

W. F. TRAVES.
SWITCH STAND.

APPLICATION FILED MAY 14, 1909.

950,252.

Patented Feb. 22, 1910.

2 SHEETS—SHEET 1.

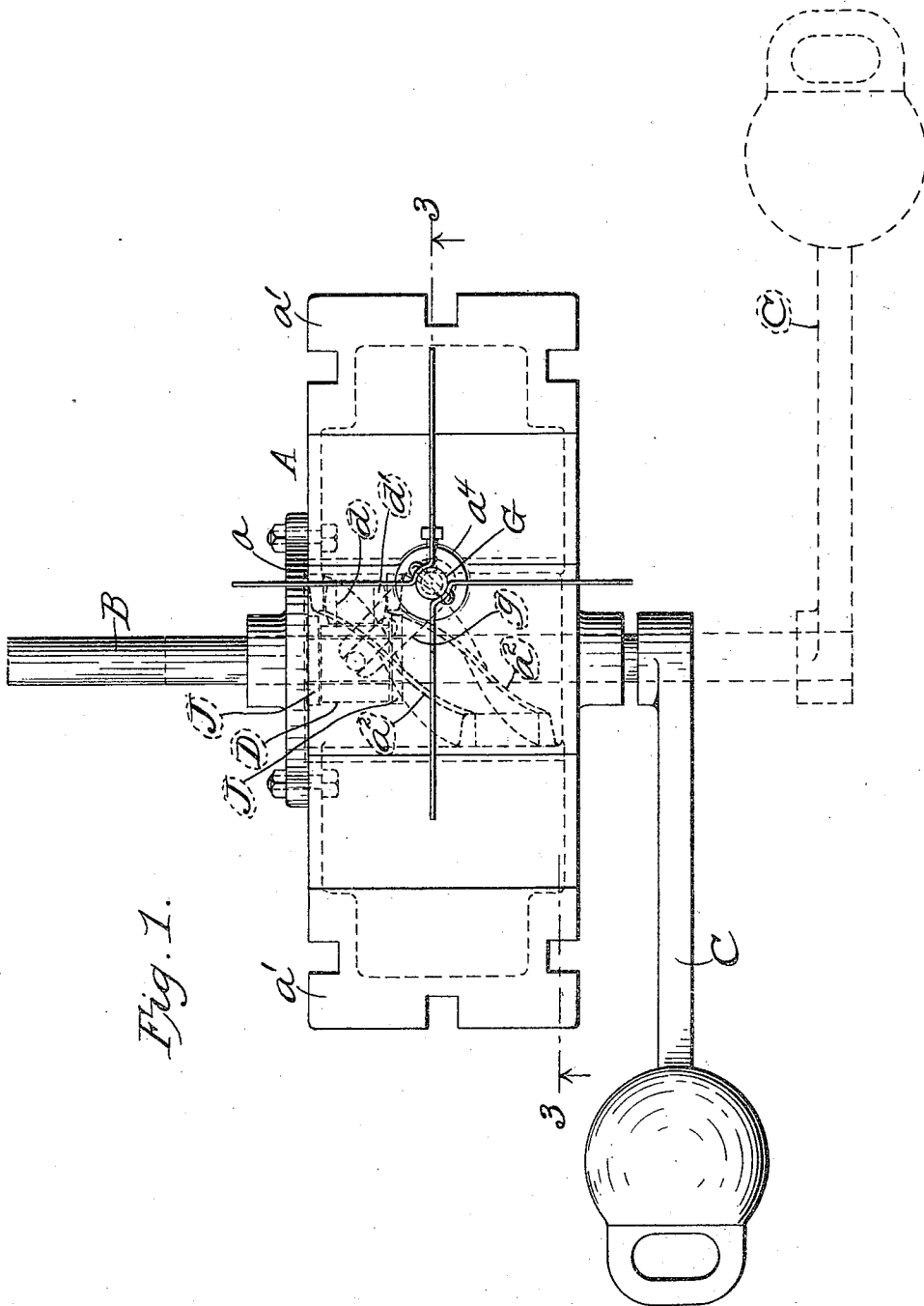


Fig. 1.

