

No. 644,261.

Patented Feb. 27, 1900.

C. SCHLARED.
SWITCH STAND.

(Application filed Aug. 29, 1899.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1

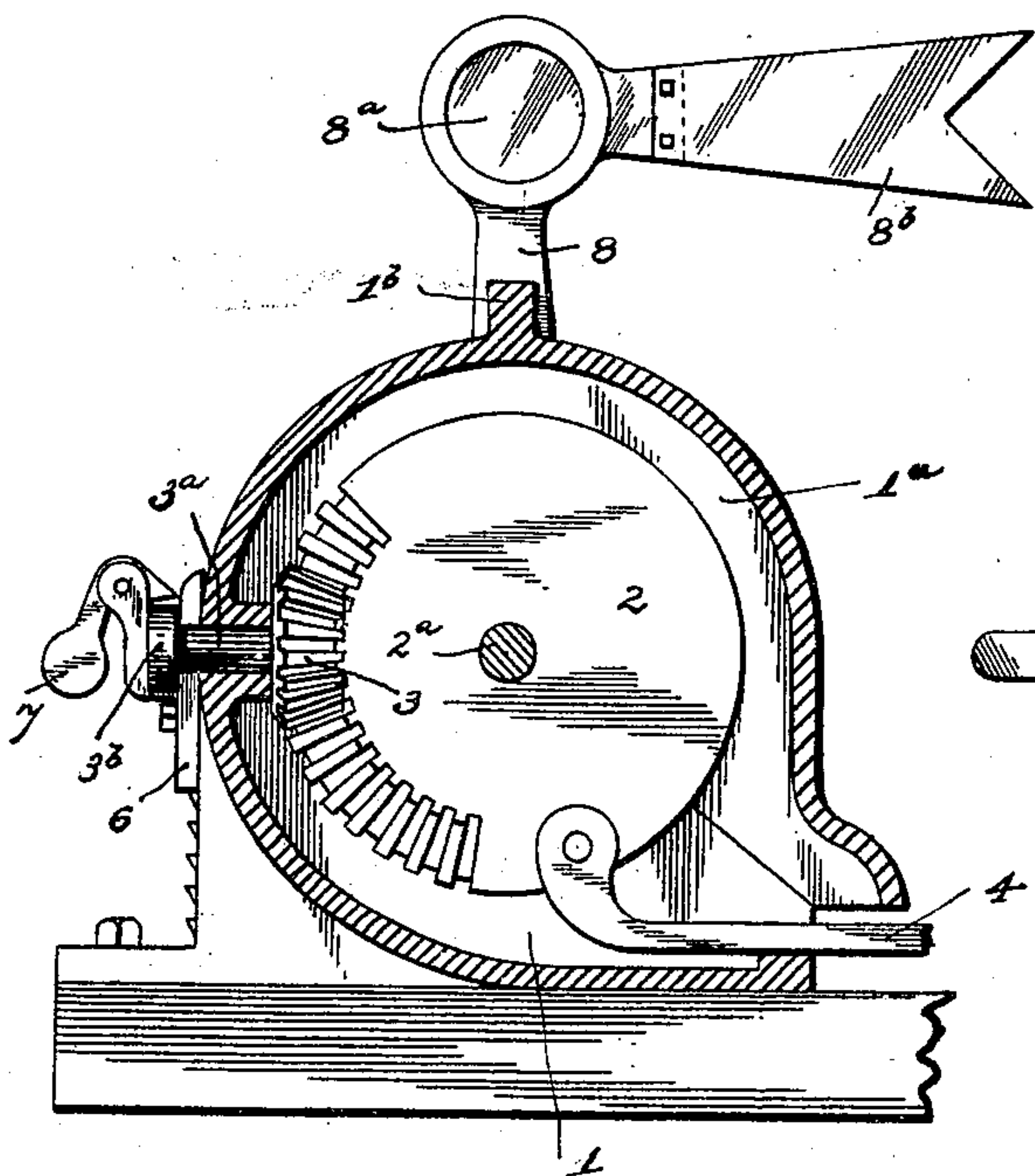
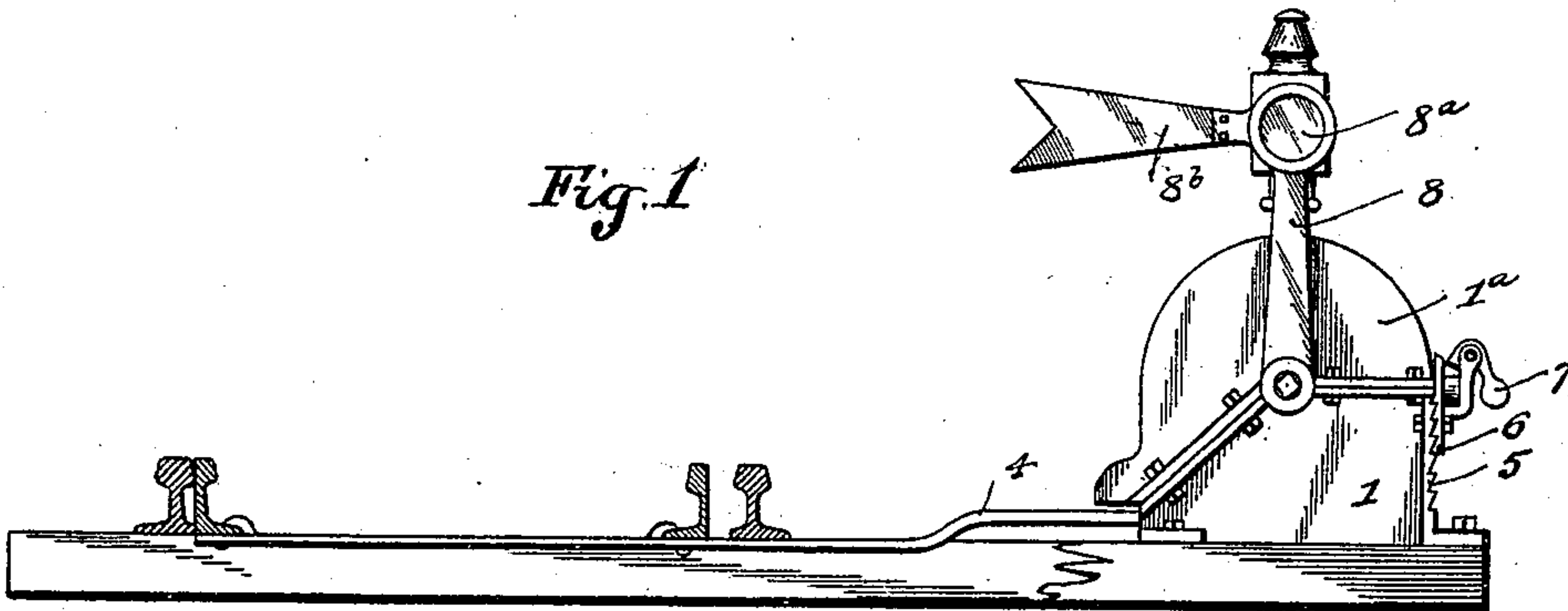


