

No. 629,396.

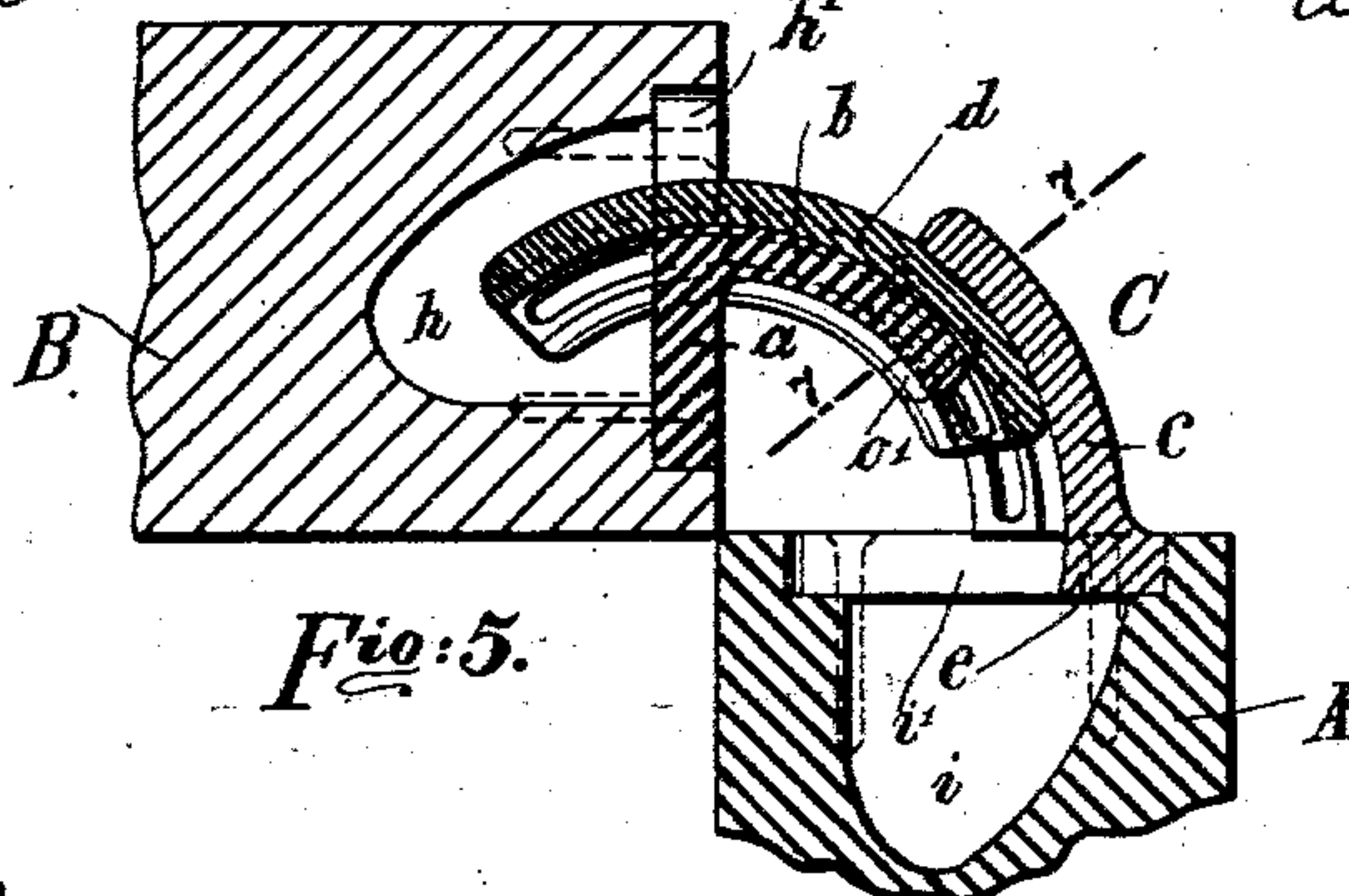
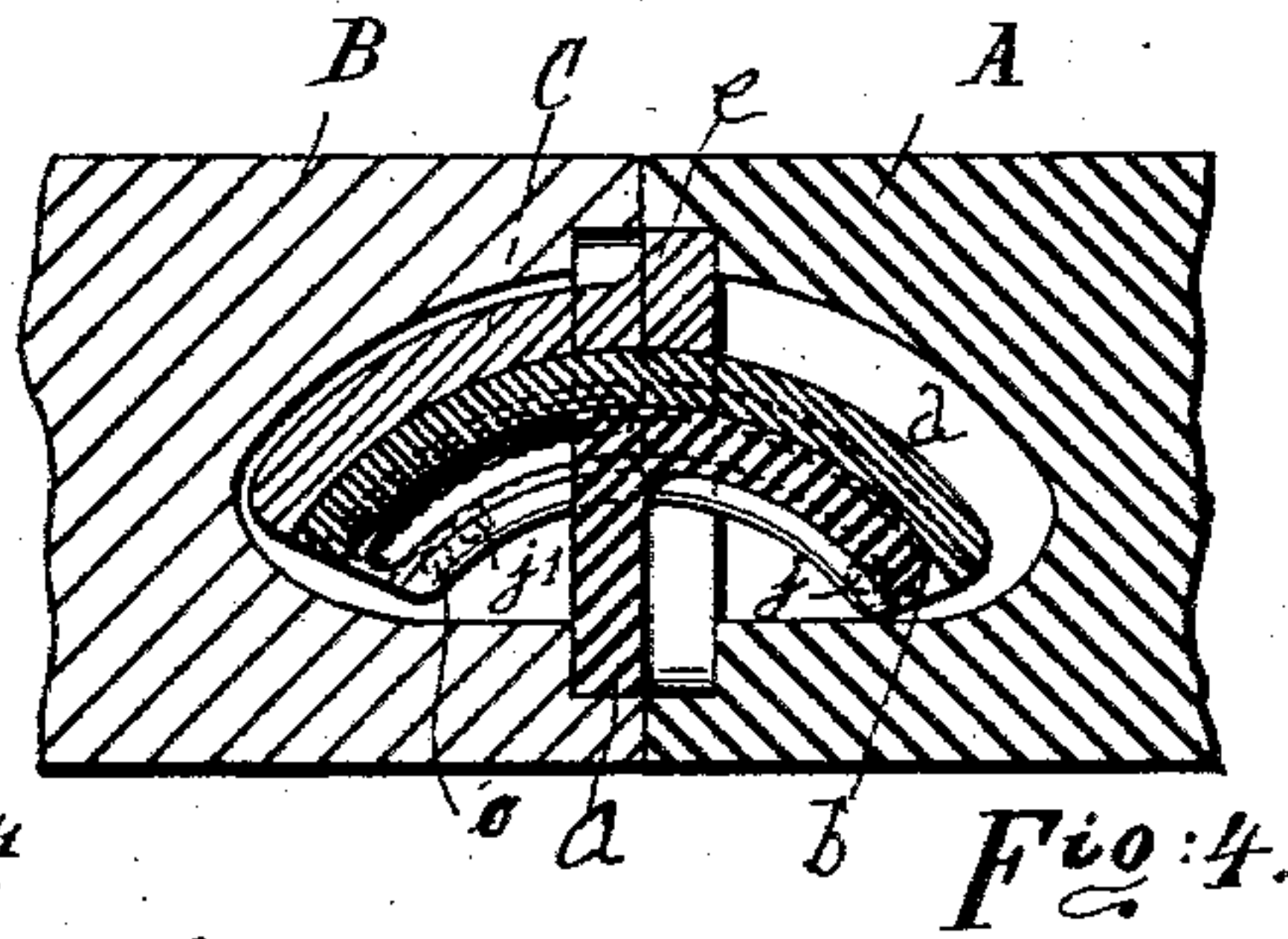