Witnesses:

A. L. Lord.
H. B. Sullivan.

Inventor.

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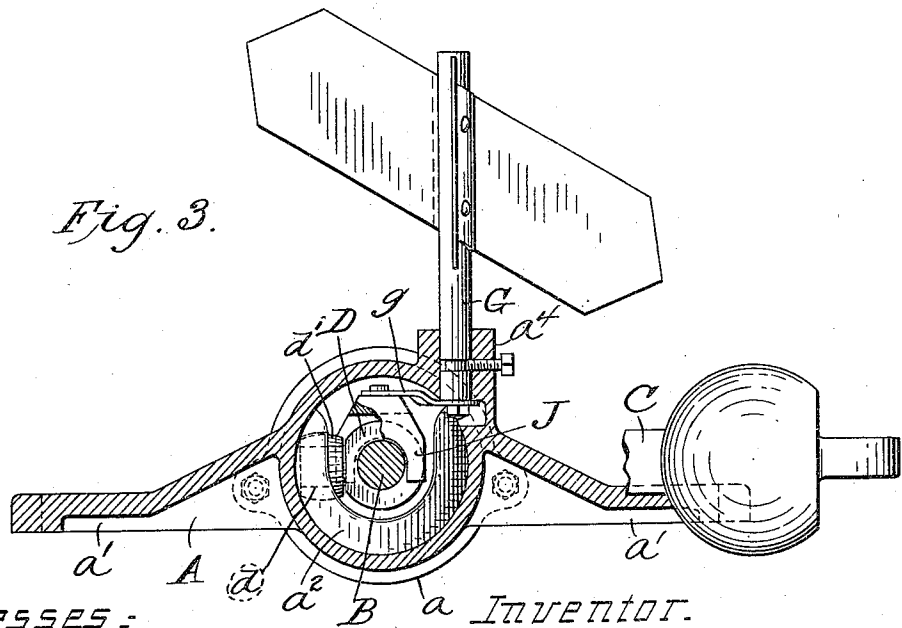
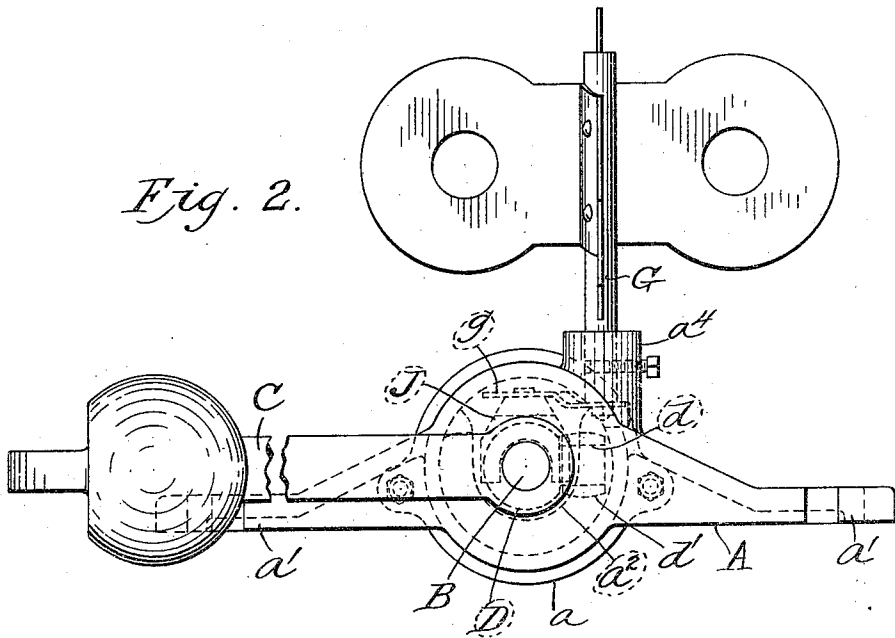
Attorneys.

