ing a bottle of Bouvier. A few minutes after leaving we met young Bohren and a cowherd with provisions, and instructions from the hotel to see what had become of us. At 9.30 we turned into the courtyard of the Bär, and found that our prolonged absence had caused some anxiety, and that for once the telescope was in request, as a means of finding us coming down the path by the Mettenberg.

One individual was, I believe, thoroughly disappointed at our turning up, having assured the Bosses that we *must* be lost, and that an expedition should at once be sent out to find all the fragments possible.

The next morning we said good-bye to friends; the day after we were in London, and the pleasures of another mountaineering season a thing of the past. The last link that bound us to Grindelwald was broken on the way to Interlachen, as we had a hurried view of our friend the camel, having a preparatory wash and brush-up by the side of a stream.

In conclusion, a few words as to the general nature of this expedition. We of course tried it under difficulties, and just after a prolonged spell of bad weather and much snow. Both Almer and Pollinger said it reminded them of the Matterhorn from the north in bad condition. The arête is certainly the steepest I am so far acquainted with, but in fine weather there should be no difficulty to any mountaineer worthy of the name. The single really bad piece on the final peak should be taken one at a time with a long rope, and not as we took it, unless an easier line of attack can be found. The new route may be estimated as about an hour longer than the old.

The strange thing is, that in a district like the Oberland such an expedition, forming as it does the apparently right route up a peak so well known as the Schreckhorn, should not have been tried till our ascent in 1883.

Notes on Corsica. By F. F. Tuckett.

MY friend Mr. E. T. Compton and I, accompanied by François Dévouassoud, landed at Bastia on the afternoon of May 20, 1883, after a delightful voyage of 6¾ hours from Leghorn, and devoting a day to the environs and another to a fine 12 hours' diligence drive through a perfect blaze of flowers *viâ* Ile Rousse to Calvi, proceeded thence on the 23rd by the magnificent road through the Haute Balagne to Speloncato. Crossing the pass of the Croce d'Ovo (1,100 mètres?) in the afternoon—an easy walk of 2½ hours—we

reached Olmi Cappella, and were most hospitably received and comfortably lodged at the house of my old friend M. Angelo Maria. The 24th was devoted to a very pleasant expedition into the valley and forest of Melaja, S.W. of Olmi, where our host had some woodcutters at work on a *coupe*, or parcel, of Pinus laricio, of which we saw some balks cubing 12 mètres (i.e. the entire balk contained 12 cubic mètres of timber), whilst on the left flank of the valley I measured two standing pines of magnificently picturesque growth and cedar-like appearance, which were respectively 16 feet 2 and 16 feet 9 inches in circumference. Compton secured some lovely sketches, and then, after striking up as far as the Col de Cineraggio (1,432 mètres), from which, but for a provoking mist, we ought to have had a superb view over Calvi and its bay, we returned to Olmi and spent a delightful evening at the house of the highly accomplished curé, M. l'abbé Martin Casanova, who showed us the greatest kindness. He is the author of numerous articles, and a more elaborate dissertation, on the claims of Calvi to be the birthplace of Christopher Columbus, and certainly brings forward some telling evidence in its favour as well as damaging criticism of the pretensions of various places on the mainland. A charming concert—'Voceri,' &c.—at the house of his *vicaire* by some amateurs, including a blind performer on a violin signed 'Stradivario. Cremona. 1720,' which had belonged to M. Casanova's family for a century, wound up the day most pleasantly, and it was hard on midnight before we got to bed.

The next morning we started, with a mule to carry cooking utensils and extra supplies, for the valley and forest of Tartagine, S. of and parallel to that of Melaja, with the intention of crossing the Col de l'Ondella (1,855 mètres), near its S.W. extremity, between Monte Corona (2,143 mètres) and the Cima della Statoja (2,304 mètres), and descending thence to bivouac in the upper portion of the, as yet, virgin forest of Asco, near the head of the valley above the village of that name, which is traversed by the fine torrent of the Strancia-cone. A little above the entrance of the Tartagine valley we reached the *maison forestière*, and were most hospitably entertained at breakfast by the *garde forestier*, who entirely declined payment. The timber in the lower part of the forest is not of a remarkable character, and, higher up, the terrible conflagration, alluded to in my former paper, has wrought frightful destruction; but when we quitted the *route forestière* and climbed the hill side on our left, we found numerous noble trees, often most picturesquely grouped amidst magnificent granite blocks, though here the woodman's axe had been hard at work, and

prostrate balks often made our beast's progress both difficult and tedious.

