

No. 804,105.

PATENTED NOV. 7, 1905.

E. J. DOOLEN.
COLTER CLAMP.

APPLICATION FILED MAY 9, 1905.

2 SHEETS—SHEET 1.

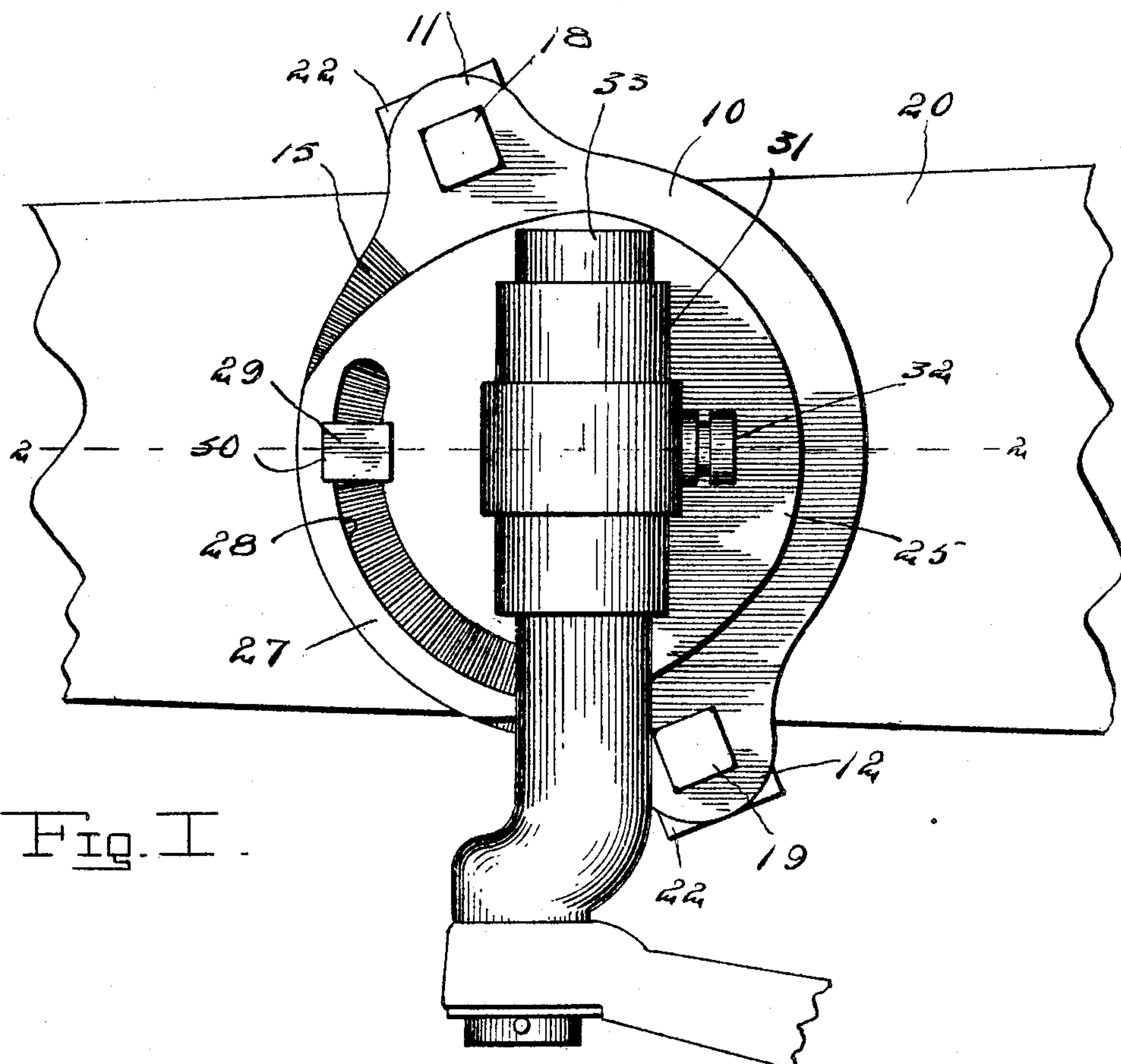


Fig. I.

