

No. 612,980.

Patented Oct. 25, 1898.

S. H. STUPAKOFF.
GUIDE FOR SWITCH AND SIGNAL RODS.

(Application filed July 6, 1896.)

(No Model.)

FIG. 1.

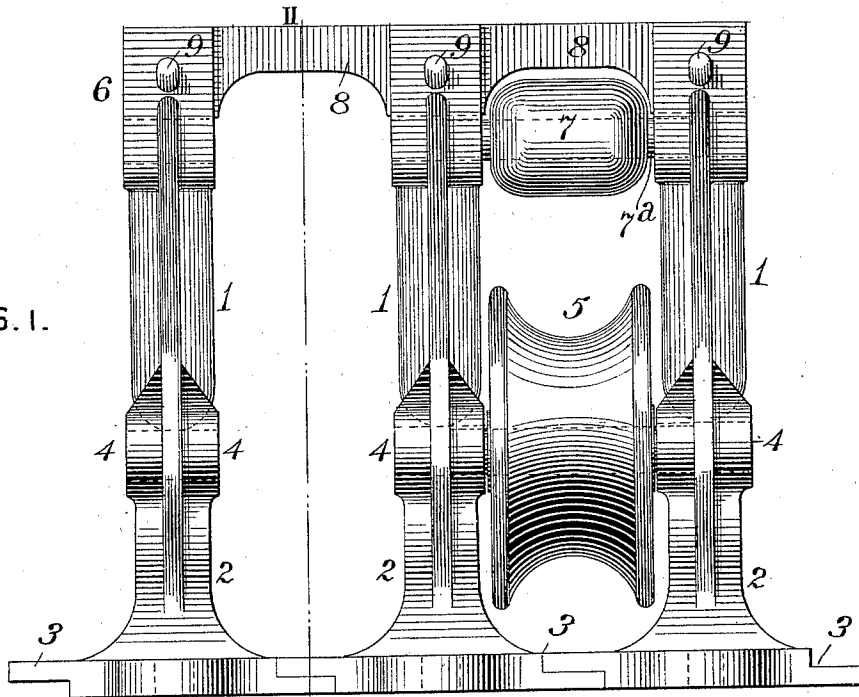
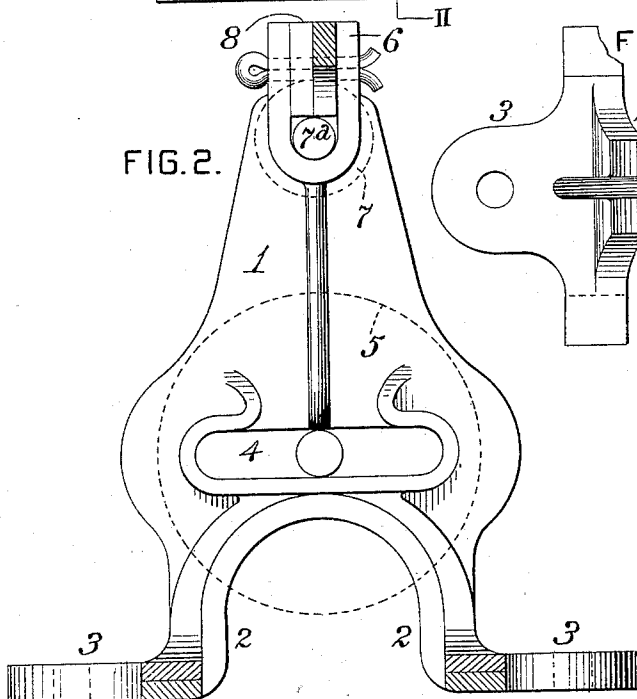


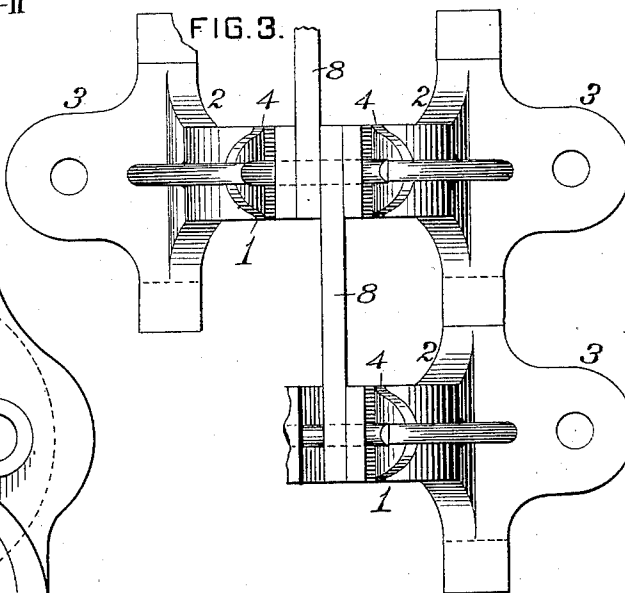
FIG. 2.



WITNESSES:

Chas. F. Miller.
Wm. H. Erskine

FIG. 3.



INVENTOR,

Senion H. Stupakoff
by Darwin S. Wolcott

Att'y.

UNITED STATES PATENT OFFICE.

SIMON H. STUPAKOFF, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO
THE UNION SWITCH AND SIGNAL COMPANY, OF SWISSVALE, PENN-
SYLVANIA.

GUIDE FOR SWITCH AND SIGNAL RODS.

SPECIFICATION forming part of Letters Patent No. 612,980, dated October 25, 1898.

Application filed July 6, 1896. Serial No. 598,200. (No model.)

