

No. 685,218.

Patented Oct. 22, 1901.

S. B. NILSEN.

HINGE.

(Application filed May 29, 1901.)

(No Model.)

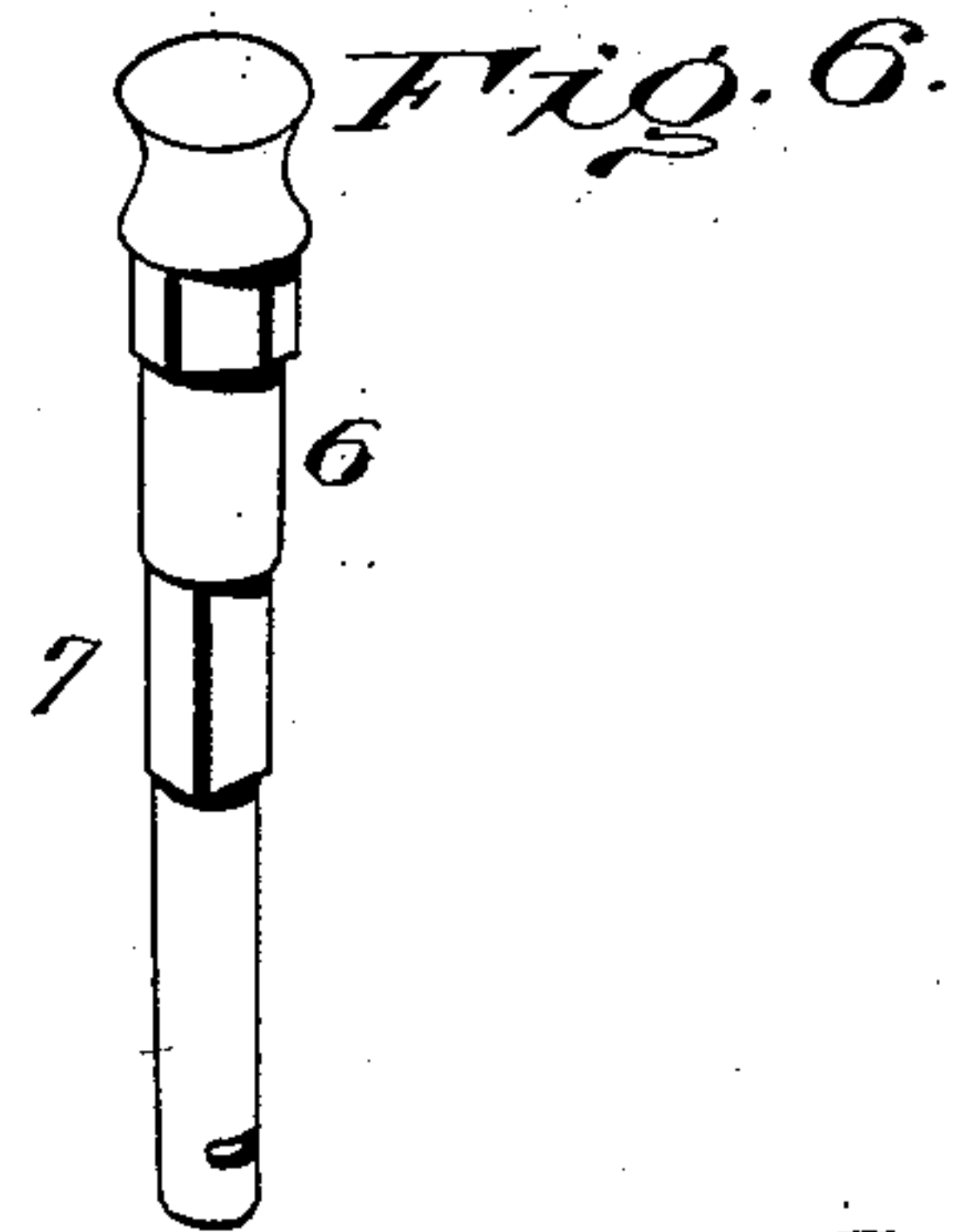
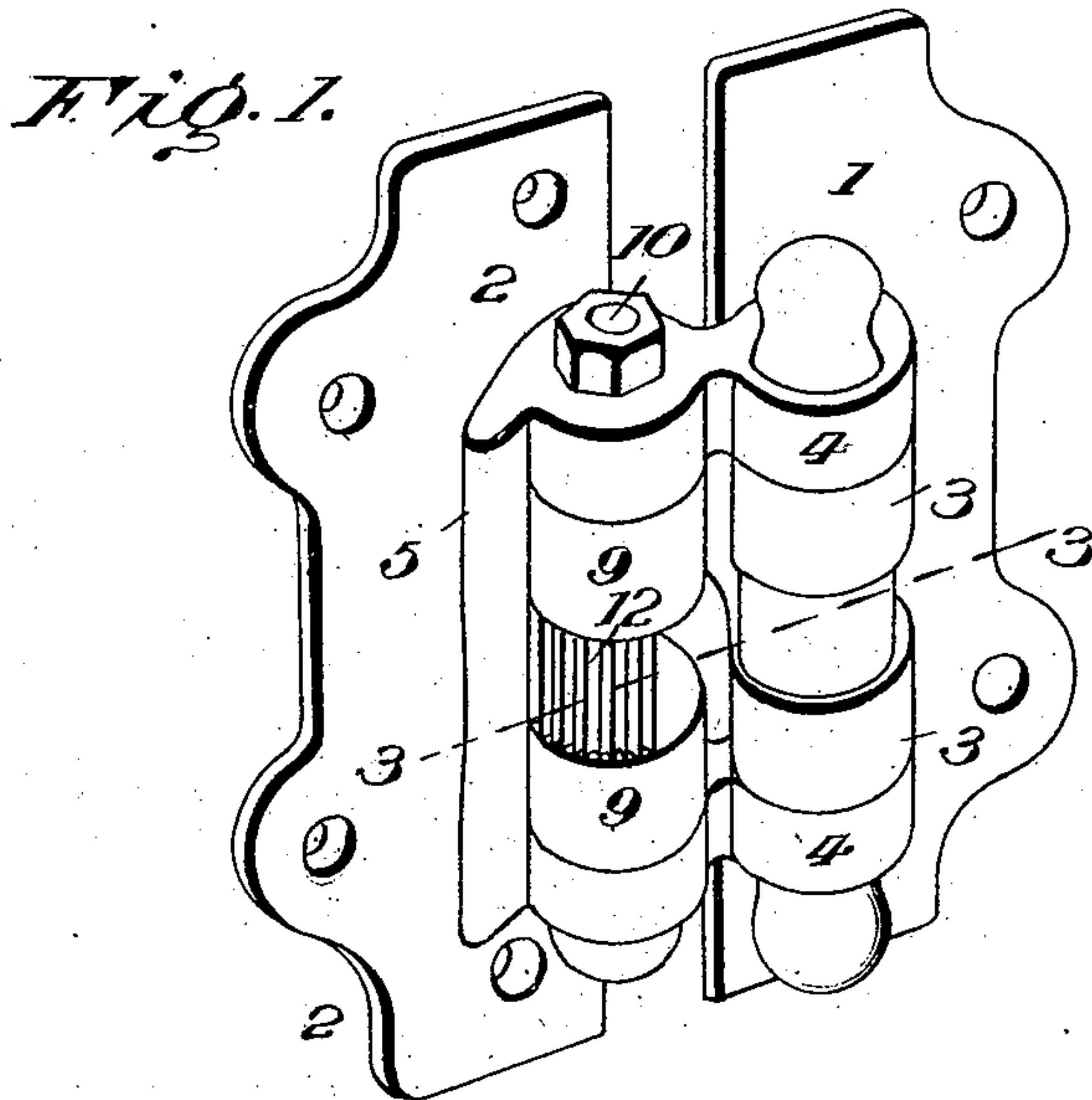