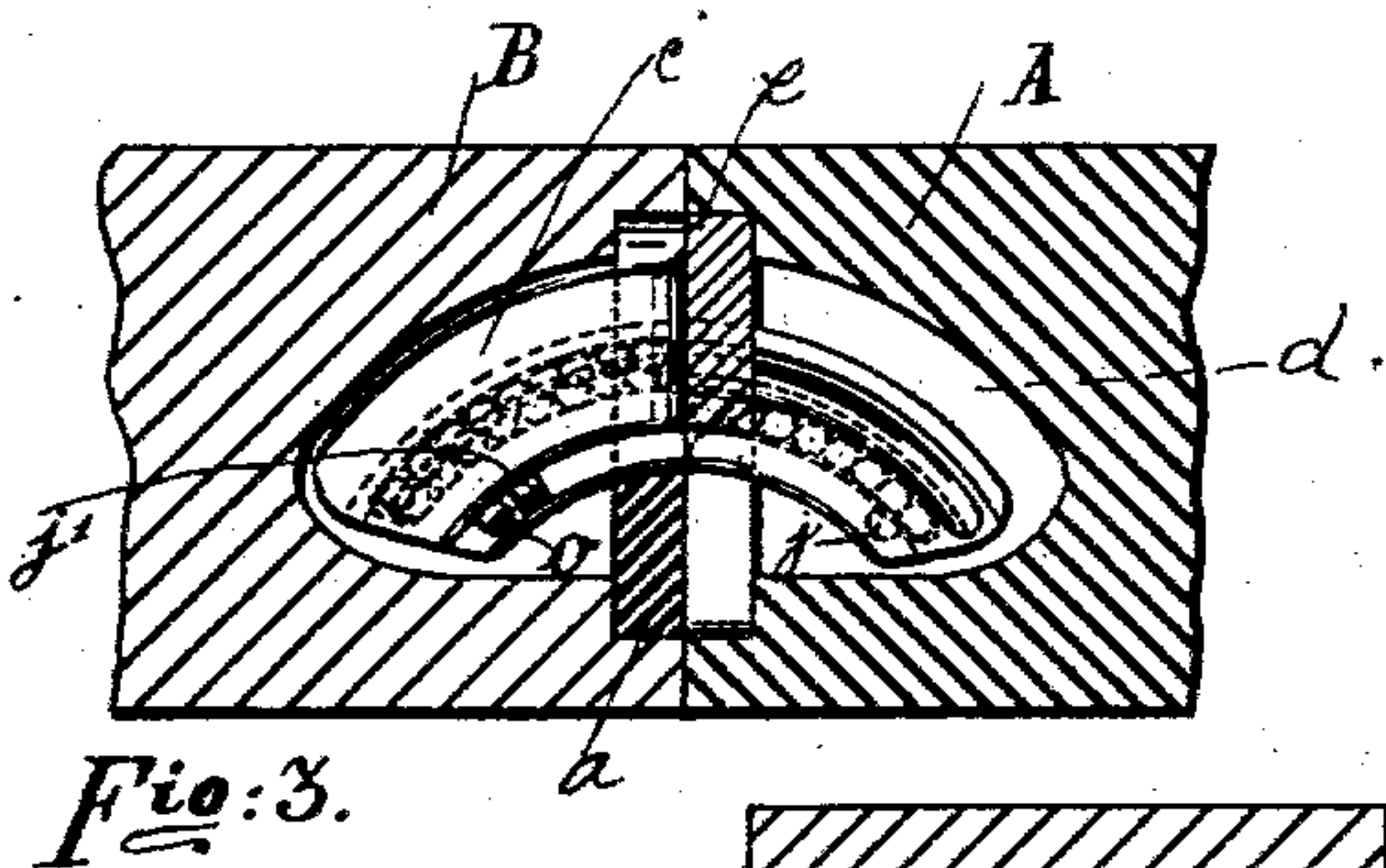
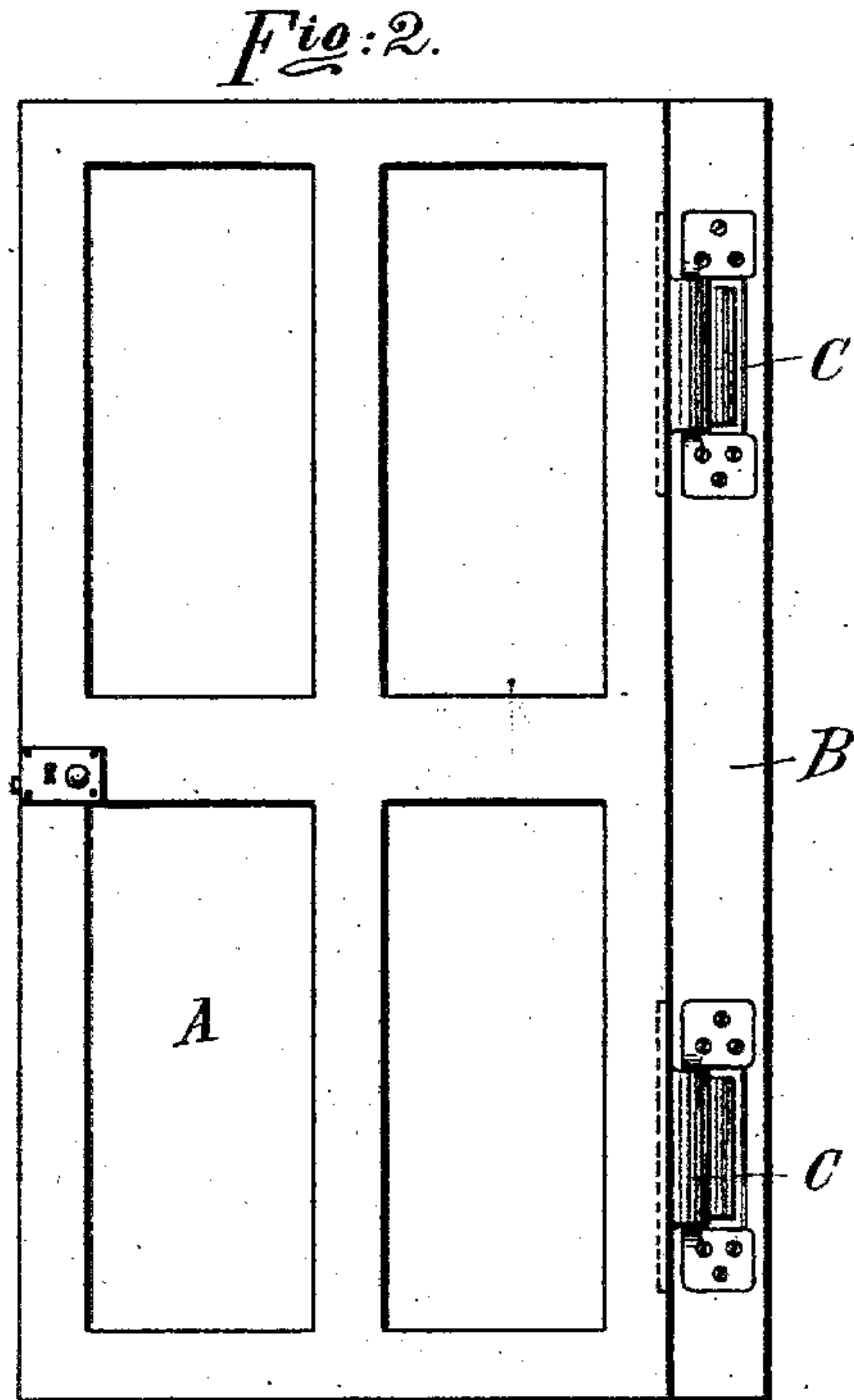
