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SANITARY SCIENCE AND ARCHITECTS RESPONSIBILITIES IN RELATION THERETO.



E are again led to write on this most important subject, on the solicitation of the *Sanitary Engineer* and other scientific journals, urging all those connected with scientific publications to use their best endeavours to bring about, in the public mind, a change from that apathy which has so long pervaded it in relation to Sanitation. Until within the last few years, superintendence over the plumbing of a house was never considered of such vital importance as it is today, but happily the public is awakening up to a knowledge

of the poisonous nature of sewer gases, and few architects now, will entrust entirely to the plumber the carrying out of his plans and specification, without seeing that the work and the materials are of the best quality. It is a matter of such great importance to those who repose trust in the architect that the plumbing of a house should be done in the most perfect manner, that even when the services of the best plumbers are engaged, he has no right to relax his vigilance, when the lives of human beings are at stake. It may be a strong expression to use, but we hesitate not to assert that the architect, builder or plumber, who overlooks a defect in a work in connection with the drains or closets of a building, is, if death in a family results from such wilfulness or carelessness on his part, morally guilty of manslaughter. If every man whose sign announces to the public that he is a plumber by trade, was an educated sanitarian as well, then the supervision of his employees might be, to a great extent, entrusted to him, and even consultation with such a man would be productive of good; but when we have so few of that class, and so many carrying on the trade

who are no more competent to perform the sanitary part of it, than an apothecary is to practice as an educated physician and surgeon, then no architect is justified in leaving the arrangement of the supply pipes, water pipes, water closets and ventilation, to an incompetent mechanic to construct.

In a matter of such vital importance to the community, the educated professional man, should direct every detail of his plans, and unless he exercises a thorough supervision of the execution of the work, he cannot be certain that safety will be insured at *everypoint*. The architect, in relation to his client, should be in his entire confidence, and if so, in him is entrusted the health, usefulness, and long life of the family that he shelters in a greater degree than the physician can ever have, and having this confidence reposed in him, he is answerable, to a great extent, for many of the ailments, weaknesses and early death which, in that family, may be the result of his remissness. But if, on the other hand, the client insists upon a contract being accepted, from an inferior workman, because it is the lowest, then it should be the duty of the architect to protest the work, if improperly performed, and there should be a public official, empowered with full authority, to have the work made perfect. One great difficulty architects have to contend against is, that few of their clients understand sanitary matters; if the work is cheap and outwardly appears good, they too frequently ignore the architect. It is unfortunately a common error among persons building, to consider that because a man is a mason, a carpenter, painter or plumber, that he should naturally know more of his own trade than an architect who never worked at any of these trades in his life-time; but in fact many of these men know little more than the mere use of the tools they employ.

Certain conditions of soil and surroundings may produce fever and ague, neuralgia and consumption, or exposure to the emanations of decomposing filth may expose one to the danger of typhoid fever, diphtheria, cerebo-spinal-meningites and other diseases of a like class, but whole populations are frequently subjected to these dangers without an outbreak of any one of these disorders, because they are frequently counteracted by