

The pneumatic system separates the sewage into two distinct parts, and conveys each away by appropriate channels. The previously existing sewers are restricted to the conveying away the rain and other harmless waters. For the removal of fecal matters there is provided a system of small iron pipes, which are just large enough to admit a man's hand; no larger pipe is used than five inches in diameter. One of these pipes runs underground along each street. The closets are all connected with these street pipes by branch pipes. At convenient points, generally where two streets cross, there are small iron tanks sunk underground, called "street reservoirs." The street pipes open into these reservoirs. From each street reservoir a pipe leads to a central station and enters the main reservoir, which is also an iron tank. At the central station there is an engine for creating a vacuum or exhausting the air from the main reservoir.

By opening cocks in the pipes entering the main reservoir, the vacuum is immediately extended to the street reservoirs, and from these it is continued through every line of street pipes, and to every closet, the contents of which are at once drawn, or rather sucked, into the street pipes, thence into the street reservoirs, and finally from these into the main reservoir.

A small quantity of sulphuric acid is now added, to prevent the formation of ammonia during the evaporating process, and the whole mass is subjected to heat until it is reduced to a dry and odourless powder, or *poudrette*.

The heat is derived largely from the exhaust steam of the engine and the flame and smoke of the furnace.

The *poudrette* is sold as guano. During the whole time from first to last the fecal matter has been in a vacuum; hence no gases can have escaped. Even the air which the exhausting engine draws from the pipes and reservoirs is passed into the furnace. Thus all noxious gases and typhoid germs are literally burned up and forever disposed of.

Few can have failed to notice the unpleasant odour prevailing in even our best regulated water-closets. We are accus-