

No. 821,920.

PATENTED MAY 29, 1906.

W. A. BONNELL.
INSULATING APPLIANCE.
APPLICATION FILED APR. 3, 1905.

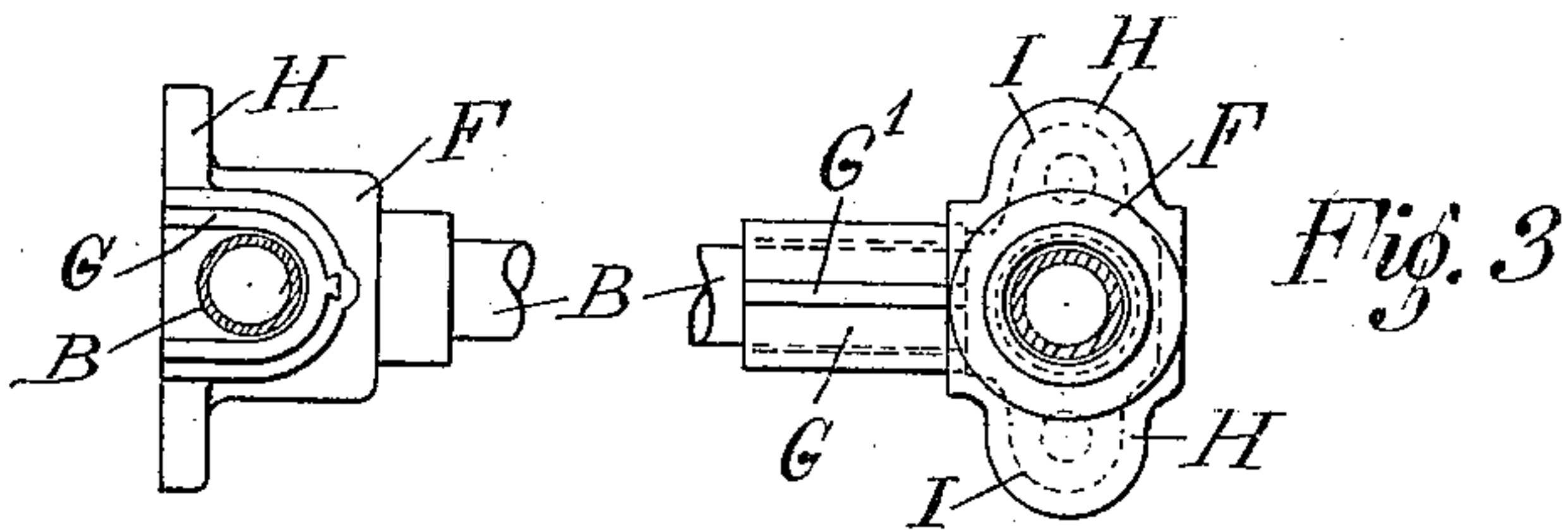
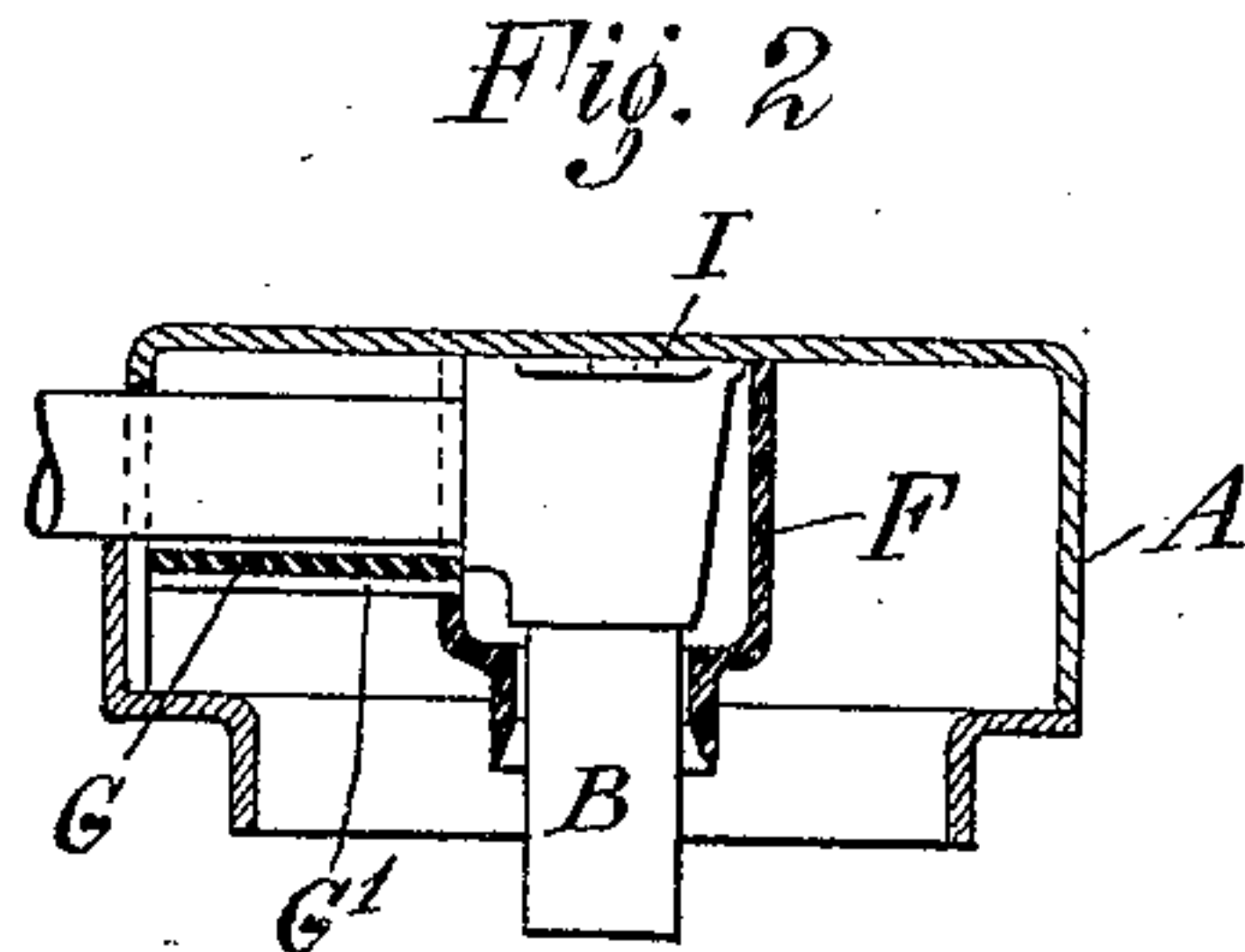
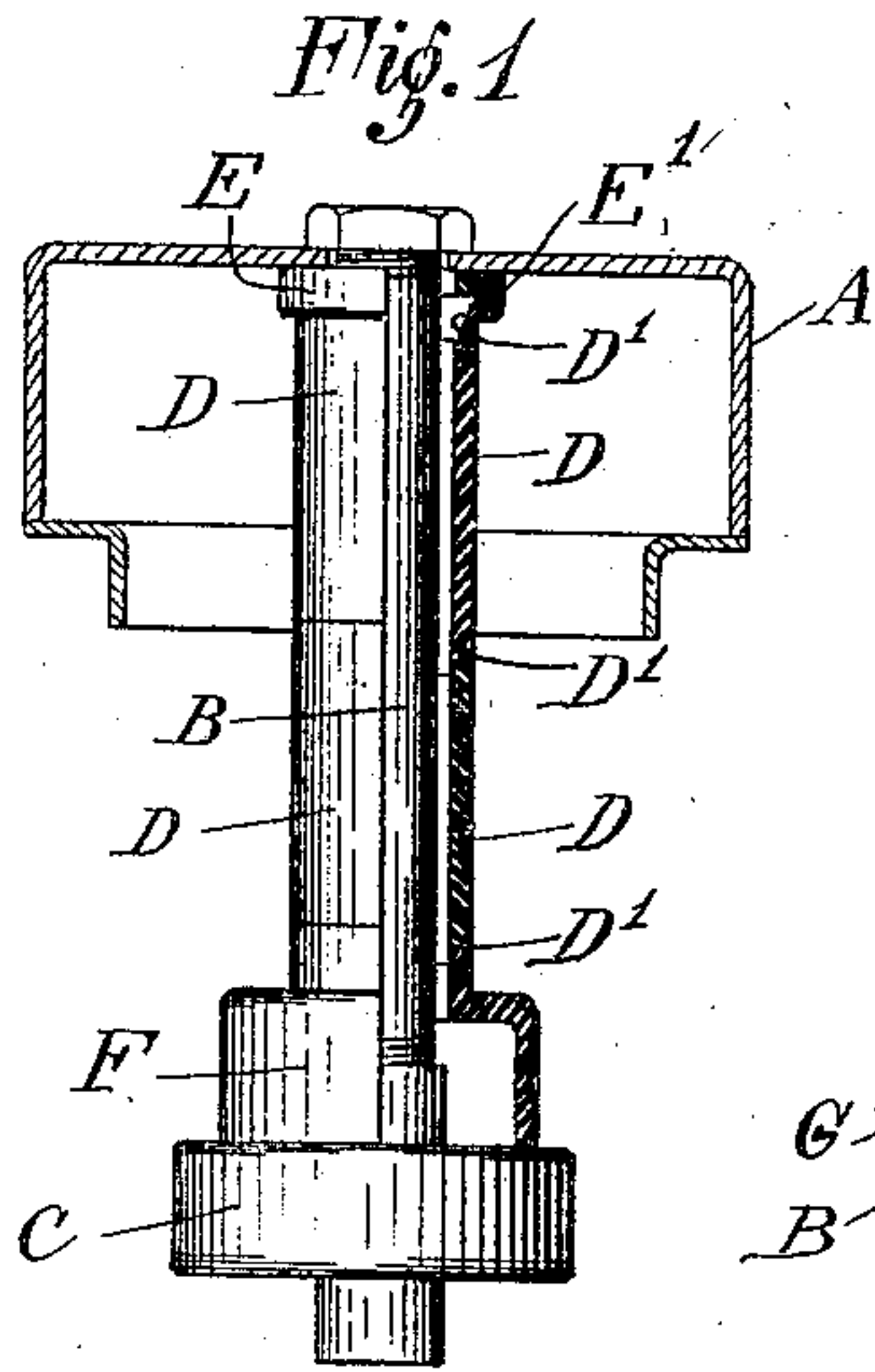


