

SWITCH STAND.

981,721.

2 SHEETS--SHEET 1.



Witnesses:-

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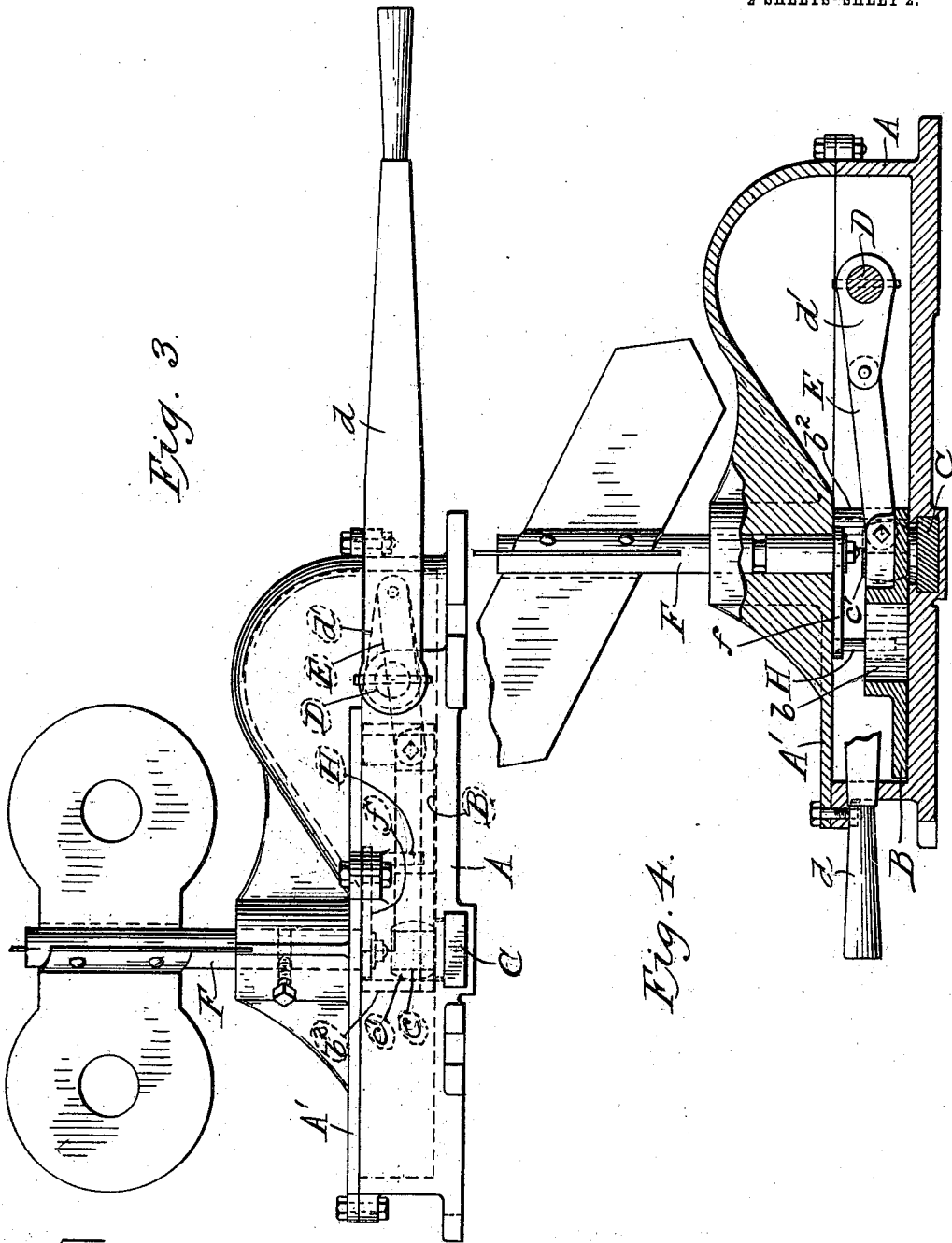
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Patented Jan. 17, 1911.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

WEBESTER F. TRAVES, OF CLEVELAND, OHIO, ASSIGNOR TO JOHN McMYLER, OF CLEVELAND, OHIO.

