

Inventive Vents – Timeline of Underground London

AD50 – AD400

The Romans founded London as Londinium in about AD50 and were here until they left in 388 - 400AD. London became a big port and there were public baths with running piped water, an amphitheatre and the Mithraeum, a temple dedicated to Mithras which became buried as the city grew up around it.

AD 60 - 61

Boudica, Queen of the Iceni, led a revolt against the Romans in London and Verulamium. Archaeologists have discovered a layer of carbon from burnt wood which matches with this date.

1100 - 1300

In the Middle Ages London grew up around Westminster and the City of London. In 1100 the population was little more than 15,000. By 1300 it had grown to roughly 80,000. It was surrounded by a city wall, which was built to keep out raiders. There were no public baths.

1207 - 1272

London's first underground drainage system was built during Henry III's reign. However, waste mainly went into the streams and ditches running into the Thames. Bigger houses had cess pits that had to be emptied – a smelly and dangerous job!

1348 - 1666

Between the Black Death of 1348 and the Great Plague of 1665-6 there were sixteen outbreaks of plague in the city. There was no sanitation, and open drains flowed along the centre of winding streets. The cobbles were slippery with animal dung, rubbish and the slops thrown out of the houses, roads were muddy and buzzing with flies in summer and awash with sewage in winter.

2nd - 6th September 1666

The Great Fire of London. Water had to be collected from rivers including the Thames for firefighting as there was no piped water. Archaeologists have discovered a layer of carbon from burnt wood which matches with this date.



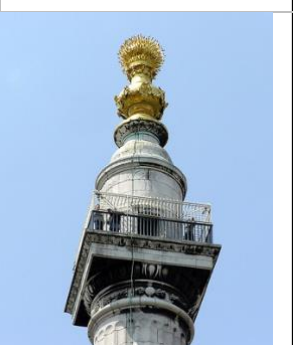
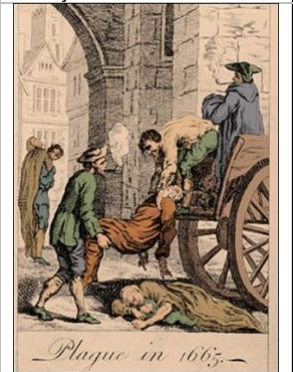
Roman bust of Mithras from a temple in London



London in the Middle Ages.



Henry III



The Monument for The Great Fire of London

1843

Thames Tunnel opens. It was designed by Marc Brunel and inspired by his observation in prison of *teredo navalis* the common shipworm burrowing through wood.

1849

London's first underground telegraph line was built (telegrams were a way of sending messages). Ever since cables for telephones, electricity and internet are run underground.

1858

The Great Stink. Disraeli the Prime Minister described the Thames as 'a Stygian pool reeking with ineffable and unbearable horror', London's rapidly expanding population, (of around 3,000,000) badly needed a working sewage system.

1863

The world's first underground railway opened between Paddington and Farringdon. It has now become part of the tube network with many lines including the most recent, the Jubilee line extension. Steam locomotives were used at first which made the air smoky so vents were added to tunnels.

1875

Sir Joseph Bazalgette the chief Engineer's solution was to construct a huge (1182 miles) network of underground brick main sewers and street sewers with pumping stations to collect the sewage. They were built with ventilation pipes so that the poisonous and explosive gases could escape.

1939 -1945

Many people slept in the Underground to keep safe during the Blitz in World War II. Archaeologists have discovered a layer of carbon from burnt wood which matches with the date.

Now

What have you noticed where you live?

2024

Tideway tunnel will be completed and will prevent millions of tonnes of raw sewage polluting the River Thames every year!

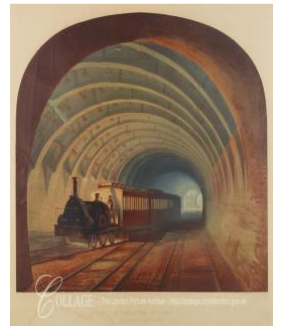


Thames Tunnel

Teredo navalis - shipworm



Cartoon of Stinky Father Thames



First underground railway



Sir Joseph William Bazalgette (1819-1891)



1939-1945 people sheltering in the London Underground.