

at the same time a professorship of the study of geology. The Woodwardian Museum still subsists, a monument of the sagacity with which its author so early saw the importance of such a collection.

Collections and descriptions of fossils, including in the term specimens of minerals of all kinds, as well as organic remains, were frequently made, and especially in places where mining was cultivated; but under such circumstances, they scarcely tended at all to that general and complete knowledge of the earth of which we are now tracing the progress.

In more modern times, collections may be said to be the most important books of the geologist, at least next to the strata themselves. The identifications and arrangements of our best geologists, the immense studies of fossil anatomy by Cuvier and others, have been conducted mainly by means of collections of specimens. They are more important in this study than in botany, because specimens which contain important geological information are both more rare and more permanent. Plants, though each individual is perishable, perpetuate and diffuse their kind; while the organic impression on a stone, if lost, may never occur in a second instance; but, on the other hand, if it be preserved in the museum, the individual is almost as permanent in this case, as the species in the other.

I shall proceed to notice another mode in which such information was conveyed.

Sect. 3.—First Construction of Geological Maps.

DR. LISTER, a learned physician, sent to the Royal Society, in 1683, a proposal for maps of soils or minerals; in which he suggested that in the map of England, for example, each soil and its boundaries might be distinguished by color, or in some other way. Such a mode of expressing and connecting our knowledge of the materials of the earth was, perhaps, obvious, when the mass of knowledge became considerable. In 1720, Fontenelle, in his observations on a paper of De Reaumur's, which contained an account of a deposit of fossil-shells in Touraine, says, that in order to reason on such cases, "we must have a kind of geographical charts, constructed according to the collection of shells found in the earth." But he justly adds, "What a quantity of observations, and what time would it not require to form such maps!"

The execution of such projects required, not merely great labor, but