

No. 837,407.

PATENTED DEC. 4, 1906.

C. JAGER.
BRAKE SHOE.

APPLICATION FILED JULY 19, 1906.

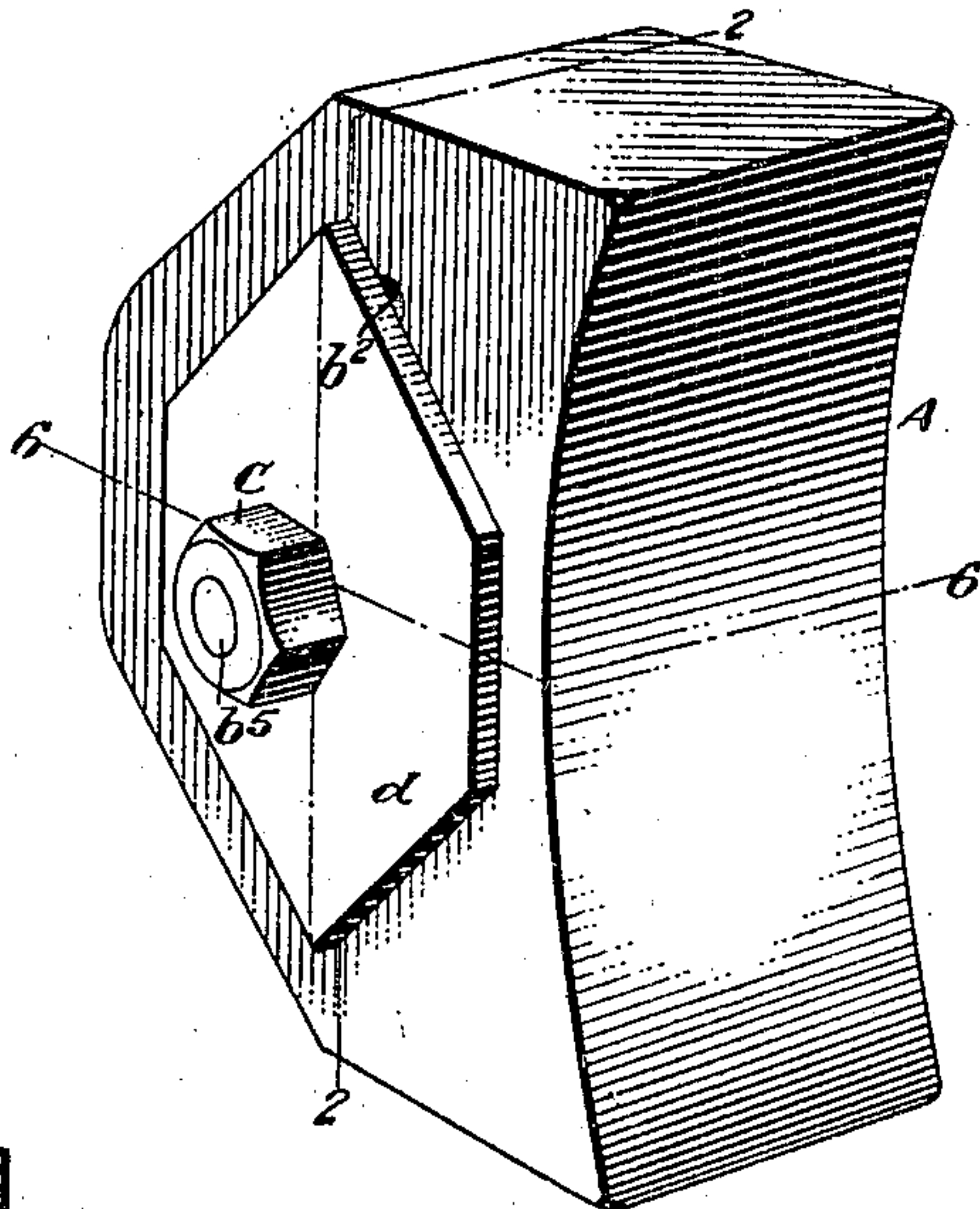


Fig. 1.