Fig. 4

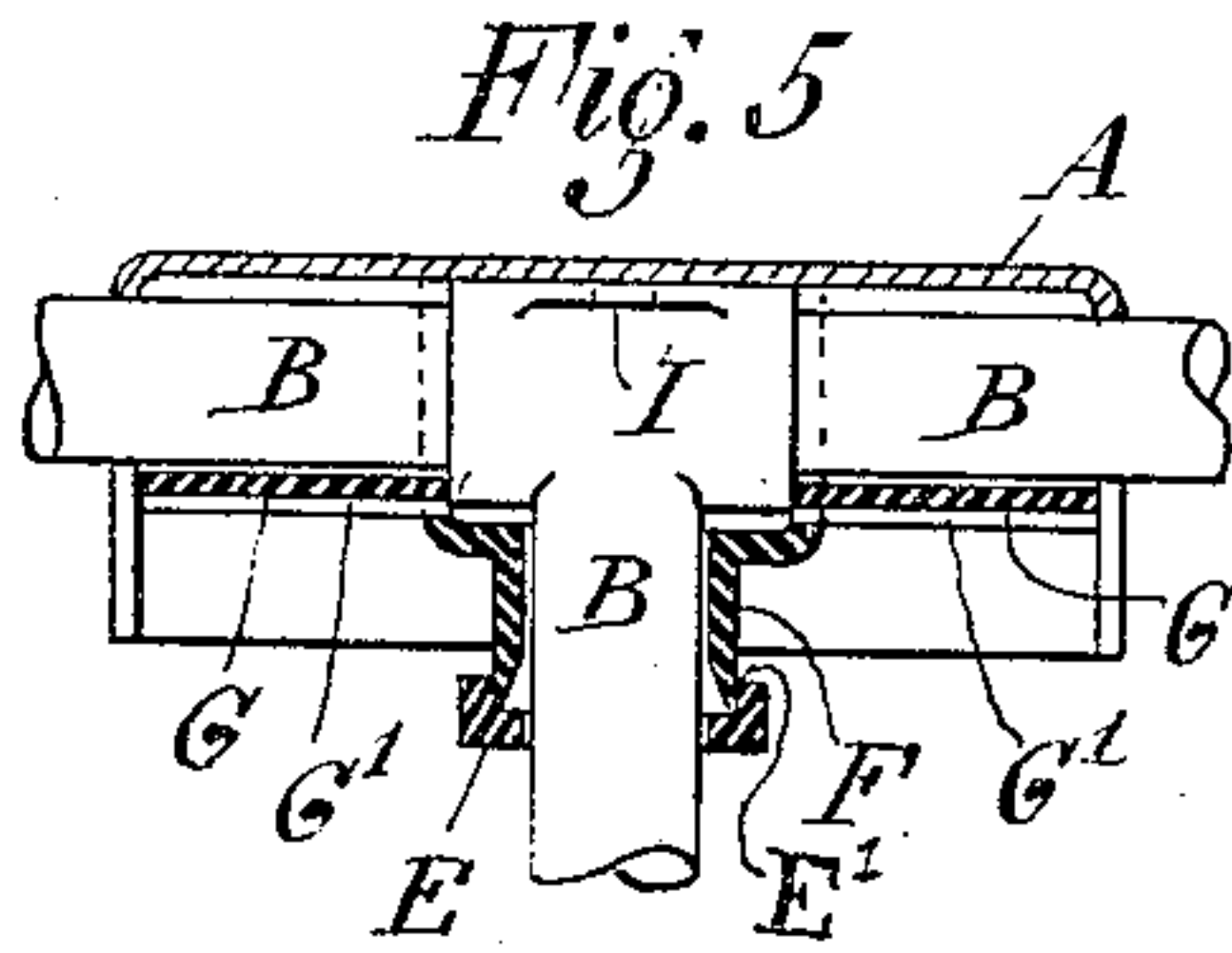
