

968,703.

J. I. SHAW.
WHIFFLETREE HANGER.
APPLICATION FILED NOV. 26, 1909.

Patented Aug. 30, 1910.
2 SHEETS—SHEET 1.

Fig. 1.

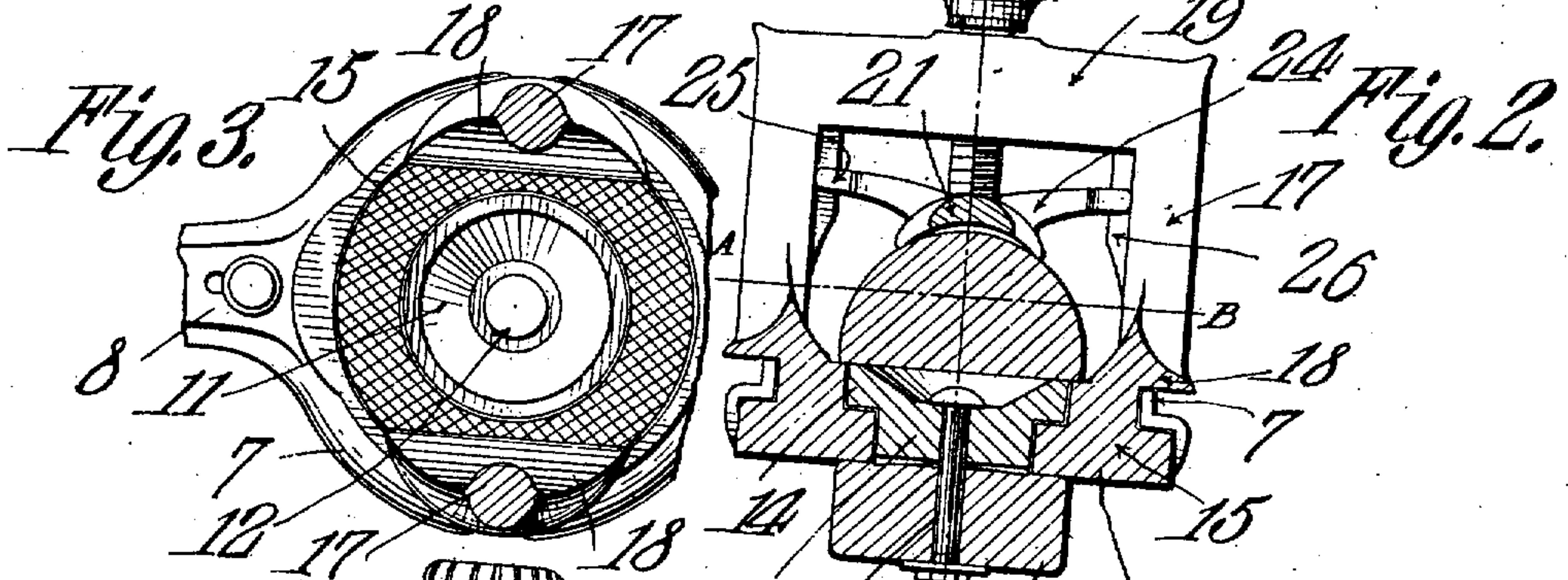
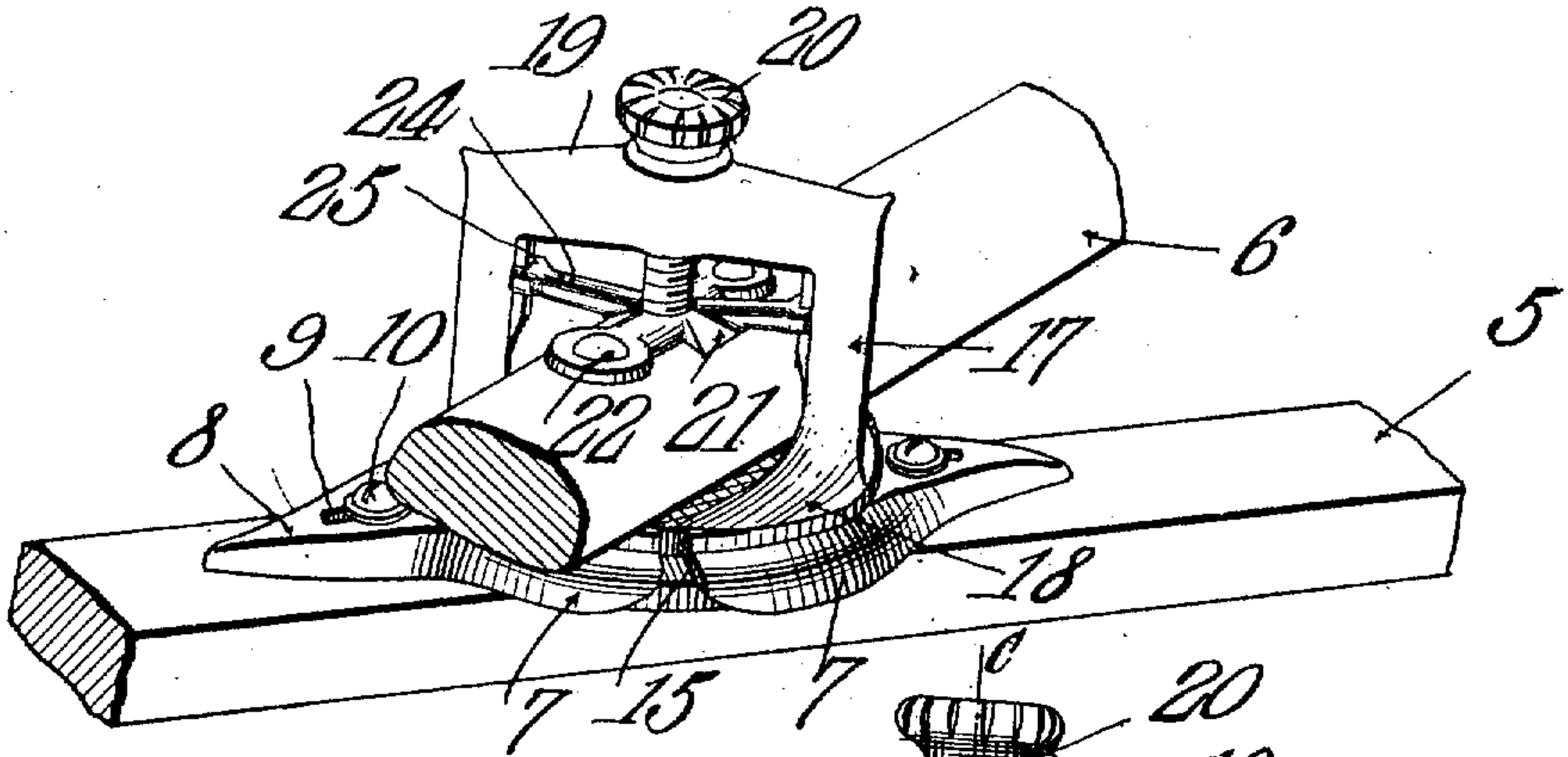


