

SYSTEMATIC MINERALOGY.

CHAPTER VIII.

ATTEMPTS AT THE CLASSIFICATION OF MINERALS.

Sect. 1.—Proper object of Classification.

THE fixity of the crystalline and other physical properties of minerals is turned to account by being made the means of classifying such objects. To use the language of Aristotle,¹ Classification is the *architectonic* science, to which Crystallography and the Doctrine of External Characters are subordinate and ministerial, as the art of the bricklayer and carpenter are to that of the architect. But classification itself is useful only as subservient to an ulterior science, which shall furnish us with knowledge concerning things so classified. To classify is to divide and to name; and the value of the Divisions which we thus make, and of the names which we give them, is this;—that they render exact knowledge and general propositions possible. Now the knowledge which we principally seek concerning minerals is a knowledge of their chemical composition; the general propositions to which we hope to be led are such as assert relations between their intimate constitution and their external attributes. Thus our Mineralogical Classification must always have an eye turned towards Chemistry. We cannot get rid of the fundamental conviction, that the elementary composition of bodies, since it fixes their essence, must determine their properties. Hence all mineralogical arrangements, whether they profess it or not, must be, in effect, chemical; they must have it for their object to bring into view a set of relations, which, whatever else they may be, are at least chemical relations. We may begin with the outside, but it is only in order to reach the inner struc

¹ *Eth. Nicom.* i. 2.