

squares with purely hypothetical views I published a few years ago. Those views, unsupported by original experiment, and depending solely upon work done by others, or upon the well-known facts in the history of typhoid were, naturally perhaps, looked upon as too speculative to have any value. Nevertheless they are, I perceive, slowly shown to be correct. I submitted, and I submit now with firmer reliance on the soundness of the proposition, that there is no natural or artificial thing, or condition of a thing or things, capable of poisoning both air and water precisely as the typhoid poison does—except vegetation; and that nothing that can be presumed or conceived possesses this double property or qualification of the poison but a mildew.

5. *What is their habitat, or the soil on which these parasites last occur before their reception by man?* The reply is not far to seek. Granted the (at present hypothetical) mildew, and the conclusion that fæcal matter is the principal substrate on which it flourishes immediately before its reception into the organism is well-nigh forced. The elimination of all other substances is so simple and easy that I need not detain the reader by detail. Regard being had to the phenomena connected with "sewer-gas," and with the atmosphere surrounding privies, middens, and other collections of excrement, there is hardly any room for doubt as to the substrate from which these parasites are given off to pass into the human substrate. When once the mildew nature of the typhoid poison is ascertained, its sources is a certainty. Of course, other animal and vegetable matters may occasionally be overrun by this specific mildew of typhoid, and may thus cause the surrounding atmosphere to be charged with particles of the mildew. The toxical properties of these particles may be modified by the qualities of the substrate; but it is probable they will, if imbibed, cause some one or more of the typical symptoms and lesions of typhoid. Hence, possibly, febriculæ, and bastard or obscure forms of typhoid. The one great substrate, however, which has supplied the typhoid mildew in all ages and in all countries is fæcal matter.

Let me add, briefly, that the supposition of a mildew grown on fæcal matter is, as I submit, the only possible exegesis of typhoid causation. No other explanation has been, or can be sufficient. By this hypothesis every phenomenon which has been observed in every epidemic, and in all isolated cases of the disease, may be clearly interpreted. For instance, the celebrated Munich problem, which has exercised Professor von Pettenkofer for so many years, admits of the readiest solution