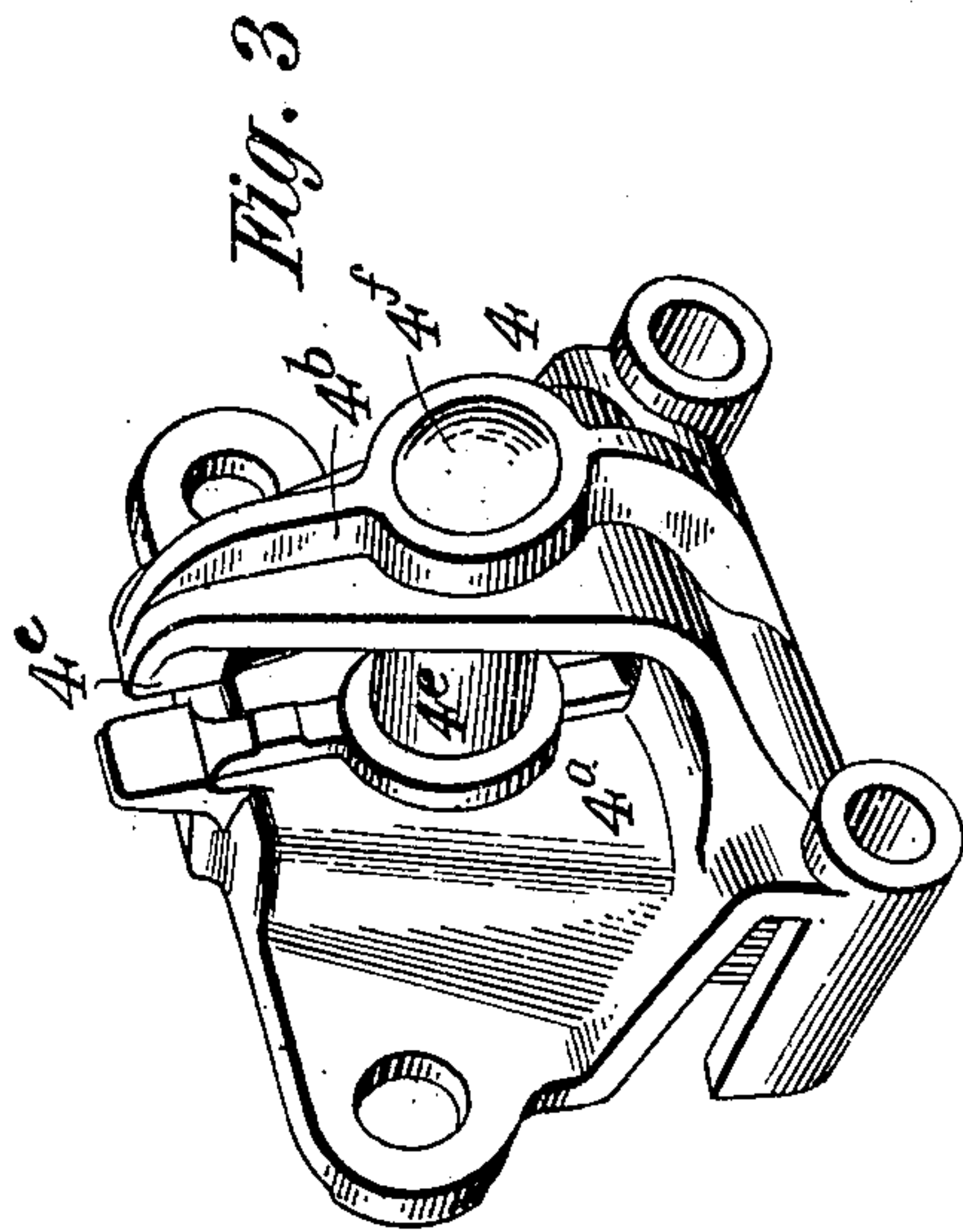
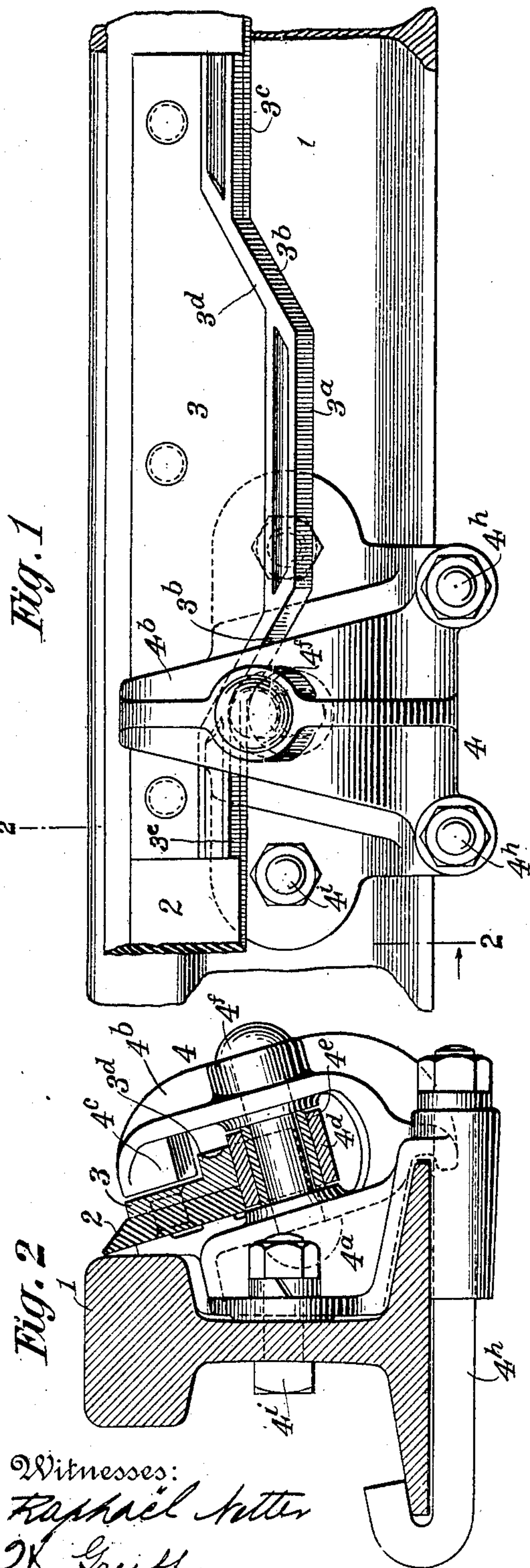


