was supposed that in South America yellow fever was enough to prevent cholera, or that this disease kept out cholera, until suddenly, in 1854, after a service of fast sailing-vessels between Philadelphia and Rio de Janeiro had been established, the chief town in the Brazils experienced a terrible epidemic of cholera. When cholera passes overland it dies out unless it finds a suitable soil within a certain time. Rainless deserts are unfavorable to cholera. Caravans which pass from infected localities through deserts have never spread the disease, provided the journey in the desert lasted at least twenty days. Cholera always requires for its propagation favorable stations on land, and, as a rule, if the course of epidemics be traced, a gradual extension in successive years is found to take place in fixed directions. . . . .

No doubt can be entertained that the configuration of the earth has a certain influence. Relatively low-lying sites are very favorable to cholera. Where the surface of the earth has an undulating outline, it will be found that districts and individual houses which are situated on the summit of the undulation very frequently have no, or only a very small, disposition to the development of an epidemic of cholera, while in the hollow of the undulation under like conditions the opposite holds good. The truth of this statement is seen in single districts where parts or single houses exist on the summit and others lie low.

Another feature which is found in every epidemic is the falling off of the disease in the neighborhood of and on mountain-ranges. The Himalayan Mountains, those of Lebanon and the Alps, have always formed the places of refuge for fugitives from cholera. Now and then an epidemic occurs in the mountain. The immunity, or the slight susceptibility, of mountain-ranges for cholera is witnessed in India as plainly as it is in Europe. . . . . Some time ago Jameson, in his description of the epidemics of 1817 and 1819 in India, said, "Cholera does not appear to like a rocky soil." French epidemiologists (Boubée and others) have said the same thing. I studied this point in Bavaria in 1854, and then collected so many facts that I came to the conclusion that cholera requires for its epidemic development a porous soil through which air and water easily percolate, and that a compact soil was decidedly inimical. It will be sufficient to give a couple of illustrations. When the cholera broke out in Munich the inhabitants scattered themselves on the mountains. Many settled in the valleys, where several fell ill and died. The greater part of the town in which the better hotels were situated lies upon compact chalky soil, and the smaller part was built upon alluvial soil. In this part the cholera assumed an epidemic character. In the higher-lying districts (Schrödelgasse) the epidemic began in the beginning of August, and in the lower lying areas toward the end of September, while the greater part situated on chalk was not affected. Among the Jura Mountains to the left of ths Donau lies a village called Kienberg, which is built on rock. In this village the cholera broke out so fiercely that within a month thirty per cent of the inhabitants died. When I went there I found many houses emptied, while other houses had not had a single case of illness. I then thought that drinking-water was at fault. But the whole village drew water from a single spring at the foot of the slope on which the village was situated. From a study of the soil I found that all the houses built upon porous and rather loamy sand had been attacked, while those which lay upon the compact soil of the Jura rocks had escaped. The greater part of Kienberg stands upon a cleft of the mountain which had been filled up by fine soil which had resulted from the wearing down of the higher parts of the mountain (alluvial soil). That some doubt should be thrown on the decision of the commission which had adopted my views on the influence of the natural state of the soil on cholera was not to be wondered at. I spared no pains, however, in going to the Krain and Karst Mountains, where cholera apparently was raging on a bare, rocky soil, and instead of contradiction I found a further corroboration of my views. The towns lying among these mountains were found to suffer from an affection which unquestionably proceeds from the soil—namely, ague. The mountains are freely cleft, and the clefts are filled with porous soil, allowing of the free percolation of water and air, so as to be nothing more than an alluvial soil. Here streams rush down the mountain-side, turn off at its base, and run on richer still in water. You may often find there a cleft having the shape of a funnel, filled with porous earth; the nature of the cleft and its contained earth may be determined by sinking a so-called Dolione, when the bottom