

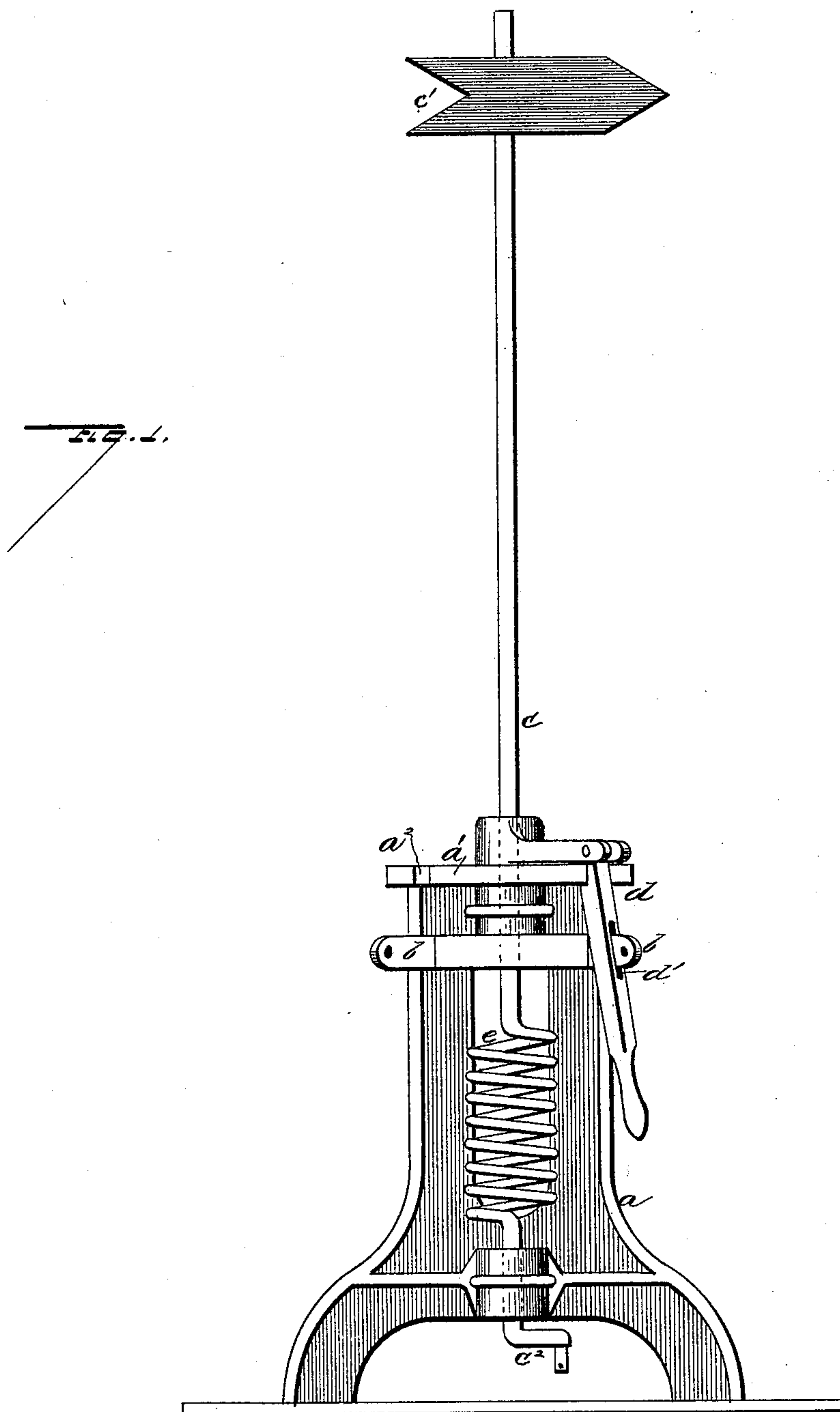
(No Model.)

2 Sheets—Sheet 1.

W. J. MORDEN.
SWITCH AND SIGNAL STAND.

No. 366,973.

Patented July 19, 1887.



Witnesses.
H. C. McArthur
W. J. McArthur

Inventor,
William J. Morden
per H. Harrison
Attorney.