Fig. 3.

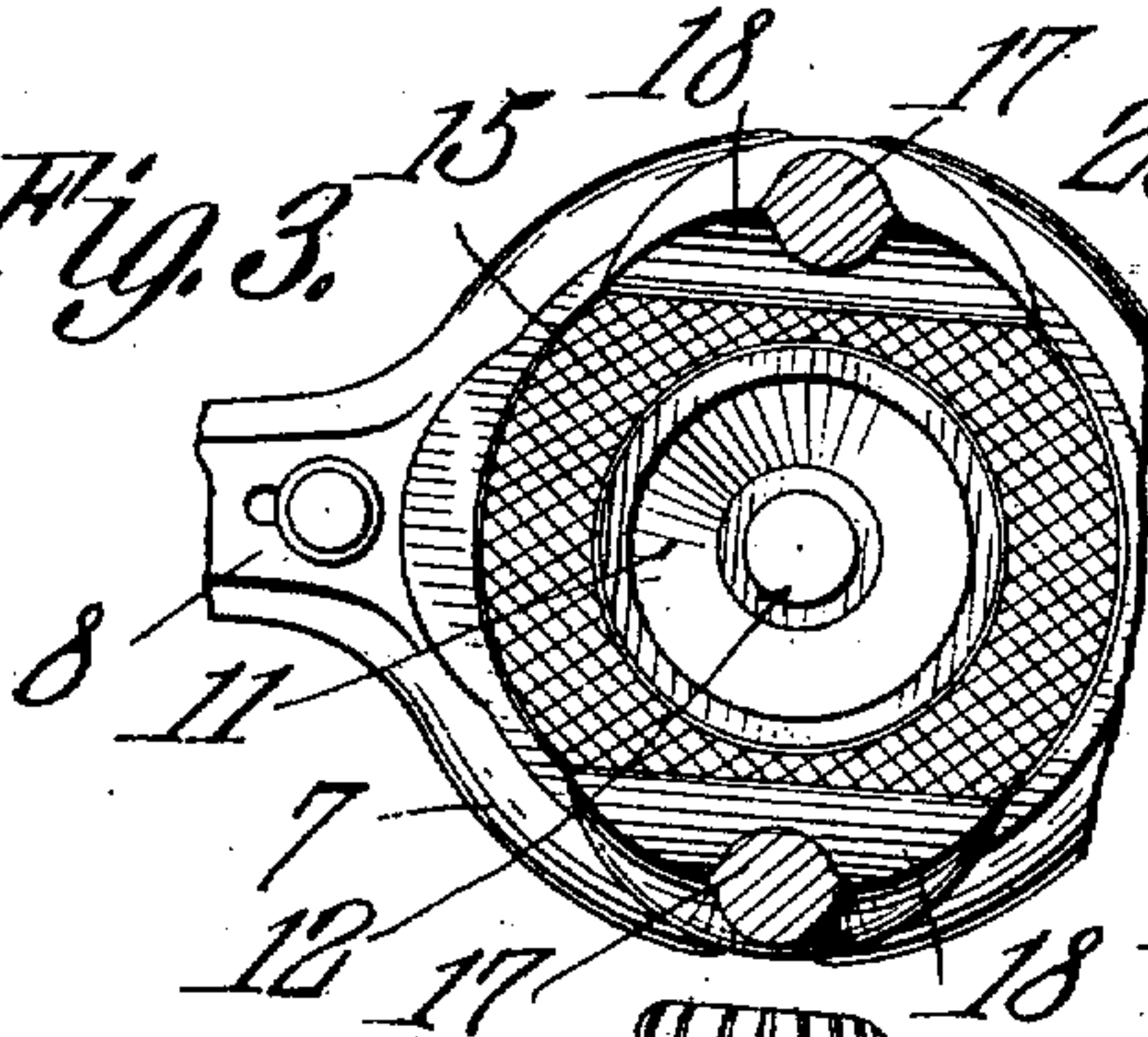
