

steep slopes of loose stones had to be crossed between short lengths of the remaining path. There was a deep drop into the river below. My horse halted a second or two before each of these slopes, evidently well knowing their treacherous nature and also the best way of crossing them, and then went across with a quick run as fast as he could make his way.

I myself should have crossed them in the same manner on foot ; the momentum helps one across the sliding stones, and there is no time for stones to roll down from above. I certainly thought that the horse managed his feet better than the mule on this occasion, and as far as my experience goes, a horse that is thoroughly accustomed to mountain work is better to ride than a mule in difficult places, and is certainly quicker, though the mule has secured the credit of being the better mountaineer.

Messier Channel and the Straits of Magellan, December 31st, 1875, to January 20th, 1876.—The ship entered the Gulf of Peñas on the coast of Patagonia south of the Chonos Archipelago, on December 31st, and for a fortnight steamed through the wonderful series of sounds or fjords into which the southwest coast of South America has, like the coasts of British Columbia, of Greenland, Norway, and other countries, been slowly engraved by the prolonged action of glaciers. Such an indented coast-line occurs only in those regions in high latitudes where there is a constant precipitation of moisture, since glaciers can only be fed and perform the eroding work where there is an abundant snowfall.*

The Western Patagonian fjords are very beautiful. The route led through narrow channels, between successive ranges of mountains, capped here and there by snow and glaciers, the dwindled representatives of those which scooped out the main features of the scenery. The fjords remind one somewhat of those of Norway. They branch and send off offsets on either hand perpetually. Thus, as these long sounds are traversed, constant glimpses are obtained down the communicating channels, which show themselves bounded by successions of mountain ridges, fading gradually out of sight, one behind the other in the distance.

In the upper part of the Messier Channel, near the Gulf of Peñas, the mountains are covered from top to bottom by a dense forest of small trees, and one of the chief peculiarities of the scenery is caused by the fact that these forests come right down to the sea-shore, and overhang the beds of mussels growing on the rocks. The channels are full of Fur-Seals, which were to be

* O. Peschel, "Neue Probleme der vergleichenden Erdkunde." Leipzig, Duncker und Humboldt, 1876. Die Fjordbildungen, s. 9.