T. Slaight,

Railroad Switch Lock.

No. 7,176. Patented Mar. 12, 1850.

Fig. 3.

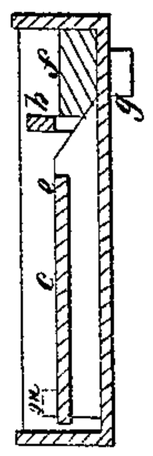

Fig. 2

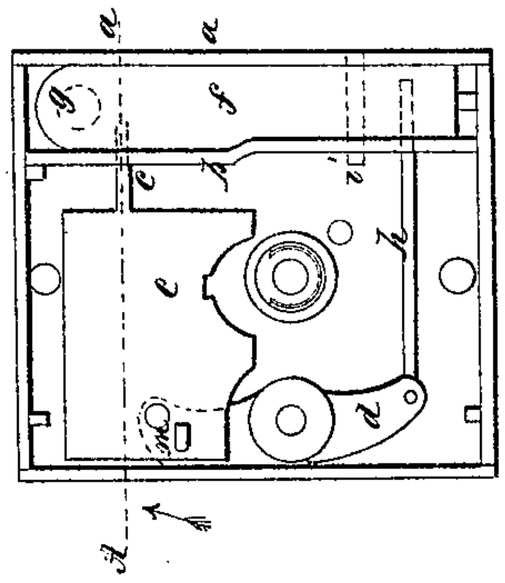

Fig. 1

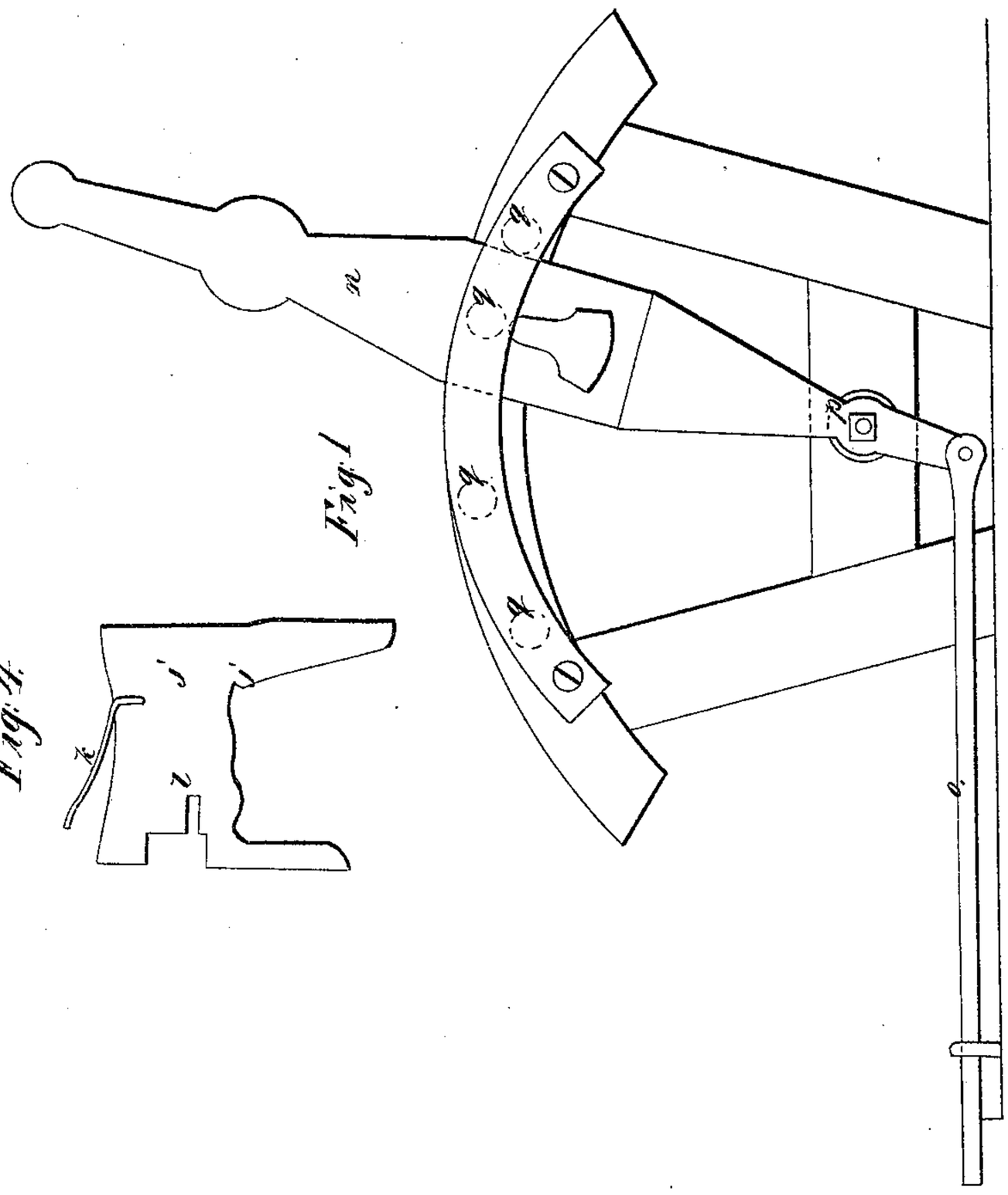

Fig. 4.

UNITED STATES PATENT OFFICE.

THOMAS SLAIGHT, OF NEWARK, NEW JERSEY, ASSIGNOR TO HENRY C. JONES, OF NEWARK, NEW JERSEY.

METHOD OF OPERATING LOCK-BOLTS.

Specification of Letters Patent No. 7,176, dated March 12, 1850.

To all whom it may concern:

Be it known that I, THOMAS SLAIGHT, of Newark, in the State of New Jersey, have invented an Improved Mode of Locking the Switches of Railroad-Tracks; and I do hereby declare that the following is a full, clear, and exact description of its nature and construction and of the manner of making and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an elevation of the switch; Fig. 2, a plan of the lock for fastening the switch in one position, with the spring guard plate and lock plate removed; Fig. 3, a section taken at the line (A, *a*,) of Fig. 2, and Fig. 4, a view of the spring guard plate.

The same letters refer to like parts in all the figures.

My invention relates to the construction of the lock for locking the switch and consists in operating by means of reciprocating slides a vibrating lever provided with a bolt at one end projecting from the back face of the lock, in combination with a spring guard plate provided with a notch for the purpose of preventing the key from turning and otherwise so formed as to prevent the withdrawal of the key unless the bolt is thrown.

It is obvious that this lock is peculiarly adapted to the locking switches on railroads, the lock being provided with a guard plate to prevent the key from being withdrawn unless the bolt is locked.