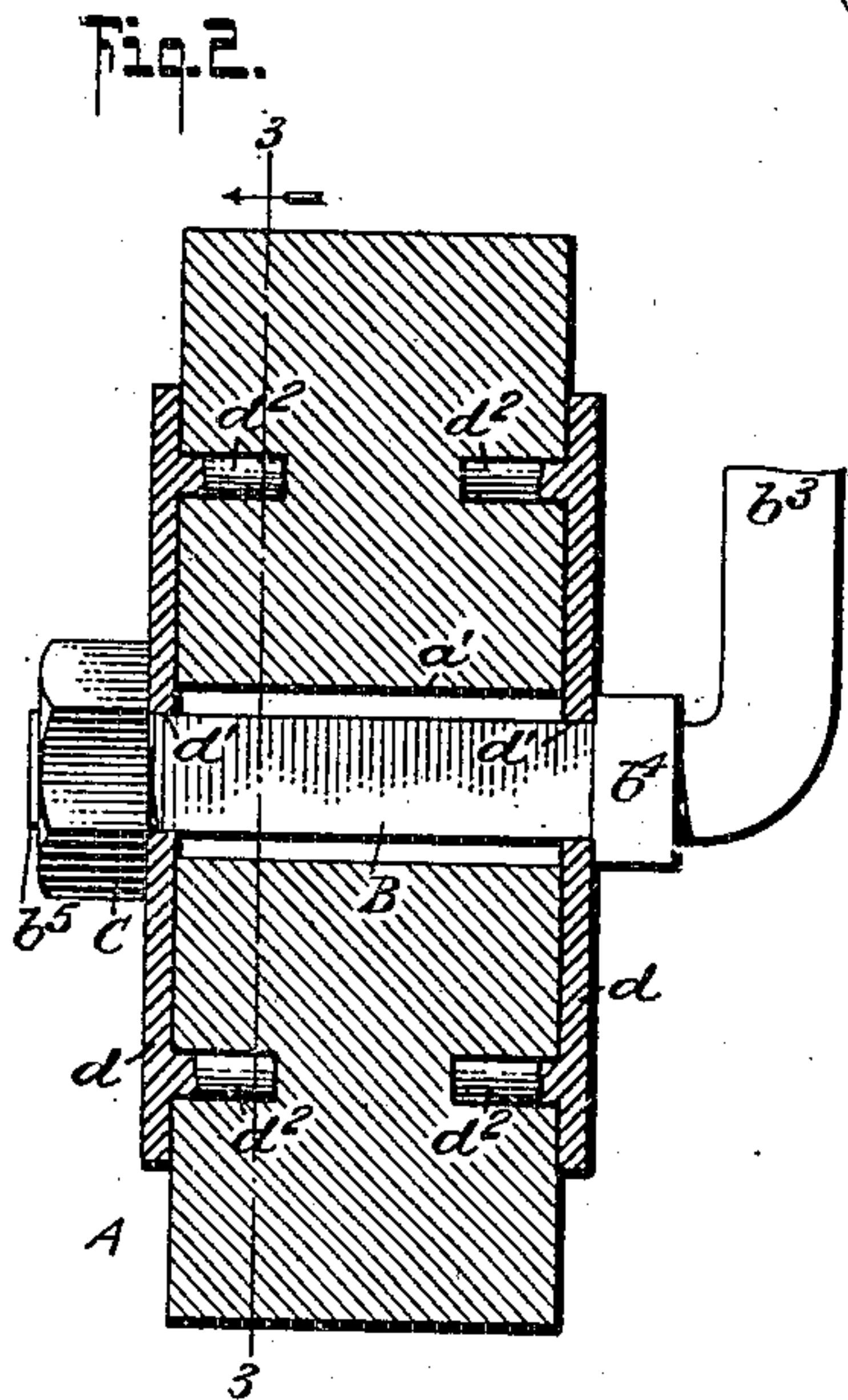


Fig. 2.

