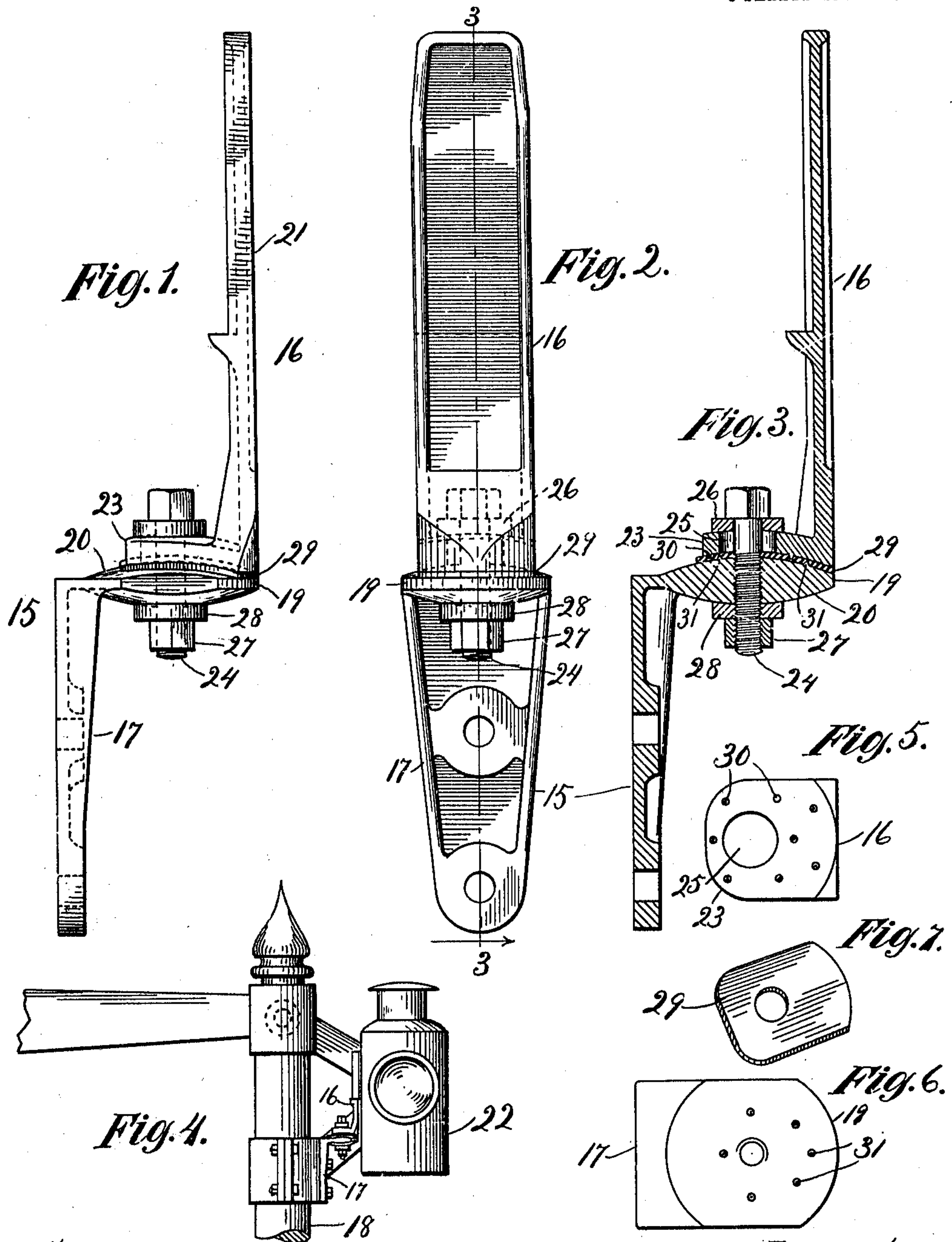


M. B. WILLISTON.
SIGNAL LAMP BRACKET.
APPLICATION FILED MAY 16, 1908.

970,770.

Patented Sept. 20, 1910.

3 SHEETS-SHEET 1.



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3 SHEETS—SHEET 2.