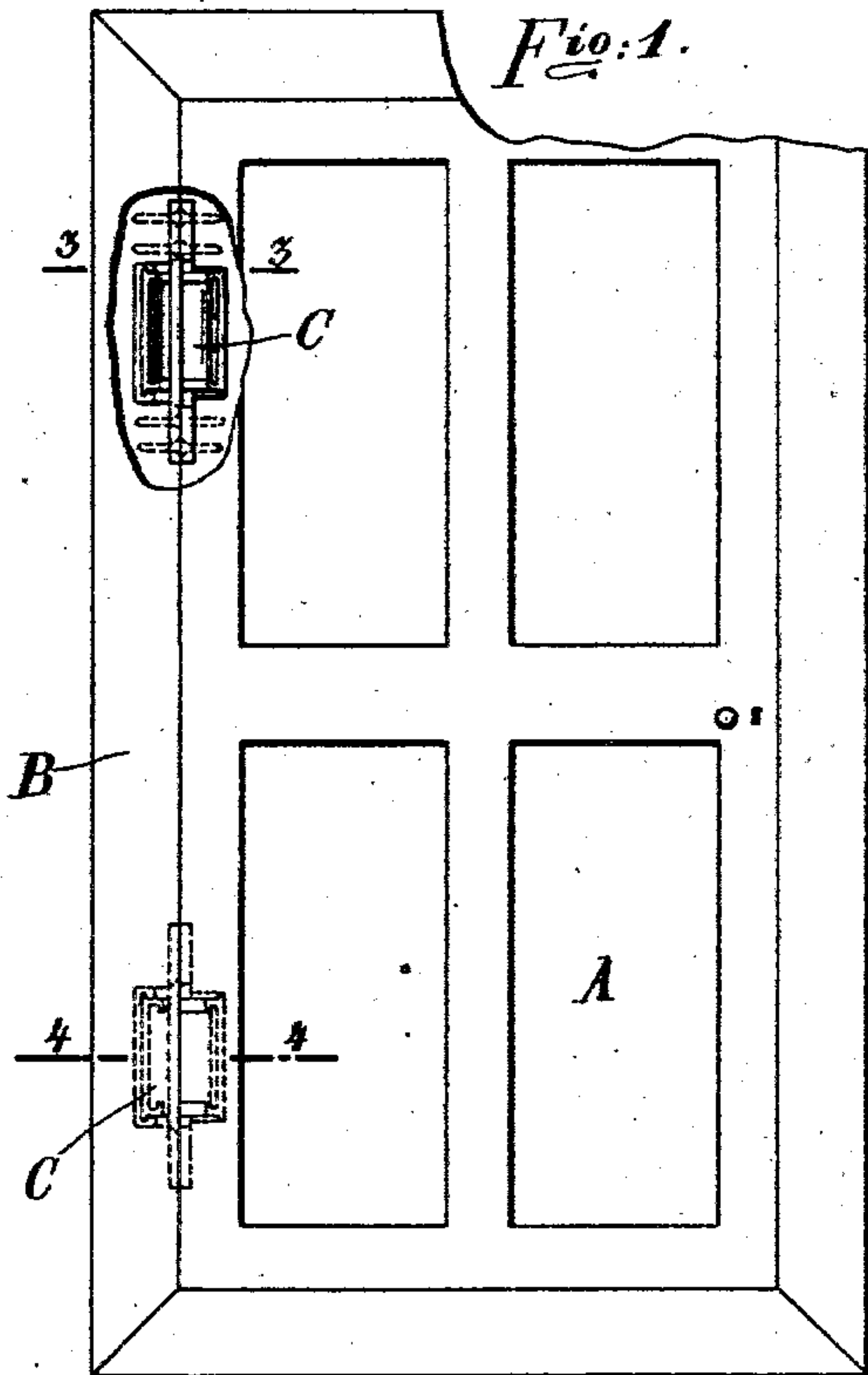
Patented July 25, 1899.

