

tain the remains of organized bodies, some of which are of the most remarkable character, and lead us to very important deductions. The wonder of thinking men has long been excited by the discovery of these in the solid strata of the globe, and that at great depths below the surface. There is evidence that they were objects of attention among the learned long before the science of geology had a name; and some of the speculations which have reached us are little to be preferred to the notions of the most ignorant peasants of our own day. But since men have been engaged in geological investigations, the study of fossils has risen to great importance, and has conferred many advantages upon geology itself.

By the character of the organic remains found in a bed, the relative position and age of a deposit may, as we have already shown, be frequently determined, for every series of beds contains some which are peculiar to itself. It is not always possible to assign to a deposit its proper position in the geological series, by its mineralogical characters; but if a collection of its fossils can be formed, the difficulty vanishes, and its relative age may be determined. Every series of beds, therefore, possessing fossils peculiar to itself, contains an index to its own mysterious history; for not only can its position in the series be read, but also the circumstances under which it was formed.

The fact that every series of rocks contains fossils peculiar to itself, was first discovered by Lister, more than one hundred and fifty years ago, but the honour of demonstrating it by extensive observation is due to Mr. William Smith: and thus he has placed the naturalist, as well as the geologist, in a new position,—inducing him to extend his observations into the bowels of the earth, where the remains of a race of beings before entirely unknown have been discovered.

The fossilized bones of animals are among the most singular organic remains. Baron Cuvier, the celebrated French geologist, was the first who commenced the study of these fossils. As an antiquary of a new order, to use his own words, he was obliged at once to learn the art of restoring these monuments of past revolutions to their original forms, and to discover their nature and relations. He had to collect, in their original order, the fragments of which they consisted, to reproduce the ancient beings to which they belong-