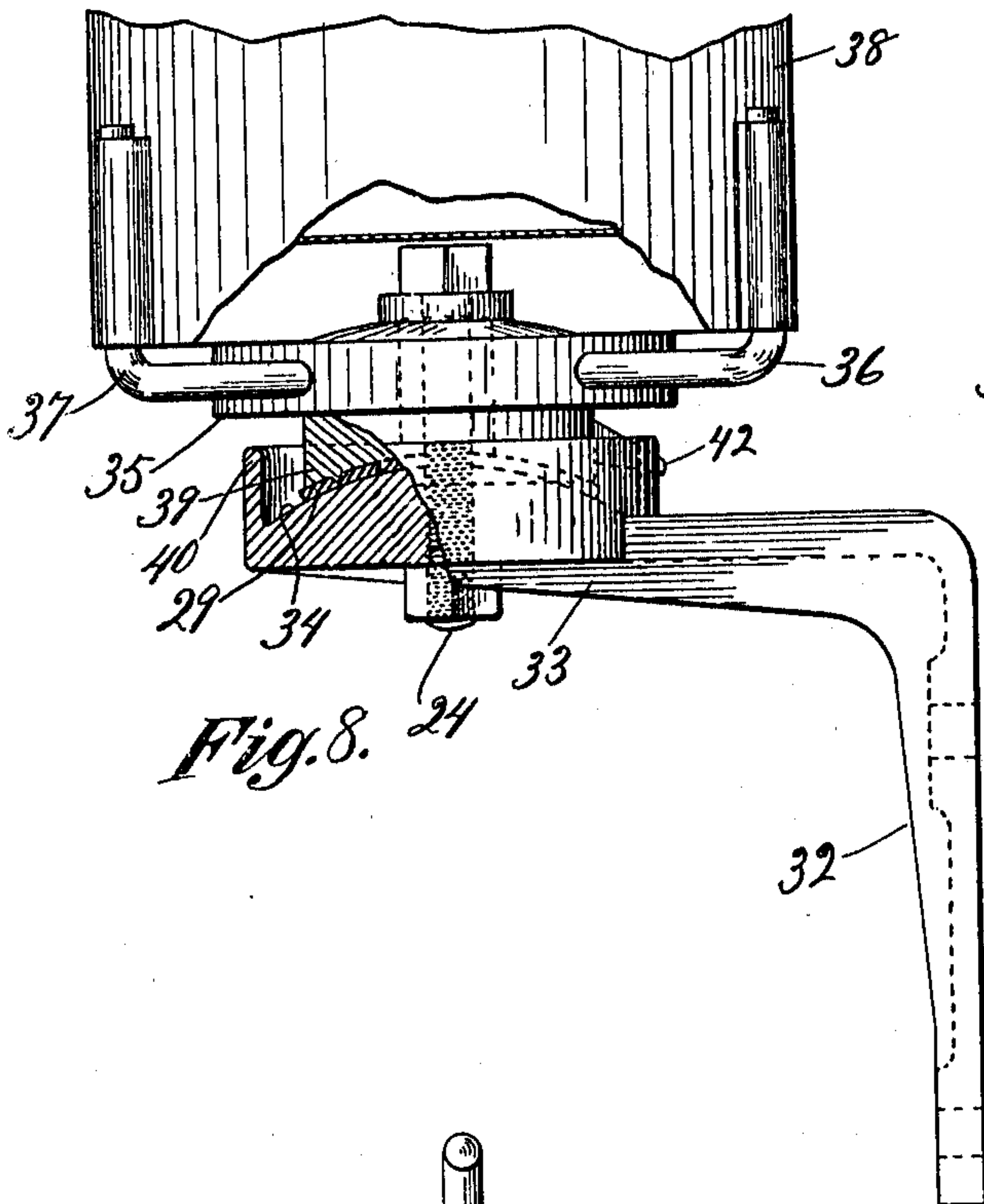


Fig. 8.