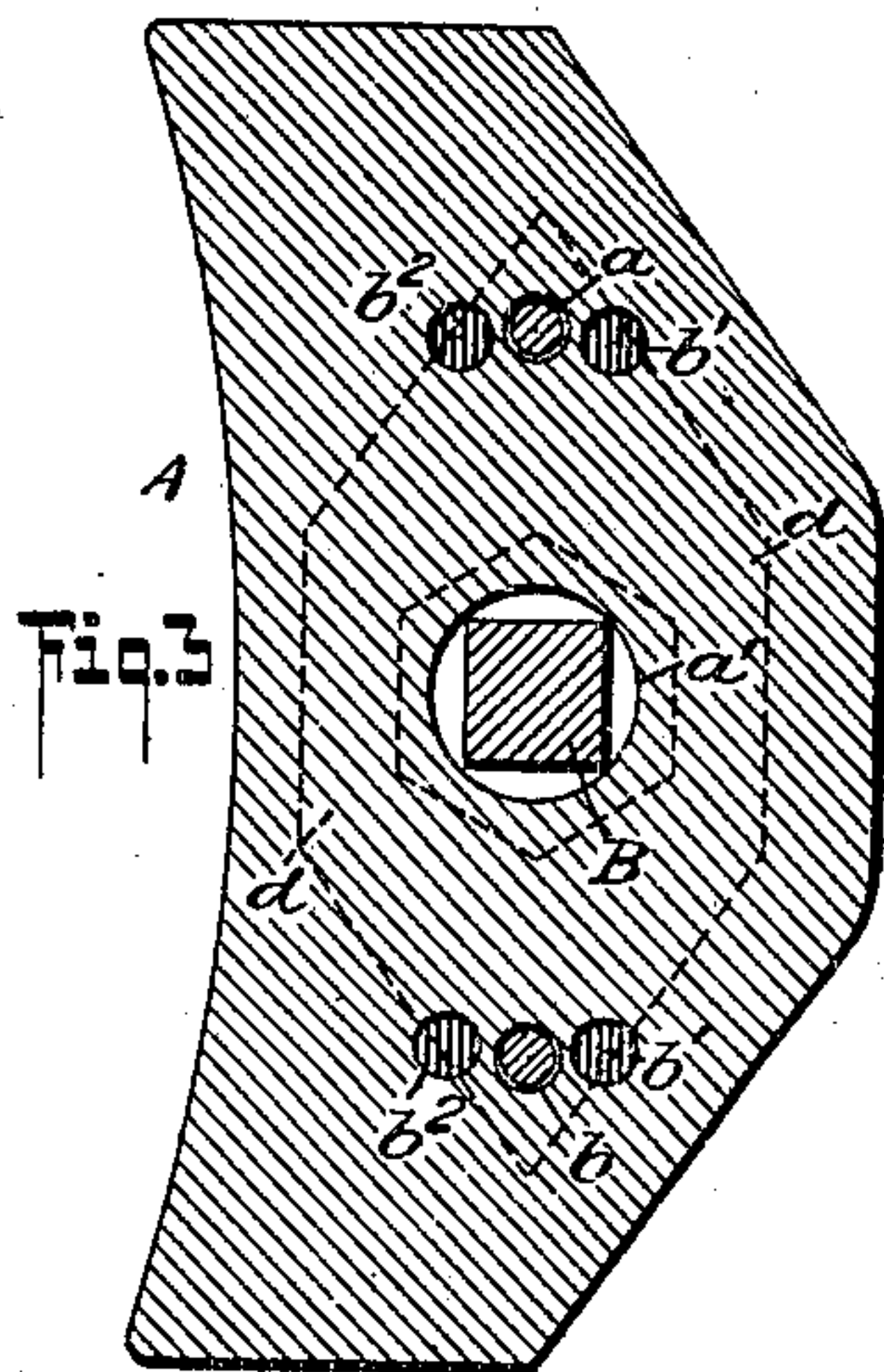


Fig. 3.

