

(No Model.)

P. FORG.  
HINGE.

No. 373,352.

Patented Nov. 15, 1887.

Fig. 1.

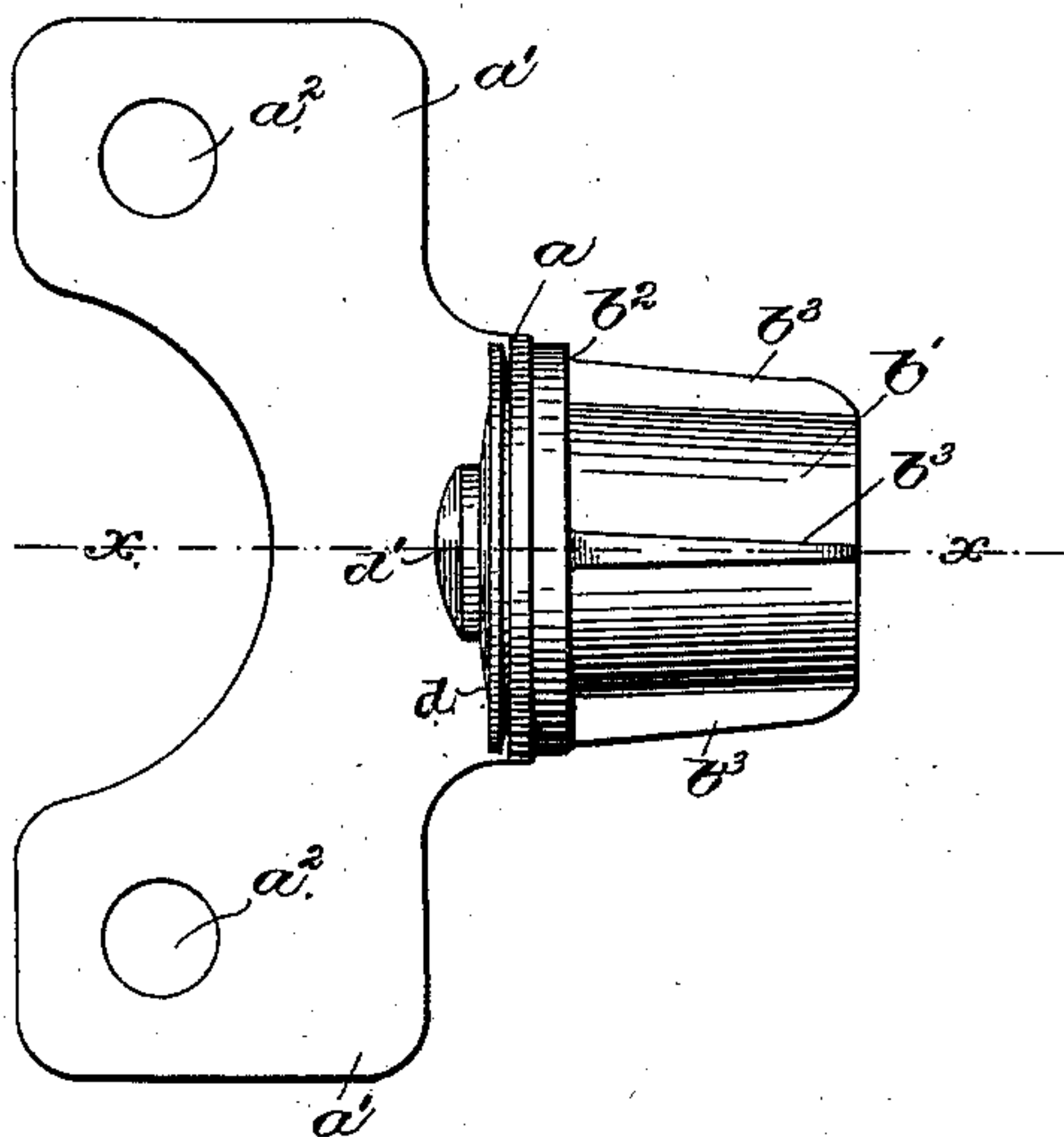


Fig. 2.

