

(No Model.)

M. H. SEXTON.
HINGE.

No. 583,512.

Patented June 1, 1897.

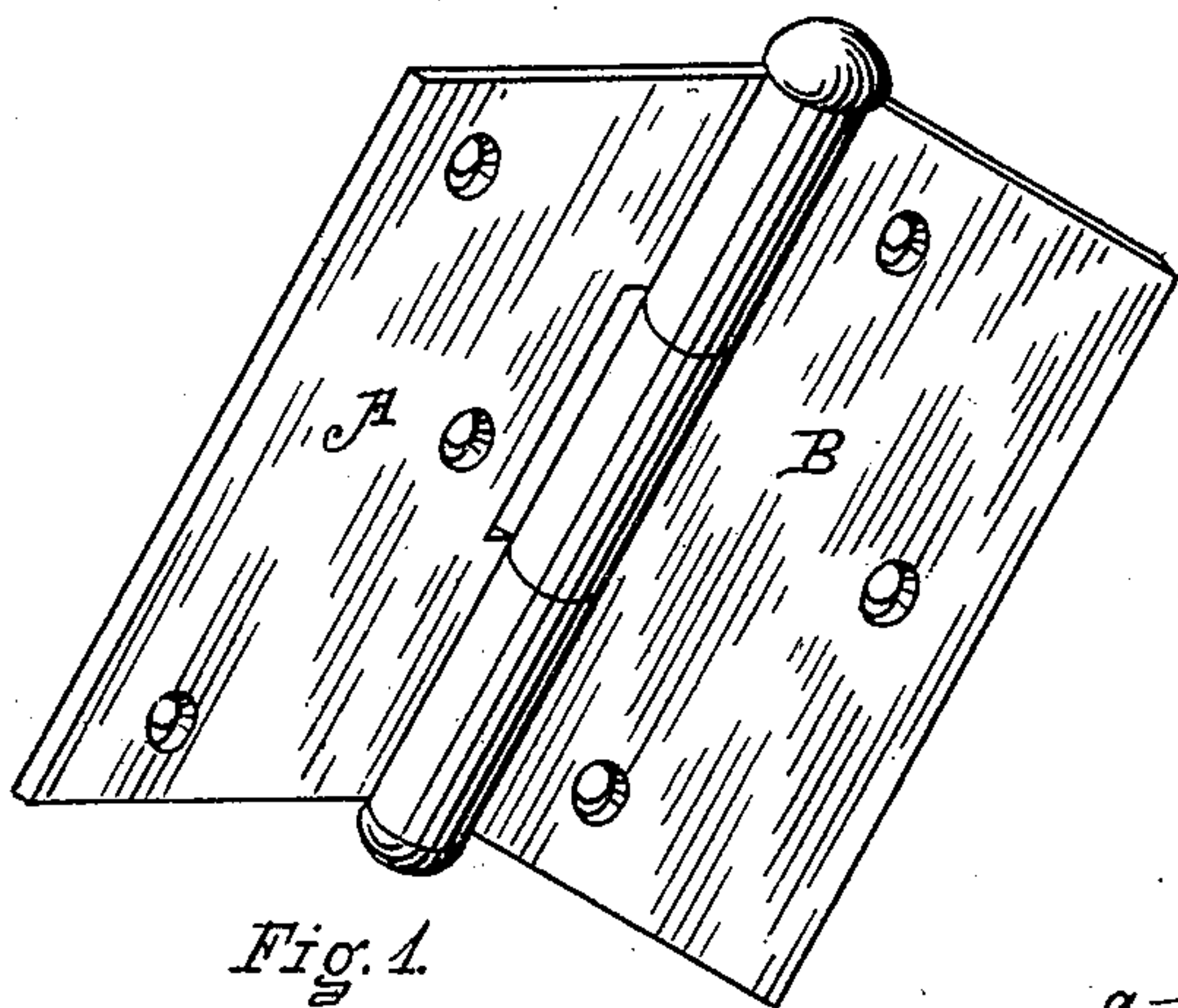


Fig. 1.

