gaseous compounds of great activity, which prove instantly fatal to animals respiring them. Such effects, however, appear to be obviated by a beautiful expedient, to be noticed hereafter. In the mean time it may be observed, that though the compound of carbon and oxygen, *(carbonic acid,)* is by innumerable processes constantly forming around us in enormous quantities; by some compensating means, it disappears as fast as it is formed; so that the atmosphere, which without this provision, would probably before now, have become contaminated by carbonic acid to an extent fatal to animal life, barely contains traces of it.

(8) *Azote*, or *nitrogen*, is one of the very few elementary principles which exist naturally in an uncombined state. It constitutes about 4-5ths, or 80 per cent. of common air; the rest being principally oxygen. The great bulk of this principle in existence is confined to the atmosphere; or to animal substances, of which it forms a constituent element: and it enters very little into natural mineral productions. In its pure state, azote is remarkable for its negative properties; that is to say, for the difficulty with which it enters into combination with other matters. Thus, it is neither combustible, nor a supporter of combustion; is neither acid, nor alkaline; possesses neither taste, nor smell; nor does it directly combine with any known sub-