W. SCHUCH.  
HINGE.

(Application filed July 11, 1898.)

(No Model.)

2 Sheets—Sheet 1.



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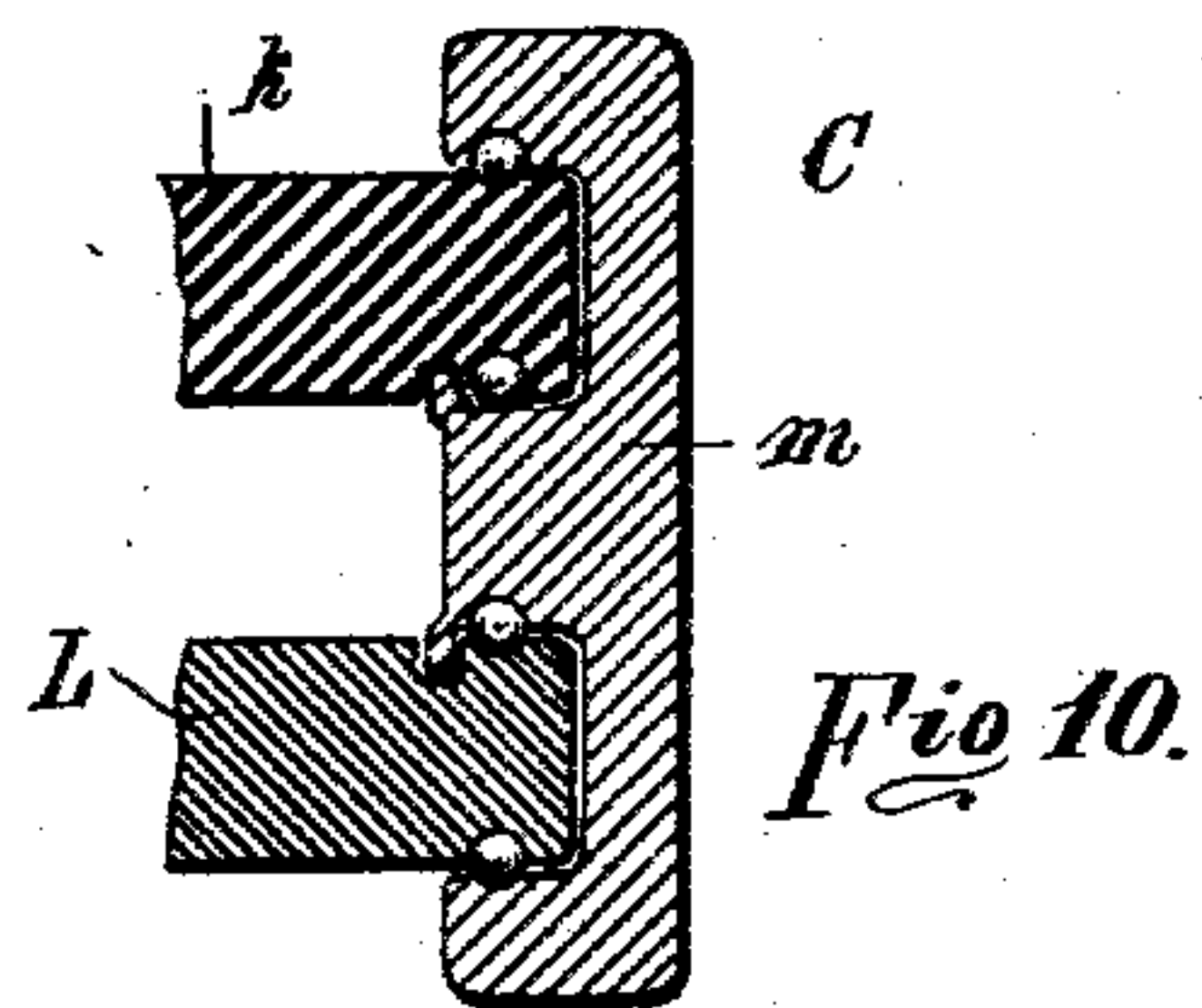
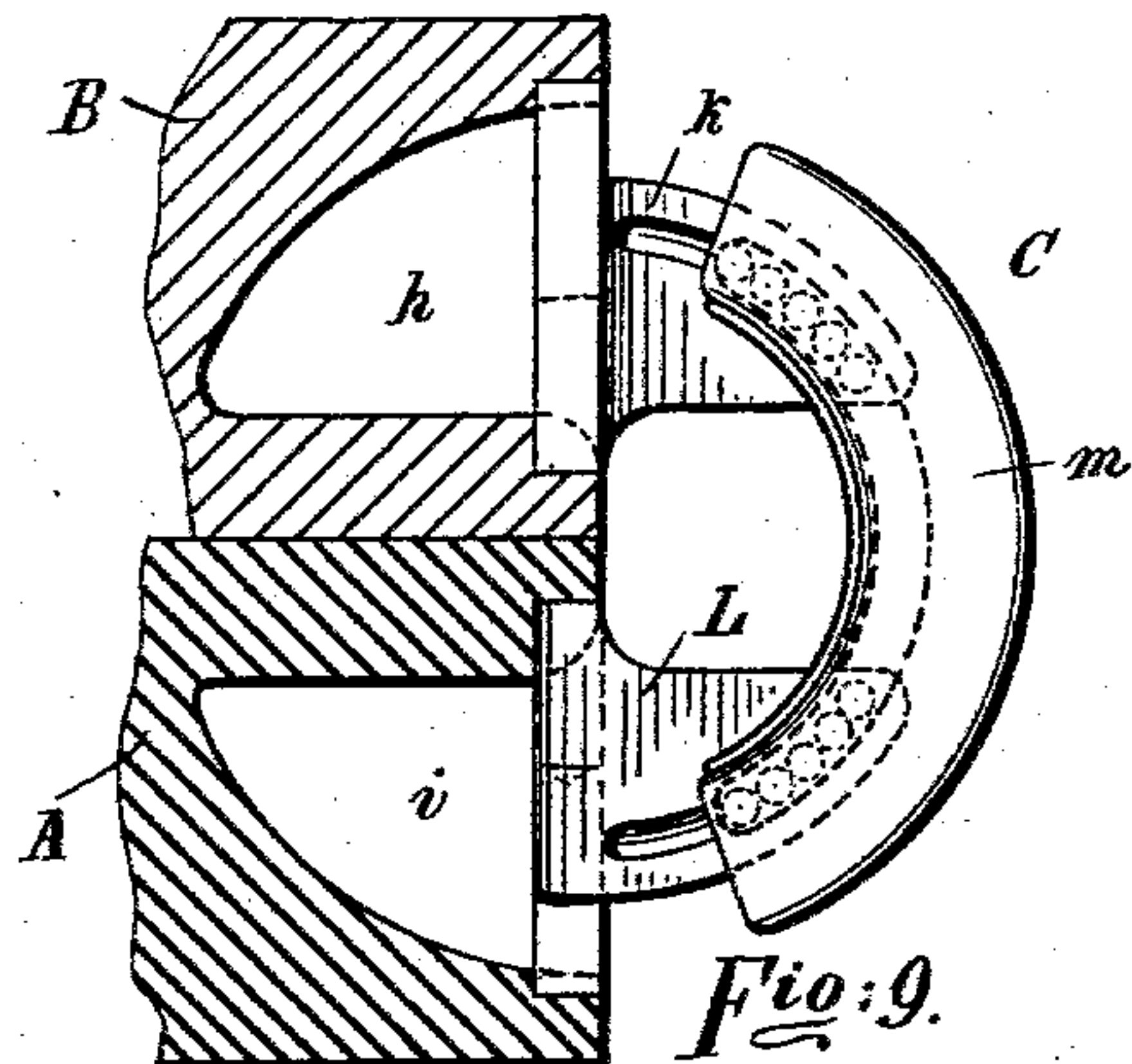