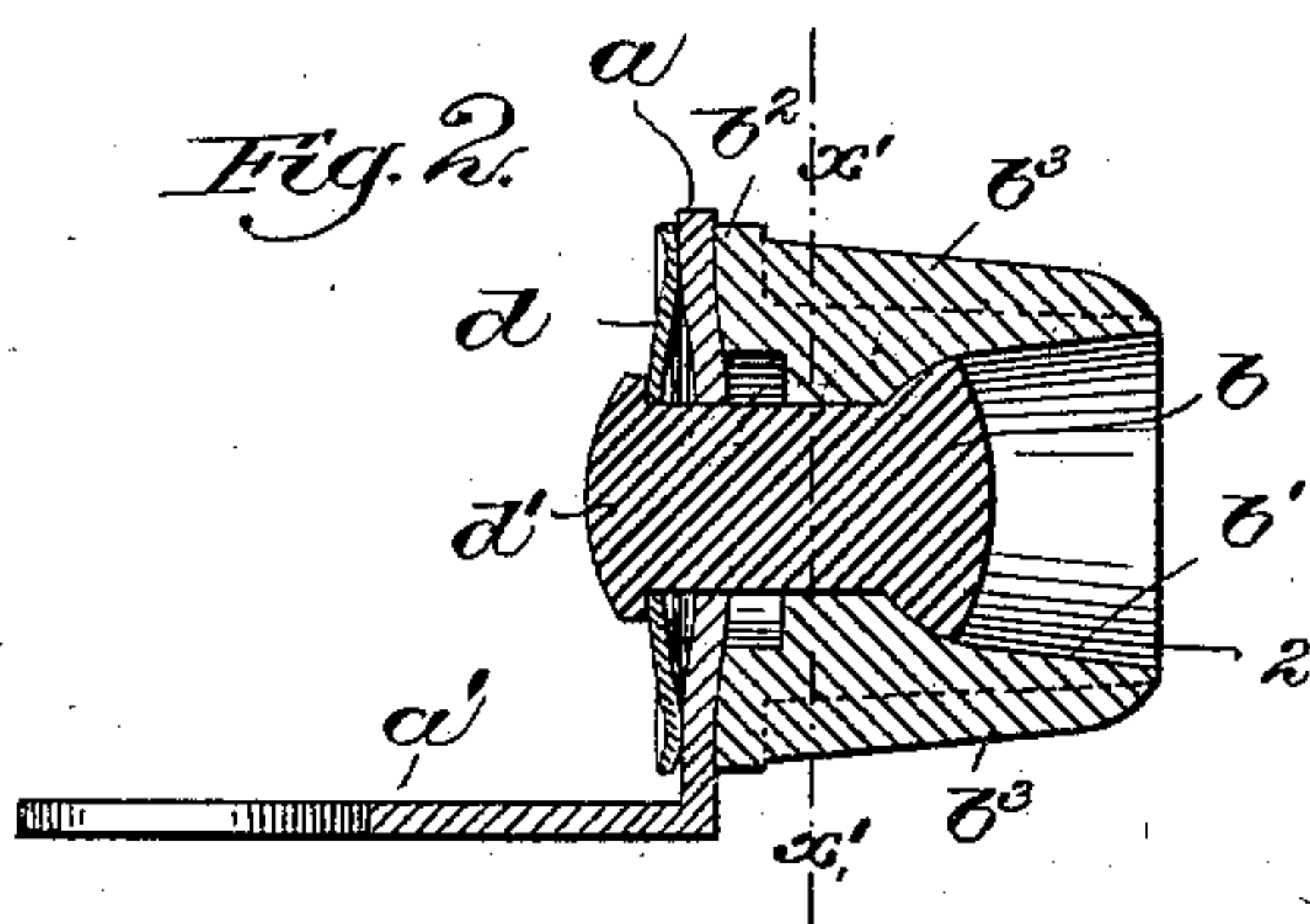
