

be most injurious in its effects upon the animal organism. Besides the oxygen which exists in its admixture with nitrogen, there is also another form of this same element, which is known as ozone. Three of the original atoms are supposed to exist in this combination, and its action seems to be even more effective and energetic than its constituent alone. It is the great counteragent of all that is foul and obnoxious. From Dr. Cornelius Fox we learn that "The oxidation of metals, the decomposition of rocks, the germination of seeds, the growth of plants, the falling of dew, rain, hail, and snow; the collision between air currents of different degrees of humidity proceeding from opposite quarters with one another, or with the earth; the evaporation which is continually proceeding from saline fluids, such as oceans, seas, and lakes; the dashing and splashing, the smashing and crashing of the restless waves on the rocky coast, are all concerned in the simultaneous development of electricity and ozone." Yet, notwithstanding the enormous bulk of the surrounding atmosphere, it is possible to produce impurities in such quantities that the amount of scavenging influence immediately at hand, is inadequate to completely oxidize them. Such sources of impurities must be avoided, and when we come to speak of the earth, we shall state how it should be drained so that its surface may not be a cesspool of filth exhaling infection with its noxious gases. But it may be wise to say here in general terms that no accumulation of refuse or filth of any kind should be allowed within, under, or about any dwelling.

But air is not the only essential to life. Water is equal in importance, since it is as impossible to do without the one as without the other. There is no question but that we breathe *in* volume upon volume of air and that we thus take into the lungs an amount of hurtful matter which is considerable, due to the fact of constant accumulation. This necessitates most careful inspection of that which we must breathe. But water is also indispensable; and as the intestines are exceedingly delicate organs, we should not allow them to receive the contact of whatsoever might be injurious to them or occasion any interior functional derangements.

Water is made up of oxygen and hydrogen, in the proportion of one volume of the former to two of the latter. The weight of the oxygen is, however, eight times that of the hydrogen. Unlike air, water consists of the chemical combination of its two constituent elements, so that the properties of the elementary substances are changed by their intimate association. Like air, it may be polluted. Matters may enter it and be dissolved; chemical action may take place or mechanical mixture may be the result; suspended particles of every conceivable size or shape may float on its surface or in its depths, so that its purity is greatly affected. In fact, it is just as rare to find pure water (H_2O) as it is to find a pure mixture of twenty one per cent of oxygen with seventy nine of nitrogen. This will not be difficult to believe when we consider that our purest waters have been drawn into the atmosphere by a process of vaporization, and have fallen upon the earth again in the form of rain, washing down, in their descent, such matters as they may have met with on the way. Then, while percolating through the earth, say even under the most favorable conditions, they will assimilate inorganic matters, becoming nevertheless, exceedingly pure due to their perfect filtration. Water is an excellent solvent, perhaps the best that exists; for there is nothing that will not, in time, succumb to its action. Since water is so delicate as to be thus readily affected by foreign substances, and since the intestinal organs share with it this same delicacy, it is natural to assume the conclusion that the water supply must be exceedingly pure and entirely free from any thing which is liable to cause any abnormal condition in the recipient. Our purest supply of potable water is to be found in deep wells such as have been bored in Brooklyn. Deep springs, which have entered the ground miles above the place where the boring is made, have necessarily traveled a great distance, passing through porous layers of sand and gravel, and thus filtering out every impurity so that it offers forth a limpid stream of exquisite refinement. In some places rivers and lakes are depended upon. It is evident that, when this is the case, no sewage or filth of whatever the nature should be allowed to