

Out of the Water Closet

The Evolution of the Flushing Toilet

The intent of this topical exhibit is to show the development of the toilet from its' humble beginnings, hidden in a closet, to its' place in the modern bathroom. Advertising covers showing this plumbing marvel first appeared in the 1880s touting the early flushing toilets. This exhibit will use these covers and other media to show the progression from the early chamber pot cabinets through the many design and style changes to what we expect to find when we enter the bathroom today. Sadly, due to modern types of advertising, toilet advertising covers carried through the mail all but disappeared by the 1960s. All are very difficult to find. The exhibit covers the period from 1880 to 1960.

Importance: The development of the lowly toilet has allowed mankind to build large cities. Picture London during the Black Death: limited supplies of clean water, odors, disease, and vermin. The toilet limits water usage and provides a means to control disease and odors, while allowing for a larger population.

Background history: While the use of indoor plumbing to dispose of sanitary wastes is several thousand years old, going back to the Romans, the basic design was a hole in the floor with a stream of water passing underneath which carried the wastes away. While convenient, this allowed odors and vermin back into the home. Also as communities grew, the demand for continuously flowing water supplies became extreme. In 1536 John Harington invented the first flushing toilet. This consisted of a large fired clay basin connected to an under drain, flushing it required 17.5 gallons of water from a hand filled cistern located on the floor above the toilet. Flushing was only done after 15-20 uses. Odors were a problem. In 1775 Alexander Cumming developed the "S" trap, the water remaining in the loop of the "S" prevents sewer gas and vermin from coming back into the home. In 1884 Tomas Crapper developed the ballcock flushing valve which limits the amount of water used with each flush. This reduced the strain on water suppliers and marked the point where the toilet began to come out of the closet.

1881 plumbers' invoice shows cut-away drawing of an early British cast iron toilet at the left. Similar designs were also being made in America. Although functional and durable, it was neither comfortable to use, nor attractive. The overhead cistern was filled before each use and was flushed using a gear-stick like hand lever. No seat or lid.