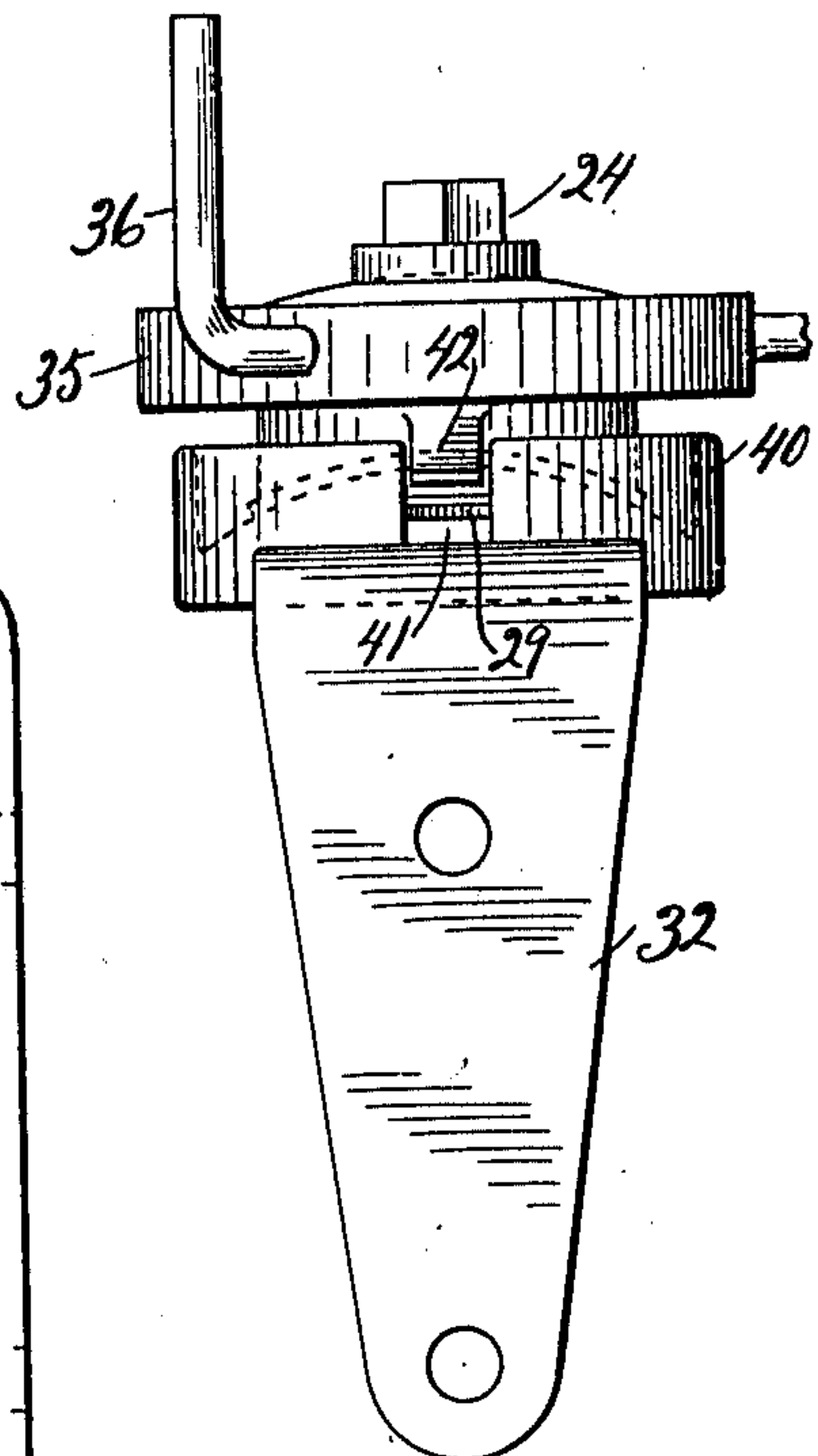


Fig. 9.