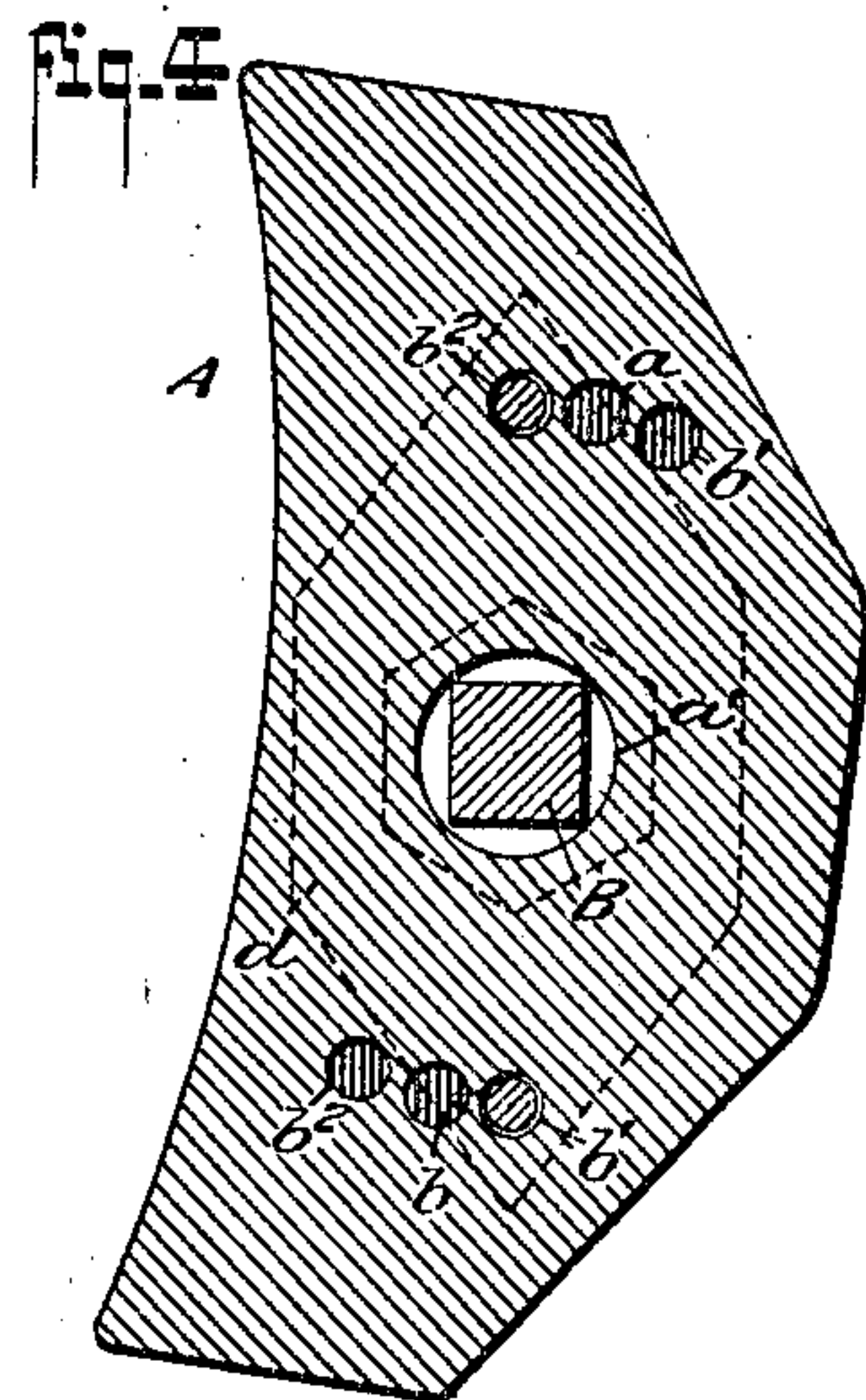


Fig. 4.

