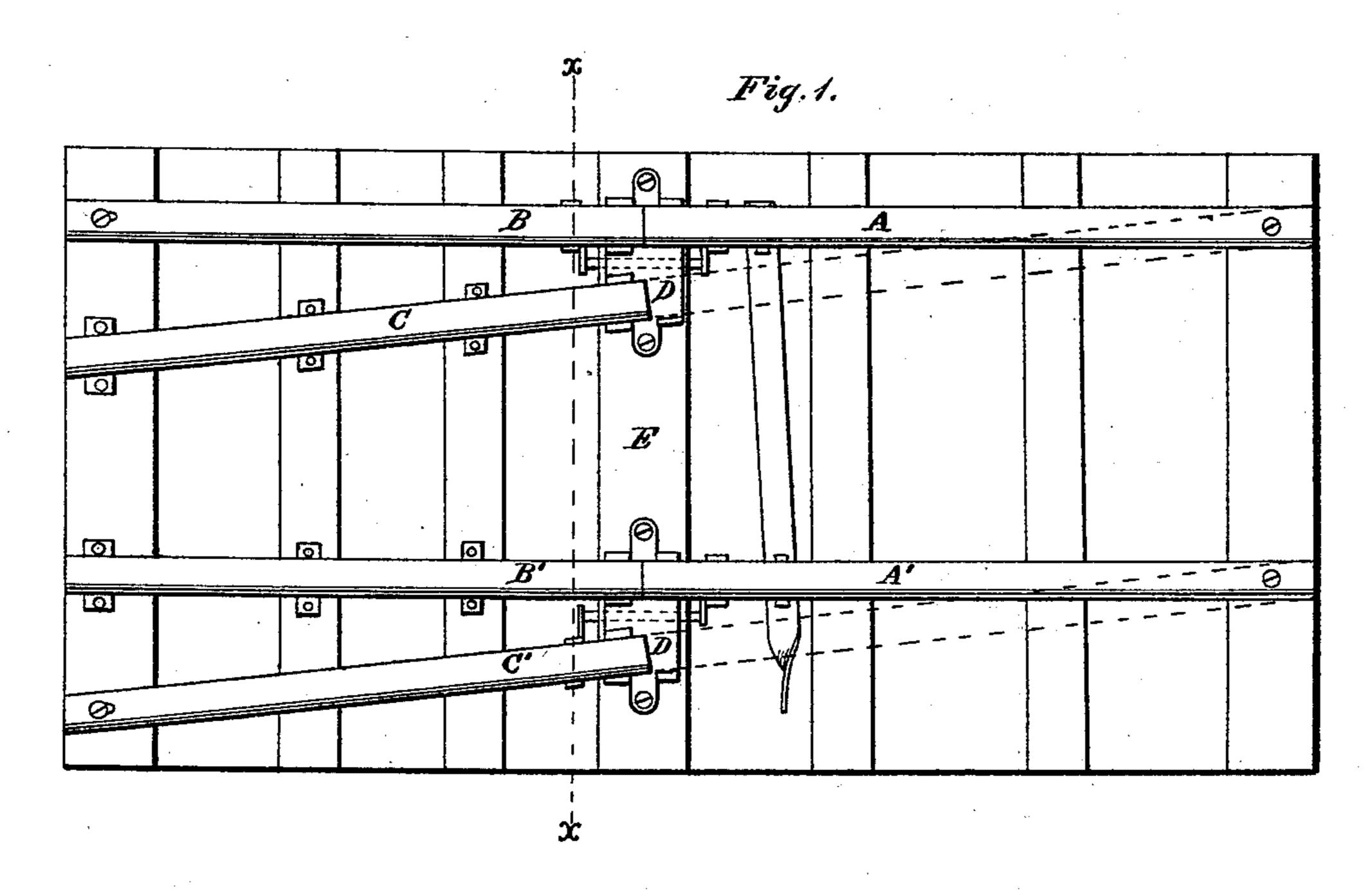
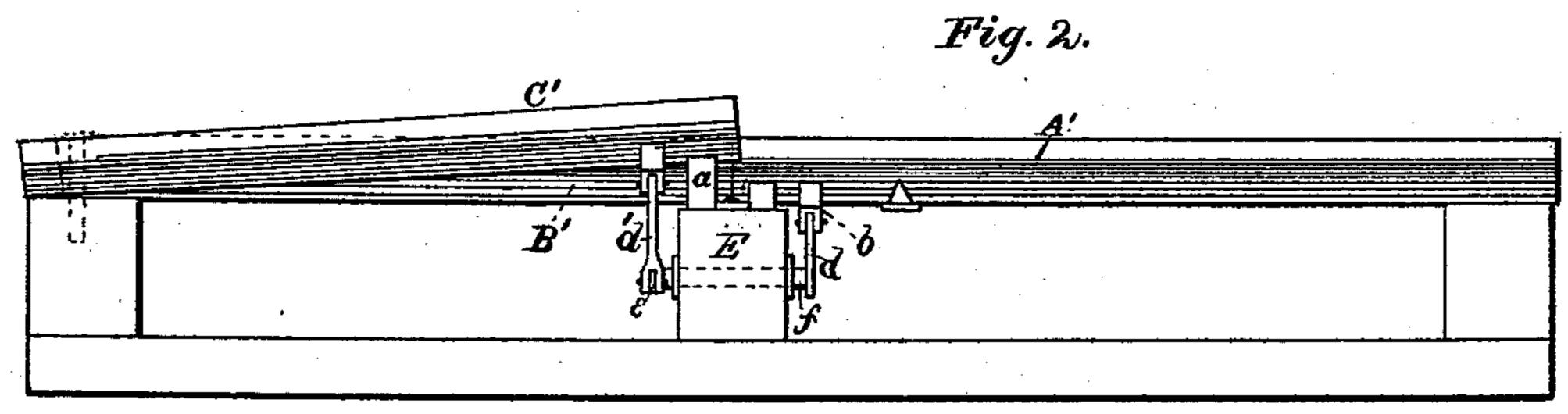
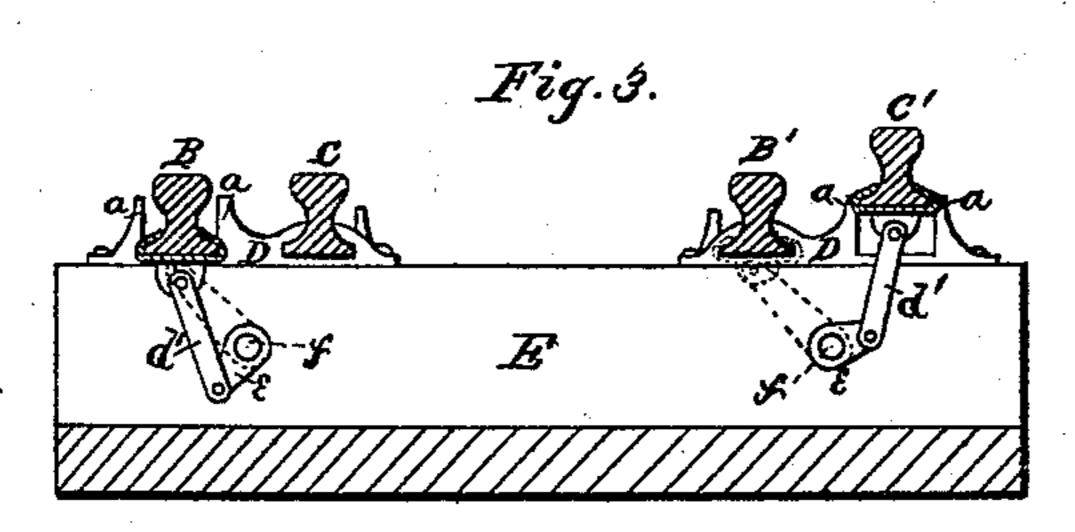
H. H. POTTER. Railway-Switches.

