

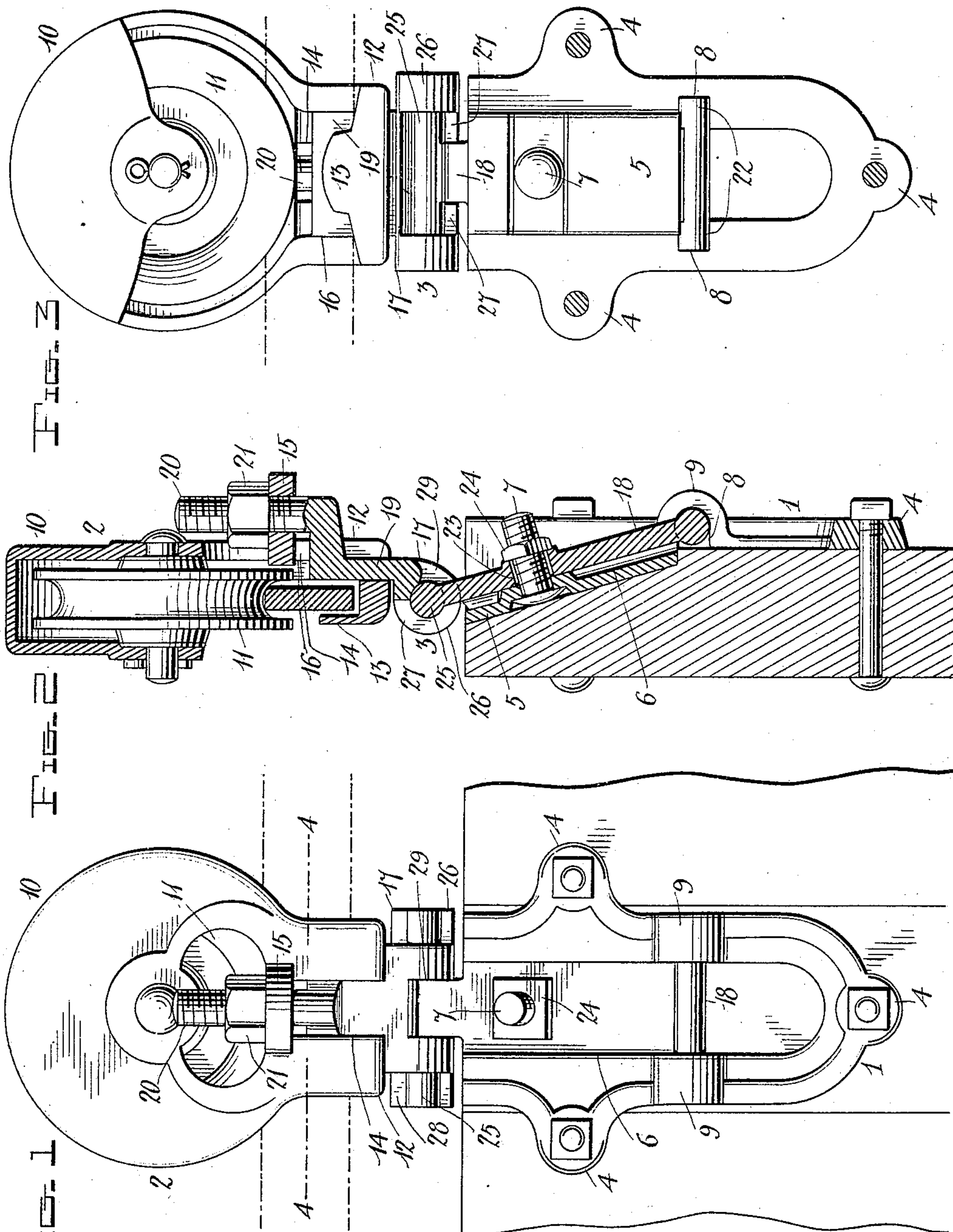
No. 841,117.

PATENTED JAN. 15, 1907.

