now Professor Ehrenberg has had the kindness to examine for me a little of the red earth, taken from low down in the deposit, close to the skeletons of the mastodon, and he finds in it many infusoria, partly salt-water and partly fresh-water forms, with the latter rather preponderating; and therefore, as he remarks, the water must have been brackish. M. A. d'Orbigny found on the banks of the Parana, at the height of a hundred feet, great beds of an estuary shell, now living a hundred miles lower down nearer the sea: and I found similar shells at a less height on the banks of the Uruguay: this shows that just before the Pampas was slowly elevated into dry land, the water covering it was brackish. Below Buenos Ayres there are upraised beds of sea-shells of existing species, which also proves that the period of elevation of the Pampas was within the recent period.

In the Pampean deposit at the Bajada I found the osseous armor of a gigantic armadillo-like animal, the inside of which, when the earth was removed, was like a great caldron; I found also teeth of the Toxodon and Mastodon, and one tooth of a Horse, in the same stained and decayed state. This latter tooth greatly interested me, and I took scrupulous care in ascertaining that it had been imbedded contemporaneously with the other remains; for I was not then aware that among the fossils from Bahia Blanca there was a horse's tooth hidden in the matrix: nor was it then known with certainty that the remains of horses are common in North America. Mr. Lyell has lately brought from the United States a tooth of a horse; and it is an interesting fact that Professor Owen could find in no species, either fossil or recent, a slight but peculiar curvature characterizing it, until he thought of comparing it with my specimen found here: he has named this American horse Equus curvidens. Certainly it is a marvellous fact in the history of the Mammalia that in South America a native horse should have lived and disappeared, to be

¹ I need hardly state here that there is good evidence against any horse living in America at the time of Columbus.