this superiority in number, the organic fossil world furnishes, in every latitude, a further analogy with the intertropical shells that now live at the bottom of the ocean. In fact, M. Defrance, in a work* full of new and ingenious ideas, not only recognizes this preponderance of the univalves in the number of the species, but also observes, that out of 5500 fossil univalve, bivalve, and multivalve shells, contained in his rich collections, there are 3066 univalve, 2108 bivalve, and 326 multivalve; the univalve fossils are therefore to the bivalve as three to two.

XIII. Formation of Pyroxenic Amygdaloid and Phonolite, between Ortiz and Cerro de Flores.—I place pyroxenic amygdaloid and phonolite (porphyrschiefer) at the end of the formations of Venezuela, not as being the only rocks which I consider as pyrogenous, but as those of which the volcanic origin is probably posterior to the tertiary strata. This conclusion is not deduced from the observations I made at the southern declivity of the littoral Cordillera, between the Morros of San Juan, Parapara, and the Llanos of Calabozo. In that region, local circumstances would possibly lead us to regard the amygdaloids of Ortiz as linked to a system of transition rocks (amphibolic serpentine, diorite, and carburetted slate of Malpasso); but the eruption of the trachytes across rocks posterior to the chalk (in the Euganean Mountains, and other parts of Europe), joined to the phenomenon of total absence of fragments of pyroxenic porphyry, trachyte, basalt, and phonolite,† in the conglomerates or fragmentary rocks anterior to the recent tertiary strata, renders it probable that the appearance of trap rocks at the surface of the earth is the effect of one of the last revolutions of our planet, even where the eruption has taken place by crevices (veins) which cross gneiss-granite, or the transition rocks not covered by secondary and tertiary formations.

* Table of Organized Fossil Bodies, 1824.

† The fragments of these rocks appear only in tufas or conglomerates, which belong essentially to basaltic formations, or surround the most recent volcanos. Every volcanic formation is enveloped in breccia, which is the effect of the eruption itself.