

its spores through the air. In the City of Nottingham, in ten years, ending 1896, 85.3 per cent. of the typhoid fever cases occurred in houses of five rooms or under. This fact tends to prove the theory of sick room infection.

Surface soils contain a large number of micro-organisms of different species. More organisms are found in made soils than in virgin soils, and the number varies also with the amount of certain organic matter in the soil. The largest number is found at a distance of from 12 to 24 inches below the surface. In the case of the typhoid organism planted at a depth, (Maitland Gibson, Sheffield), says: "There was an undoubted tendency to grow upward, and which appeared quite distinct from the upward diffusion of B. anthrax by means of earth worms; and further, organisms disappeared from surface soil long before they did from subjacent strata, and this would lead to the belief that the deeper layers sheltered the organisms during the winter months. It has also been proven by observation, and statistics have been compiled showing that with certain soil conditions the organism of typhoid fever slowly dies out. Conditions, then, which favor the growth of the organism are, 1st, badly paved or unpaved streets, which are constantly receiving small amounts of organic matter in the shape of slop water or faecal matter; 2nd, the filth in and around privies and drains also favor the growth of the organism. Grass covered areas, so long as the ground is not disturbed, are not favorable to the growth or spread of the typhoid organism. We must also remember that there are different arrangements of the dwelling in these areas, differences in the habits of the people and differences in the care exercised by the attending physician and the nurse. So much for typhoid fever areas. Now, as to diphtheria. This disease is a treacherous one, and we cannot be too careful, both in our diagnosis and in the care of our patient, paying attention particularly to limiting the spread of contagion. Here, again, we find certain areas of our town subject to frequent outbreaks of the disease. It has occurred in the district first mentioned with frequency, and while we cannot attribute the cause of the disease directly to the made up soil, and its allowing of percolation, we can indirectly, in that owing to its not being drained it must be damp. Then, again, in many cases, the clothes of the patient are not thoroughly disinfected, and at once. People move into a house in which diphtheria occurred three or four years before, and in a short time it breaks out in this new family. How do you account for it? Simply in this way, that proper care was not exercised in destroying anything which might contain particles of infection; the walls and floors were not scrubbed, the windows cleaned, the paper on the wall removed, and other things left undone, all of which tend to harbor or spread disease. People dread this disease during its height, but often neglect simple precautions after the patient is convalescent.

In conclusion—after making these few imperfect and incomplete remarks—I would urge all Medical Health Officers to keep a record of all cases of typhoid fever, noting particularly the locality in which each occurs; and also impress upon the attending physician the absolute necessity of a careful and thorough enquiry into the cause of the case or cases he may have in hand.