J. I. CONKLIN, Jr.

CIRCUIT-CLOSERS FOR RAILWAY SIGNALS.

No. 183,643. Patented Oct. 24, 1876.

Fig. 1

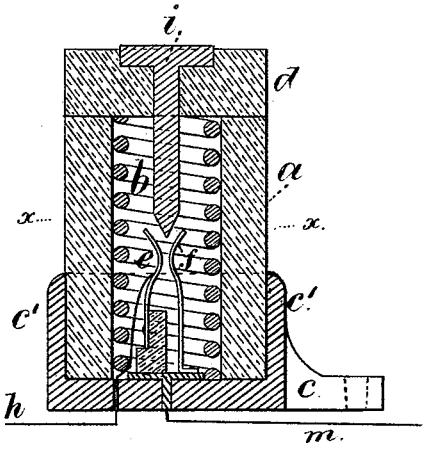
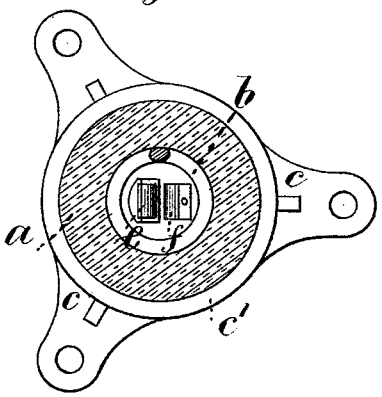


Fig. 2.



Witnesses

Cho H. Smith

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per Lemuel W. Serrell.

atty.

UNITED STATES PATENT OFFICE.

JOSEPH I. CONKLIN, JR., OF NEW YORK, ASSIGNOR TO HIMSELF AND CHARLES A. DRESSER, OF BROOKLYN, N. Y.

IMPROVEMENT IN CIRCUIT-CLOSERS FOR RAILWAY-SIGNALS.

Specification forming part of Letters Patent No. **183,643**, dated October 24, 1876; application filed May 22, 1876.

To all whom it may concern:

Be it known that I, JOSEPH I. CONKLIN, Jr., of the city and State of New York, have invented an Improvement in Track-Circuit Closers, of which the following is a specification:

This improvement is made for allowing the track-circuit closer to be moved more or less, according to the weight passing over the same, without the risk of injury to the parts.

I make use of a hollow column of india-rubber, or similar elastic material, cemented into a hollow metal base, and within the hollow column there are two upright springs, one of which is connected to the line-wire of the railway-signal; the other is connected with the track. A contact-pin is applied to the cap of the elastic column, and the said contact-pin, when forced in between said springs; closes the circuit and causes the electric signal, and said contact-pin may be pressed down more or less without risk of injuring the springs.

In the drawing, Figure 1 is a vertical section of the circuit-closer, and Fig. 2 is a plan at the line *x x*.

The hollow column *a*, of india-rubber or similar material, may be provided with an internal wire helix, *b*. *c* is a metal base, having a circular flange, *c'*, within which the column *a* is cemented. The cap *d* is preferably of india-rubber, having a headed contact-pin, *i*, passing through the same, and extending down within the hollow column *a*. The contact-springs *e* and *f* are connected with the base *c;* but one spring, *e*, is insulated, (and from this the wire *h* extends to the railway-signal,) and the other spring, *f*, is in metallic connection with the track by the wire *m*, or otherwise. The contact-pin *i* does not touch the springs *e* and *f* except when the column *a* is compressed by the passing weight on the railway-track, and when this takes place the circuit is closed through *e*, *i*, and *f*.

The contact-pin *i*, as it moves up and down between *e* and *f*, keeps the surfaces clean and bright.

I claim as my invention—

The circuit-closer composed of the springs *e* and *f* within the hollow elastic column *a*, and the contact-pin *i*, passing through the cap *d*, as and for the purposes set forth.

Signed by me this 18th day of May, 1876.

J. I. CONKLIN, JR.

Witnesses:

GEO. T. PINCKNEY,

CHAS. H. SMITH.