

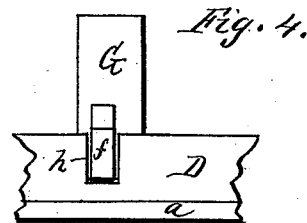
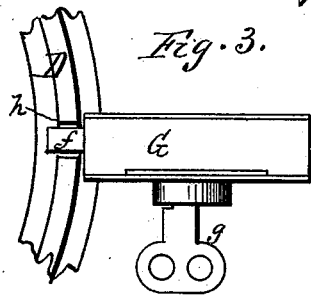
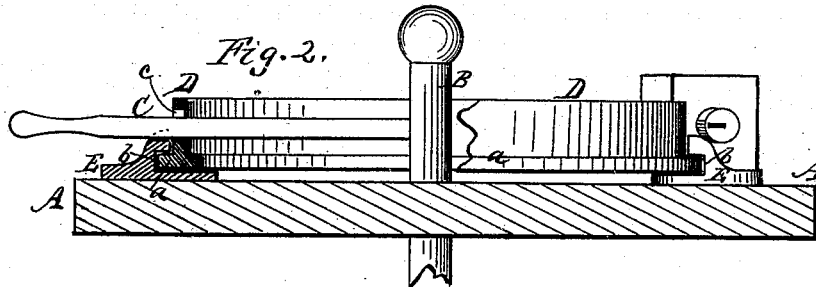
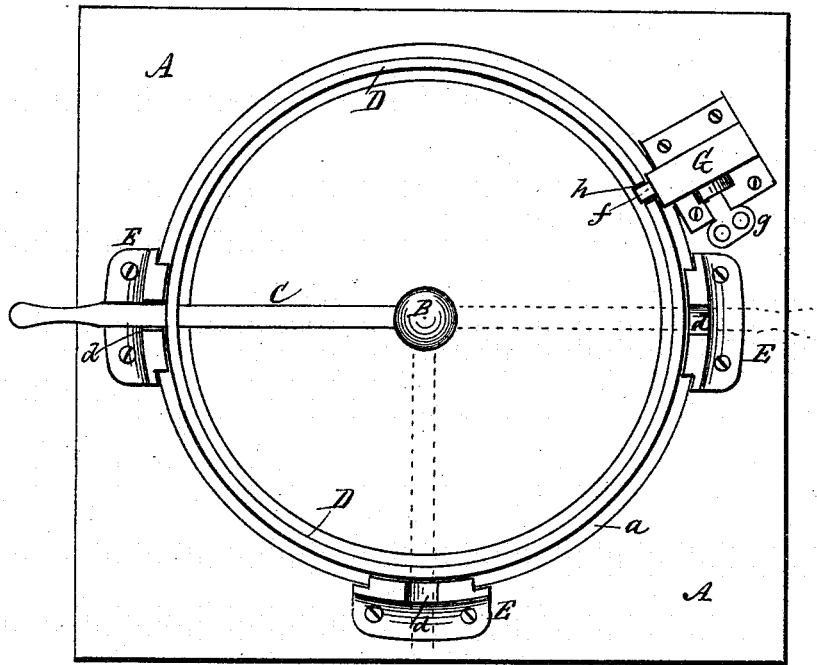
(No Model.)

E. DE WITT THOMAS.
SWITCH LOCK FOR RAILROADS.

No. 343,407.

Patented June 8, 1886.

Fig. 1.



Attest.

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UNITED STATES PATENT OFFICE.

E. DE WITT THOMAS, OF ROCHESTER, NEW YORK.

SWITCH-LOCK FOR RAILROADS.

SPECIFICATION forming part of Letters Patent No. 343,407, dated June 8, 1886.

Application filed September 28, 1885. Serial No. 178,326. (No model.)

To all whom it may concern:

Be it known that I, E. DE WITT THOMAS, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Switch-Locks for Railroads; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this application.

My improvement relates to stands for changing switches on railroads, and is of that kind where the lever that operates the shaft rests in slots of a ring mounted on the stand, and is capable of being turned to engage with different stops, over which the ring turns.

The invention consists in the combination of the shaft, its lever, a revolving ring through which the lever passes, slotted stops which support the ring, and with which the lever engages at different adjustments, and a flat-keyed lock on one side of the ring, provided with a bolt which strikes into a slot of the ring, which comes in alignment with the bolt when the switch is in connection with the rails of the main track, all as hereinafter described.

In the drawings, Figure 1 is a plan view of a switch-stand, showing my improvement applied thereto. Fig. 2 is a side elevation of same partially in section. Fig. 3 is an enlarged plan view of the lock with its bolt thrown into the slot of the ring. Fig. 4 is a front elevation of Fig. 3.

A shows the platform or stand on which the parts are mounted.

B is the shaft or spindle, by which the switch-rails are thrown, the crank and its connections not being shown.

C is the lever connected with the shaft by which the latter is turned.

My improvement is as follows:

D is an open-ended circular ring, mounted in bearings E E E of the stand, so as to be turned freely. It is raised a little from the platform, and is provided at its lower edge with a flange, *a*, that fits in a corresponding groove, *b*, of the bearings, by which it is retained in position and cannot get out of place.

c is an open socket in the ring, through which the lever C passes, said socket being of such size as to allow a certain degree of vertical movement of the lever to enable it to pass over the incline of its catch.

d d d are square notches or sockets, forming stops in the bearings E E E. Each side of the bearing is inclined leading to the notch, so that as the ring is turned by the lever the latter will ride up on the incline and then drop into the notch, thus locking both the lever and the ring in place. As many of these bearings and notches are used as there are changes to make in the switch, and the lever can be shifted from one to another with great facility. When the lever is thus located in a notch, it cannot get out of place till purposely raised again.

G is a flat-keyed lock having a straight shooting-bolt, *f*, and operated by a flat key, *g*, of that kind which, when once inserted in the lock, cannot be removed from place except when the lock-bolt is protruded.

h is a slot in the side of the ring, into which the lock-bolt enters when thrown out. In this position the switch-rails are thrown in alignment with the main track. At all other positions of the ring the lock-bolt will strike the sides of the ring and cannot be thrown; neither can the flat key be removed from the lock.

Instead of the square-stand block shown in the drawings, the ring and its attachments above described may be applied directly on top of the ordinary switch-stand now in use.

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

The combination of the ring capable of a turning movement, the lever attached to the crank-shaft and resting in a socket of the ring, bearings supporting the ring and provided with notches into which the lever drops when turned to different adjustments, and a lock secured to the switch-stand beside the ring, provided with a sliding bolt that shoots into a slot of the ring when the latter is turned to coincide therewith, as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

E. DE WITT THOMAS.

Witnesses:

R. F. OSGOOD,
E. STARING.