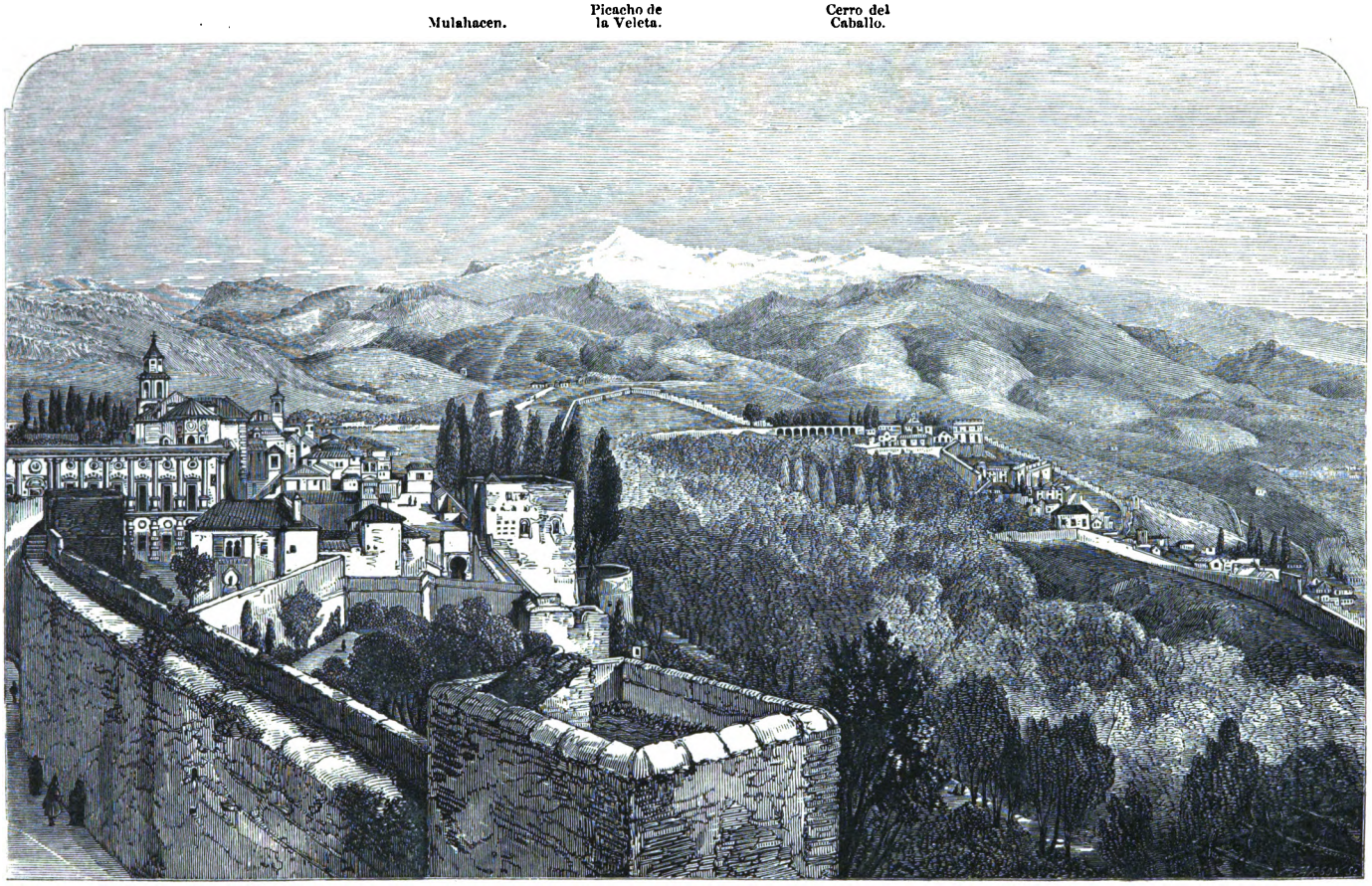


THE SIERRA NEVADA FROM THE TORRE DE LA VELA IN THE ALHAMBRA
(*From a Drawing by* E. W. Cooke, R.A.)

THE

ALPINE JOURNAL.

The Sierra Nevada. By John Ormsby. Read before the Alpine Club, March 5th, 1867.

In a notice of Mr. Blackburn's 'Travelling in Spain,' which appeared in the September number of the *Alpine Journal*,* it was remarked that there was a difference of nearly 2,000 feet between two statements of the height of the highest point of the Sierra Nevada, and also that there were four peaks represented as exceeding 12,000 feet, an elevation sufficient to give more snow and glacier than that range had been generally credited with; and it was suggested that some member of the Alpine Club ought immediately to go to Spain, and give us more certain knowledge on the subject.

Perhaps it was a fortunate thing for me that I did not see that paragraph before starting for Spain; for if I had seen it I must have either forfeited the friendship of the editor, or taken steps to follow out his suggestion. Of course, the mere laying in of a stock of instruments at Mr. Casella's, and carrying the same wherever I went, as if I were enthralled by a scientific Old Man of the Sea, would have been a pleasure; but I am not so sure what the consequences of such a proceeding might have been. With nothing in the way of apparatus more sinister in appearance than a small pocket telescope, I found myself more than once an object of curiosity, not wholly unmingled with suspicion. The theory that I was in quest of enjoyment was not accepted by the natives with that entire belief I could have wished. The burns, bites, heat, hard walking, and other incidents of travel in these parts, proved to be severe stumbling-blocks to faith in this direction, when the probabilities came to be calmly considered. Whether it was the mining

* *Alpine Journal*, vol. ii. p. 368.