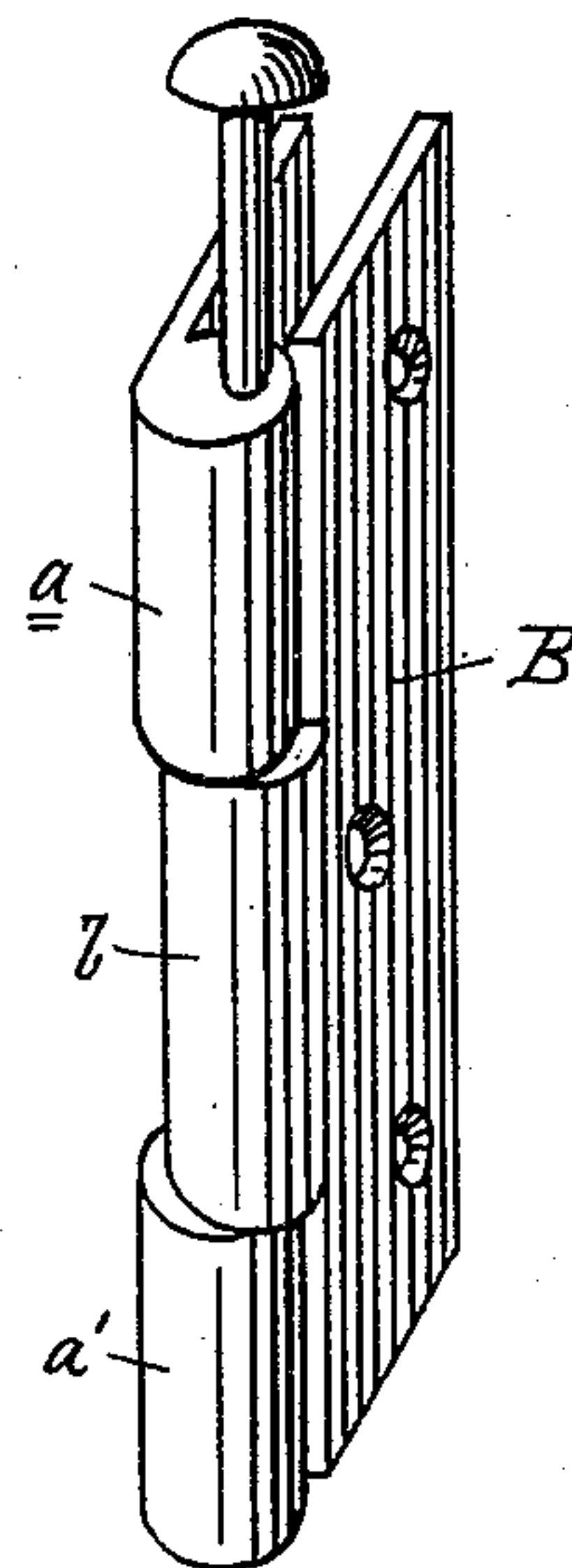


Fig. 3.

