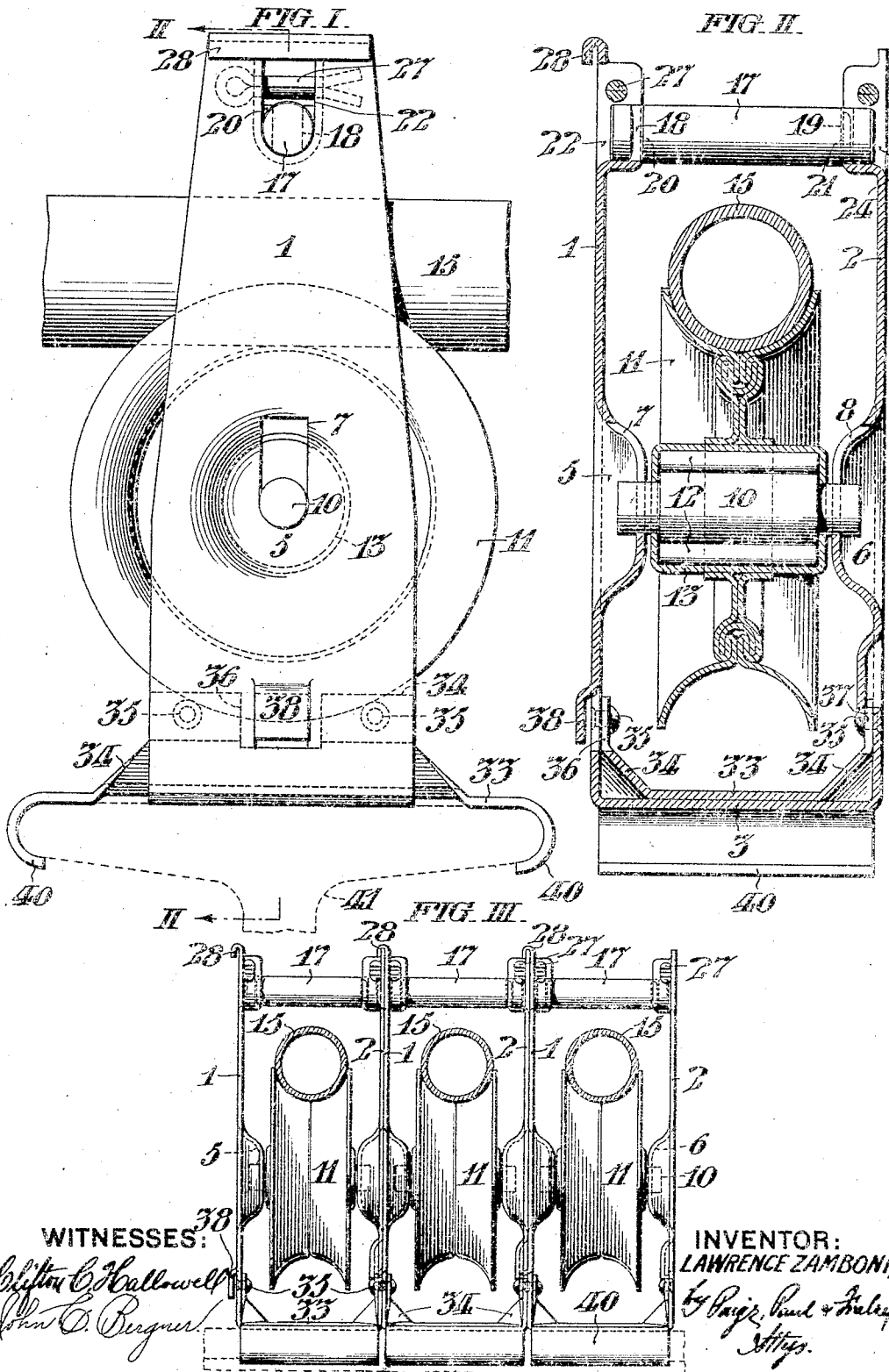


No. 786,616.

PATENTED APR. 4, 1905.

L. ZAMBONI.
ROLLER STAND FOR SWITCH RODS.
APPLICATION FILED FEB. 2, 1905.



UNITED STATES PATENT OFFICE.

LAWRENCE ZAMBONI, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
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SYLVANIA, A CORPORATION OF PENNSYLVANIA.

ROLLER-STAND FOR SWITCH-RODS.

SPECIFICATION forming part of Letters Patent No. 786,616, dated April 4, 1905.

Application filed February 2, 1905. Serial No. 243,814.

To all whom it may concern:

Be it known that I, LAWRENCE ZAMBONI, of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Roller-Stands for Switch-Rods, whereof the following is a specification, reference being had to the accompanying drawings.

My improvements may be employed with particular advantage in stands designed to support the rods by which railway signals and switches are manipulated. However, it is to be understood that they are equally applicable as supports for pipes or rods for other purposes.

As hereinafter described, my invention comprises a stand supporting a single roller arranged to receive and guide a rod, the opposite side and bottom walls of said stand being braced by a metal plate extending within them, having flanges at its opposite sides extending obliquely to said side walls and flanges at its ends arranged to engage a supporting-rail extending beneath said stand. Moreover, said stand has its side walls provided with means whereby any desired number of such stands may be assembled in interlocked relation with their rollers in axial alinement, and said side walls are provided above said rollers with bars, which are removable, but which when in position maintain said walls in properly-spaced relation. I find it convenient to make the walls of the stand in unitary relation of a single piece of pressed sheet metal and to form said bracing-plate of pressed sheet metal.