As we rose above the timber region and got a clear view of the basin of the upper valley, we noticed a depression higher up which seemed to correspond more accurately with the position of the Col de l'Ondella of the map than that at the head of the lateral hollow we were following, and, in fact, it finally turned out that instead of hitting off the true pass we had gained a saddle further to the east, and so near the foot of the fine rocky summit of Monte Padro (2,393 mètres) that it must probably be that point of the ridge indicated by the figures 2,033 on the Carte de l'État Major. Strange to say—misled by our muleteer's assurance—we did not clearly recognise the fact at the time, though we saw that the more westerly col was decidedly lower, and the result was that not only a considerable loss of time took place in forcing a rather long and difficult descent over very rough and trackless ground, but the topography of the northern face of Monte Cinto was not so unmistakably clear as we had expected to find it from the col. However, the weather was fine and the view magnificent, and, as it was only 4 o'clock when we bade adieu to our man and his charge, we had no doubt of reaching our destination by daylight. In fact, after nearly three hours of roughish scrambling, which our rather heavy loads did not facilitate, we reached the left bank of the Stranciacone at a point almost exactly due N. of the Capo Bianco (2,554 mètres) on the opposite or southern side of the valley, only, however, to find that the stream was so wide, and the volume of water derived from the rapidly melting snow so great, that to cross it would be a matter of difficulty, if not absolutely impossible. Rather bothered and perplexed, as the same knot would have to be unravelled or cut in the morning if we were to carry out our plan of attack on Monte Cinto, we forced our way 'thorough brake, thorough briar,' over boulders, and through *maquis*, up the left bank of the torrent for about another hour, and then, as no further chance of a crossing could be discovered, and it would soon be too dark to install ourselves comfortably for the night, we fairly caved in and proceeded to camp.

Some dry sand close to the water and in a partially sheltered position offered a tempting foundation for the bracken which Compton collected, whilst I built up a dry stone wall at the head and side of our 'lager,' stretching a macintosh across to keep the dew at least from our faces, and François presided over a magnificent fire of laricio wood, over which first a good brew of that most nourishing and appetising of preparations,

'Symington's pea-flour soup,' and then 'lashings' of tea boiled merrily. As the darkness 'fell from the wings of night,' and the bright flames shot high in air, lighting up the golden ruddy stems of the pines, we held high revelry for a couple of hours, and then all turned in, hoping that the cold of the night would diminish the water of the torrent.

On rousing, however, at 2.45 on the 26th, we saw to our dismay that the level had only fallen a few inches, and so there was nothing for it but to go on—as soon as the light permitted a little after 4—forcing our way up stream, trusting that, like most at least of its brethren, it would not grow bigger as its sources were approached. An hour went by, our progress was slow and unpleasant, not to say disheartening, and, though we had not much doubt of ultimate success, the delay was becoming annoying from its probable effect on the clearness of the views, when a shout of triumph was heard from Compton, who had gallantly pushed on in advance, and soon we saw him on the further bank, which he had reached by the help of a large fallen pine trunk spanning the greater portion of the river, and from the further end of which it was possible by moderate athletics to get to shore. We were soon by his side, thankful to have found such an ally, as closer acquaintance only confirmed our impression of the imprudence of attempting to wade a torrent of such depth, width, and force.

