

*Ancient.**Modern.*

Sienitic and greenstone rocks. | Greystones of Mr. Scrope.

DIVISION III. — *Hornblendic, Augitic, &c.*

Rocks in which hornblende, augite, hypersthene, or diallage predominates over the felspar (or its representative olivine, &c.), and sometimes constitutes the whole mass of the rock.

*Ancient.**Modern.*

Basaltic series of most authors. | Basaltic series of Scrope.

To each of these three divisions belong the granular, earthy, compact, resinous, and vitreous *textures*; porphyritic, concretionary, amygdaloidal, and cellular *structures*; cuboidal, prismatic, spheroidal, or irregular *divisional planes*. (Among recent igneous rocks the cellular and vitreous structure passes to spumous and filamentous: — pumice and scoria.)

To each of them belongs also a peculiar set of stratified analogues—as gneiss to granite; some hornblende slates to greenstones; wacké to basalt,—which are often embarrassing to the observer, and perplexing to the reasoner, even with the advantage of Mr. Lyell's views of “metamorphic” rocks, (for which consult a future section).

Exposed to the wasting agency of the atmosphere and water, few resist decomposition, and then yield clay or sand, often of great fertility.

A classification and nomenclature upon this system, which should embrace the igneous rocks of all ages, might, if accepted generally among observers, confer great benefits on geology. It would, however, necessitate an almost total change of descriptive names, and would render it indispensable for geologists to study mineralogy with more care than is now given to that rather difficult subject. It seems therefore unlikely that success would attend such a system if proposed at this time, more especially when we remember how very little regard has been paid in England to the classification and nomenclature of mixed rocks devised by M. Brongniart.