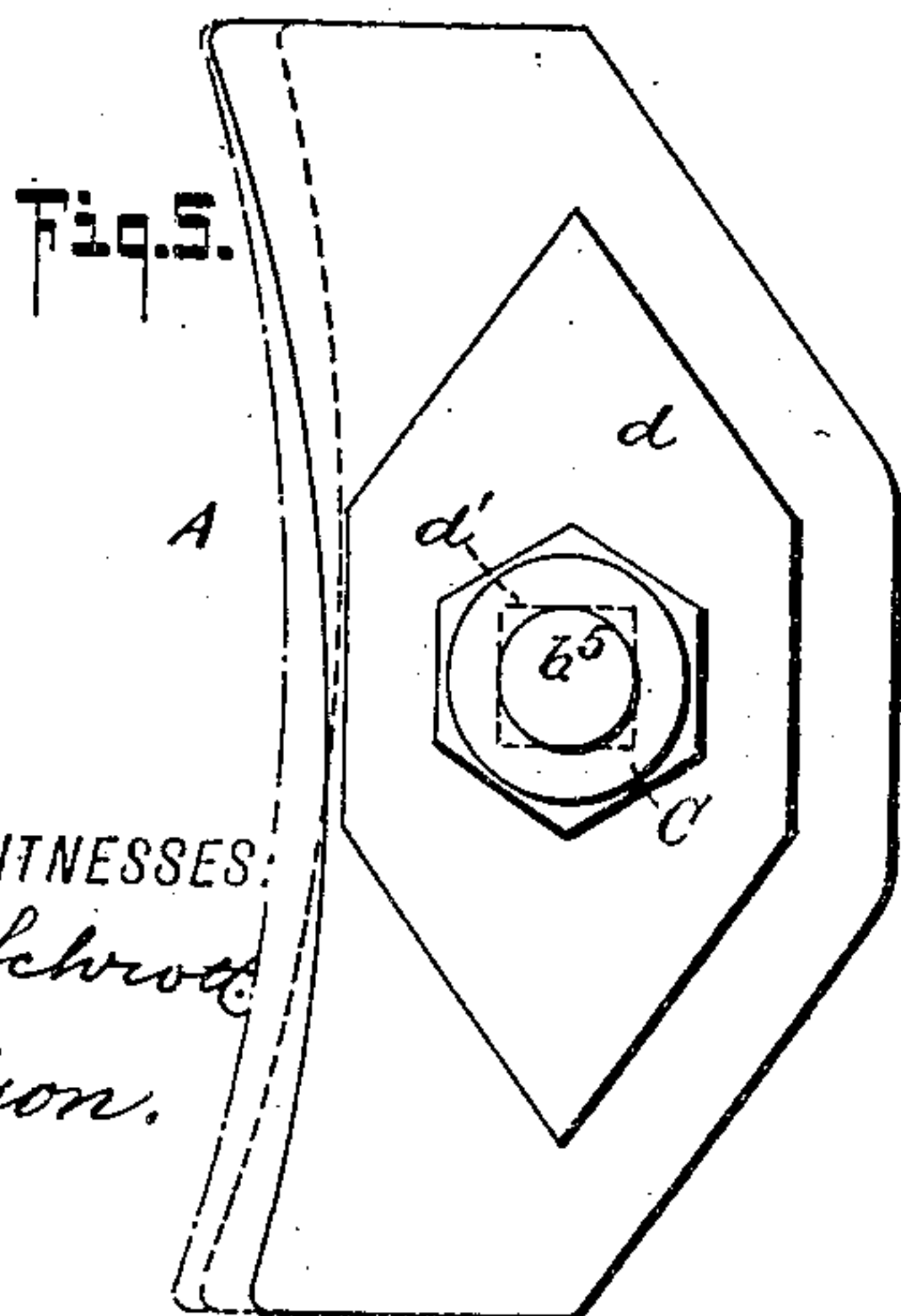


Fig. 5.