interest, or railway-extension, or sympathy with General Prim, or a harmless form of insanity, that was considered to be at the bottom of my proceedings, I cannot say; but of this I feel sure, that if I had been seen going about with a barometer, thermometer, sympiezometer, theodolite, and those other scientific trinkets which ambitious mountaineers hang about their persons when occupied in settling questions of this sort, I should have heard more about it. I might, perhaps, have managed to satisfy the authorities, though these in Spain sometimes do curious things. But if it had got wind that I was in the habit of performing incantations over boiling water on mountain tops, and setting up graven tubes in lonely places, and repeating mystic formulas in front of them, it is by no means impossible that an ignorant and superstitious peasantry might have taken a bigoted view of my conduct; and that I might have been compelled to swallow the mercury of my barometer, or have had my own boiling-point taken, with more or less accuracy, or suffered some other personal inconvenience or injury to my constitution, for which the scientific value of my observations would not have compensated—at least to me. On the whole, therefore, I am just as well pleased that I was not stimulated to do anything for the benefit of science, and not the less so because of the fact that there was really no necessity to do anything at all. There are no mountains in the world, except perhaps some favoured portions of the Alps, that have been more frequently and carefully measured than the heights of the Sierra Nevada. The first figures quoted in the Journal are those of the Spanish naturalist, Rojas Clemente, who, as he says himself, was the first observer that measured the heights of this range with exactitude. It did not occur to O'Shea or to Ford, when they quoted them in their Guides for Spain, that these figures meant Spanish feet, and were therefore likely to mislead English readers, as the Spanish foot is to the English in the proportion of twelve to thirteen. The other figures come from Edmond Boissier of Geneva, the eminent botanist, who spent a considerable time in the Sierra Nevada, and measured its heights, apparently in the most painstaking way.* His results are of course given in French feet, and therefore fall short of English measure by just about as much as Clemente's exceed it. Besides these, there have been other observers, among whom may be mentioned Señor

* Boissier seems to have been obliged to conduct his experiments with the strong hand. He found it necessary to disguise his barometer so as to make it look like a blunderbuss.

Frank Pfendler d'Ottensheim, a German no doubt by descent, though he writes in Spanish, who gives a series of barometric measurements made by himself in 1847. The results produced by these three agree on the whole more closely than is usual in such cases, and the average of their observations gives 11,723 English feet as the height of Mulahacen, the culminating point of the Sierra Nevada, and 11,518 as the height of the second peak, the Picacho de la Veleta. There are two other peaks, the heights of which are represented by Clemente as exceeding 11,000 feet, the Cerro de Alcazaba, and the Cerro de los Machos; but it is curious that neither he nor the others give any calculation of the height of the Cerro del Caballo, to the eye at least, after Mulahacen and the Veleta, the most important summit of the range, the only one besides these two marked on any map, and certainly a higher point than the Machos.* It may be as well to explain here that *cerro* generally means a round-topped mountain, while *picacho* is a peak. But in the Sierra Nevada district

* The following are the heights, reduced to English feet, of the principal points mentioned in this paper. The authorities are—Edmond Boissier, *Voyage botanique dans le midi de l'Espagne*, Paris, 1839–45; Simon Rojas Clemente, *Paseos de Granada*, and *Ensayo sobre las variadadas de la vid*, Madrid, 1807; Frank Pfendler d'Ottensheim, *Madera, Andalusia, la Sierra Nevada y los Pirineos*, Sevilla, 1848:—

Mulahacen	Clemente	11,781
	Clemente	11,711
	Boissier	11,701
	d'Ottensheim	11,701
Picacho de la Veleta	Clemente	11,597
	Clemente	11,533
	d'Ottensheim	11,530
	Clemente	11,501
	Boissier	11,432
Cerro de Alcazaba	Clemente	11,356
Cerro del Caballo	Estimated	11,200
Cerro de los Machos	Clemente	11,205
Col de la Veleta	Boissier	10,826
Glacier of the Corrál	Boissier	9,585
Sierra Lujar	d'Ottensheim	6,262
Village of Trevelez	Boissier	5,330
City of Granada	Boissier	2,343
Village of Lanjaron	Boissier	2,284

The Cerro del Caballo appears, from both the Veleta and Mulahacen, to overtop the Cerro de los Machos by some few feet, but Clemente's measurement of the latter is probably, as in other cases, slightly excessive.

the latter title is monopolised by the Veleta, on account of its superior sharpness and commanding position: it is always spoken of by the natives as 'El Picacho' simply. Its second title Ford explains to mean 'watch-point,' but the dictionary says 'weather-cock.' Mulahacen is Spanish Arabic, meaning 'the Lord Hasan'; the Hasan in question being Abu-l-Hasan, the father of Boabdil, and last but one of the Moorish kings of Granada. The Sierra Nevada, therefore, has five peaks exceeding 11,000 English feet in height, the lowest of which (by Clemente's measurement at least) is higher than anything in the Pyrenees, and the loftiest nearly 600 feet higher.

Notwithstanding this very respectable show of facts, I am bound to say the first view of the Sierra Nevada from the streets of Granada at the season of the year at which I saw it, is apt to prove somewhat disappointing. Led away by its name, and its rank as the second highest mountain range in Europe, you expect to see a lofty chain of mountains covered with dazzling snow stretching far away east and west. What you do see looks rather like one big brownish-grey mountain, with a sharp culminating peak that does not seem to be half as far off or half as high as it ought to be; and as for the great masses of snow you looked for, there is nothing to be seen in that way but a chain of snow patches, not on the top exactly, but running along just underneath the crest. There are one or two considerations, however, which ought not to be lost sight of. In the first place, the clear dry atmosphere of Andalusia deceives the eye strangely in matters of distance. That peak (it is the Veleta, Mulahacen being all but invisible from Granada) which does not look more than two or three hours distant, is in reality, Ford says, twenty miles off; and having walked the distance, I have reason to know that his estimate is certainly not excessive. Then it should be borne in mind that these mountains are in latitude 37°, only a degree or two north of the Cashmere Himalayas, and just twice as far south of the Pyrenees as the Pyrenees are south of the Alps. In the Pyrenees the snow-line is at least a thousand feet higher than in the Alps and, therefore, if snow-lines were regular in their habits, it should be here at least two thousand feet higher than in the Pyrenees, or somewhere about 11,000; and in fact, except in one instance, I do not remember ever seeing snow at a lower level than this. It is true the main ridge from the Caballo to the Alcazaba is above 11,000 feet, except at one spot, but it does not afford space enough for the accumulation of large continuous masses; and snow, we all know, requires the moral support of large masses to enable it to withstand the influence of the sun. On

the whole, I think it is very creditable to the Sierra Nevada that it contrives to preserve such a quantity of snow as it does through the fierce heat of an Andalusian summer, and I know that after some experience of the power of the sun on the highest peaks, I felt inclined to wonder, not that there was so little, but that there was so much. The glacier part of the question we shall come to presently.