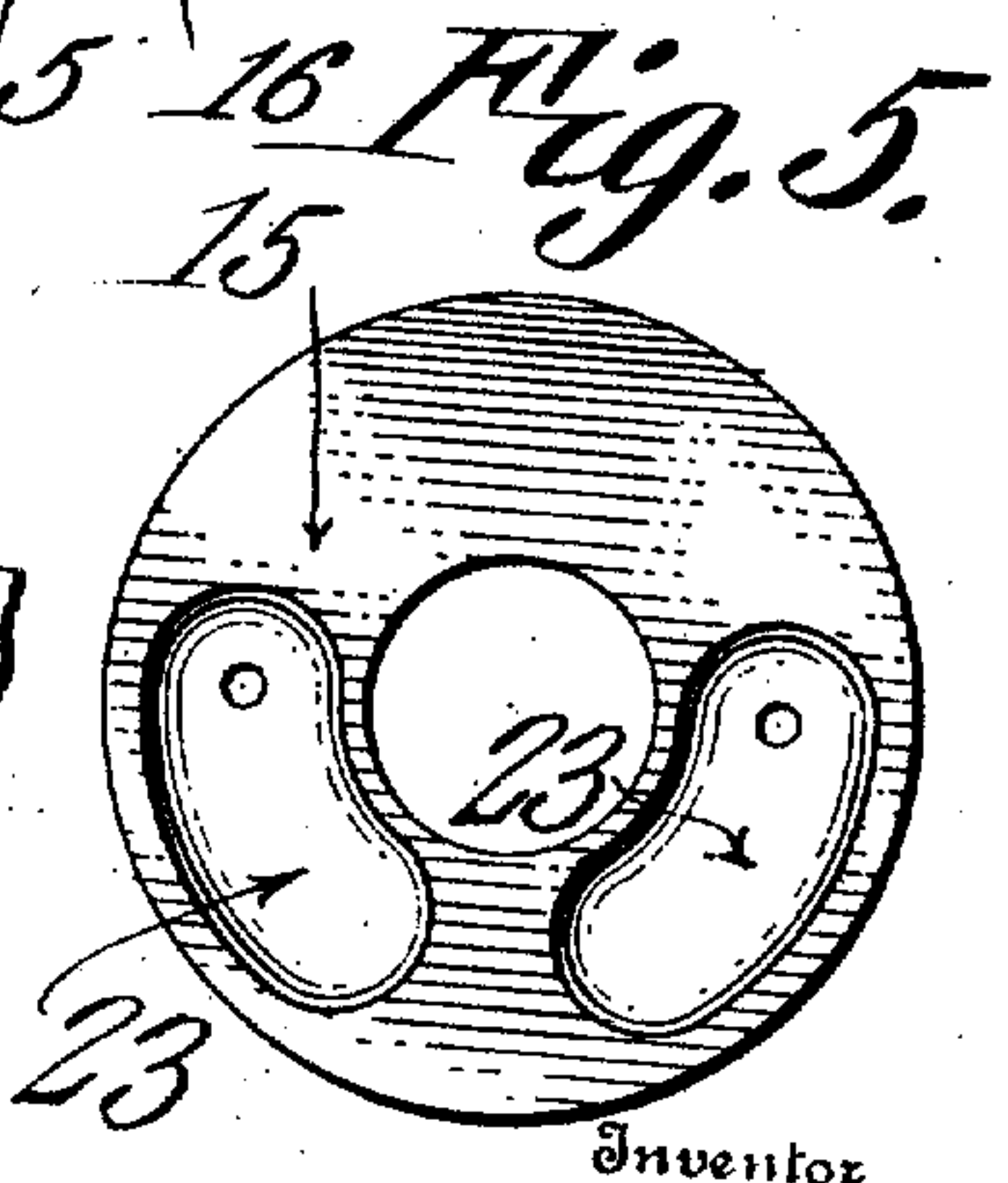
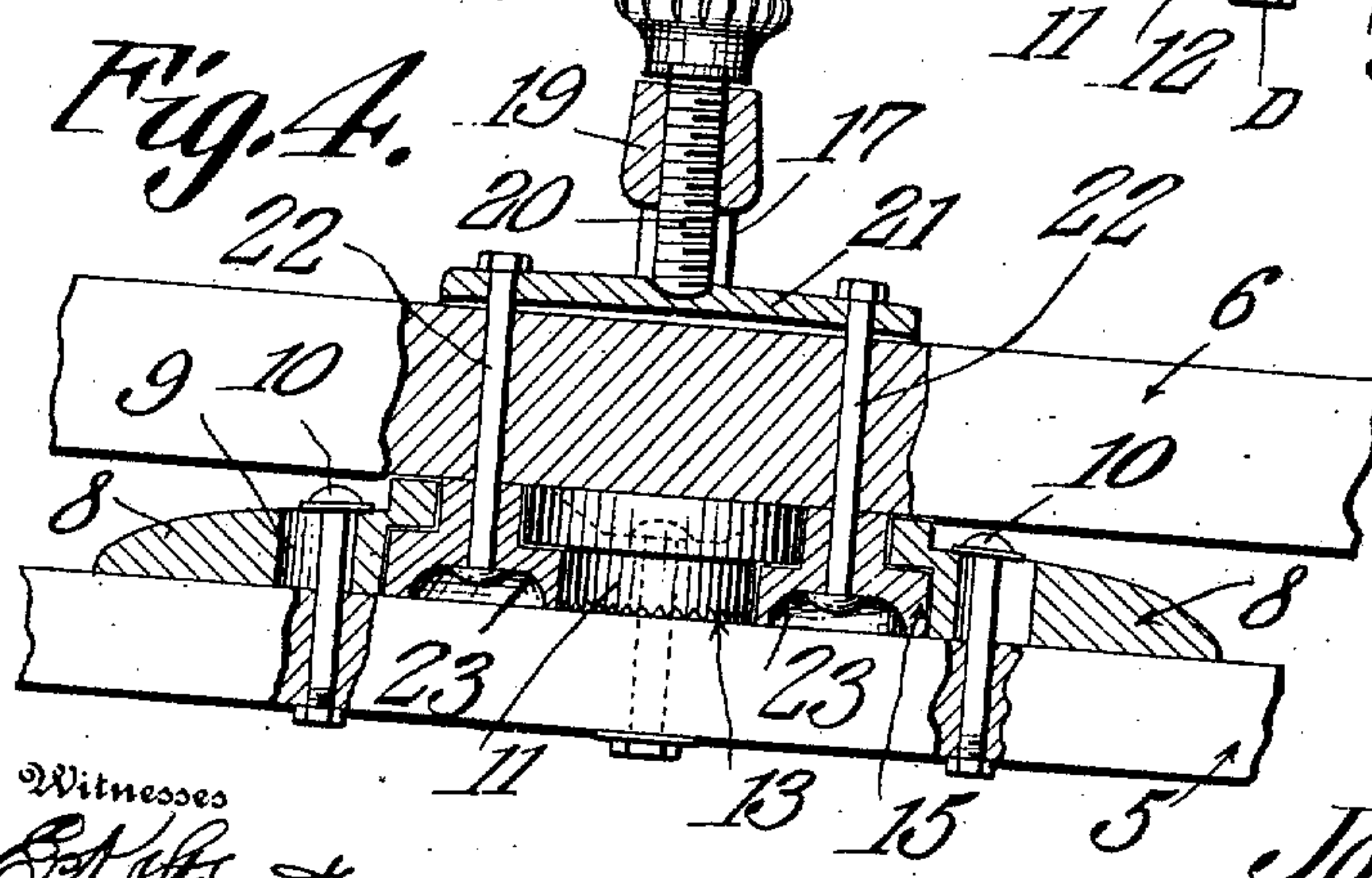


