

miles on the shores of the Pacific, and of at least 1,350 miles on the shores of the Atlantic, and in an east and west line of 700 miles across the widest part of the continent? I believe the explanation is not difficult, and that it is perhaps applicable to nearly analogous facts observed in other quarters of the world. Considering the enormous power of denudation which the sea possesses, as shown by numberless facts, it is not probable that a sedimentary deposit, when being upraised, could pass through the ordeal of the beach, so as to be preserved in sufficient masses to last to a distant period, without it were originally of wide extent and of considerable thickness: now it is impossible on a moderately shallow bottom, which alone is favorable to most living creatures, that a thick and widely extended covering of sediment could be spread out, without the bottom sank down to receive the successive layers. This seems to have actually taken place at about the same period in southern Patagonia and Chile, though these places are a thousand miles apart. Hence, if prolonged movements of approximately contemporaneous subsidence are generally widely extensive, as I am strongly inclined to believe from my examination of the Coral Reefs of the great oceans—or if, confining our view to South America, the subsiding movements have been coextensive with those of elevation, by which, within the same period of existing shells, the shores of Peru, Chile, Tierra del Fuego, Patagonia, and La Plata have been upraised—then we can see that at the same time, at far-distant points, circumstances would have been favorable to the formation of fossiliferous deposits, of wide extent and of considerable thickness; and such deposits, consequently, would have a good chance of resisting the wear and tear of successive beach-lines, and of lasting to a future epoch.

May 21st.—I set out in company with Don Jose Edwards to the silver mine of Arqueros, and thence up the valley of Coquimbo. Passing through a mountainous country, we reached by nightfall the mines belonging to Mr. Edwards.