red snow-headed pilaster was passed westwards; more of the same kind of work, diversified by a very stiff 8 ft. of chimney and a final exciting traverse, and at 12 o'clock we stood on the desired snow patch. From here onward the rock was better broken, and the traverse ledges less sensational. Pushing on briskly, we reached the crest at 12·50, emerging between the two most easterly of the three little blocks which break the horizontal line. A driving rain saluted us, and we sheltered under a rock till 2·13. Twenty minutes more along the ridge to the peak, where we had laughed with Giorgio Bernard seven years before at the idea of the North Wall being practicable. So do mountains degenerate. Still rain, though, and still no Dibona and no boots. So at 2·45 we took the first snowfield at a sitting glissade in kletter-shoes. Meeting our accoutrements at the bottom, we all hopped down cheerfully over the scree ledges to the once terrible Lange Band, and then, by a stony glissade over unduly hard snow, to the Rifugio Venezia at 4·25. Hence in an hour and thirty-five minutes S. Vito was reached in a deluge. This expedition is described with even greater rhetorical amplitude in the *Rivista Mensile* of the Italian A.C. for March.

The dangers from the condition of the rock make it impossible to recommend the climb as a regular way up the Pelmo, though parts of it are very interesting for their difficulty. The problem remains of finding a way not 'simplified for families and very young persons,' nor unduly risky. Such a way might very possibly be found up the E. ridge, starting from the Forcella Rossa. Meanwhile that North Wall is no longer an insult and a challenge to the mountaineering world.

Lofoten, 1898.

By HOWARD PRIESTMAN.

WHEN the mail steamers leave Bodö, on the mainland of Norway, the first point at which they touch in the Lofoten Islands is the little fishing town of Svolvaer and it was there that Messrs. Woolley and Hastings and I landed near the end of July last year. We had travelled as fast as possible from England and had occupied exactly six days on the journey. During that time we had only spent one night ashore, at Trondhjem, and a few hours in Bergen.

Digitized by Google

There was no mistaking that we were in Norway. It was a dull grey evening and, though the wind had dropped, the waves lapped ceaselessly against the rugged shores; the quaint wooden houses clustered round the sheltered harbour, on which floated many of the elegant Nordland boats; and just behind the town the wet grey crags rose steep and grim, their heads still buried deeply in the clouds.

In this latitude the sun never sets from May 28 to July 16; but as that date was passed, the sun was not now visible at midnight from the North cape and the tourist traffic was therefore over for the season. In winter, on the other hand, the sun is never visible at all from November 29 to January 13; and the islanders and their many visitors who come to take part in the great cod fishery, think themselves fortunate if the dim winter twilight is clear enough to enable them to read at midday without artificial light. Whilst we were in camp we were much more troubled by the heat than by the cold; but in winter the thermometer sinks many degrees below zero and the hardships which such a temperature must entail on those who fish from open boats are very severe indeed.

During the few hours which we had to wait at Svolvaer we found a little hotel standing close beside the quay, where we got some plain good food. It was nicely furnished; and when, on our return, we had to spend a night there, we found the bedrooms clean and comfortable.

We left again the same evening in the little local steamer and threaded our way through the dangerous channels towards the northern part of the island. The weather cleared somewhat as the night advanced; but though we had occasional glimpses of a towering pinnacle or a shattered ridge, we never saw a summit and we arrived at Digermulen about 12 P.M., in the grey twilight of a dull summer night, without getting any idea of the grouping of the mountains.

Digermulen is the only station of any size on the Raftsund. It lies on the southern extremity of the large island of Hindö and is well known to most people who have visited the North cape, as many of the tourist steamers call there for a few hours on their way north or south.

There is no hotel, but visitors are taken at the house of the landhandler; and although the advent of ourselves and three other people without any kind of notice caused some consternation on the night of our arrival, we received very comfortable bedrooms and made the house our headquarters all the time we were in the neighbourhood. We were supplied

Digitized by Google

by the Normans with as much bread, butter, cheese, eggs and cream as we required and we also hired our two boats from them. Of other dwelling-houses there were but few and they were very small, but all were well built of wood and nicely painted, having an air of comfort about them which is often absent in similar houses in southern Norway.