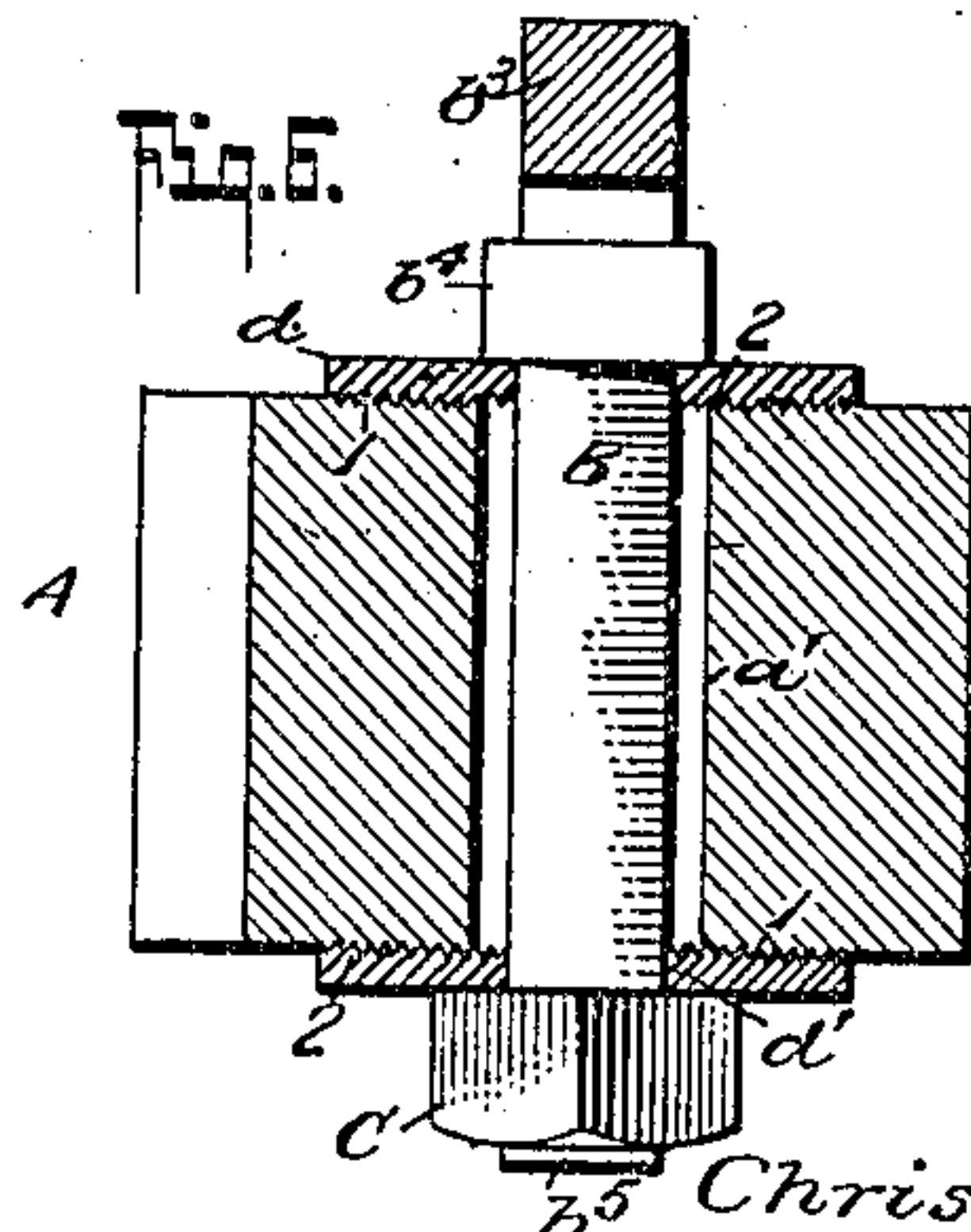


Fig. 6.

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CHRISTIAN JAGER, OF PORTLAND, OREGON.

BRAKE-SHOE.

No. 837,407.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed July 19, 1906. Serial No. 326,881.

To all whom it may concern:

Be it known that I, CHRISTIAN JAGER, residing at Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Brake-Shoe Connection, of which the following is a specification.

My invention primarily has for its object to provide a simple and economically-constructed means of connecting the ordinary forms of brake shoes or blocks to the brake-rods, and which is particularly designed for a quick and positive adjustment whereby to set the shoe to compensate for wear and in which each adjustment of the shoe can be readily effected without removing the shoe from the brake or supporting member.

With the above and other objects in view and hereinafter explained my invention consists in certain details of construction and novel combination of parts, all of which will be hereinafter explained, pointed out in the appended claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my brake-shoe connection, showing the parts to their initial adjustment. Fig. 2 is a longitudinal section thereof on the line 2 2 on Fig. 1. Fig. 3 is a transverse section taken on the line 3 3 looking in the direction of the arrow. Fig. 4 is a similar view showing the worn shoe adjusted on the connecting devices for bringing the worn face in position to again present a proper braking-surface. Fig. 5 is a diagrammatic side elevation illustrating the position of the greatly-worn shoe in full lines and the manner in which the said worn shoe can be set on the connecting devices to present new "braking-faces." Fig. 6 is a horizontal section taken substantially on the line 6 6 on Fig. 1 and showing a modified construction hereinafter referred to.

