

A ANTIDOTE TO BAD AIR.—Dr. Golden of London (Brath Ret. No. 77) gives a simple method of purifying air when so offensive as to be totally unfit for breathing. He says it has been tried on small and on very large scales, and never failed in its results. It is used in hospitals, large school-rooms, slaughter-houses, tanners's yards, the lower decks of ships, where several hundred seamen have made the atmosphere so impure during the night as to be most offensive to any one from the outside suddenly entering.

Dr. Goolden would disabuse the public of a notion—that the evolution of carbonic acid gas, as the noxious element, is the cause of the mischief we want to rectify. The offensive matter is sulphide of ammonium, hydro-sulphuric acid, and other still more poisonous gases of which sulphur is the base. So poisonous is this gas that one volume added to 1,500 volumes will kill a small bird: and one volume to 1,000 will kill a middle-sized dog instantly; and one volume added to 250 its volume of air will kill a horse. This when existing in the atmosphere in an exceedingly small quantity is most injurious to animal and vegetable life—in fact, it is poisonous in proportion to its quantity. It is constantly secreted from the surface of the living body, and evaporates into the air. When crowds of people are assembled in a room the air becomes very poisonous; but fortunately the chloride of lead destroys it by attracting it with the strong force of double electric affinity. The sulphur combines with the lead, and hydrogen with the chlorine, and the sulphur will combine with nothing else if lead be present, and the combination is perfectly insoluble, so that it involves no fear of lead poisoning.

The mode of using it is: Take a drachm of nitrate of lead, and dissolve it in a pailful of soft water (rain water or distilled), and take a drachm of common salt, which dissolve in a jug of soft water, and when the solutions are mixed it is ready for use. Dip a towel into it and hang it up in the offensive room. The strength might be very much increased, but for ordinary purposes this quantity is quite sufficient; and if not, more may be made with very little trouble. It is important to understand why soft water should be used. If there is any lime in the water there will be carbonic acid, and a precipitate will be formed of carbonates of lime and of lead. If it is unavoidable, the precipitate must be allowed to fall, and prevented from mixing with water or sewage falling into rivers or springs, otherwise you may get lead poison. Dr. G. advocates ventilation at the same time.

DON'T BE AFRAID of the little currents of fresh air coming in around windows and doors. Regard them rather as kindly little messengers striving, though too often all in vain, to keep the air within pure, and to bring in a supply of oxygen. If your rooms are not provided with special means for constant ventilation, don't stuff the cracks and crevices too tightly with listing or anything else, but burn a little extra fuel and let in plenty of fresh, pure air, if you wish to live, healthy and vigorous, through the winter. It is the worst sort of economy to make living and bedrooms air-tight in order to save fuel. Saving coal and wasting health and life.