(No Model.)

H. ELLIOT.

RAILWAY SWITCH STAND.

No. 289,633. Patented Dec. 4, 1883.

Fig. 1.

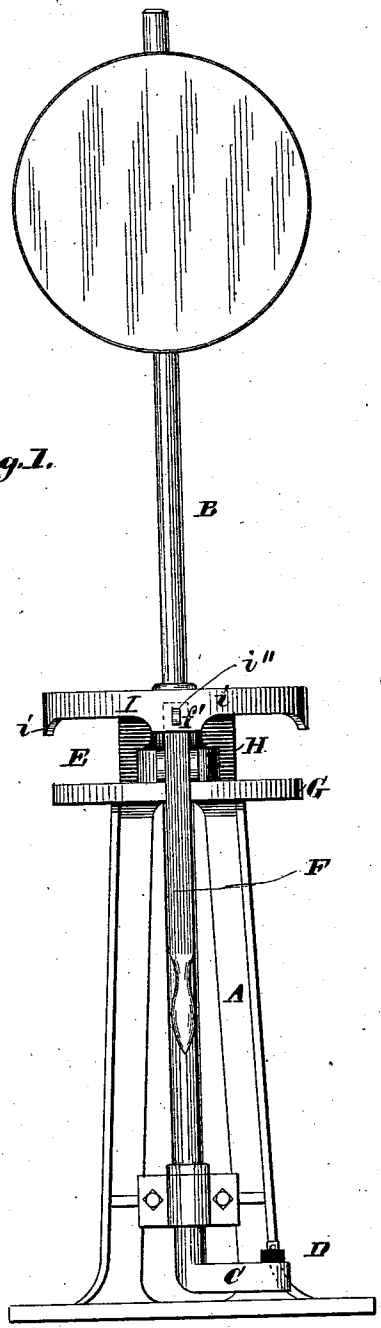


Fig. 3.

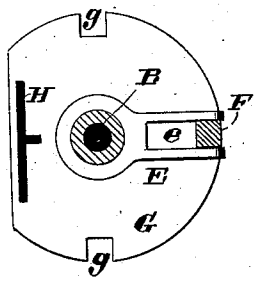


Fig. 4.

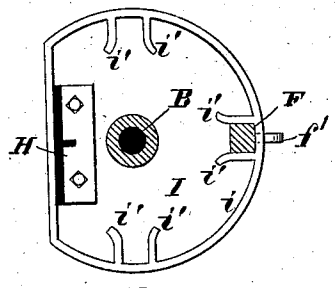
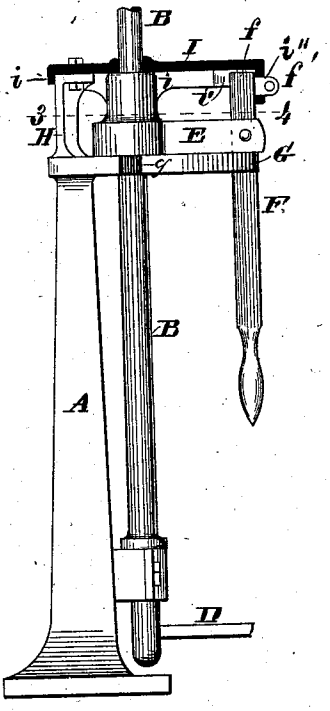


Fig. 2.



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HENRY ELLIOT, OF ST. LOUIS, MISSOURI.

RAILWAY-SWITCH STAND.

SPECIFICATION forming part of Letters Patent No. 289,633, dated December 4, 1883.

Application filed June 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY ELLIOT, of the city of St. Louis, and State of Missouri, have invented a certain new and useful Improvement in Railway-Switch Stands, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

For the scope of the invention I refer to the claims.

Figure 1 is an elevation of a switch with my improvement applied thereto. Fig. 2 is a detail elevation. Fig. 3 is a horizontal section at 3 4, Fig. 2, looking downward, and Fig. 4 is a section at same place, looking upward.

A is the standard-frame, giving bearing to the stand-shaft B, as usual.

C is an arm upon the stand-shaft, which is connected with the moving switch-rails, as usual, by a rod, D.

E is an arm fixed to the shaft, slotted at *e*, forming two jaws to receive the end of the hand-bar F, by which the switch is operated. The hand-bar is made with the usual extension, *f*, beyond the pivot, so as to give it an extended bearing in the slot *e* when the bar is raised in its horizontal position, which is the position it occupies when used to move the switch.

G is a horizontal plate fixed to the standard, having at its edge notches *g*, into which the bar F enters when in a hanging position, as seen in Figs. 1 and 2, to lock the switch in any of its positions.

The parts above described have a usual construction, and no novelty is claimed in them.

I will now describe the parts that I believe to be new and of my invention.

H is a post or standing bracket, cast with or secured to the plate G, and to this is secured, by bolts or otherwise, what I denominate a "storm-cap," I. This consists of a plate parallel with the plate E, having, preferably, a marginal downturned flange, *i*, which serves at the same time to give strength to the cap and to protect the plate beneath from rain and snow, the flange causing the water to drip from the edge of the cap. At *i'* are shown guide-ribs extending from the under side of the cap and forming recesses into which the end *f* of the bar F fits when the bar is in its vertical position. The ribs are preferably curved outward at the ends, as shown, so that the end of the bar is guided into the recess. Upon the end *f* of the hand-bar is a lock-staple, *f'*, that extends through a hole or slot, *i''*, in the flange *i* when the hand-bar is in its vertical position, and to this staple may be applied a padlock to lock the switch in position. The cap I, besides serving to protect the parts beneath from snow and ice—a matter of considerable importance for the easy and certain operation of the switch in cold weather—provides a means, in conjunction with the staple *f'*, for locking the switch.

In addition to these uses is another very important one—viz., the furnishing of a bearing for the end *f* of the hand-bar F. As heretofore constructed, the arm had only one bearing upon the fixed part of the stand, (that in the notch *g*.)

It will be seen that a little lost motion in the joint in arm E and in the notch *g* would render uncertain the position of the switch-rails, as the bar F would not be held to its vertical position, whereas with the additional bearing at the plate or cap I the bar could not swing from a vertical position, more especially because this bearing is a distance from the others.

I claim as my invention—

1. The switch-stand having a cap, I, above the ordinary lever and locking-plate, and independent of the lever.

2. The cap-plate I above the locking-plate G, when provided with recesses to receive the end *f* of the hand-bar F.

3. The combination of hand-bar F, jointed to an arm, E, with staple *f'* upon the bar, and the fixed cap-plate I over the arm, with slots *i''*, for the purpose set forth.

HENRY ELLIOT.

Witnesses:
SAML. KNIGHT,
GEO. H. KNIGHT.