J. H. BURKHOLDER.
DOOR HANGER.

APPLICATION FILED AUG. 27, 1906.

2 SHEETS—SHEET 1.



Witnesses

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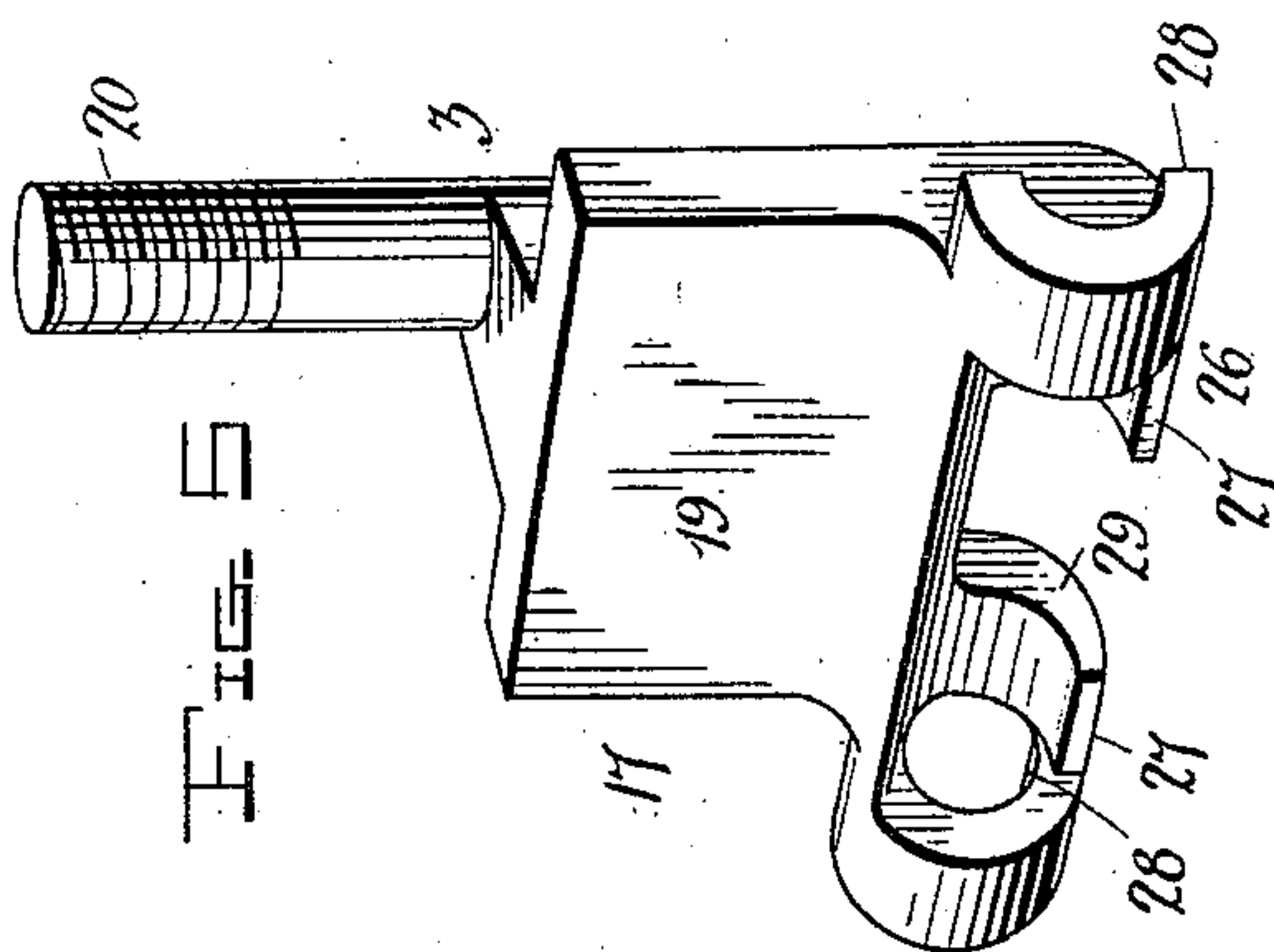
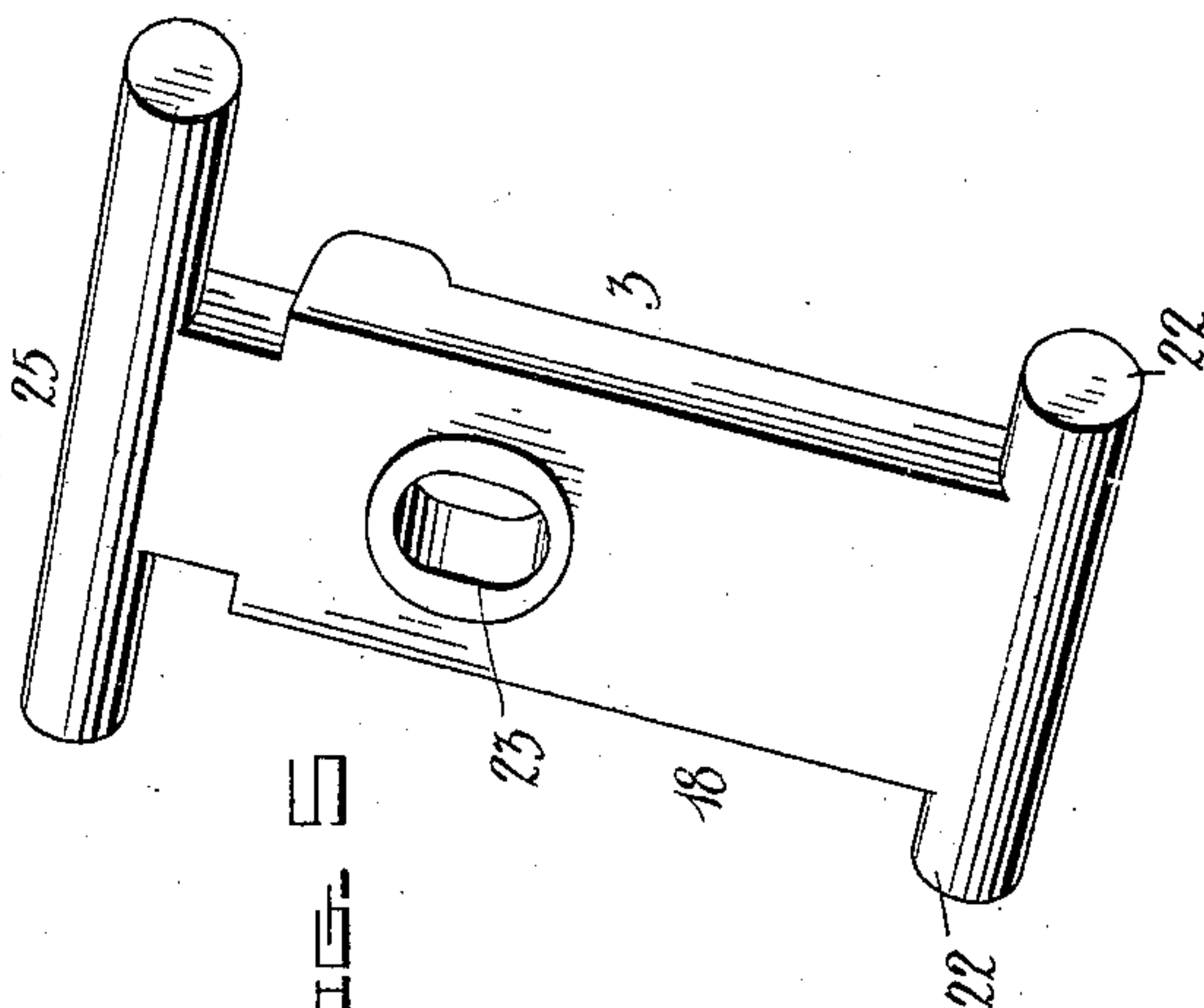
