

No. 635,869.

Patented Oct. 31, 1899.

G. PEEPLES.  
INSULATED PIPE COUPLING.

(Application filed Apr. 16, 1898.)

(No Model.)

FIG. 1

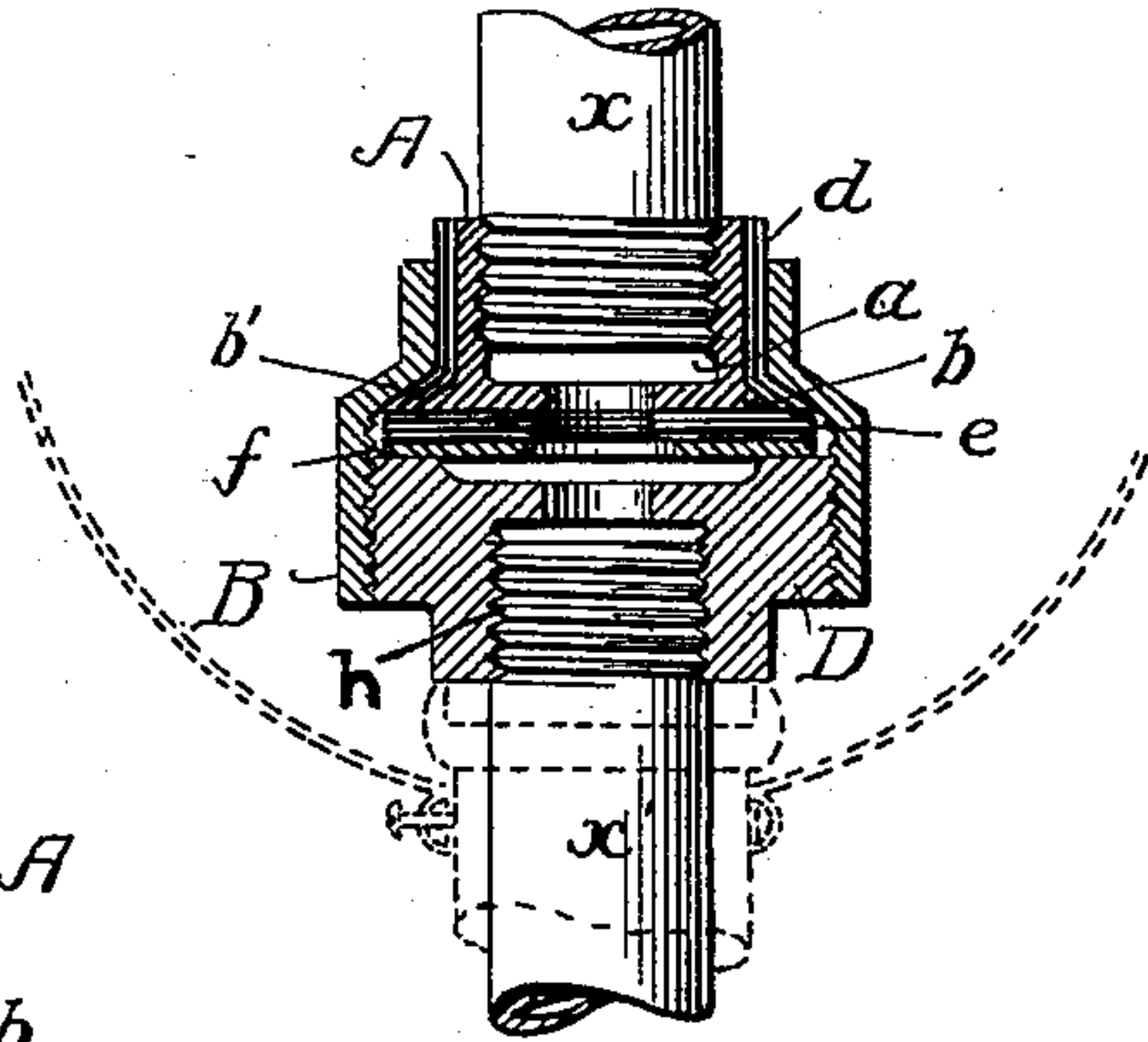


FIG. 2

