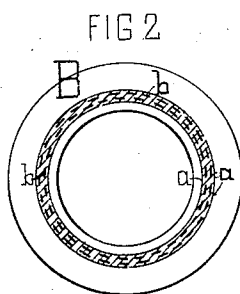
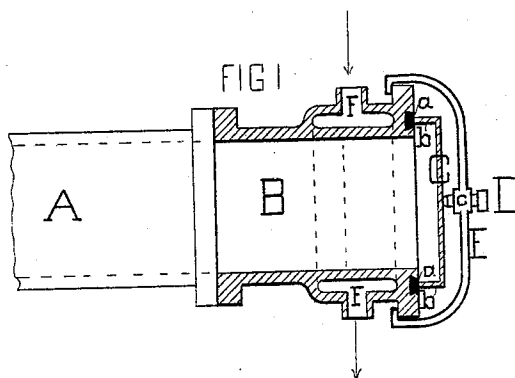


P. MUNZINGER.
Gas-Retort Mouth-Pieces.

No. 144,857.

Patented Nov. 25, 1873.



WITNESSES

A. J. Walter
Robt. Carr

INVENTOR

Peter Munzinger
by Francis D. Pastorius
his Atty

UNITED STATES PATENT OFFICE.

PETER MUNZINGER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN GAS-RETORT MOUTH-PIECES.

Specification forming part of Letters Patent No. **144,857**, dated November 25, 1873; application filed October 3, 1873.

To all whom it may concern:

Be it known that I, PETER MUNZINGER, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improved Retort Mouth-Piece for Gas-Works, of which the following is a specification:

The invention consists of a retort mouth-piece having an inlet soft-metal base for the retort-lid, and a water-chamber to protect the said base from the heat of the retort.

Figure 1 is a view of a retort in connection with a sectioned view of the improved mouth-piece and attachments. Fig. 2 is an end view of the improved mouth-piece.

A is a retort, of clay or other material, or metal. B is a mouth-piece, flanged and bolted to it. Like the retort, it can be of any suitable material or metal, and of any form. The outer end of the mouth-piece B has an inlet base or ring, of lead or other soft metal, *a*, which is capable of resisting the deleterious action of the gas. It conforms to the depending rim *b* of the lid C, which should be trued and ground before being set against it. A screw, D, passing through the boss *c* of the cross-bar E, and pressing against the center of the lid, forces the depending rim perfectly gas-tight against

the metal base. Although the gas in the retort has no perceptible influence upon the soft-metal base, the heat from the retort has a decided tendency for softening and melting it; to obviate which a water chamber or jacket, F, is formed in the enlargement around the mouth-piece, sufficiently near to the soft-metal base to absorb and carry off the heat with the water.

I am aware that a lead base has been applied directly to the mouth of a retort; but this of itself is not sufficient, owing to the intense heat. I am also aware that a water-jacket has been used in combination with a vulcanized-rubber packing. Neither of the above devices are claimed by me.

I claim as my invention—

The retort mouth-piece B, having a soft-metal lid-base, *a*, in connection with a water-jacket, F, as and for the purpose shown and described.

In testimony whereof I hereunto sign my name in presence of two subscribing witnesses.

PETER MUNZINGER.

Witnesses:

THOS. C. WARWICK,

FRANCIS D. PASTORIUS.