## The case of Thomas Crapper

(Martin Adams)



An eminent historian of my acquaintance has pointed to an error (now corrected) in another London's Microbiota in which I mistakenly conflated the names of two anarchists, Ravachol and Vaillant, into 'Ravechol Vaillant'. Just to clarify, it was Vaillant who bombed the French Chamber of Deputies (in part to avenge the death of Ravachol) - but be assured, you will not need to know this for most exams. Blame it on failing eyesight and a feint comma in my copy of The Stolen Bacillus, but the mistake did at least serve to remind me how names sometimes give rise to confusion; take, for example, the case of Thomas Crapper.

In 1861 Crapper came to London from Yorkshire to found a very successful sanitary equipment company in Marlborough Road, Chelsea, with a later showroom in the nearby King's Road. In the ensuing 160 years his name has become the stuff of legends; mostly false unfortunately. For example, it has been claimed that Crapper was the eponym for a more widespread and pithy term for defecation. It was also said that during the First World War, Crapper's name emblazoned on toilet bowls and other bathroom paraphernalia much amused American soldiers stationed in England and was the origin of the U.S. slang word for the smallest room. Neither is true and the association of Crapper with his chosen profession appears to be simply an example of nominative determinism, where people are thought to gravitate to jobs that suit their name. One recent example I have seen is a Mr Weed, a President of the Royal Horticultural Society and, in the past, I have, known of a medical doctor called Payne and a meat expert called Silverside. I am sure readers will have their own examples, perhaps even microbiological ones?

I'm afraid to say the assertion that Crapper invented the flush toilet or water closet (WC) is also an urban myth. This advance is credited to Sir John Harington who first described his

## A learner-centric microbiology education framework

'Ajax' WC in a political satire published in 1596. At first sight this may seem a somewhat unusual publication in which to post such news, but on reflection one can see how scatological metaphors can be very appropriate when describing the political scene, even today.

Although Harington installed versions in his own home in Somerset and in that of his godmother, Queen Elizabeth I, at Richmond Palace, the WC was slow to take off. Demand didn't really increase until the 18<sup>th</sup> Century when, in 1775, a refinement of Harington's design was patented by Alexander Cumming, a Scottish watchmaker living in London's Bond Street. In his patent, Cumming describes an improved flush and the S trap to prevent odours finding their way back into the house. In a productive life, he also *inter alia* invented a microtome for cutting microscopy sections, adjudicated on the award of the longitude prize and gave his name to Cumming Street off the Pentonville Road, near which he is buried. Further patents were issued in 1778 to Joseph Bramah, a founding father of hydraulic engineering, who started manufacturing WCs from a workshop in Denmark Street and had supplied more than 6,000 by the beginning of the 19<sup>th</sup> Century. Though Thomas Crapper was responsible for several plumbing innovations, described in 9 patents between 1881 and 1896, the essentials of the flush toilet were already well established long before he started his business.

One consequence of the burgeoning popularity of the flush toilet in the 19<sup>th</sup> Century was increased water usage. This, paradoxically, led to increased pollution from overwhelmed cesspits and diluted their contents making it uneconomic to empty them and sell the contents to farmers. As a result more and more of this material found its way into the Thames contributing ultimately to the Great Stink of 1858, mentioned in another *London's Microbiota*.

At the time, most of London's water supply came from competing companies extracting water from the Thames, its tributaries and the New River. The latter was a channel built in 1613 to bring clean water from springs in Hertfordshire to reservoirs at New River Head in Clerkenwell. The New River still supplies water to London, traversing the M25 orbital motorway in two enclosed concrete aqueducts west of Junction 25, and some of its more picturesque route has been made into a 45 km footpath.

Water from the New River Company was less polluted than that from many other sources which were the cause of outbreaks of cholera and other diarrhoeal diseases. Introduction of slow sand filtration, which uses a combination of physical and biological processes to remove turbidity and pathogens from water, began in the early 19<sup>th</sup> Century and the Chelsea Waterworks were the first to use it for treating a public water supply in 1829. The process is still an important part of London's water treatment, though from 1916 a final chlorination began to be introduced to ensure safety from the treatment works to the home.

Thomas Crapper & Co. continued to ride the wave, so to speak, until 1966 when the company and its showroom, by then rather incongruous in the King's Road of the Swinging Sixties, closed. The business was later revived in Crapper's home county of Yorkshire where they currently make high end bathroom fittings, often with a retro look. Installations, old and new, bearing the Company name can be found in many locations in London and elsewhere, perhaps most notably in Westminster Abbey where the company re-laid the drains in the 19<sup>th</sup> Century. In this national shrine there are four cast-iron Crapper manhole covers visible to the public. Today's Company remains admirably committed to customer support; on their website one is reliably informed that most water closets flush in the key of E flat; vital information for those who feel compelled to sing in the toilet, either from devotion to the art form or because there is no lock on the door.

Further reading: Stephen Halliday (2019) An Underground Guide to Sewers. Thames & Hudson, London.