

(Model.)

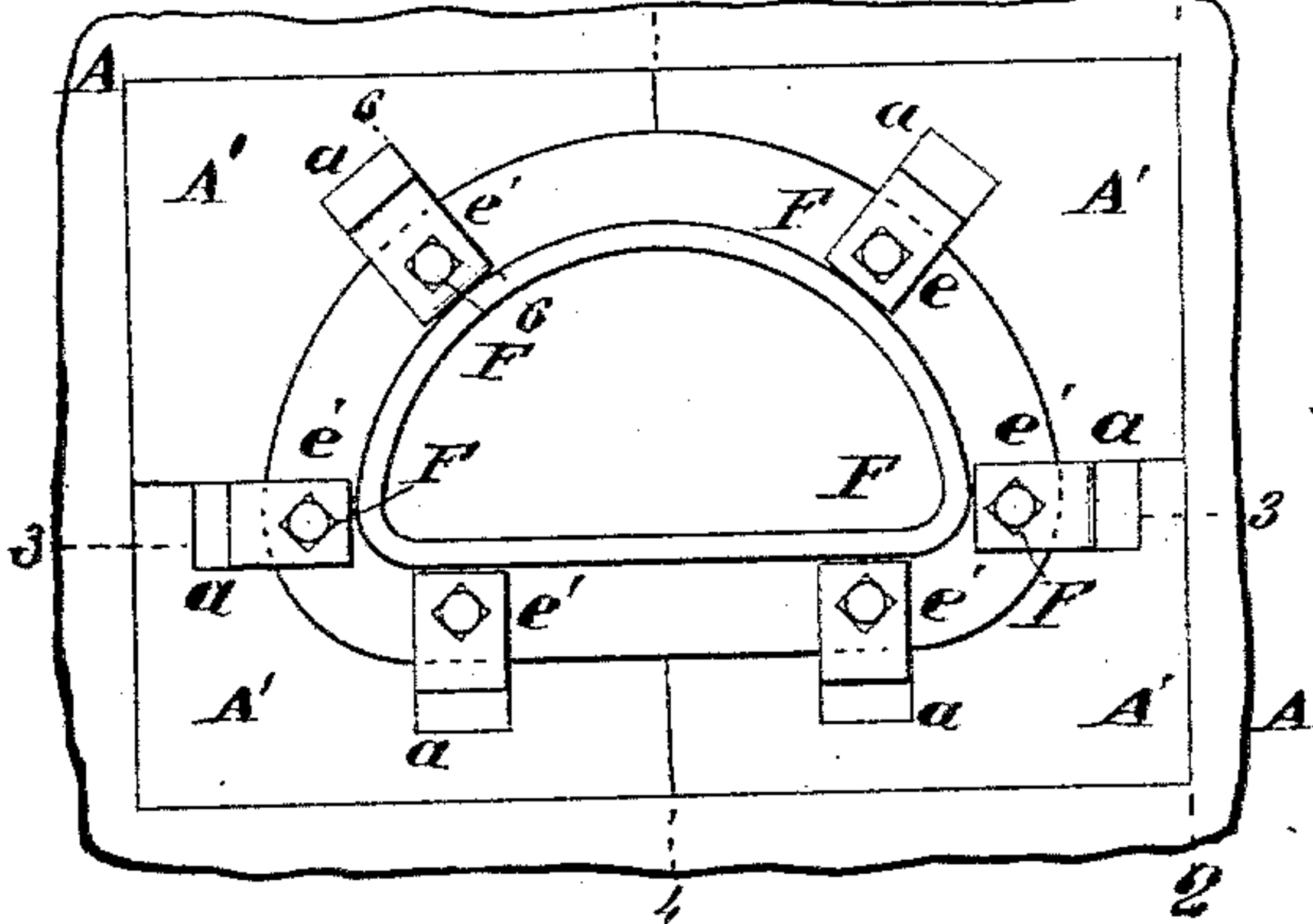
J. DELL.

DEVICE FOR FASTENING MOUTH PIECES TO GAS RETORTS.