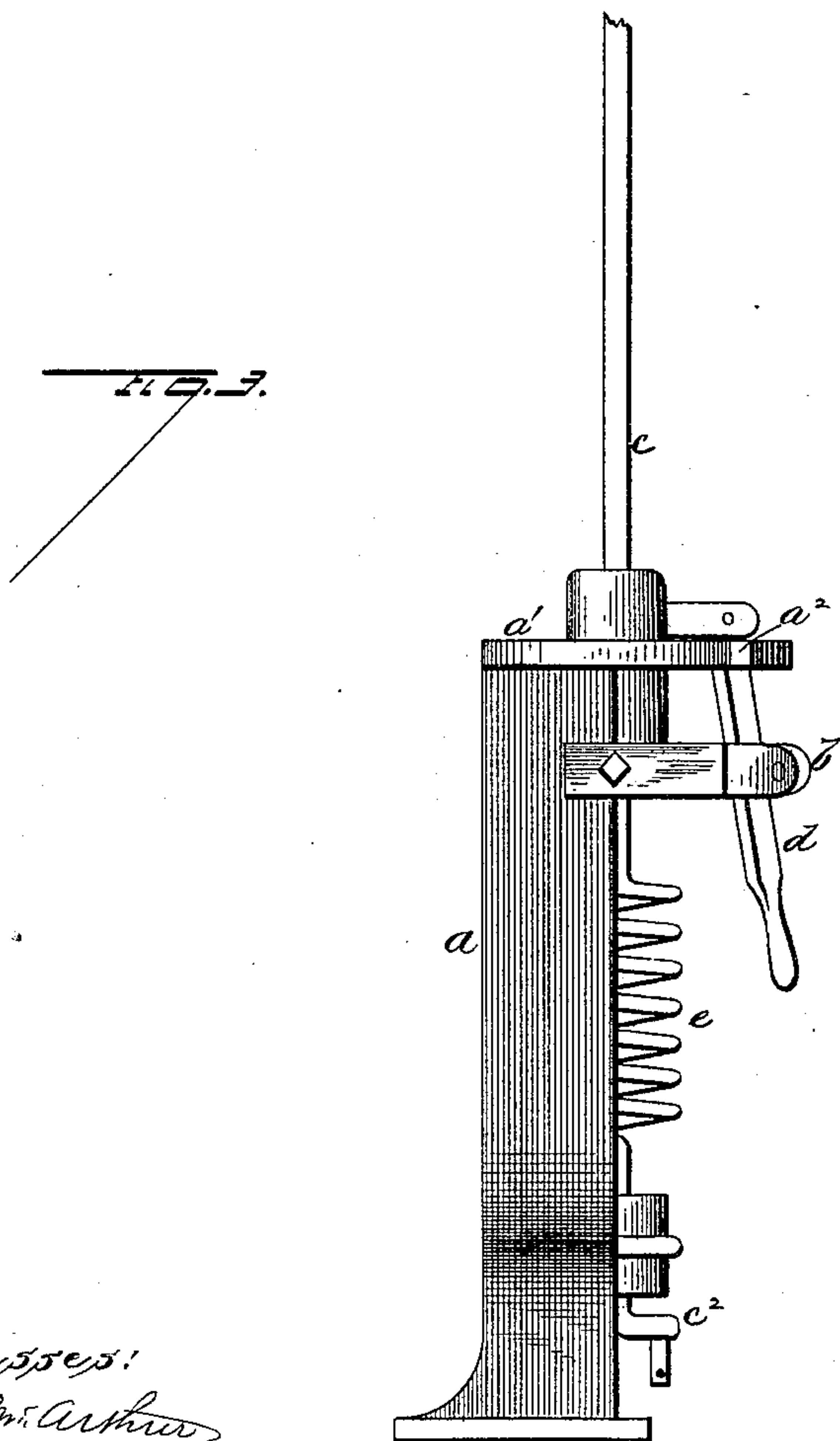
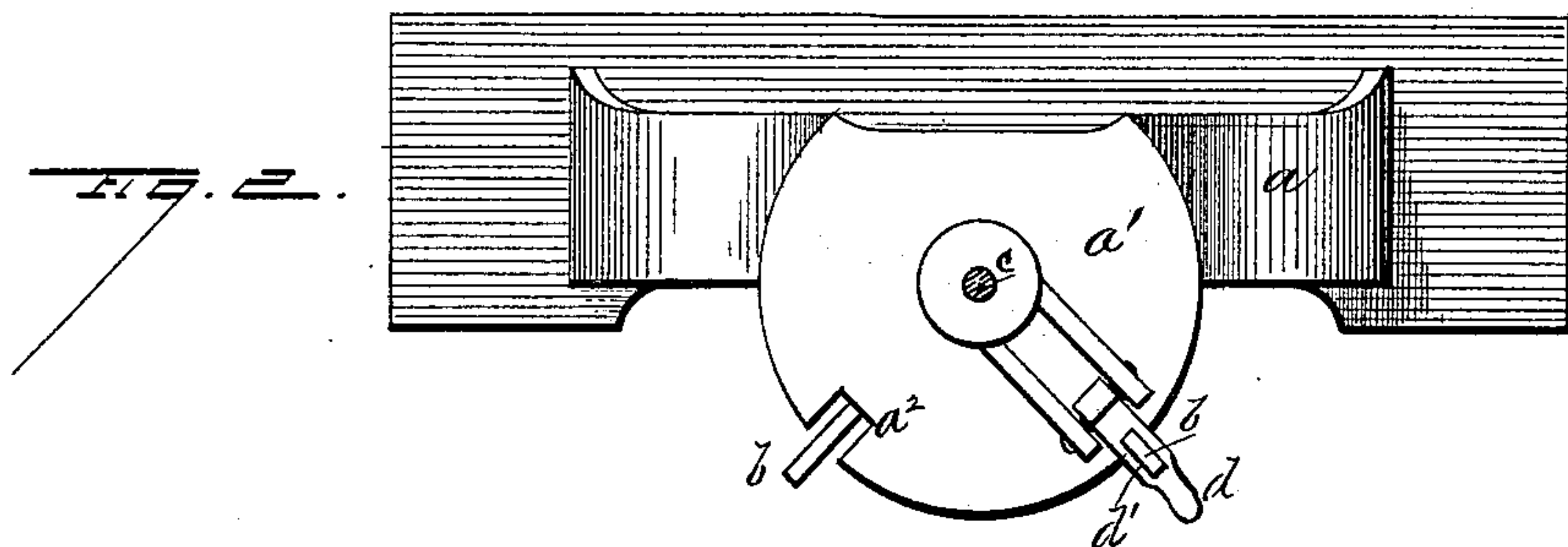
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UNITED STATES PATENT OFFICE.