Mounting the bank, we at once struck a track and followed it up the valley by the river side for about twenty minutes, till rather below the point marked 'Résinerie' on the map, where a stream from the Cinto comes down on the left through a lateral gorge bounded on the W. by a ridge which culminates in an isolated peak marked 2309. In the higher and more open portion of this ravine, which is thickly wooded lower down, are the Bergeries de Manica, which we passed about 7, after striking up through the forest and turning round the shoulder 1471. Still further up, and nearly in the middle of the valley, we had noticed from our col of the previous day some tooth-shaped masses of rock emerging Grands Mulets-like from the, at this time, snow-covered slopes, and on nearing these about 8.30 we—wisely as it turned out—decided to keep to the left of them and hug the huge dark cliffs of the Cinto as closely as possible, until by getting round a sort of corner buttress or bastion we should see whether in the re-entering angle beyond any means of access could be discovered to the western arête of the peak.

I had not been feeling very well, and, loaded as we were,

our progress up the long slopes of snow was slow, but at last the critical point of the expedition came into view, and, to our delight, a snowy couloir was seen leading up in a very favourable direction and giving good hopes of access to the ridge, though from below its upper portion was invisible. The inclination was considerable and increased, but the footing was good, and at times when ice was encountered the rocks afforded a by no means difficult alternative, so we made fair and steady progress, halting occasionally for a drink and once for a longer rest, and never quite sure where our staircase would finally land us. However, after climbing a height of not much less, I imagine, than 800–1,000 feet, we suddenly stepped over into the sunshine and found ourselves looking down upon the great central valley of the Niolo, face to face with the Rotondo massif, with an easy snow slope coming up almost to the actual crest, and our peak some few hundred yards to the left, easy of access and rising but slightly, perhaps 250 feet, above us. It was 12.30, but as the view was clear and the weather promising, we halted till one for food, and depositing our *rücksacks* were on the highest point in another quarter of an hour.

As a rule, at any rate during the months of May and June, the atmosphere in Corsica is not particularly clear, but on this occasion it was fortunately more so than usual, and not only the greater part of the island but Elba and Monte Christo were beautifully seen. Portions of the gulfs of Porto and Ajaccio came into the view, and, to my surprise, Calvi and its bay were most conspicuous, proving of course that the actual summit of Monte Cinto is visible from thence, which I had not previously suspected. We remained an hour on the top, gazing around at the magnificent panorama and down the great precipices into the wooded depths of Val d'Asco, and then returning to our pass to pick up our baggage, started at 2.50 for Calacuccia.

The snow was in fine order and abundant in quantity, notwithstanding the drought of the previous year,* so that 40 minutes' rapid descent by a broad couloir took us down some 2,500 feet to the head of the valley of the Erco torrent, whilst

* It is a curious meteorological fact that, whilst Italy and the rest of the continent of Europe were, in 1882, deluged with rain and devastated by floods, an extraordinary drought prevailed in Corsica, not a drop of rain having fallen in some districts for eight, and in almost all for six, months. Snow disappeared almost entirely from the mountains; streams, fountains, and wells ran dry, and water for domestic purposes became alarmingly scarce; and this, too, whilst at a distance of 70 miles to the E. an incessant downpour was taking place!

the snow itself came to an end about a quarter of an hour further down. Keeping well to our right, we skirted the slopes of the Capo al Manzano high above the stream, and finally descended upon Corsica and Calacuccia, which we reached at 6. There are splendid specimens of *roches moutonnées* and *blocs perchés* alligned along the slopes at a height of 1,000–1,100 feet above Calacuccia, giving clear evidence of the former existence of a vast glacier which must have filled not only the lateral but probably the whole of the main valley to that depth.