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 6.

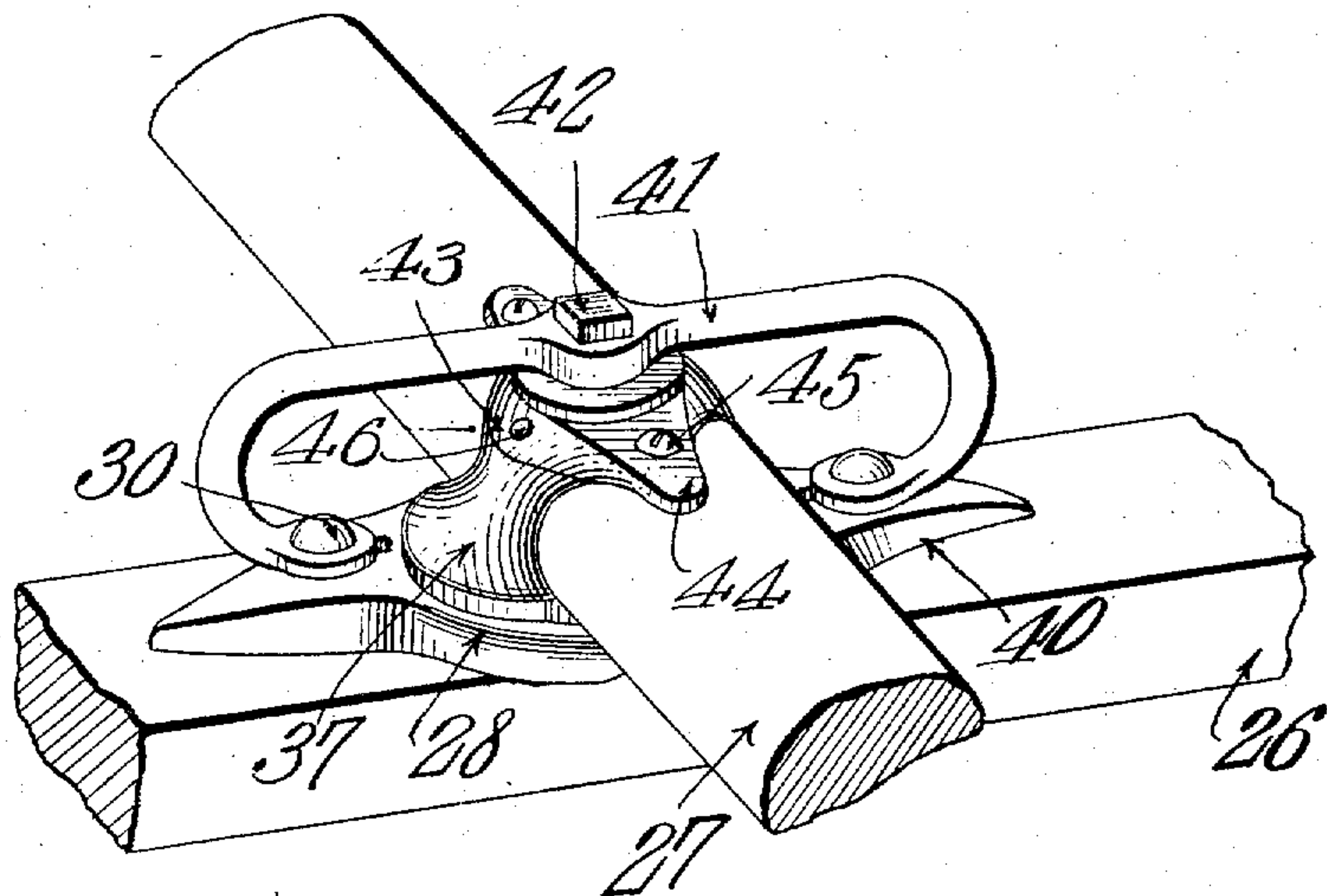


