

No. 690,606.

Patented Jan. 7, 1902.

F. QUATRAM.

MANTLE HOLDER FOR INCANDESCENT GAS BURNERS.

(Application filed Aug. 9, 1901.)

(No Model.)

Fig. 1.

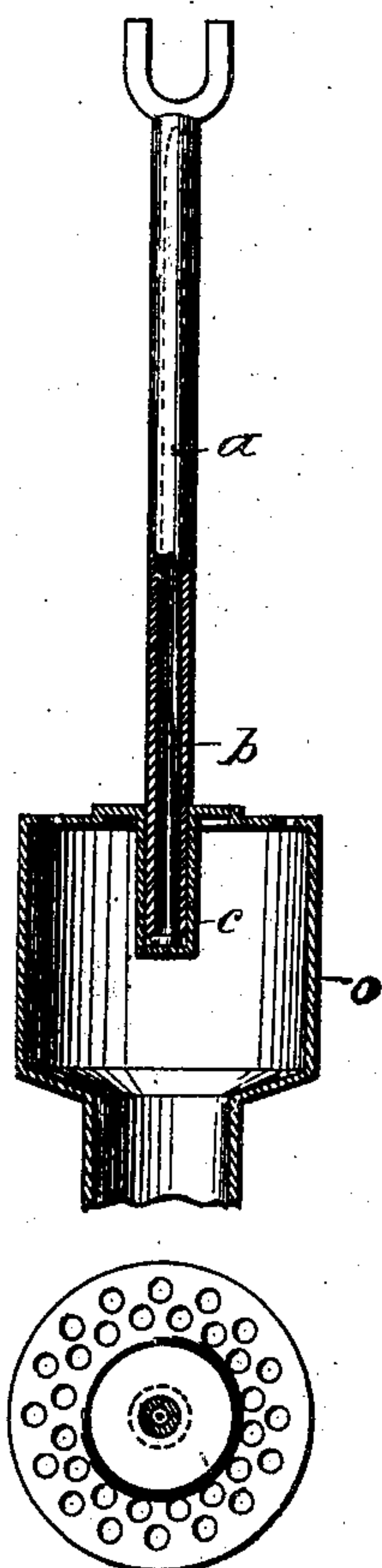


Fig. 2.

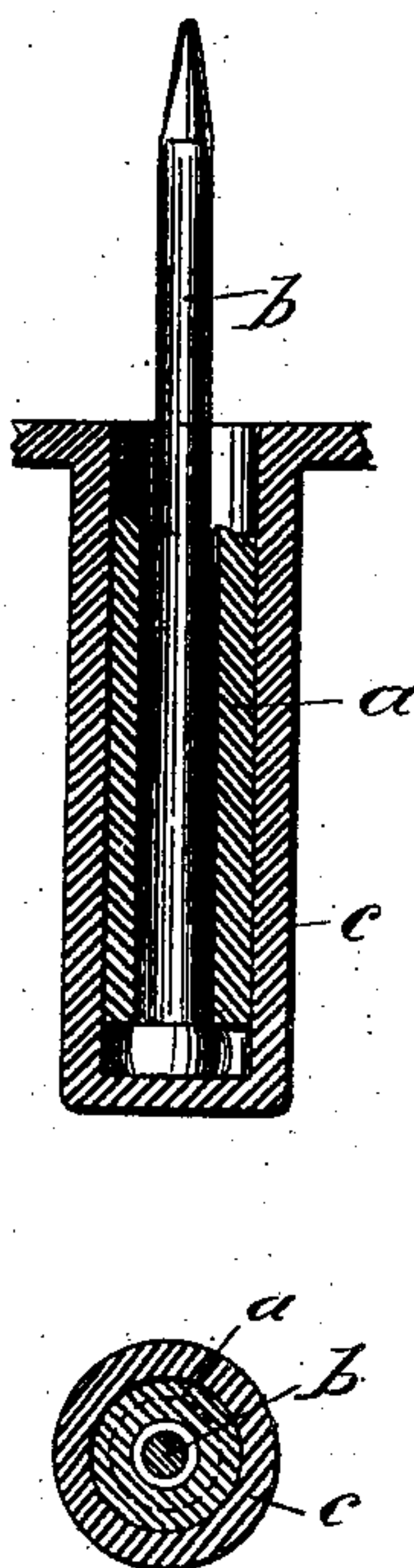
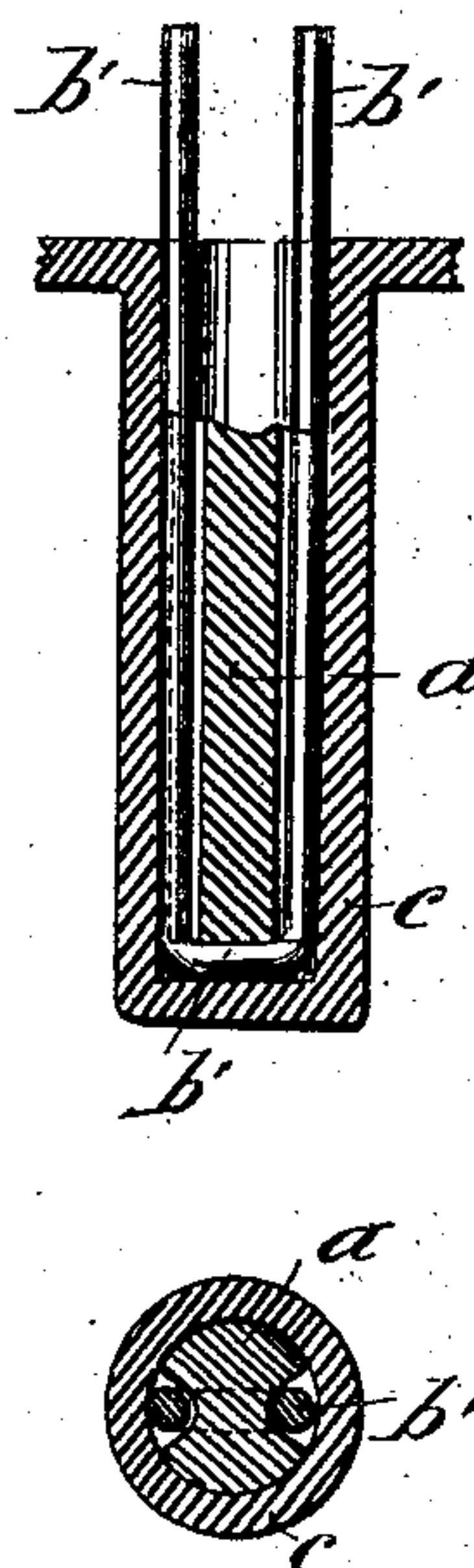


