

The development of the water closet in England. Alan Macfarlane

From the fourteenth century, at least 'the jerry proper appears; it might be of tin, pewter, copper, silver or gold. Several illustrations show it boldly displayed on a stool at the foot of the bed; it was not yet thought necessary to hide it.'¹ It would, however, be concealed within a chair, when it was called a 'close-stool' or commode. Its presence in the sixteenth century, for instance is shown in inventories² and other evidence. We learn that the '...family of Grene or Greene, coffer-makers, who, on the evidence of the royal household accounts, made a variety of things, including many close-stools, for the royal palaces throughout the sixteenth century. One example of these stools, made in 1547, was for "the use of the kynges mageste"; it was, says Mr. Symonds, "covered with black velvet and garnished with ribbon and nails and fringes. The seat and elbows were covered with white "fuschan" filled with down; 2,000 gilt nails for garnishing were used and the stool was supplied with two leather cases lined with black cotton and fitted with girdles - one for the stool and the other for the bowl and the "sesstornes".'³

It would appear that, like many useful inventions the water closet was discovered and re-discovered several times. Medieval latrines and privies used pipes to take away the fluid with the cesspit, thus lessening smell and dirt.⁴ But the first noted inventor of the water-closet seems to have been Thomas Brightfield in 1440-50. 'As early as 1449 one Thomas Brightfield of the parish of St. Martin built some kind of water closet, flushed by pipe water from a cistern.', but, we are told, 'this was much before its time and was not imitated.'⁵ A fuller description of Brightfield's invention is given by Sabine. 'According to a deed dated February, 1449-50, in the Guildhall Library (London), Thomas Brightfield was to make at his own expense within the house where he lived in the Parish of St. Martin, Vintry Ward, a chimney for a kitchen, a cistern of lead, with a lead pipe in the wall to Narrow Lane, and a privy of stone in the stone wall. Now this cistern was doubtless intended as a receptacle for rainwater collected from the roof, and the pipe as a vent for the excess water accruing during heavy rains, leading it down to the public gutter.'⁶

¹Wright, Decent, 122

²Pounds, Culture, 148

³Pudney, Smallest, 106

⁴Sabine, Latrines, 312-8

⁵Wright, Decent, 75

⁶Sabine, Latrines (xerox), 313

Although he probably did not invent it, the first full written specification of the system was given by Sir John Harrington. His device of the mid-sixteenth century embodies all the features of the valve closet.⁷ 'It has a seat with a pan, a cistern above...an overflow pipe, a flushing pipe, a valve or "stopple" and a waste with a water-seal.'⁸ Yet, although it was copied and used at the Queen's Palace at Richmond, it was an invention which came several centuries too early. It depended on permanent running water and it would be as useless in most English contexts as it would be in much of the Third World today where water is too precious and difficult to get to flush away with excrement. If one were going to have a water closet, for most people the only way to do so was to build the privy over a stream. In the early eighteenth century, 'Privies were built over water-courses, providing a kind of elementary an polluting water closet...'⁹ Yet the danger of this was also recognized. (For instance, a person was prosecuted at the Essex Quarter Sessions in c.1607 for building a privy house over a brook and so tainting the water.)¹⁰ Hence 'its coming into general use, re-invented, was delayed for nearly 200 years.'¹¹ What it needed, was a decent, cheap supply of running water coming into the house and a sewage pipe flowing out. This would require a massive amount of power in the form of steam-engines pumping water, as well as complete re-building of the infrastructure of the towns to lay the sewage systems. Both of these emerged from the early eighteenth century.

The merits of the new system of water closets attracted the attention of Benjamin Franklin in the middle of the eighteenth century. It is now well known that the stench arising from stationary privies, may be prevented by a cheap and easy method. The excrements may be received in tubs, so closely connected with the sea, that no air can pass. The lower ends of the tub should be sunk below the surface of water contained in proper cisterns. The excrements are soon dissolved in water, and so carried off, **every time the privy is washed, which should be as often as it is used.**' The novelty of this very characteristically English invention was widely recognized. In France 'anglaise is defined as sourtout une sorte de graderobe.'¹²; the very word English was synonymous with water closets. The first

⁷Wright, Decent, 75

⁸Wright, Decent, 71

⁹Marshall, People, 168

¹⁰Q/SR 169/73

¹¹Wright, Decent, 75

¹²Wright, Decent, 103

patent for a water closet was taken out by Alexander Cummings, a watchmaker of bond Street, in 1775, incorporating all the elements of the modern valve closet.¹³ As for smell, The first patent for a stinck-trap seems to have been taken out by John Gaillait, a cook, in 1782,for "the invention of an entire new machine a stinck-trap,...which will entirely prevent the very disagreeable smells from drains and sewers."¹⁴ The manufacture of the revived water closets took off in the last third of the eighteenth century. The efficient water carriage of human wastes on a large scale became possible with Joseph Bramah's introduction of the improved version of the water-closet in the 1770s. Between 1778 and 1797, Bramah supplied over 6,000 water-closets; and by the 1830s they were being widely used in London.¹⁵ There were still many problems to be overcome, particularly in getting the sewage safely from the water closet to a place of disposal, but an important break-through had been made.¹⁶

¹³Wright, Decent, 107

¹⁴Quennell, Things, iii, 97

¹⁵Hardy, Water (xerox), 262/63

¹⁶Smith, People's Health,222.