C. C. SHELBY.

Railroad Switches.

No. 139,827. Patented June 10, 1873.

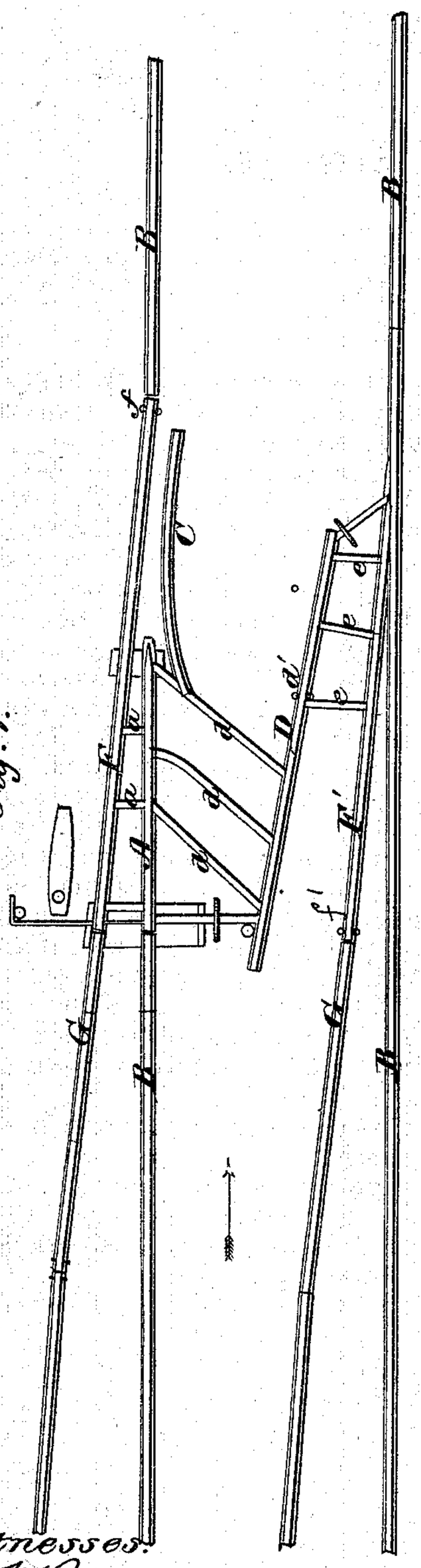


Fig. 1.

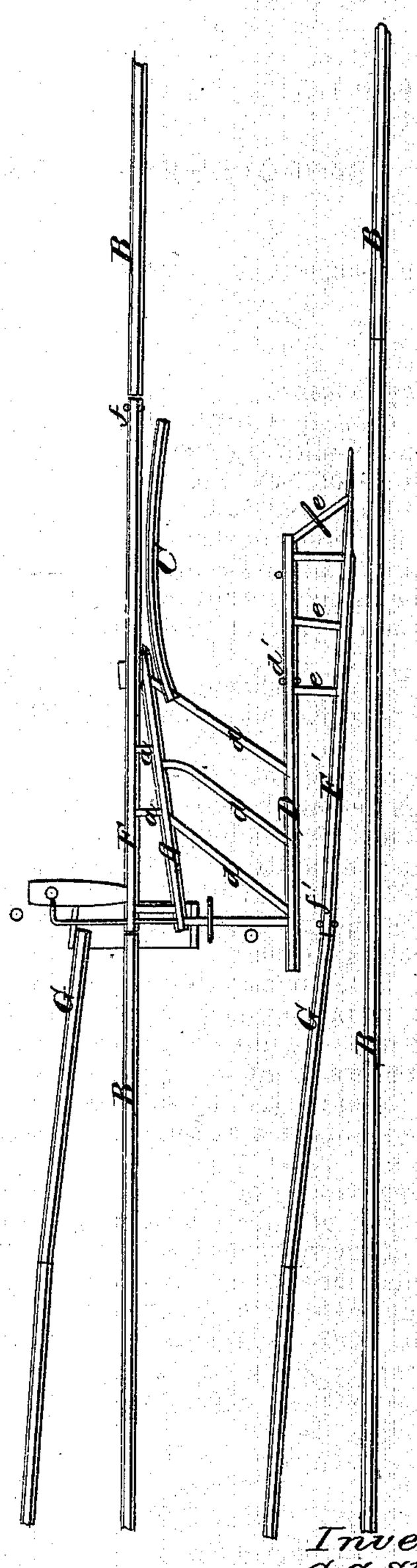


Fig. 2

Witnesses:
C. F. Brown.
M. Church.

Inventor.
C. C. Shelby.
by his Attys.
Hill & Ellsworth

# UNITED STATES PATENT OFFICE.

CHRISTOPHER C. SHELBY, OF SPRING VALLEY, NEW YORK.

## IMPROVEMENT IN RAILROAD SWITCHES.

Specification forming part of Letters Patent No. **139,827**, dated June 10, 1873; application filed Aprll 11, 1873.

*To all whom it may concern:*

Be it known that I, CHRISTOPHER C. SHELBY, of Spring Valley, in the county of Rockland and State of New York, have invented a new and Improved Safety-Switch for Railways; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a plan view, showing the switch open; and Fig. 2 is a plan view, showing the switch closed.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention has for its object to prevent the derailment of railway trains by reason of open switches. To this end, it consists in a system of rails connected with the switch-rails, and operating, when the switch is opened, to form a temporary filling of the gap, so that if a train approaches along the main line, in the opposite direction from that of the train which went off on the branch, such train will be conducted by said temporary filling to the main track at the other end of the switch-rails.

In the accompanying drawing, B is the main track, one side of which is rigid at the switch. F is one of the switch-rails, pivoted at *f*. G is the branch or siding. A is a short pointed rail connected with F by rods *a*. Hence, when the switch is opened, as shown in Fig. 1, the rail A swings into the place formerly occupied by F, and keeps the main track continuous, so far as a train approaching in the direction of the arrow is concerned. F′ is the other switch-rail, pivoted at *f′*, and having a point beveled at the side next the main rail. The rail F′ is connected with the rail A by links *d e* and an intermediate rail, D. Hence, when the switch is opened the rail F′ is thrown with its beveled end against the side of the main rail, thus completing the connection between the main and side tracks. The intermediate rail D serves as the support of the rail A. C is a guide-rail, which serves to conduct the wheels from A to B. The thin end of F′ bends toward C so as to allow the wheels to pass between it and B, said end returning to B by its own elasticity on the passing of the wheels. When the track is closed, as shown in Fig. 2, inasmuch as the rail D is pivoted at *d′*, its shorter arm withdraws the beveled end of F′ from B, and thus confirms the integrity of the main track. The point of A is also beveled to allow the wheels to run along F without obstruction. The point of F′ fits into a notch in the side of B so as to make a close joint.

Having thus described my invention, what I claim as new is—

The combination, with a railway, of the switch-rails F F′, connecting-rail A, supporting-rail D, and links *a d e*, substantially as and for the purpose specified.

CHRISTOPHER C. SHELBY.

Witnesses:

MELVILLE CHURCH,

N. K. ELLSWORTH.