Besides the dwelling-houses, there was a large wooden warehouse on the quay which was stored with firewood; there was a telegraph office and a shop where one could buy rifle cartridges or cigarettes, chimney-piece ornaments or treacle, as well as an unusually varied assortment of other goods.

The harbour contains a very good anchorage; and as it is well protected from the S.W. by a long promontory, it is largely patronised by the fishing-boats which are always passing up and down the sound.

The advantages of stopping at a private house are not without their drawbacks, for, although the visitor is allowed to pay, he is treated as a guest and takes his meals with the family; and as these were often very late, we were frequently delayed in starting, because we did not like to ask for too many special breakfasts.

For two days after our arrival the weather remained dull and the clouds low on all the hills, so that we never saw a peak; but the third day brought a welcome change and in the brightness of the early morning the splendid peaks which form the crowning beauty of the world-famed Lofotvaeggeu stood up in serried ranks against unclouded blue. The steep bare crags and slabs, still dripping after days of rain, shone as they caught the level sun and long blue shadows picked out in strong relief the endless pinnacles and deep ravines which seam each mountain side. Beneath them all the Raftsund lay—a long, still lane of light, reflecting in its placid surface the bright green lower slopes, the bare grey crags and the now glittering snows.

As we had made preparation for a start the day before, it did not take us long to get our things together and by 11 o'clock both our boats were loaded with tents and sacks, a small canteen for cooking and a week's supply of food.

For the first time since our arrival we found that rowing was uncomfortably hot work and we went but slowly in consequence; for there was not a breath of wind and sailing was quite out of the question.

As we crossed the sound and drew near to the foot of Store Troldtind, the many pinnacles which at a distance are merged against the face of the mountain began to bristle up against

Digitized by Google

the sky and we perceived for the first time how much the mountains are riven into detached towers and splintered ridges by gullies and chasms, which were often quite impassable to beings without wings.

When we entered the splendid portals of the Trold Fjord, we were glad to get into the shade of the mighty crags and to idle along over the deep green water, whilst at every stroke the wonderful prospect opened wider before us. It gave us our first view of many of the remoter mountains, with their smooth, steep sides and jagged ridges, as they rose above the intervening crests.

It proved to be no light task to find a suitable place for our two small tents, for the floor of the valley seemed to be composed entirely of fragments fallen from the crags above and, to a height of 500 ft. above the sea, everything was covered with a dense growth of ferns and flowers, which stood fully 4 ft. deep. After spending an hour in trying to discover a level place, we finally decided on a site close to a huge boulder about 50 yds. from the head of the fjord and we made a clearing in the ferns, using many of those we cut to improve the uneven floor where we proposed to put the tents.

We had no difficulty in getting a good supply of small firewood from the dwarf birch-trees; but the weather was so fine and warm that we were not inclined to hurry and after dinner we sat enjoying the bright sunshine and our beautiful surroundings till 6 P.M., when Ole left with the smaller boat and we were ready to start for our first expedition.

We had hopes that the sun might still be visible at midnight from a height of 3,000 ft. and we therefore decided to ascend Store Troldtind, which is one of the four highest points on the island and is the only mountain which has been previously ascended.

So many of the tourist steamers now visit this wonderful fjord that a landing-stage has been erected on the southern side for the benefit of passengers who wish to see the Trold fjordvatn, a lake 500 ft. above the sea, on which there are nearly always icebergs floating; there is also a rough footpath as far as its eastern end and we ascended by this track until we reached the outlet of the lake, whence the water falls in a long series of cascades to the fjord.