After four or five days devoted to the Alhambra and Granada generally, I began to see about the Sierra Nevada. My original plan was to start in the cool of the evening, sleep somewhere on the side of the Veleta, ascend the peak in time to see the sunrise, and then descend on the south side to the little village of Lanjaron, a place much resorted to by the people of Malaga and Granada for the sake of its mineral waters, and therefore likely to be good headquarters. The commissionaire of the hotel charged himself with the task of providing some one to act as guide and porter. The first candidate had curious views about mountaineering. At the first mention of walking he cried off. The regular way of ascending the Veleta from Granada is to hire horses for self and guide and ride as far as possible, about, I believe, an hour short of the summit (though I suspect a really clever mountain pony might be got to do the whole distance without much difficulty); and this was the only way he recognised. The second consented under protest to walk, but he drew the line at night-walking, and utterly refused to have anything to say to camping out on account of the 'ladrones.' This, as I endeavoured to point out to him, was all 'bosh.' There are no ladrones, that is to say professional robbers, in the parts of the Sierra Nevada I wished to explore, for the same reason that there are no deerstalkers on Primrose Hill or salmon fishers at the fountains in Trafalgar Square. The third agreed with me on this point, and thought that even if we did meet with 'mala gente'—literally, 'bad people,' but in Spain always used to distinguish people with a congenital taste for robbery, from those with whom robbery is a profession and a science—what with his gun and my revolver, we had very little to fear from them; but he distinctly refused to go for less than a week certain, at the rate of a dollar and a half a day. Tired of waiting, I agreed to this, and ordered provisions and wine. But on the afternoon of the day on which we were to start he came to the hotel and pleaded urgent private affairs, responsibilities as a family man, and so forth, and begged leave to propose as his substitute a friend, a 'hombre de confianza' who knew the mountains well. With these remarks he introduced a sprightly youth of about seventy,

who in a quavering voice assured me that he feared nothing, neither the heat by day nor the ladron that walked in darkness. There was a diligence starting that night for Lanjaron, so I sent immediately and secured a seat.

Lanjaron is one of the very loveliest spots it has been my fortune to light on in my walks through 'the wilderness of this world,' as John Bunyan calls it. The village consists of a long street of white, flat-roofed houses, and like all the villages of the Alpujarras, is entirely Moorish in appearance. It is perched on the south side of a steep mountain, with a deep ravine in front, and the narrow shelf on which it sits is one tangle of pomegranates and peaches, figs and oranges. We here, however, have nothing to do with lovely spots or oranges, except perhaps to bear in mind that these Lanjaron oranges are famous throughout the south of Spain, and are an admirable provision of nature for the comfort of the mountaineer in this fiery, thirsty land. Among the attractions of the spot more to the purpose are—a rare thing in Spain, and doubly rare in these parts—a clean and comfortable little inn, and a tolerably efficient guide. The driver of the diligence, who took an interest in my proceedings, said he thought he knew a young man who would answer my purpose, and the young man, as it turned out, did answer reasonably well. In case any member of the Alpine Club should ever go to Lanjaron, it may not be amiss to mention that his name is Juan Estévez, here pronounced Etéve, which I suspect is Alpujarras for Estéban, in English Stephen; a name entirely calculated to inspire confidence on a mountain expedition. He is a thoroughly willing, good-humoured youth, strong, active, ready to walk any number of hours, afraid of nothing, and rather fond than otherwise of camping out. He can be trusted with untold coppers, I know, for he has carried rather more than the change of a pound for me in that form in a satisfactory manner; uncounted cigars I am not quite so sure about, but then everybody in Spain holds liberal views about the rights of property in tobacco. He now knows the Sierra pretty well, and the way to most of the chief points of interest; but I cannot say much for the extent of his knowledge when we started. The chief fault I found in him was a habit of roaring with a view to make himself more intelligible. There is no European language more easy to understand after a little practice than Spanish, provided always that it is regular Castilian Spanish, a deliberate tongue which gives its proper effect to every vowel and consonant. But Andalusian is a corruption of Castilian, dropping some letters, slurring over others, and hurrying on

in a way calculated to puzzle the foreigner; and the Alpujarras dialect is a corruption of Andalusian. I got on, however, with Juan better than I could have expected. On the evening of our third day he told the landlord of the inn that he now could understand everything I said to him, and that he believed I could understand everything he said to me, which is in its way an illustration of what Buckle says about the facility with which mountaineers believe. By starting that night, he said, he thought we could reach the Veleta and return the next evening; so shortly after midnight we began to ascend straight up behind Lanjaron.