In the accompanying drawings (*a*) represents the lock case which is cast with a partition (*b*) and hole through which the bolt plays. The tumbler (*c*,) is connected with one arm of a working beam or lever (*d*,) and has also cast with it the inclined slide (*e*,) which being moved into a recess in the lever (*f*,) of the bolt (*g*,) unlocks it. To the other end of the lever (*d*,) is attached the inclined slide (*h*), which being the reverse of the one (*e*,) locks the bolt when it is thrown out, the lever (*f*,) of the bolt vibrating on a pin (*i*). The spring guard plate (*j*) shown separately in Fig. 4, is so constructed that although the key may be turned to unlock the bolt it cannot owing to the notch (*j'*) in the plate be removed from the lock without being turned back thereby relocking the bolt, and therefore it is impossible to remove the key from the lock without leaving the bolt fast. The said guard plate (*j*) is provided with a spring (*k*) at the upper side which tends to cause the plate to bear upon the key, by turning which the plate is elevated until a slot (*l*) in the slide is brought opposite a stud (*m*) on the tumbler, when the key is brought to bear upon the tumbler and the inclined slide (*e*) entering a mortise in the lever (*f*) unlocks the bolt.

The lock so constructed is attached to the hand lever (*n*) that operates the rod (*o*) which is attached in the usual manner to the switch on the track. This hand-lever (*n*) turns on a fulcrum pin (*p*) and works freely in a clamp on a segment provided with holes (*q*) in which the bolt of the lock fits. By this arrangement after the attendant has moved the hand lever (*n*) to the proper position and withdrawn the key, there is no possibility of the switch being shifted in a wrong position as the key cannot be withdrawn without by so doing locking the bolt.

What I claim as my invention and desire to secure by Letters Patent is—

Operating by means of reciprocating slides a vibrating lever provided with a bolt at one end and projecting from the back face of the lock, substantially as described.

THOS. SLAIGHT.

Witnesses:

NATHL. P. MORRIS,

G. M. ANDRUSS.