Fig. 4.

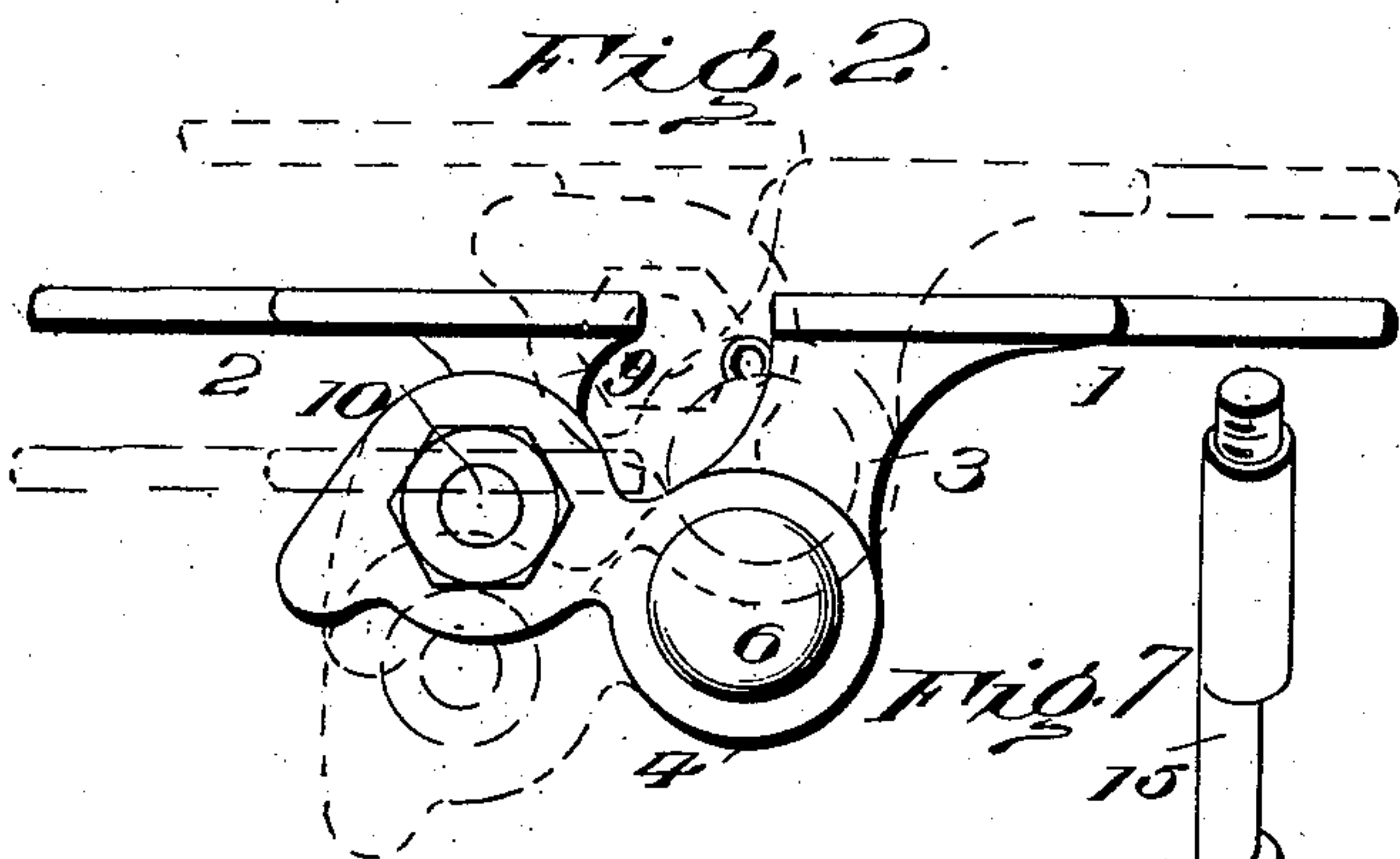