Fig. 7.

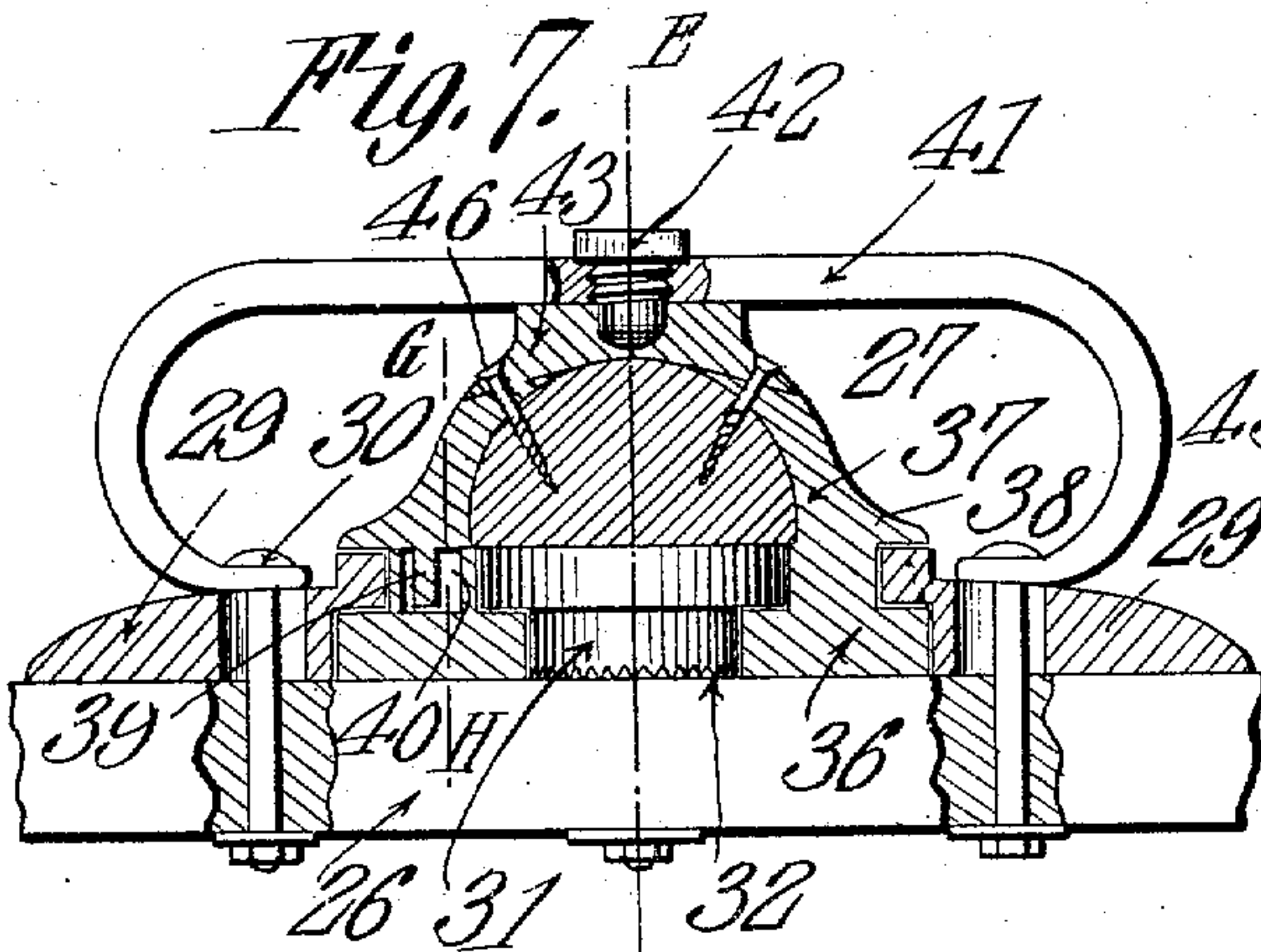


Fig. 8.

