means of restoring to animals and to man a sufficient and normal amount of Oxygen, to replace that which may have become consumed by animal respiration, and the various operations of nature and of art. The physician, in his investigations on the cause of disease, and as guardian of the public health, more es pecially in reference to diseases of an epidemic character, has not been silent in ascribing to it a salutary or deleterious agency in proportion to its presence or absence, and as exerting an important influence on the health of individuals and of nations, varying with the time, the season, and the temperature.

A substance, the knowledge of which seems to be fraught with life and health, both to the animal and vegetable kingdom, and which must, as a consequence, have an important bearing on the agricultural and commercial wealth of nations, demands from the man of science, a calm and patient investigation, so as to give to it a proper place in the annals of *true* science.

It is for this purpose that the present observations are submitted, trusting that in so vast a field for enquiry, many may be found as co-labourers—willing to contribute, however little, to the vast treasury of true knowledge.

As far back as the end of the 18th century Van Marum, in experimenting on the electrical action on oxygen speaks of the odour or smell being very strong, and which appeared to him as the smell of electrical matter, and it is scarcely to be doubted that Gilbert, Hawksbee, Dufay, Franklin and others were equally sensible of the peculiar odour generated by electrical action.

It is about 19 years ago since Schonbein, during his investigations on the decomposition of water by the Voltaic pile, remarked the odour that became manifest, and in a letter written to Arago in 1840, he says, "that for some years past he had been familiar " with the odour generated during the decomposition of water by " this voltaic current," and to this simple elementary body he gave the name of Ozone (from ozo, to smell).

The first accounts of the investigations of this substance may be found in the "Memoirs de la Société d'Histoire naturelle de Bâle," in the "Journal de chimie pratique," Erdmann in the "Annales de Poggendorf," also in the "Archives de l'Electricité" de Marignac et De La Rive, and also in the various British scientific periodicals.

Schonbein at this period of his investigations believed it to be a simple elementary body analogous to chlorine, bromine and