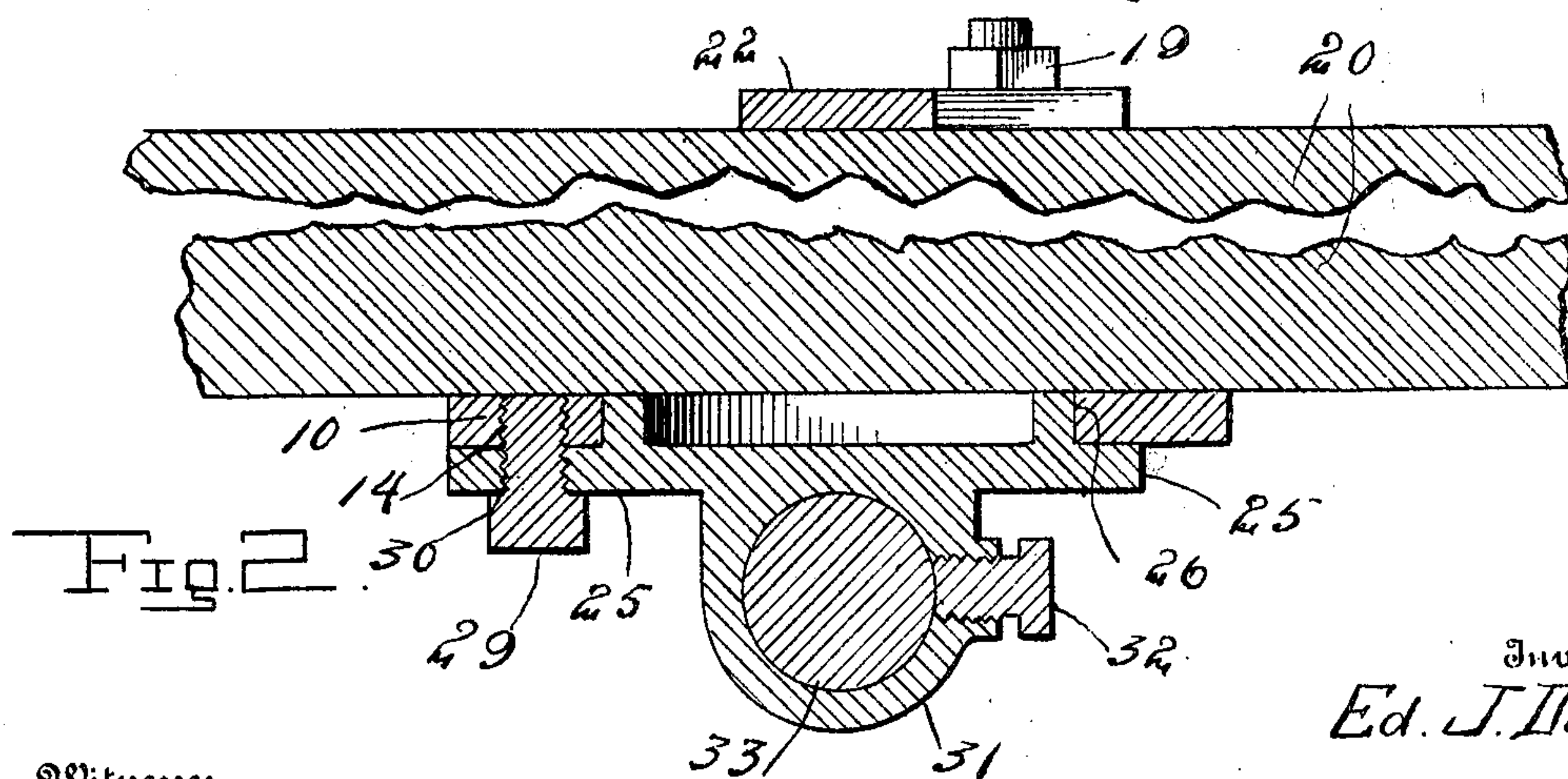


Fig. 2.