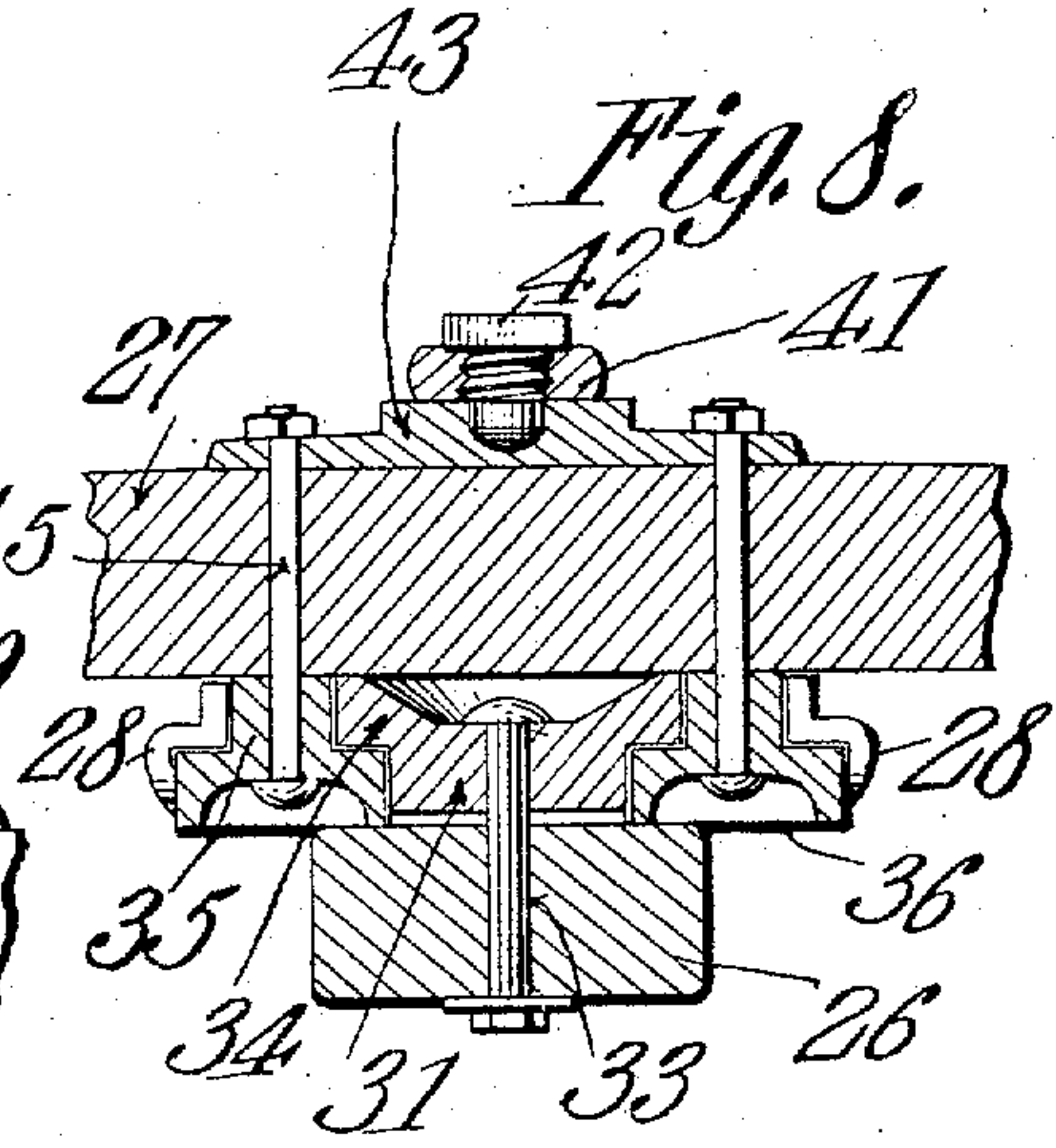
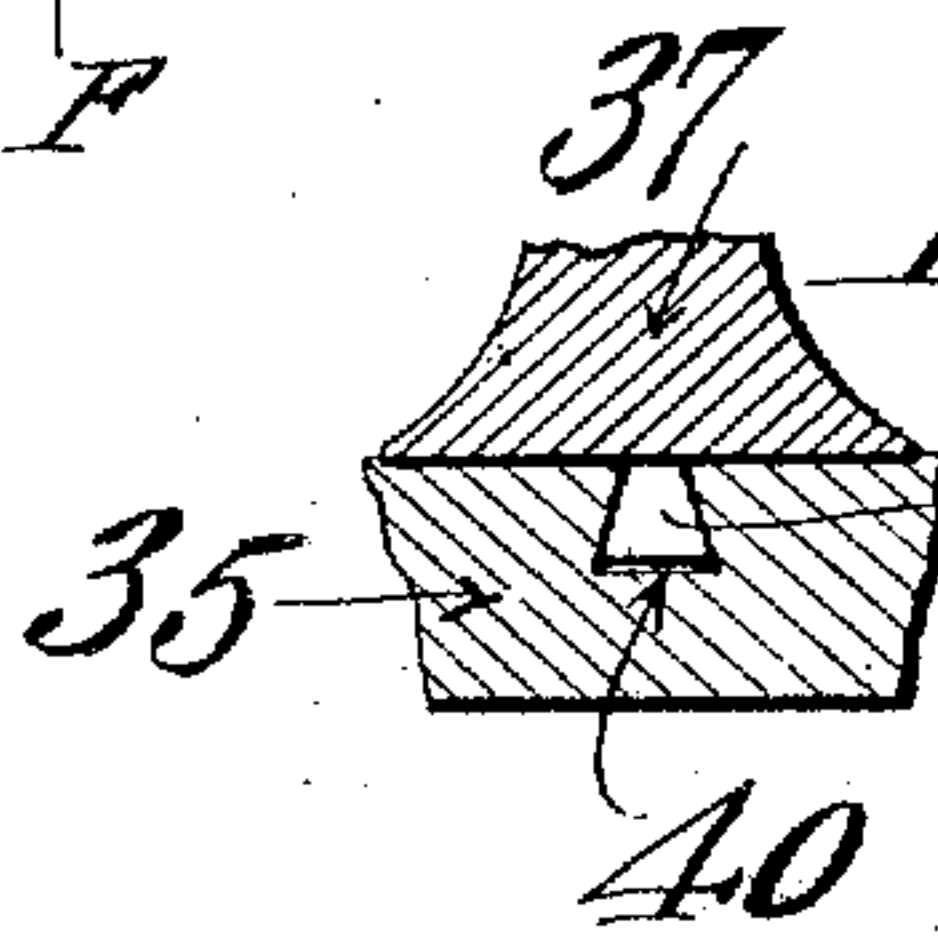