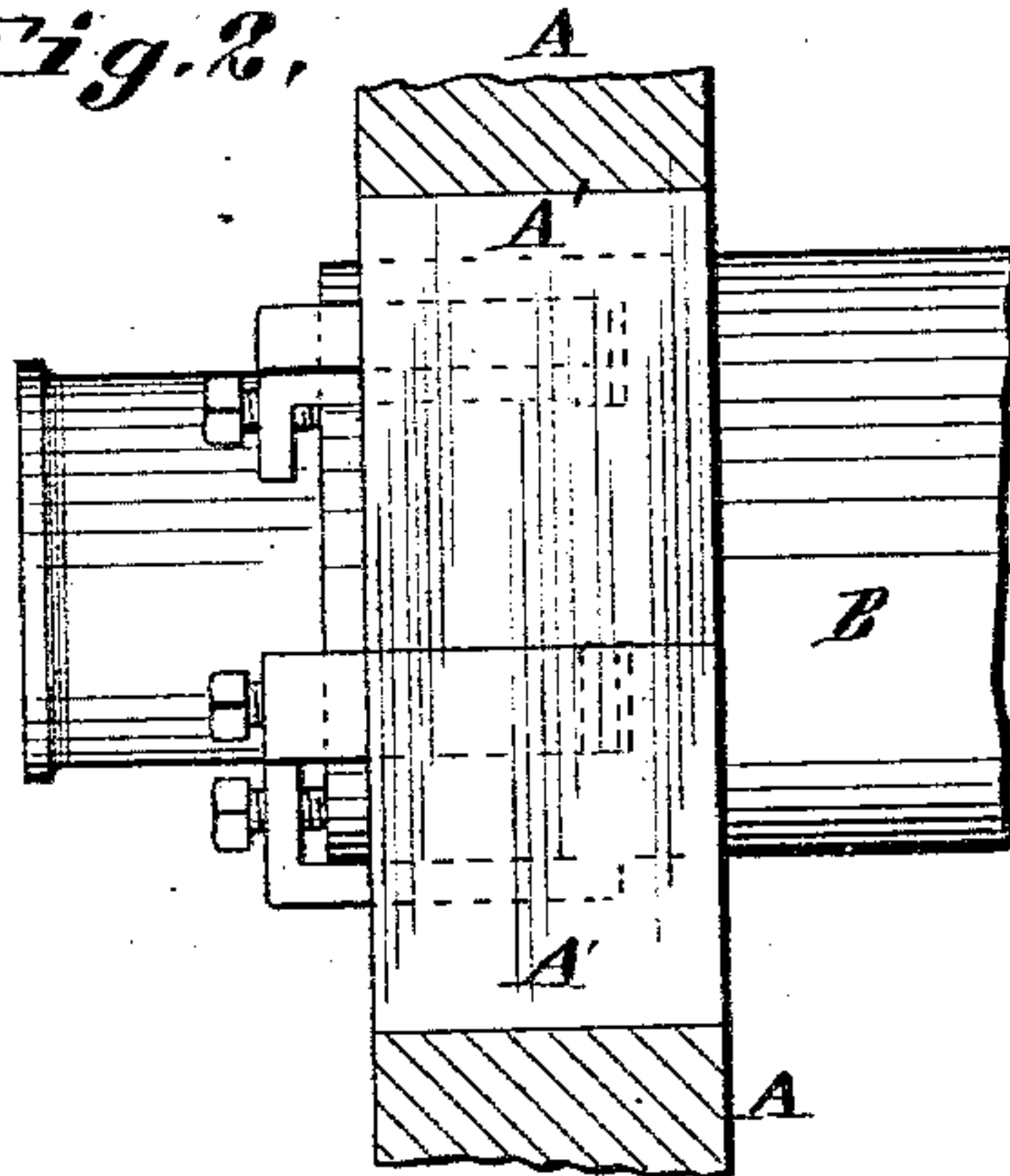
No. 318,965.

Patented June 2, 1885.

