at a period still more remote the Euganian moun-

tains may have been islands.

My learned brother of the Institute, M. de Prony, inspector general of the bridges and roads, has communicated to me his valuable researches explanatory of these changes in the shores of the Adriatic.

ON THE HYDRAULIC SYSTEM OF ITALY.

"Account of the displacement of that portion of the banks of the Adriatic sea, which is occupied by the mouths of the Po.

"That part of the coast of the Adriatic, contained within the southern extremities of the lake, or rather the lagoons (lagunes,) of Comachio, and the lagoons of Venice, has undergone since early times vast changes, attested by many veracious authors, and which is borne out by the present state of the soil in the districts on the coast; but it is impossible to detail with precision the successive progress of these changes, and particularly the exact measures previously to the twelfth century of our era.

"We are however sure that the city of Atria, now Adria, was formerly situated on the sea-coast; and this gives us a decided and known point of the primitive shore, whence the shortest distance to the present shore, taken from the mouth of the Adige, is 25,000 metres,* (15½ miles and upwards.) The

^{*} We shall find that the farther extremity of the alluvial promontory formed by the Po, has advanced into the sea farther by ten thousand metres (6\frac{1}{4} miles nearly) than the mouth of the Adige.