We struck the ice at a point where it had piled up a moraine of big boulders, right on the edge of the crag, and after climbing over these we got on to the glacier at an altitude of about 1,500 ft. The surface was very little crevassed and free from snow; and as the angle was slight, steps were seldom

Digitized by Google

necessary as we turned westward up the ice. Above us, on our left, the wall of rock rose almost vertical for about 1,500 ft. and in vain we scanned the broken face for a possible line of ascent. Three big gullies afforded the only hope of a direct route and as we got below them each in turn proved to be entirely out of the question; so we continued to the highest visible point of the ice, in hopes of finding some other route.

Here a new surprise awaited us, for we found that there was no feasible way up the rocks and at this point the wall and the terrace, still nearly 100 yds. wide, ended abruptly and fell away for two or three hundred feet on to a second glacier, very similar to the one we had ascended. The rocks were steep, glaciated and impossible; but, as seems so often the case, there was just one line of escape and by creeping down a very narrow gully we reached a ledge covered with snow on the face of the final buttress. We had then only to cut a few steps in a steep and very rotten slope in order to make our way on to the nevé of the second glacier.

We had now come considerably to the west of the summit for which we had started and as we had also lost much ground, we began to debate as to climbing another peak, which lay about a mile further along the same ridge. Our enthusiasm about the ascent of Store Troldtind was also damped by the sight of a long steep slope which formed the only route to the summit and, as the snow was now fast hardening, this meant heavy step-cutting; so, as it was already about 16 hrs. since we began our day's work, we took what seemed the easier course and turned once more westwards over the snowfields in the gathering twilight.

Our hopes of seeing the sun at midnight proved quite unfounded, for it had set whilst we were taking supper on the highest rocks, about 10·30, and now the sky was glowing with all the splendour of a northern sunset. It was difficult to keep one's attention fixed on such sublunary matters as crevasses, when all the peaks we had come so far to see, were beginning to show above the ridges round us. All were alike deep purple and in the north the wild and shattered outlines stood up against an orange sky, on which the brilliant crimson clouds were faintly streaked by long thin lines of black. It was midnight when we reached the steepest ice we had to cross, but there was ample light to see; and after we had climbed a very rotten ridge we had no further trouble and we reached the cairnless summit of the peak, which we named Troldsadel, exactly at 1 A.M. The northern sky was still ablaze with colour such as I have vainly tried to describe

Digitized by Google

and we found it impossible to decide when the waning colours of the sunset ended and the new glories of another day began. Around on every hand rose the bare purple hills with wreaths of night mist resting on their lower slopes; between were lanes of water and then more distant mountains, range on range, where the mighty ice-caps over Lyngen were glowing in the splendour of the now quickly coming sun. Southward from them, in long array, an endless chain of mainland peaks stood up against the blue—unknown, almost unnamed; and in the south the great ice-sheet which rests on Sulitelma shone pale roseate beneath a pearl-grey sky.

From S. to W. and W. to N. the distant rim of the deep blue ocean encircled all the intervening sea of island peaks, from the low hills of southern Rost, to where the skerries of the far north-west break the fierce fury of the winter storms on the rugged coast of Andö.