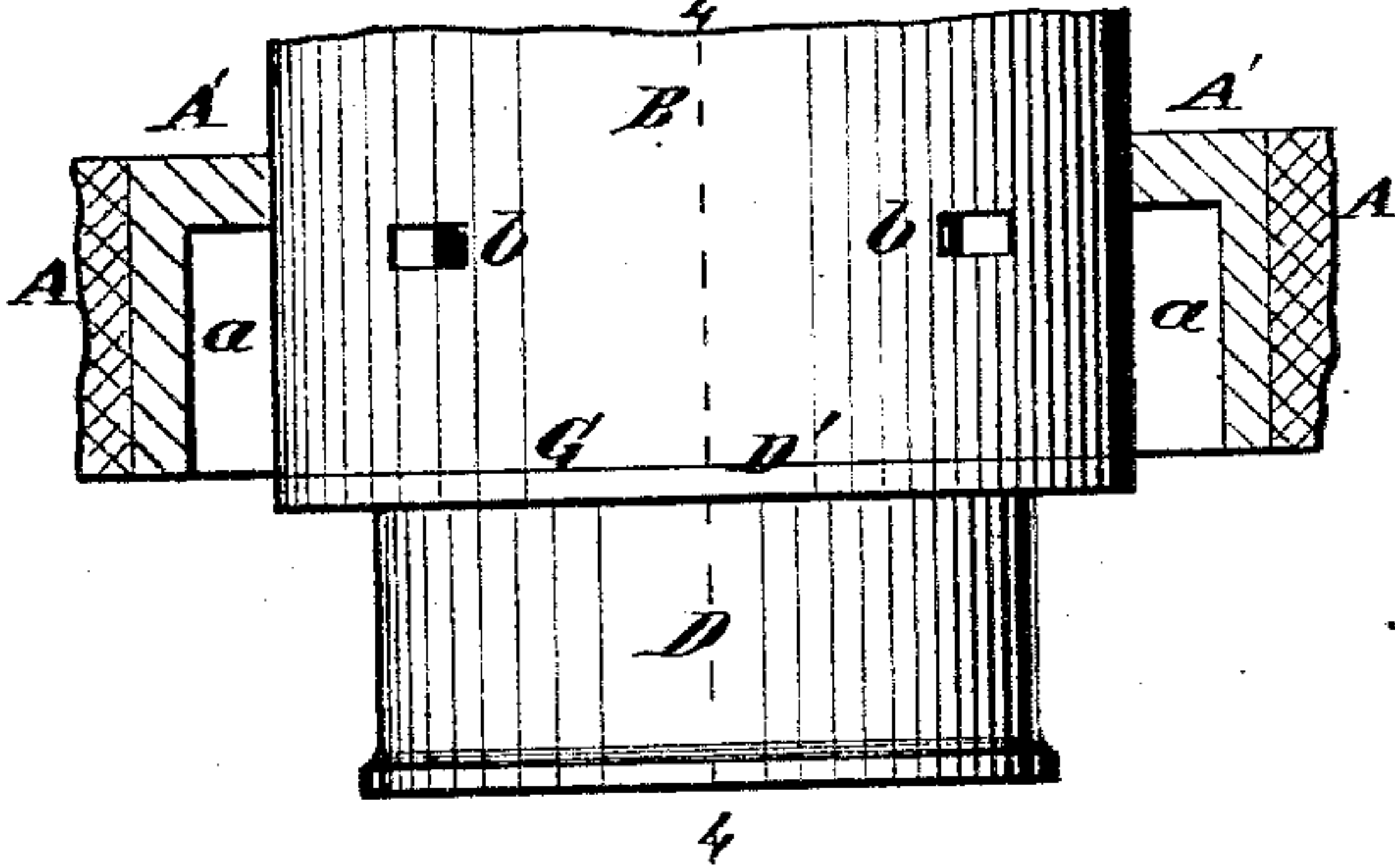
*Fig. 1.*



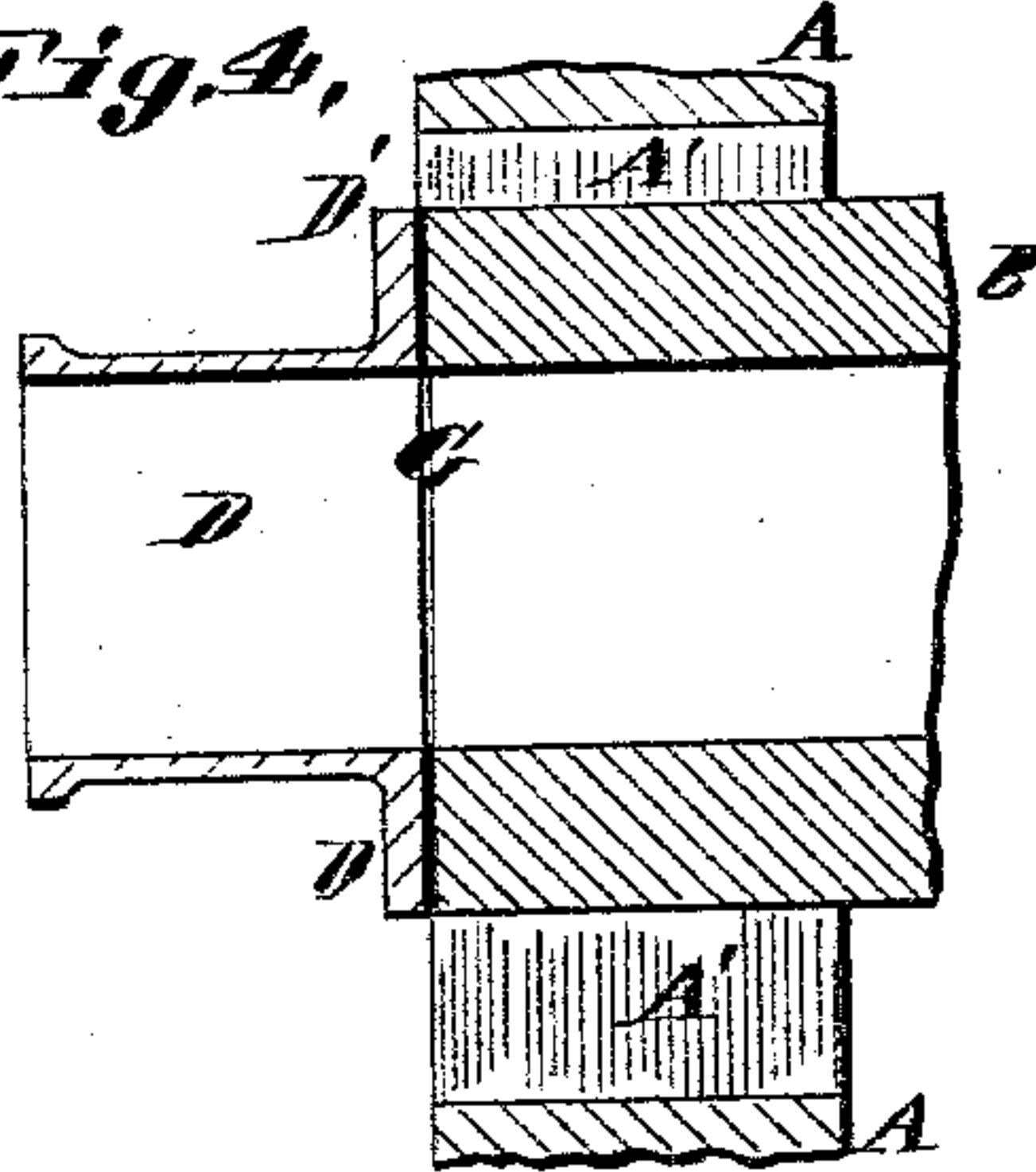
