

Lastly, it may be remarked, that the numbers at present conventionally employed by chemists, to represent what have been called the *atomic weights* of bodies, are so convenient, that they will not readily, nor indeed ought lightly, to be set aside; though there is reason to believe that many of them require revision, and are destined to undergo material alterations, even as the subject is at present understood. If the views however which we have advanced be correct, these numbers certainly do not represent nature: for as we have already stated, a strictly philosophical arrangement can be rationally founded only, upon the volumes of bodies in the gaseous state. If the same body combine *cohesively*, they form a compound, which though having properties in some degree allied to those of the original molecule, nevertheless usually possesses a specific difference; that is to say, the *chemical* polarities of the compound molecule as modified by the union, will be different from those of the simple molecule. But a body possessing a *specific difference*, may be supposed to be a *new* body; and thus capable of combining in future, *not* cohesively, but *chemically* with our original molecule. Now in such a case, it is evident that the weight of the original molecule, and that of the new compound molecule, *must* have a certain relation to one another, by multiple. If our space admitted, it would not, we believe, be difficult to point out instances of such combination among chemical phenomena; but we shall merely observe, that many of the substances, at present considered as elementary, appear to be constituted upon the above principles, from some common molecule, of a still more elementary character. Moreover this law seems to hold universally throughout nature; and those substances related to the same molecule, in general constitute a natural group or family, having certain properties in common.