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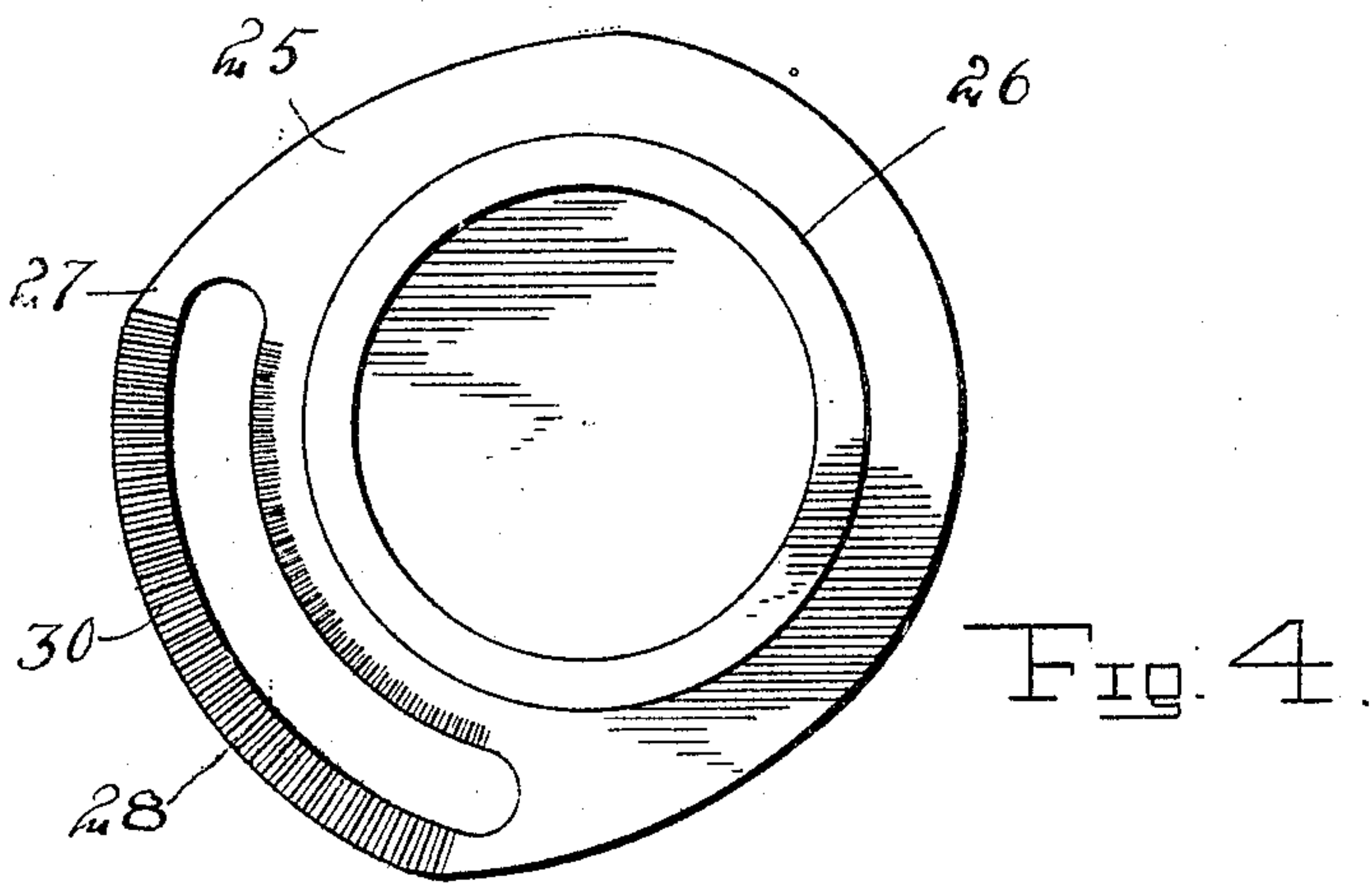