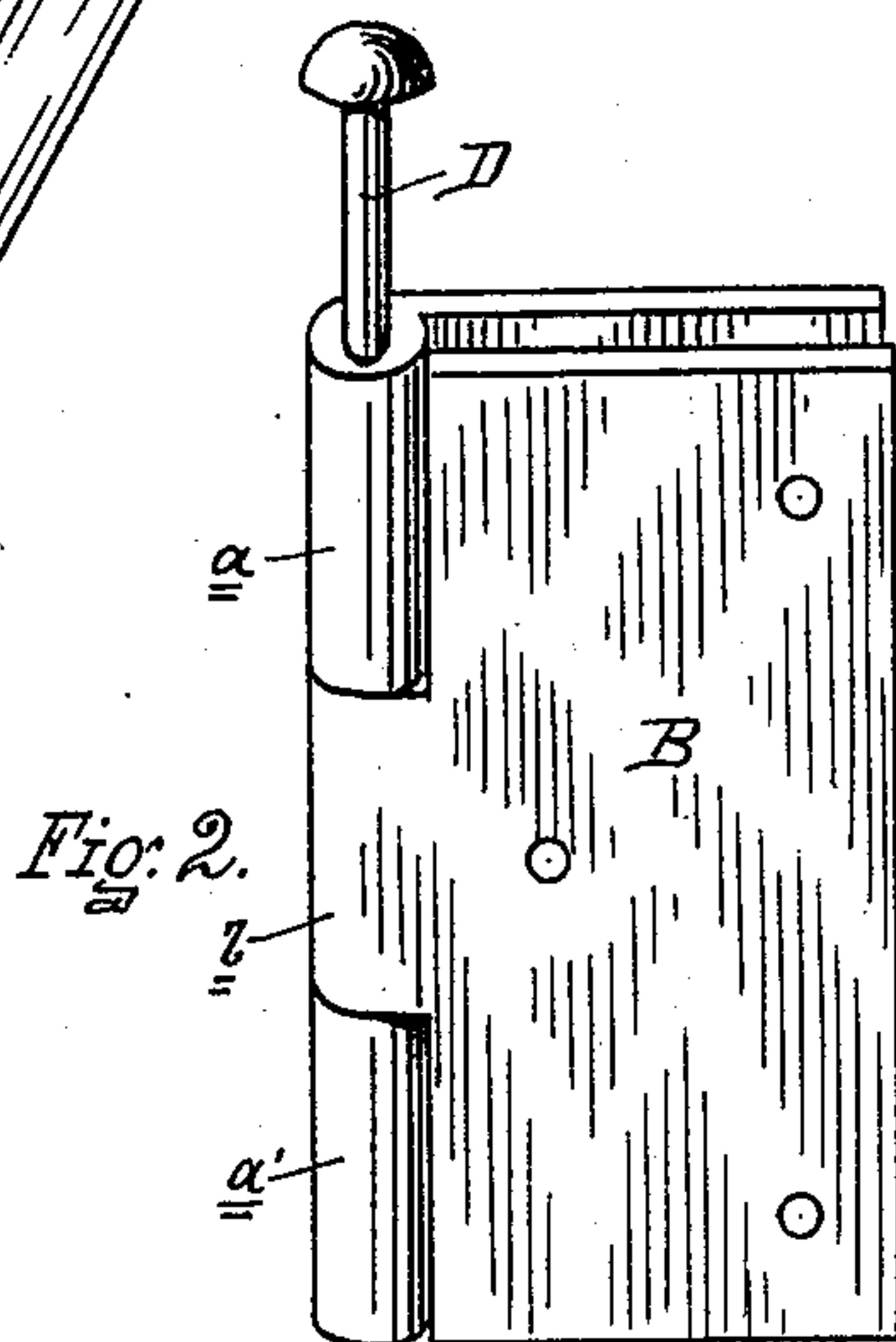


Fig. 2.

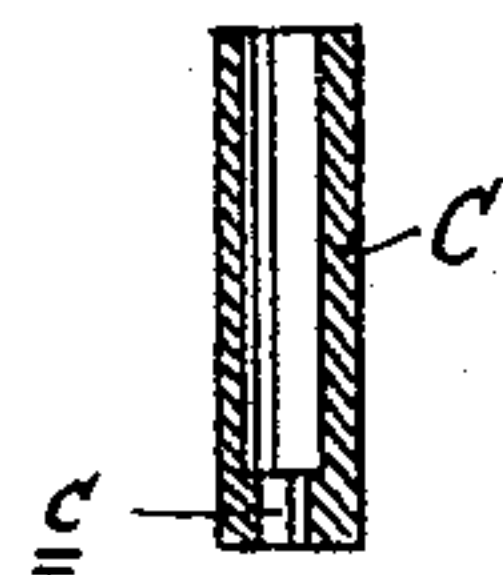


Fig. 8.