*Fig. 2.*



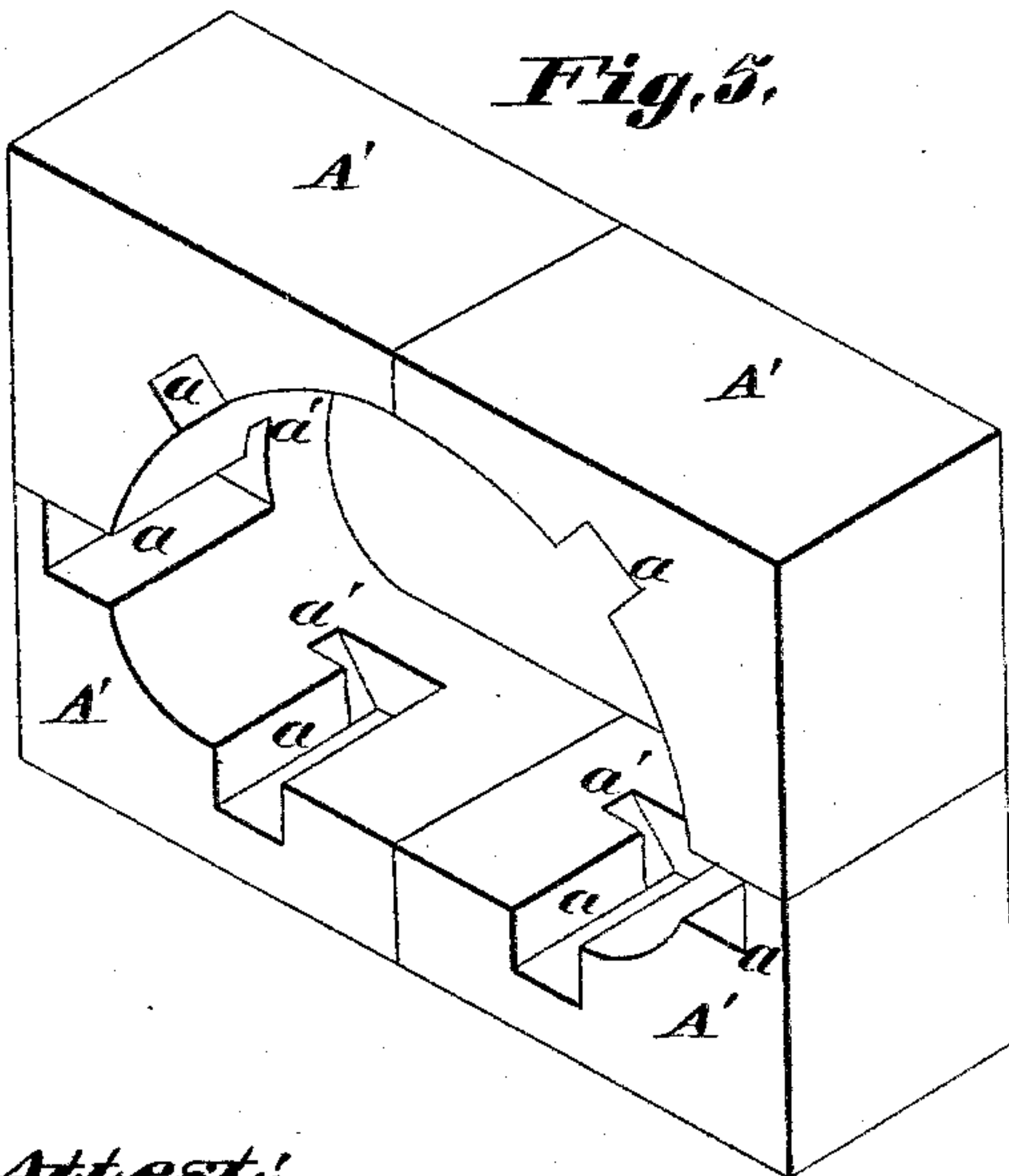
*Fig. 3.*