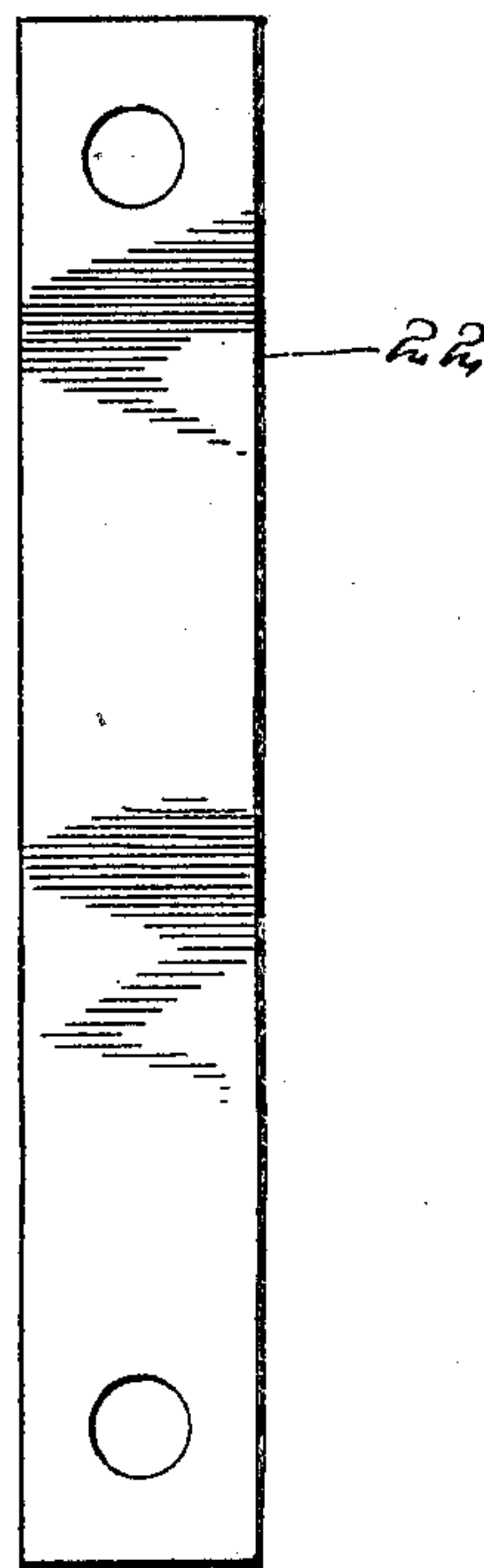
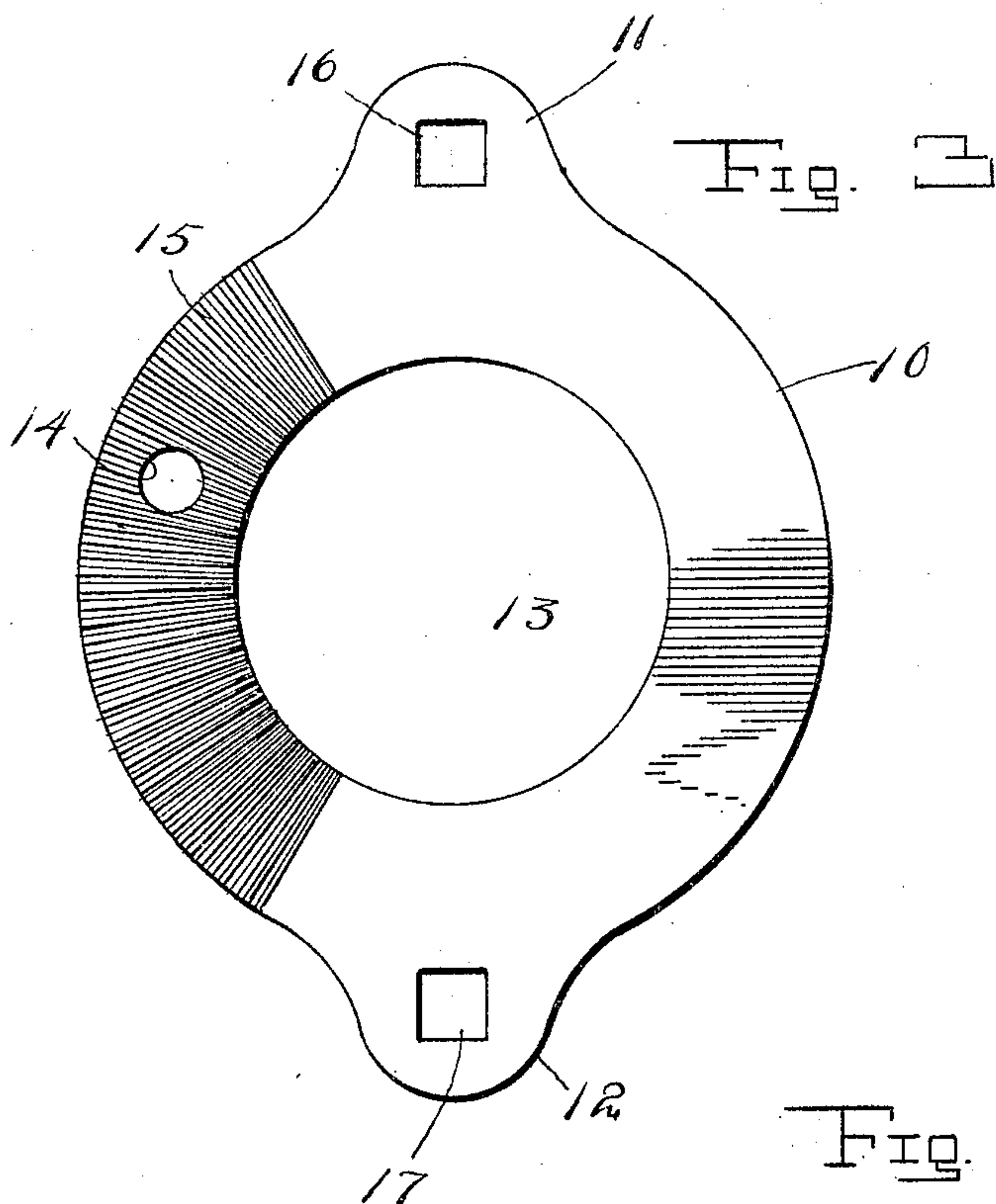
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UNITED STATES PATENT OFFICE.