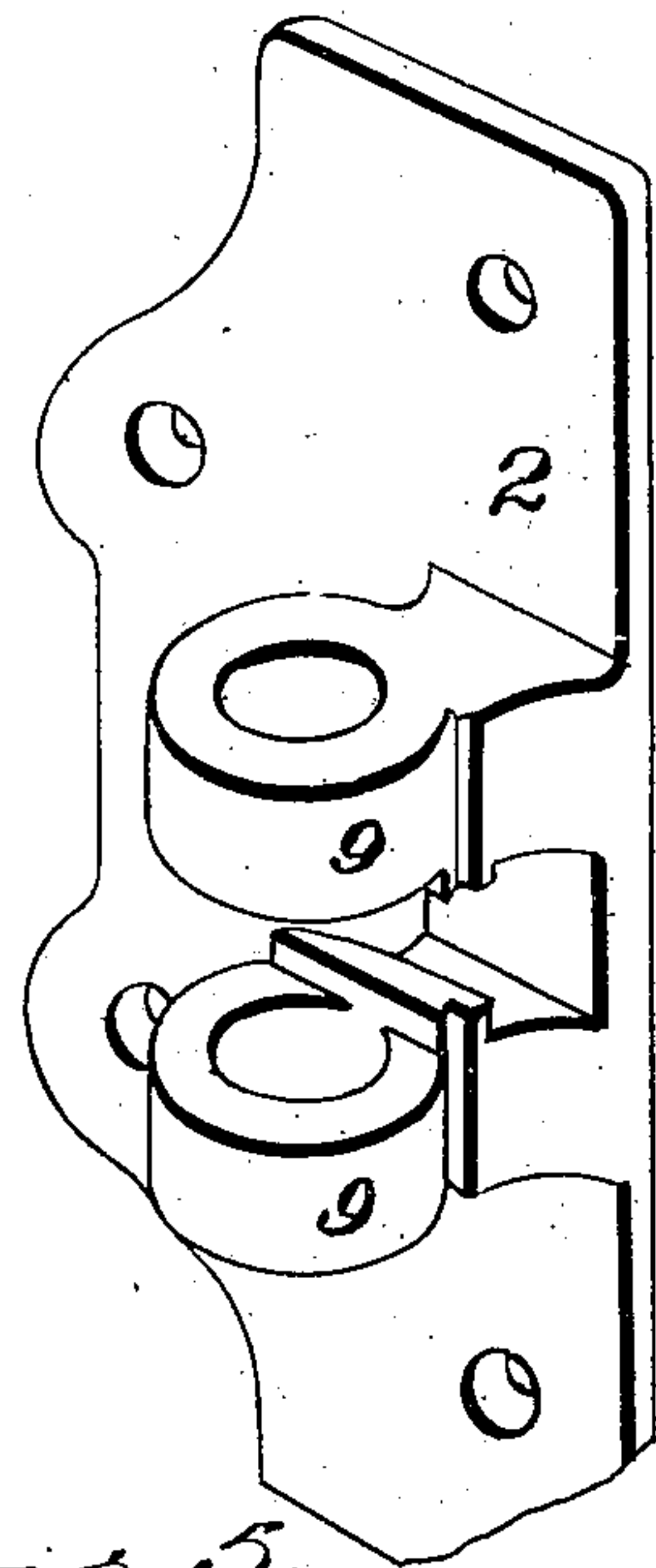