No.148,623.

Patented March 17, 1874.







Witnesses: Atenry N. Miller Thomas Goyrne! Soenry H. Potter. Cer HAPPot. Attorney.

UNITED STATES PATENT OFFICE.

HENRY H. POTTER, OF STERLINGVILLE, ASSIGNOR OF ONE-EIGHTH HIS RIGHT TO WILLIAM G. PIERCE, OF WATERTOWN, NEW YORK.

IMPROVEMENT IN RAILWAY-SWITCHES.

Specification forming part of Letters Patent No. 148,623, dated March 17, 1874; application filed January 30, 1874.

To all whom it may concern:

Be it known that I, HENRY H. POTTER, of Sterlingville, county of Jefferson, and State of New York, have invented certain new and useful Improvements in Railroad-Switches, of which the following is a specification:

The nature of my invention consists in the construction and arrangement of a railwayswitch, whereby, if the switch is open, it will automatically close itself upon the approach of the train, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view, and Fig. 2 a side elevation, of my railroad-switch. Fig. 3 is a cross-section of the switch through the line x

x, Fig. 1. A A' and B B' represent the rails of the main track at the switch, and C C' are the rails of the side track. The rails C and B' are attached, in the usual manner, rigidly to the ties underneath, while the rails A A' are movable at the ends near the switch, so as to be moved to correspond, or form connection, either with the rails B B', or with the rails C·C'.

The rails A A' should be connected, in the usual manner, by cross bars or rods, so as to move uniformly to either side, as required.

The ends of the rails B and C', at the switch, are movable in a vertical direction, and are prevented from moving laterally by means of guides a a, projecting upward from the chairs which support them. The rail A has, at its under side, near the end, an ear-clamp or projection, b, which is attached, by an arm or bar, d, with the end of a shaft, f, which passes through the cross-tie E, that supports the adjoining ends of all the rails mentioned. Upon the other end of the shaft f is a crank, e, with arm or bar d' connecting it with a projection on the under side of the rail B. The rails A'

and C' are connected by the same means, in the same manner.

These devices are so arranged, with relation to each other, that when the rails A A' are on a line, or form connection with the rails B B', the rail B will be down upon its chair, while the end of the rail C' is elevated a certain distance above its chair; and, when the rails A A' form connection with the rails C C', the rail C' will be down, and the rail B elevated.

If the main track is closed, and a train should approach on the side track, the rail C' will be pressed down before the front wheels of the locomotive reach the end of said rail, and, by pressing this rail down, the rails A A' are instantaneously shifted to form connection with the side track, and thus prevent an accident. In like manner, if the main track is open, the rail B' will be pressed down, and the track automatically closed.

The rails A A' are, of course, to be operated by the usual switch-lever when necessary; but this must never be locked, as that would prevent the automatic working of the switch.

By thus dispensing with any locking device, the expense of the switch is materially reduced.

I do not claim, broadly, an automatic switch, actuated, through a system of cranks and shafts, by the weight of the train upon a yielding track; but

What I do claim is—

The combination of the laterally-moving rails A A', stationary rails C B', verticallymoving rails BC', connecting-bars d d', guides a a, crank e, and shafts f, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 30th day of January, 1874.

HENRY H. POTTER. Witnesses: H. S. ABBOT,

JNO. D. PATTEN.