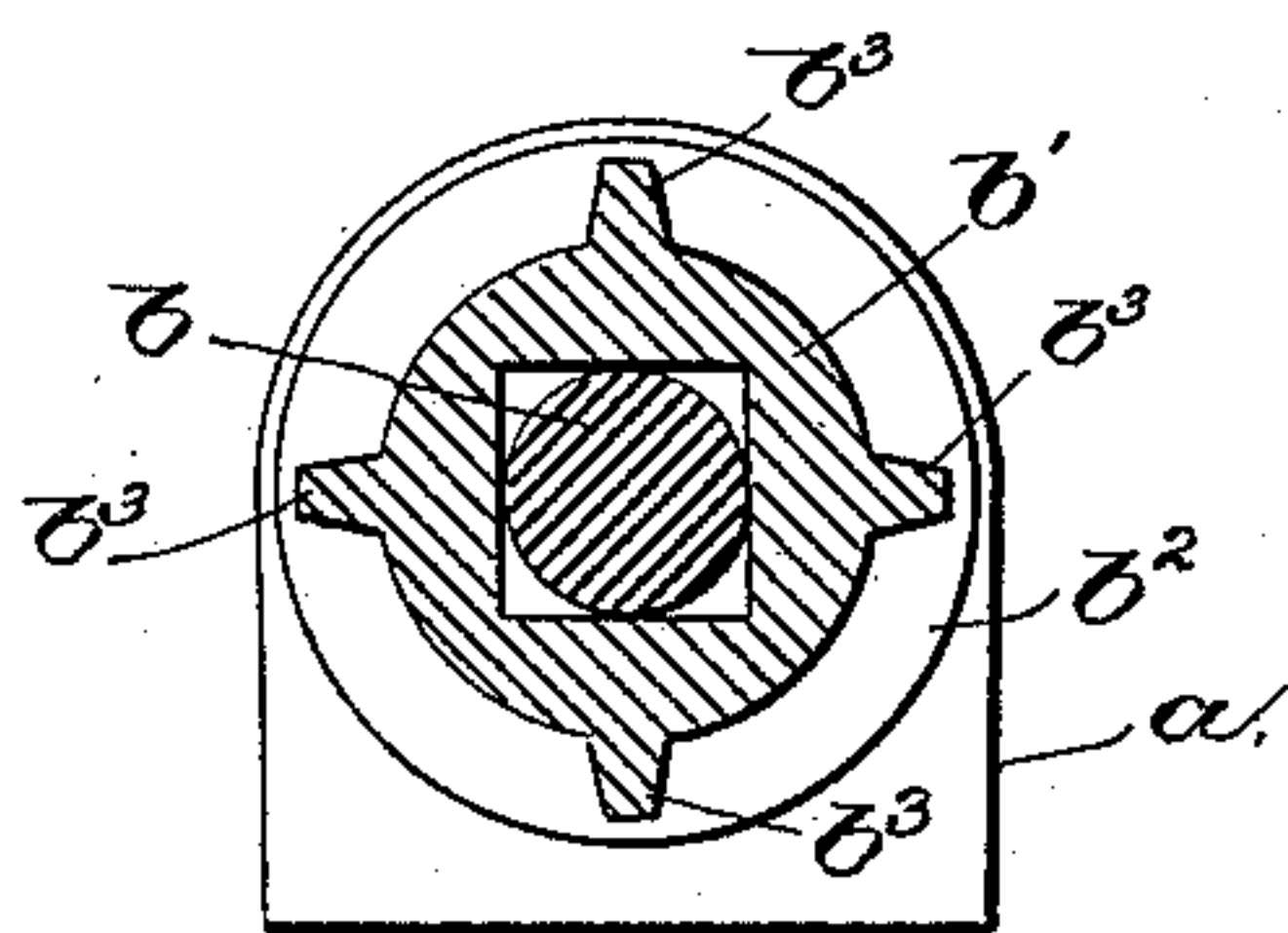


