likewise a variable quantity, (as will be shown hereafter), but usually fluctuating between one, and one and a half per cent.* In addition to these ingredients, there are, probably, also other matters constantly present in the atmosphere; for as the sea contains a little of every thing that is soluble in water; so the atmosphere may be conceived to contain a little of every thing that is capable of assuming the gaseous form.

The atmosphere exerts a pressure, or weight, upon all parts of the earth's surface, on an average, equal to about fifteen pounds upon a square inch; or in other words, equal in weight to a column of mercury, one inch square, and thirty inches high. The well-known instrument, the common *Barometer*, or *Weather-glass*, consists of nothing more, than such a column of mercury, poised or pressed upwards into a vacuum, by the weight of the atmosphere. With the changes constantly taking place in the height of such a column, every body is familiar; and we shall have occasion to recur to them hereafter: at present, it is only requisite to observe, that these changes are much less remarkable in tropical,

* Or, more accurately speaking, 1000 parts of atmospheric air, under ordinary circumstances, may be said to consist of

Oxygen	•	•					210.0
Azote.	٠	•	۰.	•	•	•	775.0
Aqueous	•	•	•	14.2			
Carbonic	acid .			•	•		0.8