E. T. HARDIN.

SWITCH LOCK.

APPLICATION FILED MAR. 6, 1908.

898,737.

Patented Sept. 15, 1908

Fig. 1.

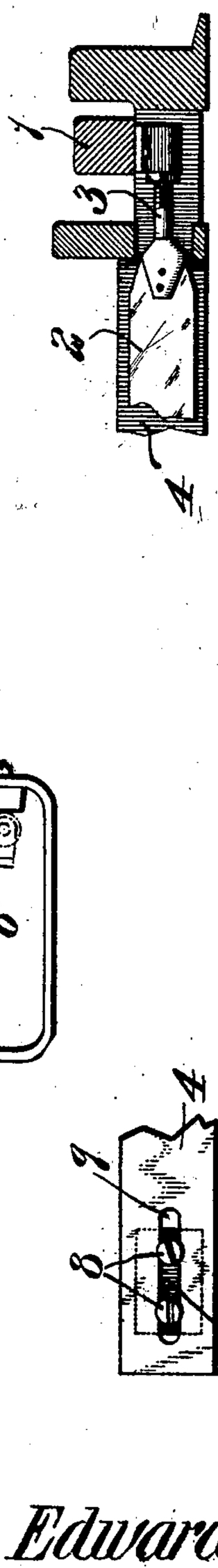

Fig. 2.

Fig. 3.

Witnesses;
George Ladeau
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By Bakewell & Coun[illegible] Attys

UNITED STATES PATENT OFFICE.

EDWARD T. HARDIN, OF HOT SPRINGS, ARKANSAS.

SWITCH-LOCK.

No. 898,737. Specification of Letters Patent. Patented Sept. 15, 1908.

Application filed March 6, 1908. Serial No. 419,541.

To all whom it may concern:

Be it known that I, EDWARD T. HARDIN, a citizen of the United States, residing at Hot Springs, Arkansas, have invented a certain new and useful Improvement in Switch-Locks, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of a switch lock constructed in accordance with my invention; Fig. 2 is a cross sectional view taken on the line 2—2 of Fig. 1; and Fig. 3 is a detail view of the adjustable roller which forms part of the locking device.

This invention relates to switch locks; namely, devices that are employed for holding a movable switch-point or tongue in either of its two positions.

The main object of my invention is to provide a locking device of simple construction that will securely hold a switch-point in either of its two operative positions.

Another object of my invention is to provide a locking device that will prevent a switch-point from assuming a position intermediate its two operative positions, said locking device being so constructed that it causes the switch-point to move into its extreme position after it has been started or moved slightly.

Referring to the drawings which illustrate the preferred form of my invention, 1 designates the movable tongue or switch-point of a railway switch, and 2 designates an arm formed of spring metal and adjustably connected to the switch-point by means of a threaded rod 3 and lock nuts. A yoke or support 4 which is secured to one of the rails of the track, carries a block 5 provided with a roller 6, and the spring arm 2 on the switch-point is provided with a roller 7 that coöperates with the roller 6 to lock the switch-point in either of its two positions. The block 5 is preferably adjustably connected to the yoke or support 4 by means of clamping screws 8 that project through an elongated slot 9 in the yoke, as shown in Fig. 3, so that the position of the roller 6 can be changed to compensate for wear and thus insure a proper adjustment of the switch-point.

When the switch-point is moved slightly from the position shown in full lines in Fig. 1, the roller 7 on the spring arm 2 will ride up onto the roller 6 and then down onto the other side of said roller 6 and thus move the switch-point into the position shown in broken lines in Fig. 1. With a locking device of this construction it will be impossible for the switch-point 1 to assume a position intermediate its two operative positions for the roller 7 on the spring arm 2 will not come to rest on the upper side of the roller 6 because the spring arm exerts sufficient pressure on said roller 7 to throw it to either side of the roller 6. The roller 6 is so positioned that the switch-point will be in either of its two operative positions when the roller 7 lies on either side of said roller and when the switch-point or rollers wear away the block 5 can be adjusted so as to properly position the switch-point, or the lock nuts on the bolt 3 can be manipulated to lengthen or shorten the spring arm 2.

While I have herein illustrated my improved switch lock as being used in connection with grooved rails such as are used for street railways, it will, of course, be understood that it could also be used in a track structure composed of T-rails.

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

1. In a railway track structure, a movable switch-point, an arm projecting laterally from said switch-point and being formed of spring metal, a roller carried by said arm, and a coöperating roller carried by a stationary support; substantially as described.

2. In a railway track structure, a movable switch-point, a laterally projecting spring arm adjustably connected to said switch-point and provided at its outer end with a roller, and a coöperating roller carried by a support; substantially as described.

3. In a railway track structure, a movable switch-point, a yielding arm projecting laterally from said switch-point and provided with a locking member, a support, and a cooperating locking member adjustably connected to said support; substantially as described.

4. In a railway track structure, a movable switch-point, a spring arm projecting later-

ally from said switch-point, a roller carried by said arm, a stationary support, a block adjustably connected to said support, and a roller on said block which coöperates with the roller on said spring arm; substantially as described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 24 day of Feb. 1908.

EDWARD T. HARDIN.

Witnesses:
ALDEN C. JONES,
MARTIN A. EISEL.