EDWARD J. DOOLEN, OF VERNON, ILLINOIS.

COLTER-CLAMP.

No. 804,105.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed May 9, 1905. Serial No. 259,518.

To all whom it may concern:

Be it known that I, EDWARD J. DOOLEN, a citizen of the United States, residing at Vernon, in the county of Marion, State of Illinois, have invented certain new and useful Improvements in Colter-Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to
10 which it appertains to make and use the same.

This invention relates to clamps such as are employed in the attachment of colters to plow-beams, it being understood, however, that the principles involved may be embodied
15 in a clamp for any other specific purpose.

The object of the invention is to provide an article that will be cheap of manufacture, that may be easily and quickly applied to a plow-beam and removed therefrom, which
20 will permit of various adjustments of the shank or stem of the colter, and which will hold the colter securely in its different adjusted positions.

A further object of the invention is to provide a structure wherein the carrying-plate may be adjusted after the loosening of a single clamping-screw.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an elevation showing the clamp in place upon a plow-beam and having a stem or shank of a colter engaged therein. Fig. 2 is a section on line 2 2 of Fig. 1.
30 Fig. 3 is an elevation of the attaching-plate. Fig. 4 is a rear elevation of the carrying-plate. Fig. 5 is a view of the rear clamping-plate.

Referring now to the drawings, there is shown a clamp comprising an attaching-plate 10, which may be of ring shape, as illustrated, having radiating lugs 11 and 12 at diametrically opposite points. At one side of the central opening 13 of the plate, substantially midway of the lugs 11 and 12, is a threaded perforation 14, the outer face of the
45 plate at both sides of the perforation 14 being serrated, as shown at 15. While the member 10 is illustrated as ring-shaped, it may have any other specific outline so long as it has the round central opening 13 and the perforation 14, as will be understood from the following description. In the lugs 11 and 12 are formed openings 16 and 17, designed to receive bolts 18 and 19, which in practice are
50 disposed transversely of the plow-beam 20 above and below it, respectively, and are en-

gaged with a clamping-plate 22 at the opposite side of the beam, whereby the plate 10 is held securely to the beam. A carrying-plate 25 is disposed against the plate 10 and upon
60 its rear face has an annular flange 26 of a size to fit snugly but rotatably in the opening 13 and hold the plate 25 against displacement bodily over the face of the plate 10. The
65 plate 25 is enlarged at one side, as shown at 27, and in this enlarged portion is an arc-shaped slot 28, which is concentric with the flange 26 and which slot registers with the perforation 14. Through the slot 28 is passed
70 a set-screw 29, which engages the perforation 14 and has a shoulder 30 that rests against the plate 25 to clamp the latter against the plate 10. The rear face of the
75 plate 25, adjacent to the slot 28, is serrated, as shown at 30, to match the serrations 15 of the plate 10 or lie between them, this holding the plates positively against rotation with respect to each other when the set-screw is
80 screwed up.

Upon the outer face of the plate 25 is a sleeve 31, the axis of which intersects the axis of rotation of the plate 25 at right angles, and engaged with the sleeve 31 is a set-screw 32, which is designed to impinge against and
85 hold the stem 33 of a colter or other earth-treating device disposed in the sleeve.

With this construction it will be seen that the strains in the use of the clamp are almost entirely taken up by the flange 26, the set-screw 29 serving merely to hold the plate in
90 its different adjusted positions. Furthermore, the angular adjustment of the colter-stem is permitted when one screw is loosened.

It will be understood that in practice modifications of the specific construction
95 shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. An article of the class described, comprising an attaching-plate having an opening therein, a carrying-plate adapted to receive and hold an earth-treating tool and having an annular flange rotatably engaged
105 in the opening of the attaching-plate, and a single means for holding the carrying-plate against rotation and against movement with its flange from the opening of the attaching-plate.

2. An article of the class described, comprising an attaching-plate having an open-
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ing therein and a threaded perforation at one side of the opening, a carrying-plate having an annular flange rotatably fitted in the opening of the attaching-plate, and having
5 an arc-shaped slot concentric with the flange, and a set-screw engaged loosely in the slot and screwed into the perforation of the attaching-plate, said screw having a shoulder disposed to bear against the carrying-plate.
10 3. An article of the class described comprising an attaching-plate, means for securing the attaching-plate to a plow-beam, said attaching-plate having an opening therein and a threaded perforation at one side of
15 the opening a carrying-plate having an annular flange at one side rotatably fitted in

the opening of the attaching-plate and an arc-shaped slot concentric with the flange, said carrying-plate having a clamping-sleeve upon its outer face and a clamping-screw 20 passed loosely through the slot and engaged in the perforation, said screw having a shoulder disposed to bear against the attaching-plate, the portions of the plate adjacent to the perforation and slot respectively, being 25 serrated.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD J. DOOLEN.

Witnesses:

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JOHN A. MILLER.