J. S. HOBSON.
SUPPORT FOR DETECTOR BARS.
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912,677.

Patented Feb. 16, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN S. HOBSON, OF EDGEWOOD PARK, PENNSYLVANIA, ASSIGNOR TO THE UNION SWITCH & SIGNAL COMPANY, OF SWISSVALE, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

SUPPORT FOR DETECTOR-BARS.

No. 912,677.

Specification of Letters Patent.

Patented Feb. 16, 1909.

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To all whom it may concern:

Be it known that I, JOHN S. HOBSON, a citizen of the United States, residing at Edgewood Park, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Supports for Detector-Bars, of which the following is a specification.

My invention relates to supports or clips which are employed to support and guide detector bars in their movements alongside a railway rail.

I will describe a support embodying my invention, and then point out the novel features in the claims.

In the accompanying drawings Figure 1 represents in side elevation a portion of a railway rail, a portion of a detector bar, a motion plate secured thereto, and a support embodying my invention. In this view the detector bar is shown in its usual position, below the rail. Fig. 2 is a vertical transverse section taken on the line 2—2 of Fig. 1. Fig. 3 is a perspective view of the support.

Similar numerals of reference designate corresponding parts in all of the figures.

Referring now to the drawings, 1, designates a railroad rail, 2, a portion of a detector bar, 3, a motion plate secured to the detector bar and 4, a support for the detector bar. It will be understood that the detector bar is provided with a plurality of motion plates 3, and with a plurality of supports 4, one at each motion plate.

Each motion plate is provided with a central depending portion 3^a, two oppositely inclined portions 3^b, and two horizontal portions 3^c. Each motion plate is also provided with a flange 3^d, which extends along the lower edge portion of the motion plates. This flange 3^d coacts with a stop 4^e on the outer member 4^b of the support 4 to prevent the detector bar being dislodged or removed at any time, and especially when it is being operated in its usual manner, from the supports. The detector bar, it will be understood, is moved longitudinally, and in its opposite longitudinal movements the lower edge of each motion plate travels on a roller 4^d suitably journaled in the adjacent support. As the inclined surfaces 3^b travel over the roller 4^d the detector bar is caused to rise above the rail, provided no train or wheels are on rails at that point.

Each support comprises an inner member

4^a, and an outer member 4^b, which is integral with the inner member but separated by a sleeve 4^e to form a space to receive the detector bar and an adjacent motion plate and a roller 4^d over which the motion plate travels. The support also comprises the stop 4^e hereinbefore referred to. The support is adapted to be attached either to the web of the rail, as by bolts and nuts 4ⁱ or to the flanges of the rails, as by hook bolts 4^h, the support being suitably formed to permit of this.

Heretofore in supports of the type to which my invention relates, the two members 4^a, 4^b were separate pieces, suitably fitted together at their lower ends and joined together by a bolt which also served as a bearing for the roller over which the motion plate traveled. In use it has been found that by reason of the two members being independent and bolted and also by reason of the fact that the outer member is inclined toward the rail to keep the detector bar in position, the outer member became loosened thus permitting the detector bar to fall away from the rail. In order to overcome this difficulty I cast or otherwise form the two members in one piece and employ a rivet 4^f to join the two members together at a point intermediate their top and bottom edges. The sleeve 4^e on the rivet spaces the two members apart, and the sleeve and rivet act as a journal or pivot on which the roller 4^d revolves. The rivet 4^f is inserted while hot and of course the sleeve and roller are assembled at the same time. In practice I have found that this construction is very efficient and does away with the objections hereinbefore set out with regard to similar types of supports.

The provisions for fastening the support either to the web or flange of the rail is an advantage heretofore not possessed by any type of support and makes the support herein described universal in its application.

Having thus described my invention what I claim as new is:

1. A support for detector bars comprising an integral inner and outer member, means for connecting and spacing apart the two members between their top and bottom edges, and provisions for attaching the support either to the web or flange of a rail.

2. A support for detector bars comprising an integral inner and outer member, a rivet

for connecting the two members together between their top and bottom edges, and means for spacing the two members.

3. A support for detector bars comprising an integral inner and an outer member, a rivet for connecting the two members together, means for spacing the two members, and a roller movable on said means.

In testimony whereof I have signed my name to this specification in the presence of two subscribed witnesses.

JOHN S. HOBSON.

Witnesses:

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