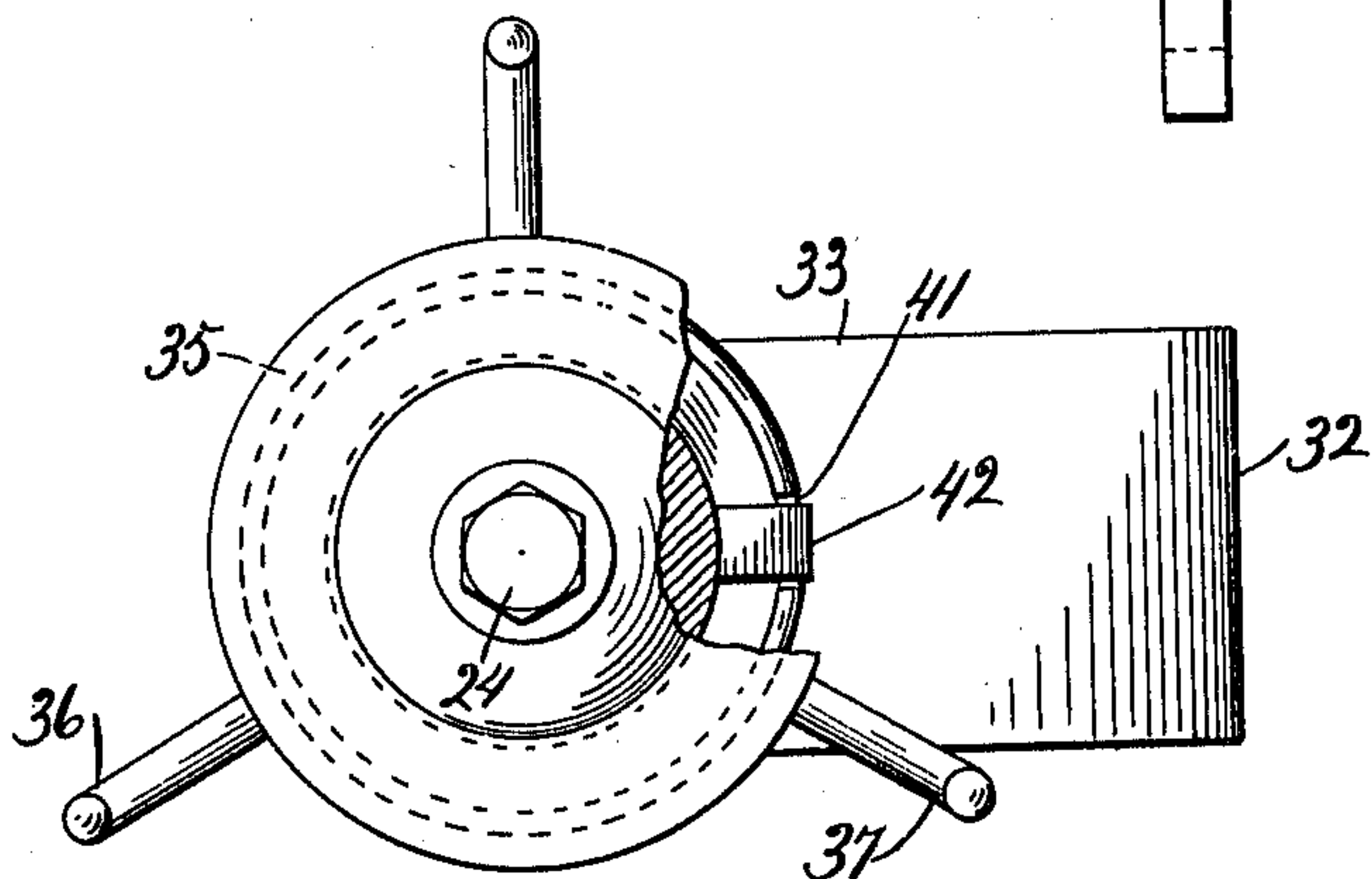


Fig. 10.