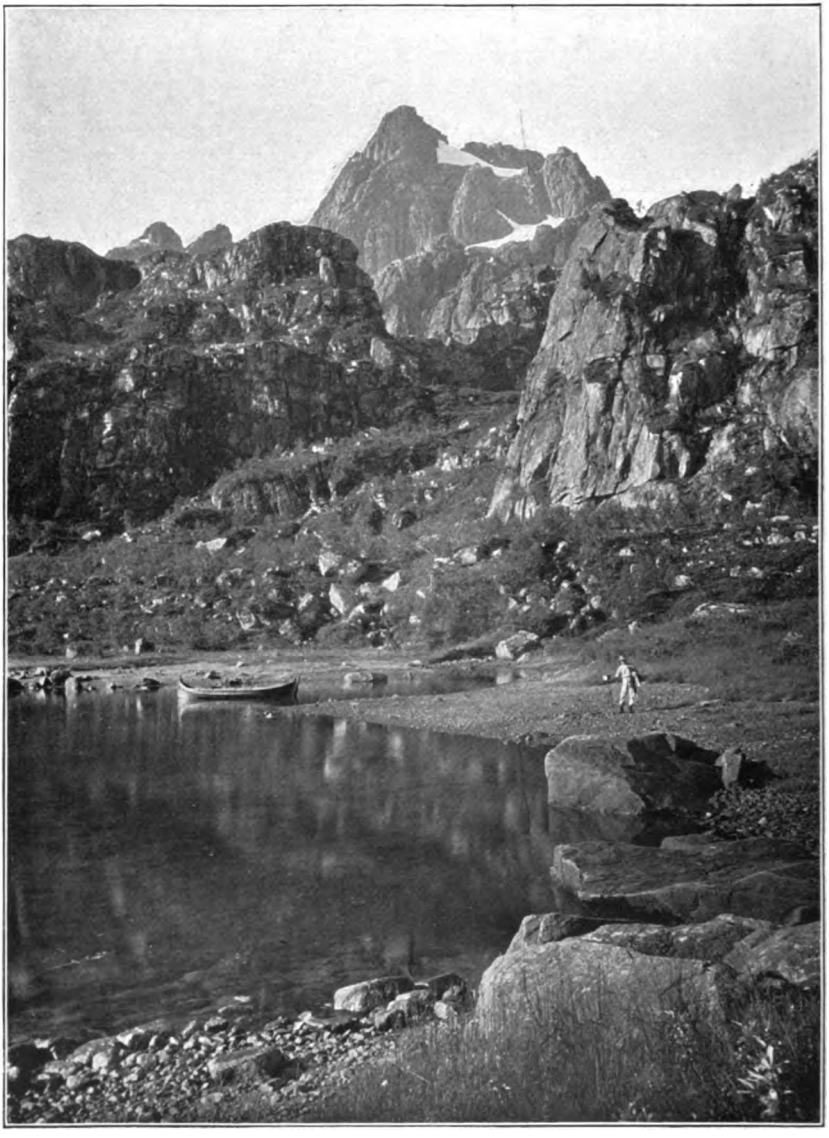
It has not been my fortune yet to stand on high Caucasian summits, or on India's giant mountains, but, as I had the company of those who had seen both, I think it can with truth be said that such a view as we enjoyed can claim a place amongst the best this world can show.

When we reached the upper snows, we were surprised to find that there had been sufficient frost to harden the surface considerably; but we found no difficulty in the descent and we arrived again in camp about 5·0 A.M.

There is a well-known passage in 'Three in Norway,' where they say that, like the Snark, they would frequently breakfast at 5 o'clock tea and dine on the following day. I suppose that this is a usual occurrence with all Arctic travellers, but as mountaineers we did not find it satisfactory. We were never on the summits at the time of day when the atmosphere was clearest, or the light best suited for successful photography; but on more than one occasion we dined about 6 o'clock the following morning and, in order to economise time and the necessity of washing-up too often, we ran the next breakfast and 4 o'clock tea into one meal about 3 o'clock in the afternoon.

On the day in question we took early to our bags, again intending to start betimes for our next climb; but the weather failed us and we only got as far as the lake before we were stopped by heavy rain and mist. It was 8 o'clock on Thursday morn when we started again, intent on the conquest of Store Troldtind. We had yet to learn that shortest routes are not always the quickest and after some debate we made direct for the lake which lies immediately between the

Digitized by Google



Howard Priestman, photo. *Swan Electric Engraving Co.*

STORE TROLDTIND FROM TROLDFJORD.

Digitized by Google

fjord and the summit, instead of going half a mile along the shore before striking up beside the stream.

