

any apparent exciting cause. Such agents are solar heat and atmospheric electricity. Hence it is that while diarrhoea and cholera are only epidemic in temperate climates, and, exceptions apart, are only epidemic in such climates during the summer months, they are more or less endemic in tropical climates throughout the year.

10. That though great and continuous solar heat is pre-eminently powerful as a cause of diarrhoea and cholera, even the great potency of solar heat as a cause of these diseases is immensely augmented, if, while the days are hot the nights are cold. Wide ranges of temperature, when the average temperature remains high, cause the amount of blood in the surface of the body to vary extremely within each 24 hours, and thus by means of the ebb and flow of the blood-currents, as well as by means of the nervous ramifications throughout the surface of the body, exert an oscillating influence on the circulation within the nervous centres themselves, which rendered permanently hyperæmic by the high average temperature, become still more so in the night, owing partly to the influence of sleep, and partly to the fall of the external temperature, which causes the body to become cool, and the surface arteries, therefore, to become contracted. Careful and exact observations, both in India and in England, have demonstrated that when in connexion with a high temperature there is a great range between the degrees of greatest heat and greatest cold within each 24 hours, diarrhoea and cholera are likely to prevail most extensively; and hence it is that in England, as a general rule, September, which is especially notable for its hot days and cold nights, is the month in which those diseases are most prevalent and most fatal.

11. That when a high temperature, with or without great alterations, produces excessive hyperæmia of the nervous centres, the extent of such hyperæmia, and therefore proclivity to diarrhoea or cholera, differs in different persons at the same time, and in the same person at different times, because the constitutional variability of the circulation in the nervous system differs in different persons, and in the same person at different times.

12. That when the spinal cord and sympathetic ganglia have become hyperæmic by the influence of great solar heat, but not sufficiently so to enable them to become self originative of diarrhoea or cholera, various agents, which, without the co-operation of such hyperæmia of solar origin, would be powerless to produce either of those disorders, are capable, with that co-operation, of becoming exciting causes of both of them.

In India *prolonged marches* of soldiers, *pilgrimages*, and *ordinary*