Fig. 3.



Witnesses.

John F. C. Printz  
Fred L. Emery.

Inventor.

Peter Forg.  
by Crosby & Gregory Attys.

# UNITED STATES PATENT OFFICE.

PETER FORG, OF SOMERVILLE, MASSACHUSETTS.

## HINGE.

SPECIFICATION forming part of Letters Patent No. 373,352, dated November 15, 1887.

Application filed January 11, 1887. Serial No. 224,013. (No model.)

*To all whom it may concern:*

Be it known that I, PETER FORG, of Somerville, county of Middlesex, and State of Massachusetts, have invented an Improvement in Hinges, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

In another application, Serial No. 224,012, I have shown and described a friction-hinge for mirrors and similar articles, which is composed of two sheet-metal halves having ears maintained in contact by spring-washers, one half of said hinge being adapted to be secured to a stationary or fixed part of a mirror or other frame and the other to a movable part or frame.

My improved hinge is composed of a single leaf secured to a hollow stud adapted to be driven, preferably, into the mirror-frame, the said stud having longitudinal flanges or ears to hold it in place and prevent it rotating, the said leaf having its ear maintained in frictional contact with the face of the hollow stud by a spring washer or disk.

Figure 1 is a top view of a hinge embodying my invention; Fig. 2, a vertical section on line  $x x$ ; and Fig. 3, a section of Fig. 2 on line  $x' x'$ , looking toward the left.

The leaf of my improved hinge is stamped out of sheet metal, and is struck up to form an ear,  $a$ , substantially at a right angle to the foot portion  $a'$ , the latter having holes  $a^2$ , by which the foot is secured in place.

The ear  $a$  has an opening through which is inserted a rivet,  $b$ , which is also extended through a hollow stud,  $b'$ , adapted to be driven into the wood or other material to which the hinge is to be secured, the said stud being provided at its front end or head with a flange,  $b^2$ , and having longitudinal ribs  $b^3$ , which hold it in place and prevent it from being turned or rotated.

The ear  $a$ , which is herein shown concaved near its center, and which bears directly against the front face of the flange  $b^2$ , is maintained in contact with the said flange by a spring washer or disk,  $d$ , herein shown con-

caved on its inner face, which is kept pressed against the outer face of the said ear by the head  $d'$  of the rivet  $b$ , the concavity of the spring-washer being opposite to that of the ear  $a$ .

The opening in the spring washer or disk  $d$  and in the stud  $b'$ , through which the rivet is extended, is square or rectangular, or other than round shape, so as to prevent the said disk from rotating independently of the hinge-leaf, the washer also assisting to prevent the said stud from turning when the hinge-leaf is turned.

The front edge of the stud  $b'$  is substantially sharp, as at 2, to assist the entrance of said stud into the wood or other material into which it is driven, which in practice will preferably be the mirror-frame; but it may be just the reverse.

The spring washer or disk  $d$  is of such strength and stiffness as to exert sufficient friction between the ear and flange  $b^2$  to maintain the hinge in the position into which it is or may be turned.

By making the spring-washer concaved and applying it to the ear  $a$  so that its concavity will be opposite to that of the said ear, a greater spring motion is obtained; but instead of having both the washer and ear concaved I may make the ear flat or smooth, the washer being concaved; or I may make the washer flat, the ear being concaved.

I claim—

A friction-hinge comprising a single leaf having an ear substantially at right angle to its feet, combined with a hollow stud,  $b'$ , in contact with the inner face of the said ear, and with a spring washer or disk bearing against the outer face of the said ear and secured thereto, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PETER FORG.

Witnesses:

G. W. GREGORY,  
J. H. CHURCHILL.