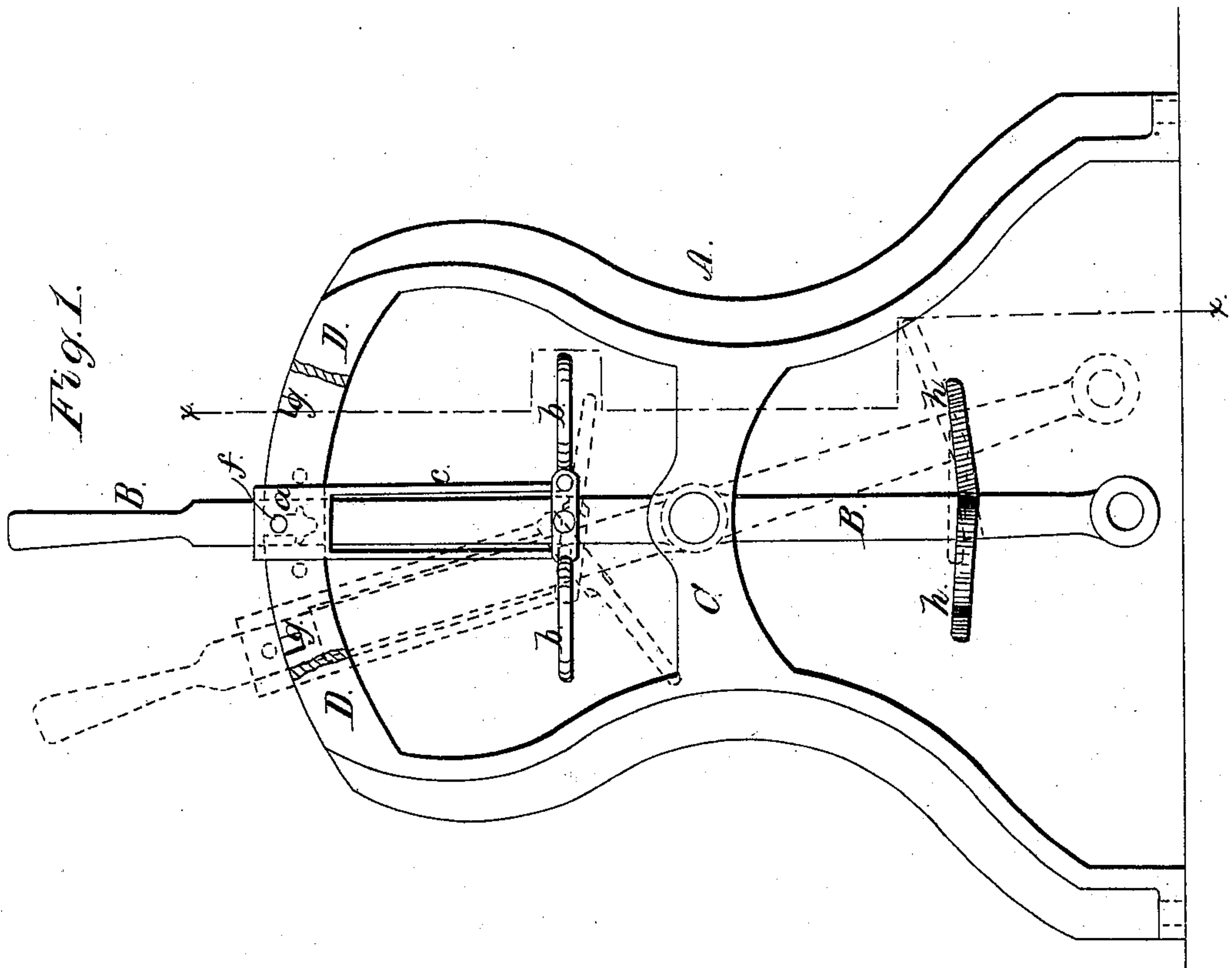
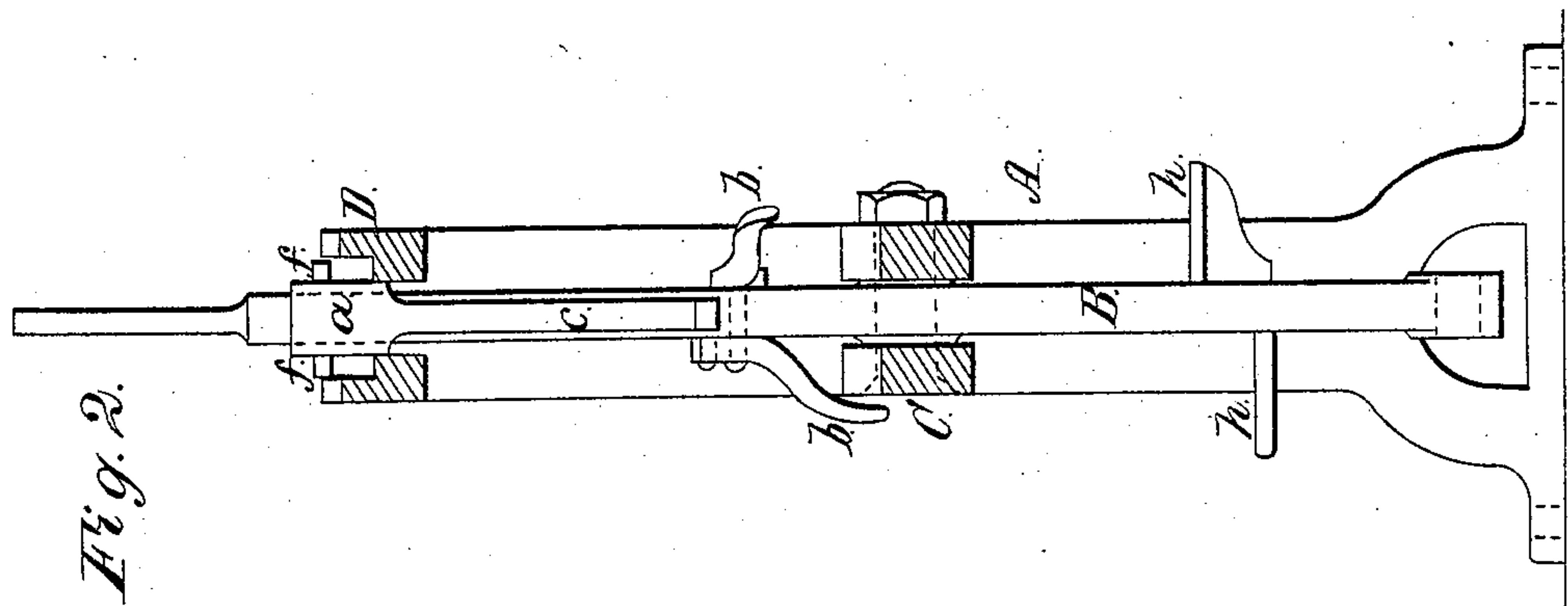


