PHOTOESSAY

Remnants of Sewer Gas

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Going home after a housing co-op meeting, a friend offered to walk me to the bus stop. “I’m going to show you something” he said “and you won’t believe you’ve passed it so many times and never seen it before”. As we rounded a corner he halted and I saw what I thought to be the base of a lamppost. Then I looked up, having to tilt my head back to see that this ‘lamp post’ was headless and at least 30 feet high. “It’s a stink pipe” he said.

The increasing pollution of the Thames and the hot summer of 1858 combined to produce the Great Stink.\(^1\) Parliament had to be relocated due to the overwhelming stench of raw sewage,\(^2\) a factor that undoubtedly focussed the minds of its Members and ensured that work on Joseph Bazalgette’s plan commenced shortly after in 1859. Built at great expense but with great foresight, Bazalgette’s system channelled the sewerage via miles of street sewers into a series of main intercepting sewers which then took it eastwards to be pumped into the Thames where it would be swept out to sea. An engineering achievement, amazing even by modern standards, the plan took seven years. On completion in 1865, London had 2100 km (1300 miles) of sewers. Against opposition Bazalgette insisted on constructing wide egg-shaped, brick-walled sewer tunnels, a design which has allowed the system to cope with subsequent increases in the population of London and consequently the volume of sewage.\(^3\) Bazalgette’s system had to be ventilated to prevent a build-up of noxious gasses in the system. The answer was stink pipes, or sewer ventilators, as they were more politely known,\(^4\) and sewer gas destructor lamps.
Stink pipes in Mottingham, South-East London
Iron Lily – Carting Lane London
Originally sunk at street level, sewer ventilators were considered an abomination and there were calls for their abolition in favour of elevated ventilators which were observed to have ‘a marked favourable influence on the public health’ by removing ‘disgusting and poisonous stenches [from] immediately under the pedestrian’s nose’.\textsuperscript{4} Simply huge hollow pipes, sewer ventilators allow potentially lethal gas to escape into the atmosphere, well above the rooftops. Those remaining often seem to be located near culverted rivers, suggesting that when these rivers were incorporated into the sewer system, they required an additional safety valve; the buried Fleet exploded at King’s Cross after just such a build-up of gas in 1846.\textsuperscript{5} Once you start to notice them, sewer ventilators or stink pipes are more common than one would have imagined. To find if there is one near you check http://stinkpipes.blogspot.co.uk/. Some decorated, some plain, and manufactured by different companies it will be interesting to see whether these relics end up being removed or preserved, like Iron Lily, London’s only remaining sewer gas destructor lamp. Alight day and night burning off sewer gas from below, Iron Lily can be found in Carting Lane at the back of the Savoy Hotel.

Subsequent to the publication of John Martin’s plan to supply London with safe water and a sewage system,\textsuperscript{6} Londoners were subject to two further cholera epidemics; in 1848-49 and 1853-54, which together resulted in approximately 25,000 deaths. Bazalgette’s plan owed much to the designs of John Martin, which had they found backing would have made London a forerunner in terms of water and sanitation as well as saving many lives.\textsuperscript{7}

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References
\textsuperscript{1} Ferrie JE. Progress, public health and vested interests. \textit{Int J Epidemiol} 2013;\textbf{42}:1527–36.