

997,410.

J. B. O'DONNELL.
SWITCH FOR RAILWAY TRACKS.
APPLICATION FILED AUG. 15, 1910.

Patented July 11, 1911.

2 SHEETS-SHEET 1.

Fig. 1

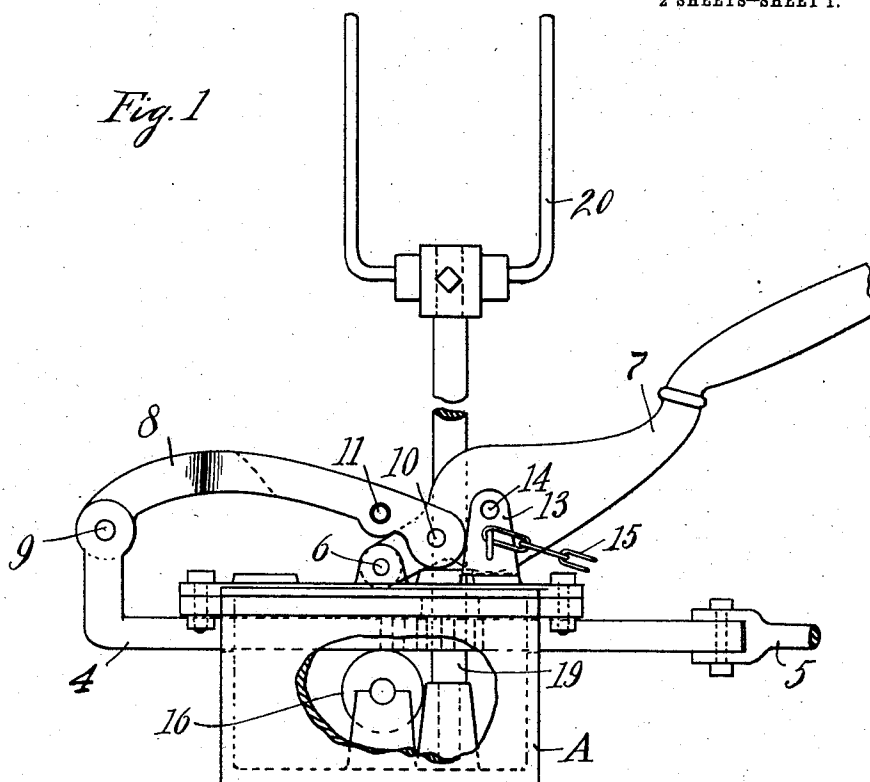
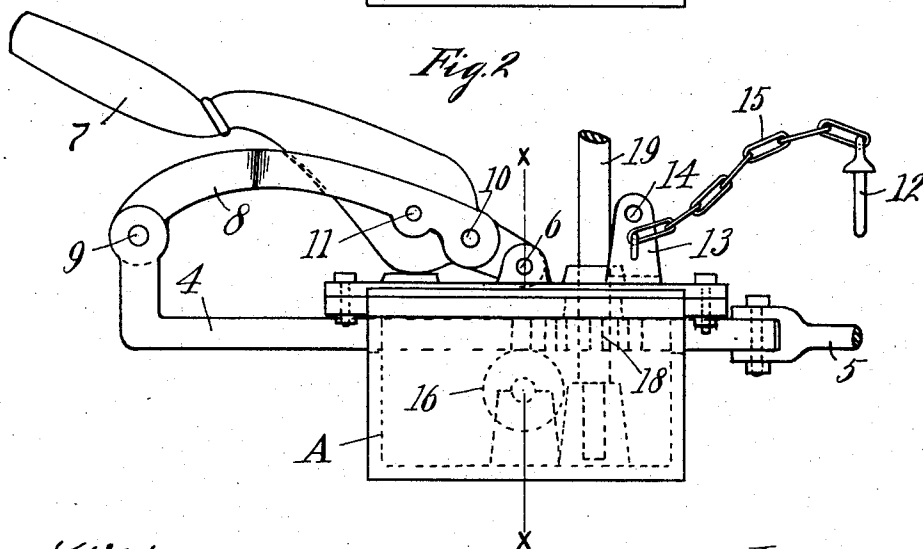


