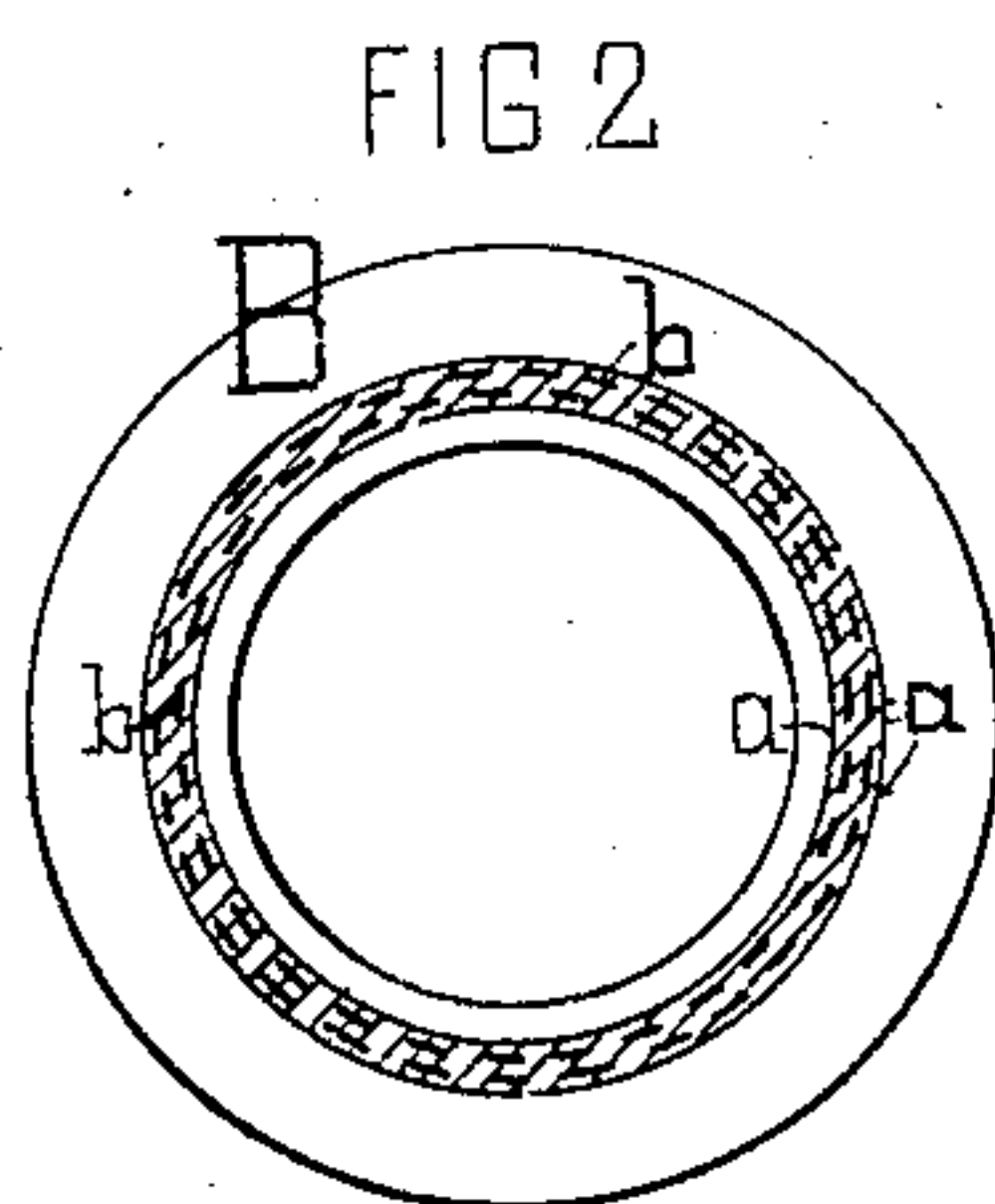
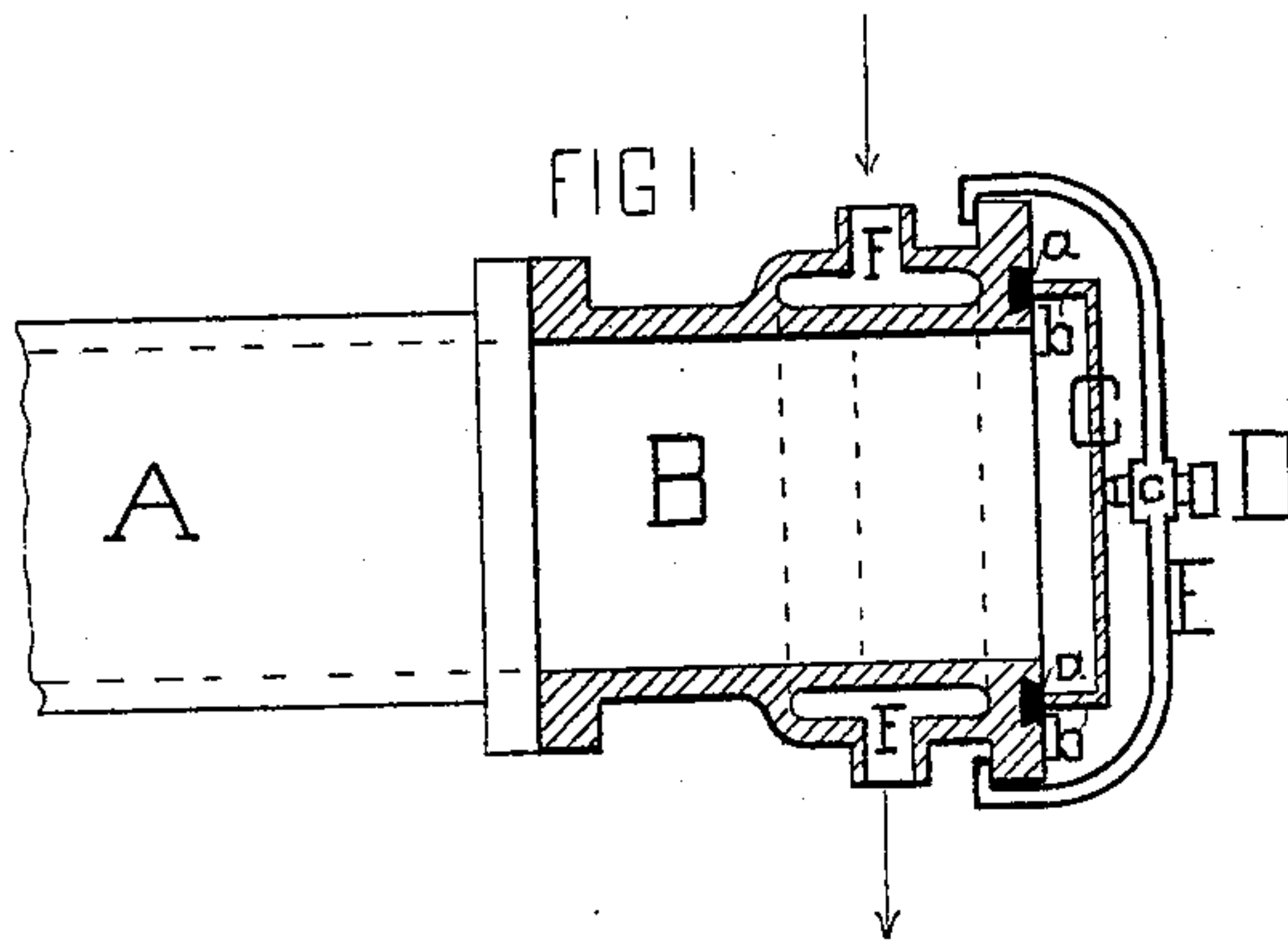


Gas-Retort Mouth-Pieces.

Patented Nov. 25, 1873.



WITNESSES

A. J. Walter
Robt Curro

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.