

formation of spores is rapid, at 68°F. slow. A warm week in a wet summer would provide, therefore, the very conditions which the bacillus requires for the formation of spores in large numbers outside the human body. Judging by analogy, these spores, once formed, would be able to resist conditions of cold and drought which would be fatal to the bacilli which gave them origin, and would remain ready to give rise to the disease when introduced into the human body with water or food. Gaffky, who has made a special study of these bacilli for the German Board of Health, believes that the spores may remain quiescent for long periods, and "may sprout and form bacilli in favourable circumstances, even outside the animal economy, may increase enormously in numbers, and in the warmer part of the year may form spores afresh." Mr. W. H. Power, in the course of investigations for the Local Government Board, has brought out the fact that in certain epidemics traced to the milk supply, persons who drank milk which had been kept overnight suffered earlier and in larger numbers than those who drank fresh milk—an observation which probably finds its explanation in the fact that the spores had time to germinate and reproduce the bacilli in large numbers before the milk was drunk.

It is well known that there are three stages in typhoid fever—the stage of ascent of the temperature, the period of stationary temperature, and the period of decline. The first period, which lasts four or five days, presents the most characteristic type of temperature, the evening rise of 2°F. and the morning descent of 1°F. It is interesting to know that it is during this period that the bacilli are present in the largest numbers in the tissues. During the stationary period, which varies greatly in duration, according to the severity of the case—the period of high temperature with only slight morning remissions—we have probably to do with a double infection—the true typhoid infection and septic infection of the intestinal ulcers. The proverbial uncertainty of typhoid fever, the liability at any time during the stationary period, even in relatively mild cases, to the appearance, almost without warning, of most serious symptoms is probably to be traced to this secondary infection, which may lead to rapid