Fig. 7.

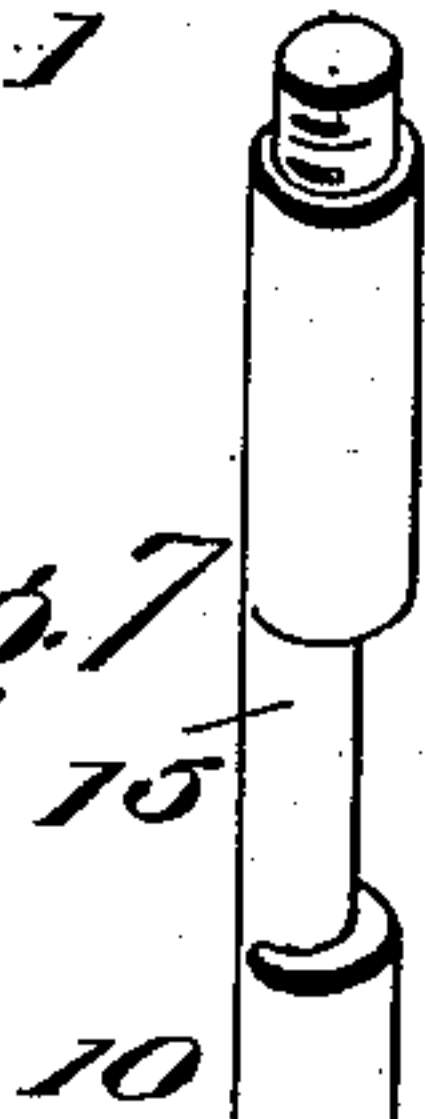