Whilst touching on this subject I may mention a phenomenon of very general occurrence in Corsica, and which I have nowhere else seen on anything like the same scale, or, indeed, of precisely the same character. This is the really extraordinary undercutting, scooping out, and honeycombing of the granite both in the face of cliffs and in the case of detached fragments. It is not easy to give by description an adequate idea of the extent to which this disintegrating process is carried, or of the curious and bizarre forms resulting from it. It is not confined to granite, though I have observed it most frequently in that formation, and its occurrence is apparently not dependent on altitude or particular aspect. I have observed it at all heights from the sea level to certainly 5,000 feet, perhaps higher, though I cannot now speak positively, but whether it is due to some portion of the rock being more easily weathered, or to the capricious erosive action of a salt-impregnated atmosphere, or to a combination of the two, I do not know and never have heard explained. It occurs in positions where the agency of water, except in the form of rain or fog, must be excluded as an efficient cause, and I have found isolated fragments as large as a moderate sized room, into the very heart of which I could wriggle until almost entirely concealed from view and perfectly protected from the weather. A section of a bath sponge or of an ant's nest in an old oak joist would give no very exaggerated notion of the extent to which the honeycombing is carried, but neither by the eye nor the touch could I detect such difference in the appearance or grain of the stone as would suggest a marked variety of composition or structure.

On the morning of the 27th we strolled up the Niolo valley to the *maison forestière* of Valdoniello, and were most heartily welcomed and entertained by M. Carli, the *garde général*, and his *employés*. This time, however, we came not, as in 1881, as suppliants for a hospitality which the printed regulations of these establishments in fact strictly forbid, but as guests of the Government; for my friend Mr. D. W. Fresh-

field, in his capacity of Hon. Sec. of the Geographical Society, having kindly made an application in my favour through the Société de Géographie of Paris, the authorities of the Ministère d'Agriculture most kindly and handsomely granted me permission to make use of any of the *maisons forestières* if I would inform M. le Conservateur des Forêts at Ajaccio in what portion of the island I proposed to travel, so that he might give the necessary instructions to his subordinates. Having complied with this request, I found that everything had been most fully and completely done to facilitate my objects in every way, and I have much pleasure in here bearing my grateful testimony—as I of course have already done by letter to the Conservateur himself—to the kindness of all the local representatives of the forestal service, who did everything in their power to make us comfortable and aid us in our plan of campaign.

We had hoped to make the ascent of the Paglia Orba (2,523 mètres), the boldest peak in the island, from Valdoniello, but again, as on my previous visit, a break-up of the weather defeated this fine expedition, and during the three days and nights we spent under M. Carli's roof we had to rest satisfied with a visit to Evisa—where it was a very pleasant surprise to find my friend Mr. Barry—*viâ* Ciatorino and the Col di Vergio, and wanderings through different branches of the forests of Valdoniello and Aitone, the two noblest existing at present in the island. There are perhaps bigger individual trees in some others, but none with so high an average of fine timber-producing stems, or where the rules of forest craft seem more carefully and systematically carried out.

A few notes on forestal matters, taken very much at random, may perhaps be of some interest. As it was the height of the season for getting out the timber, and the cries and axe-strokes of the Italian woodcutters resounded weirdly or merrily in almost every valley, we had an opportunity of studying with more care the various operations involved in the process of clearing a 'coupe,' and extracting and carting the squared balks. My companion, Mr. Compton, during the five or six weeks which he devoted to artistic work in this central district after my departure, was still more frequently a witness of the process. By his kind permission, I extract the following passages from the very interesting journal which he sent me on his return to his Bavarian home at Feldafing on the Starnberger See:—

'The men who fell and square the timber are very silent at their work, but those employed in shifting keep up a constant chorus, the fine voices of their respective leaders giving the word to heave and shove in a loud chant, something like sailors,

but less continuous. When a fresh "pezzo" or balk is taken in hand, the foreman utters a sort of benediction in the shape of an invocation to the Madonna or St. Hubert to preserve the men from accidents. Then one of the men, or all together, shout "Ho!" when they have fixed their heavy tools and are ready. Then the foreman, or ganger, himself working in the front, sings out "Tai!" "Guai-eu!" and the "pezzo" gives a grunt and moves two or three inches forwards. Next follows a shout in the same loud chant, but varying much in form. Those I caught were as follows:—

Ho! Tai! Guai! Bravi giovani!
Ho! Tai! Guai! Innamorati!
Ho! Tai! Guai! La bella pianta!
Ho! Tai! Guai! Andiamo!
Ho! Tai! Guai! Alla marina!