To all whom it may concern:

Be it known that I, SIMON H. STUPAKOFF, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Guides for Switch and Signal Rods, of which improvements the following is a specification.

The invention described herein relates to certain improvements in antifriction-guides for switch and signal rods. As heretofore constructed the guides consist of two standards formed integral with a supporting-base and provided with a horizontal slot for the reception of the journals of the roller, the upper wall of the slot being notched to permit of the insertion of the rollers. Another form of guide consists of a series of horizontally-slotted standards having independent feet or bases and designed to be arranged alongside of each other and be independently secured on a suitable foundation. The latter form of guides have also been constructed with interlocking feet or bases. Such constructions of guides are objectionable, as in case of the breaking of any of the rollers it is necessary to remove one or more of the standards in order to insert a new roller.

The object of the present invention is to provide guides for a series of two or more rods without unnecessary duplication of standards and also for the renewal of broken rollers in such series of guides without disturbing the supporting-standards.

To these ends the invention consists in the construction and combination substantially as hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of a series of my improved standards arranged together. Fig. 2 is a sectional elevation, the plane of section being indicated by the line II II, Fig. 1; and Fig. 3 is a top plan view of one of the standards and a portion of an adjacent standard.

In the practice of my invention each part or member of the guide consists of a post or standard 1, having, by preference, its lower end arched or divided, forming legs 2, pro-

vided with feet 3. While I consider it with- in my invention to form the feet continuous under the post or standard and the latter solid, the construction shown is preferable, as it is much lighter and equally strong and rigid. A rib 4, having a horizontal portion, with the ends curving over the horizontal portion, is formed on each side of the post or standard and forms a bearing for one of the journals of the supporting-roller 5. It is preferred to form a slot through the post or standard, the walls of said slot being in line with the inner walls of the ribs 4 on each side of the standard, as shown in Fig. 3. The inwardly-curved ends of the ribs are so arranged as to form mouths for the insertion of the journals of the friction-rollers into the partially-closed bearings formed by the ribs.

The upper ends of the standards are provided with U-shaped sockets 6 for the reception of the journals 7^a of the top rollers 7. The sockets are made of such a length as to form bearings for the journals of adjacent rollers, or, in other words, each standard is provided at its upper end with open-ended supports or bearings for the journals or spindles of the adjacent retaining-rollers. These sockets are made of sufficient depth and width to receive the ends of links 8, by which adjacent standards are tied together at their upper ends. The links are made of sufficient length to tie the end of one standard to an adjacent standard. As shown in Figs. 2 and 3, the ends of the links overlap within the sockets and are held in place by means of pins or keys 9, passing through the walls of the sockets and the ends of the links within the same.

In addition to serving as ties the ends of the links are made of sufficient width to serve as caps to hold the journals 7^a of the upper rollers from vertical movement in their bearings.

The posts or standards are secured on a suitable foundation by lag-screws or bolts a distance apart slightly greater than the distance between the ends of the journals of the rollers 5, so that said rollers can be readily placed in position in their bearings after the

standards have been secured on their foundations. After the standards have been secured on their foundations the rollers 7 are placed in position and the links secured within the sockets. The rollers 5 can be placed in position at any time.

It will be observed that new top rollers can be inserted or any one of the standards renewed by taking out the links and tying the standard to be replaced to adjacent standards.

As shown in Fig. 1, it is preferred to form the feet of the posts or standards so that they will overlap one another, thus lessening the number of lag-screws or bolts necessary to hold a series of posts on their foundations.

I claim herein as my invention—

1. A post or standard for guides for rods provided on its sides with ribs forming partially-closed bearings for the journals of the supporting-rollers and having a U-shaped socket at its upper end for the reception of the journals of the retaining-rollers and the ends of tie-links, substantially as set forth.

2. A post or standard for guides for rods provided with a bearing for the supporting-roller and a U-shaped bearing at its upper end for the retaining-roller, in combination with a removable cap for the upper or U-shaped bearing, substantially as set forth.

3. The combination of two or more standards each provided with ribs on its sides, forming partially-closed bearings, with a U-shaped socket at its upper end, supporting-rollers having their journals mounted in the bearings formed by the ribs, retaining-rollers having their journals mounted in the sockets, and links for connecting each standard to an adjacent standard, substantially as set forth.

4. A post or standard for guides for rods provided with a bearing for the supporting-

roller and with the open-sided bearing or support at its upper end adapted to form supports for the journals or spindles of adjacent retaining-rollers, in combination with means for holding the journals in position, substantially as set forth.

5. A post or standard for guides for rods provided with bearings for the supporting-rollers and a U-shaped bearing at its upper end for the journals of the adjacent retaining-rollers, in combination with means for holding said journals in the bearing substantially as set forth.

6. The combination of a series of posts or standards, a series of rods supporting rollers journaled on bearings formed on the sides of the posts or standards and a series of independent retaining-rollers mounted at their abutting ends in the same post or standard and each removable independently of the abutting retaining-roller, and also independently of the pipe or rod which it retains in place, substantially as set forth.

7. A post or standard for guides for rods provided on opposite sides with bearings for rollers adapted to support a pipe or rod and provided at its upper end with bearings for the journals or spindles and adjacent retaining-rollers, the bearings for the retaining-rollers being constructed to permit of the removal of any of the retaining-rollers independently of adjacent retaining-rollers and also independently of the pipe or rod which it retains in place, substantially as set forth.

In testimony whereof I have hereunto set my hand.

SIMON H. STUPAKOFF.

Witnesses:

DARWIN S. WOLCOTT,
F. E. GAITHER.