Fig. 2.

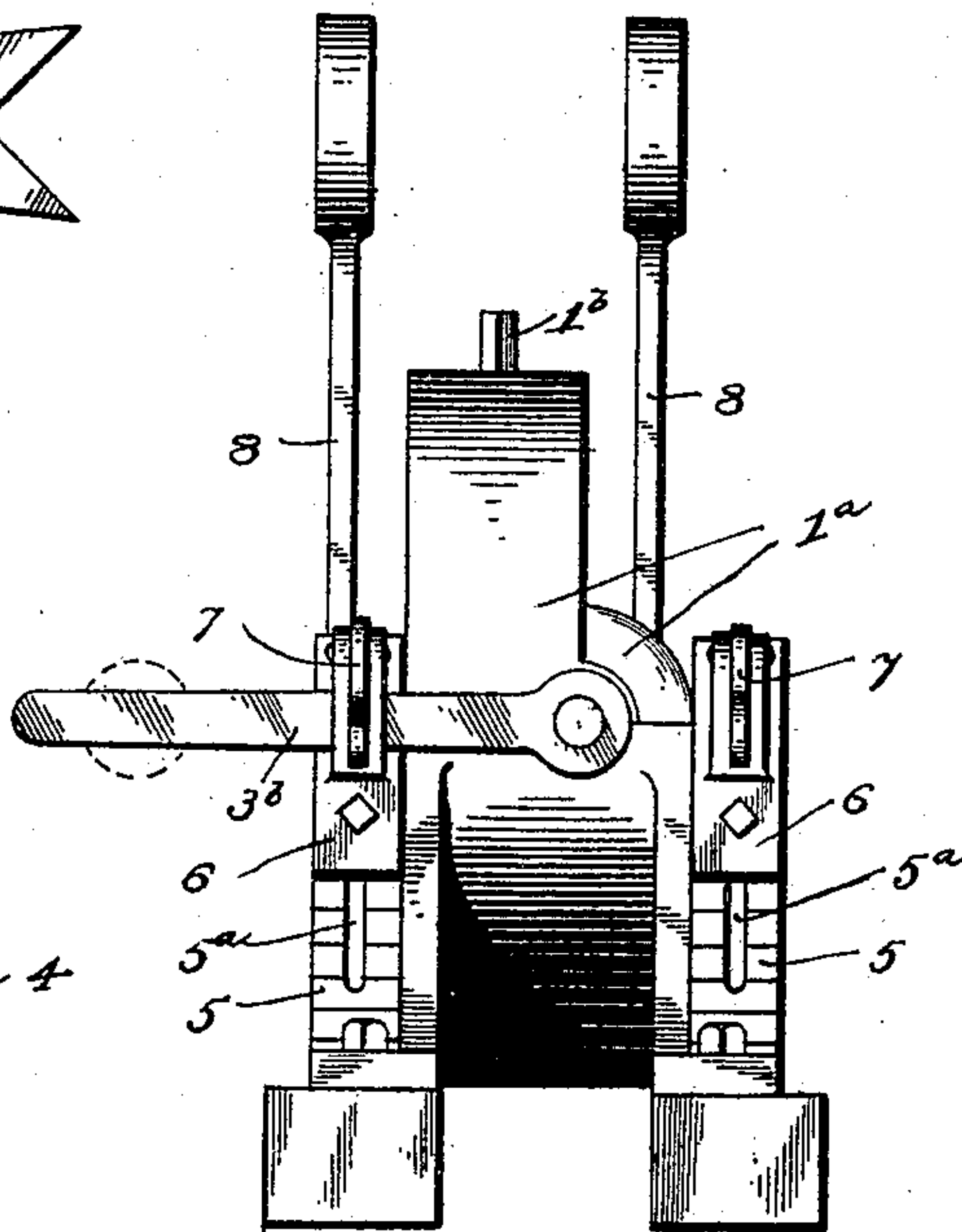


Fig. 3.

WITNESSES:

Hallam Murdock
M. D. Blondel

INVENTOR

Charles Schlared,
BY
Finckel & Finckel,
ATTORNEYS

No. 644,261.

Patented Feb. 27, 1900.

C. SCHLARED.
SWITCH STAND.

(Application filed Aug. 29, 1899.)

(No Model.)

