

fail to have greatly assisted the denuding force of "the ocean stream." Ποταμοιο μεγα σθενος Ωκεανοιο.

Folkstone. — At Folkstone, the sea undermines the chalk and subjacent strata. About the year 1716 there was a remarkable sinking of a tract of land near the sea, so that houses became visible from certain points at sea, and from particular spots on the sea cliffs, from whence they could not be seen previously. In the description of this subsidence in the Phil. Trans. 1716, it is said "that the land consisted of a solid stony mass (chalk), resting on wet clay (gault), so that it slid forwards towards the sea, just as a ship is launched on tallowed planks." It is also stated that, within the memory of persons then living, the cliff there had been washed away to the extent of ten rods.

Encroachments of the sea at Hythe are also on record; but between this point and Rye there has been a gain of land within the times of history; the rich level tract called Romney Marsh, or Dungeness, about ten miles in width and five in breadth, and formed of silt, having received great accession. It has been necessary, however, to protect it from the sea, from the earliest periods, by embankments, the towns of Lydd and Romney being the only parts of the marsh above the level of the highest tides.* These additions of land are exactly opposite that part of the English Channel where the conflicting tide-waves from the north and south meet; for, as that from the north is, for reasons already explained, the most powerful, they do not neutralize each other's force till they arrive at this distance from the Straits of Dover. Here therefore some portion of the materials drifted from west to east along the shores of Sussex and Kent find at length a resting-place.

Rye, situated to the south of Romney Marsh, was once destroyed by the sea, but it is now two miles distant from it. The neighbouring town of Winchelsea was destroyed in the reign of Edward I., the mouth of the Rother stopped up, and the river diverted into another channel. In its old bed, an ancient vessel, apparently a Dutch merchantman, was found about the year 1824. It was built entirely of oak, and much blackened.† Large quantities of hazel nuts, peat, and wood are found in digging in Romney Marsh.

South Coast of England. — To pass over some points near Hastings, where the cliffs have wasted at several periods, we arrive at the promontory of Beachy Head. Here a mass of chalk, three hundred feet in length, and from seventy to eighty in breadth, fell in the year 1813, with a tremendous crash; and similar slips have since been frequent.‡

About a mile to the west of the town of Newhaven, the remains of an ancient entrenchment are seen on the brow of Castle Hill. This earthwork, supposed to be Roman, was evidently once of considerable extent and of an oval form, but the greater part has been

* On the authority of Mr. J. Meryon, of Rye.

† Edin. Journ. of Sci. No. xix. p. 56.

‡ Webster, Geol. Trans., vol. ii. p. 192. 1st series.