WILLIAM J. MORDEN, OF CHICAGO, ILLINOIS.

SWITCH AND SIGNAL STAND.

SPECIFICATION forming part of Letters Patent No. 366,973, dated July 19, 1887.

Application filed January 10, 1887. Serial No. 223,896. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. MORDEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Switch and Signal Stands, of which the following is a specification, to wit:

This invention relates to an improvement in switch and signal stands; and it consists in certain peculiarities of the construction and arrangement of the same, substantially as will be hereinafter more fully set forth and claimed.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a front elevation, Fig. 2 a plan view, and Fig. 3 a side elevation, of my invention as it is applied in use.

a represents the main frame of my switch and signal stand, of any suitable size and shape, provided at its top with a semicircular plate, *a'*, in the edge of which is formed a pair of notches, *a''*, at such a distance apart as will enable them to be used as locking-recesses for the two positions in which it is designed the switch and signal shall be set.

To the front of the main frame, just beneath the top plate and in alignment with the notches *a''*, are secured a pair of projecting lugs, *b*, as shown. In suitable boxes in the frame is journaled the shaft *c*, which extends some distance above the frame, and has upon its upper end the signal *c'*. The lower end of this shaft is cranked, as at *c''*, for operative attachment to the switch-rod, (not herein shown,) and above the frame the shaft is provided with a jointed operating-handle, *d*, by which it is moved, and the outer end of which drops normally into one or other of the notches in the plate *a'*, and has a slot, *d'*, for the reception of the lug *b*. This part of the switch and signal stand is of common and well-known form; but it will be noted that the shaft *c* is between its boxes twisted into a spiral spring, *e*, of sufficient stiffness to cause the two ends of the shaft to move together under all ordinary conditions.

The connection of this stand to a switch is so well known as to require no description or illustration at this place, and it will be also at once understood that when the cranked shaft is moved it not only turns the signal, but also throws the switch into connection with either the main line or side track, as may be, and as soon as the jointed handle falls into the notch the switch and signal are locked and cannot be accidentally displaced. In normal conditions the switch is kept set for the main line, and must be operated by the attendant to permit a car to pass from the main line upon the siding, and with the common form also from the siding to the main line. With this construction, however, when a car approaches the main line upon the siding, its wheels, acting upon the guard-rails used with all such switches, draws over the switch-rails and admits of its passing out upon the main line freely, because of the yielding of the spring-section of the shaft *c*, while this spring at once closes the switch behind it and leaves both switch and signal set for a clear main line. This will be at once understood, as the spring-section of the shaft, while stiff enough to insure the proper action of the parts when operated by the attendant, yet gives freely under the action of the passing car in the manner described.

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

1. In a switch and signal stand, the shaft *c*, having one portion formed in a spiral spring, substantially as shown and described.

2. The combination, with the stand *a*, provided with the notched plate *a'* and the journal-boxes, of the shaft *c*, formed with the spring-section *e* and crank *c''*, and provided with a jointed handle, *d*, all constructed and arranged to operate substantially as and for the purpose set forth.

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

WILLIAM J. MORDEN.

Witnesses:

W. C. McARTHUR,
W. S. McARTHUR.