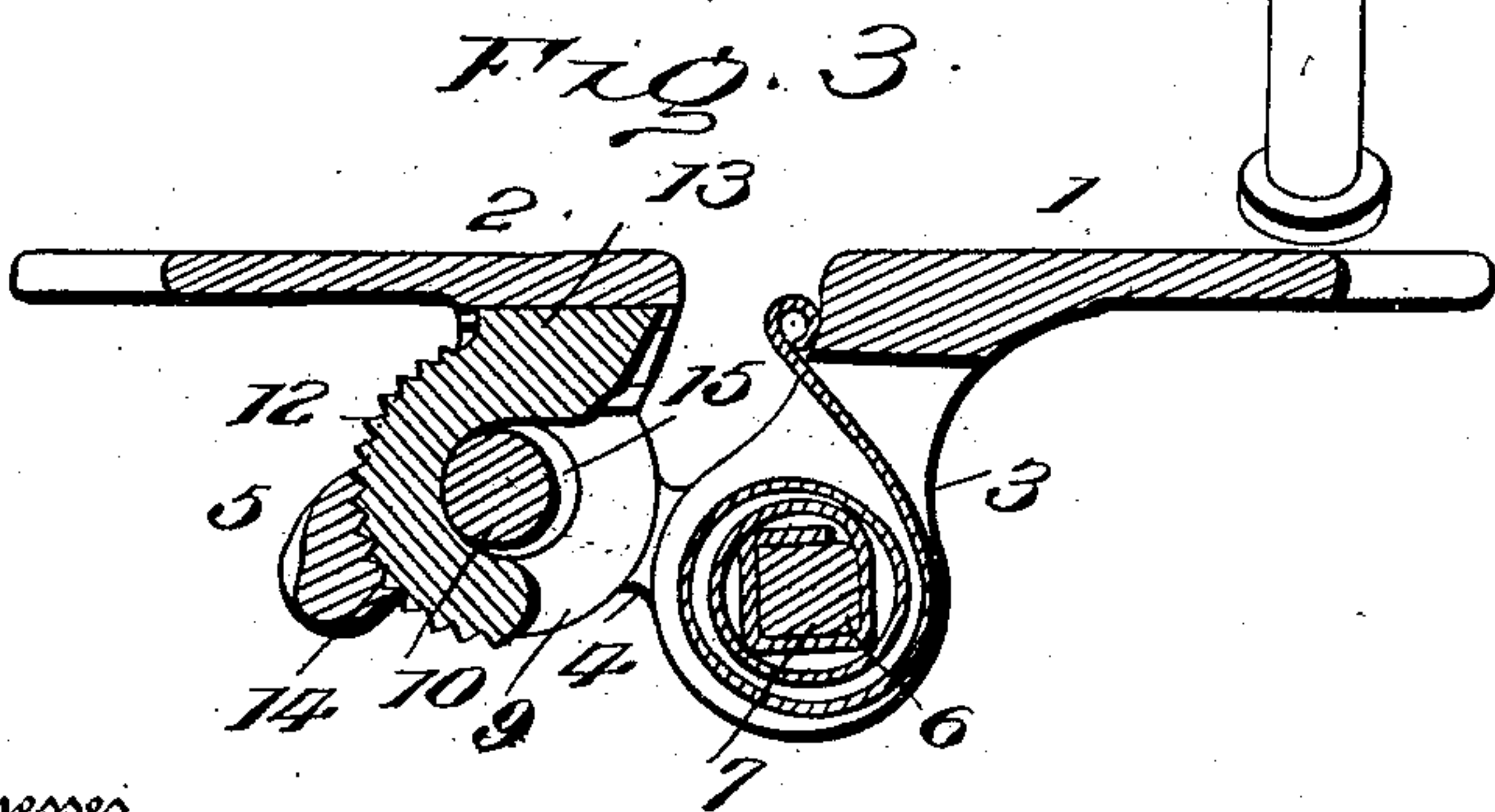
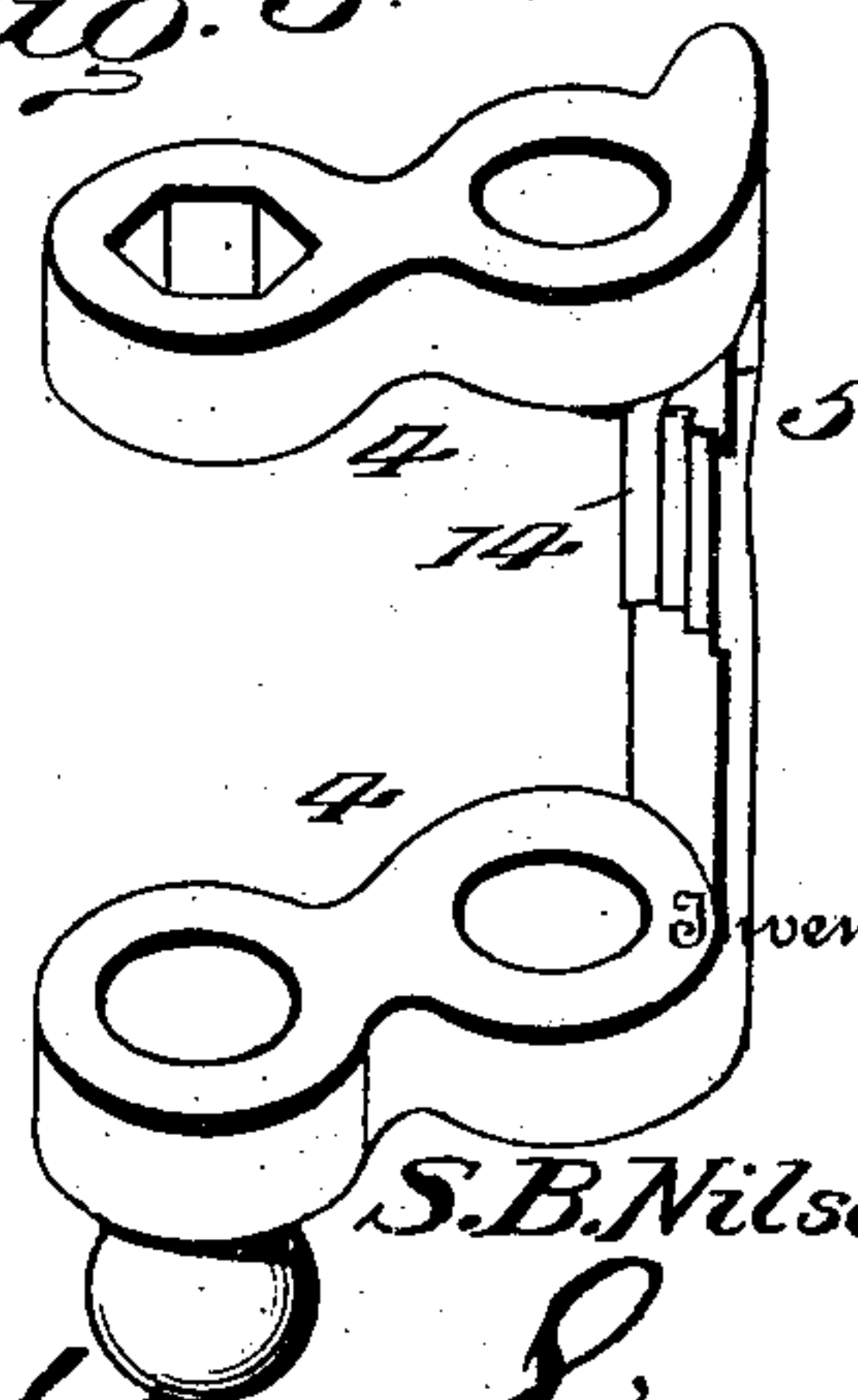


