oxygen, united with *two* volumes of hydrogen, the relative weights of the hydrogen and oxygen in water will be, not as 1 to 16, but as 1 to 8 only; while the weight of the self-repulsive molecule of steam, will be 9. Hence, as one, or the other, of the elements of water, is usually made the basis of the atomic numbers, this difference between the volumes and the combining weights of its elements, has produced considerable confusion; and has given rise to much needless discussion. As a mere matter of convenience, it is certainly preferable to consider the two volumes of hydrogen, as one *atom*, (to use the language of Dr. Dalton); in which case, oxygen will be 8, and water 9; but a strictly philosophical arrangement, supposing the principles we have advanced be well founded, would require, that *the volume in all instances should be made the molecular unit;* in which case, the relative weights of the self-repulsive molecules of hydrogen and oxygen, as above mentioned, will be as 1, to 16.

In this country, two volumes of hydrogen, as we have said, are usually considered as *one atom*, or unity, in which case, oxygen is 8; but some have chosen instead of hydrogen, to make oxygen unity, or 10; in which case, hydrogen, of course, will be the one-eighth of 1, or of 10; that is to say, ·125 or 1·25; and water, instead of 9, will be 1·125, or 11·25. It matters not