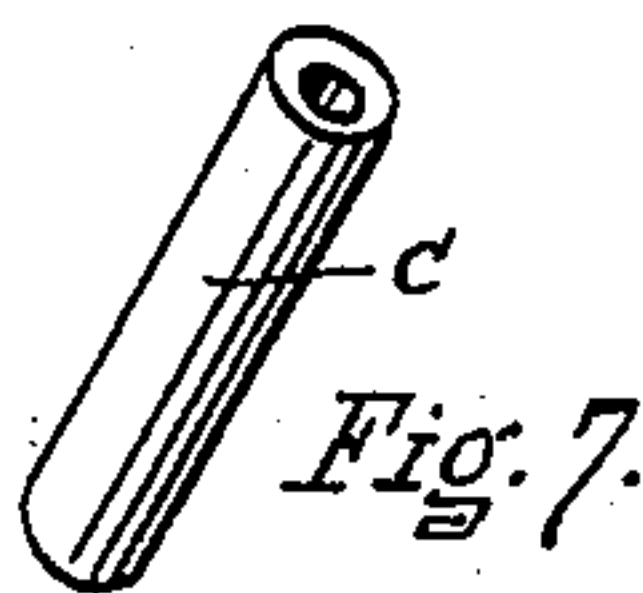


Fig. 7.

