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THE DRINKING-WATER THEORY OF THE
PROPAGATION OF CHOLERA—DR. MAX
VON PETTENHOFER'S VIEWS.*

The drinking-water theory played a great part in the causation of epidemics in the middle ages; it was believed that wicked men, either Jews or Christians, had poisoned the springs from which death was drunk. For good health pure water is as necessary as pure air, good food, comfortable quarters, and so forth. I myself am an enthusiast in the matter of drinking-water, but not from fear of cholera or typhoid fever, but simply from a pure love for the good. For the water is not only a necessary article of food, but a real pleasure, which I prefer, and believe to be more healthful than good wine or good beer. When water fails, man may suffer not only from cholera, but from all possible diseases. In places where cholera prevails the water may always be indicted, for the water-supply is always a part of the locality, and the doctrine will frequently hold good, because the part may be mistaken for the whole. Where the influence of the water is held up to the exclusion of all other local factors error is liable to creep in. In England, where the drinking-water theory is fully believed in, two like influences, in which every other local factor was excluded, were observed in the cholera epidemic of 1854. In one case, in a street in London which was supplied by two water companies, the Lambeth with pure water, and the Vauxhall with impure water, it was found that the cholera was practically limited to the houses supplied by the Vauxhall Company. I was so much impressed by this fact that I endeavored to see whether the epidemic in 1854 in Munich could not be explained on a similar hypothesis. But my researches led me to a negative result.

*Selections from Report of special translation made for the London *Lancet*—in *Popular Science Monthly*.

Without doubting the facts observed in London, I am of opinion that the impure water of the Vauxhall Company did not spread the germs of cholera, for the propagation of cholera was not effected by this means in Munich, but that the water increased either the personal predisposition to cholera, or perhaps the local predisposition, since the water would be employed in the houses, and about the soil. Later on, in 1866, Lethéby doubted the accuracy of the drinking-water theory, and proved that there had been considerable confusion; so that a house which was registered on the Lambeth Company, really drew its water-supply from the main of the Vauxhall Company, and *vice versa*. The cholera epidemic of 1866 was essentially limited to East London. The East London Water Company supplied this district with water filtered from the river Lea. Lethéby brought forward a series of facts to prove that we might with equal justice accuse the East London Gas Company, since the first case of cholera broke out at the gas factory. A second instance in London was that with which the name of Dr. Snow is associated. Golden Square, a part of London with very deficient drainage, was the scene of a severe epidemic of cholera in 1854. The epidemic concentrated itself in Broad Street. There must have been some reason for this, and the reason must be discovered. Where Golden Square and Broad Street stood was formerly a place of burial for individuals dead of the plague. This pest-blast of a former century could walk from its grave in A. D. 1854 like the ghost in "Hamlet." but a narrower inspection proved that the old pest-field and the new cholera-field were not exactly co-extensive. Now, however, another fact was brought to light, which led to the substitution of the drinking-water as the cause. In the middle of Broad street there stood a pump of which the water was much esteemed on account of its fresh-