2 Sheets—Sheet 2.

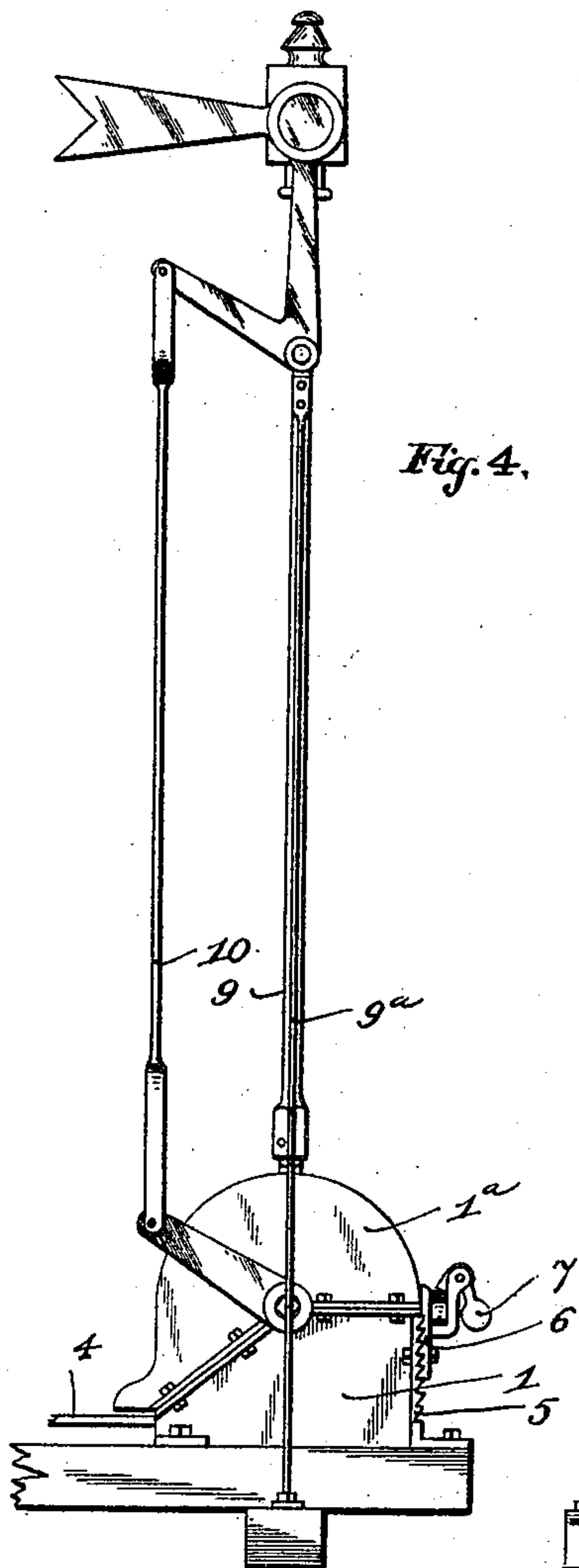


Fig. 4.