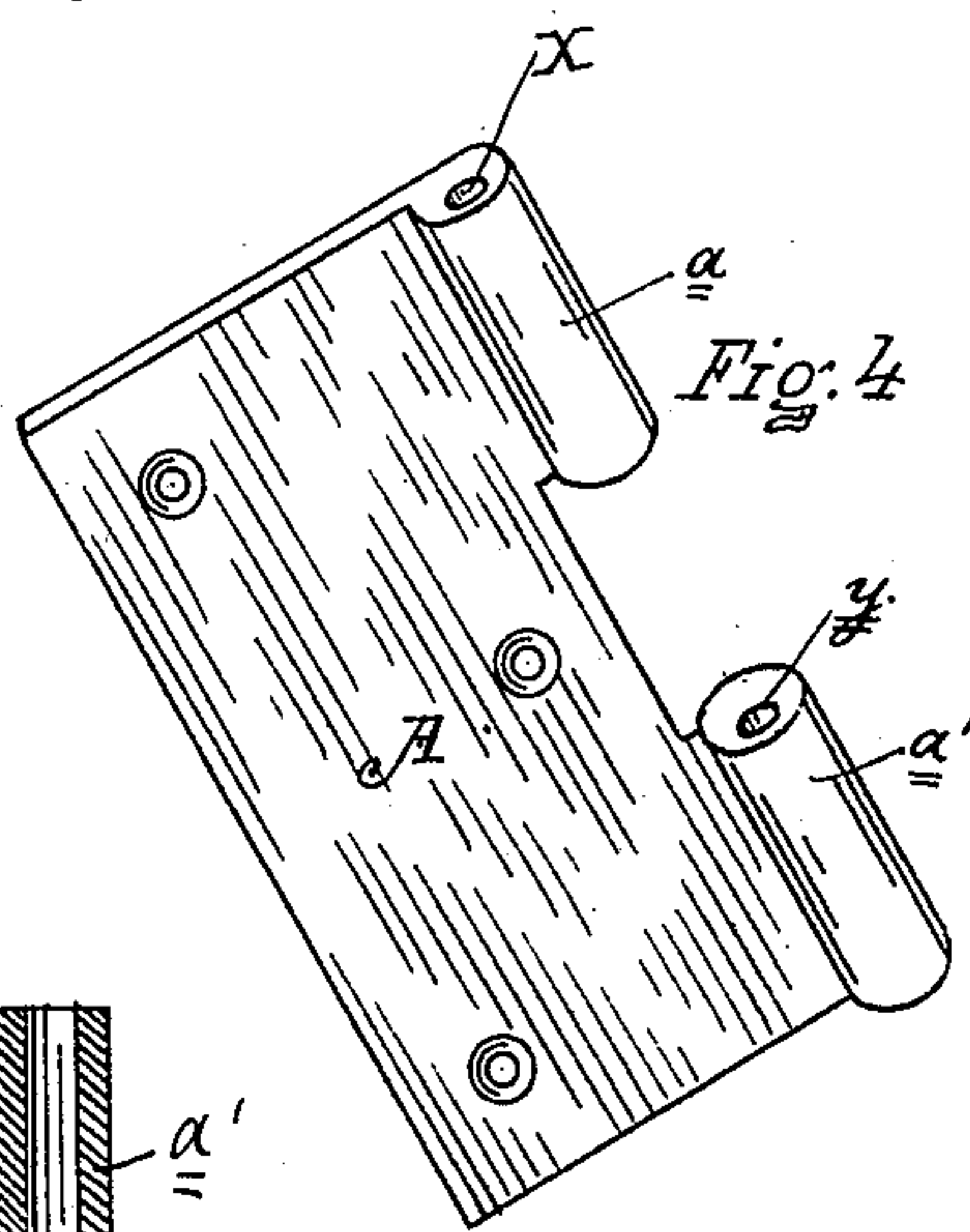


Fig. 4.

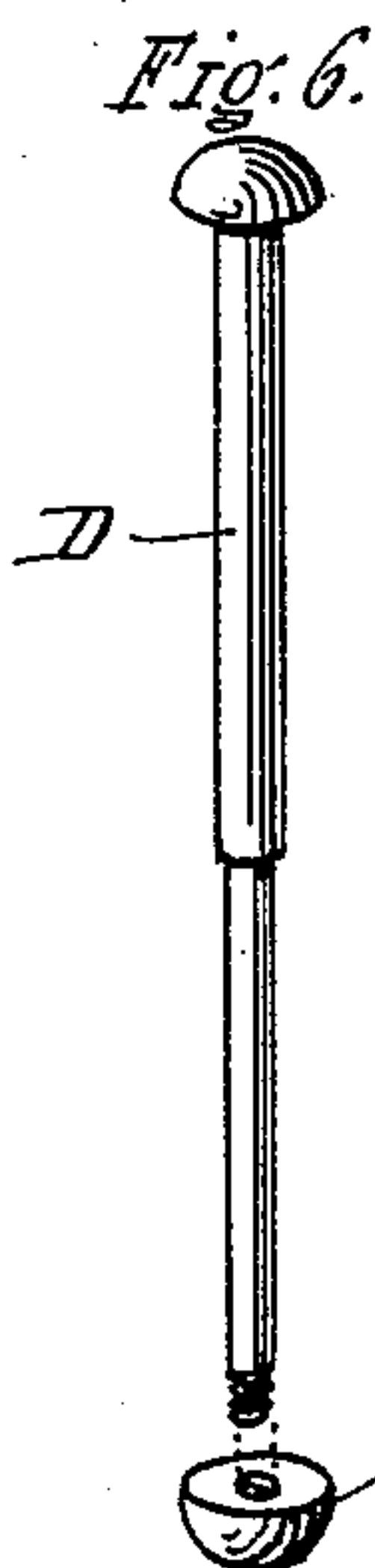


Fig. 6.