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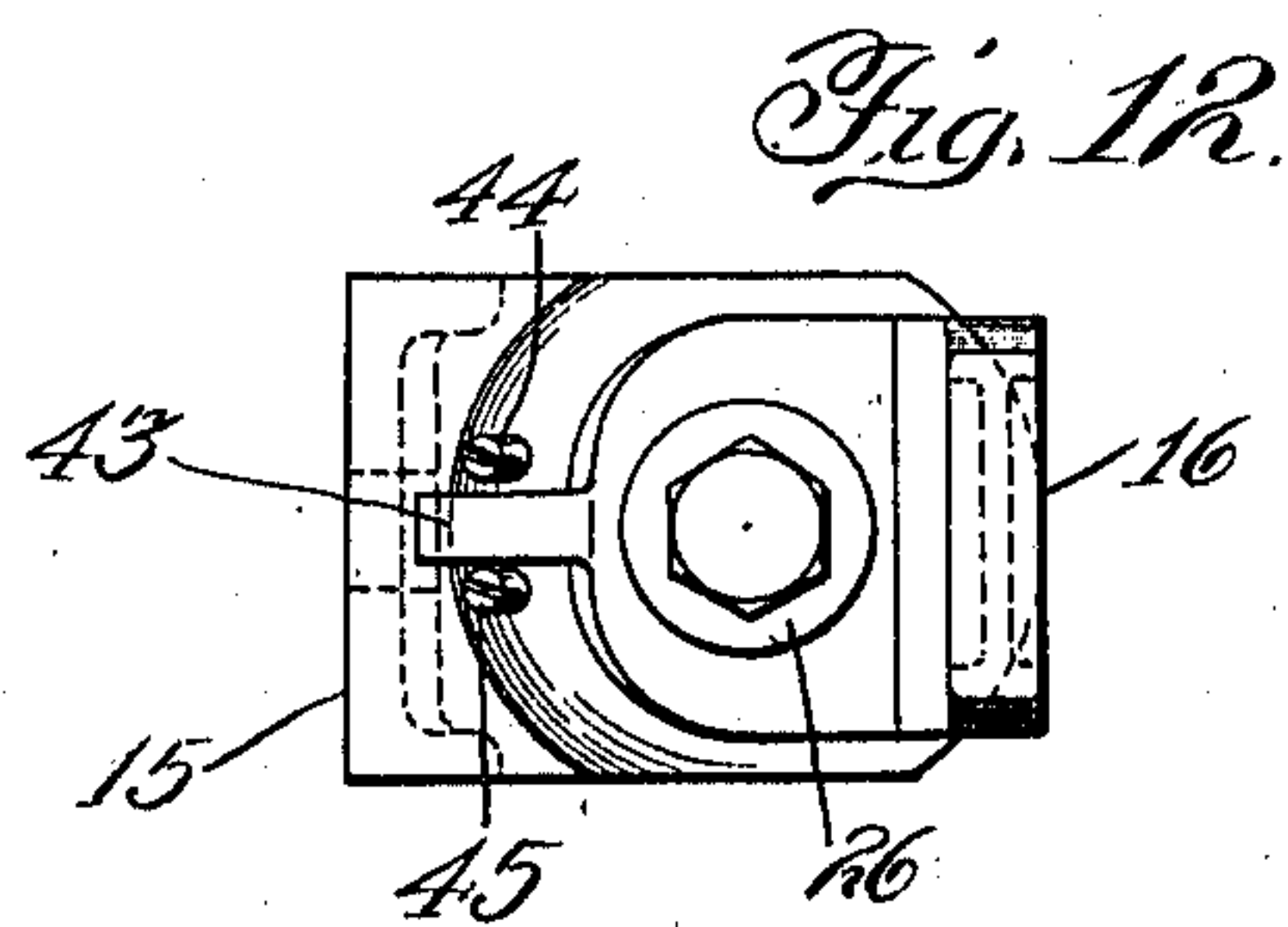
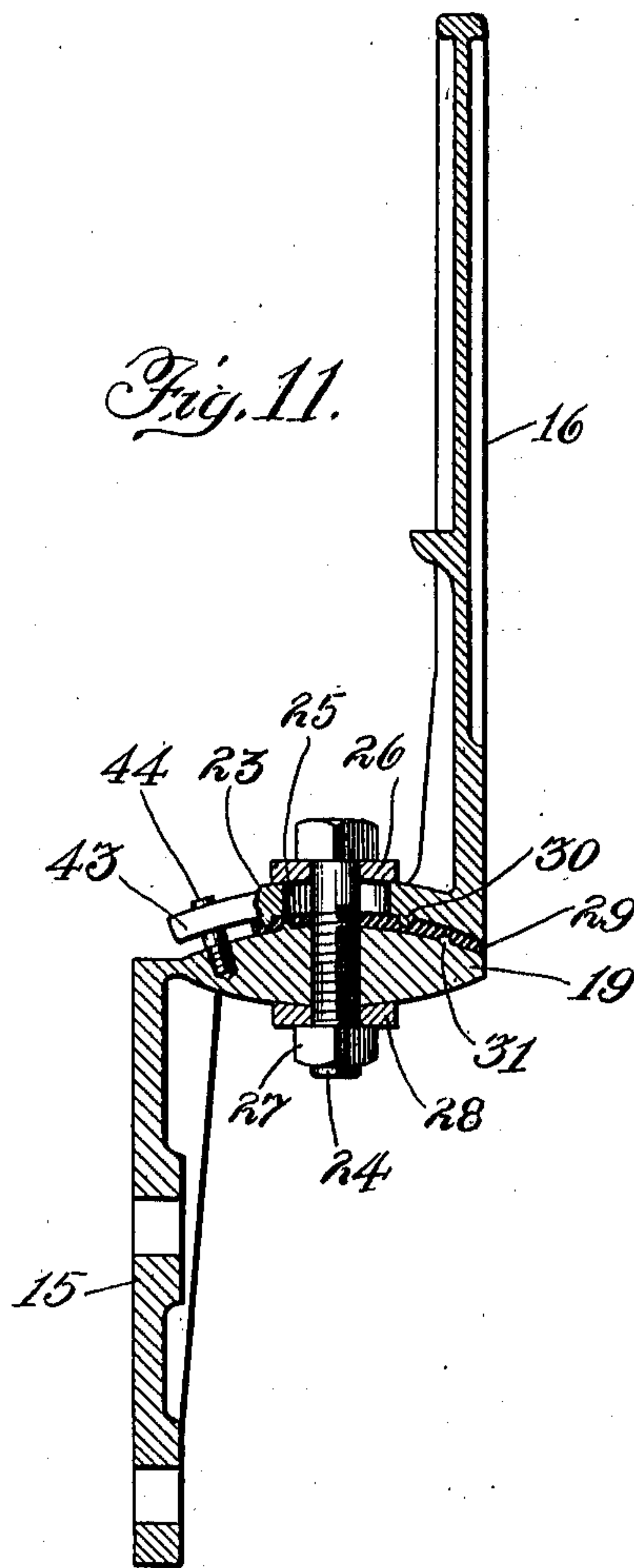
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3 SHEETS-SHEET 3.