always with a full swell on the last syllable. They are wonderfully quick and skilful at getting beams into position for loading. Before 9 A.M. one party of eight men had shifted four huge balks for a greater or less distance between the still standing trees, and placed them with the greatest precision, poised on a cross stem, ready to drop the head on to the truck and be shoved forward. One gang immediately set to work to load an enormous beam, which was ready close to the cabin with its thick end overhanging the road. It measured roughly 3 feet 8 inches square at the thick end, and 3 feet 5 at the other, and was about 40 feet long. The remainder of the stem was afterwards put on another cart with two smaller pines. The carts are run in, with the pole inside, beneath the stem as it lies propped up by the roadside, so as to get the heavy cross block placed between the wheels just under the thick end of the "pezzo." The foreman then mounts the cart, which is well propped, and the whole gang of fifteen to twenty men, armed with huge picks and ash poles, begin to shove the monster slowly, keeping time to the leader's cries, till at length it is in a position of equilibrium on the block and gently falls forward, whilst half a dozen men hang on to the tail. All this only occupied about eighteen minutes. The native *charretiers*, in magnificent print shirts, scarlet scarves, and black Corsican hats, meanwhile maintained a dignified reserve amongst the despised "Lucchesi," and took their breakfast and a siesta.'

A little below Ciatorino we counted 400 rings in a Pinus laricio which had just been felled close to the road, and near to it was a square balk, 75 feet in length, 32 inches square at the base and 20 at the head. In the forest of Valdoniello are plenty of laricios, tall columnar trees, 4 mètres in circum-

ference, and I measured two or three up to 5 mètres; whilst in that of Aitone, which contains a greater variety of trees or *essences*, are beautifully proportioned beeches which attain a height of 130 feet, according to my friend Mr. Barry's measurement. The largest pine actually measured by either of us, was one which Compton subsequently discovered close to his camp, near the Bergeries d'Alzo, high above the ravine of the Tavignano, which opens just above Corte, but, though 24½ feet in girth, and a picturesque and grand object, it was, I believe, more like those we saw in the Melaja forest, and did not contain as much available timber as some of its slenderer but more lofty brethren.

The name 'Valdoniello' signifies 'black forest,' according to M. Carli, who also stated that Niolo, the general designation for the entire valley, also means 'black,' and is derived from the period when it was well wooded throughout. The present forest covers 4,000 *hectares*, and is divided into six 'affectations,' or sections, in which 'coupes' successively take place, about one hundred of the trees in each being cut down annually, so that the entire superficies would be worked through in 120 years. As, however, trees of less than a growth of a century or so are usually left, their age will exceed 200 years by the time the cycle recommences. The most troublesome part of the duties of the *gardes forestiers* seems to be the task of keeping cattle, and especially sheep and goats, from straying within the forest bounds, and imposing fines on the owners or caretakers if their flocks are caught so trespassing. M. Carli says that each of his eight subordinates at Valdoniello and Ciatorino averages annually about twenty cases of infraction of forestal laws, and he has plenty to do in preparing the *procès-verbaux*. The fines are severe—eight francs for each animal, even a goat, which is caught straying! He also told us that the curious bombyx or 'processional' caterpillars, remarked by most of those who have visited the forests of Corsica, crawl along in their seemingly endless chain until the leader finds a suitable spot for entering upon the pupa stage. Then he wriggles round in a spiral, and on reaching its centre works his way down beneath the surface, followed by the rest of the army, who, as they march round in the coil, seeming like insect Melchizedeks, without beginning or end, appear as though in a state of fermentation. The chrysalis stage follows, and when the moths are developed and pair, the female lays her eggs on the pine boughs, and as the young caterpillars emerge, they feed on the needles and gradually spin their white cottony nest till it is capable of protecting them from the winter's cold

and snow. Finally, they crawl out, feed vigorously, descend to the ground by the stems of the trees, and the process recommences with another 'march past.' I did not gather that they are found to commit a very serious amount of destruction in Corsica, though reckoned amongst forest pests, as is also the case in Greece.