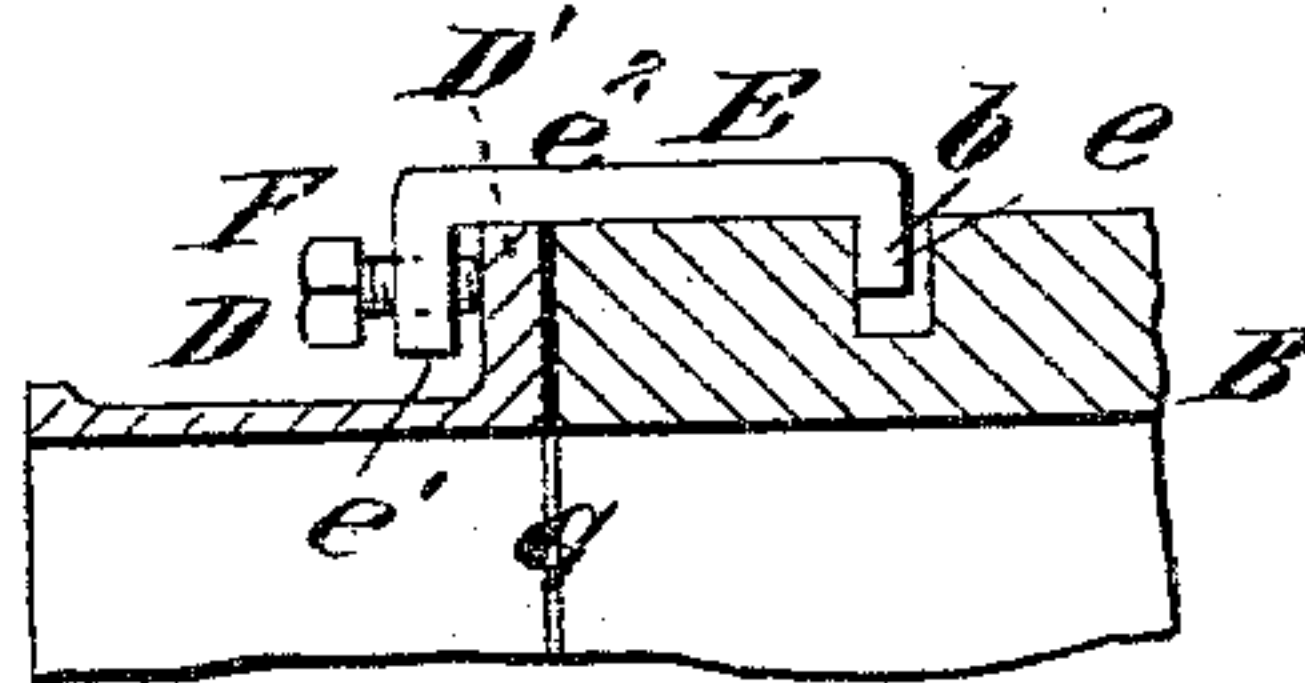
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



