

ly affect young children, and when it does so they are not likely to be attending school. Assuming, however, that the germs of typhoid are occasionally found in such excreta, it is tolerably certain that such do not become virulent until excreta has been for some hours exposed to the air, and undergoing decomposition. This system of desiccation may be said largely to prevent this by drawing the warm, dry air over the excreta and evaporating its moisture. But let us further suppose that infectious particles can be carried upward and high into the air. We trace the same conditions regarding the destruction of microbes which prevail over the whole city where organic particles are constantly carried upwards from all sorts of sources of pollution, and notably from excreta deposited in proximity to houses, to a degree infinitely greater than what is likely to affect them from a neighboring school of healthy pupils. The feature of this system of heating which we have taken objection to, is one which, as far as the desiccation of excreta goes is one of its greatest virtues. We refer to the unduly dry atmosphere of the school-room, which, unless care is taken to supply moisture artificially, is sure to follow the raising of external air through the requisite number of degrees of heat, thereby proportionately lessening its relative humidity. This, however, is a danger attaching to all sorts of warm-air furnaces, and can in all cases be largely overcome by an adequate supply of water being placed in the evaporating pans. The relative humidity on a cold day in winter, when no water has been evaporated, would probably be as low as 50 R.H., but its capacity for drying out excreta where large rooms, containing 20,000 cubic feet, have their air changed once, at least, in ten minutes, would be very great indeed. We would say in conclusion that it is unfortunate that a system of heating and ventilation, in which there are so many positively good features, should be spoken against when there is such an absence of any other well-devised schemes, especially for ventilating school-rooms, and when on every side the recognized dangers from impure air in school-rooms are so great and so prejudicial to both the physical and mental strength of our school children. We may properly call such men public benefactors, and encourage them to persevere in their labors until the system has been perfected along those lines where improvement may be found possible.

SMALL-POX.

CYCLES of disease have from time to time been remarked upon, and statisticians have looked for and physicians have contemplated as an inevitable necessity that every five or ten returning years would usher in an outbreak of some contagious disease—smallpox, scarlatina, etc. Defective opportunities for studying either the nature of diseases or of epidemics have doubtless contributed to the establishment of these opinions; but modern experience is teaching us that the reasoning has been of a *post hoc ergo propter hoc* character, and that cycles in disease are largely apocryphal. Speaking especially of small-pox, we are, to-day, under the unpleasant duty of recognizing that this continent is at present more than usually threatened with a severe outbreak of this disease as cold weather approaches. It has maintained its hold and rather increased than diminished since last winter in two of the largest distributing centres, New York and Philadelphia. The New York returns for week ending July 24th gives nine cases, while Philadelphia returns for week ending July 14th give seven deaths from small-pox. Cases are reported from Baltimore and from Selby, Tenn.; and San Francisco, July 2, reports two deaths there for the previous week. The disease has reached Buffalo, there being in the Polish quarter, while Toronto has had three cases recently reported. With so many *foci* it will be strange indeed if some one or other of these does not become the occasion of outbreak which, through accident or neglect, will assume the proportions of an epidemic. In England the disease is similarly present at several centres in notable amounts. During June, 48 deaths occurred in the 28 reporting towns, 23 being in Preston and 16 in Sheffield. The question therefore becomes an intensely practical one for us in Canada. We have been remarkably free during the past two years from outbreaks of this disease, and may congratulate ourselves upon the fact; but when we examine the conditions upon which we ought to be able to base a continued immunity we find much room for reflection and, indeed, alarm. Since the small-pox epidemic in Montreal our people have either ceased to believe that such another outbreak can occur, and have therefore thought it unnecessary to vaccinate or else they have neglected, as we neglect so many other things, simply because we cannot help it. Local Boards