I cannot give any description founded on observation of the path or scenery just here, for it was pitch dark; but, from the number of trees I ran against, I judged that we were travelling through a forest, and, if I might trust my own sensations, the route generally lay up a waterfall on the roundest and smoothest stepping stones I ever slipped off. When at last we got clear of the trees and fairly out on the bare mountain side, I fancied we must before long come to the plateau or moderate slope that one usually finds after the first steep ascent out of the valley. But no; on we went up, up, up, as the song says; and I began to suspect that I had wofully underrated the Sierra Nevada. The previous night I had spent in holding on to the top of a lively diligence over a difficult line of country, and though I tried to sleep an hour or two before starting, what with the noises in the inn and the watchman in the street, I could not. This was my first walk for the season, and after four or five hours of this sort of thing I began to have a feeling as if my legs never by any possibility could be straight again; also that it would not grieve me very much if the Veleta were removed to a region the temperature of which would put an end to all disputes about the limit of its snow-line; and finally, that to murder Juan then and there, for chuckling when I referred to 'las piernas,' would be only justifiable homicide. However, a timely halt and an early breakfast worked a softening change, and a couple of hours afterwards I suddenly found myself looking down on a vast plain bounded by distant blue mountains, and Juan said, 'Mire! Granada!' Above us on the right rose a grey dome-shaped summit; beyond it, a jagged peak of nearly the same height; and beyond that, far away, a sharp conical peak much higher than either. I now saw plainly enough how the land lay. The nearest summit was the Cerro del Caballo, the next the Machos, and the distant one the Veleta. Juan had told me he had been once up the Picacho and knew all about it, but I

now began to have my doubts on the matter, doubts which were subsequently confirmed. At any rate, he clearly had not taken the right way: this was, in fact, nothing more than the short cut over the Sierra from Lanjaron to Granada. However, as it turned out, it suited my purpose just as well. It seemed quite possible to reach the Veleta, but it was also possible it might turn out a much longer and more difficult piece of work than it looked, as indeed it afterwards proved to be; and at best it would have been a hurried affair, and I always like to take mine ease on my mountain top. But even before leaving England I had set down the Caballo for an expedition on its own account, as it was the third peak marked on my map, and from its position at the western end of the range, clearly deserving of an ascent. So I determined to make this the Caballo day, and thereby avoid going a second time over ground I had already had quite enough of.

To effect this from where we stood all that was necessary was a tug up some steep slopes of shingle, at an unpleasantly high temperature. The view from the Caballo is, in most points, much the same as that from the Veleta, which we shall come to presently, the only advantage being that the noble mountains overhanging Alhama, the Sierra Tejeda, and the continuation of the range on to the Serrania of Ronda, are more fully seen. From the Caballo the ridge descends rapidly until it reaches the level of the col, about 3,500 feet high, over which the road from Granada to Motril and Lanjaron passes, and which connects the Sierra Nevada with the other links of the chain. This is the spot renowned in romantic history as 'El ultimo suspíro del Moro,' being the point from which Boabdil, surnamed 'the unlucky,' retiring into the Alpujarras after the fall of Granada, took his last view of the towers of the Alhambra. The face of the Caballo overhanging the Lanjaron valley is nearly an absolute precipice, but on the side next the Machos there is a deep basin containing a lake which reminded me strongly of our old friend the Schwartz See, and a rather respectable bank of snow, extensive enough for a glissade—a mode of progression which seemed to afford Juan much amusement as we descended by it. Perhaps it was the first time he had ever seen it, for opportunities do not occur everywhere in the Sierra Nevada. I received here a practical illustration of the nature of the struggle for existence which snow has to maintain in these mountains. Lying in a shady spot by the side of the lake, after a trifling transaction in ham and oranges, an exposition of sleep came upon both of us. I had not had any for forty eight hours, and mine was sound, but

not so sound but that after a while I became conscious of a sensation as if I were pantaloon in a pantomime, and clown were touching me up with his favourite implement, the red-hot poker. The sun had come round the rock under which we lay, and finding a couple of motionless bodies there, was instituting experiments on the combustion of human cuticle with such brilliant success that I lost all the skin off the left cheek and side of the nose, and for nearly a month afterwards carried a mark on the wrist exactly like the sear of a hot iron. Juan's case was worse; for the front of his shirt being open a neat oval patch of skin was raised, just as it might have been by a blister put on for the relief of his chest. The valley near the head of which we were was plainly the route we should have taken, and by it we returned to Lanjaron. It is a fair sample of the lateral valleys of the Alpujarras, basin-shaped, and bare, wild, and savage at the top, then descending rapidly, and as it descends becoming deeper, narrower, and more gorge-like, the lower portion being richly wooded with chestnut and evergreen oak, and in its general features strongly resembling the Italian valleys of the Alps. In fact, but for an occasional aloe or cactus, or other semi-tropical plant, I could have fancied myself back again in the Val Anzasca.

At first sight, from a moderate elevation, the Alpujarras seems a mad jumble of mountains without system or arrangement, a mighty maze, and quite without a plan; but from a commanding height the ground plan of the district is seen to be very simple. It is something like that of the south Tyrol. There is a great primary valley running parallel with the line of the mountain chain, formed by the streams of the Guadalfeo descending from the west and the Rio Grande, the 'great river,' or 'Guad-al-quivir' of these parts, from the east. These two, uniting below Lanjaron, just as the Adige and Eisack unite near Botzen, make a compromise and flow together southwards into the Mediterranean at Motril. Between this line of valley and the sea there intervenes a chain of sierras from 4,000 to 6,000 feet in height; on the west the Sierra Almijarras; in the middle the Sierra Lujar; and on the east the Sierra Contraviesa. The two latter may be held to represent the Dolomite mountains as far as position goes. On the other, the north side of the main valley, there is a series of lateral or secondary valleys coming down at right angles (more or less) between the mountain buttresses that spring from the crest of the chain. From the general survey I made from the top of the Caballo, it appeared that the right route for Mulahacen, and probably the best also for the Veleta, lay up the

