

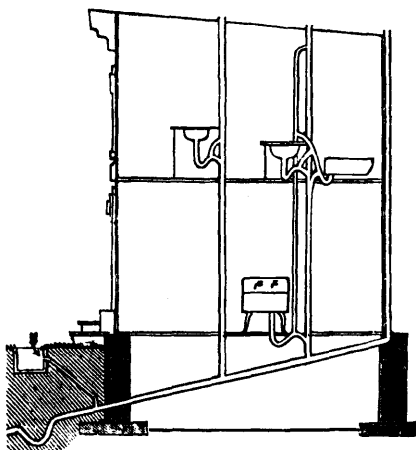
*ventilating agency, not merely as regards this apartment, but also in relation to others adjacent.*

"In the first place, a sufficient iron trap, with inlet not less than 4 inches, is to be inserted between the pan and the soil-pipe connecting with the sewer. The latter should be perfectly air-tight, and should never be conducted for any distance inside the basement of the house. The trap should be placed low enough to allow the surface of its contained water to stand  $1\frac{1}{2}$  or 2 feet below the bottom of the pan, with which it is connected by a 4 inch down pipe. In this pipe 6 or 8 inches above the water level, is a circular opening of 3 or 4 inches in diameter, for reception of an air pipe, which is to be carried to the nearest CONSTANTLY ACTING CHIMNEY. This proximity to the requisite draft can always be secured in primary construction, by locating the closet, in private houses, contiguous to the kitchen chimney. In my own present residence, I have adopted this plan. The air pipe, of galvanised iron, is only of 2 inches diameter, and in all 16 or 17 feet in length, with two elbows. It enters the kitchen chimney just under the ceiling. No smell has ever been perceived in the closet, nor in fact ever can be perceived, for the downward draft is at all times strong. A short air-pipe is of course preferable to a long one, but if the chimney draft is strong, the pipe may be almost any length."

The great points, undoubtedly, in house drainage, are, thorough ventilation of the soil-pipes and drains; soil-pipes to be carried full bore to the roof, distant from dormer windows, if any, with no dead ends; to ventilate, there must be *inlets* and *outlets* for air; disconnection, especially of baths, sinks and basins; free flushing.

In the next number of this Journal

it is purposed to give an article on the various DRY methods of removing excreta—the Rochdale pail system, Goux system, use of coal ashes, dry earth, &c.



PLAN OF SOIL PIPE VENTILATION.

From "*Healthy Homes for Rich and Poor*"—  
reduced.

#### WATER SUPPLY.

Impure water from wells and other sources is a well known cause of disease, especially of fevers and diphtheria; and many physicians in country practice can recall instances in proof of this.

An epidemic of typhoid fever broke out a few weeks ago at Princeton College, New Jersey. It was found that the fever originated in a house where the water supply was drawn from a well about fifty feet deep, with a cesspool on both sides of it, about fifty feet distant, in a soil so porous that the contents had not been removed for several years, so that a large amount of soakage must have taken place. The water contained a large amount of poisonous organic matter.

This method of water-supply is too common in many small towns