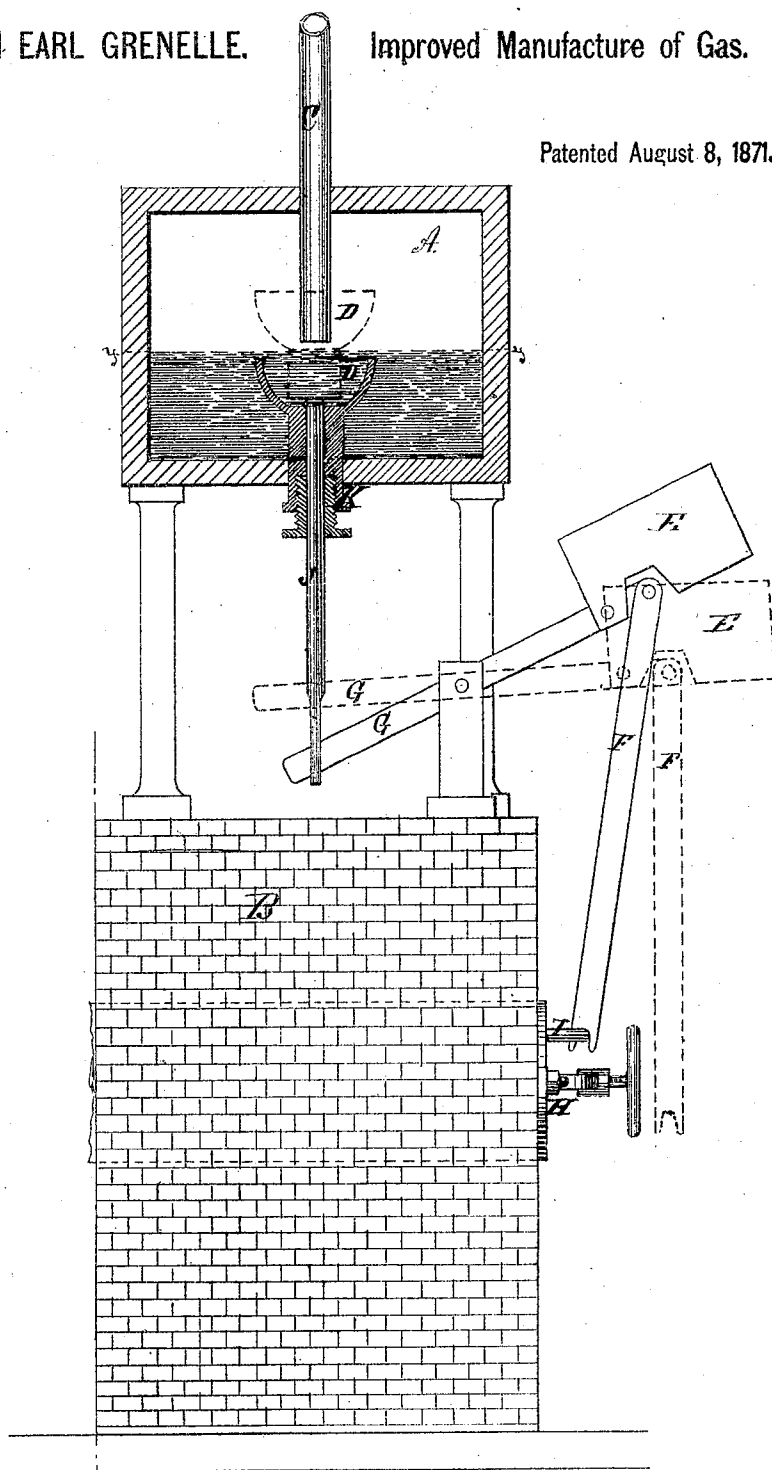


WILLIAM EARL GRENELLE.

Improved Manufacture of Gas.

117,880.

Patented August 8, 1871.



Witnesses:

G. Hathings.
J. Oley Swathin

Inventor:

William. Earl. Grenelle.
By B. F. James,
his Atty.

UNITED STATES PATENT OFFICE.

WILLIAM EARL GRENELLE, OF NEW YORK, N. Y.

IMPROVEMENT IN SEALING AND UNSEALING DIP-PIPES IN HYDRAULIC MAINS.

Specification forming part of Letters Patent No. 117,880, dated August 8, 1871.

To all whom it may concern:

Be it known that I, WILLIAM EARL GRENELLE, of the city, county, and State of New York, have invented a new and useful Improvement in the Method of Sealing and Unsealing Dip-Pipes in Hydraulic Mains; and I do hereby declare the following to be a true and correct description of the construction and operation of the same, reference being had to the annexed drawing making a part and parcel of this my specification.

The nature and object of my invention are to provide a means of sealing and unsealing dip-pipes in hydraulic mains in a simple and certain manner that is inexpensive and easily manipulated, consisting of the construction of a cup-and-saucer attachment operated by an arm and weighted lever that will adjust the cup or saucer in its relation to the dip-pipe in the desired manner, and below the tar-line in the hydraulic main.

In order to enable others skilled in the art to make and use my invention, I will proceed to describe the same.

The drawing represents an exterior view of the brick-work containing the retorts used in the manufacture of gas, designated as letter B.

A represents a cross-sectional view of the hydraulic main, showing within it the cup or saucer attachment D D in two positions, raised and lowered. C is the dip-pipe, resting upon and within the hydraulic main above the tar-line *yy*. K is a stuffing-box, through which the spindle J passes, which is attached to the cup or saucer D at its upper end, the operation and movement thereby being controlled by the lever G weighted, as shown at E, with the attached arm F, that is adjusted upon the hook or support I in order to

secure the cup or saucer in a proper condition when lowered for the purpose of unsealing the dip-pipe C. H is the lid of the retort, which cannot be removed for the purpose of drawing and recharging until the bar F is removed, thereby effectually sealing the dip-pipe C, as shown in dotted lines in the drawing. When the dip-pipe is unsealed the cup or saucer remains upon the bottom of the hydraulic main, and, being filled with tar, when the pipe is desired to be sealed is raised as described, and proves most effectual.

The devices referred to and claimed herein being placed without the hydraulic main are easily operated and replaced when injured, and the stuffing-box and spindle constantly lubricated by the hot tar contained within the hydraulic mains.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The within-described arrangement and method of sealing the dip-pipe C upon the opening of the retort-lid H, thereby releasing the arm F and the weight E, depressing the lever G, causing the cup D to be elevated, in the manner and for the purpose herein set forth.

2. The combination of the arm F, weighted lever G, with the cup or saucer attachment D D, in the manner and for the purpose herein described.

3. The combination of the spindle J, stuffing-box K, cup D, with the lever G and arm F, in the manner and for the purpose herein described.

WILLIAM EARL GRENELLE.

Witnesses:

E. SANDERSON,
C. E. SANDERSON.