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THE ELEMENTS IN CONNECTION WITH SANITATION.

FROM AN ENGINEER'S STANDPOINT.

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ALL philosophers agree that man is a social being. His very reason, which differentiates him from all other contingencies that people the universe, is the cause of his seeking mutual intercourse and intellectual relations.

This natural feeling of sociability, this innate desire for society, necessitates the congregation of individuals, be it in cities, in towns, or in villages. But in this connection man is no more exempt from the general laws of nature than in any other. Comfort, bliss, and satisfaction are never found unalloyed; there always exists something of an evil tendency to mar that which, in fact, may be intrinsically good. The assemblage of individuals entails numerous physical evils; it increases the undesirable and yet unavoidable reactions which the different states and conditions of the atmosphere produce in the human body, and often greatly augments the offal and excremental nuisances which, for a single person, would be inappreciable, since, instead of being affected by them, the elements would dispose of them by their then ample chemical and physical actions. But when there is question of an entire village, town, or city, then the ingenuity of man is severely taxed, and all his faculties come into requisition in order to pronounce

upon a method of treating refuse, which, while it is even initially most objectionable, still continues to develop its incipient noisomeness, and becomes, in a short time, excessively deleterious to the health of the community.

It scarcely devolves upon us, in the present limited essay, to enter into any minutiae concerning the cause of the propagation of disease and epidemics, which, from established facts, are known to accompany accumulations of filth; yet it may perhaps not be amiss to make some general statements concerning the matter. The fact that the collection of excretal, kitchen, or any similar refuse, is disgusting to all the senses, is too patent to require any comment. We have such a natural loathing for matters of so putrescent a nature that we instinctively try to avoid them. Our brethren of a more extensive chemical knowledge, may form their pills of sewage and take them down in order to sustain their theory that sewage is not poisonous in itself; yet our spontaneous repulsion from similar contact with such ordure, should be sufficiently strong to withhold us from anything so revolting. But since there have been certain gentlemen of the chemical profession who have been sufficiently disinterested to experiment upon themselves for the cause of science, we cordially thank them for such loyal investigation, and we are glad to avail ourselves of any scientific truths which they may thus have brought to light. In fact, the progress of medical and