Fig. 5.



Witnesses

My true
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By

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UNITED STATES PATENT OFFICE.

SIVERT B. NILSEN, OF CROOKSTON, MINNESOTA.

HINGE.

SPECIFICATION forming part of Letters Patent No. 685,218, dated October 22, 1901.

Application filed May 29, 1901. Serial No. 62,404. (No model.)

To all whom it may concern:

Be it known that I, SIVERT B. NILSEN, of Crookston, in the county of Polk and State of Minnesota, have invented certain new and
5 useful Improvements in Hinges; 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 which it appertains to make and use the same.

10 This invention contemplates certain new and useful improvements in hinges.

The object is to provide improved means for adjusting the connection between the leaves to permit of doors being attached to
15 jambs of varying thicknesses and also to overcome the unevenness resulting from warping.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

20 In the accompanying drawings, Figure 1 is a view in perspective. Fig. 2 is an end view showing in dotted lines the positions to which the leaves may be adjusted. Fig. 3 is a cross-sectional view on line 3 3, Fig. 1. Fig. 4 is a
25 view of one of the leaves. Fig. 5 shows the yoke connection between the leaves. Figs. 6 and 7 are views of the pintles.

Referring to the drawings, 1 and 2 designate the leaves of a hinge. Leaf 1 is provided with ears 3, through which and the outer
30 apertures of the horizontal arms 4 of a yoke 5 is passed a pintle 6, preferably square in cross-section at its center 7. A coiled spring 8 on this pintle tends to hold leaf 1 in its
35 normal position. Leaf 2 is also provided with ears 9, through which and the inner apertures of the horizontal arms of the yoke is passed its pintle 10. Between ears 9 is a segmental rack 12, which extends from a block 13, slid-
40 able in grooves between said ears. This rack is engaged by teeth 14 of the vertical arm of yoke 5. The pintle 10 is cut out at one side of its central portion to form a cam-like section 15 of length equal to the width of rack
45 12, the movement of which is controlled by said pintle. When the latter is turned so that its cut-out is adjacent to the rack, the latter may be moved slightly toward the pintle and out of engagement with teeth 14; but
50 when the pintle is given a half-turn its cam-

like surface will force the rack outward into engagement with the yoke.

The yoke 5 forms the connection between the two leaves. It will be noted that the pivot on which the hinge moves when the
55 door is opening or closing is that formed by leaf 1 and the outer apertures of the horizontal arms of the yoke. It will also be noted that the yoke, being adjustably connected to
60 leaf 2, may be so moved as to throw the normal position of leaf 1 forward or rearward of the vertical plane of leaf 2. To effect this adjustment, it is only necessary to loosen the
65 nut on the end of pintle 10 and give the latter a half-turn. The yoke may then be ad-
justed to move leaf 1 to the required position to fit the door or to overcome any unevenness between the casing and the door. The pintle
70 is then again turned to bind the segmental rack against the yoke, and the nut on the end of the pintle being tightened the parts are firmly held in their new position.

I claim as my invention—

1. In a hinge, a connection between the leaves forming the pivot-bearing for one leaf
75 and means for adjusting such connection relatively to the other leaf for regulating the relative positions of the two leaves, as set forth.

2. In a hinge, a connection between the
80 leaves forming the pivot-bearing for one leaf and itself adjustably mounted on the other leaf, and adjustable means for controlling the position of such connection, as set forth.

3. A hinge having two leaves, a yoke ad-
85 justably mounted on one of said leaves and pivotally secured to the other leaf, and means on said first-mentioned leaf for adjusting the position of said yoke, as set forth.

4. A hinge having two leaves, a yoke ad-
90 justably mounted on one of said leaves and pivotally secured to the other leaf, and an adjustable member on said first-mentioned leaf designed to engage and hold said yoke in its
95 adjusted position, substantially as set forth.

5. A hinge having two leaves provided with
ears, a yoke movably connected to the ears of one of said leaves by a pintle, said pintle
having a cam-like central portion, and said
yoke having a toothed portion and pivotally 100

connected to the ears of the other leaf, and a segmental rack on said first-mentioned leaf designed, by means of said pintle, to be held in and released from engagement with the
5 teeth of said yoke, substantially as and for the purpose set forth.

6. A hinge having two leaves, a yoke connecting said leaves, means for adjusting the position of the yoke to change the vertical
10 plane of its pivotal connection to one leaf rel-

atively to the vertical plane of the other leaf, and a spring for acting on said first-mentioned leaf, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscrib- 15
ing witnesses.

SIVERT B. NILSEN.

Witnesses:

O. O. CHRISTIANSON,
C. B. PEDERSON.