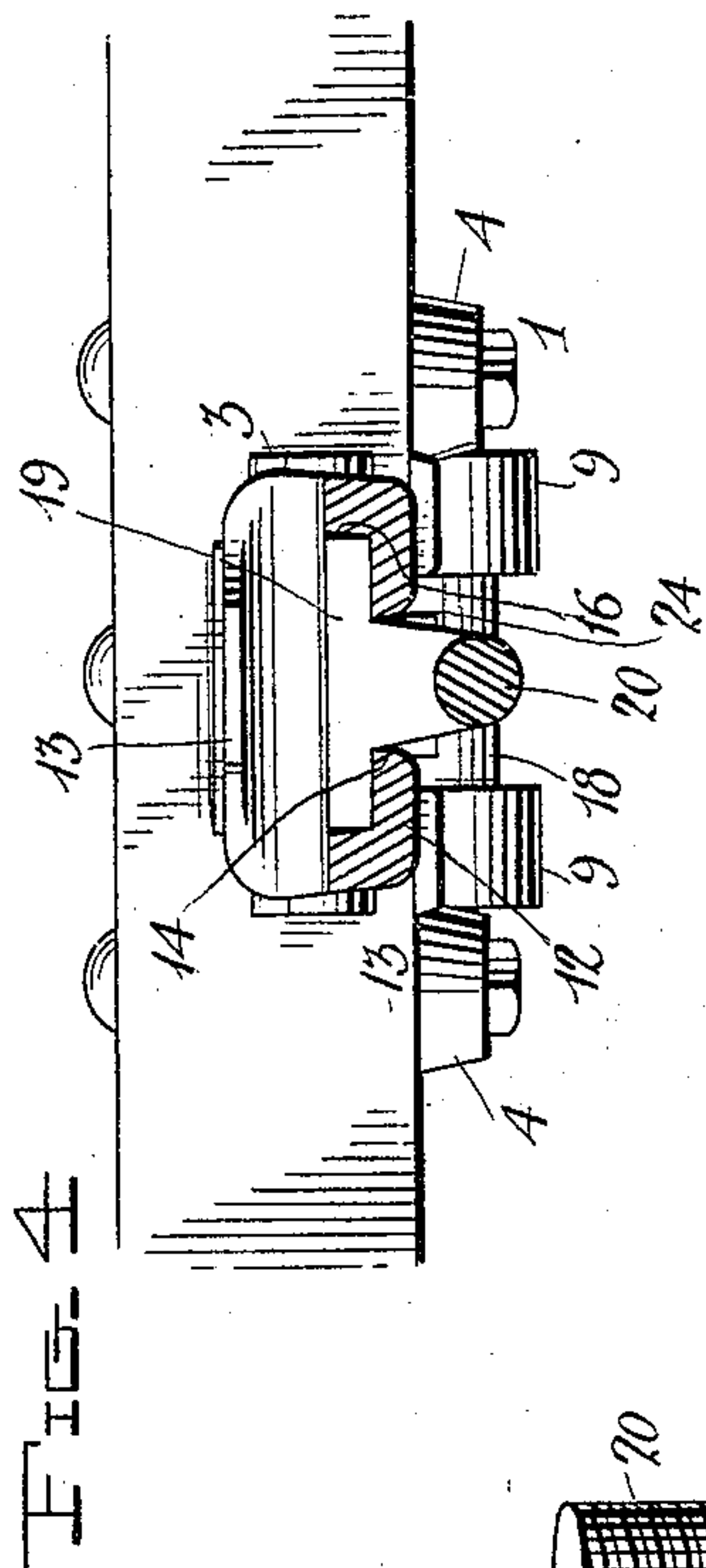
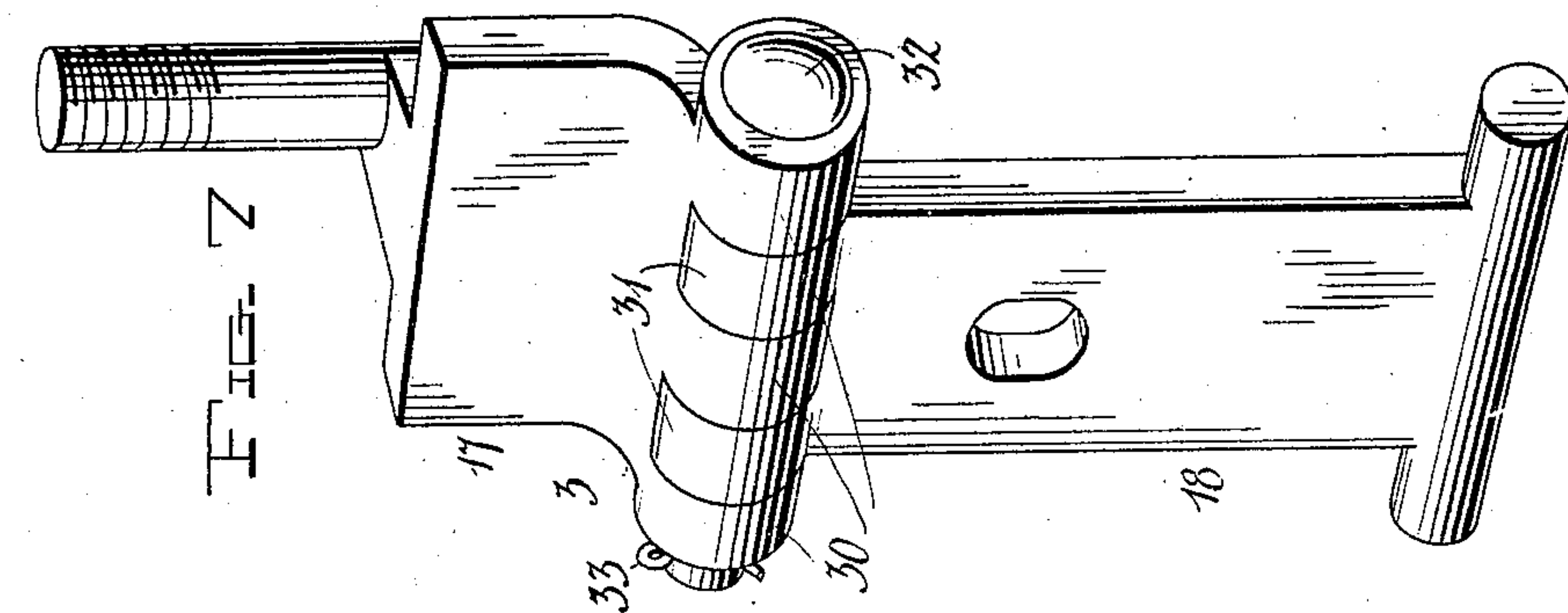
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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN H. BURKHOLDER, OF ASHLAND, OHIO.

