498 PERMANENCE OF THE OCEAN'S LEVEL. [CH. XXXI.

reluctance to admit that the land, rather than the sea, is subject alternately to rise and fall. Had it been assumed that the level of the ocean was invariable, on the ground that no fluctuations have as yet been clearly established, and that, on the other hand, the continents are inconstant in their level, as has been demonstrated by the most unequivocal proofs again and again, from the time of Strabo to our own times, the appearances of the Temple at Puzzuoli could never have been regarded as enigmatical. Even if contemporary accounts had not distinctly attested the upraising of the coast, this explanation should have been proposed in the first instance as the most natural, instead of being now adopted unwillingly when all others have failed.

To the strong prejudices still existing in regard to the mobility of the land, we may attribute the rarity of such discoveries as have been recently brought to light in the Bay of Baiæ and the Bay of Conception. A false theory, it is well known, may render us blind to facts which are opposed to our prepossessions, or may conceal from us their true import when we behold them. But it is time that the geologist should, in some degree, overcome those first and natural impressions which induced the poets of old to select the rock as the emblem of firmness—the sea as the image of inconstancy. Our modern poet, in a more philosophical spirit, saw in the sea "The image of eternity," and has finely contrasted the fleeting existence of the successive empires which have flourished and fallen on the borders of the ocean with its own unchanged stability.

> Has dried up realms to deserts :------- Their decay Unchangeable, save to thy wild waves' play : Time writes no wrinkle on thine azure brow ; Such as creation's dawn beheld, thou rollest now. CHILDE HAROLD, Canto iv.

CHAPTER XXXI.

ELEVATION AND SUBSIDENCE OF LAND WITHOUT EARTHQUAKES.

Changes in the relative level of land and sea in regions not volcanic — Opinion of Celsius that the waters of the Baltic Sea and Northern Ocean were sinking — Objections raised to his opinion — Proofs of the stability of the sea-level in the Baltic — Playfair's hypothesis that the land was rising in Sweden — Opinion of Von Buch — Marks cut on the rocks — Survey of these in 1820 — Facility of detecting slight alterations in level of sea on const of Sweden — Shores of the ocean also rising — Area upheaved — Shelly deposits of Uddevalla — Of Stockholm, containing fossil shells characteristic of the Baltic — Subsidence in south of Sweden — Fishing-hut buried under marine strata — Upheaval in Sweden not always in horizontal planes — M. Bravais — Sinking of land in Greenland — Bearing of these facts on geology.

WE have now considered the phenomena of volcanos and earthquakes according to the division of the subject before proposed (p. 331.), and have next to turn our attention to those slow and insensible