next valley to that of Lanjaron on the east. If we continue to describe the Alpujarras in terms of the Tyrol, as a mathematician would say, the Lanjaron valley standing for the Passeyr Thal, and Lanjaron itself for Meran, this valley would represent the valley up which the Brenner road turns at Brixen, and the resemblance is perhaps fortified by the fact that the chief pass from the south to the north side of the mountains lies at its head. I set Juan, therefore, to make the necessary inquiries, and after a day or two at Lanjaron we set out for Capilleria, the highest village; the party being on this occasion increased by the addition of a donkey to carry the provisions, and the indispensable 'bota' of Valdepenas, for it was too great a risk to depend altogether on the resources of a mountain posada, and in this climate if a man carries his clothes, it is about as much as can be expected of him. In the Alpujarras you pass in the course of a day, nay in the course of a forenoon, from African to Alpine scenery. All the way down to Orgiba, the capital, the Botzen in fact of the district, the country had a more thoroughly African look, I thought, than even the neighbourhood of Algiers. The vegetation of Europe, except as represented by the olive, seemed to have vanished and given place to the aloe, prickly-pear, and dwarf-palm. A little further down, I believe, about Motril, the date palm is to be seen, as it is pretty nearly all along the Mediterranean coast from Malaga up to Tarragona. From Orgiba we ascended at first, by the bed of the Rio Chico or 'Little river,' so called from the volume of its waters. It was quite dry, and its bed had the general appearance of an undisciplined moraine; but it would appear that a higher degree of drought than this is possible in the Alpujarras, for somewhere in the vicinity there is a stream called the Rio Seco or 'Dry river.' I wish I had seen this natural curiosity. A tramp of a couple of hours across a burning ridge brought us to the Barranco de Poqueira. Up to this we had been, to all intents and purposes, in Africa; here we were suddenly transported into what might have been a nook in the Val d'Aosta, a deep rocky gorge shaded by beech and chestnut, with a fine lively cascade and a rickety wooden bridge and quaint old mill, above it a succession of steep green slopes with the villages of Pampaneira, Gubbio, and Capilleria, and high up, cutting sharp against the sky, the piebald peak of the Veleta —altogether a view that seemed as if intended for the walls of the Royal Academy. And now for the first time I realized the height of the Sierra Nevada. We had been going steadily up and were here at least 4,000 feet above the sea, and yet we

seemed to have made no impression on it, to be still at its foot. I cannot say much for the comforts of Capilleria. The dirtiest and most ramshackle auberge or wirthshaus any of us ever put up at is a palace to an Alpujarras posada, and the posada here was the turning of a scale worse than usual. In fairness, however, I must admit the transcendent virtues of the snow-cured hams produced in these villages.

We started at daybreak for Mulahacen, taking on a local guide, as Juan at last admitted his total ignorance. Mulahacen, when at length it came in sight, loomed out a big, grey, humpbacked mass, looking like the great grandfather of all our British family of mountains, a complete contrast to the slim peak and sharp lines of the Veleta. Just as we reached the spot where the real tug begins, a very striking but at the same time depressing phenomenon presented itself. Great masses of fleecy cloud came boiling up from the Granada side, rolling over the western shoulder of the Veleta and along the side of the peak, and then, tumbling over a precipice on the eastern flank, disappeared into some mysterious abyss. At this spectacle the local became big with augury, and began to deliver predictions of 'malo tiempo' and 'tormenta.' I have had more than my fair share of bad weather in the mountains, and it seemed very hard to be followed by ill luck into this remote corner of Europe. But I thought it was worth while trying whether I could not cheat the tormenta by reaching the top before it had time to spoil the day altogether, and leaving the two natives to discuss at their leisure the state of the weather—that topic of conversation from Indus to the Pole—I pushed on as hard as I could go. There is no difficulty whatever about the ascent of Mulahacen from this side, and, I need scarcely say, no danger. It can only be described by drawing on the resources of mountain slang. It is simply a long, heartbreaking 'grind.' You have before you a long steep slope of mica schist crowned by a fringe of jagged rocks, one of which you fondly imagine to be the summit. That gained, you find another slope with another fringe of rocks about half a mile ahead, and so on. I think I counted four of these before I caught sight of, nearly a mile away, a rocky pinnacle with something on it, clearly the handiwork of man, which said in unmistakeable language 'top of Mulahacen.' By this time the ominous gathering round the Veleta had quite disappeared, and the sky was once more the usual deep cloudless blue of these skies; but the wind blew a small hurricane, and for the first time for some weeks I felt actually cold. Scrambling up the rocks and ranging alongside of the 'stone man,' as we should call it, a very neat affair

built, I believe, a couple of years ago by Government engineers, I found myself looking down on one of the strangest—I think the very strangest piece of mountain scenery I ever saw.

I remembered having read in some geographical work that Mulahacen and the Veleta were separated by a tremendous chasm. This I had set down as merely a piece of tall encyclopædia talk. But now that I was on the spot, I felt bound to make a mental apology to the writer, whoever he was. There was a chasm after all, and a tremendous one. My first feeling was that at some period the mountain mass of the Sierra Nevada must have been a vast volcano compared with which Etna would be a mere squib, and that here I was standing looking down into its crater. A Pyrenean cirque is perhaps the mountain feature most closely resembling this huge pit; but, in truth, neither the Pyrenees nor the Alps have anything that can be properly compared with it. Its Spanish name conveys a tolerably good idea of its form and appearance. It is called the 'corrál,' from a fancied resemblance to the walled enclosure into which cattle are driven at night in this country, and it *is* an enclosure with only one narrow outlet, shut in by a vast wall of precipice some eight or ten miles in extent, in which the three highest peaks of the Sierra Nevada are points, and which runs round in an almost perfect circle from the north-eastern shoulder of the Veleta to the north-western flank of the Alcazaba. It is as nearly as possible sheer precipice the whole way round; indeed under the Veleta the mountain seems to be actually undercut; in one or two spots, as well as I remember, the base cannot be seen on looking down from the top. The depth of the precipice from the summit of Mulahacen I roughly guessed at about 1,500 feet, and something more perhaps measured from the top of the Veleta, for the floor slopes away rapidly to the north; but on looking into Boissier and d'Ottensheim, I find they agree in estimating it at about 2,000 French feet. The floor is partly a jumble of rocks, partly a mass of snow, the most considerable probably in these mountains, and from its northern extremity issues the one glacier of the Sierra Nevada, and the most southerly glacier of Europe. No glacier could have a grander cradle, no mountain stream a bolder or wilder birth-place. The north face of the Wetterhorn is a pretty good specimen of what people of the gushing school call 'nature in her sternest mood,' but it is soft pastoral scenery compared with the Corrál de la Veleta. I was so taken by the mystery of the spot that I determined when I returned to Granada, from which side it was obviously more easily approached, to devote a day to exploring

