peculiar organic matter. From experiments on animals, in which the carbonic acid and watery vapor were removed, and the organic matter alone left, this has been found to be highly poisonous. A mouse died in it in forty-five minutes. On the other hand, carbonic acid, in itself, within certain limits, has been found by experiment, not to be an important impurity, nor to have a very injurious effect upon the health, except when in great excess. Dr. Angus Smith experienced no discomfort in a soda-water manufactory where the carbonic acid amounted to 2 volumes per 1000 (more than 5 times the amount in ordinary air—.35 per 1000). Doubtless its presence in the air in any great excess, however, would lessen the elimination of carbonic acid from the lungs, and thus the gas would be retained in the blood, and in a little time produce serious alterations in nutrition.

The carbonic acid gas is practically in a constant ratio with the organic matter in expired air, and as the quantity of the gas is readily enough determined, it may be conveniently taken as an index to the amount of the more important impurity in such air.

In expired air there is LESS OXYGEN than in ordinary atmospheric air, as a certain amount of oxygen is consumed in the body at every breath : hence in an inhabited room which is not well ventilated, this life giving element is gradually and materially lessened. Dr. Angus Smith's experiments showed that while the percentage of oxygen in the open air of a suburb of Manchester amounted to 20.96, in a sitting room it was only 20.89, in the pit of a theatre, 20.74, and in the Court of Queen's Bench, 20.65. By a reduction of the proportion of oxygen, therefore, as well as by accumulation of impurities, the air in unventilated living rooms is soon unfitted for the purposes of respiration and the support of life.

By the EXHALATIONS FROM THE SICK, the air is vitiated more rapidly, and rendered still more noxious, than by those from persons in health, which we have been considering. This is true as regards all diseases, but more especially the specific eruptive fevers, which implicate the skin and mucous linings of the air passages, as in small pox, scarlet fever, measles, and the like; and also as regards diphtheria, erysipelas, and some diseases of the lungs. The specific contagiums of other contagious diseases are doubtless given off by the skin and lungs, and pass into the air; which then acts as a medium by which others receive the disease. In diseases with certain purulent discharges, putrefying particles and pus-cells are