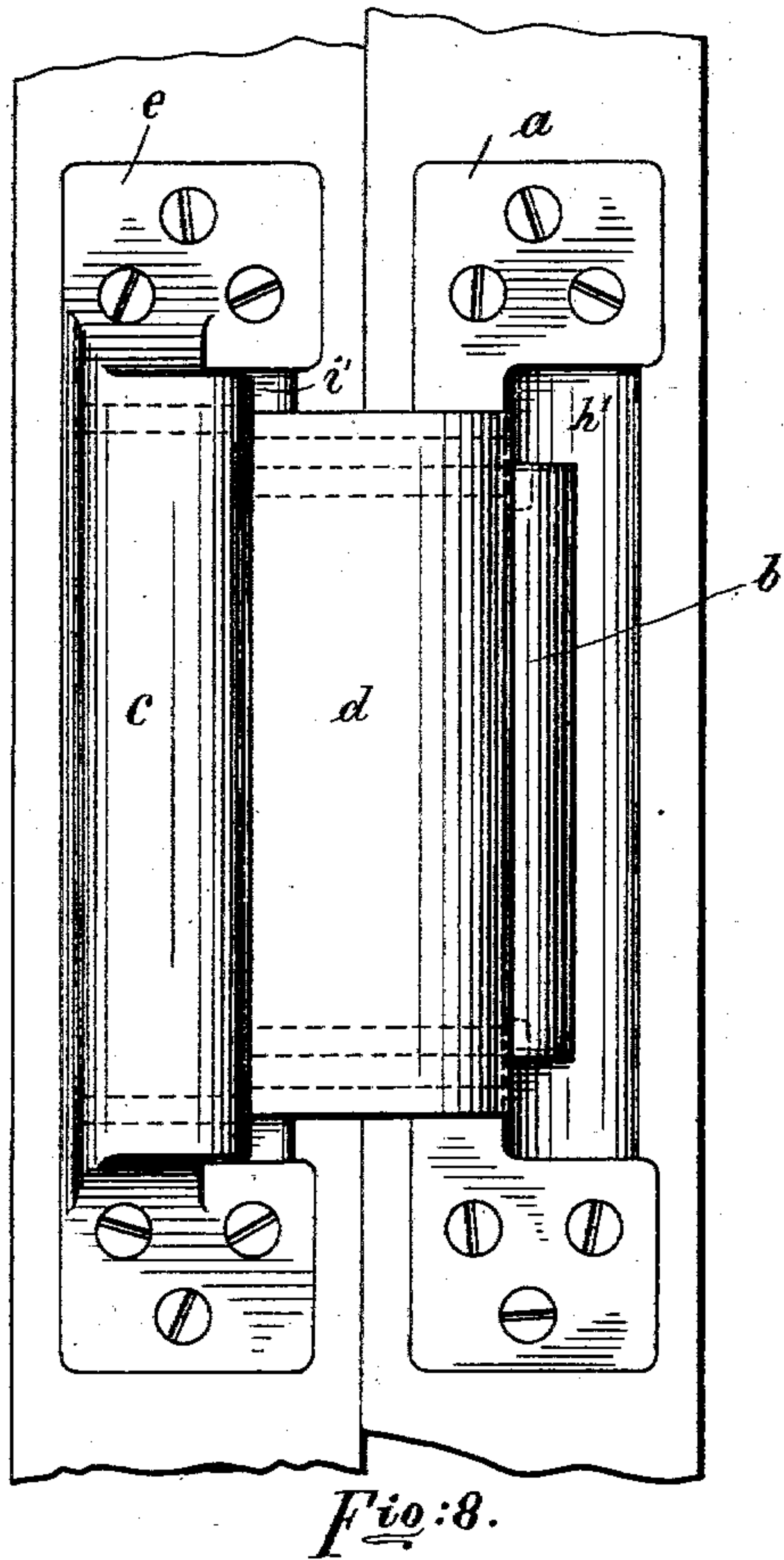
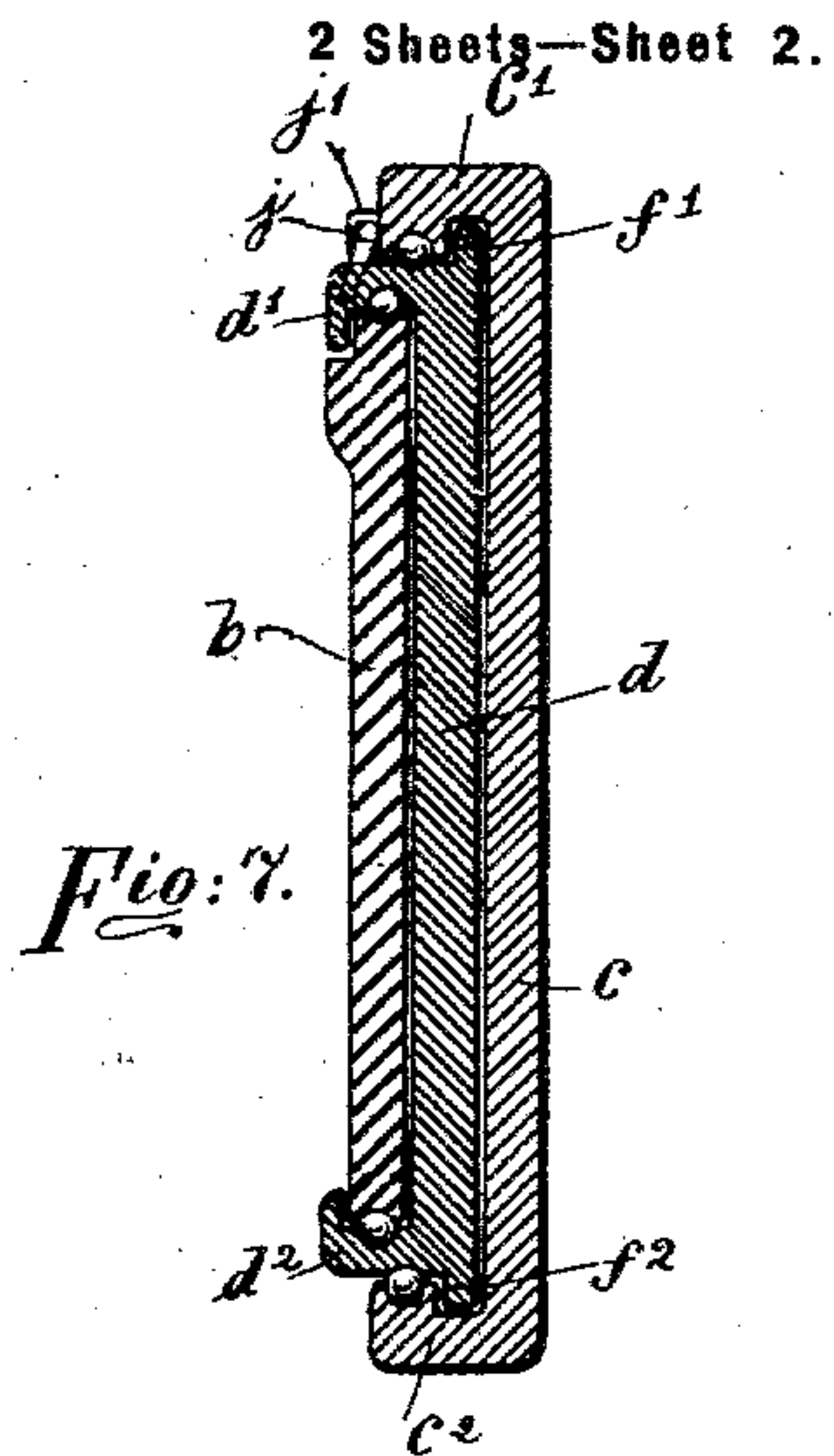
