

discovery of Coprolites, (see Pl. 15,) i. e. of fœcal remains in a state of petrification, dispersed through the same strata in which these skeletons are buried. The state of preservation of these very curious petrified bodies is often so perfect, as to indicate not only the food of the animals from which they were derived, but also the dimensions, form, and structure of their stomach, and intestinal canal.*

On the shore at Lyme Regis, these Coprolites are so abundant, that they lie in some parts of the lias like potatoes scattered in the ground; still

* The following description of these Coprolites, is given in my memoir on this subject, published in the Transactions of the Geological Society of London, 1829, (vol. iii. n. s. part i. p. 224. with three plates.)

“ In variety of size and external form, the Coprolites resemble oblong pebbles or kidney-potatoes. They, for the most part, vary from two to four inches in length, and from one to two inches in diameter. Some few are much larger, and bear a due proportion to the gigantic calibre of the largest Ichthyosauri; others are small, and bear a similar ratio to the more infantine individuals of the same species, and to small fishes: some are flat and amorphous, as if the substance had been voided in a semifluid state; others are flattened by pressure of the shale. Their usual colour is ash grey, sometimes interspersed with black, and sometimes wholly black. Their substance is of a compact earthy texture, resembling indurated clay, and having a conchoidal and glossy fracture. The structure of the Coprolites at Lyme Regis is in most cases tortuous, but the number of coils is very unequal; the most common number is three: the greatest I have seen is six: these variations may depend on the various species of animals from which they are derived; I find analogous variations in the tortuous intestines of modern Skates, Sharks, and Dog-fish. Some