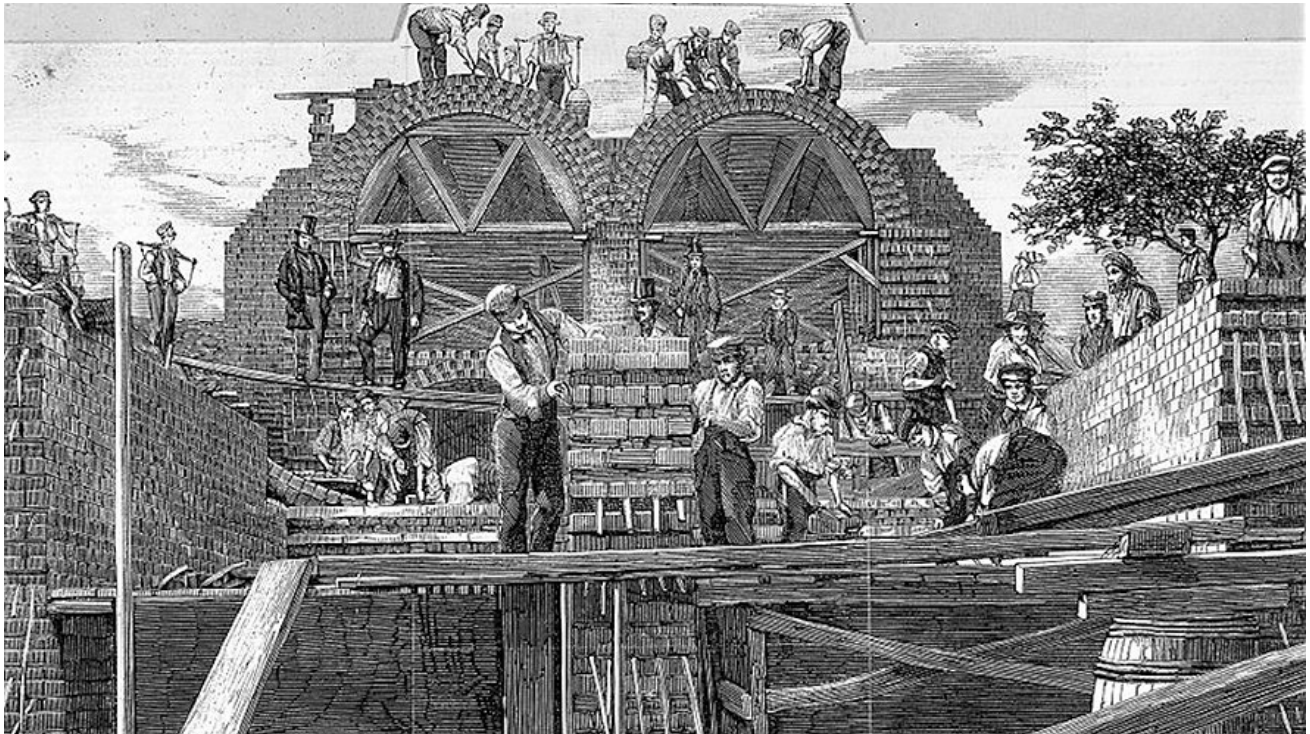


Great Cities: London's Great Stink heralds a wonder of industrial world

By Emily Mann, The Guardian, adapted by Newsela staff on 05.20.16

Word Count **1,066**



Workers building the tunnels for Bazalgette's sewage system near Wick Lane. Photo: Wellcome Trust. MIDDLE: A cartoon from 1858 showing a skeleton rowing along the Thames. Photo: Wikimedia Commons. BOTTOM: Victorian sewers are still in use today but with a growing population in London, the Thames is under severe strain. Photo: Photo: Luke MacGregor/Reuters

Editor's Note: By the mid-1800s, the River Thames had been used as a dumping ground for human waste for centuries. At last, fear of its 'evil odour' led to one of the greatest advancements in city planning: Joseph Bazalgette's sewage system.

In the steaming hot summer of 1858, there was an awful sewer stink coming from the River Thames. It was everywhere in the Houses of Parliament. Finally, it was too much for Britain's leaders. Many fled in fear of their lives to the countryside.

The lawmakers agreed that some action was needed right away. They needed to get rid of the "evil odor." They believed it was the cause of disease and death.

This "Great Stink," as it was called, led to one of history's most life-improving plans. It improved the public's health and helped create a more modern London.

You'll see no sign of it on most maps of the capital. It cannot be seen when you tour the streets of London. It is hidden underground. It is a wonder of the industrial world, a great sewage system that still flows (and overflows) today.

An Old City With New Needs

London is an old city. However, the 19th century saw a lot of change. By the mid-1800s, the capital created a modern water and sewer system.

For centuries, the River Thames was a dumping ground for human, animal and industrial waste. London's population more than doubled between 1800 and 1850. It was the largest city in the world. The build-up of waste became a huge problem. No one wanted to see or smell it.