To describe the country over which we went would be difficult. The ground, which we could not see for dense vegetation, must have consisted wholly of large rocks which varied very much in size; and on the lower slopes they were thickly interspersed with dwarf birch-trees 8 to 10 ft. high. It was a splendid place for the habitation of bears, or for breaking one's legs; and when the birch-trees gave place to a dense growth of ferns, which waved well above our heads as we fought our way upwards, we had to clear every step with the butts of our axes and then pull ourselves up by the stems of the ferns beside the track we made. When an hour and a half had gone, we were still on the slope below the col, in a labyrinth of huge blocks, amongst and over which we clambered slowly upwards to the gap. Here we found we were too high above the lake and after a short halt for photography we scrambled forward again, but now downwards, going over and under and between great masses of rock which lay piled in the most chaotic confusion.

We intended to skirt the shore to the eastern end of the lake, but we had not gone far before we found that this route was stopped by a huge glaciated headland, the cliffs of which plunged straight down into the lake and, under a blazing sun, we were again driven 400 ft. up, amongst ferns and boulders, by a series of awkward traverses. When at last we reached the outlet of the lake, we found that we had wasted 2½ hrs. of the best part of the day and done an enormous amount of hard work over a distance that we could have walked by the track in ¾ hr.

It was not till noon that we reached the place at which we crossed the moraine on our first night's expedition. To our right rose the long wall of uncompromising crags, up which we had in vain searched for a route from the ice; but directly in front of us, to the south, a long broad tongue of nevé ran steeply up to a little col between the main mass of Store Troldtind and a lower summit to the east.

As the snow was hard enough to make steps necessary, we took to the rocks about half-way up and ascended quickly to the col we had seen from below, where we stopped for lunch. As we approached, we drove away a covey of ptarmigan which were there before us. In these unfrequented places, as is much more the case still further north, man's usually accepted proclivities for killing are not realised by the rest of creation and, in lieu of other murderous weapon, our sportsman had to

Digitized by Google

upset one old bird with a stone before he would get out of range and the bird then sat grumbling at us from the other side of the gully until we went away.

Hitherto we had been ascending entirely on the north face; but when we reached a little col on the ridge, we traversed some snow patches until we were on the south side, which is not nearly so steep. We ascended by slanting, rounded gullies and slabby rocks, until we reached the summit ridge and found the cairn erected by the only previous climbers.

The summit is a nearly level ridge about 100 yds. long, falling in almost vertical crags on the north on to the snow slope which we had seen from below. At its highest point the snow was only about 60 ft. from the ridge and earlier in the season it would doubtless run so far into the gullies as to be easily accessible; but at that time we could find no possible route for a descent without engineering and, as the weather was changing and wreaths of mist already sailing about the summit, we decided to return by the way we had come.

We found a substantial cairn, which was built by Miss Jeffrey's party and their record was contained in a well-corked bottle. Although it was upside down, it was nearly half full of water; and as we could not draw the cork, we smashed the neck and extracted the papers, which were almost in a state of pulp. We separated them with great care until we found an entry in Norwegian, written in pencil and dated. Had it been in ink it would have been illegible. It gave no indication of the route adopted; but as the ascent was made direct from Digermulen, we concluded that they had come up the opposite side of the mountain to that we climbed and we probably only joined their route very near to the top. We carefully re-wrote the names and left them in a tin box, together with our own. Failing to find a route down on to the northern snow-slopes we returned without adventure by the way we had ascended.

On turning in that night we had our usual conflict with the mosquitoes. We closed up every opening in the tent before we went to bed, but they found ways to get in. No smoke or any ointment proved of the slightest use against them and they bit me through my head net where it rested on my forehead. When we got desperate, a great slaughter began, which continued at intervals through the weird stillness of the summer night, until the enemy withdrew, as usual, at 3 A.M. Next morning the tent was strewn with the corpses of the slain, but whilst we counted the enemies' losses we had

Digitized by Google

a painful consciousness that there were many stains of gore which had not originally been the property of the mosquitoes.

On the day when we ascended Isvandtind we again had perfect weather and started due west from camp until we reached another lake about 1,000 ft. above the fjord. A glacier flowed into its western end and small icebergs floated on the water. From where we stood, the peak was perfectly bell-shaped; both sides were very steep indeed and the only feasible route was therefore by the ridge running east towards us This ridge is very much rounded and ice-worn and lies between the two high lakes.