DOOR-HANGER.

No. 841,117.

Specification of Letters Patent.

Patented Jan. 15, 1907.

Application filed August 27, 1906. Serial No. 332,179.

To all whom it may concern:

Be it known that I, JOHN H. BURKHOLDER, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented new and useful Improvements in Door-Hangers, of which the following is a specification.

This invention relates to improvements in door-hangers, and particularly those in which the door may be adjusted both vertically and laterally.

The object of the invention is to improve and simplify the construction and operation of devices of this character, and thereby render the same more efficient.

With the above and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a door-hanger embodying my improvements. Fig. 2 is a central vertical section through the same. Fig. 3 is a side elevation of the rear or inner side of the hanger. Fig. 4 is a detail horizontal section taken on the plane indicated by the line 4-4 in Fig. 1. Figs. 5 and 6 are perspective views of the two sections of the two-part hanger member, and Fig. 7 is a perspective view of a slightly-modified form of the two-part hanger member.

The improved door-hanger consists of a plate or bracket 1, to be attached to a door, a track member 2, and a two-part hanger member 3, which connects the door and track members. The door member 1 is in the form of a plate, having apertured lugs 4 to receive bolts or similar fastenings, which secure it upon the door. Formed in the center of its upper portion is an inwardly-extending offset 5, which provides a laterally-inclined vertically-extending channel 6. From the bottom of this channel projects an upwardly-inclined screw-stud 7, and at its lower end upon its opposite sides are bearing-sockets 8, formed in enlargements 9, oppositely arranged upon the plate 1. The offset 5 is seated in a recess in the door, as seen in Figs. 2 and 4.

The track member 2 is provided at its top with a housing 10, in which is journaled a grooved wheel 11, adapted to run upon the track, which latter may be of any form and construction. The lower depending portion 12 of the track member is formed at its rear

with an upwardly-projecting guard-lip 13, adapted to prevent the wheel 11 from jumping its track. This portion 12 of the track member is formed in its front face with a vertical slot 14, extending from its bottom to an apertured are 15, projecting from the front of said member. The slot 14 opens into a vertically-extending recess 16, formed in the inner face of the portion 12 of the track member and adapted to serve as a guideway, as presently explained.

The hanger member 3 comprises upper and lower sections 17 18, which may be hingedly connected in any suitable manner. The upper section 17 has a rectangular portion 19, which is adapted to slide vertically in the guide-recess 16 in the track member and to depend from the bottom of the portion 12 to said member. Formed upon the outer face of the body 19 is a laterally-projecting lug which extends through and slides in said slot 14 and from the top of which projects a screw-stud 20, adapted to pass through the aperture in the ear 15 and to receive an adjusting-nut 21. It will be observed that by turning this nut the section 17 of the hanger member may be adjusted vertically. The lower section 18 of the hanger member is adapted to seat in the channel 6 in the door plate or member 1, and at its lower end are formed oppositely-projecting studs or trunnions 22, which are seated in the bearing recesses or sockets 8, and thus serve to pivot the section 18 and the plate 1, so that said section may swing laterally or horizontally. Formed in the upper member of the section 18 is an elongated slot or opening 23, through which the screw-stud 7 projects. A nut 24 is provided upon the outer end of this screw-stud, so that the section 18 may be adjusted laterally or horizontally with respect to the door, said section 18 being free to move on the screw-stud and the weight of the door tending to turn the section 18 to a vertical position, so that said section always bears against said nut.

The hinged or pivotal connection between the sections 17 18 of the hanger member 3, as shown in the first six figures of the drawings, comprises a pintle or trunnion member 25, provided upon the section 18 and in the form of a transversely-extending cylindrical cross-head formed upon the reduced upper end of said section. This hinged connection also comprises a socket or bearing member 26,

provided upon the lower end of the section 17 and in the form of a cylindrical sleeve adapted to receive the pintle or trunnion 25 and having portions cut away to permit of the detachable engagement of the same therewith. This cylindrical socket 26 has its rear portion cut away, as shown at 27, from a point adjacent to one of its ends to a point adjacent to the other of its ends, and it is cut away on the front face of each end, as shown at 28. Said member is also cut away at the center of its bottom and front, as shown at 29. The recess or portion 29 is of slightly greater length than that of the reduced portion of the upper end of the section 18, which reduced portion it is adapted to receive, as shown in Fig. 1. Owing to the fact that the recess 27 in the rear of the socket 26 is of greater length than the recess 29, the pintle or trunnion 25 may be shifted longitudinally in said socket when the reduced portion of the upper end of the member 8 is swung up out of the recess 29 and into the recess 27. When thus swung up and the section 18 is shifted laterally with respect to the section 17 to move the reduced upper end of the former to one end of the recess 27, it will be seen that the pintle or trunnion 25 may be swung angularly in a horizontal plane, so as to move one of its ends out of the socket member through the opposite end of the recess 27; this being permitted by the movement of its other end into the recess 28 at one end of the socket member. When the trunnion or pintle 25 is swung to this position, so that when one of its ends is disengaged from the socket 26, its other end may be readily drawn out of the same through the recess 27, as will be readily understood. This construction provides a detachable hinge or pivotal connection between the two sections of the hanger member, the parts of which connection cannot become casually disengaged.

