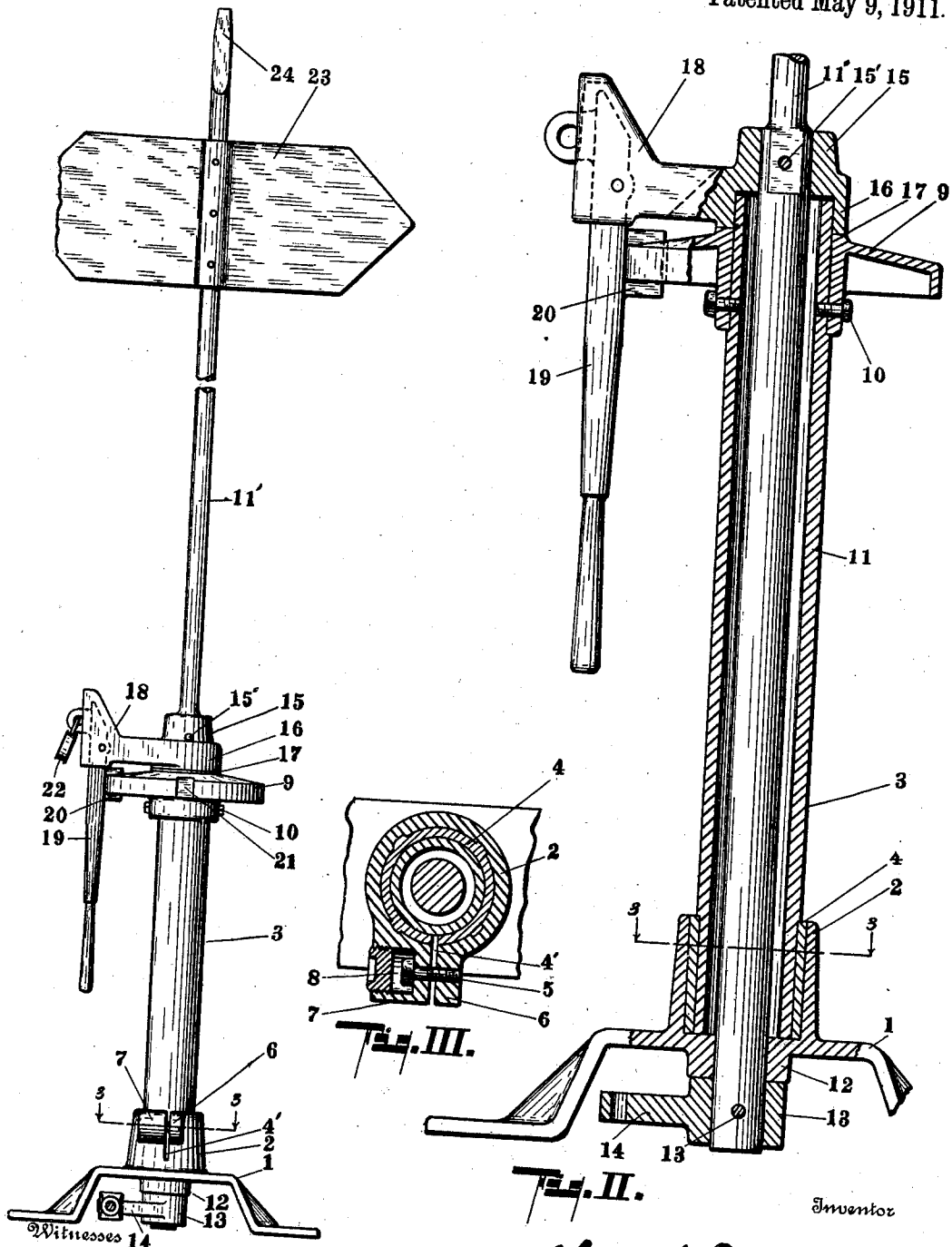


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SWITCH STAND.
APPLICATION FILED JUNE 20, 1910.

991,531.

Patented May 9, 1911.



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UNITED STATES PATENT OFFICE.

CLIFFORD E. NOWLIN, OF KALAMAZOO, MICHIGAN.

SWITCH-STAND.

991,531.

Specification of Letters Patent.

Patented May 9, 1911.

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To all whom it may concern:

Be it known that I, CLIFFORD E. NOWLIN, a citizen of the United States, residing at Kalamazoo, Kalamazoo county, Michigan, have invented certain new and useful Improvements in Switch-Stands, of which the following is a specification.

