

## THE DEVELOPMENT OF THE FLUSHING TOILET DETAILED CHRONOLOGY 1596 onwards

### 1596 Invention of the Flushing Toilet

Sir John Harington, “Father of the Water Closet” and eccentric Godson of Queen Elizabeth 1st invents a flushing toilet and describes the details in his book **“Metamorphosis of Ajax”**. (Ajax is a corruption of “A Jakes” which was the term used to describe a “privy”).

The WC was essentially a “Valve Closet” and one was installed for use by the Queen at Richmond Palace. (It was the Queen, remember, who took a bath once a month whether she needed one or not!)

Water, “but not a whole Thames full”, was used to wash the toilet chamber. Unfortunately the toilet did not catch on - perhaps it was too complicated and expensive for its time. Later Royals, James 1st, Charles 1st and 2nd and James 2nd all preferred “close stools” or chamber pots which, of course, required emptying into the local river or moat.

Harington was almost two hundred years ahead of his time!



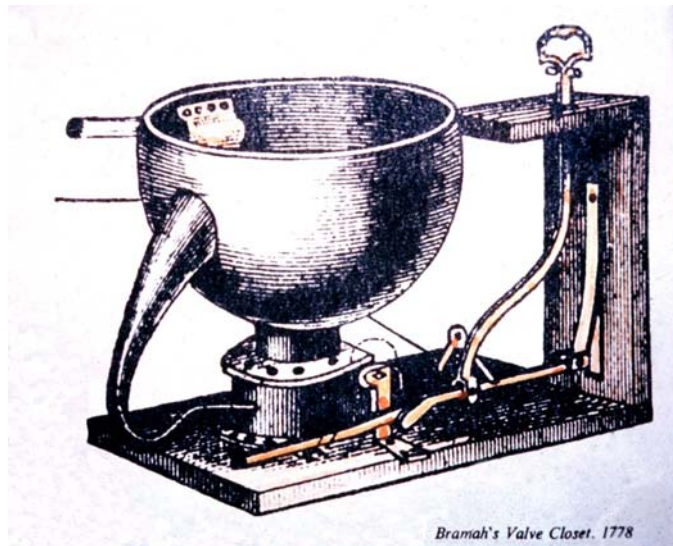
## **1700 - 1850 “The Age of Awakening**

### **1775 First notable development of the Flushing Toilet**

Alexander Cummings, a watchmaker from Bond Street took out the first successful patent for a **valve closet**. This followed several attempts during the early 1700's to improve the closet. Cummings' design was notable for its “S-trap” feature and used swirling water to cleanse the toilet bowl.

### **1778 Further development of Cummings WC**

Joseph Bramah, a locksmith, took Cummings patent and improved it further and perfected a design which became the benchmark for WC's for the next 80 to 100 years. “A most satisfactory water closet”. Bramah's products were “quality” pieces and his name gave us the slang meaning “first rate” or “a good one”! 6000 Bramahs had been manufactured by 1797. Even so the closet was complex and expensive and not too hygienic.



### **1815 John Doulton invests in Lambeth Pottery**

John Doulton invests his life savings of £100 in a small pottery in Lambeth, London. John goes into partnership with John Watts and Martha Jones making domestic wares

### **1827 John Doulton commences production of Stoneware pipes**

The first production of ceramic pipes begins at Doulton's Lambeth factory together with stoneware jars

### **1835 John Doulton's son, Henry, joins the business aged 15**

## **1837 - 1901 The Reign of Queen Victoria** **The Golden Age of Toilets**

### **1842 Publication of “General report on the Sanitary Conditions of the Labouring Classes of Great Britain**

Written by Edwin Chadwick he described the sanitary problem of the land in great and sordid glory!

### **1845 Construction of Henry Doulton’s new Lambeth factory**

Production of salt glazed stoneware sewer pipes commences. The Chadwick Report influenced Doulton’s decision to go into mass pipe production. The pipes were glazed inside and out and were formed complete with a special joint.

### **1848 Cholera Year**

14,000 dead in London

55,000 dead throughout the Nation

### **1848 Public Health Act**

The first Public health Act made it compulsory for a fixed sanitary arrangement to be included in every new or refurbished household. The arrangement may have been a “water closet, privy, or ash pit, furnished with proper doors and coverings”.

### **1848 Doulton expands pipe manufacturing to Dudley and St. Helens**

Manufacturing of pipes continues and Doulton began making money from the sanitary reforms. 20% of UK sewers were made of Doulton’s pipes.

### **1849 Nuisances Removal Act**

The Act gave local authorities greater powers to enforce better public hygiene.

### **1849 Thomas Twyford begins Sanitaryware manufacture**

The Twyford family had long been associated with pottery manufacture and the coming of the Golden Age of Toilets inspired him to switch production from domestic wares to sanitaryware. He spotted an opportunity to make money. His entrepreneurial skills were put to good use and he soon began to realise his fortune.

### **1851 Development of an improved Water Closet**

George Jennings continued the development of the WC and his patent described a “wash-out” design of toilet bowl.

The mid 1880s were busy times in the Sanitary Revolution

### **1858 “The Great Stink”**

Sitting of Parliament is suspended due to foul smells from the Thames. “Something has to be done!” was the cry! Similar problems were found throughout the country. The River Cam in Cambridge was an open sewer.