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 H. B. Sullivan

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UNITED STATES PATENT OFFICE.

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

SWITCH-STAND.

950,252.

Specification of Letters Patent.

Patented Feb. 22, 1910.

Application filed May 14, 1909. Serial No. 495,876.

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 relates to railway switch stands, which is the conventional name for the mechanism and the support therefor by means of which switch rails may be moved and a target turned to indicate the position of the switch rails.

The object of the invention is to produce a cheap, efficient, durable and easily operated switch stand.

In the drawings, Figure 1 is a plan view of a switch stand embodying the invention. Fig. 2 is a side elevation thereof; and Fig. 3 is a sectional side elevation in the plane of line 3—3 on Fig. 1.

Referring to the parts by letters, A represents the base which is in the form of a cylinder having a removable head a and two laterally extended feet a' by means of which said base may be fixed to railway ties or other suitable supports. The said cylinder is hollow and has on its inner periphery two spirally disposed ribs a^2 suitably placed with respect to each other, so as to leave between them a spiral groove or guide-way, which extends about half way around the cylinder.

B represents a shaft which extends centrally through the cylinder and projects through suitable bearings in the heads thereof. On one projecting end a weighted operating handle C is fixed. The other end is to be connected by suitable mechanism, which it has not been thought necessary to show, with the movable switch rails. Within the cylinder a collar D is rigidly fixed to the shaft, and it has a laterally projecting stud d on which is mounted a frictional roller d' which lies in the spiral groove between the two spiral ribs a^2 . It is quite obvious that if a person takes hold of the external handle and moves it so as to turn said shaft B, the shaft will of necessity, because of the engagement of said friction roller with one or the other of said spiral ribs, move endwise. It is this endwise movement which is relied upon to throw the switch rails.

The base A is formed with a vertical

bearing a^4 , in which the vertical target shaft G is mounted. This shaft has an arm g fixed to its lower end, and extending within the case over the shaft B and the collar thereon. J represents a fork having a swiveled connection with this arm, one leg of the fork extending on one side and the other leg extending on the other side of the collar. Both of these legs are also forked so that they may embrace loosely the shaft B. When the shaft is turned and also moved endwise, the collar D partakes of this endwise movement. One end or the other engages with the adjacent fork arm and draws the fork along with it and this movement of the fork necessarily causes the turning of the target shaft G to which the arm g is attached.

It is not pretended that this switch stand embodies any radical novel feature. The field of improvement in switch stands has been pretty thoroughly worked over. The main object of improvers in this day is to reduce the cost of these switch stands, without making them any less efficient or less reliable, or less easily operated. It is thought that in the construction described these desirable results are attained.

The switch stand described is efficient, strong, durable and easily operated, and it costs, as I believe, very much less than any other equally good switch stand.

Having described my invention, I claim:

1. The combination of a hollow cylindrical base having laterally projecting legs and having on its inner periphery two inwardly extended spiral ribs, one of the heads of said cylinder being removable, a shaft extending centrally through the said cylinder rotatably mounted in the two heads thereof and projecting beyond both heads, a collar fixed to this shaft within the cylinder having a laterally projecting stud, a friction roller mounted on said stud and projecting between said spiral ribs, and an operating handle connected to one projecting end of said shaft.

2. The combination of a hollow cylindrical base having laterally projecting legs and having on its inner periphery two inwardly extended spiral ribs, one of the heads of said cylinder being removable, a shaft extending centrally through the said cylinder rotatably mounted in the two heads thereof and projecting beyond both heads,

a collar fixed to this shaft within the cylinder having a laterally projecting stud, a friction roller mounted on said stud and projecting between said spiral ribs, an operating handle connected to one projecting end of said shaft, a vertical target shaft rotatably mounted in a vertical bearing which is a part of said base, an arm fixed to the lower end of said shaft and projecting into the hollow interior of said base, and a fork con-

nected with said arm, said fork having two forked legs which span the shaft and lie respectively close to opposite ends of said collar.

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

WEBESTER F. TRAVES.

Witnesses:

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