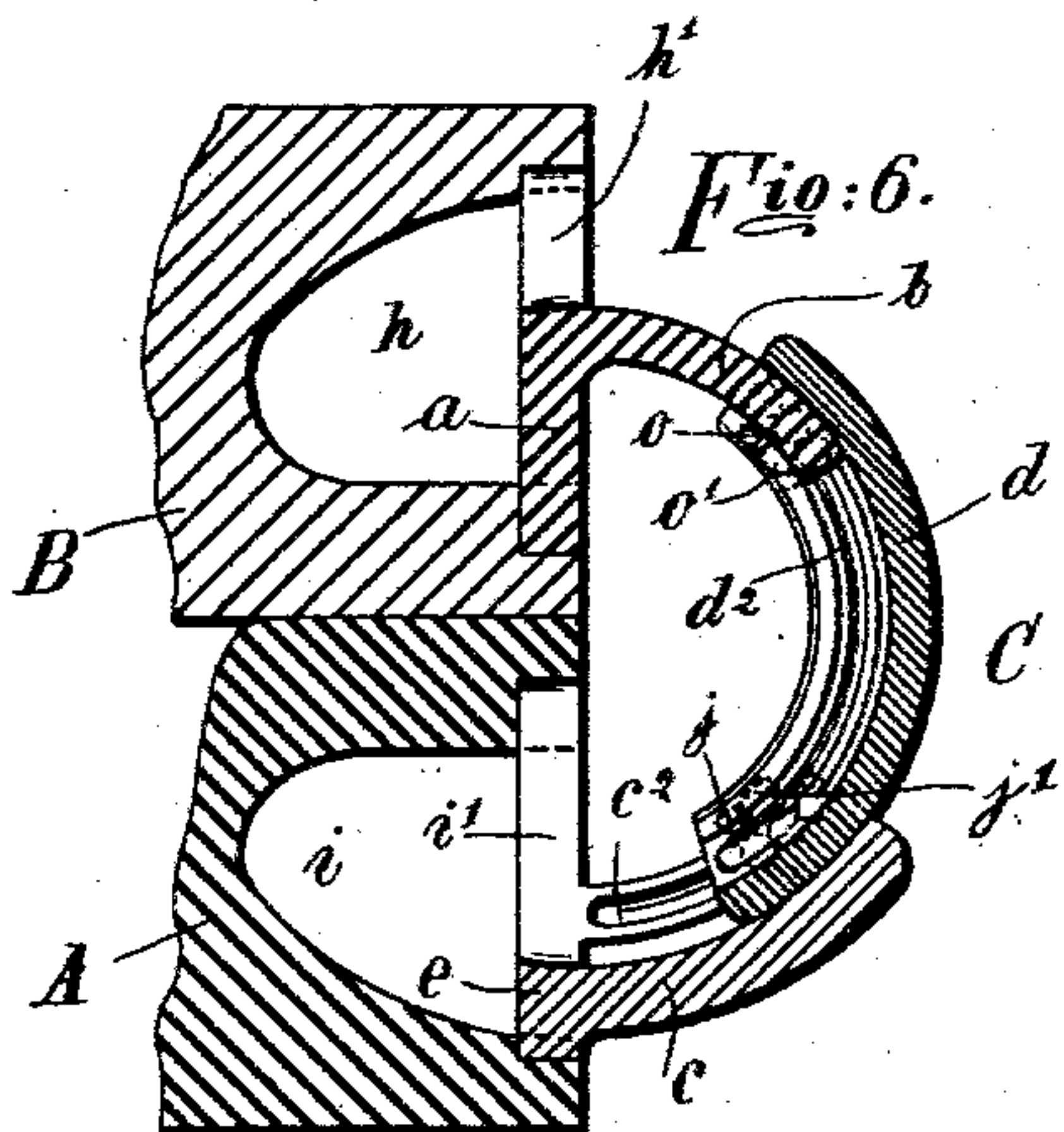
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# UNITED STATES PATENT OFFICE.

