

No. 881,703.

PATENTED MAR. 10, 1908.

F. W. MOORE.

LOCK FOR SWITCH LEVERS.

APPLICATION FILED DEC. 17, 1906. RENEWED AUG. 22, 1907.

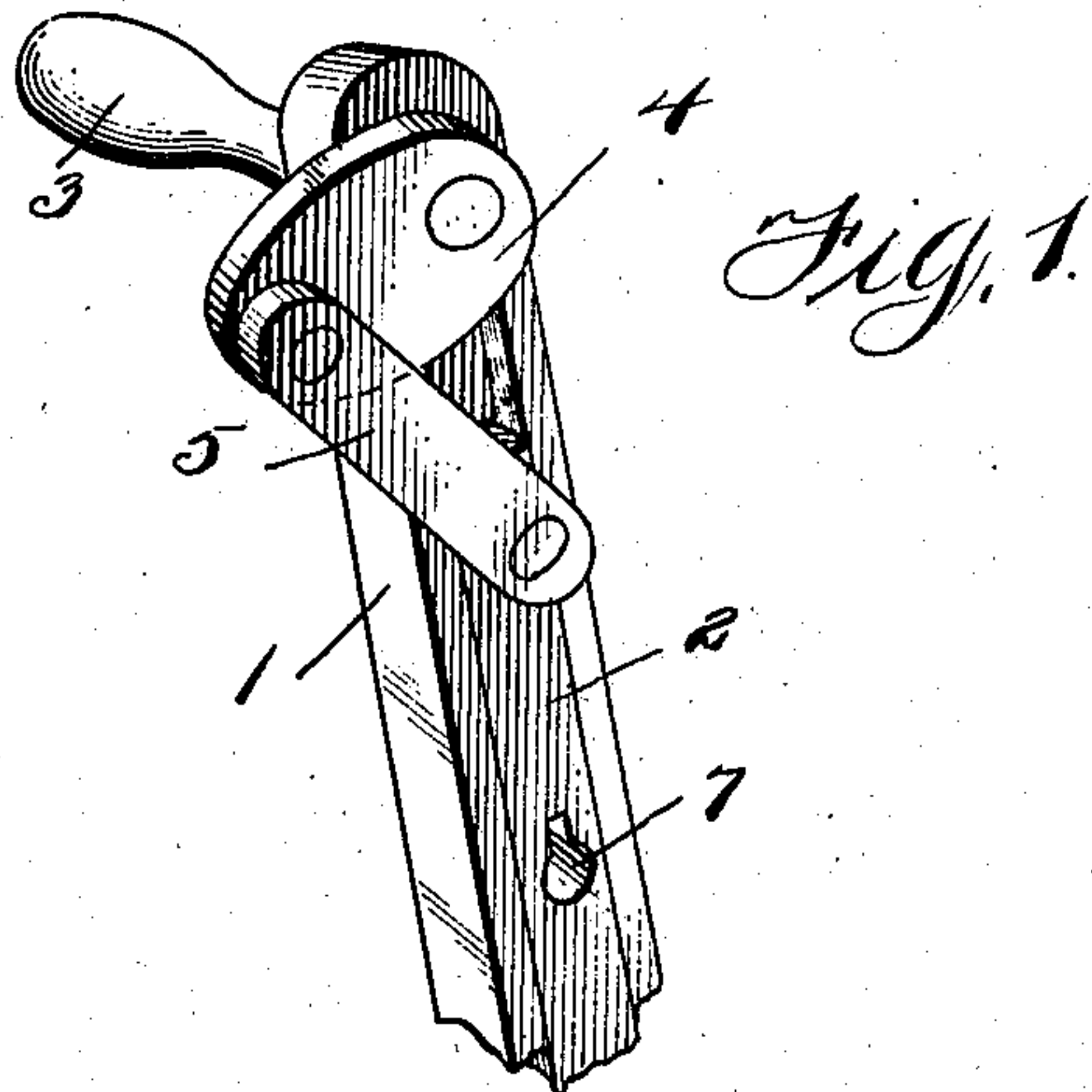


Fig. 1.