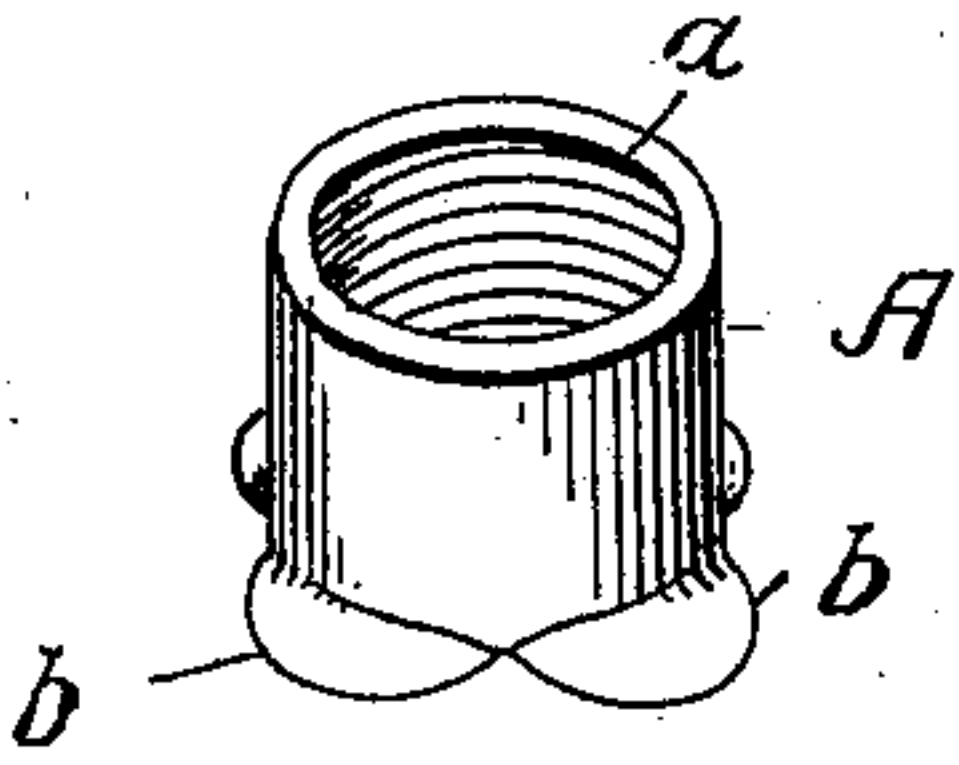


FIG. 3

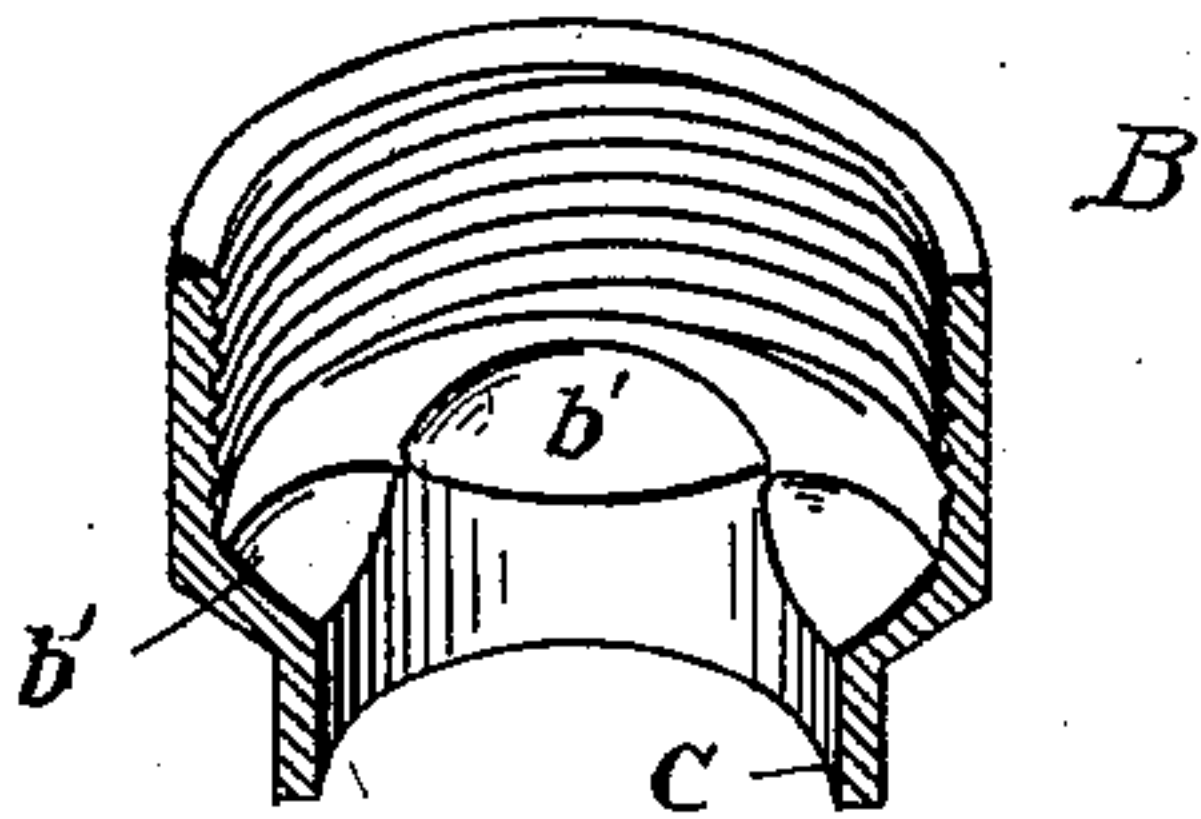