Fig. 3.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

FRANZ QUATRAM, OF BERLIN, GERMANY.

## MANTLE-HOLDER FOR INCANDESCENT GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 690,606, dated January 7, 1902.

Application filed August 9, 1901. Serial No. 71,440. (No model.)

*To all whom it may concern:*

Be it known that I, FRANZ QUATRAM, a subject of the German Emperor, and a resident of Berlin, Germany, have invented certain new and useful Improvements in Mantle-Holders for Incandescent Gas-Burners, of which the following is a specification.

In order to support the mantles for incandescent burners, cylindrical holders are used which are forked at their uppermost part, their lower end being inserted in a hole made in the burner-piece. Should this holder break, it is generally near the edge of the said hole of the burner-piece and often below the edge. The piece which remains in the said hole is not easily extracted. It is also difficult to make a bore in it, for the substance of which it is composed is usually very hard.

The object of the present invention is to remedy this inconvenience by providing a holder the end of which remaining in the socket in case of breakage can be easily removed.

In the accompanying drawings, illustrating my invention, Figure 1 shows a front elevation of the holder. Fig. 2 shows a detail on a larger scale. Fig. 3 shows the holder fitted with a V-shaped stirrup.

The construction of the holder will be readily understood from the following description with reference to the drawings.

The forked stem *a* is hollow, so that it forms a small tube, into which is inserted a piece of metal wire or a pin *b*, the length of which is a trifle greater than the depth of the hole in the burner-body *o*. The head of this pin is larger than the inner diameter, but smaller than the outside diameter, of the said stem. When the burner is in place, as shown in Fig. 1, the head of the piece of metal wire rests on the bottom of the hole in the burner-body, while the wire point extends upwardly in the holder and sufficiently above the mouth or edge of the hole to allow it to be easily seized, if the holder is fractured, for the purpose of withdrawing the end of the broken

holder by means of the projection formed by the head of the pin.

The pin *b* is shown in Fig. 2 on an enlarged scale.

The same object is obtained and the principle of the invention is not altered when the forked holder is furnished exteriorly with two longitudinal grooves on opposite sides, into which is introduced before being placed in position a U-shaped wire stirrup *b'*, Fig. 3, of convenient length.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a device for removing portions of mantle-holders after same have been broken in the burner, a piece of wire engaging the mantle-holder and normally projecting above the burner, whereby the said wire may be grasped and the holder removed after the holder has been broken, substantially as described.

2. A device for removing portions of mantle-holders after the same have been broken in the burner, which consists of a piece of wire engaging the lower end of said holder and projecting above the upper face of the burner, whereby the upper portion of said wire may be grasped and the portion of the broken mantle remaining in the burner removed, substantially as described.

3. A device for removing portions of mantle-holders after the same have been broken in the burner, which consists of a piece of wire having a head on the lower end thereof which engages the lower end of the mantle-holder, the upper end of the piece of wire projecting above the burner whereby the same may be grasped and the broken portion remaining in the burner removed, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

FRANZ QUATRAM.

Witnesses:

HENRY HASPER,  
WOLDEMAR HAUPT.