

No. 824,354.

PATENTED JUNE 26, 1906.

J. F. GREEN.
SWITCH ADJUSTER.

APPLICATION FILED OCT. 21, 1905.

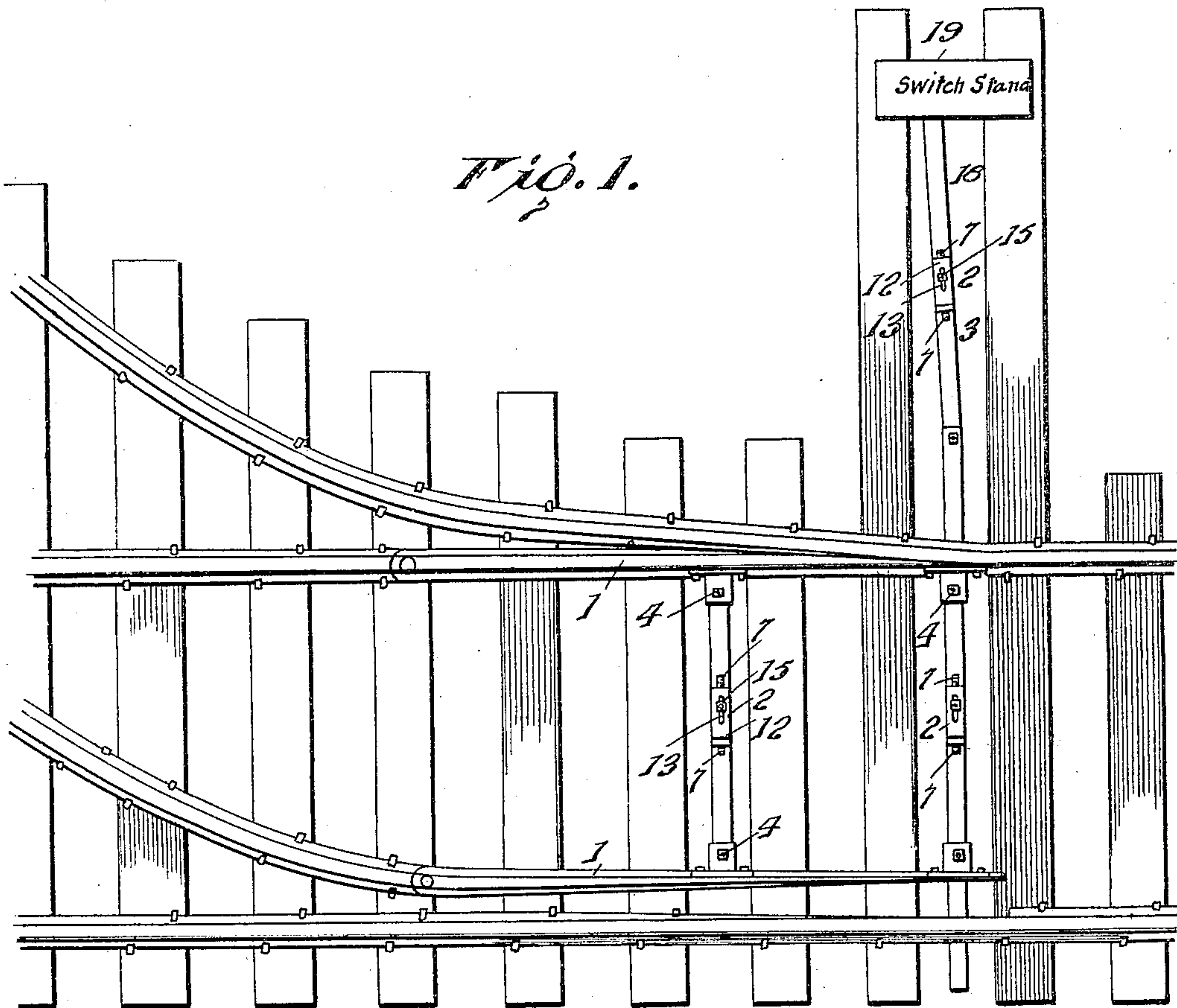


Fig. 2.