### **1859 till 1865 Building of London Sewer System**

Sir Joseph Bazalgette  
Doulton pipes used

### **1861 Thomas Crapper sets up plumbing business**

Thomas Crapper, born a Yorkshire man, sets up his plumbing business in Chelsea, London at just the right time to take advantage of the forthcoming boom in interest in public health and in particular sewage.

### **1863 Crapper invents Self Rising Seat**

Thomas Crapper had an inventive mind and devised a contraption for use with WC’s - the self rising seat. The idea proved unsuccessful - it could slap unsuspecting ladies on the bottom!

### **1872 Metropolis Water Act**

The Act required Water Saving Measures to prevent the shocking waste of water throughout the capital. WCs at this time were fed water using valves . these were notoriously leaky and in some circumstance users would prop the open permanently to ensure their WC’s remained sweet.

### **1872 Invention of “Valveless Waste Water Preventer”**

Spurred on by the Metropolis Water Act Thomas Crapper put his mind to devising a system to prevent the waste of water from a toilet cistern. He designed the successful “Syphon” and in effect made water flow uphill!

Crapper went on to install the sanitary provisions at Sandringham in Norfolk

### **1872 Thomas Twyford dies. He was just 46 years old**

Thomas’s eldest son, Thomas William, at just 23 takes over the business.

### **1875 Public Health Act, from the Disraeli government**

This act required that "Every local authority shall provide that all drains, water closets, earth closets, privies, ash pits, and cell pools within their district be constructed and kept so as not to be a nuisance or injurious to health".

### **1875 Appearance of first "Wash Out" Closet**

Daniel Bostel's "Excelsior" wash out closet makes its first appearance. The ancestor of modern closets since Bramah's valve arrangement is superseded

### **1877 Doulton purchases share in Nile Street, Burslem, factory**

Partnership with Pinder Bourne and Co. manufacturing tableware and sanitaryware.

### **1882 Doulton wholly owns Burslem factory**

### **1883 Launch of "Unitas" - 1st one piece ceramic pedestal closet**

Thomas William Twyford designed the first one piece closet which was a vast improvement on previous designs. It was hygienic and cheap. It was free standing and the entire appliance was fully exposed. "No filth, nor anything causing offensive smells could accumulate or escape detection". It was a "Perfection of Cleanliness".

The toilet also featured a remarkable wooden seat which was hinged so that it could be raised to allow the use of the toilet by gentlemen as a urinal. Vast quantities were manufactured and exported. Installations were made in Buckingham palace. The Unitas was shipped into Russia and the name UNITAS became the Russian word for WC!



Мы сделали  
первый  
унитаз

### **1884 International Health Exhibition**

Twyfords "Unitas" featured and becomes a "star" product together with the "India Rubber connection"

Henry Doulton wins 21 medals for his exhibition of products. William de Morgan describes Doulton as "The Big Potter"

**1885 Henry Doulton awarded Albert Medal of the Society of Arts**

**1887 Building of Twyford's "model" factory at Cliffe Vale, Stoke.**

The factory was designed around a courtyard so that "every worker could have a window". Twyford's Hanley and Bucknall factories moved to Cliffe Vale

**1887 Henry Doulton knighted by Queen Victoria**

**1880 British Patent Perforated Paper**

Prior to the introduction of perforated paper, cut pieces of paper were the norm. Twyford furnished his WCs with paper holders.

**1896 Twyford's is registered with Companies House as a Limited company**

**1898 Doulton launches the "Combination" closet**

Similar to the Twyford's Unitas it remained in production for another 60 years

**1899 Twyford's TWYCLIFFE**

This was the first "syphonic" WC and the most perfect yet

**1900 Twyford's WALL HUNG**

Twyford's wall hung WC makes an appearance

**1901 Doulton granted Royal warrant**

Doulton wins the right to use the word Royal in its title.

**1908 The casting process developed**

**1910 Death of Crapper**

January 17th 1910

**1924 Production of sanitaryware still in Earthenware body**

Sanitaryware was still either in the earthenware body or in fireclay. Earthenware was twice fired ( just like tableware) in "bottle ovens" and this was an eight day process for first fire and 6 days for second (or glost ) fire.

**1930 Twyford's Double Trap Syphonic WC****1937 Doulton purchases Whieldon Road Sanitary Pottery, Stoke**

When Winkle and Wood's Sanitary Works at Whieldon Road, Stoke had been purchased the transfer of sanitary ware production from the Nile Street works began.

**1956 Doulton's Lambeth Works finally closes**

By 1956 the Doulton empire consisted of four divisions:

- Doulton Fine China in Burslem
- Doulton Industrial Porcelain, manufacturing, insulators, chemical wares and filters in Wilencote and Tamworth.
- Doulton Sanitaryware at Whieldon Road, Stoke
- Doulton Vitreous Pipes at Erith and Dudley

**1959 - 1963 Twyford changes from Earthenware to Vitreous China body**

Also mechanical casting and Tunnel ovens make their appearance

**1968 Doulton acquires factories in Queenborough and Stoke to expand production**

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**1996 400th BIRTHDAY OF HARINGTON'S FLUSHING TOILET**

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