimpfischwänge and in four hours from the Fluhalp we were on the summit of the Rimpfischhorn and looking along the towers of the N. ridge. These appeared to be separated by considerable patches of snow, the consistency of which would determine our rate of progress.¹ Though the immediate outlook did not seem too promising, the preliminary *rappel* from the summit tower and the few steps over the first snow patch showed that the rocks were in fact dry and that the snow held. There followed nearly three hours of delightful up and down rock work along the airy ridge, keeping all the while above the 4000 metre line. One or two of the descents on the N. side of the towers were choked with snow, but the long traverses where the crest of the ridge is gripped presented no particular difficulty save where snow occasionally overlaid the crest. The climax of the climb in this direction is of course the steep chimney up the face of the great gendarme and, to a weak rock climber like myself, here and on the other tricky passages, a guide and rope were of convincing moral support. From the top of the great gendarme a few cautious steps on loose powdery snow brought us on to the firm *firn* of the characteristic snow ridge above the Allalin Pass and, after negotiating the two curious crevasses which cut across this ridge, we reached the plateau near the pass at 1 P.M.

Arthur told me that in addition to the construction of a new hut on the Lange Fluh by the Fee Glacier, there had also been built in 1945 another S.A.C. hut above the Täschalp. At the risk of a slight *détour* I decided to take a look at this new hut which makes a good starting point for the 'red ridge' of the Alphubel as well as for the Täscherhorn. Cutting across under the Feekopf, we reached the lower section of the Wand Glacier and after some boulder-hopping through the moraine where the rudiments of a path are being encouraged by a succession of diminutive cairns, we found the hut at 2750 metres on a grassy shoulder above the Täschalp. A pleasant ninety minutes passed swiftly away in resting and contemplating the apparently *snowy* outline of our ridge against the sky, before a leisurely walk down over the Täschalp and through the larch forest landed us at Täsch in plenty of time for a late train back to Zermatt.

Meanwhile the Matterhorn had had ample time to clear itself of new snow, and though we had no chance of making the first ascent of the year, as one party had been up while we were skiing on the Arolla side and a second had left the day of our return from the Rimpfischhorn, we were sure that there would be none of the usual risks of stonefalls caused by other parties on the Swiss ridge. When Arthur and I reached the Hörnli hut on the evening of June 11 we found the only other occupants to be two Swiss frontier guards, one of whom was bemoaning a lost wallet. Soon after 4 A.M. on the following morning we were on the first rocks of the N.E. ridge and made such good

¹ See illustration.



Photo, E. H. Peck.]

MATTERHORN, DENT D'HÉRENS—JUNE 1947

headway up the for the most part dry rocks and over the surprisingly small patches of snow that in just over two hours we had reached the Solvay hut and watched the sun flood the recesses between Monte Rosa and Lyskamm. Above the hut conditions were still good and the snow on the Shoulder though extensive was firm, while the steep rocks with the fixed ropes were practically free from snow. By 8.45 we were on the narrow untrampled snow crest of the Swiss summit and I was surprised to find how closely the Italian summit resembled the illustration in *Scrambles*. A chilly breeze cut short any dallying on the summit but the view was unbroken by any vestige of cloud, and I was delighted to be able to see, as another party had seen some 82 years ago, the great bulk of Monte Viso standing out clearly on the southern horizon.

We could afford a leisurely descent and I was glad of the opportunity of noting the classic spots of the first ascent, while there was no risk of other parties showering stones or hurrying one on. I found, however, that I had paid for the too rapid early morning ascent to the Solvay by being totally unable to recollect more than a few isolated sections of that part of the route. By 2.30 P.M. we were back at the Hörnli, and while a heavy afternoon cloud settled round the Shoulder, we sped down by long glissades to the Staffelalp and wandered back to Zermatt by way of Zmutt. So ended an ideal mountain holiday, in which skiing, climbing and the joys of spring in the High Alps had all played their respective parts and it was less with the normal feeling of regret than with one of gratitude and satisfaction that I left Zermatt on the morning of Friday, June 13, under weeping skies on my way to Geneva and London.

If I may be permitted a few general remarks regarding ski mountaineering based on this very brief and modest experiment which was moreover exceptionally well favoured by weather and snow conditions, I should first frankly confess that the expeditions described must for the most part be classed either as skiing expeditions or as climbs pure and simple. There was little attempt to use ski simply as a medium for reaching the foot of climbs and for ensuring a rapid return to base. Naturally on both types of expedition one was among high mountains and the opportunities of practising and learning mountain craft were there, but while admitting the value of ski on long mixed rock and snow expeditions of several days, I found that, given the (admittedly limited) object of extracting the maximum of enjoyment from the mountains during a restricted period of leave, it was, in fact, less advisable to adapt one's medium to the type of expedition selected than, oddly enough, to select the climb according to the medium to be employed. Thus, at one end of the scale the Zermatt Breithorn is obviously a tour on which ski should be used to the utmost even in summer, while at the other the Matterhorn may be quoted as an example of an expedition where it would be useless to take ski except in the most improbable event of the slopes down from the Hörnli being skiable at the same time as the rocks of the peak were in climbable condition. A good example

of a possible combined ski and rock tour might be the Rimpfischhorn, but even here the question of boots which discouraged us from the ascent of the Dufourspitze would raise some difficulty, and there would be long portages on the lower slopes. This vexed question of boots seemed to me the principal drawback to combined expeditions; ski boots can only be nailed with a few studs if they are to do service on ski, and, as I found on the Aiguille de la Tsa, their square toes are singularly inadequate for delicate footwork on rock; the Swiss are making much use on ski boots of the hard rubber Vibram soles, shaped to resemble nails, and these, combined with crampons, are perhaps the best all round solution, though Vibram is dangerous on glazed or wet rock. Another drawback, which may cause a mental conflict between the claims of skiing and climbing, is the fact that, in order to obtain the best snow conditions, it is important to ski down between 9 and 11 A.M., and this may, on occasions, mean choosing between an immediate descent and completing the climb to the final peak.

But it would be ungracious to dwell on these and other minor drawbacks, when I was able in this period between seasons to enjoy such an admirable combination of winter and summer delights. While in March or April it is possible to extend the use of ski to the sub-glacier regions, in May or June one must be prepared for long portages of ski, such as from Zermatt to the Schönbühl or from Arolla to Plan de Bertol, and one must anticipate that ski can only be used on the permanent snowfields, though it is reasonable to expect that the glaciers will not be too open. Ski can be used to best advantage on the peaks which, though still of fairly considerable height (*e.g.* Tête de Valpelline, Pigne d'Arolla, Cima di Jazzi, all over 3800 metres), would rarely be visited on foot in summer, and these tours on ski can be used in turn both to extend one's high mountain experience and to reconnoitre routes and conditions on the higher peaks which should then be just coming into condition. Though ski expeditions thus provide an enjoyable alternative to ice and rock climbs, they are not, paradoxically enough, to be recommended when a fall of new snow puts the high peaks out of action, as the fresh fall tends to spoil the *sulz* surface which has been forming under the action of sun and frost. Finally if I may express an opinion which is strongly influenced by the stringency of leave and the need to extract the greatest mountain enjoyment in the least possible time, I would suggest a modified 'centrist' policy with expeditions planned for ski or climbing as determined by conditions, but avoiding as far as possible a combination of both on the same expedition.