The hinged connection between the sections 17 18 of the hanger member 3 (shown in Fig. 7 of the drawings) is very similar to the ordinary door-hinge and comprises a plurality of spaced cylindrical sockets 30, formed on the section 17, and similar spaced sockets 31, formed on the section 18 and adapted to enter the spaces between the sockets 30. The sockets 30 31 have transversely-alining openings to receive a pivot-pin or pintle 32, which has a head at one end and an aperture at the other end for a split pin or cotter 33.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

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

1. In a door-hanger of the character described, a member for attachment to a door,

a track member, and a sectional hanger member having a hinged connection between its sections, means for adjusting one of said sections vertically upon one of said members, and means for adjusting the other of said sections laterally upon the other of said members.

2. In a door-hanger of the character described, a member for attachment to a door, a track member, and a sectional hanger member having a hinged connection between its sections, one of said sections being mounted for vertical sliding movement upon the track member and the other of said sections being mounted for laterally-swinging movement upon said door member.

3. In a door-hanger of the character described, a member for attachment to a door, a track member, and a sectional hanger member having a hinged connection between its sections, means for adjusting one of said sections vertically upon said track member, and means for adjusting the other of said sections laterally upon said door member.

4. In a door-hanger of the character described, a door member, a track member, a hanger member having upper and lower hinged sections, means for connecting the upper section to said track member for vertical movement thereon, a pivotal connection between the lower end of said lower section and said door member, and means for adjusting the lower section laterally in said door member.

5. In a door-hanger of the character described, a door member or plate having a laterally-inclined, vertical channel, oppositely-disposed bearing-sockets and an upwardly-inclined screw-stud in the bottom of said channel, a track member having a depending slotted and recessed portion and a laterally-projecting, apertured ear, a hanger member comprising hinged upper and lower sections, the lower section being adapted to enter the channel in the door member and having an opening to receive said screw-stud, oppositely-projecting trunnions to enter the bearing-sockets in said door member, the upper section being adapted to slide in the recessed portion of the track member and having an upwardly-projecting screw-stud to enter the aperture in the ear on said track member, and an adjustable nut upon said screw-stud, substantially as described and for the purposes set forth.

6. In a door-hanger of the character described, a track member having a wheel-housing at its top and a depending portion formed with a vertically-extending guide-recess in one of its faces, and a vertical slot in its opposite face, said recess and slotted opening at the bottom of said depending portion, an upwardly-extending integral guard-lip upon one side of said depending portion, and an apertured laterally-extending ear upon

the other side of said depending portion at the upper end of said slot, substantially as described and for the purposes set forth.

5 7. In a door-hanger of the character described, a door member comprising a plate having apertured ears, a laterally-inclined offset upon its bottom, said offset forming a vertically-extending channel, a screw-stud projecting upwardly and outwardly from the
10 bottom of said channel, and enlargements upon said plate at the lower end of said channel and formed with oppositely-disposed bearing-sockets, substantially as shown and for the purposes set forth.

15 8. In a door-hanger of the character described, the combination with the door and track members, of a connecting hanger member having upper and lower sections, one of

said sections having a transversely-extending, cylindrical pintle member upon its reduced end and the other of said members having upon its adjacent end a cylindrical socket member formed with a central longitudinally-extending recess at its rear, recesses upon its front face at its opposite ends, 25 and a centrally-disposed recess in its bottom and front face, substantially as shown and for the purposes set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 30 witnesses.

JOHN H. BURKHOLDER.

Witnesses:

F. N. PATTERSON,

JULIET E. MASON.