

where, as few traps to sinks, drains, lavatories, and baths as possible, and the complete ventilation of all drains and sewer pipes. It follows that every water-closet must have its soil pipe ventilated, that a bath should discharge its waste water without any trap over an open gully; and that inasmuch as nothing is more dangerous in its rapid decay than soapy water and bedroom slops, the provisions for disposal of these need special attention and constant cleanliness.

To guide him in securing a house that shall be and remain sanitary, the householder will do well to remember these rules: money spent on good plumbing and sanitary work is worth paying for and secures good health, while it saves him from illnesses at home; it does not follow because a family has long drunk bad water or breathed sewer gas mixed with their air with apparent impunity, that dangers are not there; for persons may suffer for years from impaired vitality and health due to the bad water drunk or the foul air inhaled, while that no definite ailment has been attributed to these causes may be explained by the evils having grown gradually and the family having become by degrees inured to them; drains, ventilation shafts and inspection chambers should be examined and tested to see that they act properly; gullies and traps should be frequently cleansed; no delay should ever occur in setting right any sanitary defect.

*Walls and Roofs.*—Good water-supply and proper sanitation have been named as the first essentials of a house, because without them no structure, however sound, will be satisfactory, and because they should be first sought everywhere. The structure of walls and roofs needs equal care, though it is usually more obvious whether this is good work or bad. Some materials used in building are absorbent of wet, certain bricks and sorts of stone being durable and strong so long as they are quite dry; but spongy in texture and with no surface to keep out the wet, whether of damp air or driven rain, they become permeated with