J. Y. Chamberlin,

Lock.

No. 80,332. Patented July 28, 1868.

Fig: 1

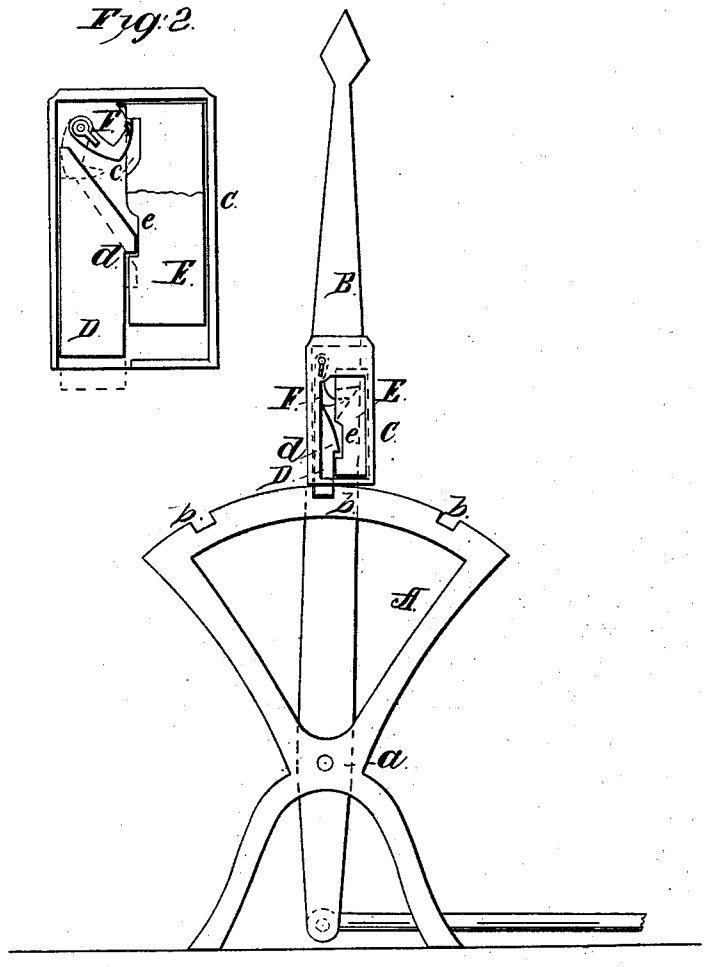

Fig: 2.

Witnesses:
Wm. A. Morgan.
G. C. Cotton.

Inventor:
John Y. Chamberlin
per Munn & Co
Attorneys

United States Patent Office.

JOHN V. CHAMBERLIN, OF CINCINNATI, ASSIGNOR TO HIMSELF, S. D. PATTERSON, AND JOHN V. CHAMBERLIN, OF DELHI, OHIO.

Letters Patent No. 80,332, *dated July* 28, 1868.

IMPROVEMENT IN LOCK FOR SECURING RAILROAD-SWITCHES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN V. CHAMBERLIN, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented a new and improved Switch-Lock; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved lock for railroad-switches, and it consists in a novel construction and arrangement of parts, as hereinafter fully shown and described, whereby the lock is rendered self-locking, and a very simple and durable lock obtained, all springs and small parts which are liable to get out of repair being avoided.

In the accompanying sheet of drawings—

Figure 1 is a view of my invention applied to the switch-bar of a railroad-switch.

Figure 2, an enlarged and detached internal view of the lock.

Similar letters of reference indicate corresponding parts.

A represents a switch-stand, and

B a switch-bar secured to the stand, as usual, by a pivot-bolt, *a*, and having its lower end connected to the switch by a rod, shown in red in fig. 1.

The top bar of the stand is curved, forming the part of a circle, of which the bolt *a* of the switch-bar is the centre, and this top bar has three notches *b* made in it at equal distances apart, as shown in fig. 1.

C is a lock-case, attached to the switch-bar B.

The internal mechanism of this lock is composed of three parts only, to wit, a bolt, D, a slide, E, and a cam, F, the latter being operated upon the key, and made and arranged in such a manner that it will raise the bolt, and also serve to hold the same or prevent it from being raised.

The bolt D, when the lock is in a locked state, extends down through the bottom of the lock-case A, and into one of the notches *b*, thereby securing the switch-bar, (see fig. 1.)

The slide E has an oblong notch, *c*, made in it, in which notch the end of the cam F works, and the bolt D is provided with a laterally-projecting lip, *d*, which fits in a recess, *e*, in the slide E, said slide being sufficiently long to admit of a certain degree of play or movement of the slide, independent of the bolt, as shown clearly in both figures.

In order to raise the bolt and unlock the lock, the cam F is turned by the key in the direction indicated by the arrow 1, the cam raising the slide E, and the latter raising the bolt D out from the notch *b*, in which it fitted, so that the lower end of the bolt may rest on the top bar of the switch-stand, and admit of the switch-bar being moved, and the switch adjusted as desired, the bolt D dropping by its own gravity into a notch, *b*, that it is brought in line with, and locking the switch-bar, and consequently the switch, the cam F and slide E also dropping in connection with the bolt by virtue of their own gravity, and the angle of the cam passing over the top of the bolt, so as to prevent the latter being raised, except by the turning of the cam through the medium of the key.

This portion of the parts is shown in red in fig. 2.

Thus, by this simple arrangement, a very durable and economical switch-lock is obtained, all springs and other delicate parts being avoided.

I claim as new, and desire to secure by Letters Patent—

A switch-lock, composed of the bolt D, slide E, and the cam F, all arranged within a suitable case, A, attached to the switch-bar B, substantially as herein shown and described.

Witnesses:

THOS. MCLEAN,

VINCENT SCHWALL.

JOHN V. CHAMBERLIN.