*N. N. Dale.*

*Railroad Switch.*

*N<sup>o</sup> 98,472*

*Patented Jan. 4, 1870.*



*Witnesses.*

*A. Bernsein  
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# United States Patent Office.

NICHOLAS N. DALE, OF PLYMOUTH, INDIANA.

Letters Patent No. 98,472, dated January 4, 1876.

## IMPROVED SWITCH-STAND FOR RAILWAYS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, NICHOLAS N. DALE, of Plymouth, in the county of Marshall, and State of Indiana, have invented a new and improved Switch-Stand for Railroads; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains, to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved switch-stand, and

Figure 2, a vertical section of the same, in the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts in the several figures of the drawings.

My invention relates to railroad-switch stands, and has for its object to produce a more efficient and secure means for switching or changing the rails of a railroad-track.

It consists, first, in the construction of the switch-stand and the self-locking switch-lever, as hereinafter more fully described.

It also consists in the combination of parts, which will be hereinafter more particularly referred to.

In the accompanying drawings—

A is the switch-stand proper, composed of metal or other suitable material, secured to the side of a railroad-track, in the usual position.

B is the switch-lever, passing vertically through the frame, and pivoted slightly below its centre, within a slot formed in the cross-bar C of said frame, as clearly shown in fig. 1.

Its lower end is pivoted to a bar connected with the switch-rails of the track, in the usual manner, while its upper end extends through a longitudinal slot in the arched top, D, of the frame.

*a* is a metallic collar, placed loosely upon the lever B, above and within the slot in the arched top, and is connected upon opposite sides, by means of the rods or bars *c c*, with the short arms of the levers *b b*, which are pivoted, in reverse positions, to opposite sides of the switch-lever, between the top D and cross-bar C of the frame, as shown.

By this arrangement, the movement of the levers *b b* serves to change the position vertically of the collar.

Instead of connecting the levers *b* and collar *a* by means of the bars or rods *c*, the collar may be extended and pivoted directly to said lever.

When it is desired to change the switch-rails from one track to another, the longer arms of the levers *b*

are depressed, to raise the collar upon the switch-lever, so that the lateral pins or projections *f*, secured to opposite sides of said collar, shall clear the recesses *g*, a series of which is formed opposite each other in the proximate sides of the longitudinal slot in the arched top D.

The lever is then moved either forward or backward in the slotted top D, until the switch-rails of the track are in the position required, when the pins *f* will drop, by the gravity of the collar, within the recesses *g*, with which they coincide, thereby firmly locking the switch-lever in place, and preventing it from being moved by the action of the passing train upon the switch-rails.

The dotted lines in fig. 1 show the switch-lever thrown to one side of the frame.

*h h* are foot-supports, arranged in reverse positions upon opposite sides of the switch lever, near its lower end, and are adapted to be pressed by the foot of the operator, to assist in changing the switch-lever.

If desired, spring-catches or locks may be placed in the recesses *g*, to lock the pins *f* in place as they fall within the recesses, and thereby prevent the collar, and, consequently, the switch-lever, from being moved, without first unlocking the pins, which may be accomplished by means of a key introduced through the side of the arched top D of the frame.

My improved switch-stand is simple and economical in construction, can be operated with the utmost ease and expedition, and securely fastens the switch-rails against the possibility of displacement.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. A railroad-switch stand, provided with a self-locking switch-lever, constructed as herein shown and described, for the purpose specified.

2. In combination with the switch-lever B, either with or without the foot-rests *h*, and with the slotted frame A, the sliding collar *a*, pins *f*, and pivoted levers *b*, connected with said collar, substantially as herein shown and described, for the purpose specified.

3. In combination with the switch-lever B, the collar *a*, pins *f*, levers *b*, and foot-rests *h*, substantially as herein shown and described, for the purpose specified.

The above specification of my invention signed by me, this 20th day of September, 1869.

NICHOLAS N. DALE.

Witnesses:

A. BERNSTEIN,  
JOHN A. SILENCE.