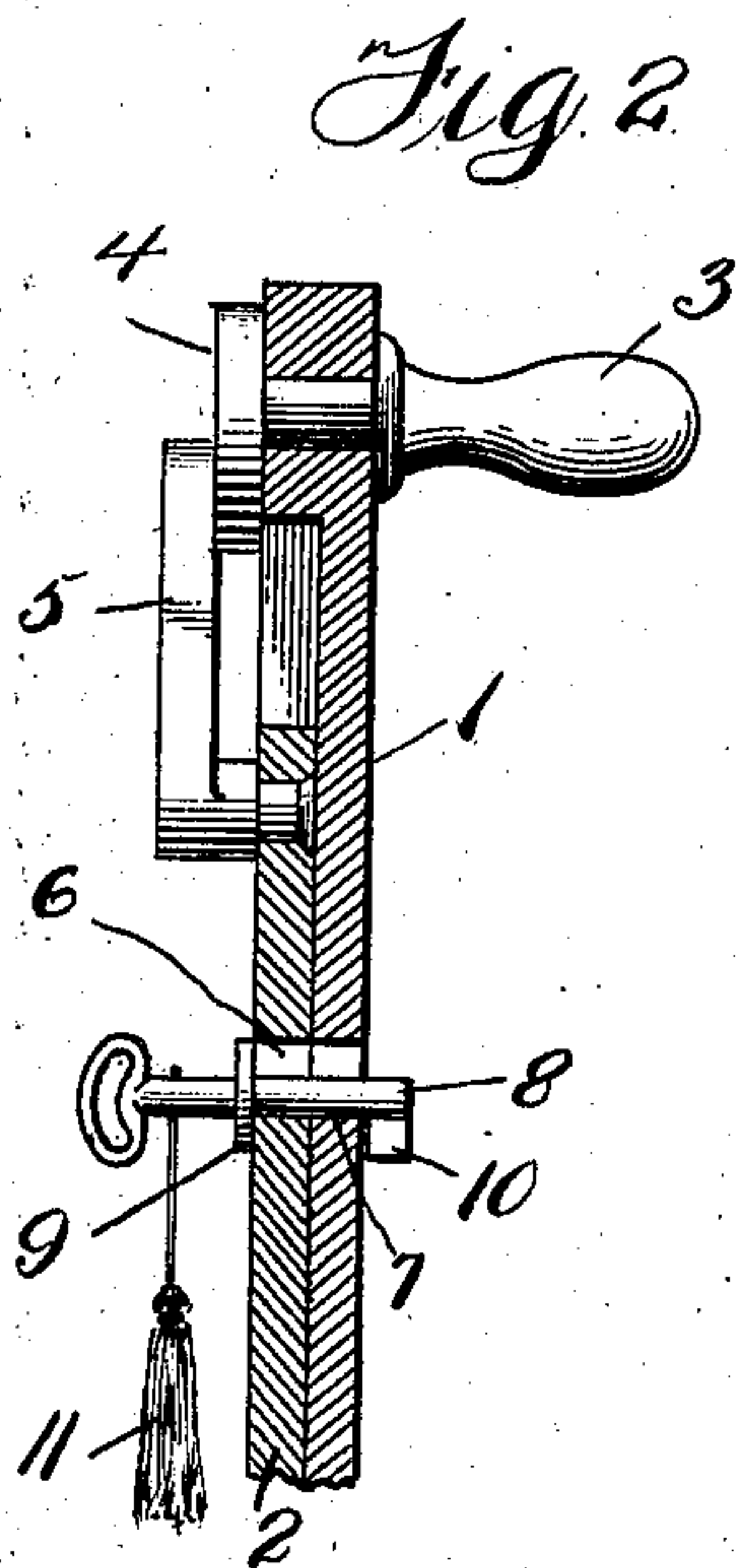


Fig. 2.

