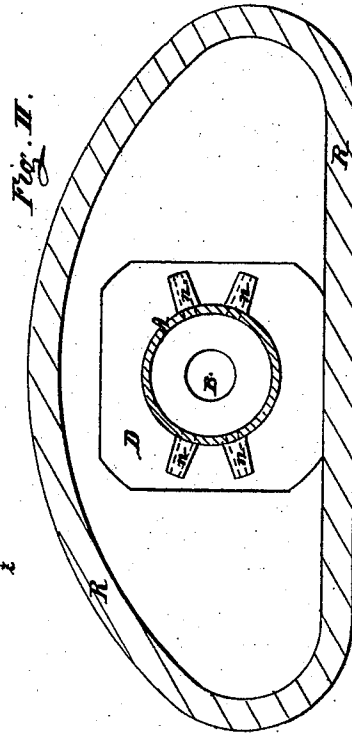
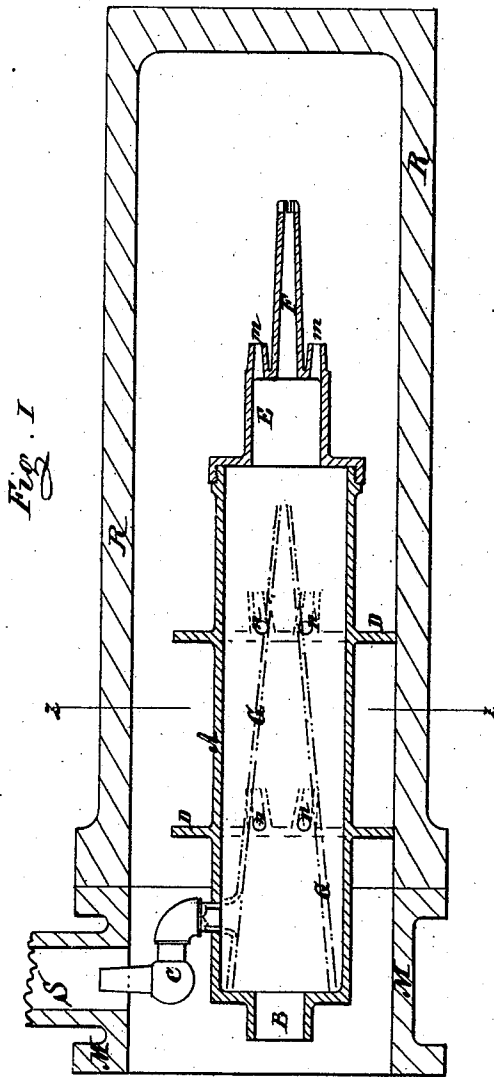


N. JAMIN.

APPARATUS FOR CLEANING GAS RETORTS.

No. 185,107.

Patented Dec. 5, 1876.



Witnesses.

Al. Lyons.
Wm. Chet.

Inventor.

Nicolas Jamin
per Henry & Roder
attorney.

UNITED STATES PATENT OFFICE.

NICOLAUS JAMIN, OF NEW YORK, N. Y.

IMPROVEMENT IN APPARATUS FOR CLEANING GAS-RETORTS.

Specification forming part of Letters Patent No. **185,107**, dated December 5, 1876; application filed August 18, 1876.

To all whom it may concern:

Be it known that I, NICOLAUS JAMIN, of New York, in the State of New York, have invented a new and Improved Apparatus for Cleaning Gas-Retorts, of which the following is a specification:

The nature of my invention consists in the arrangement of a large pipe or chamber, provided with a contracted mouth-piece and a series of jet-pipes, together with a branch pipe, capable of being conducted into the standing-pipe of the retort, which, being placed into the inside of the gas-retort and supplied with steam, will cause the cleaning of the inside of the retort, as well as the standing-pipe, more thoroughly and in a shorter time than is the case with any of the means at present known and employed.

In the accompanying drawing, Figure I represents a longitudinal section of my apparatus, shown as placed in the retort embodying my invention. Fig. II shows a cross-section of the same at line *z z* of Fig. I.

A is a large pipe or chamber, provided with two or more flanges, or other suitable projections, D, to support the same on the bottom of the gas-retort. The after end of this chamber is provided with a nozzle, B, to connect a steam-supply pipe to the same, and on its forward end a cap, E, is attached, provided with a nozzle or pipe, F, gradually contracting toward its mouth. Small jet-pipes *m m* are made on the end of this cap E. On the sides of the chamber A jet-pipes *n*, radiating from its center, are arranged forward of the flanges D.

On the top of the chamber A, near the after end, a pipe, C, provided with a universal joint, is arranged, capable of being turned either upward to discharge into the standing-pipe S, or into the one or the other side of the retort R. This chamber is placed into the retort to be cleaned, as represented in the drawing, and a connection made with a steam-pipe from the boiler at the nozzle B. The live steam will then play in jets against different parts of the interior of the retort, as well as into the standing-pipe S, and thus clean the same in a very short time.

It will readily be understood that the position of the apparatus in the retort can be changed whenever required. For short retorts the cap E, with its tapering nozzle F, may be removed, and a tapering pipe or nozzle, G, extending nearly to the forward end of the chamber A, may be arranged in the inside of said chamber, in connection with the steam-nozzle B, as shown in dotted lines in Fig. I.

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

The chamber A, provided with flanges D, nozzle B, pipe C, jet-pipes *n n*, and cap-piece E, provided with jet-pipes *m* and tapering nozzle or pipe F, the whole being constructed and operating substantially in the manner and for the purpose set forth.

NICOLAUS JAMIN.

Witnesses:

HENRY E. ROEDER,
WM. EHRET.