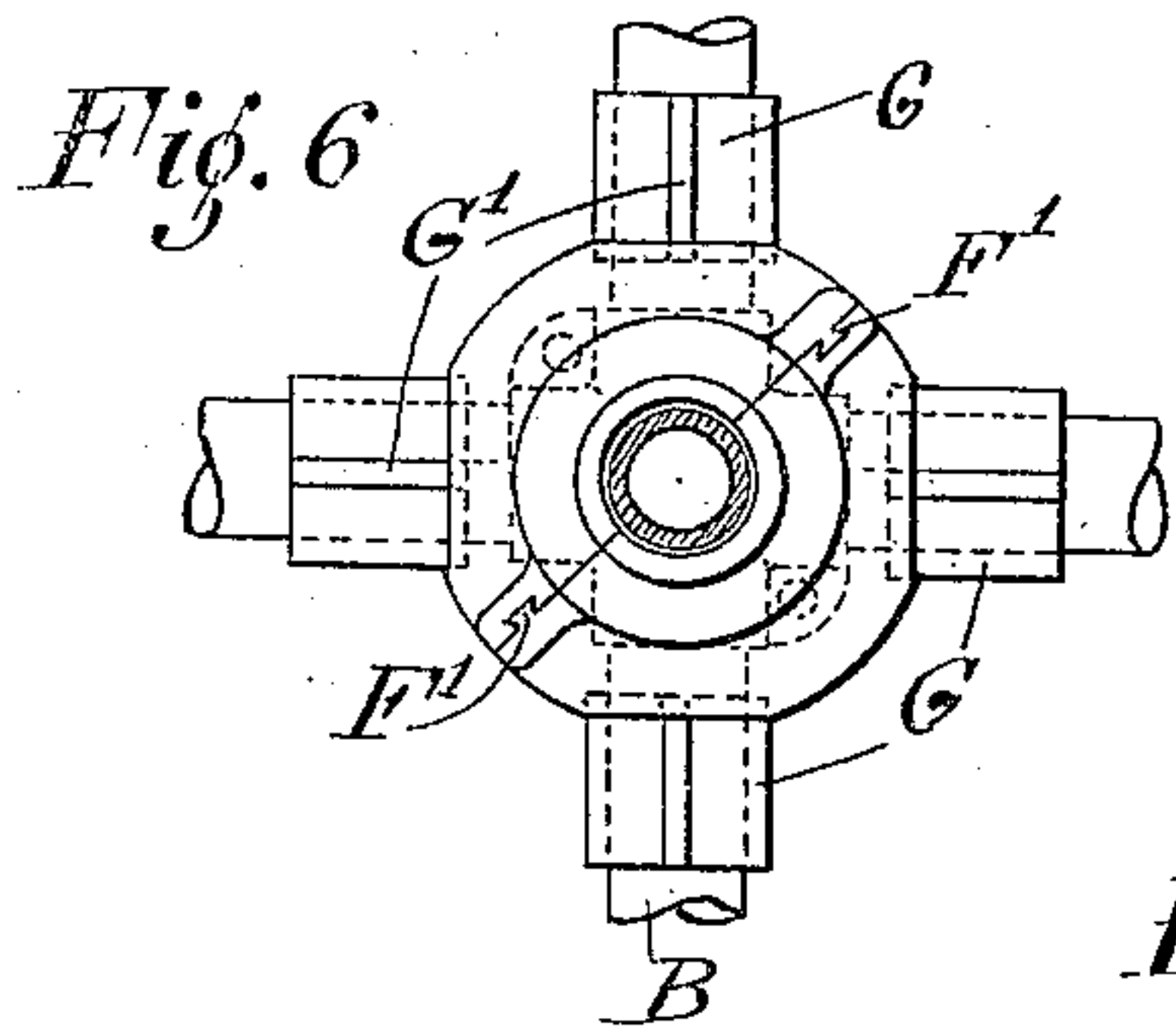


