of *verde di Corsica*, which the arts is applied to the rock as a whole, is by Beudant restricted to the contained smaragdite.

I have lately examined a pale yellowish-green compact and apparently homogeneous rock, which forms great beds among the crystalline schists of the Shickshock mountains in Gaspé, and has somewhat the aspect of saussurite. Its hardness is 7·0 and its density 3·04—3·09. It is exceedingly tough and sonorous, has a conchoidal fracture with a feeble waxy lustre, and is translucent on the edges. The analysis gave as follows:

		Oxygen.
Silica	62·60	33·38
Alumina	12·30	5·78
Protoxyd of iron	9·40	2·82
Lime	14·10	4·03
Magnesia	·72	·29
Soda with a trace of potash	·43	·11
Loss on ignition	·16	
	99·71	

The oxygen of the protoxyds and peroxyds in the above analysis equals 4·43 and 8·60. If to these we add the silica corresponding to 13·00 of oxygen, we shall have 61·33 parts of epidote, leaving 32·22 parts of silica uncombined. The density of the mass is that of a mixture of epidote and quartz in the above proportions, and in some specimens where the rock becomes granular, the two species are easily distinguishable. (*Geol. Survey of Canada, Report*, 1858). This epidote rock then is completely distinct from the saussurite of Orezza.

The two silicates zoisite and meionite offer a remarkable instance of that isomerism in mineral species upon whose importance I have long insisted. The relation of the specific gravity to the empirical equivalent weights of minerals, must enter as an essential element into a classification which shall unite the chemical and natural-historical systems. Similar isomeric relations exist between kyanite and sillimanite, rutile and anatase, and as I have elsewhere endeavored to show, among the carbon-spars. It becomes necessary in the study of mineral species to determine their relative equivalent weights, to which specific gravity must be the chief guide.—(*Proc. Am. Assoc. Adv. Science*, 1854, pp. 240–247).*

* The action of heat upon organic bodies of high equivalent tends to resolve them into simpler and less dense forms, (we except of course the simultaneous productions of small portions of more complex hydrocarbons). Similar results are obtained when the denser silicates are fused. Thus according to Magnus the specific gravity of garnet is lessened one-fifth by fusion, while that of idocrase is reduced from 3·34 to 2·94. Epidote by ignition has its density changed from 3·40 to 3·20 according to Rammelsberg, and saussurite is converted by fusion into a soft glass of specific gravity 2·8. The silicates thus modified are decomposable by acids like the basic feldspars; idocrase and garnet crystallize after fusion, the latter according to von Kobell in octahedrons. Deville found the density of hornblende and pyroxene to be reduced by fusion from 3·2 to 2·8, orthoclase from 2·56 to 2·35, and labradorite from 2·689 to 2·525.