Fig. 2



Witnesses,
George Voelker
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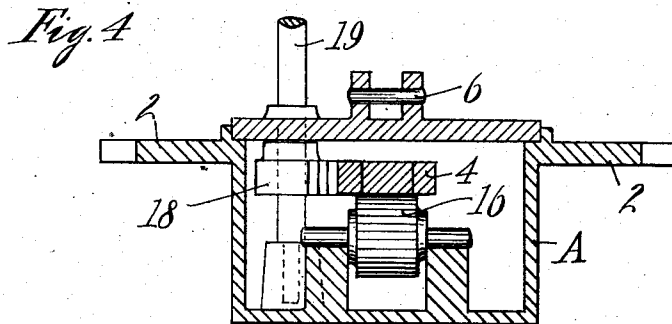
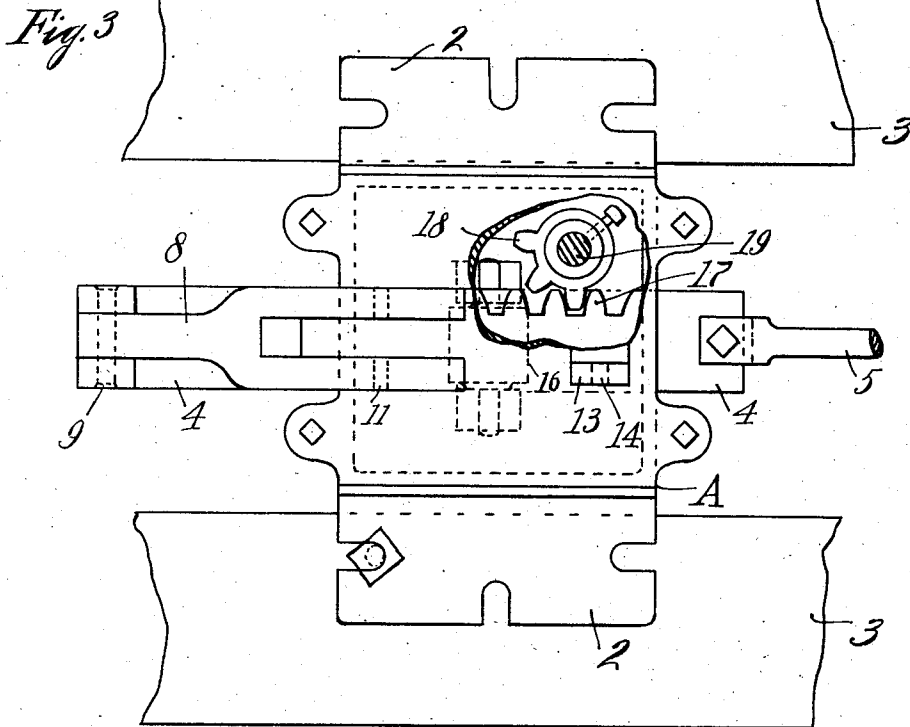
Inventor,
John B. O'Donnell
by *Lothrop Johnson*
his Attorneys.

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UNITED STATES PATENT OFFICE.

JOHN B. O'DONNELL, OF ST. PAUL, MINNESOTA.

SWITCH FOR RAILWAY-TRACKS.

997,410.

Specification of Letters Patent.

Patented July 11, 1911.

Application filed August 15, 1910. Serial No. 577,227.

To all whom it may concern:

Be it known that I, JOHN B. O'DONNELL, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Switches for Railway-Tracks, of which the following is a specification.

My invention relates to improvements in switches for railway tracks and consists in improved features of construction and combination hereinafter described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 is a side elevation of my invention partly broken away; Fig. 2 is a similar view with the parts in opposite position to that shown in Fig. 1; Fig. 3 is a plan view partly broken away; and Fig. 4 is a section on line $x-x$ of Fig. 2.

In the drawings A represents the switch box or casing provided with wings 2 suitably secured to the ties 3. Longitudinally slidable through the box is a bar 4 connected by a link 5 with a rail not shown. Having pivotal support 6 with the top of the box is a handle 7, a link 8 having pivotal connection 9 at one end with the free end of the bar 4 and similar connection 10 at its other end with the handle on the inner side of the pivot 6. The link 8 is formed with an opening 11 which registers with a corresponding opening in the lever 7 when the parts are in the position shown in Fig. 2 so that a pin 12 may be passed through said openings to hold the parts locked in position. Upon the opposite side of the lever fulcrum 6 is a lug 13 formed with an opening 14 and registering with the opening in the lever arm 7 when the parts are in the position shown in Fig. 1 through which registering openings the pin 12 may be passed to hold the parts locked in said position. The pin 12 preferably has chain connection 15 with a lug 13. Within the box is suitably journaled an anti friction roller 16 upon which the bar 4 slides. The bar 4 is formed at one side with teeth 17 intermesh-

ing with a toothed pinion 18 mounted upon the vertical shaft 19. The shaft 19 is journaled in the box A and carries at its upper end a suitable lamp bracket 20.

By means of the combination of the link 8 and the handle 7 the weight ordinarily employed is dispensed with and a construction is secured that is adapted to be locked firmly in adjusted positions. Also by having the link pivoted to the lever 7 in the manner shown a partial dead center between the pivots 10 and 6 is secured relieving the strain upon the locking pin 12.

I claim as my invention:

1. A switch of the class described, comprising in combination a box, a slidable bar, a lever arm fulcrumed at one end above said bar and a link connecting the free end of said slidable bar with said lever arm at a point on the inner side of its fulcrum.

2. A switch of the class described, comprising in combination a slidable bar, a lever arm pivotally supported at one end above said bar, a link pivotally connecting one end of said bar with said lever arm on the inner side of its fulcrum support, said lever arm and link being formed with corresponding openings for the purpose set forth.

3. In a switch of the class described, comprising in combination a box, a bar slidable therethrough, a lever arm pivotally supported at one end upon said box, a link pivotally connecting one end of said bar with said lever arm upon the inner side of said fulcrum support, said lever arm and link being formed with corresponding openings, a fixed part adjacent to said lever arm formed with an opening corresponding with the opening through said lever arm and a locking pin fitted to said openings.

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

JOHN B. O'DONNELL.

Witnesses:

H. S. JOHNSON,
H. SMITH.