In carrying out my invention I form the brake block or shoe A with a central transverse aperture a' and at the opposite sides with a pair of sockets a and b , disposed in vertical alinement with the axis of aperture a' . At the said opposite sides the shoe has additional sockets b' adjacent thereto but disposed to the rear end of the upper sockets a and other sockets b^2 , disposed adjacent to but in front of the lower socket b , as clearly shown in Fig. 3, from which it will be noticed the several sockets a , b , b' , and b^2 are disposed concentrically to the aperture a' , the reason for which will presently appear.

The brake rod or bar in the simplest form

of my invention is integral with the crank portion b^3 of the bolt end that adjustably carries the shoe A, or it may be bolted or otherwise made fast to the said crank portion b^3 .

The bolt end B is made square in cross-section, has an annular enlargement or collar b^4 at its inner end, and has its outer end b^5 threaded to receive the clamp-nut C.

The shoe A has its aperture a' of sufficient diameter whereby it will rock upon the bolt end B, and when it is initially fitted upon the said bolt end it is fixedly held thereon by a pair of metallic clamping-plates d d , having centrally thereof squared apertures d' d' to slidably fit on the square bolt end B, and the plates each have a pair of oppositely-disposed inwardly-projected dowels d^2 d^2 , that engage the vertically-alined sockets a b in the opposite sides of the shoe, it being understood that when thus arranged the several parts will be held in a fixed connection by screwing up the clamp-nut C to firmly interlock the plates d d with the bolt end B and the sockets a and b .

By reason of arranging the parts as described, when the shoe is of the ordinary vehicle-wheel type it can be readily fitted on the brake rod or bar and firmly secured by the single nut C, and when so used as to be unfit for further use it can be as readily removed to admit of substitution of a new shoe.

By providing the extra sets of sockets b' and b^2 and arranging them as shown, when the shoe is but partly worn the block can be correspondingly set up to the wheel by turning the block on the bolt B to bring the dowels in plate d in the other sets of holes, whereby to incline the block for providing the necessary adjustment thereof to set the block, and, furthermore, since the block can be so readily removed from the bolt it can in case the lower end becomes much worn be turned to bring the lower worn end uppermost, as indicated in dotted lines on Fig. 5.

In Fig. 6 I have shown a slightly-modified arrangement of my brake-shoe connections, which is more especially provided for holding metallic shoes or blocks, and in said form the shoe has segmental serrated or toothed portions 1 to coact with like portions 2 on the inner faces of the opposite end of the plates d , it being manifest that by loosening the nut C the block A can be turned to the position required for bringing the near face into proper set with the wheel and clamping the same by gripping the plates on the serrations or teeth in the sides of the block.

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

1. A brake-shoe connection, comprising in
5 combination with the transversely-operated
block, of a bolt member adapted to loosely
fit in the block-aperture, said member having
its inner end terminating in a crank member
adapted for a fixed connection with the
10 brake-bar, the outer end of said member be-
ing threaded to receive a clamp-nut, said bolt
member having flat sides, a pair of opposing
clamp-plates slidable on the bolt member and
having studs for entering the apertures in the
15 sides of the block when the clamp-nut is ap-
plied to hold the block stationary, as set
forth.

2. The combination with the centrally-ap-
ertured brake-shoe, said shoe having a pair of
20 sets of upper and lower opposing sockets con-
centric with the central aperture, of a brake-
rod having a crank portion and a bolt or spin-
dle non-circular in cross-section, the inner
end of the spindle or bolt having an annular
25 collar and the outer end being threaded, a
clamp-nut for said threaded end, and a pair
of opposing clamp-plates slidably mounted

on the spindle or bolt and having projections
for engaging the sockets in the brake-shoe, as
set forth.

3. The hereinbefore-described improve-
ment in brake-shoe connections, which com-
prises, in combination with the shoe, having
a central circular aperture and a pair of sets
of upper and lower opposing sockets concen-
tric with the said aperture, a brake-bar hav-
ing a crank member formed with an integral
spindle-bolt, square in cross-section, and
adapted to loosely fit the aperture in the
brake-block, said spindle having a collar at
40 its inner end and its outer end threaded, a
pair of opposing metal plates having square
openings whereby to freely slide on the spin-
dle, said plates each having a pair of opposing
dowels to engage the sockets in the opposite
45 sides of the block, and the nut that engages
the outer end of the bolt or spindle, all being
arranged substantially as shown and de-
scribed.

CHRISTIAN JAGER.

Witnesses:

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