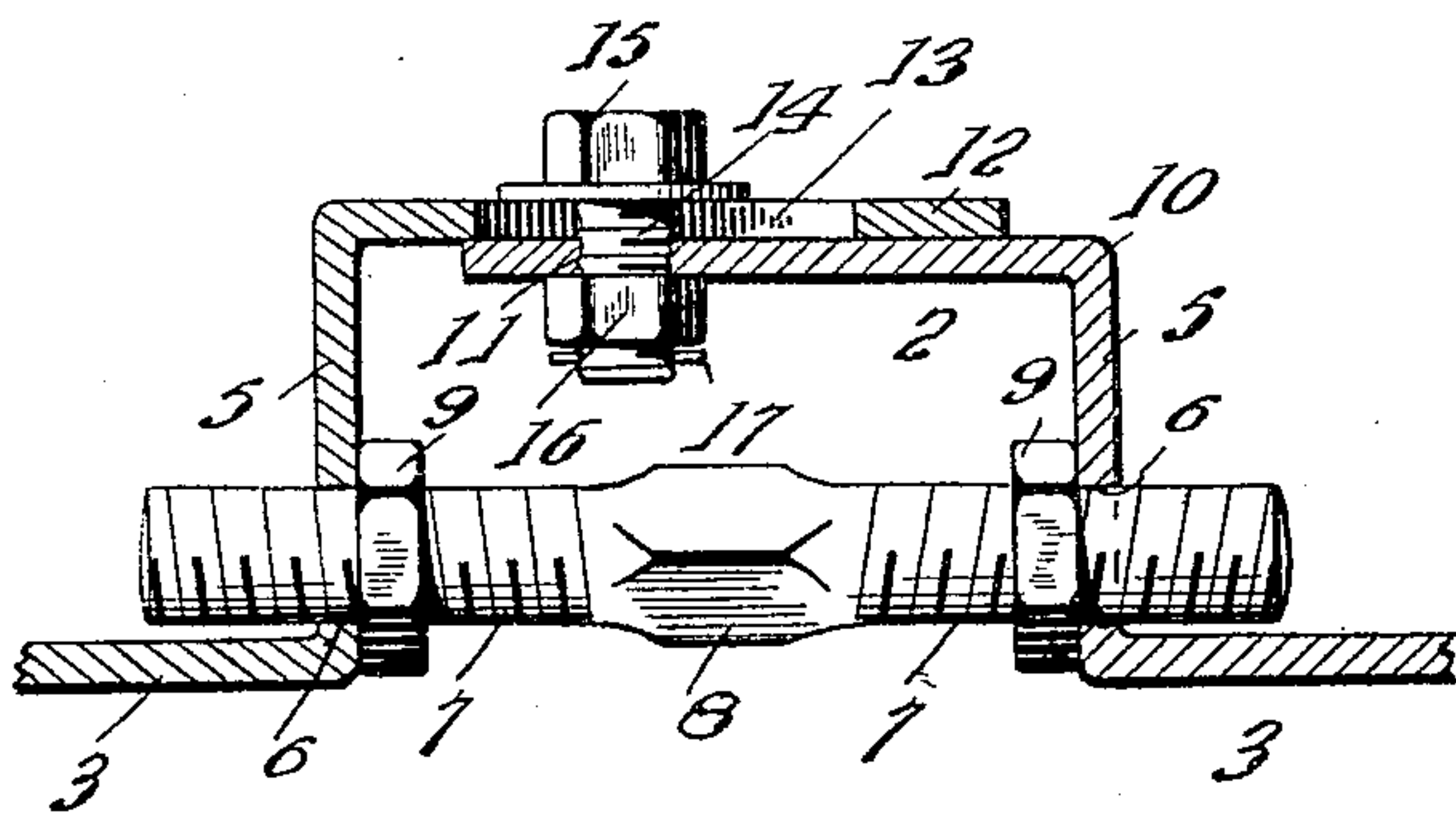