WILLIAM SCHUCH, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO FRED LUTZ, OF WEST HOBOKEN, NEW JERSEY.

## HINGE.

SPECIFICATION forming part of Letters Patent No. 629,396, dated July 25, 1899.

Application filed July 11, 1898. Serial No. 685,610. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM SCHUCH, a citizen of the United States, residing at New York city, in the State of New York, have invented certain new and useful Improvements in Hinges, of which the following is a specification.

My invention relates to hinges.

I will describe a hinge embodying my invention and then point out the novel features therein in the claims.

In the drawings, Figure 1 represents a front view of a door, part being broken away to expose a hinge. Fig. 2 is a view showing the door half open. Fig. 3 is a detail sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a detail sectional view on the line 4 4 of Fig. 1. Fig. 5 is a similar section, the hinge being partially extended. Fig. 6 is a section showing the hinge entirely extended. Fig. 7 is a detailed sectional view on the line 7 7 of Fig. 5. Fig. 8 is an end elevation, on a larger scale, of the hinge, showing part of door on frame. Fig. 9 is a top view of a modification. Fig. 10 is a detail sectional view of Fig. 9.

Similar letters of reference refer to corresponding parts throughout the several figures.

A represents a door, B the frame, and C the hinges.

The hinge C comprises the parts *a*, *e*, and *d*, which are formed so that they have a sliding connection or engagement with each other and can telescope, thereby enabling the hinge when the door is closed to be confined in a small space and be out of view, as will be seen from the several figures. The fastening-plates *a* and *e* are secured, respectively, over recessed portions *h* and *i* in the frame and door. The plate *a* is formed with a longitudinal opening *h'* and a longitudinally-disposed and laterally-projecting portion *b*, which is preferably curved. The plate *e* is also provided with a longitudinal opening *i'* and a longitudinally-disposed and laterally-curved projection *c* and in addition overhanging flanges *C'* and *c'*, which embrace flanges *f'* and *f'* on the connecting plate or sleeve *d*. This plate or sleeve is provided with overhanging flanges *d'* and *d'*, which embrace the edges of the projection *b*. Between the ad-

jacent faces of these several parts balls may be provided to lessen the friction between these faces when the parts are moved.

The several parts of the hinge are assembled as shown, and when the door is in closed position the hinge is as shown in Figs. 3 and 4.

In opening the door the parts *c* will slide out of the recess *h* until the pin *j*, which is part of the plate or sleeve *d*, engages with the shoulder *j'* of the projection *c*, holding the sleeve *d* and permitting it to slide over the projection *b* until the door is open. The pin *o*, which is part of sleeve *d*, and shoulder *o'*, which is part of portion *b*, prevent the sleeve *d* from sliding off the projection *b*.

The projections *b* and *c*, as well as the plate or sleeve *d*, have one common center, so that the edges of the door and frame will make a good fit when the door is closed.

In Figs. 9 and 10, which show a modification, the projections are shown as plates *k* and *L*, sliding in curved grooves of the sleeve *m*. The operation is the same as above described.

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

1. In a hinge, the combination of a fastening-plate having a longitudinal opening and a longitudinally-disposed and laterally-curved projection, a sleeve sliding thereon and a second longitudinally-disposed and laterally-curved projection embracing the former, the latter being part of a fastening-plate having a longitudinal opening, substantially as described.

2. The combination of a door-frame provided with a recess, a door having a recess opposite the recess in the frame and a hinge between said door and frame said hinge comprising fastening-plates secured to the frame and door and each having a longitudinally-disposed and laterally-curved projection extending therefrom and a longitudinal opening, and a longitudinally-disposed curved sleeve having a sliding engagement with said projections, said projections and sleeve being adapted when the door is closed to pass through the longitudinal openings in the plates and engage the recesses in the door and frame, substantially as described.



3. In a hinge the combination of fastening-  
plates each having a projection, a sleeve hav-  
ing a sliding engagement with each of said  
projections, balls interposed between the ad-  
5 jacent surfaces of the said sleeve and pro-  
jections, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of  
two subscribing witnesses.

WILLIAM SCHUCH.

Witnesses:

JOHANN REHRAUER,

JACOB MÜLLER.