Fig. 9.



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UNITED STATES PATENT OFFICE.

JOHN I. SHAW, OF NOVINGER, MISSOURI.

WHIFFLETREE-HANGER.

968,703.

Specification of Letters Patent. Patented Aug. 30, 1910.

Application filed November 26, 1909. Serial No. 529,980.

To all whom it may concern:

Be it known that I, JOHN I. SHAW, a citizen of the United States, residing at Novinger, in the county of Adair and State of Missouri, have invented a new and useful Whiffletree-Hanger, of which the following is a specification.

This invention relates to devices for coupling double trees upon a wagon pole and swingle trees upon shaft cross bars, and has for an object to provide a hanger that will permit of a swivel movement of the swingle or double tree upon the cross bar or wagon pole while holding the same against tilting or rocking movement.

A further object is to provide a device of this character that will be adjustable to receive any ordinary swingle or double tree.

A still further object is to provide a device of this character that will have an adjustable base plate which may be adjusted from time to time to take up the wear upon the parts.

With the above advantages and other objects in view which will appear as the description proceeds, my invention embraces certain novel details of construction and combination of parts which will be hereinafter more fully described and claimed.

In the accompanying drawing forming part of this specification, Figure 1 is a perspective view of my improved hanger in applied position. Fig. 2 is a transverse sectional view through the hanger showing the frame member of the device in elevation and disposed in a plane at right angles to the vehicle pole. Fig. 3 is a transverse sectional view taken on the line A—B of Fig. 2 with parts removed. Fig. 4 is a longitudinal sectional view of the hanger taken on the line C—D of Fig. 2. Fig. 5 is an underneath plan view of the frame supporting disk. Fig. 6 is a perspective view of a modification of my improved hanger. Fig. 7 is a longitudinal sectional view of the hanger with parts in elevation and parts broken away. Fig. 8 is a transverse sectional view through the line E—F of Fig. 7. Fig. 9 is a fragmentary sectional view taken on the line G—H of Fig. 7.

Like characters of reference designate similar parts in the views shown.

Referring to the drawing, 5 designates a

vehicle pole and 6 a double tree, both of the usual and well known kind.

The hanger for coupling the double tree to the vehicle pole comprises an adjustable base plate consisting of a pair of semi-circular plates 7 each having an arm 8 projecting from its outer periphery. Formed in the arms 8 are longitudinal slots 9 to receive securing screws or bolts 10. The slots 9 are of a size to slidably fit the shanks of the securing bolts so that the plates 7 may be slid longitudinally of the pole and their opposed terminals drawn closer together from time to time to take up the wear of the movable members upon the plates and maintain a true bearing between the two at all times. Mounted between the semi-circular plates is a circular disk 11 having its top face recessed to receive the head of a bolt 12 which passes through the pole 5 and rigidly secures the disk thereto. The bottom face of the disk is provided with a plurality of radial corrugations 13 adapted to impinge against the pole and prevent the independent rotation of the disk. Formed upon the disk is an annular flange 14 which extends beyond the periphery of the disk and retains in position a ring 15. The ring 15 is rotatably mounted between the disk and semi-circular plates and is provided with a laterally extending flange 16 which slidably engages the bottom face of the flange 14 and opposed faces of the disk and semi-circular plates, as shown in Fig. 2. The top face of the ring is flush with the top face of the disk and cooperates with the latter to support the double tree 6.