There was no planning to improve the city for this huge population. Filthy streams, ditches and very old drainage pipes all bubbled into the River Thames. The litter just bobbed up and down with the tide. The use of new flushing toilets only made things worse. Old cesspools overflowed. More and more liquid waste ran into the river.

In 1855, scientist Michael Faraday said the "silver Thames" had become a pale, dark, brown liquid. Rotting slime was everywhere on the river's surface.

London Was Rotting

Newspapers complained the River Thames was the most polluted river in the world. London was rotting at the core.

The smells alone, it was thought, could kill people. Why was the river so deadly? The answer was that many Londoners were drinking the river water. It was piped directly into their homes from the Thames. Even water pumped from outside the city picked up some sewage. The wells still in use were too close to leaking open pools of waste.

The water caused stomach diseases and deadly cholera. Cholera had no known cure. Both poor and wealthy died. Cholera attacks in Britain killed thousands from 1830 to 1870.

The people and newspapers pushed for change. The poet Thomas Miller called for protests demanding clean air and water. He wrote. "It rests with ourselves to get rid of these evils."

Cholera Came From Dirty Water

In 1854, a doctor, Dr. John Snow, discovered that cholera came from dirty water. His proof came from 70 workers in a beer factory. They only drank beer. They did not drink water. They never got cholera. Few people believed Dr. Snow. Most believed that cholera came from the smell.

In 1858 at the time of the Great Stink, cholera was not a big problem. If bad air was deadly, the Great Stink surely would have killed thousands.

The awful smell finally did change the minds of the men in the Houses of Parliament. They realized the stinking river did have something to do with the city's health. The river needed to be cleaned.

Benjamin Disraeli was a great British leader. He said the River Thames was like a river in Hell. He pushed for a law that would clean the river and the city's water supply.

Along The River, 82 Miles Of New Sewers

In the past, London did not have the power or the money to clean up the problem. Now the city got permission to raise 3 million pounds. The work began. The chief engineer, Joseph Bazalgette, had already spent several frustrating years drawing up plans for a new water and sewer system. Each plan was ignored. At last, he got the go-ahead to begin construction.

Bazalgette 's plan included 82 miles of new sewers. They ran along both sides of the river. These sewers also moved rainwater and overflowing river water. It then flowed down to the sea.

Pumping stations were built to raise up sewage from low-lying places. From there the sewage could flow down and away. Some of the pumping stations looked like large churches. Some said it made London look more holy.

High banks of dirt were also built along the River Thames. Bazalgette had built them strong enough to carry both sewer and underground railway tunnels. "It was certainly a very troublesome job," Bazalgette said. "It was tremendously hard work." Thousands worked on the project.

Money Spent On Sewers Helped Solve Cholera Problem

Today, on one of the river banks stands a monument. It is there to honor and remember Bazalgette.

An artist, Ford Madox Brown, made a painting called "Work." It shows people building a tunnel below ground. Around the edges are strong arms, tools and bricks. Bazalgette's project used millions of bricks to build the sewers.

The hard work and money spent was worth it. In 1866, cholera again hit London. No one caught cholera in places that had the new sewers.

Bazalgette's plan helped people right away. It also helped people in the future. It was planned to work for 3 million to 4.5 million people. In the next 30 years, it still worked well for the 6 million that lived in London.

Sewage Is Starting To Leak Again

The sewers have been improved through the years. Today, in the 21st century, much of Bazalgette's plan is part of London's sewer system.

Today almost 14 million people live in London. With climate change, the River Thames is once again in trouble.

Bazalgette tried to plan for extreme weather. He worried about flooding. Today sewage is again starting to leak out.

History is repeating itself. The River Thames is getting polluted again. It was fixed 150 years ago. It has to be fixed again.

Work on a “super sewer” will begin this year. It will be finished in 2023.

Quiz

- 1 What is the MAIN idea of the section "London Was Rotting"?
 - (A) Newspapers complained about the River Thames.
 - (B) People thought the smells from the River Thames could kill people.
 - (C) Water from the River Thames was piped into homes.
 - (D) Thousands of people who drank the polluted water from the River Thames died.

- 2 Which sentence from the article is MOST important to include in the summary of the article?
 - (A) By the mid-1800s, the capital created a modern water and sewer system.
 - (B) The litter just bobbed up and down with the tide.
 - (C) There was no planning to improve the city for this huge population.
 - (D) The awful smell finally did change the minds of the men in the Houses of Parliament.

- 3 Based on the section "An Old City With New Needs," which of the following statements is TRUE?
 - (A) An increase in London's population led to an increase in waste in the River Thames.
 - (B) The city wanted more people to use flushing toilets to help clean up the River Thames.
 - (C) There was more animal waste in the River Thames than human waste.
 - (D) A scientist names Michael Faraday had a solution to clean up the River Thames.

- 4 Which section of the article explains HOW the River Thames was cleaned up?
 - (A) An Old City With New Needs
 - (B) Cholera Came From Dirty Water
 - (C) Along The River, 82 Miles Of New Sewers
 - (D) Money Spent On Sewers Helped Solve Cholera Problem

Answer Key

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