Fig. 7

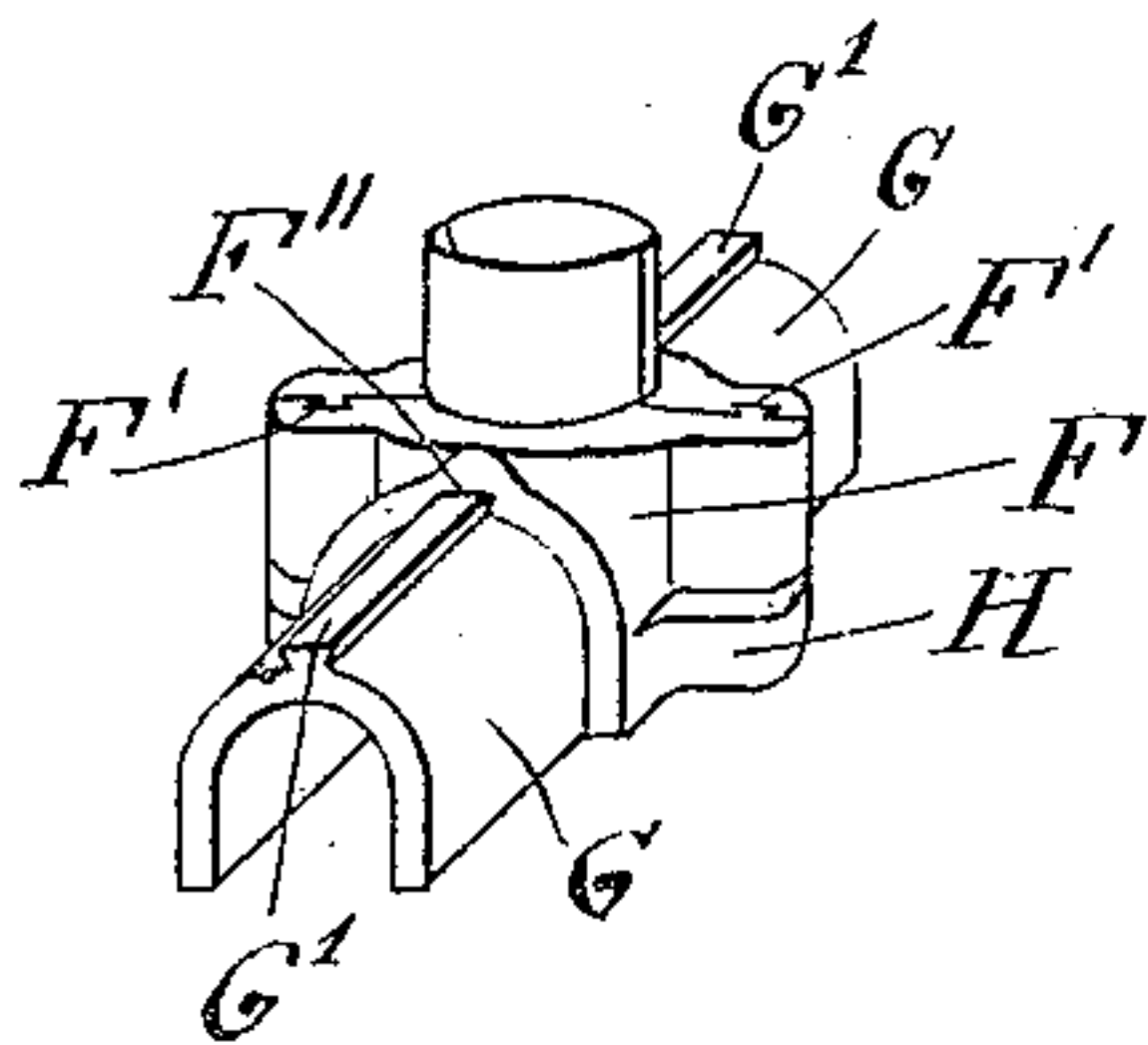


Fig. 9

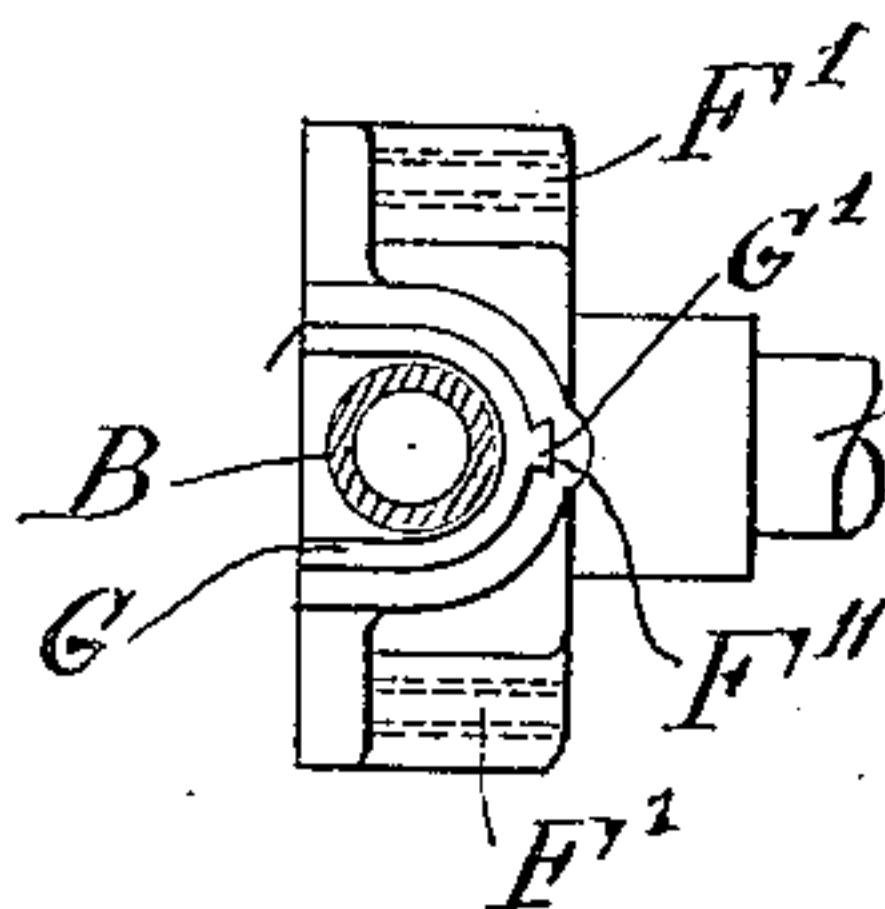