its recesses, the glacier, and the 'Barranco del Infierno' or 'Hell gap' which forms the outlet, more satisfactorily than I was able to do with a telescope from the top of Mulahacen or the Veleta. But this from one cause or another I was unable to manage, which I regret all the more as I was told afterwards that there is a very beautiful lake, the 'Laguna larga,' somewhere near on that side. According to Boissier, who examined it closely, the glacier is 9,585 English feet above the sea level, from 200 to 300 feet high, and about 600 paces broad; and presents in miniature all the features of the glaciers of the Alps, crevasses—only however some inches wide—impure ice, moraines at the base and on the sides, and streams of turbid water issuing from small ice caves at its extremity. This is the source of the famous river Genil, or Xenil, which figures so prominently in the history of Granada and the times of the Moors.

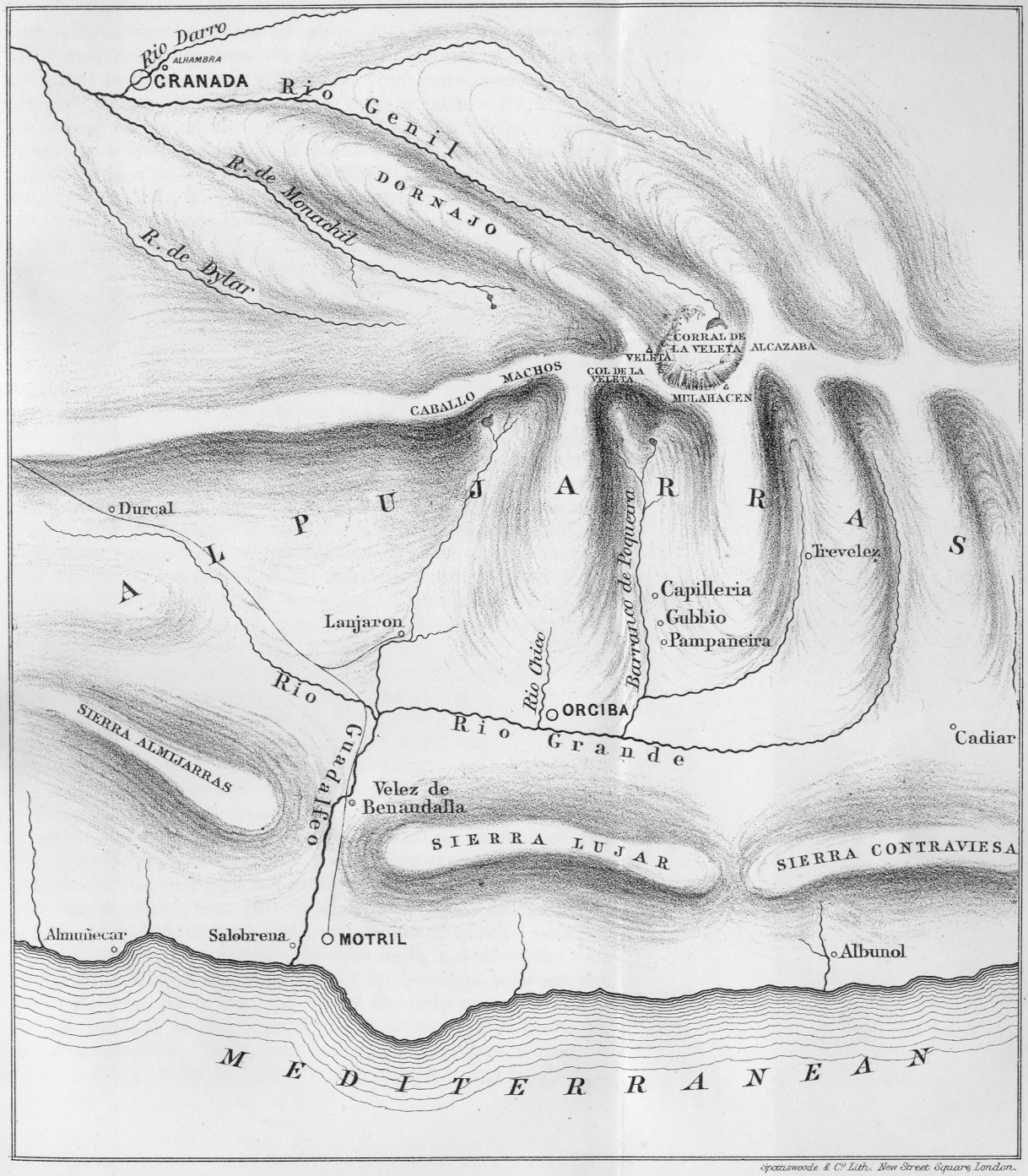
It speaks volumes for the attractions of this Corrál de la Veleta that it should take precedence, as it does here, and as it did each time I saw it, of as as fine a panorama as is to be seen from any mountain-top, perhaps, in the world. I had been sitting alone for more than half an hour, very much like Patience, on the monument I have already mentioned, when the others came up, and something was said about the coast of Africa, which reminded me of where I was. Unconsciously I had been slighting one of the four quarters of the globe, by sitting with my back to it all this time. There is so little difference between the view from Mulahacen and that from the Veleta, that I may as well here combine the two. I must remark, however, that Mr. O'Shea is quite wrong when he says in his 'Guide' that the view from Mulahacen is far finer and grander than that from the Veleta. Where there is any difference, it is decidedly in favour of the latter. So high up as this, the two or three hundred feet by which it is overtopped make no appreciable difference in the extent of view, and its position is certainly better. Standing out as it does, and so close, it cuts off Mulahacen from the whole west side of the great plain of the Vega and the mountains that bound it. On the other hand, it is true, from Mulahacen you have a more extended view of the Mediterranean coast, in the direction of Adra and the Cabo de Gata, and of the south-eastern spurs of the Sierra Nevada. But all this, in the other case, is more than redeemed by the view of the intercepting bulk—Mulahacen itself. No man with a well-developed mountain sympathy can help feeling a respect and affection for this mountain, after