We passed the first obstacle by a snow-slope on the northern face and then joined the ridge again where it merges in the final face of the mountain. As we advanced, the angle became so steep that it was desirable to rope; for the whole face was covered with a thick growth of moss and turf, which adhered but lightly to the rounded rocks below it. The climbing was extremely insecure and we had to move slowly and use every precaution to prevent a slip becoming serious, for large patches of the surface covering would peel clean off when any weight was put upon it. To avoid descending this awkward face we decided to try another route; and when we saw that the western ridge fell away at a gentle angle to the top of a long snow-slope, we started down that way. Things went well until we reached a bergschrund running right across the slope. It was far too wide to jump and was crossed by only one flimsy bridge of snow, which the leader was exhorted by the other two to try. They said they would pull him out if he went through; but as this offer was declined with thanks, No. 2 came down to form his own conclusions. When on the lip, he was invited by No. 3 (still up above) to try the bridge himself; but his ideas underwent a sudden conversion and we were obliged to try the rocks for a route. The only possible way was down a narrow chimney, almost vertical, with a jambed stone at the top.

We thought that from the bottom we could see a way, down easy snow-slopes, right to the nevé of the glacier and we made no calculations as to getting up the gully again in consequence; the last man helping the other two down and then following himself on a double rope hitched on a point above the pitch.

For about 1,000 ft. we went merrily down easy slopes until, to our chagrin, we found that the snow on which we stood was separated from the glacier by a belt of vertical rocks

Digitized by Google

which were quite invisible from above. On either hand descent was made impossible by the vertical walls of gullies, but in the bottom of one of them there was a long slope of old hard snow, down which we proceeded to cut our way. We soon discovered that the water from the slopes above ran down beneath this snow and undercut it in the centre to a dangerous extent ; so we kept close to the left wall, until we were forced to cross to the other side, when we tried the strength first with a boulder. For many feet it hurtled down in ever-lengthening bounds, awaking nasty echoes from the hollow crust ; but when it reached a point about 300 ft. above the lake it crashed right through, together with many tons of snow, leaving a yawning chasm which we could not pass and taking with it our hopes of seeing either food or tents that night.

At 10 P.M. we turned to ascend once more and when we reached the rocks we ate our few remaining scraps of food. We had then to decide whether we would try to force a passage across the snout of a small hanging glacier to a snow-slope which traversed the northern face of the mountain, or without more delay retrace our steps over the summit and tackle in turn the bergschrund gully and the treacherous slopes up which we had made the ascent of the peak. It was quite clear that very heavy work would be necessary to cut steps across the steep blue ice in order to reach the snow ; and as we were uncertain if we could then descend direct, we decided to face the difficulties which we knew, rather than run the risk of others which might be even worse.

We got to the foot of the gully about twenty minutes to 12 and as we had no option but to get up it, we tackled it in the twilight without delay. By means of a combination, in which the leader was ably steadied from below by No. 2, the vertical portion was safely negotiated and without more adventure we arrived again on the summit, hungry and tired, at 1 A.M.

The view was much the same as that we had seen from Troldsadel three nights previously, with the same wonderful colouring in the sky ; but I regret to think that we would willingly have exchanged the æsthetic pleasures of the exquisite prospect, for the solid consolation of a very little food.

With great care we descended the treacherous grass-grown face without mishap and, though the journey back to camp seemed very long, we reached the tents before 5 A.M. next day, but not before we were all drenched by the dew with which every fern and birch leaf in the valley was laden.

Digitized by Google

It was late that afternoon when we finished breakfast and the tide rose high enough to float our heavy boat quite close in shore. Camp was dismantled and all things on board by 6 P.M. and we turned our backs on one of the most beautiful fjords in Norway, in the stillness of a cloudless summer evening, with the long shadows of the peaks falling across the dark green water and the brighter greens of the fern-clad shore.