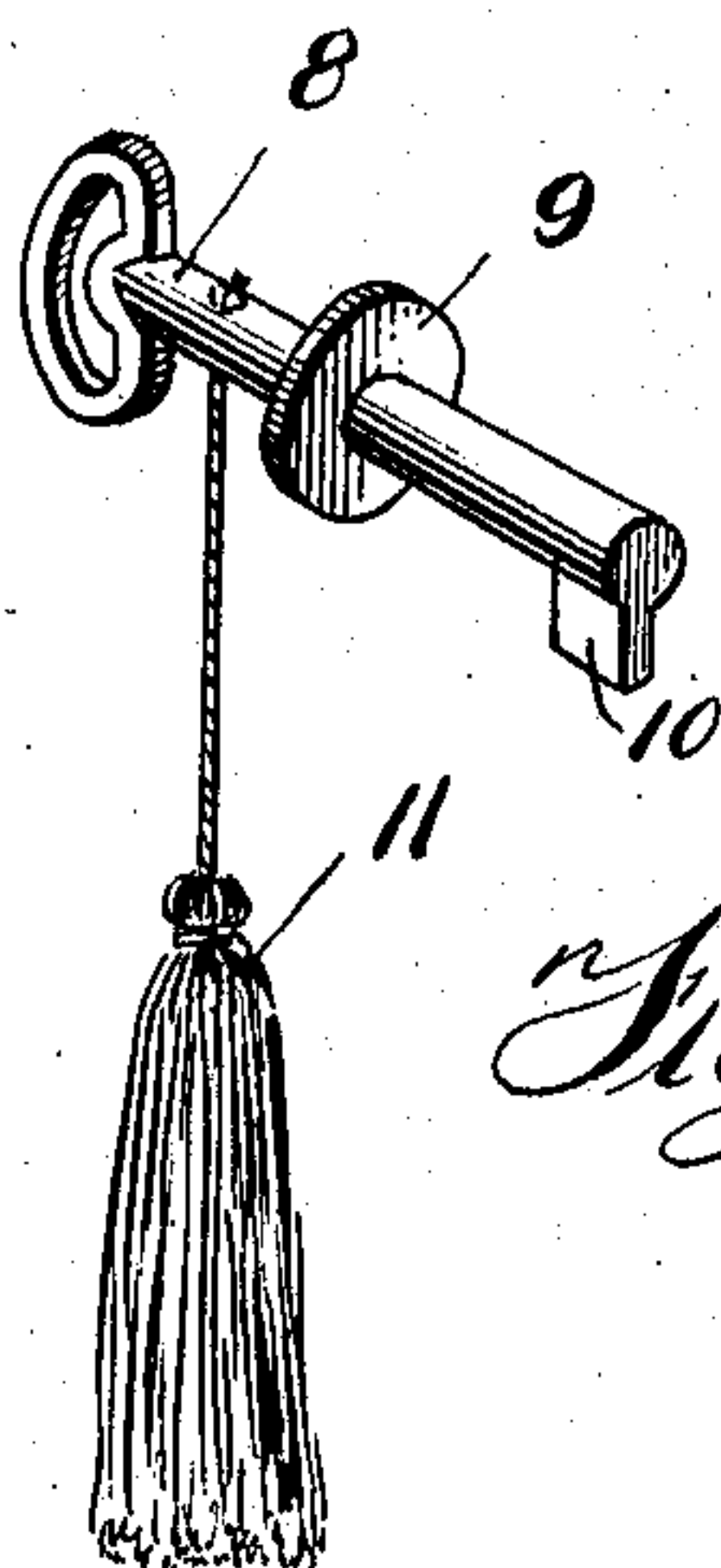


Fig. 4.

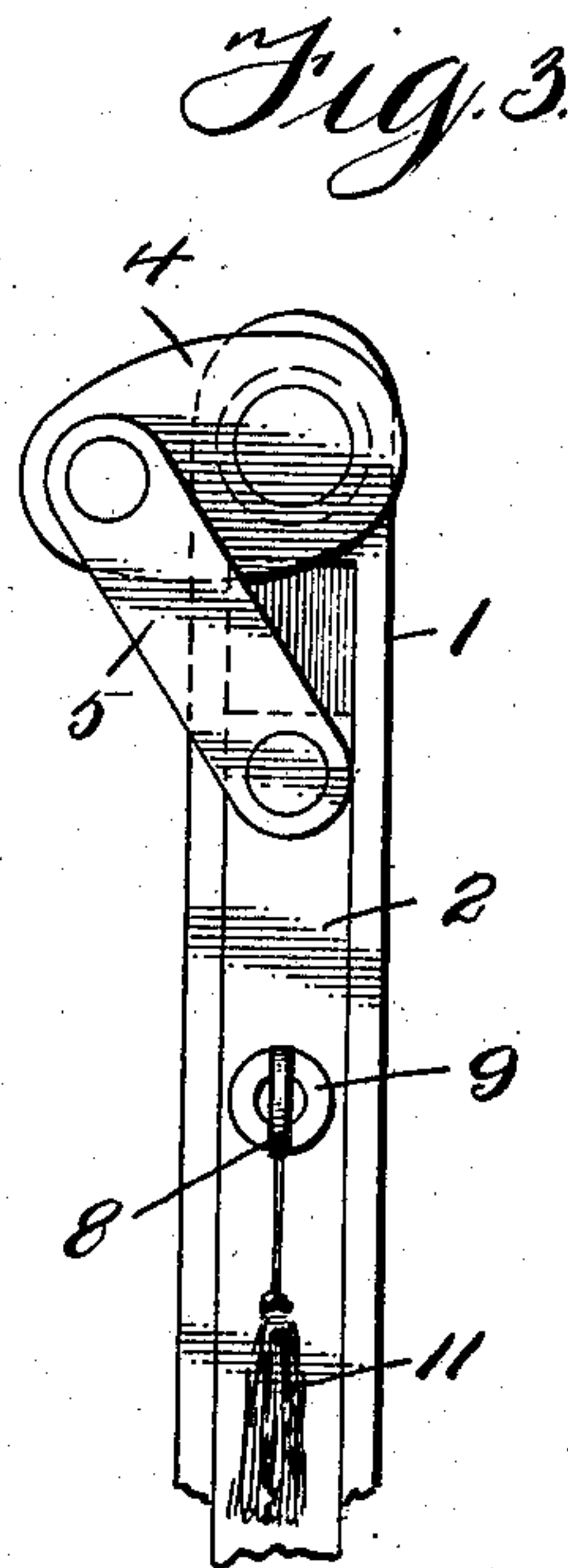


Fig. 3.

