(No Model.)

G. W. STEVENS.

AUTOMATIC RAILWAY SWITCH.

No. 502,475. Patented Aug. 1, 1893.

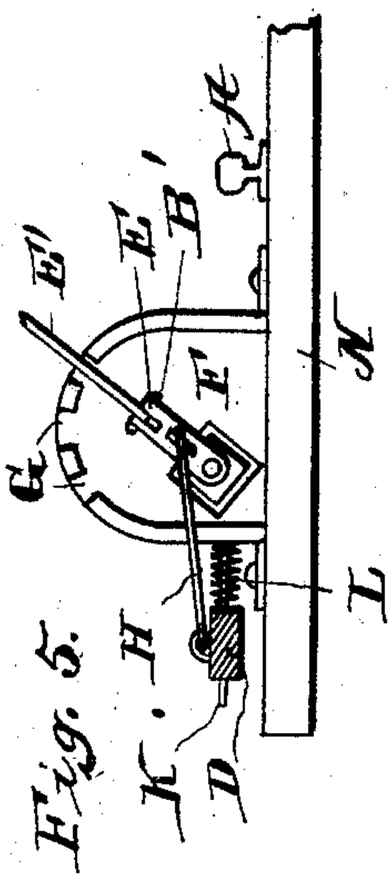

Fig. 5.

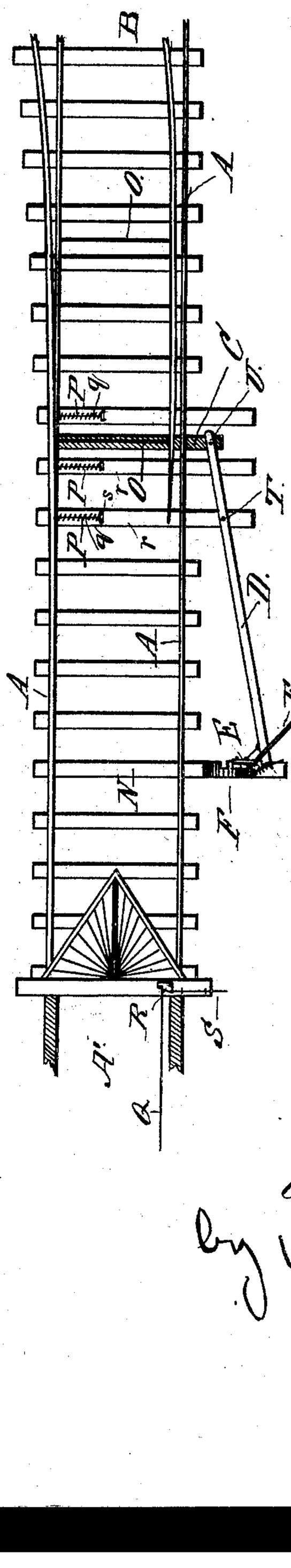

Fig. 1.

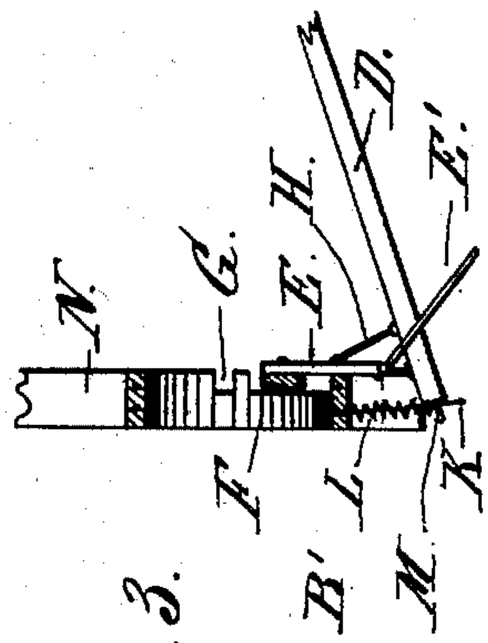

Fig. 4.

Fig. 2.

Fig. 3.

WITNESSES:
Helmuth Holtz.
Ricardo Dee

INVENTOR
George W. Stevens.
by W. E. Stringfellow
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE W. STEVENS, OF NEW ORLEANS, LOUISIANA.

AUTOMATIC RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 502,475, dated August 1, 1893.

Application filed November 22, 1892. Serial No. 452,826. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON STEVENS, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Automatic Railway-Switches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in automatic railway switches, and its novelty will be fully understood from the following description and claim when taken in connection with the annexed drawings.

The objects of my invention are to provide a new and useful device by which an engineer may open a switch from the cab of the locomotive. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view showing switch thrown to the main line. Fig. 2 is a front end view showing position of lever of switch when thrown from the main line. Fig. 3 is a front end view showing position of lever of switch when thrown to the main line. Fig. 4 is a sectional view of lever on a larger scale. Fig. 5 is a rear end view of the switch stand, enlarged.

Similar letters refer to similar parts throughout the several views.

In the drawings A refers to the main line or track, having the switch B, which is secured to the tie bar C. The lever D is pivoted at T, and also pivoted to the tie bar. The switch stand F has slots G, in which the arm E′ of the lever E rests when the switch is thrown from the main line. The arm E′ is jointed at B′, with the lever E to allow the former to move parallel with the track, while the lever E, is thrown out at right angles with the said track. The lever D is connected, at its free end, to the lever E by means of the link H.

Extending from the switch stand F is a metal rod K which engages an eye M on the said free end of the lever D, and is provided with a spiral spring L, which is compressed when the arm E′ is placed in one of the slots G.

N, designates a cross tie upon which the switch stand E is secured.

O, are metal rods connecting the rails of the switch B.

P, refers to the spiral springs surrounding metal rods *q*, which rods are attached at one end to cross bars *r*, at *s*, while their other ends pass through openings in one of the rails.

A′ is the locomotive, provided with a suitable rod Q, which extends to the cross beam of the pilot, and is connected at R, in such a manner as to drive the rod S out as shown in Fig. 1. The said rod S engages the arm E′ of the lever E, when the said arm is in position shown in Figs. 2 and 5.

In practice, when the engineer desires to run upon the main line, the arm E′ being in the position shown in Fig. 5, as the locomotive proceeds toward the switch stand the engineer, by means of the rod Q, causes the rod S to be thrown out on the cross beam of the pilot, and when in this position, as the locomotive advances, it comes in contact with the arm E′, throws it out of engagement with the slot G, causing the switch to assume the position shown in Fig. 1, allowing the locomotive to pass upon the main line. The spring L on the rod K, is compressed when the arm E′ is in the slot G, and when the arm E′ is thrown from the said slot, the lever E is moved, the lever D is released from its close proximity to the switch stand, the springs P cease to be compressed, and therefore aid in throwing one of the rails of the switch B against one of the rails of the main track.

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

The combination with an automatic switch, of the switch box having slots, the lever E, jointed with an arm adapted to engage the said slots, the tie bar, the lever D, connected to the tie bar and to the said lever E, and means attached to a locomotive to engage the said arm for operating the switch as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. STEVENS.

Witnesses:
RICARDO DEE,
J. D. TAYLOR.