On the 30th, after three wet days, our time and patience being both exhausted, we fled to Corte *viâ* Casamaccioli and the pretty pass of the Bocca Rinella (about 1,600 mètres). The pines in the forest of Cavallo Morto above Casamaccioli, are particularly fine and picturesque in form; and, on the descent into the grand gorge of the swollen Tavignano, the mists curling amongst the trees and the shadowy aiguilles of granite, which towered up mysteriously on either hand, produced effects of surprising grandeur, which enchanted my companion.

As the weather cleared during the night and showed signs in the morning of steady improvement, we set forth for the Restonica ravine, with the intention of giving Compton an opportunity of judging of its artistic capabilities as compared with that of the Tavignano; but, as it seemed desirable to do so under like conditions, I suggested our crossing from the first to the second by the Forcadella Laccia (about 1,500 mètres) to the west of the Punta al Pinello, so called, I suppose, because it is crowned by a single audacious laricio, which has anchored its roots in the bare granite, and seems to defy alike lightning, wind, and snow. A more fortunate choice could not have been made, for a more varied and delightful expedition cannot, I think, be found even in Corsica, with its rich variety to choose from; and I strongly recommend it to all pedestrians who may have a day to spare at Corte, and, though perhaps not caring to attempt the ascent of Monte Rotondo, are up to a climb of some 3,500 feet and an excursion which was most easily accomplished by us between 9 A.M. and 6.30 P.M., including numerous halts to admire the many exquisite points of view, as well as for my companion to sketch. The crest of the ridge commands grand views in opposite directions of the Rotondo and Cinto *massifs* and of the sea, whilst close at hand the eye plunges into the magnificent parallel gorges of the Restonica and Tavignano, 2,000 feet or more below. As we descend into the latter, every imaginable form of picturesque grouping of rocks and trees presents itself, and offers an infinite variety of subjects for the pencil. Besides pines above and chestnuts below, ilexes of noble proportions—we measured one which was 12 feet in girth, and I should think 100 in height—add variety and beauty to the scene, the interest of which

culminates not far above the point where the path traverses the stream by a rude but broad plank bridge, and ascends the opposite bank to join the track of the Col de la Rinella. Instead of following the northern side of the ridge, after crossing the Forcadella Laccia, as far as the Bergeries d'Alzo—near to which Compton subsequently pitched his tent, and devoted several days to hard work—we struck off to the right, and descended in a N.E. direction, hoping to hit off the path which leads down from the Bergeries; but keeping, I suppose, rather too much to the right, we did not do so until within a few hundred feet of the river, though the line of descent followed by us presented no difficulty and led through exquisite scenery.

Not unduly to spin out these notes, I will merely add that we proceeded on June 1 to Morosaglia, crossed right over the actual summit of Monte S. Pietro (1,766 mètres) to Stazzona on the 2nd, reached Cervione *viâ* Carpineto, Pietricaggio, and Ortale on the 3rd, and, travelling through that night by diligence, arrived on the morning of the 4th at Bastia. Starting thence the same night by steamer, François and I reached Leghorn in 5¼ hours, whilst Compton remained to paint—how diligently and successfully we shall, I trust, have ample proof before long.

The Decline of Chamonix as a Mountaineering Centre. By C. D. Cunningham.

(Read before the Alpine Club, February 5, 1884.)

FOR some years past it has been the custom in what the newspapers call 'climbing circles' to run down Chamonix. It seems to be the fate of every one who has ever been there to meet with some unfortunate *contretemps*, which leaves on their minds the impression that no good thing ever comes out of it. One cannot be in the Alps, even for a few days, without becoming aware of the unpopularity of this particular district. It is one of the stock subjects discussed at *tables d'hôte*; and on going to Chamonix, few of those faces are to be seen which are so familiar at the other great mountain centres. Yet if we look at Chamonix from a purely 'climbing' point of view, we must admit that in all the ranges of the Alps there are no peaks to be compared to its sharp aiguilles, and nowhere does the climber find such favourable conditions for testing his skill either on ice or rocks. We should remember, too, that the three great peaks in the Alps which remained longest