FIG. 4

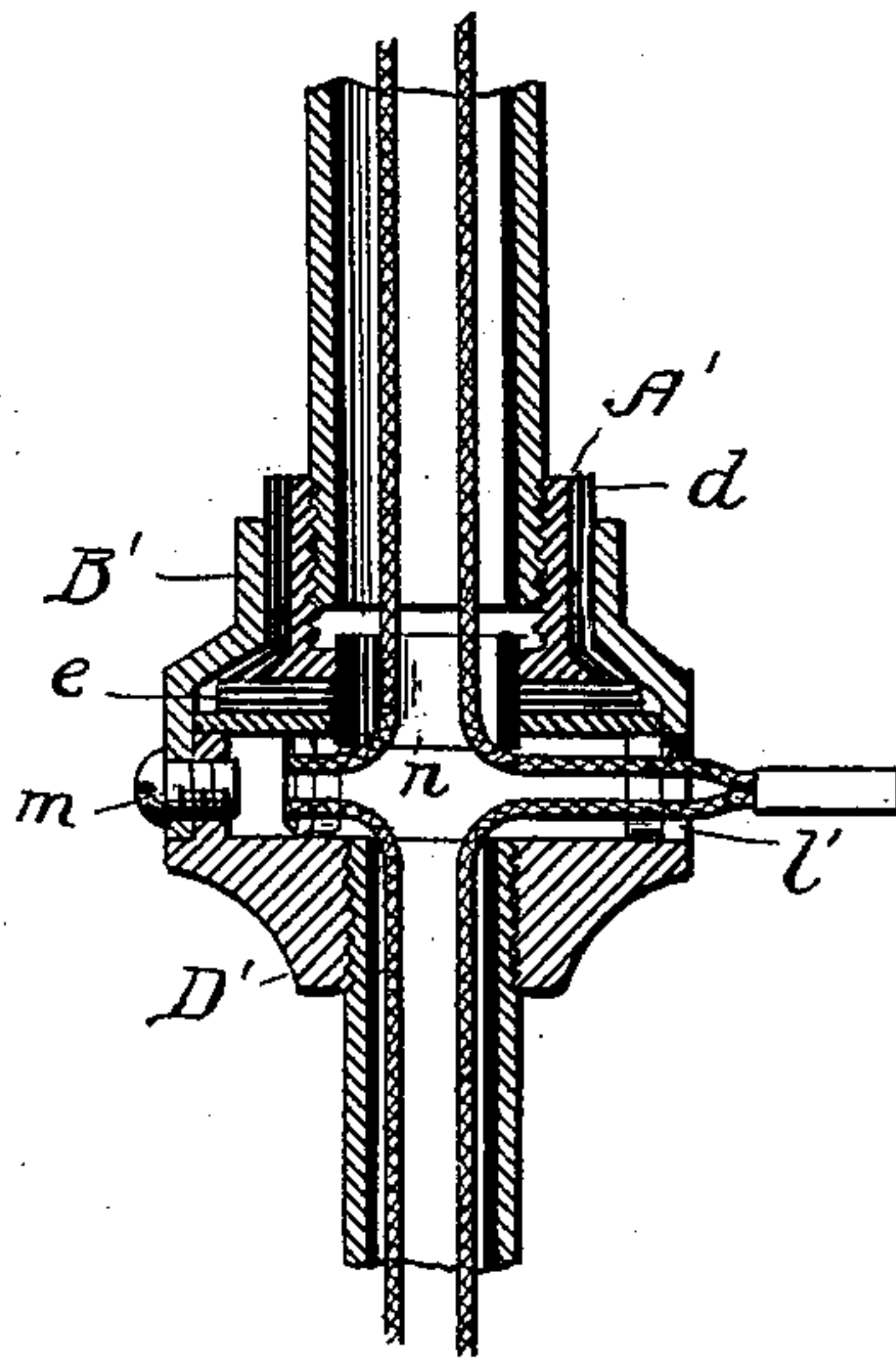
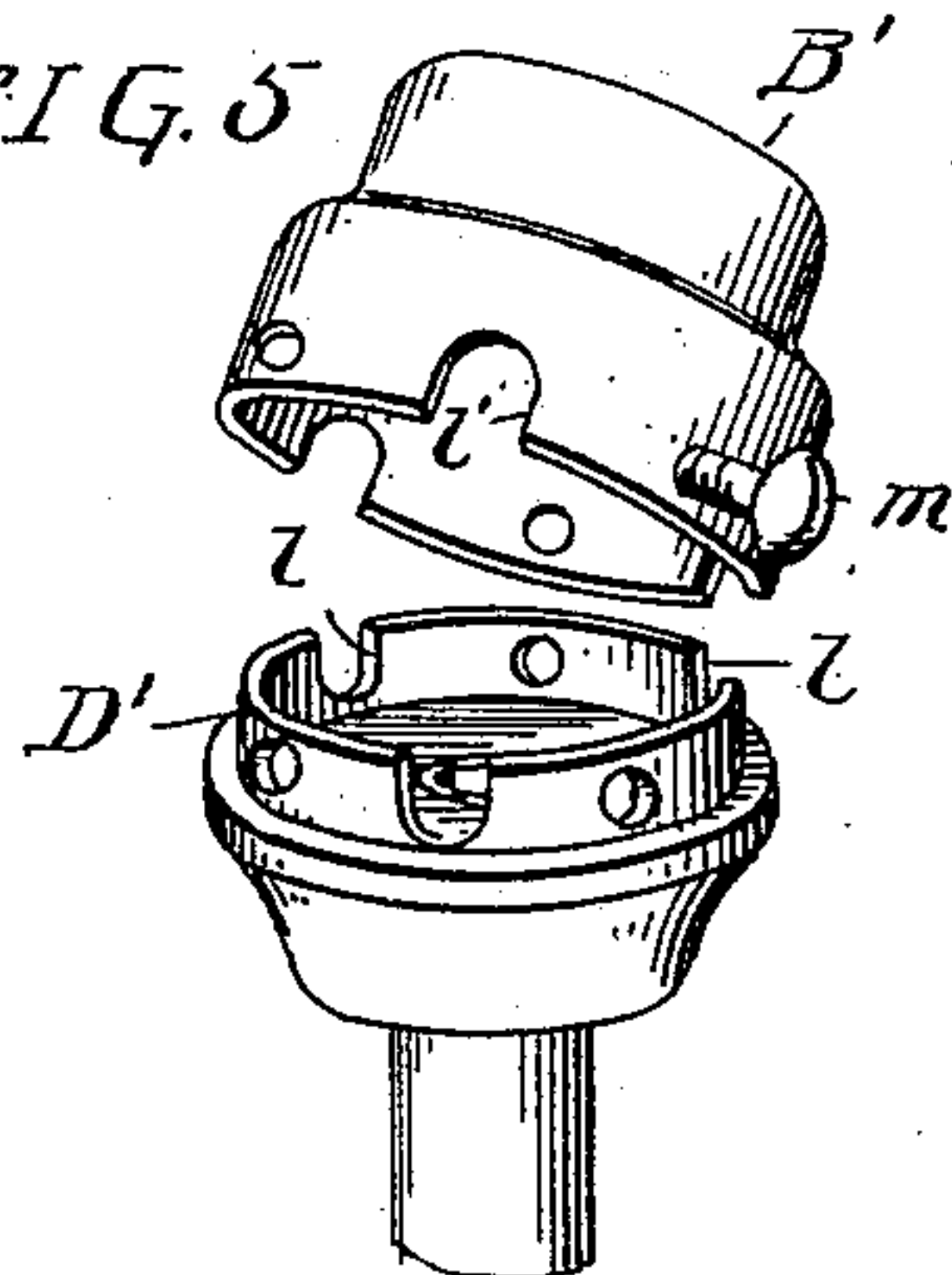


