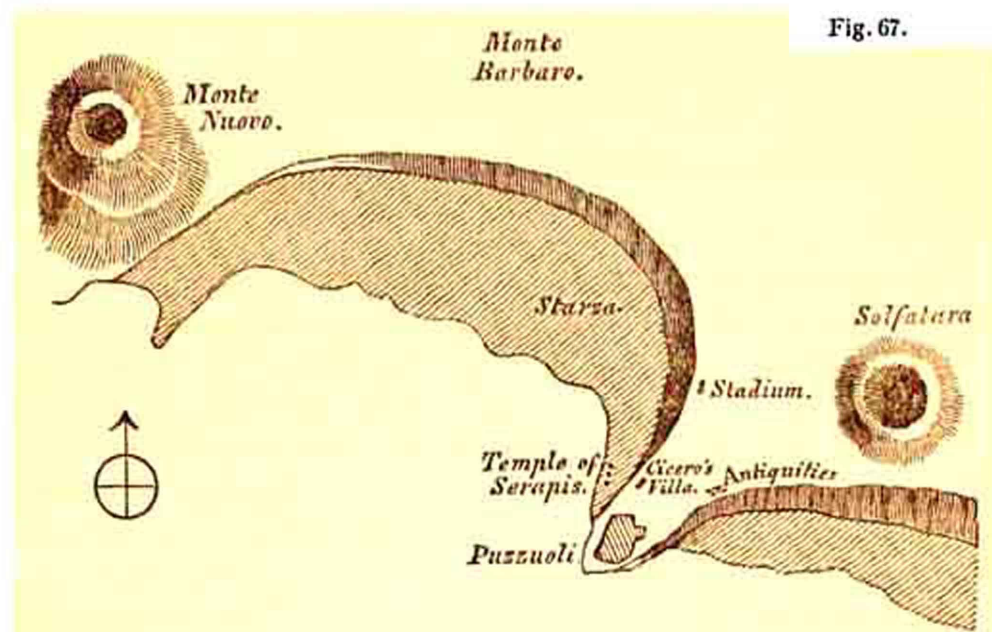


PROOFS OF ELEVATION AND SUBSIDENCE IN THE BAY OF BAIÆ.

Temple of Jupiter Serapis.—This celebrated monument of antiquity, a representation of which is given in the frontispiece*, affords, in itself alone, unequivocal evidence that the relative level of land and sea has changed twice at Puzzuoli since the Christian era; and each movement, both of elevation and subsidence, has exceeded twenty feet. Before examining these proofs, I may observe, that a geological examination of the coast of the Bay of Baiæ, both on the



Ground plan of the coast of the Bay of Baiæ, in the environs of Puzzuoli.

north and south of Puzzuoli, establishes, in the most satisfactory manner, an elevation, at no remote period, of more than twenty feet, and, at one point, of more than thirty feet; and the evidence of this change would have been complete, even if the temple had, to this day, remained undiscovered.

Coast south of Puzzuoli.—If we coast along the shore from Naples to Puzzuoli, we find, on approaching the latter place, that the lofty and precipitous cliffs of indurated tuff, resembling that of which Naples is built, retire slightly from the sea; and that a low level tract of fertile land, of a very different aspect, intervenes between the present sea-beach and what was evidently the ancient line of coast.

The inland cliff may be seen opposite the small island of Nisida, about two miles and a half south-east of Puzzuoli†, where, at the height of thirty-two feet above the level of the sea, Mr. Babbage observed an ancient mark, such as might have been worn by the waves; and, upon farther examination, discovered that, along that line, the face of the perpendicular rock, consisting of very hard tuff,

* This view of the temple (substituted for one by A. de Jorio, given in former editions,) has been reduced from part of a beautiful coloured drawing taken in 1836, with the aid of the camera lucida, by Mr. l'Anson, to illustrate a paper by

Mr. Babbage on the temple, read March, 1834, and published in the Quart. Journ. of the Geol. Soc. of London, vol. iii. 1847.

† See Map of Naples, Pl. VII. Fig. 2. p. 346.