

hundred years afterwards, land had already been gained, in some places, to the extent of three quarters of a league beyond these dikes ; and even the city of Groningen, partly built upon the old land, on a limestone which does not belong to the present sea, and in which the same shells are found as in the coarse limestone of the neighbourhood of Paris, is only six leagues from the sea. Having been upon the spot, I am enabled to adduce my own testimony in confirmation of facts already well known, and which have been so well stated by M. Deluc *. The same phenomenon may be as distinctly observed along the coasts of East Friesland, and the countries of Bremen and Holstein, as the period at which the new grounds were inclosed for the first time is known, and the extent that has been gained since can be measured.

This new alluvial land, formed by the rivers and the sea, is of astonishing fertility, and is so much the more valuable, as the ancient soil of these countries, being covered with heaths and peat-mosses, is almost everywhere unfit for cultivation. The alluvial lands alone produce subsistence for the many populous cities that have been built along these coasts, since the middle age, and which perhaps would not have attained their present flourishing condition, without the aid of the rich deposits

* In various parts of the two last volumes of his Letters to the Queen of England.