My invention comprises the various novel features of construction and arrangement hereinafter more definitely specified.

In the drawings, Figure I is a side elevation of a single stand embodying my improvements. Fig. II is a central vertical sectional view of said stand, taken on the line II II in Fig. I. Fig. III shows a group of three of said stands arranged in interlocked relation.

In said figures each stand comprises opposite side walls 1 and 2, formed of sheet metal, in unitary relation with the bottom wall 3. Said side walls 1 and 2 are provided with bear-

ing-recesses 5 and 6, which are respectively provided with slots 7 and 8 to receive the shaft 10 of the roller 11, which is conveniently provided with the cylinder-bearings 12 within its hub 13. Said rollers 11 support the rods or pipes 15, as indicated, so as to permit of their reciprocatory movement, and the upper ends of said walls 1 and 2 are maintained in properly-spaced relation by the bars 17, which extend above said rods. In order that said rods may be readily removed and replaced, said bars 17 are arranged to removably engage said walls 1 and 2, being provided with recesses 18 and 19, at their opposite ends fitted to the flanges 20 and 21 in the respective recesses 22 and 24 in said walls. When but a single stand is employed, as shown in Figs. I and II, said bars 17 are secured against accidental displacement by cotter-pins 27. However, the wall 1 is provided with the overhanging flange 28, arranged to interlock the wall 2 of an adjoining stand of the same construction as indicated in Fig. II, and when thus assembled the intermediate stands do not require any cotter-pins 27, the bars 17 being retained by said overhanging flanges 28.

The horizontal and vertical walls of each stand above described are internally braced in rigid relation by a plate 33, which comprises flanges 34 upon its opposite sides, extending obliquely at the junctions of said walls and secured by the rivets 35, extending through said flanges and the walls 1 and 2. As shown in Figs. I and II, said flanges 34 and walls 1 and 2 are provided with recesses 36 and 37 between their connecting means 35, and the wall 1 is provided with the projecting lug 38, arranged to interlock with the wall 2 of an adjoining stand through the recess 37 in the latter, as indicated in Fig. III. The opposite ends of said plates 33 are also conveniently provided with inwardly-curved flanges 40, arranged to embrace the opposite edges of an I-beam or other suitable support 41, which extends beneath the series of stands and maintains them, with their rollers 11, in axial alinement, as indicated in Fig. III.

Although said stands are shown with the

supporting means beneath them, it is to be understood that they may be supported with equal facility in a pendent position. Moreover, although I prefer to construct the stands with interlocking means, as above described, it is to be understood that I do not desire to limit myself to such construction, as various modifications may be made therein without departing from the essential features of my invention.

I claim—

1. A roller-stand comprising vertical and horizontal walls in unitary relation; a shaft supported in said vertical walls; a roller mounted to rotate on said shaft; and, a plate distinct from said walls arranged to brace them in rigid relation, substantially as set forth.

2. A roller-stand comprising vertical and horizontal walls in unitary relation; a shaft supported in said vertical walls; a roller mounted to rotate on said shaft; a plate distinct from said walls having portions extending obliquely from said horizontal wall to said vertical walls at the junctions thereof; and, means securing said plate in rigid relation with said walls, substantially as set forth.

3. A roller-stand comprising vertical and horizontal walls in unitary relation; a shaft supported in said vertical walls; a roller mounted to rotate on said shaft; a plate distinct from said walls having portions extending obliquely from said horizontal wall to said vertical walls at the junctions thereof; and, means securing said plate in rigid relation with said walls, comprising rivets extending through said vertical walls, substantially as set forth.

4. A roller-stand comprising vertical and horizontal walls in unitary relation; a shaft supported in said vertical walls; a roller mounted to rotate on said shaft; a plate distinct from said walls arranged to brace them in rigid relation; and, means on said brace-plate arranged to engage a support for said stand, substantially as set forth.

5. A roller-stand comprising vertical and horizontal walls formed of a single piece of pressed sheet metal; a shaft supported in said vertical walls; a roller mounted to rotate on said shaft; a pressed-sheet-metal plate arranged to brace said horizontal and vertical walls in rigid relation; and, means securing said plate to said walls, substantially as set forth.

6. A roller-stand comprising vertical and horizontal walls formed of a single piece of pressed sheet metal; a shaft supported in said vertical walls; a roller mounted to rotate on said shaft; a pressed-sheet-metal plate arranged to brace said horizontal and vertical walls in rigid relation; means securing said plate to said walls; and, means on said brace-plate arranged to engage a support for said stand, substantially as set forth.

7. A roller-stand comprising vertical and horizontal walls formed of a single piece of pressed sheet metal; a shaft supported in said vertical walls; a roller mounted to rotate on said shaft; a pressed-sheet-metal plate arranged to brace said walls in rigid relation; means securing said plate to said walls; and, means on said brace-plate arranged to engage a support for said stand, comprising inwardly-turned flanges, substantially as set forth.

8. A roller-stand comprising vertical and horizontal walls formed of a single piece of pressed sheet metal, and having respectively opposite bearing-recesses; a shaft removably supported in said recesses; a pressed-sheet-metal roller mounted to rotate on said shaft; a pressed-sheet-metal plate arranged to brace said walls in rigid relation; and, means securing said plate to said walls, wholly within the outer planes of said vertical walls, substantially as set forth.

In testimony whereof I have hereunto signed my name, at Philadelphia, Pennsylvania, this 30th day of January, 1905.

LAWRENCE ZAMBONI.

Witnesses:

RUSSELL H. BOWEN,
ALBERT W. MORRIS.