

resemblances and differences of the objects classified. It is obvious that to execute such a work, implied a most intimate and universal acquaintance with minerals;—a power of combining in one vivid survey the whole mineral kingdom. To illustrate the spirit in which Professor Mohs performed his task, I hope I may be allowed to refer to my own intercourse with him. At an early period of my mineralogical studies, when the very conception of a Natural System was new to me, he, with great kindness of temper, allowed me habitually to propose to him the scruples which arose in my mind, before I could admit principles which appeared to me then so vague and indefinite; and answered my objections with great patience and most instructive clearness. Among other difficulties, I one day propounded to him this;—"You have published a Treatise on Mineralogy, in which you have described *all* the important properties of all known minerals. On your principles, then, it ought to be possible, merely by knowing the descriptions in your book, and without seeing any minerals, to construct a natural system; and this natural system ought to turn out identical with that which you have produced, by so careful an examination of the minerals themselves." He pondered a moment, and then he answered, "It is true; but what an enormous *imagination* (*einbildungskraft, power of inward imagining*), a man must have for such a work!" Vividness of conception of sensible properties, and the steady intuition (*anschauung*) of objects, were deemed by him, and by the Wernerian school in general, to be the most essential conditions of complete knowledge.

It is not necessary to describe Mohs's system in detail; it may sufficiently indicate its form to state that the following substances, such as I before gave as examples of other arrangements, calcspar, gypsum, fluor spar, apatite, heavy spar, are by Mohs termed respectively, *Rhombohedral Lime Haloide, Gyps Haloide, Octohedral Fluor Haloide, Rhombohedral Fluor Haloide, Prismatic Hal Baryte*. These substances are thus referred to the *Orders* Haloide, and Baryte; to *Genera* Lime Haloide, Fluor Haloide, Hal Baryte; and the *Species* is an additional particularization.

Mohs not only aimed at framing such a system, but was also ambitious of giving to all minerals *Names* which should accord with the system. This design was too bold to succeed. It is true, that a new nomenclature was much needed in mineralogy: it is true, too, that it was reasonable to expect, from an improved classification, an improved nomenclature, such as had been so happily obtained in botany by the