seeing it from the Veleta. It has that grand simplicity of character and retiring modesty that accompany true greatness. It is not one of those mountains that are always thrusting themselves into notice. From Granada nothing but the top is visible, and that as an occasional excrescence merely, on the shoulder of the Veleta; and there are very few low-lying spots on the Alpujarras side from which it can be made out. It seems always content to allow the Veleta to carry off the first honours. But when you have ascended his rival, then at last old Mulahacen seems to be put on his mettle; then he comes out in his true proportions, and takes the conceit out of that perky Picacho. The comparison of a mountain to a recumbent lion is a common one; but I have never seen a case in which it is so apt as this. From the Veleta, Mulahacen does look like a lion in repose, with his grim face of precipice turned northwards, his long back on Africa, and his outstretched arms embracing the Corrál, while the peaks of the Alcazaba and Veleta mount guard right and left. Not that the Picacho, as seen from Mulahacen, is not itself a very striking object. There is more snow on this than on the Granada side —indeed on the east flank of Mulahacen, over the Trevelez valley, there is a piece which almost reaches to the dignity of a 'field'—and the peak has altogether more of the character of a snow mountain. The black precipice too, overhanging the Corrál, gives it a very bold appearance, and I can well imagine that on a fine morning in May, before the dog-day heats have changed the brilliant green of the lower sierras into the russet-brown I saw, and destroyed the continuity of snow upon the upper peaks, it must be a magnificent object from the deck of one of the P. and O. steamers below in the Mediterranean, such a spectacle as even our own Alps might find it hard to surpass. Perhaps from no other spot on the globe, except Teneriffe and one or two of the island peaks of the Pacific, does the eye look down so directly on the sea, and take in such a vast expanse of water at a glance. The distance to the coast is over thirty miles, but from this height of near 12,000 feet, it is so foreshortened that the surf beating on the shore away at Adra seems almost at your feet, and the white latteen sails of the fishing boats, and the very curl of the waves, can be seen right over the crest of the Sierra Lujar, which is itself more than 6,000 feet high, and from Orgiba looks well worth an ascent on its own account.

I was not able to make out the African coast satisfactorily from either Mulahacen or the Veleta. The great blue plain seemed to stretch away onward and upward until it melted insen-

sibly into the sky. The coast of Africa is, I imagine, in general visible only in the early morning, but that it is distinctly visible is unquestionable. The distance is not more than about 130 miles, which is well within the range of vision from such an elevation. Mr. Clark, the author of *Gazpacho*, saw it at sunrise from the Veleta, as I did myself from the head of the Lanjaron valley the morning I ascended the Picacho, though I confess if I had been alone on that occasion I might have had some doubts as to whether what I did see were clouds or mountains. Gibraltar, I am inclined to think, is *not* visible from the Sierra Nevada, at least I never could identify the old rock from any point, and I suspect it is hidden by some of the spurs in the neighbourhood of Malaga. At Gibraltar, afterwards, I tried to solve the question, but I neglected to provide myself with the Town Major's pass, without which no civilian is allowed to ascend to the top of the Rock; however, from the highest points which I did reach, there was nothing to be seen of the Sierra Nevada. The coast view, however, in this direction is very fine, and that wild medley of mountains, the Alpujarras, at your feet, and the succession of jagged sierras rising one above the other on towards Ronda, make up a grand panorama. To the south-east and east the view is less striking. East of Mulahacen and the Alcazaba the Sierra Nevada becomes very uninteresting. The mountains, spreading out fan-wise, fall away rapidly in height, and lose all boldness of form and outline. To the north, in the direction of Baza, there are some very striking looking sierras of a light grey rock, on which, the day I was on Mulahacen, I observed those strange tints about which people were so sceptical in the case of Mr. Holman Hunt's Dead Sea Mountains in the picture of the 'Scape Goat.' On the north-west the great attraction is, of course, the beautiful plain of the Vega, dotted with groves of olive, pomegranate, and orange, and laced with a network of little streams whose winding wooded banks look from this height like an embroidery in green silk. In the 'tiempo de los Moros' it was one vast garden, and even Spanish neglect cannot quite rob it of the appearance of a garden now. But more fascinating even than the Vega is that white mass at the very foot of the mountain, like the model of a town carved in ivory, the ancient city of Granada in its nest of red hills and green trees. Though it is twenty miles away, and more than 9,000 feet below, you need no telescope here to follow the windings of its narrow Moorish streets. On the hill just over it, a little to the right, the red walls of the Alhambra rise above the trees, and you look over its belt of towers down into the very heart of the old

SKETCH MAP OF
THE SIERRA NEVADA.



Spottiswoode & Co. Lith. New Street Square London.

fortress, and can trace the walks and terraces in the gardens of the Generalife, its neighbour. The whole thing is so minute, yet so distinct, that it looks like an elaborate toy, or a scene in Lilliput.