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FRIEND W. MOORE, OF PITTSBURG, PENNSYLVANIA.

LOCK FOR SWITCH-LEVERS.

No. 881,703.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed December 17, 1906, Serial No. 348,357. Renewed August 22, 1907. Serial No. 389,724.

To all whom it may concern:

Be it known that I, FRIEND W. MOORE, citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Locks for Switch-Levers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to locks for switch levers, and the invention relates more particularly to a novel form of lock for the switch throwing levers of a railroad tower.

My invention aims to provide positive and reliable means for locking a switch lever, whereby it cannot be moved. In this connection I have devised a simple and inexpensive lock, which can be easily and quickly operated to lock a switch lever in a fixed position, the key employed in connection with the lock being provided with a visible warning attachment for attracting the attention of a switchman or operator.

The detail construction of my improved lock will be presently described and then specifically pointed out in the appended claims, and referring to the drawing forming part of this specification, like numerals of reference designate corresponding parts throughout the several views, in which:—

Figure 1 is a perspective view of the handle end of a switch throwing lever, Fig. 2 is a vertical sectional view of the same, Fig. 3 is a side elevation of the switch throwing lever equipped with my improved lock, Fig. 4 is a perspective view of a key used in connection with the lock.

In the accompanying drawing, I have illustrated the handle end 1 of a switch throwing lever, such as commonly used in a railroad tower, where numerous levers, often as many as one or two hundred, are employed for controlling the switches and railroad tracks in the vicinity of the power. In connection with the lever 1 a rack bar or latch 2 is employed for holding the lever in a fixed position the bar or latch engaging in a rack (not shown) located at the base of the switch lever. The bar or rack 2 is regulated through the medium of a handle 3, to release and lock the lever 1 at any desired time. By turning the handle 3, the bar 2 is raised and lowered through the medium of a crank 4 and the

link 5, although in some instances their mechanical equivalent is employed.

My invention resides in providing the lever 1 with a key opening 6 adapted to aline with a similar opening 7 formed in the bar 2, when the lever 1 or bar 2 is held in a fixed position. A key 8 is adapted to fit in the openings 6 and 7 and prevent the bar 2 from being moved by the rotation of the handle 3. The key 8 is provided with an annular flange 9 to limit its movement within the openings 6 and 7, and with a lug 10, similar to an ordinary key. Besides the flange 9 the key 8 is provided with a depending tassel 11, preferably of a red or attractive color whereby the tassel will serve as a warning that the switch lever has been locked and that the lever is not to be moved until the condition of the switch which the lever controls is observed.

By the novel construction of my improved lock and the use to which it is applied, I prevent the side swiping of cars, and other similar accidents, and in using the red tassel I attract the leverman's or switchman's attention that a track is blocked. It is a well known fact that a great many accidents occur by a leverman opening switches which should remain closed, and when a switch lever is equipped with my improved lock, it will be impossible to move the same, unless it is done intentionally by removing the key. Where a great number of switches are used in one tower, a leverman is able to observe immediately what switches or tracks are blocked, and ascertain immediately what tracks are open for traffic.

I do not care to confine myself to the type of switch lever in connection with which my improved lock is used, or to the exact type of key and warning signal used in connection with the same.

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

1. In combination with a switch lever and a reciprocating bar or latch, said lever and bar having key openings formed therein, a key adapted to fit in said openings, an annular flange carried by said key, and a tassel carried by said key, substantially as described.

2. The combination with a switch lever, a bar for holding the same in a fixed position,

and means for moving said bar, of a key adapted to extend through said lever and said bar, a warning signal carried by said key, and means to limit the movement of
5 said key, and said bar and lever.

3. The combination with a switch lever, and a movable bar for holding the same in a fixed position, of means for preventing the movement of said bar, said means consisting

of a key adapted to extend through said 10 lever and said bar.

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

FRIEND W. MOORE.

Witnesses:

MAX H. SRLOVITZ,
A. J. TRIGG.