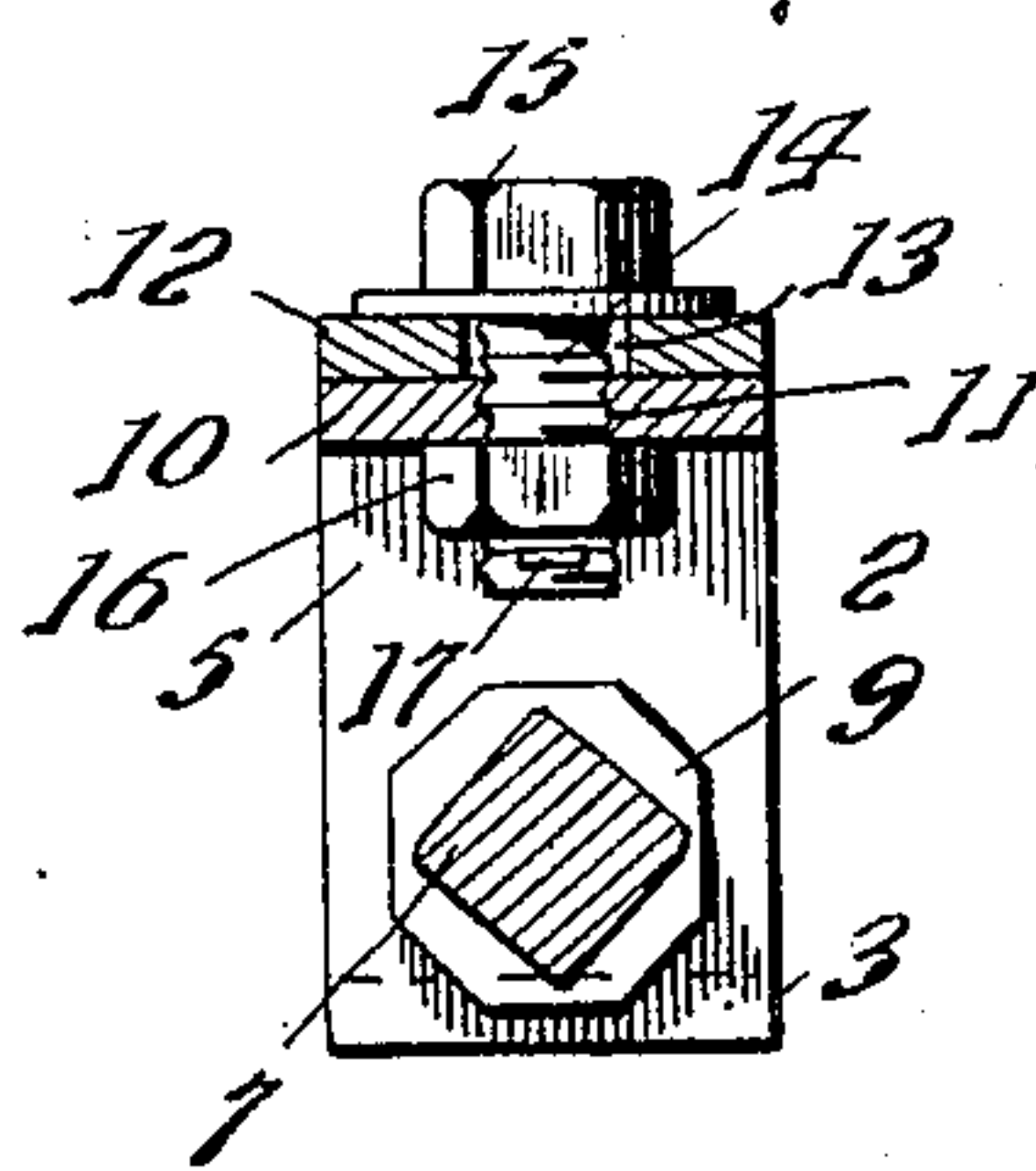