This invention relates to improvements in switch stands.

10 The objects of the invention are to provide a simple switch stand, which is economical to construct, with a suitable yielding joint which will slip whenever a train or engine improperly passes the switch.

15 Objects relating to the details will clearly appear from the description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

20 The invention is clearly defined and pointed out in the claims.

A structure showing a preferred embodiment is clearly illustrated in the accompanying drawing, forming a part of this specification, in which:

25 Figure 1 is an elevation view of my improved switch stand, showing the parts complete. Fig. 2 is an enlarged detail sectional elevation, certain parts being shown in full lines. Fig. 3 is a detail transverse sectional view, taken on a line corresponding to line 3—3 of Figs. 1 and 2, looking down.

30 In the drawing, similar numerals of reference refer to similar parts throughout the several views.

35 Considering the numbered parts of the drawing, the base 1 is preferably of cast steel and is provided with an upwardly-extending socket 2 to receive the bottom of the tubular stand body 3. This stand body 3 is made of a section of pipe, and is turned true at the bottom and fits into the socket 2. The socket 2 is open at one side and has laterally-extending lugs 6 and 7, which are 40 joined together by the screw 5. The head of the screw is within the socket 8 in the lug 7. A plug 8' is provided for the socket 8. Babbitt metal 4 is poured into the joint, and the babbitting is opened by a kerf 4'. The interior of the socket is preferably grooved to retain the babbitt.

45 A head 9 is fitted to the upper end of the tubular body portion 3 and retained in place by a screw or screws 10. The vertical switch operating shaft 11 extends through a journal boss 12 in the switch stand base 1. A hub

13 bearing an arm 14 to which is connected the bridle rod for operating the switch is secured to the shaft 11 by pins 13'. A hub 15 is secured to the upper end of this shaft 11, by means of a transverse bolt or pin 15'. This is flanged downwardly at 16 and fits against the flat surface 17 on the stand top 9. An arm 18 extends laterally to which the switch operating lever 19 is hinged, the same being provided with a projection 20 to engage the usual notches 21 on the stand top. The usual padlock 22 is provided for locking the switch. The operating shaft 11 extends upwardly, forming a mast or column 11' on top of which is carried a target 23. The upper end 24 of the column is suitably formed to receive a switch lamp.

From this description, it will be seen that any undue pressure on the arm 14, when the switch is locked, will tend to rotate the switch stand body 3 in the socket 2 from the fact that the vertical shaft 11 is connected by the arm 18 and the lock switch lever 19 to the top 9, which is secured by a screw to the stand body 3. This socket 2 can be very nicely adjusted to any desired resistance from one to three tons as required, so that the passing of a train or locomotive that improperly swings the switch points will throw this arm 14, causing the joint to slip and moving the parts without injury. It will then not be possible for a switchman to readjust the switch, and he will be obliged to spike the switch point and report the circumstance, when the foreman can proceed with a proper socket wrench, loosen the screw 5 and readjust the parts to their normal position. This device or means avoids the breaking of any part. By casting a ring of Babbitt metal into the socket around the bottom of the tubular body 3, and slitting the ring, a good joint is very effectively secured and a correct adjustment to the desired resistance is readily effected. By careful fitting, the Babbitt metal might be dispensed with, but it is of great advantage in securing a true fit and avoids undue corrosion of the joint.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a switch stand, the combination with a suitable base with a socket thereon open at the side and provided with laterally-extending lugs, of a screw through said lugs for clamping the same; a tubular body fitting

into the socket on said stand; Babbitt metal in said joint; a switch stand head on the said tubular body; and a vertical actuating shaft within the said body with locking lever connections to the said stand, whereby an effective slip joint is secured between the stand body and base, adapted to yield under undue stress on said shaft, coacting as specified.

2. In a switch stand, the combination with
10 a suitable base with a socket thereon open at the side and provided with laterally-extending lugs, of a screw through said lugs for clamping the same; a tubular body fitting into the socket of said stand; a switch

stand head on the said tubular body; and a 15 vertical actuating shaft within the said body with locking lever connections to the said stand, whereby an effective slip joint is secured between the stand body and base, adapted to yield under undue stress on said 20 shaft, coacting as specified.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

CLIFFORD E. NOWLIN. [L. S.]

Witnesses:

CLORA ELLYN BRADEN,
F. GERTRUDE TALLMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