FIG. 5



Witnesses:  
Jno. E. Barker  
A. D. Pelly

Inventor:  
George Peeples.  
by his Attorney,  
Walter W. Calhoun



# UNITED STATES PATENT OFFICE.

GEORGE PEEPLES, OF WASHINGTON, DISTRICT OF COLUMBIA.

## INSULATED PIPE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 635,869, dated October 31, 1899.

Application filed April 16, 1898. Serial No. 677,781. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE PEEPLES, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Insulated Pipe-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain improvements in insulated joints or couplings for use on electric fixtures, combination gas and electric brackets, and the like, and has for its object to construct a cheap and economical coupling in which the fixture is thoroughly insulated from the grounded section formed by the gas pipe or conduit.

A further object is to so construct the coupling that it will withstand severe strains, as in making gas-tight joints, without danger of displacing or injuring the insulation.

In the accompanying drawings, Figure 1 is a sectional elevation of a combination gas and electric coupling constructed in accordance with my invention. Fig. 2 is a perspective view of the grounded section which is secured to the house gas-pipe. Fig. 3 is an inverted sectional view of the upper portion of the coupling. Fig. 4 is a sectional elevation of a coupling adapted for conduit use where no gas is to be employed, and Fig. 5 is a detached perspective view of portions of the structure illustrated in Fig. 4.

Referring to the drawings, A represents what is termed the "grounded section" of the coupling, being that portion which is attached to the house gas-pipe. If this portion of the coupling is not thoroughly insulated from the remaining portions, the wearing away or injury of the insulation of the feed-wires would cause the grounding of the current, and possibly the explosion of gas. The inner portion of the grounded section is provided with threads *a* for the reception of the threaded end of the house-pipe *x*. At the base of the grounded section are projecting ribs *b*, which fit into corresponding grooves or depressions *b'* in the upper section B of the coupling, and when so fitted the two are interlocked and must move with each other when turned to make connection with the pipes.

