

ON OZONE IN RELATION TO HEALTH.

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"Since the state of life necessitates the state of death, and since the functions of life are productive of decay, it becomes evident that in the scheme of nature there must exist the means of breaking up all effete and noxious compounds, the resultants of decay, into either their original elements or into other innocuous compounds fitted again to serve and subserve the purpose of vitalized matter. The best agent—perhaps the only agent—suited to the performance of such a duty is that all-pervading elementary gas, which Priestly (its discoverer) called vital air—a gas now universally known under the name of oxygen, and found to be present in our atmosphere to the extent of one part in five. Oxygen, you are aware, is essential to everything that lives ; but, in addition to and beyond this, it enacts the important part of Nature's greatest scavenger by effecting those very decompositions the necessity for which I have just referred to. It appears that, under certain conditions, this gas has the power of combining with itself, or, speaking more correctly, I believe, of existing in a condensed form. So condensed, we recognize it under the name of ozone, the name having been given to it in consequence of its possessing a very disagreeable odor. It is in this condensed condition that oxygen (ozone) appears to exercise the intensity of its action in a manner so remarkable that I have chosen it, and its relation to health and disease, as the subject of the present address."

In respect to what ensues when ozone is absent from the air, the speaker said there was a good deal of concurrent testimony as to the connection which existed between the absence of ozone and epidemic cholera. He quoted observations made in India at fifteen different stations, which showed that cholera was at its greatest ascendancy when ozone was either absent from the atmosphere or at its minimum ; that the disease showed a most marked diminution when ozone was registered as increasing ; and when at its maximum the disease ceased altogether if the maximum continued for any length of time. Experiments at Strasbourg in 1854 and 1855, and others by Dr. Moffatt and Mr. Glaisher, pointed in the same direction. The speaker handed in tables showing the atmospheric conditions which prevailed during six months of the cholera epidemic in London, in 1868, and remarked that it was almost impossible to