

destructive, and this borough is known to have been once situated a quarter of a mile east of the present shore. The inhabitants continued to build farther inland, till they arrived at the extremity of their property, and then the town decayed greatly; but two sandbanks, thrown up at a short distance, now afford a temporary safeguard to the coast. Between these banks and the present shore, where the current now flows, the sea is twenty-four feet deep on the spot where the town formerly stood.

Continuing our survey of the Suffolk coast to the southward, we find that the cliffs of Bawdsey and Felixstow are foundering continually. It appears that, within the memory of persons now living, the Orwell river continued its course in a more direct line to the sea, and entered to the north instead of the south of the low bank on which Landguard Fort is built.

*Essex.*—Harwich is said to have owed its rise to the destruction of Orwell, a town which stood on the spot now called “the west rocks,” and was overwhelmed by an inroad of the sea since the Conquest. Apprehensions have been entertained that the isthmus on which Harwich stands may at no remote period become an island, for the sea may be expected to make a breach near Lower Dover Court, where the cliffs are composed of horizontal beds of London clay containing septaria. They had wasted away considerably between the years 1829 and 1838, at both which periods I examined this coast. In that short interval several gardens and many houses had been swept into the sea, and in April 1838, a whole street was threatened with destruction. The advance of the sea is much accelerated by the traffic carried on in septaria, which are shipped off to Harwich for cement as fast as they fall down upon the beach, where they become the property of the lord of the manor, who is not lord of the soil on which the buildings stand. These stones, if allowed to remain in heaps on the shore, would break the force of the waves, and retard the conversion of the peninsula into an island, an event which might be followed by the destruction of the town of Harwich.

Among other losses it is recorded, that since the year 1807, a field called the Vicar’s Field, which belonged to the living of Harwich, has been overwhelmed\*; and in the year 1820 there was a considerable space between the battery at Harwich, built in the beginning of the present century, and the sea; part of the fortification had been swept away in 1829, and the rest then overhung the water.

At Walton Naze, in the same county, the cliffs, composed of London clay, capped by the shelly sands of the crag, reach the height of about 100 feet, and are annually undermined by the waves. The old churchyard of Walton has been washed away, and the cliffs to the south are constantly disappearing.

*Kent.*—*Isle of Sheppey.*—On the coast bounding the estuary of the Thames, there are numerous examples both of the gain and loss of land. The Isle of Sheppey, which is now about six miles long by

\* On authority of Dr. Mitchell, F. G. S.