

the simple conclusion "that the cursed pot (which was a new one) did not choose to boil potatoes."

March 22d.—After eating our potato-less breakfast, we travelled across the intermediate tract to the foot of the Portillo range. In the middle of summer cattle are brought up here to graze; but they had now all been removed: even the greater number of the guanacos had decamped, knowing well that if overtaken here by a snowstorm they would be caught in a trap. We had a fine view of a mass of mountains called Tupungato, the whole clothed with unbroken snow, in the midst of which there was a blue patch, no doubt a glacier—a circumstance of rare occurrence in these mountains. Now commenced a heavy and long climb, similar to that up the Peuquenes. Bold conical hills of red granite rose on each hand; in the valleys there were several broad fields of perpetual snow. These frozen masses, during the process of thawing, had in some parts been converted into pinnacles or columns,<sup>1</sup> which, as they were high and close together, made it difficult for the cargo mules to pass. On one of these columns of ice a frozen horse was sticking as on a pedestal, but with its hind legs straight up in the air. The animal, I suppose, must have fallen with its head downward into a hole, when the snow was continuous, and afterward the surrounding parts must have been removed by the thaw.

When nearly on the crest of the Portillo, we were enveloped in a falling cloud of minute frozen spicula. This was very unfortunate, as it continued the whole day, and quite intercepted our view. The pass takes its name of Portillo from a narrow cleft or doorway on the highest ridge, through which the road passes. From this point, on a clear day,

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<sup>1</sup> This structure in frozen snow was long since observed by Scoresby in the icebergs near Spitzbergen, and lately, with more care, by Colonel Jackson (*Journ. of Geograph. Soc.*, vol. v. p. 12) on the Neva. Mr. Lyell (*Principles*, vol. iv. p. 360) has compared the fissures, by which the columnar structure seems to be determined, to the joints that traverse nearly all rocks, but which are best seen in the non-stratified masses. I may observe that, in the case of the frozen snow, the columnar structure must be owing to a "metamorphic" action, and not to a process during *deposition*.