In many parts of Norway the Government are now making a series of new maps and that evening at Digermulen we met the officer in charge of the survey of Lofoten. It had been my good fortune to meet Captain Angell at Kristiania on a previous winter visit and it was entirely due to his kindness that we were in possession of a beautiful, accurate and as yet unpublished map, which aided us greatly in finding our way about.

After our night on Isvandtind we were glad to spend a beautiful Sunday in comfort and idleness and on Monday we crossed the Raftsund and ascended one of the Langstrandtinder to reconnoitre the southern portion of the range.

On Tuesday we left again with all our things by boat for Grundfjord, for the purpose of climbing Svartsundtind.

We surveyed the mountain as carefully as possible next day before we left the camp; and as it looked very difficult, if not impossible, by any route on the north, we went up Blaa fjeld to reconnoitre. This mountain has four very sharp peaks and after trying to decide which was the highest we finally chose the wrong one. Near to the top of the eastern peak the granite of which it is composed is so disintegrated that large masses of the solid rock seem ready to come away at any moment and every ledge gully is so deep with sand and gravel that many square feet will move in places whenever one takes a step. The top itself is very solid, but the whole peak is a striking contrast to the next summit, which stands slightly higher and appears to consist of the hardest rock; it is very steep and smooth and almost conical.

The view of Svartsundtind convinced us at once that it was no use making any attempt from Grundfjord; so we decided to go round to Falvik, on the Raftsund shore, and make an ascent from there. We had not enough provisions for many days and we had to put back to Digermulen in consequence before we could move the camp.

The voyage proved a very rough one and the S.W. wind was so violent that we found it difficult to make any way against it. The rain was driving across the sound in blinding

Digitized by Google

showers, the hills were deep in mist and every now and then a heavy squall would take the breaking crest off every wave and send the spindrift whirling past our ears and in the coxswain's face. By hard rowing we got under the shelter of Ulvö and after passing through a narrow strait we crept along under the lee of Brattö until we had to make straight down the sound for home.

Here we got the full force of the wind in our teeth and with a tide under us there was very soon a short but heavy sea running right against us. We had not 2 miles to go, but it took an hour of desperate rowing and required all our strength to reach Digermulen at all. When we got there, we were tired out and drenched; but such is the effect of usage that the natives thought nothing of our arrival in such weather, whilst, on the other hand, climbing was such a new departure in their eyes that we never started for the simplest climb without their using their best English, with very pointed gesticulations, to tell us that we should certainly break our necks.

Two days later we borrowed the lightest boat and left early, as we did not wish to face the inundation of our quarters by 200 tourists.

It was a beautiful morning and we intended to make the ascent of Svartsundtind and return without camping. We had not gone 2 miles up the Raftsund before the enormous steamer *Augusta Victoria* hove in sight off the point and announced her arrival by firing four small cannon. As each puff of smoke rose from the ship, it was followed by the dull boom of the gun and that again by echo after echo from every hill within range; and as a climax of incongruity there came as well the strains of a jiggy tune from the German band on board the ship. After 6 miles of rowing we landed on the eastern shore to get a good look at the mountain and finally decided on a route.

As on the descent of Isvandtind, we found our greatest difficulty in crossing the steep glaciated rocks which form the lower slopes. We had to make a long detour to get above them and then the route was easy for some way. We ascended over two small glaciers till we joined the East Arete above a pinnacle on the ridge, which forms a conspicuous hump on the skyline when the mountain is seen from Digermulen. Above us the ridge was composed of huge blocks of granite; they were very firm, but so smooth and rounded as to make progress slow, though we encountered no great difficulty on the way to the highest point.

Digitized by Google

The weather had clouded in, but fortunately the summit was clear, although it was damp and cold and we tried to keep warm by building a good big cairn.