Fig. 8

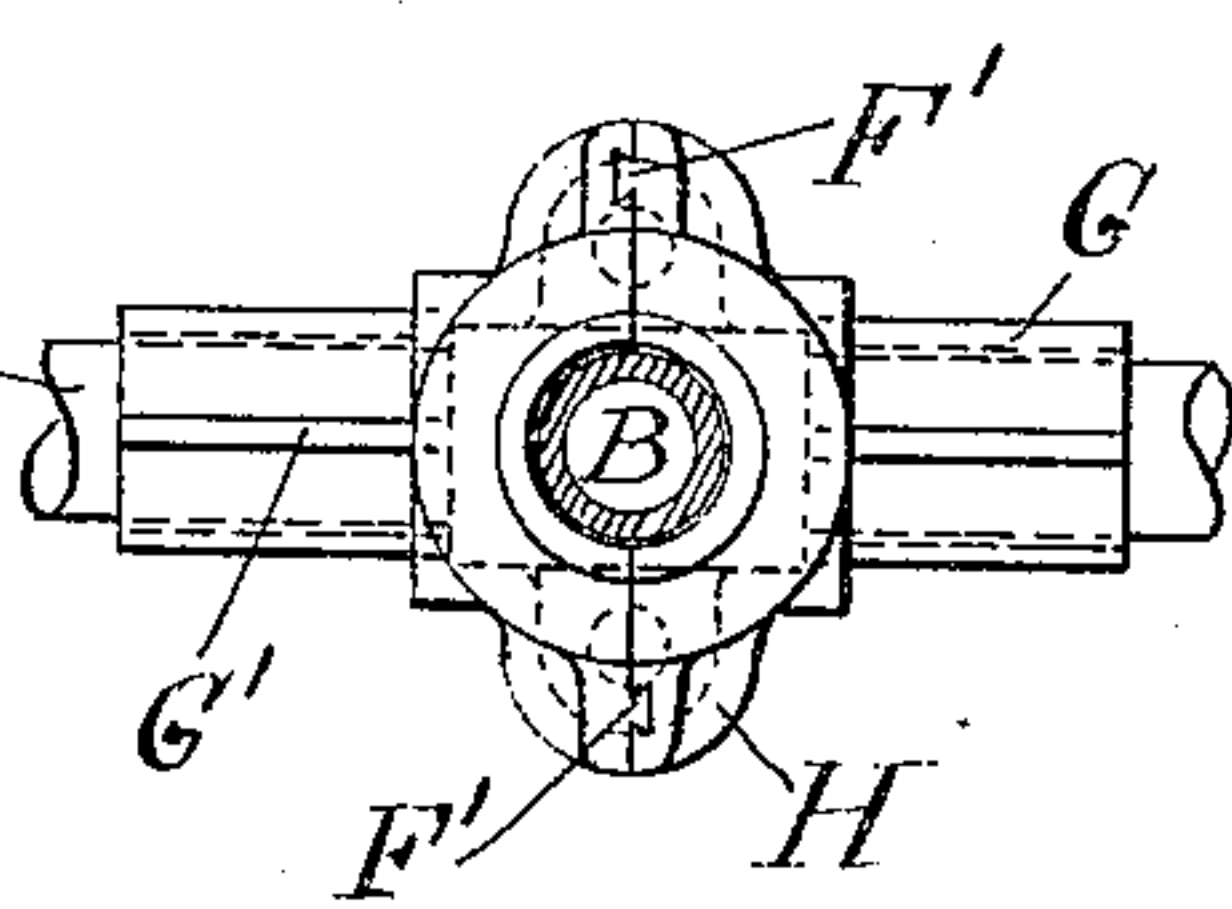
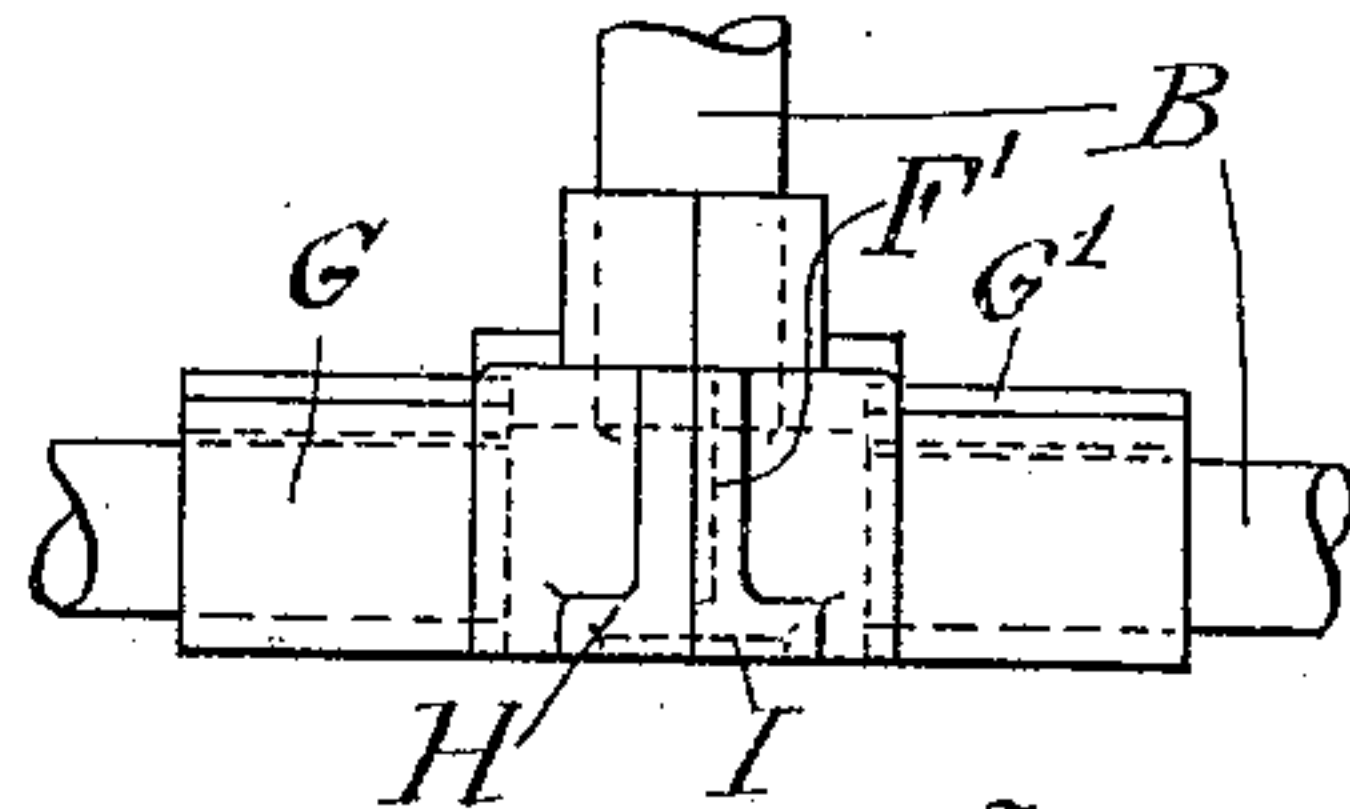


Fig. 10



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INSULATING APPLIANCE.