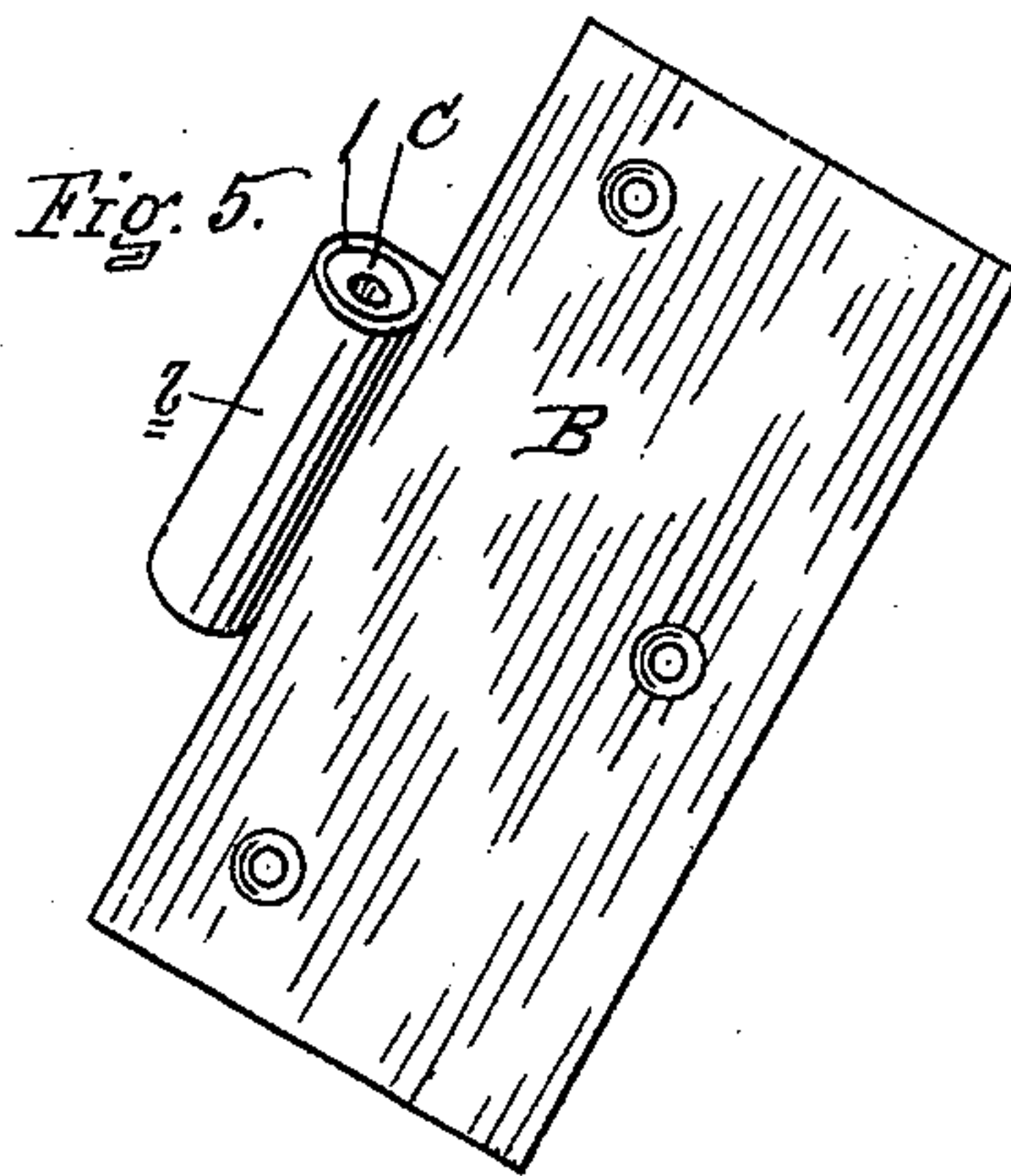


Fig. 5.

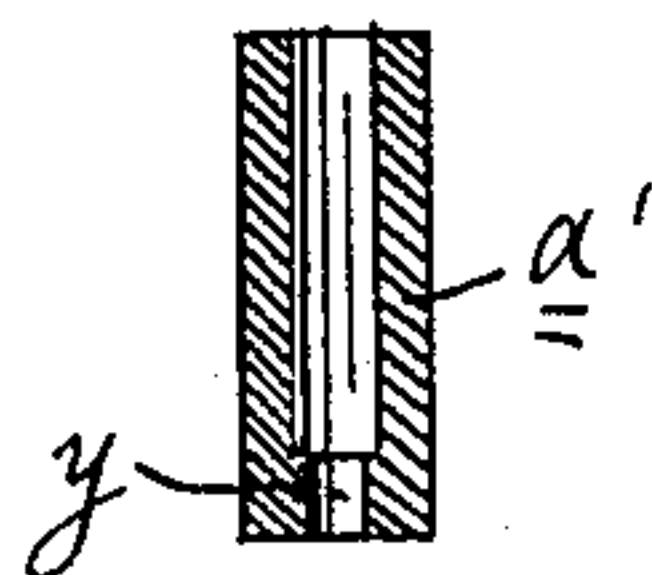


Fig. 9.

WITNESSES.

Rich. A. George.
M. Robinson

INVENTOR

Michael H. Sexton.

UNITED STATES PATENT OFFICE.

