

5. The course of drains should be as far as possible in straight lines, as few curves as possible, and at points where bends and junctions do occur, the slope should be increased a little.

(*To be continued.*)

THE PREVENTION OF PUTREFACTION AND THE DESTRUCTION OF CONTAGIA.

BY JOHN DOUGALL, M.D.

[Read before the Medico-Chirurgical Society of Glasgow, April 2, 1876.]

The truths involved in the consideration of the prevention of putrefaction and the destruction of contagia seem to me enveloped in a dense nebula of unwarranted assumptions and conflicting hypotheses. I think it imperative, therefore, instead of unheedingly passing through this thick haze, and at once laying hold of facts, to go through it leisurely, examining its constituents and measuring its extent, until we reach some rays of the small clear light sparkling in its centre.

With this object, I have arranged the two divisions of my paper into three parts:—1st, the nature; 2d, the alleged causes; 3d, the prevention of putrefaction. 1st, the nature; 2d, the origin; 3d, the destruction of contagia.

1st. THE NATURE OF PUTREFACTION.—Putrefaction is a process of reduction. A familiar law in the chemistry of organic bodies is, that the greater the number of equivalents of elements forming the atoms of a compound the less is the stability of that compound. This instability is augmented in animal bodies by their containing nitrogen, which of all the elements has least tenacity in its affinities. Also by the large quantity of water naturally present (about 75 per cent. in muscle), which furnishes a most favorable medium for putrefaction. The chemical forces exercised by the living tissues on vital organic compounds ceasing at death, the several elements of the original compound combine to form bodies less complex, but more stable. It is this combination which constitutes putrefaction, as follows:

Chemical Aspects of Putrefaction.—The chief elements in animal matter are oxygen, hydrogen, carbon, nitrogen, phos-