

extending for more than twenty-five degrees of latitude, is a *continuous glacier bottom*, showing plainly that for its whole length the great southern ice-sheet has been retreating southward in it. I could find nowhere any indication that glaciers descending from the Andes had crossed this valley and reached the shores of the Pacific. In a few brief localities only did I notice Andean, *i. e.* volcanic, erratics upon the loose materials filling the old glacier bottom. Between Curicu and Santiago, however, facing the gorge of Tenōn, I saw two distinct lateral moraines, parallel to one another, chiefly composed of volcanic boulders, resting upon the old drift, and indicating by their position the course of a large glacier that once poured down from the Andes of Tenōn, and crossed the main valley, without, however, extending beyond the eastern slope of the Coast Range. These moraines are so well marked that they are known throughout the country as the cerillos of Tenōn, but nobody suspects their glacial origin; even the geologists of Santiago assign a volcanic origin to them. What is difficult to describe in this history are the successive retrograde steps of the great southern ice-field that, step by step, left larger or smaller