MICHAEL H. SEXTON, OF UTICA, NEW YORK.

HINGE.

SPECIFICATION forming part of Letters Patent No. 583,512, dated June 1, 1897.

Application filed December 19, 1895. Serial No. 572,631. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL H. SEXTON, of the city of Utica, county of Oneida, and State of New York, have invented certain new and useful Improvements in Hinges; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My present invention relates to improvements in hinges.

In the drawings, Figure 1 shows in perspective my improved hinge. Fig. 2 shows same with parts closed and pintle partly withdrawn. Fig. 3 shows in same manner hinge after being adjusted. Fig. 4 shows one of butts or hinge parts. Fig. 5 shows the other butt or part. Fig. 6 shows the pintle and cap. Fig. 7 shows the eccentric bushing employed. Fig. 8 shows a longitudinal section of the bushing. Fig. 9 shows a longitudinal section of the lower ear of the butt shown in Fig. 4.

Referring to the reference-letters in a more particular description of the device, A and B indicate the two parts or butts of the hinge, the part A having cylindrical ears *a a'* and the part B having the middle ear or projection *b*. These ears are substantially the same as those of ordinary hinges except that the pintle-holes in the ears or knuckles *a a'* are eccentrically located and the ear or knuckle *b* of the part B is bored out or provided with an enlarged opening *l*, adapted to receive the cylindrical bushing C, which has an eccentrically-located hole extending lengthwise through it. This hole is square at its lower end *c* and is of a size to receive the square portion of the pintle-pin D. This pintle, it will be observed, is round for a portion of its length extending from the head and square throughout the balance of its length. The hole *x* in one of the ears *a* is round and the hole *y* in the other ear *a'* is square at the outer end to receive the square portion of the pintle. The parts are put together or set up by placing the bushing C within the ear *b*, bringing the parts or butts into proper relative position with the ear *b* between the ears *a* and *a'*, and placing the pintle in position by insert-

ing it in the hole *x* through the hole *c* in the bushing and the hole *y*. The three adjustments of which the hinge is capable are made by partly withdrawing the pintle until it is free from the square portion of the hole *y*, then giving it a quarter or half a rotation in the desired direction, and replacing it. In giving the pintle such a partial rotation when partly withdrawn, as stated, the eccentric bushing is carried with it, which effects the desired adjustment, the bushing acting as a cam.

The round hole *x* allows the pintle to be rotated when partially withdrawn and saves necessity of entirely disassembling and reassembling the hinge when effecting an adjustment. In order to adapt the hinge for use either end up, I provide a screw-cap D' for the square end of the pintle, which will retain it in position when this end is up, besides giving a finished appearance to the hinge. Of course when this cap is used it has to be removed before the pintle can be even partially withdrawn. By operating one or both hinges of a door fitted with these hinges it may be readily and quickly adjusted to or from the jamb on which it is hinged and to or from the stops against which the door strikes. Thus objection and annoyances caused by doors shrinking, swelling, or warping and buildings settling are quickly and easily overcome.

It should be noted that the friction and wear of this hinge does not come on the pintle, but rather on the eccentric bushing C, which has a large bearing-surface and is capable of standing much use. It is obvious that in lieu of the square pintle a three-cornered or other angular or irregular form may be used, also that the hole in the bushing might be square for only a portion of its length, and that other modifications and changes may be made without departing from my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination in a hinge of the hinge parts, a straight pintle, and an adjustable eccentric bushing, substantially as set forth.

2. The combination in a hinge of the hinge parts, the adjustable eccentric bushing, received by one of the parts, and a pintle adapted to secure the bushing, immovably, to the other of the parts, substantially as set forth.

3. The combination in a hinge of one part,
having ears with square and round pintle-
holes, respectively; the other part having an
ear with an enlarged opening and eccentric
5 bushing having a square pintle-hole eccen-
trically located therein and a square pintle
substantially as set forth.

In witness whereof I have affixed my signa-
ture in the presence of two witnesses.

MICHAEL H. SEXTON.

Witnesses:

M. E. ROBINSON,
HENRY M. LOVE.