Attest:

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# UNITED STATES PATENT OFFICE.

JOHN DELL, OF ST. LOUIS, MISSOURI.

## DEVICE FOR FASTENING MOUTH-PIECES TO GAS-RETORTS. □

SPECIFICATION forming part of Letters Patent No. 318,965, dated June 2, 1885.

Application filed August 9, 1884. (Model.)

*To all whom it may concern:*

Be it known that I, JOHN DELL, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Devices for Fastening Mouth-Pieces to Gas-Retorts, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 The improvement consists of a clamp, which is turned at about a right angle at each end, one end being bored and screw-threaded to receive a set-screw, which bears against the flange of the mouth-piece, and the other down-  
15 turned end engaging in the usual recess or tenon, which is formed in the retort to contain the nut.

In the drawings, Figure 1 is a front view of a mouth-piece showing my improvement. Fig. 20 2 is a section at 2 2, Fig. 1. Fig. 3 is a top view of one end of the retort and neck or mouth-piece with the clamps removed and the part of the front wall of the bench in which the retort has bearing in horizontal section at 25 3 3, Fig. 1. Fig. 4 is a vertical section at 4 4, Fig. 3. Fig. 5 is a perspective view of four tiles constructed to be set in the front wall of the bench and give bearing to the outer end of the gas-retort. Fig. 6 is a section at 6 6,  
30 Fig. 1, showing one of the clamps in position.

In the drawings I have shown the outer end of the retort having bearing in tiles specially formed for that purpose; but I do not wish it to be understood that the tiles are in any  
35 manner essential, for the clamps, which form the essential part of my invention, may be used to the same advantage where the front wall of the bench is constructed wholly of brick, as usual.

40 A is part of the front wall of the bench of

gas-retorts B; whose direct or immediate bearing may be formed of tiles A', or may be formed of brick-work in the usual manner. The retort is formed with mortises *b*.

D is the mouth-piece having a flange, D', 45 and E my improved clamp. The clamp E has its ends *e e'* bent at about right angles with the shank *e''*. The end *e* engages in the mortise or recess *b*, and the end *e'* extends outside the flange D'. The end *e'* has a screw-threaded 50 hole in which the set-screw F turns. The point of the set-screw F bears against the outside of the flange D', and thus presses the mouth-piece to the end of the retort.

At G is shown a "rust-joint," which is in- 55 terposed between the mouth-piece and retort, so as to make the connection gas-tight.

I prefer to make in the wall or tiles A' recesses *a*, sufficiently large to allow the introduction and removal of the clamps E when 60 the retort is in position. These recesses may be made of sufficient dimensions to allow the clamps to be simply pushed in until the end *e* drops into the recess *b*; or they may be made to allow the clamp to be pushed in with its 65 edge toward the retort and made with a side recess, *a'*, which allows the end to be turned into the mortise or recess *b* when the clamp has been inserted the proper distance.

I claim—

The combination of a retort having recesses 70 near its front end, the mouth-piece having a flange, a clamp having one end turned to enter a recess, and the other end turned to take over the flange, and a set-screw fitted in the 75 clamp and bearing against the flange.

JNO. DELL.

Witnesses:

SAML. KNIGHT,  
GEO. H. KNIGHT.