Fig. 3.



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UNITED STATES PATENT OFFICE.

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SWITCH-ADJUSTER.

No. 824,354.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed October 21, 1905. Serial No. 283,863.

To all whom it may concern:

Be it known that I, JOHN F. GREEN, a citizen of the United States, residing at Piedmont, in the county of Harrison and State of Ohio, have invented certain new and useful Improvements in Switch-Adjusters, of which the following is a specification.

This invention contemplates certain improvements in adjusting devices for switches; and the object of the invention is to provide a device of this character which will be of few and simple parts and easily operated and which will provide improved means whereby the two switch-points may be held secure in adjusted position with relation to each other and also with respect to the switch-stand and the operating switch-bar connecting the switch-points with the actuating mechanism embodied in the stand.

The invention consists, essentially, in two angular members connected at opposite ends to the switch-points or to one of the switch-points or its switch-bar and the actuating mechanism in the switch-stand, said members being held in an adjustable manner with relation to each other by a coupling-screw provided with right and left hand threads, whereby the two members may be simultaneously turned toward each other or separated to a certain degree, the adjacent ends of said members overlapping, the one being provided with an elongated slot through which a locking-bolt extends, said bolt also having position in the other member so that the two members may be securely locked together and their movement when being adjusted limited, so that the switch-points will be insured against an excessive adjustment.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a plan view of my improved switch-adjuster. Fig. 2 is a vertical sectional view thereof. Fig. 3 is a transverse sectional view.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, the reference-numeral 1 designates switch points or tongues, and 2 designates my improved switch-adjusting device. In one embodiment of the device

the adjuster is located between the two switch-tongues, so that they may be adjusted with respect to each other, and in another embodiment of the device the same may be applied to connect the switch-bar with the actuating mechanism in the switch-stand. In either application the construction of the adjuster is the same.

The adjuster comprises two bars or members 3, which may be either straight or twisted, so as to position the adjuster at any desired angle, and said bars are secured at their outer ends to the switch-tongues 1 in any suitable manner, in the present instance there being shown for this purpose retaining plates or couplings 4, riveted to the inner sides of the switch-tongues and bolted or otherwise detachably secured to the outer ends of the adjuster members 3. The adjacent ends of the adjuster members or bars 3 are bent angularly, as shown, and overlapped at their extremities. In the lateral projecting portions 5 of the angular formation of the bars or members 3 are screw-threaded apertures 6 in alinement with each other, and working in said screw-threaded portions are the right and left hand threaded ends of a coupling or adjusting screw 7, provided with a polygonal head 8 at its center. By this means the two bars or members may be simultaneously turned toward each other or away from each other, as is manifest. To assist in locking the adjusting-screw 6, each threaded end thereof has mounted on it a lock-nut 9, designed to abut against the inner faces of the lateral projecting portions 5 of the members 3. One of the overlapped portions 10 of the two members is provided with a screw-threaded aperture 11, and the superposed overlapped portion 12 is provided with an elongated slot 13 in registry with the said threaded aperture. A lock-bolt 14 has its threaded shaft entered in the aperture 11 and is received in the elongated slot 13, being provided at one end with a polygonal head 15 and a suitable washer thereon and being also provided on the opposite side of the overlapped extremities of the bars or members with a nut 16, designed to bind it in place and preferably prevented from turning accidentally by means of a cotter-pin 17, inserted therethrough, as shown.

In the practical use of the device, the parts being assembled in the relation above described, the locking-bolt is loosened sufficiently to allow the adjusting-screw to be

manipulated, and the manipulation of the latter will, as is manifest, turn the two members together or apart and result in the consequent adjustment of the switch tongues or points. After proper adjustment has been effected the parts may be securely locked in adjusted position by tightening the locking-bolt in its slot. The provision of said slot in one extremity of the bars or members insures the switch points or tongues from being spread or adjusted beyond the danger-line, as it limits the movement of the two bars outwardly with respect to each other.

If desired, as shown in the drawings, the adjusting device may be employed to adjust the switch-bar 18 with relation to the actuating mechanism in the switch-stand 19.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided a novel and useful construction of switch-adjusting device which embodies few parts and which may be readily actuated to adjust the switch tongues or points and in which there is provision that the parts will not be spread sufficiently to bring the switch points or tongues beyond the danger-line.

Having thus described the invention, what is claimed as new is—

1. In a device of the character described, the combination with the switch tongues or points of bars secured to the same at one end and provided with overlapping adjacent angular ends one of which is provided with an elongated slot, an adjusting-screw secured to said bars to adjust the same toward and away from each other, and a locking-bolt se-

cured in said overlapped ends and received in said slot, as and for the purpose set forth.

2. A switch-adjusting device comprising two bars or members provided with overlapped ends, one of which is provided with an elongated slot, a locking-bolt designed to clamp said ends together and received in said slot, and means for adjusting said members longitudinally with respect to each other.

3. A switch-adjusting device comprising two bars provided with angular overlapped ends, an adjusting-screw working in the laterals of said ends, and a locking-bolt designed to clamp said ends in adjusted position.

4. A switch-adjusting device comprising two bars or members provided with angular ends overlapped at their extremities and one of said overlapped ends being provided with a threaded aperture and the other with an elongated slot, an adjusting-screw provided with right and left hand threads mounted in the laterals of said ends, and a locking-bolt working through the aperture and slot of the overlapped extremities and designed to clamp the same together, the end of said slot being designed to abut against said bolt to limit the outward longitudinal movement of the members with respect to each other.

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

JOHN F. ^{his} × GREEN. [L. s.]
mark

Witnesses.

JESSIE McFADDEN,
R. E. SEARS