SWITCH-STAND.

981,721.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed May 14, 1909. Serial No. 495,875.

To all whom it may concern:

Be it known that I, WEBESTER F. TRAVES, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Switch-Stands, of which the following is a full, clear, and exact description.

This invention is an improved switch stand which is the conventional name for the mechanism and the supporting base therefor by means of which switch rails may be moved, and a target moved at the same time to indicate their position.

The object of the invention is to provide a switch stand which shall be efficient, durable, easily operated and of comparatively small cost.

In the drawings, Figure 1 is a plan view of a switch stand embodying the invention. Fig. 2 is a plan view with the top cover plate removed. Fig. 3 is a side elevation; and Fig. 4 is a sectional side elevation in the plane indicated by line 4—4 on Fig. 1.

Referring to the parts by letters, A represents a base which is in the form of a box adapted to be secured to railway ties or other supports adjacent to the switch rails to be operated,—said box having a removable cover plate A'. Within this box is a slide B, and through this slide is a diagonal slot *b* which at its ends is merged into two short slots *b'* which are parallel with the path in which this slide moves.

C represents a switch operating bar which is movable in a guide-way in the bottom of the box, at right angles to the path of said slide. This bar has at its inner end an upwardly projecting stud *c* on which a friction roller *c'* is mounted. This stud and roller project into the slot *b* in the slide B. It is, therefore, evident that as the slide is moved backward or forward, this sliding bar is moved in one direction or the other, but at right angles to the direction in which the slide moves. The projecting outer end of this bar is to be connected by suitable means with the switch rods.

At the rear end of the base a horizontal shaft D is mounted; and to the projecting outer end of this shaft the weighted operating handle *d* is secured. Within the casing which forms a part of the base an arm *d'* is

fixed to this shaft, and this arm is connected by a link E with the slide B. In the removable cover plate a vertical target shaft F is mounted. An arm *f* is fixed to the lower end of this shaft within the box and extends over the slide, and has a longitudinal slot *f'* into which projects a pin H on the slide. Therefore as the slide is moved in one direction or the other the target shaft is correspondingly turned. So long as the diagonal slot *b* is embracing the friction roller *c'* the bar C will be moved when the slide is moving. But when the straight parts *b'* of said slot slides over said roller as it does when slide B reaches either end of the path, the parts are so locked that no force applied to the bar C can move it or slide B. Around the edges of the slot *b*, *b'*, is an upwardly extended flange *b²*, which gives wide bearing surfaces for the friction roller; and they also, by engaging with the cover plate hold the slide down against the bottom of the box.

Having described my invention, I claim:

1. In a switch stand, the combination of a box-like base having a removable cover plate, a slide mounted and guided within the bottom part of said base, said slide having through it a diagonal slot which at its ends is merged into two short slots which are substantially parallel with the path of said slide, a sliding rod mounted in guide-ways in the bottom part of the base below said slide at right angles to the path of the slide and having an upwardly projecting pin on which is a friction roller which projects into said slot, a horizontal shaft mounted in suitable bearings which are integral with the bottom part of said base, an arm fixed to said shaft within the base, a link connecting said arm with the first mentioned slide, and an operating handle fixed to said shaft outside of the base,—the cover of the base having an upwardly extended hollow chamber in which the arm within the base fixed to the rock shaft may move.

2. In a switch stand, the combination of a box-like base, a guided slide therein having a diagonal slot which at its ends is merged into two short slots which are parallel with the path of said slide, a sliding rod mounted in guide-ways in the base at right angles to the path of the slide and having a pin on which is a friction roller which projects

into said slot, mechanism for moving said
slide backward and forward, a vertical target
shaft mounted in the base and having an arm
fixed to its lower end and projecting into the
5 hollow base, which arm is longitudinally
slotted, and a pin fixed to the base project-
ing into said slot.

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

WEBESTER F. TRAVES.

Witnesses:

H. R. SULLIVAN,
J. M. WOODWARD.