As far as we could now see, any ascent on the N. or W. or S. was quite impossible, but there are probably several variations of our route as well as more difficult climbs on the N.E. and S.E. faces. We were interested to hear later, that the only previous attempt to ascend the mountain had been made by a Norwegian gentleman, who established a camp on Grundfjord and made several futile efforts to climb the northern face.

The weather began to improve as we descended, but the thick growth of bilberry shrubs and ferns on the lower grounds were dripping with the rain and ere we reached the boat we all were wet through again. The northern sky was once more clearing of the heavier clouds before we got afloat and if the glorious radiance we had sometimes seen was absent, the crimson which we could not see tinted grey clouds upon an orange sky as silently we rowed and drifted homewards with the quickly ebbing tide.

It would convey a false impression were I to close my paper here, for our last week was by far the worst and was mostly spent in camp. We pitched our tent on Öihelsund in very heavy rain, on ground that was wet as a sponge, and before many hours were over we had a small waterfall dripping on the tent from a rock which we thought would give some shelter. We rigged a sail to cover us whilst we cooked and struggled with fires of wet green wood for the whole of our sojourn there. We hardly ever left the camp and, as we had no books, we spent our time in dodging drippings from the flapping roof and mopping puddles from the sodden floor. But the climax only came when a stream developed and flowed right through our kitchen grate and we had to subsist on cold collations until we dug a new course for the water.

We never dreamed of climbing in such weather, but waited doggedly for a change, which never came, until I had to leave to catch my steamer home. The moral of that week is obvious. Heavy waterproofs, sou'westers and a perfectly waterproof tent are necessities for camp life up there.

It is fortunate for us that discomforts such as these leave little in our minds but added interest in the tour they mark, whilst recollections of successful climbs and lovely summit views grow brighter as the weeks and months go by.

The climbing in Norway is very different from that of Switzerland; but if the hills be lower, there are many compen-

Digitized by Google

sations. There is ample room as yet for years of mountain exploration, with a total absence of conventional hotel life; and when I think of Norway, I always think as well of many kindnesses received from every class of people there.

Memories of Justedals shining snowfields, of rugged Jotun mountains, or sunlit winter landscapes, all bring with them unbidden, happy recollections of a quaint, if quiet, life among a simple kindly people, which only grow more pleasant as they mingle in the past.

VAL FORMAZZA REVISITED.

By A. CUST.

While staying at Binn and Tosa Falls, in 1897, I explored the ridge between the Forno Group and the Scatta Minojo. All the cols on the ridge are easy and agreeable on the Lebendun side when there is plenty of snow, but mostly steep and disagreeable in the upper part, with rickety débris gullies, on the Devero side. The foot of all of them is reached on the latter side from the Upper Alp Forno by a pleasant ascent, with a good view of Monte Rosa over the vista of the valley, to a large tarn, omitted on the map, which this year was partly full of snow, and on that account taking beautiful colours. This tarn lies in a bay in the mountains formed by side ridges, of which the longer separates it from the recess of the Scatta Minojo route. Above the tarn are snow slopes followed by débris.

Beginning from the N.W. the first gap, which I visited from both sides,* although easy enough, is too high and disagreeable to make it of use as a passage. The next gap, which I reached from the Devero side, is not so high, but steeper and more disagreeable. From it I reached (July 31) a rock summit to S.E., on which I found neither cairn nor place for one. It is the highest point after the Forno group, and I suggest for it the name Punta di Curzalma, from the hut below. After this another snow-ravine follows on the Lebendun side, at the head of which, on either side, are two remaining passes of about equal height, lower than those previously mentioned, but still considerably higher than the Scatta Minojo. Of these, the first (in the same order) I reached from Andermatten in 1879, and this year crossed from the Devero side. A steep and rotten débris gully leads to it on this side, terminating in a little cul de sac in the rocks, allowing escape (unless previously avoided by diverging to the left) by a curious hole, through which I dragged myself extended flat on the ground. The other, and last, pass in order is the most practicable, but the direct passage of it

* Also the higher gap S.E. of pt. 2,904, on which summit I found an engineers' cairn.

Digitized by Google