No. 821,920.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed April 3, 1905. Serial No. 253,532.

To all whom it may concern:

Be it known that I, WILLIAM A. BONNELL, a citizen of the United States of America, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Insulating Appliances, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to improvements in electrical insulating appliances, and is particularly adapted for use on gas-pipe outlets and in connection with outlet-boxes. The various inspection departments insist that all
15 gas-pipe outlets shall be covered and insulated, and the materials heretofore most generally used for this purpose have been linen tape and circular loom-tubing. Both of these materials will absorb moisture. The tape is
20 required to be wound around the gas-pipe outlet and the metal part of the insulating-joint with great care; but this is not generally done by the workmen, and the circular loom-tubing does not cover all of the metal part of
25 the insulating-joint nor the metal flanges of the gas-pipe. It is largely due to the inefficiency of such insulation that short circuits occur and fires are started, and my appliances are designed to remedy those defects by substituting a hard non-porous highly-insulating
30 substance of a shape adapted to closely fit over any form of gas-pipe outlet, thereby thoroughly insulating same from contact with the electric wires in the outlet-box.

35 For the purpose of illustration I have shown in the accompanying drawings the several pieces comprising my improved insulation and the adaptation of the same to the different forms of gas-pipe outlets as used in connection with the usual forms of outlet-boxes.

40 Figure 1 is a vertical section of an outlet-box and a single gas-pipe outlet, showing an application of my insulating-pieces. Fig. 2 is a vertical section of an outlet-box and a
45 double gas-pipe outlet, showing another application of my insulating-pieces. Fig. 3 is a plan view of Fig. 2. Fig. 4 is an end view at an angle of ninety degrees and looking from left to right at Fig. 2. Fig. 5 is a vertical section of a three-branch gas-pipe outlet and
50 outlet-box, showing another application of my insulating-pieces. Fig. 6 is a plan view

of a five-branch gas-pipe outlet, showing another application of my insulating-pieces and a means for interlocking said pieces together. 55 Fig. 7 is a perspective view of a three-branch gas-pipe outlet, showing the application of my interlocking insulating-pieces. Fig. 8 is a plan view of Fig. 7. Fig. 9 is an end view at an angle of ninety degrees looking from left
60 to right at Fig. 8, and Fig. 10 is a view of Fig. 8.

A is the outlet-box, B the gas-pipe, and C a standard form of insulating-joint.

D designates tubular insulating-pieces having graduated coupling ends D', and E is a 65 ring or bushing provided with a recess E', adapted to receive the end of one of the tubes D. Where it is desired to slightly lengthen the insulation, the ring E may be inserted upside down or additional rings may be added. 70

F is the insulating junction-piece, which is also provided with a graduated coupling end D', adapted to engage the adjoining end of a tubular insulating-piece. For branch outlets the U-shaped insulating-piece G may be 75 employed, and the insulating junction-piece F may be cut away to receive same, as shown in Fig. 4. The insulating junction-piece may also be extended at the bottom, as shown at H, for the purpose of covering the gas-pipe 80 flanges I. The insulating junction-piece F may be made in sections interlocked by dove-tailed ends, as shown at F' in Figs. 6, 7, 8, and 9, and the U-shaped insulating-pieces G may be provided with interlocking ridges G', 85 adapted to engage grooves F'' in the openings in the insulating junction-pieces F.

Where found desirable, the U-shaped insulating member G and the insulating junction member F may be formed as a single 90 piece, and various other modifications may be made without departing from the spirit of my invention.

Having described my invention, what I claim, and desire to secure by Letters Patent, 95 is—

1. In combination with insulating appliances, pipe-outlets and outlet-boxes, said insulating appliances comprising tubular and ring members, said ring members provided 100 with an inner recess, and all of said members adapted to pass over and insulate said pipe-outlets.

2. In combination with insulating appli-

ances, pipe-outlets and an outlet-box, some
of said insulating appliances comprising tubu-
lar members and other of said insulating ap-
pliances comprising U-shaped members, any
5 of said members adapted to be joined to-
gether, and all of said members adapted to
pass over and insulate said pipe-outlets.

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

WILLIAM A. BONNELL.

Witnesses:

CHARLOTTE ROSENTHAL,
THOMAS A. HILL.