The Alcazaba did not seem worth ascending after Mulahacen, nor the mountains on that side worth exploring; but I should have liked to have spent a day in rambling round the Corrál. However, the morning after our ascent of Mulahacen the weather again began to look unpromising, and as I did not relish the prospect of being weatherbound in a place like Capilleria, I returned at once to Lanjaron. It was just as well, for, though no rain fell, it blew a gale sufficiently strong to make mountaineering at any rate unpleasant. A day or two later I started once more for the Veleta. My plan this time was to camp out near the head of the Lanjaron Valley, ascend the Veleta as early as possible, and then descend to Granada alone, leaving Juan to return to Lanjaron. We made our bivouac under the cliff of the Caballo, not far from the lake, and got up a roaring fire, by which, after nightfall, a couple of shepherds were drawn suddenly out of the darkness, like moths, and joined company with their flock and wolf-dogs, noble beasts, big enough to tackle a lion and prepared for all comers with great spiked collars round their necks; for these upper Alpujarras valleys abound with wolves. Their masters proved very good fellows, and were strikingly wild and picturesque to look at. But being clad in sheepskins with the wool and the fleas left on, they were more agreeable from a social and artistic point of view than as bedfellows. Nor is the presence of sheep, except in the form of mutton, desirable in camp. The dogs, too, did their share, for just as I had managed after many failures to fall asleep towards morning, they nosed, I suppose, some wolfish or other intruder, and made, I thought, an uncalled-for fuss about it. Under these circumstances the moment there was light enough to travel I stirred up Juan, and we ascended the head of the valley and came out on the crest a little to the east of the Machos. Here we found ourselves cut off in front by a precipice descending on the Granada side, and with no road open to the Veleta, apparently, except along the top of a ridge of rocks about half a mile long, and in form something like a cock's comb. This, if we had known what we were about, we ought to have shirked altogether by descending on the Alpujarras side, and keeping along by its base. But we did not; and then followed one of those *mauvais quarts d'heure*, which it is the charming privilege of this kind of place to afford; a period of crawling along

sharp ridges, screwing round pinnacles, worming a way up 'chimneys,' dropping down on hard slabs of rock with a shock that seems to loosen every grinder in your gums, and the other agreeable gymnastics incidental to such a path. As we were here going along on the very sky line of the Sierra Nevada. I could not help thinking, if there should happen to be a powerful telescope on board some Mediterranean steamer just then, and another at Granada, what strong concurrent testimony might be produced of a new fact in natural history, that the habitat of the Barbary ape in Europe is not, as hitherto supposed, confined to the Rock of Gibraltar, two very lively specimens having been observed on such and such a morning on the crest of the Sierra Nevada. At one spot we came to a snow-slope about a hundred yards long by thirty or forty wide, filling up a gully across which we had to get somehow. I naturally looked upon the snow as affording the means of crossing, but in Juan's eyes it was the difficulty, and Juan was right. The slope was steep, the snow was coated with a glaze like a wedding-cake, and was so hard that no punching with a stick made any impression on it; and at the bottom it curved over, and the next thing that met the eye was the basin at the foot of the Veleta. I thought with tender regret of an old Alpine companion, a certain handy little pick, rusting ingloriously in London while it was so much wanted here. And now I had a delightful surprise. Scrambling up by the side of the slope, where it began to grow narrow, I came upon —I could hardly believe my eyes—our old friend the bergschrund. There it was, however; not indeed as large as life, but still there, cut right across the slope from side to side, and at right angles to the surface of the snow, all shipshape and regular. We crossed by means of that bergschrund. It was perhaps twenty yards long, and in some places almost five feet deep, and so wide that our elbows did not touch the sides. It was so unexpected, and apparently so uncalled for, that I could only set it down to a desire on the part of the snows of the Sierra Nevada to preserve all the proper traditions of snow mountains. Therefore let not ambition mock their humble toil, or Alpine grandeur hear with a disdainful smile of the short and simple bergschrund of the poor Sierra Nevada. At last we contrived to get down to the Col de la Veleta at the foot of the peak. This is the lowest point in the ridge between the Caballo and the Alcazaba, and being the only one at which it can be crossed, it is the regular pass between the Poqueira valley and Granada. According to Boissier its height in English feet is 10,826; so it is probably the highest pass in Europe

regularly employed for genuine business purposes. From this the ascent to the top of the Veleta amounts to nothing more than zigzagging up a tolerably steep cone of shale. The view from the Veleta I have already spoken of. On the top of Mulahacen, though we had risen above the current of the gale then blowing, it was bitterly cold; but here it was just sufficiently sharp to make basking in the sun pleasant, and I passed a couple of hours in that form of sensual indulgence, varied by looks into the Corrál, telescopic views of inner life in Granada, and attempts to find a plausible reason for believing a distant bank of clouds to be a part of the coast of Barbary, until Juan at last found it necessary to remind me that if I wished to reach Granada that night unmurdered, I had better look sharp about it. We descended once more to the col, and there separated with mutual regret. If, after a spell, even a week or ten days, of this kind of life, two men who have been constantly enjoying that community of sensations which ought to produce fellowship under such circumstances, who have been cooled by the same breezes, burned by the same sun, disagreed with by the same food, and bitten by the same fleas, are not, when the time comes, rather sorry to part company, there must be a screw loose somewhere. There was none, I am happy to say, in this case. In every respect, except topographical accuracy, Juan was a 'bon garçon,' and I was very sorry to think that our rambles together were over. And he, honest fellow—as the newspaper reporters always say of the gentlemen who return thanks late in the evening at a public dinner—'he was visibly affected.' He kissed me twice, and then came back to repeat the ceremony a third time—I suppose for luck. Of how I came down the Veleta, hour after hour with Granada full in view, but never seeming to get a bit nearer; and how I lost sight of it at last, and straightway began to fancy it was now no distance worth speaking of, and sat down for just one 'puro,' and remained for three, and found the sun on the point of going down behind the Loja mountains, and Granada still a couple of leagues off; and how I lost my way and found it again, and was not robbed, nor yet murdered, as people told me I must infallibly be; these and other incidents, sentimental, picturesque, or comical, of that solitary, but I am bound to say most delightful walk, I might record here if they had any bearing upon our present purpose, and if I had not already occupied too much space.