Rigidly secured to the top face of the ring 15 is a U-shaped frame, the spaced standards 17 of which are expanded at their base, as shown at 18, to engage and extend beyond the top face of the adjacent clamping plate 7 so that a true bearing between the two is maintained should the semi-circular plate become loosened on its supporting screw 10. Threading through the intermediate portion of the cross bar 19 of the U-shaped frame is a feed screw 20, the extremity of which engages a clamping plate 21, which latter is adapted to snugly engage the opposed face of the double tree 6. The clamping plate 21 is provided at its extremities with eyes for the reception of clamping

bolts 22 which pass entirely through the double tree and are rigidly engaged in the ring 15 in the bottom face of which latter are formed recesses 23 to receive the heads of the bolts, as shown. The recesses 23 reduce the dead weight of the disk and are disposed upon the same side of the center line of the ring, as clearly shown in Fig. 5, so that a flat bearing face is provided upon the opposite side of the center line for contact with the opposed top face of the vehicle pole 5. Extending laterally from the longitudinal sides of the clamping plate 21 are cross arms 24 having bifurcated extremities 25 to engage guide strips 26 formed longitudinally of the inner faces of the standards 17.

In Fig. 6 is shown a modification of my device. In this case 26 and 27 designate a vehicle pole and double tree respectively of the usual and well known kind. The hanger consists of a pair of semi-circular plates 28 each having a longitudinally slotted arm 29 extending laterally from its periphery. Engaged through the longitudinal slot of each arm is a securing bolt 30 upon the shank of which the arm is slidable so that the opposed terminals of the semi-circular plates may be drawn together from time to time to take up the wear upon the parts, as above described. Mounted upon the top face of the vehicle pole 26 is a circular disk 31, the bottom face of which is serrated, as shown at 32, to prevent the independent rotation of the disk and the top face of which is recessed to receive the head of a bolt 33 which passes entirely through the pole and serves to rigidly secure the disk thereto. Formed upon the periphery of the disk is a flange 34 which holds a rotary ring 35 in position, as above described. The rotary ring 35 is provided with a laterally projecting flange 36 to engage the bottom face of the flange 34. The top face of the ring terminates flush with the top face of the disk and coöperates therewith to support the double tree 27. Projecting upwardly from the ring is a frame comprising spaced standards 37, the lower portions of which are expanded, as shown at 38, to form extensions which engage and project over the top face of the semi-circular plates and provide a true bearing between the standards and the plates.

To enable a double tree of any size to be interposed between the standards 37 one of the standards is provided with a wedge-shaped locking lug 39 which engages an elongated wedge-shaped recess 40 disposed in the top face of the ring 35. The standard is thus capable of sliding movement toward or away from the opposite standard to permit of any sized double tree being inserted therebetween.

An arm 41 is provided having its termi-

nals bent over, and provided with eyes which engage the shanks of the before-mentioned securing bolts 30. Threading through the intermediate portion of the arm 41 is a feed screw 42, the terminal of which bears against a clamping plate 43. The clamping plate is adapted to conform to the contour of the double tree and is provided with laterally extending arms 44 through which screws 45 are passed to rigidly hold the clamping member to the double tree. Screws 46 are passed through the clamping plate 43 and standards 37 into the double tree to cause the above mentioned parts to conform to the outline of and snugly engage the double tree.

What is claimed is:

1. A whiffletree hanger consisting of a pair of semi-circular plates, a stationary disk mounted between the plates and concentric therewith, said ring having an annular flange on its top face extending beyond its periphery, a ring rotatably mounted between the disk and plates and held in position by the flange of said disk, and a frame secured to the ring adapted to receive a whiffletree.

2. A whiffletree hanger comprising a pair of semi-circular plates each having an arm for adjustably mounting the plate, a stationary disk mounted between the plates and concentric therewith, said disk having a rough bottom face to impinge against said pole or cross bar, a ring rotatably mounted between the disk and plates, and a frame secured to the ring adapted to receive a whiffletree.

3. A whiffletree hanger consisting of a pair of semi-circular plates each having a slotted extension projecting laterally from its periphery for adjustably mounting the plate, a stationary disk mounted between the plates and concentric therewith, said disk having an annular flange projecting from its periphery, a ring rotatably mounted between the plates and the disk and held in position by the flange of said disk, and a frame projecting from the ring adapted to receive a whiffletree, said frame being provided with portions to engage and normally project beyond the top faces of said plates for providing bearing surfaces for the frame upon said plates.

4. A whiffletree hanger consisting of a pair of semi-circular plates, a stationary disk mounted between the plates and having an annular flange formed upon its periphery, a ring rotatably mounted between the plates and held in position by the flange of said disk, a frame projecting from said ring and having its spaced standards adapted to receive a whiffletree therebetween, said standards having their base portion expanded to engage and project beyond the

top face of said plates to provide bearing
surfaces for the standards upon the plates,
and a clamping member between said spaced
standards adapted to engage the top face
5 of the whiffletree and clamp the whiffletree
to said ring.

In testimony that I claim the foregoing

as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN I. SHAW.

Witnesses:

JOHN C. FUGATE,
FRED SHAW.