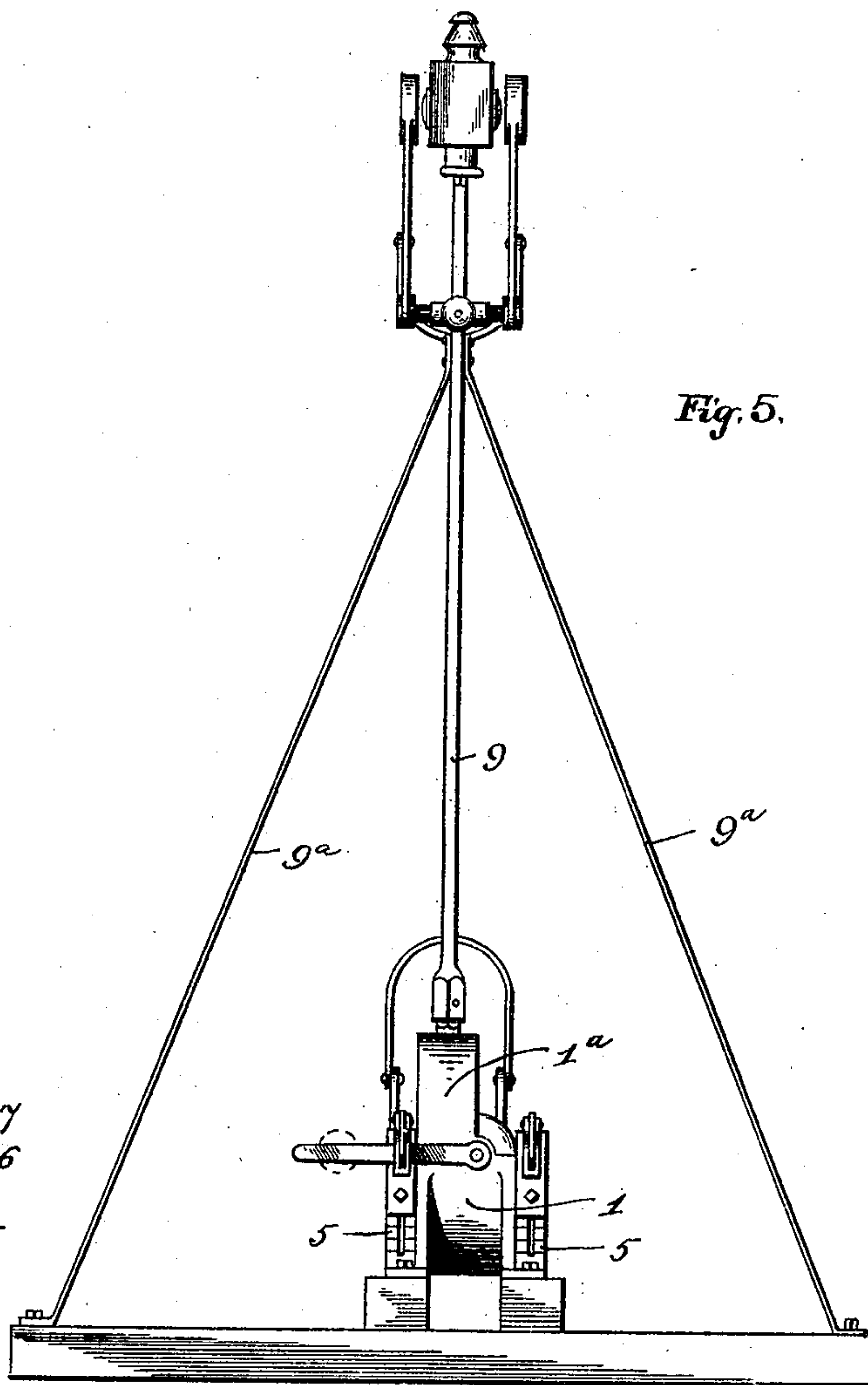


Fig. 5.

WITNESSES:

Wallace Muddock
M. D. Blondell.

INVENTOR

Charles Schlared,
BY
Finckel & Finckel,
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES SCHLARED, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-HALF TO
GEORGE M. HOPKINS, OF SAME PLACE.

SWITCH-STAND.

SPECIFICATION forming part of Letters Patent No. 644,261, dated February 27, 1900.

Application filed August 29, 1899. Serial No. 728,861. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SCHLARED, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Switch-Stands; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide a switch-stand of simple, economical, and durable construction, the operative parts of which are not liable to injury or obstruction and not dangerous to operatives using the same.

My invention resides in the improved construction hereinafter described and claimed.

In the accompanying drawings, in which I have shown an embodiment of my invention, Figure 1 illustrates a stand in side elevation, the track and switch-rails being in cross-section. Fig. 2 is a vertical sectional view through the casing, showing the interior construction. Fig. 3 is an end elevation looking toward the track. Fig. 4 is a side elevation showing an adaptation of the apparatus to a high target or signal. Fig. 5 is a rear elevation looking toward the track.

The casing for the switch-rail-operating mechanism comprises a lower portion 1 and an upper or hood portion 1^a, the line of separation being substantially such as to admit the easy placing of the interior parts in the lower portion when the upper part is off, and the two portions of the casing are secured together by bolts passing through flanges at the line of separation on each portion.