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UNITED STATES PATENT OFFICE.

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SIGNAL-LAMP BRACKET.

Specification of Letters Patent. Patented Sept. 20, 1910.

970,770.

Application filed May 16, 1908. Serial No. 433,277.

To all whom it may concern:

Be it known that I, M BROCK WILLISTON, a citizen of the United States, and resident of Detroit, county of Wayne, and State of Michigan, have invented certain new and useful Improvements in Signal - Lamp Brackets, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to brackets for supporting signal lamps, being illustrated as applied to a semaphore column, though equally applicable for other situations, as for attachment to a railway car or engine, or to a switch signal staff.

The recent development of reflectors and lenses for railway signal lamps, whereby the light is condensed into a slender shaft, renders it necessary to provide for accurate adjustment of the lamp in order that this beam of light may be properly directed; and the object of this invention is to provide an adjustable bracket which will facilitate the accurate positioning of the lamp and its readjustment in case of displacement in use. This object is attained by the construction hereinafter described, and which is illustrated in the accompanying drawings, in which,—

Figure 1 is a side elevation of the bracket; Fig. 2 is an elevation thereof from a point of view ninety degrees removed from that of Fig. 1; Fig. 3 is a sectional view on the line 3—3 of Fig. 2; Fig. 4 is a detail elevation of a semaphore column with the bracket applied thereto; Figs. 5 and 6 are details of adjusting plates forming parts of the bracket; Fig. 7 is a detail of a lead washer used in connection with the bracket; Fig. 8 is a detail side elevation, partly in section, of the bracket provided with a modified form of lamp holder; Fig. 9 is a detail elevation of the same from a different point of view; Fig. 10 is a plan view, partly in section, of the bracket shown in Figs. 8 and 9; Fig. 11 is a view similar to Fig. 3 showing a modified form of construction; and Fig. 12 is a plan view of the device as shown in Fig. 11.

The bracket comprises two main elements 15, 16, the part 15 comprising a wall plate 17 adapted for attachment by any suitable means to a support, such as the semaphore column 18. At the upper end of the plate

17 is a laterally projecting plate 19, the upper surface of which is convex, having the form of a section of a sphere, as shown at 20, the lower face of the projection being shown as convex, though not necessarily having that shape.