The upper section B has an upwardly-extending circular flange or neck *c* of a diame-

ter greater than that of the grounded section; but its height is so proportioned that its upper edge will be considerably below the upper edge of the grounded section A. Between the grounded section and the neck *c* is placed a ring *d*, of insulating material, preferably mica, the upper edge of which extends up above the upper edge of the neck, so as to absolutely prevent a short circuit between the neck and the grounded section. The neck also acts to protect the insulation from accidental contact with the wrench or other tool used to attach the coupling to the gas-pipe in the event of the slipping of the tool from the main portion of the upper section A. The lower edge of the insulating-ring *d* is spread out somewhat, so as to prevent electrical contact between the ribs *b* and the metal of the upper section B.

After the grounded section and insulating-ring are set in position in the upper section B sheet-mica *e* is next placed in position, and this is followed by a brass ring *f*, which serves to prevent the lower section D of the coupling from destroying the mica when the sections are being screwed together. Suitable threads are cut on the periphery of the lower section to engage corresponding threads with in the upper section. At the lower end of the lower section is a threaded opening *h* for engagement with the threaded upper end of the bracket or fixture-pipe *x'*, and free passage for the gas is afforded by openings formed in the grounded section, the insulation *e*, and the lower section, as shown.

The canopy and protecting-tubing (shown in dotted lines) may be arranged as usual.

In conduit-work, where the feed-wires are run through the pipes, I employ the construction shown in Figs. 4 and 5, the pipes used being of the ordinary internally-insulated character. The upper section A' has in its lower edge a series of slots *l*, and the lower section has an upwardly-projecting flange D', adapted to fit within the section A', and is also provided with slots *l'*, the two sections when fitted together having their slots coincident and being firmly secured together by screws *m*. The grounded section A' is provided with a somewhat larger opening than that shown in Fig. 1, and through this opening and similar openings in the insulation *e*



passes a bushing *n*, of insulating material, which prevents contact of the wires with the metal. The two sections of this coupling may be readily separated by loosening the screws *m*, and the wires may be led through the slots and connected, after which the sections of the couplings may be secured together. This form of coupling may also be used for electric fixtures where the wires lead from connecting-posts at the sides of the house-pipe, the wires in such case being merely passed in through the slots and down through the fixture-pipe.

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

1. An insulated coupling comprising an upper and a lower section, means for securing the sections to each other, an elongated neck formed on the upper section, a grounded section fitted within said upper section, and projecting within and above the said neck, and an insulating-ring between said grounded section and neck, said ring projecting upwardly to the level of the upper edge of the grounded section to protect the latter from contact with the wires, and being itself protected by the neck, which latter is slightly below the level of the grounded section to prevent the formation of an arc between the grounded section and neck.

2. The combination of the grounded section

having outwardly-projecting ribs, an upper section surrounding the grounded section and having grooves or recesses for the reception of said ribs, insulating material between the two sections, a lower section, and means for securing together the upper and lower sections, substantially as specified.

3. The combination of the upper section having an elongated neck, a grounded section fitting within said neck, outwardly-projecting ribs on the grounded section adapted to grooves or recesses within the upper section, a lower section secured to the upper section, and insulating material between the grounded section and the upper and lower sections, substantially as specified.

4. The combination of the upper section B having an elongated neck *c* and provided with grooves or recesses *b'*, a grounded section A fitted within the neck and having outwardly-projecting ribs *b* adapted to the grooves *b'*, an insulating-ring *d* between the sections, a lower section D secured to the upper section, and insulating material *e* between the lower and grounded sections, substantially as specified.

In testimony whereof I affix my signature in the presence of two witnesses.

GEORGE PEEPLES.

Witnesses:

J. W. BURKET,  
J. W. ALLEN.