

BOILER OPERATORS & THE BLACK GANG

Coal-fired steamships stayed on schedule only through the backbreaking labor of the boiler-room crew. The “black gang” included trimmers, who shifted coal inside the bunkers; coal-passers, who brought it by the barrowful to each boiler; and firemen, who worked the fires. Stoking and tending the furnaces took considerable skill. Referred to as the “black gang,” these crewmembers were often covered in soot and coal dust from working in the engine room. In 1900, a stoker worked four hours at a stretch, and during that time the temperature of his surroundings varied from 120 degrees to 160 degrees Fahrenheit. One stoker usually had four furnaces to attend to, and while feeding one furnace they had to be extremely careful not to burn their arm on the furnace behind them. The stoker is occupied about three minutes at each furnace, rushing to the air pipe right after they were done and waiting until their turn came again. The intense heat of the furnaces sometimes rendered stokers temporarily insane, and there are many cases on record of them making their way to the deck and jumping overboard.



DISASTERS & REGULATION OF BOILERS ON STEAMSHIPS

The drive for profits and markets meant that many steamships were poorly designed and constructed, and often the crew that operate them had minimal training. Faced with intolerable working conditions, fires and deadly explosions; steamboat engineers banded together. In 1854, the Buffalo Association of Engineers formed. This and other Lake Associations played a leading role in the formation of the Union (the Marine Engineers Beneficial Association or M.E. B.A) and provided its major strength for the first 35 years. The earliest efforts of the new association revolved around proper enforcement of the Steamboat Act of 1871. The M.E.B.A. also worked toward proper examination and licensing of engineers, and the abolition of controversial license fees. It fought against the use of foreign engineers on internal waters and steamship companies revoking licenses for union activities and protests over safety.

On April 27, 1865, the boilers aboard the steamship *Sultana* exploded and killed an estimated 1,500–1,900 people. This disaster created public demand for safer and stronger boilers, knowing that common boiler explosions happened as often as every four days in the 1850s, resulting in large losses of life. The first insurance companies were formed shortly after the *Sultana* tragedy, offering inspections and financial incentives for participating.