The upper member 16 of the bracket comprises a body portion or staff 21 for engagement with the lamp 22, and a lateral projection 23 at its foot, the lower face of which is concave and complementary to the upper face of the projection 20, upon which it is seated. The projections 20 and 23 are vertically and centrally apertured to receive a bolt 24, the aperture in the part 20 being preferably threaded for engagement therewith, and the aperture 25 in the part 23 being considerably larger than the bolt to allow for movement of the member 16 in effecting the adjustment. The upper face of the part 23 is concentric with its lower face, and a washer 26 interposed between this member and the head of the bolt 24 is correspondingly curved. A nut 27 is applied to the lower end of the bolt 24, and a washer 28 is interposed between this nut and the member 20. When the bolt is in threaded engagement with the member 20, the office of the nut 27 is to lock the bolt against working loose. A washer 29 of soft material, such as lead or leather, is preferably inserted between the member 20 and 23, each of the latter, when such washer is used, being provided on their adjacent faces with short projections 30, 31, which sink into the washer when the bolt is turned up tightly, and more securely prevent accidental displacement of the bracket.

By the construction described, the upper member 16 of the bracket may be adjusted in any direction for the purpose of properly positioning the lamp.

In the construction illustrated in Figs. 8, 9 and 10, the same provision is made for adjustment. In these figures the invention is shown as applied to a bracket having a tripod for carrying the lamp. The lower member of the bracket consists of the wall plate 32 having the lateral extension 33 at its upper end, upon which is provided a convex seat 34 for the upper member of the bracket. The upper member of the bracket comprises a base 35 having a plurality of arms 36, 37, for engaging suitable sockets in the body of the lamp 38, the lower face 39

of the base 35 being concave, and the curvature corresponding to that of the part 34. The same form of clamping bolt 24 and soft washer 29 is shown as in the other form of construction. As a guide for roughly positioning the lamp, the lower member of the bracket is provided with an upstanding flange 40 having at one side a recess 41 into which loosely projects a lug 42 extending laterally from the base 35. The relative sizes of the recess 41 and lug 42 are such as to permit the necessary range of adjustment of the lamp in horizontal plane.

In Figs 11 and 12 is shown a modified form of construction in which stops for roughly positioning the lamp are applied to the form of bracket illustrated in Figs. 1, 2 and 3. The lateral projection 23 is provided with a toe 43 which enters between a pair of stops 44, 45, shown as taking the form of screws set in the plate 19.

I claim:

1. In a signal lamp bracket, in combination, a rigid member adapted for attachment to a support and having a lateral projection the upper face of which is curved to the section of a sphere, a lamp carrying member having a bearing face of complementary curvature and resting upon the curved face of the first named member, a binding bolt passing through the engaging portions of the two members, the bolt opening in one of them being larger than the bolt.
2. In a signal lamp bracket, in combination, a member adapted for attachment to a support and having a lateral projection, a member adapted to carry a lamp and having a lateral projection resting upon and bolted to the projection of the first named member, the engaging faces of projections being curved to a section of a sphere and the bolt hole of one being of greater diameter than the securing bolt.
3. In a signal lamp bracket, in combination, an L-shaped member adapted for attachment to a support, the upper face of its lateral projection being curved to a section of a sphere, a lamp-carrying member seated on such curved surface and being bolted thereto, the bolt-hole in one of the members

being larger than the bolt, and a lug on one member entered loosely between stops on the other member.

4. In a signal lamp bracket, in combination, a member adapted for attachment to a support and having a bearing face conforming to a section of a sphere, a lamp-supporting member having a bearing face complementary to the bearing face of the other member, such bearing faces being uneven, a washer of soft material interposed between the bearing faces, and a clamping member for adjustably binding together such two first-named members.

5. In a signal lamp bracket, in combination a bracket member having a horizontal sole plate, the upper face of which is curved to the section of a sphere, a lamp carrying member having a lateral extension resting on the sole plate its lower face conforming to the upper face thereof, a binding bolt uniting the sole plate and extension and being rigidly set in one of the members, the aperture in the other member being of greater diameter than the bolt.

6. In a signal lamp bracket, in combination a bracket member having a horizontal sole plate, the upper face of which is curved to the section of a sphere, a lamp carrying member superposed upon the sole plate, its lower face conforming to the upper face thereof, a binding bolt uniting the sole plate and lamp carrying member and being rigidly set in one of such members, the aperture in the other member being larger than the bolt.

7. In a signal lamp support, in combination, a bracket member having a horizontal sole plate, the upper face of which is curved to the section of a sphere, a lamp carrying member superposed upon the sole plate, its lower face conforming to the upper face thereof, a stud for clamping together the sole plate and lamp carrying member and being rigidly secured to one thereof and passing through an aperture in the other larger than the stud.

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