The operating mechanism comprises the toothed master-wheel 2, having shaft 2^a, and an engaging pinion 3, having its shaft 3^a journaled in the rear side of the casing and protruding beyond same, where it is provided with lever 3^b, by means of which the pinion can be oscillated to rock the master-wheel 2. Coupled to the lower portion of the master-wheel is a bar 4, upon which or upon a bar attached thereto are the switch-rails.

The lower portion 1 of the casing is made at its rear side with serrated or toothed wings

5 on each side of the shaft of the pinion 3, and upon these wings are supported reversely-serrated brackets 6, containing keepers 7. The serrations of the wings and brackets permit the adjustment vertically of the brackets and their keepers, and consequently a smaller or larger throw of the lever 3^b and therefore of the switch-rails. The keeper-brackets are held in any position to which they are adjusted by means of screw-bolts in the keeper-brackets passed through slots 5^a in the serrated wings and held by nuts. (See Fig. 1.)

The ends of the shaft 2^a of the master-wheel protrude beyond the sides of the casing, and these projecting ends, as shown in Figs. 1, 2, and 3, have secured to them arms 8, having openings at their free ends provided with transparent lenses 8^a, colored as may be expedient or the practice. In the "low-target" form (shown in Figs. 1, 2, and 3) the arms 8 are each furnished with a rubber or elastic signal-arm 8^b, so as to avoid injury of trainmen in accidental collision therewith. The lenses 8^a are usually differently colored to serve as a signal at night, while the arms 8^b subserve the same function during the day.

The lantern that is to furnish the light at night is supported on a pin 1^b at the top of the casing, and the arms 8 are so placed on the ends of the shaft 2^a that when the lever 3^b is in latched position by one keeper the lenses are opposite the lantern and the light visible through the lenses along the track, and when thrown over to the other keeper the light of the lantern uncolored by the lenses is visible in the same way.

To adapt the switch-operating apparatus to a high target, as shown in Figs. 4 and 5, I fasten upon the pin 1^b a rod 9 of proper length, having at its upper end a suitable support for the lantern. This rod 9 is preferably braced by guy-rods 9^a. Upon a suitable shaft in the rod 9 are lens-arms capable of being rocked like the arms 8, Figs. 1, 2, and 3. Connecting these elevated lens-arms and plain arms substituted for the lens-arms 8 on shaft 2^a is a link-rod 10, so that when the switch-rails are thrown the elevated lens-arms and their signal-arms are operated like the

lens-arms 8 of the low-target form shown in Figs. 1, 2, and 3. A sector may of course be used in the place of wheel 2.

Besides simplicity, durability, and economy of construction the advantages of this form of switch-stand are that the throw of the switch-rails may be nicely regulated, the lantern being stationary is not liable to be broken by violence in working the switch-moving devices, the operatives are not liable to have their feet crushed by the switch-throwing lever, and the apparatus is protected from rain, sleet, ice, stones, sticks, and other things adapted to interfere with its action.

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

1. In a combined switch-stand and signal, a casing adapted to stationarily support a lantern, the master-wheel 2 in said casing to which the switch-rod is to be attached having a shaft 2^a standing parallel to the track and protruding beyond the sides of the casing,

lensed signal-arms connected to each end of said shaft 2^a, a pinion 3 engaging said master-wheel and having its shaft protruding from the casing, and a rocking lever attached to said shaft, substantially as described.

2. In a switch-stand, a casing, the master-wheel 2 in said casing to which the switch-operating rod is to be attached, a pinion 3 engaging said master-wheel having its shaft protruding beyond the casing, an oscillating lever connected to the protruding end of said shaft, and independently-adjustable keepers for said lever located at opposite sides of the axis of oscillation of said lever, substantially as described.

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

CHARLES SCHLARED.

Witnesses:

GEORGE W. ALFRED,
GEORGE M. FINCKEL.