The drains required in sandy and gravelly soil, need neither be numerous nor close together, but those in clayey ground should be placed at frequent intervals and in such positions as are best adapted to collect and draw off the water which is liable under ordinary conditions to remain. According to investigations made relatively to the retentive powers of different soils, it has been found that soils composed of sand, gravel, and clay, will discharge through underdrains, an average of seventy per cent. of the water which falls upon them, whereas the established discharge from soils of clay reached scarcely twenty-six per cent. Since the structure of the land bears such an important relation to sanitary welfare, it follows that a knowledge of the geological configuration of a proposed site is indispensable. The sandy and gravelly soils at the summit of a hill where no treacherous springs lie hid, form a most salubrious site for habitations, and strongly contrast with the lowlands which possess no drainage valleys and which allow their accumulated waters to stagnate.

Among other requisites for good sewerage, should be mentioned the proper cleansing and paving of streets, their subsoil drainage, and the complete removal of their surface water. And whatever may be the system of sewerage adopted, there should always exist facilities for inspection and for repairs. Where the eye of the master does not reach, there can be no prosperity; and in matters of this nature, such a saying as "Out of sight, out of mind," is only too true. And since among all the outputs of human industry, there has never been found one that could boast of perpetual durability and infinite perfection, it is not in the least derogatory to any kind of workmanship that there should be included such an adjunct as "possibility of repairs."

Whatever is at all obnoxious or even in the least discomforting, should ever meet with human disapprobation; and under this negative head may be considered the evils which are to be avoided by a system of sewage which is submitted for approval In the first place cesspools and privy-vaults, where deposits are collected without any attempt at disinfection or deodorization, should by no means be tolerated. The accumulation of excretal filth without any adjuncts, is an abomination which requires no words in explanation. Cesspools and vaults are likewise disgusting in as much as they pollute the surrounding ground within a radius which is limited only by the extent of time which the material has had to percolate. The capillary attraction of the earth is ever in active service, and an idea of its power may be had from the knowledge that ground, which contains water within it, is generally wet at least one foot above the level of its water line. The avoidance of this evil is really comprised in the affirmative requisition of keeping the soil pure and clean.

Estuaries and harbors should not be defiled, since ships and boats are continually traveling on their waters; and, on water as well as on land, men have the selfsame privilege of being protected from disgust, and very particularly from the slimy filth which is liable to float around them when improper sanitary precautions have been taken. Rivers should be even still more preserved from contamination, as their volumes are generally inconsiderable, especially in comparison with the ocean, and as their depths support the fish which every human endeavor should protect. And as we approach the neighborhood of the dwelling, the necessity of its preservation from every abomination, forces upon us the conclusion that no sewer should be laid under its foundations. A mere accident might be the cause of a loss of many lives; and accidents should *always* be guarded against by prevention. Other points might arise in this connection but it is not our intention to sacrifice logical order by introducing into a general discussion, particularities which will have a place when the different systems are individually considered.

Debate on debate, fraught with more or less animosity, has taken place during the greater part of this nineteenth century, concerning the superiority of one device over another. But it is good to remember that a search after a universal panacea is decidedly fruitless and an extremely ungrateful undertaking. In fact, so varied are the contingencies in connection with individual cases that different problems require different solutions. The result