

From the first of these he obtained 30 colonies comprising six kinds of bacteria and six colonies of four species of fungi. From the second he obtained 46 colonies comprising 8 kinds of bacteria, and 7 colonies of four species of fungi, and from the fly caught on the dust bin he obtained 116 colonies comprising 11 kinds of bacteria, one of which is only found in the intestinal tract, and 10 colonies of six species of fungi.

It does not require any play of the imagination therefore, to appreciate the ability of house-flies, if they normally infect themselves in this manner and carry about such germs, to infect themselves with the bacilli of typhoid fever, tuberculosis, infantile diarrhoea, and other similarly infectious diseases. Typhoid bacilli have been obtained from flies frequenting places where the disease existed. It has been found that such flies will remain infected for some time, and also that typhoid and tubercular bacilli can pass through the digestive tract of the fly in a virulent condition and that their dejecta are infective. It has further been demonstrated that flies reared from maggots which have been bred in matter infected with typhoid bacilli are infected with the bacillus. In the South African and Spanish-American wars flies were responsible for more deaths than bullets. Enteric fever in those wars carried off its thousands, which was not to be wondered at, in view of the prevailing sanitary conditions with open latrines frequented by incipient cases of enteric and myriads of flies swarming indiscriminately about the latrines and the mess tents. On a smaller scale similar conditions occur in the unsanitary districts of our towns and cities where the house-flies frequent indiscriminately and in turn the privies and kitchen tables. Once typhoid establishes itself in such places the house-flies will account for the subsequent spread of the infection. The warmer the weather the more active will the flies be, and with greater ease and rapidity will the disease be spread.

An allied disease, infantile or summer diarrhoea, is responsible for the greatest mortality among young children during the summer months or third quarter of the year. The specific cause of this disease has not been satisfactorily determined as yet, but it is probably a germ allied to the typhoid bacilli, and, in the same way that we know that the mosquito carries the germ of yellow fever, although it has not as yet been discovered, it is fairly certain from statistical and circumstantial or epidemiological evidence that house-flies are the chief agents in the dissemination of this disease. I have prepared a chart extending over a period of twenty years and giving the number of deaths per thousand living due to this disease, and the mean temperature during the third quarter of the year in a large English city, and