

is evident that the common delta of the Rhine, Meuse, and Scheldt, for these three rivers may all be considered as discharging their waters into the same part of the sea, would, if its advance had not been checked, have become extremely prominent; and even if it had remained stationary, would long ere this have projected far beyond the rounded outline of the coast, like that strip of land already described, at the mouth of the Mississippi. But we find, on the contrary, that the islands which skirt the coast have not only lessened in size, but in number also, while great bays have been formed in the interior by incursions of the sea.

In order to explain the incessant advance of the ocean on the shores and inland country of Holland, M. E. de Beaumont has suggested that there has in all probability been a general depression or sinking of the land below its former level over a wide area. Such a change of level would enable the sea to break through the ancient line of sand-banks and islands which protected the coast,—would lead to the enlargement of bays, the formation of new estuaries, and ultimately to the entire submergence of land. These views appear to be supported by the fact that several peat-mosses of fresh-water origin now occur under the level of the sea, especially on the site of the Zuyder Zee and Lake Flevo, presently to be mentioned. Several excavations also made for wells at Utrecht, Amsterdam, and Rotterdam have proved, that below the level of the ocean, the soil near the coast consists of alternations of sand with marine shells, and beds of peat and clay, which have been traced to the depth of fifty feet and upwards.*

I have said that the coast to the south as far as Ostend has given way. This statement may at first seem opposed to the fact that the tract between Antwerp and Nieuport, marked *a, a*, on the annexed map (plate 5.), although now dry land, and supporting a large population, has, within the historical period, been covered with the sea. This region, however, consisted, in the time of the Romans, of woods, marshes, and peat-mosses, protected from the ocean by a chain of sandy dunes, which were afterwards broken through during storms, especially in the fifth century. The waters of the sea during these irruptions threw down upon the barren peat a horizontal bed of fertile clay, which is in some places three yards thick, full of recent shells and works of art. The inhabitants, by the aid of embankments and the sand dunes of the coast, have succeeded, although not without frequent disasters, in defending the soil thus raised by the marine deposit.†

Inroads of the Sea in Holland. — If we pass to the northward of the territory just alluded to, and cross the Scheldt, we find that between the fourteenth and eighteenth centuries parts of the islands Walcheren and Beveland were swept away, and several populous districts of Kadzand, losses which far more than counterbalance the gain of land caused by the sanding up of some pre-existing creeks. In 1658 the

* E. de Beaumont, *Géologie Pratique*, vol. i. p. 316, and *ibid.* p. 260.

† Belpaire, *Mém. de l'Acad. Roy. de*

Bruxelles, tom. x. 1837. Dumont, *Bulletin of the same Soc.* tom. v. p. 643.