S. WEEKS.

Circuit-Closer for Railway-Signals.

No. 165,281. Patented July 6, 1875.

Fig: 1.

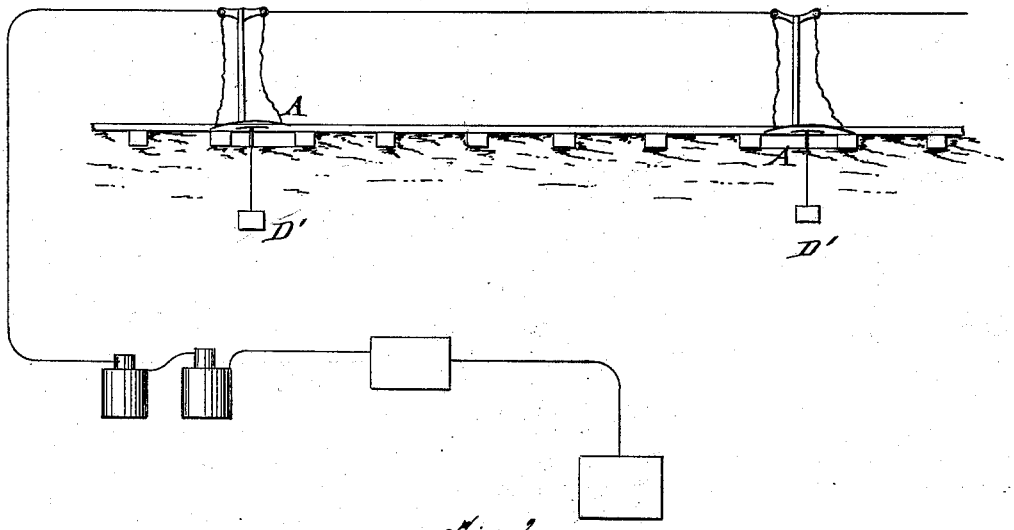
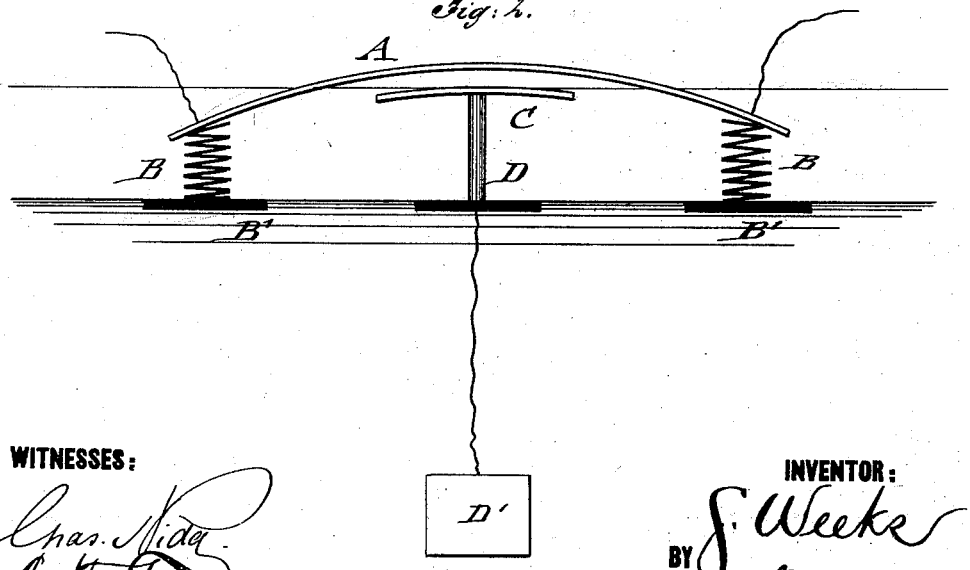


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL WEEKS, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN CIRCUIT-CLOSERS FOR RAILWAY-SIGNALS.

Specification forming part of Letters Patent No. **165,281**, dated July 6, 1875; application filed June 5, 1875.

To all whom it may concern:

Be it known that I, SAMUEL WEEKS, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Circuit-Closer for Signaling Railroad-Trains, of which the following is a specification:

In the accompanying drawing, Figure 1 represents the general arrangement and connection of my improved circuit-closing device for signaling the approach of railroad-trains, and Fig. 2 is a side elevation of the same in enlarged scale.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a cheap, durable, and reliable circuit-closing device, to be arranged at different points of the track for indicating the approach of the train or the position of the same at the station, bridge, crossing, or other suitable place, for the purpose of controlling in satisfactory manner the running of trains over the road.

The invention consists of a metallic spring-plate or "connector," that is supported at both ends by spiral springs, and brought by the train in contact with a central plate arranged below the same on a post connected to the earth.

In the drawing, A represents the metallic connector, which is made of a curved spring strip or band, that is supported at both ends on spiral springs B, placed on metallic bases B′. The connection is by its spring arrangement very flexible, and arranged in a suitable casing at the side of the rail or in any other suitable position thereto, so that either the wheels or any other suitable part of the locomotive may depress the connector on passing above the same. Below the central part of the connector A is placed a contact-plate, *c*, at such distance that the connector, when depressed, forms a ready contact therewith. The contact-plate *c* is supported on a vertical post, D, secured, like the springs B, to a vertical base-plate, which is, however, thoroughly insulated from the base-plates of the springs. The post D is connected to an earth-plate, D′, placed at the customary depth below the same. The connector is placed by insulated wires, which pass up along the poles at the side of the track to the line-wires and to a battery, gong, and earth connection at the station or other point where the train is to be signaled. The instant when the connector is depressed by the train, and brought in contact with the central plate below, the circuit is closed, and the signal given at the station.

Any number of circuit-closers may be arranged at different points and distances along the track, they being inclosed by a suitable casing, so as to be readily placed in position and repaired.

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

A circuit-closing device for signaling the passage of railway-trains over the track, composed of a spring-supported connecting-plate insulated from the ground, and placed in communication with the line-wires, and of a central contact-plate supported below the connector, and connected to the earth for closing the circuit with the station by the contact of connector and central plate, substantially in the manner and for the purpose set forth.

SAMUEL WEEKS.

Witnesses:

CHAS. A. ADAMS,

JAS. RIORDAN.