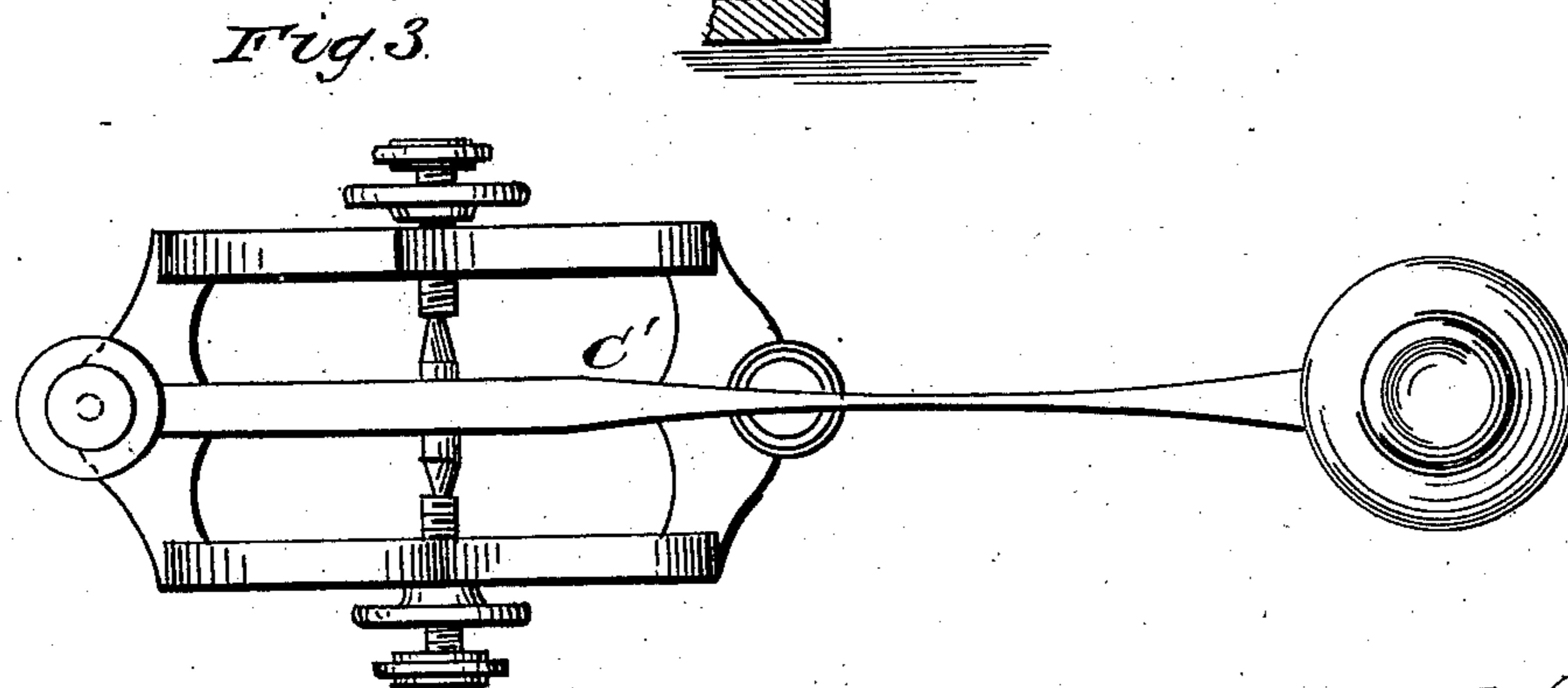
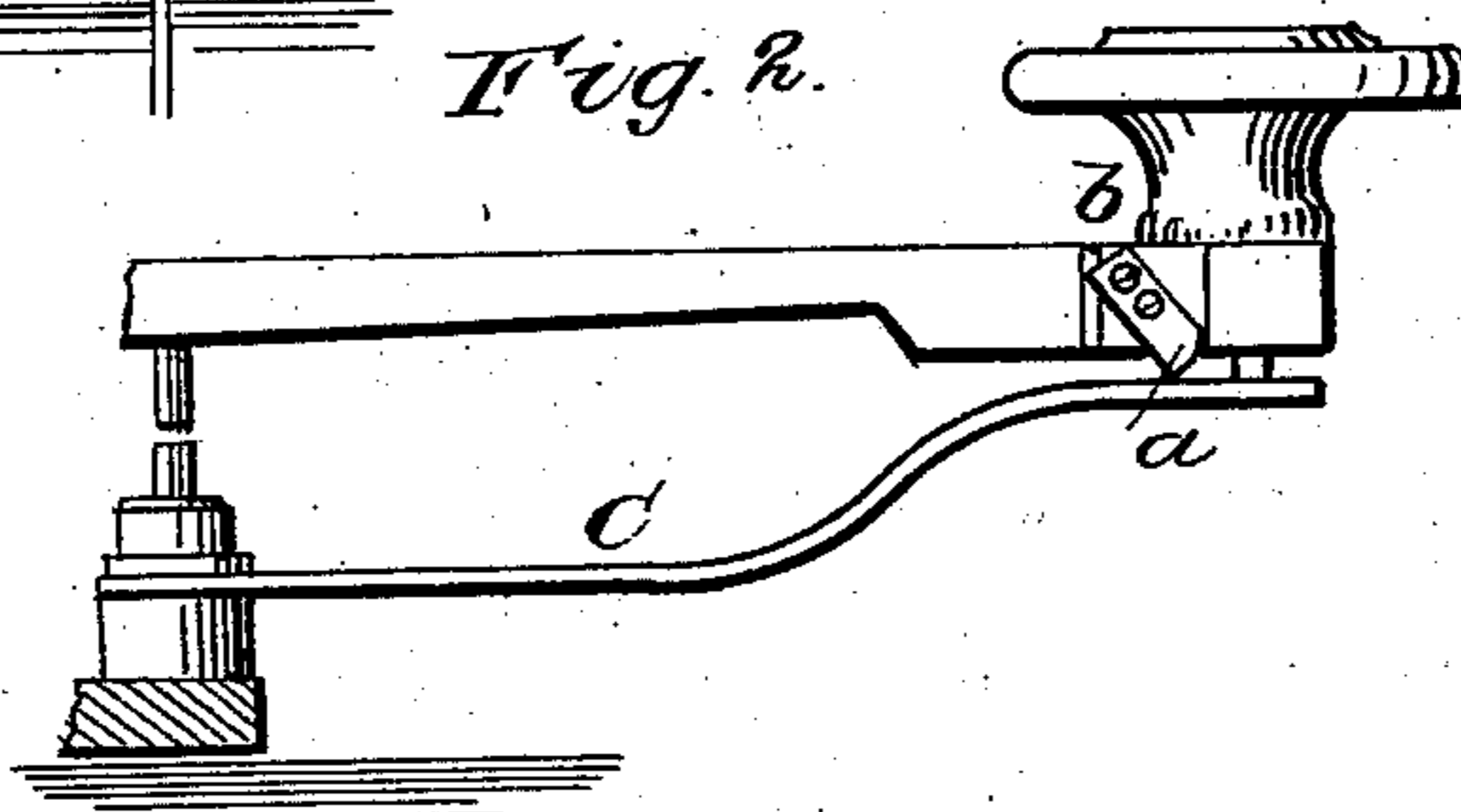
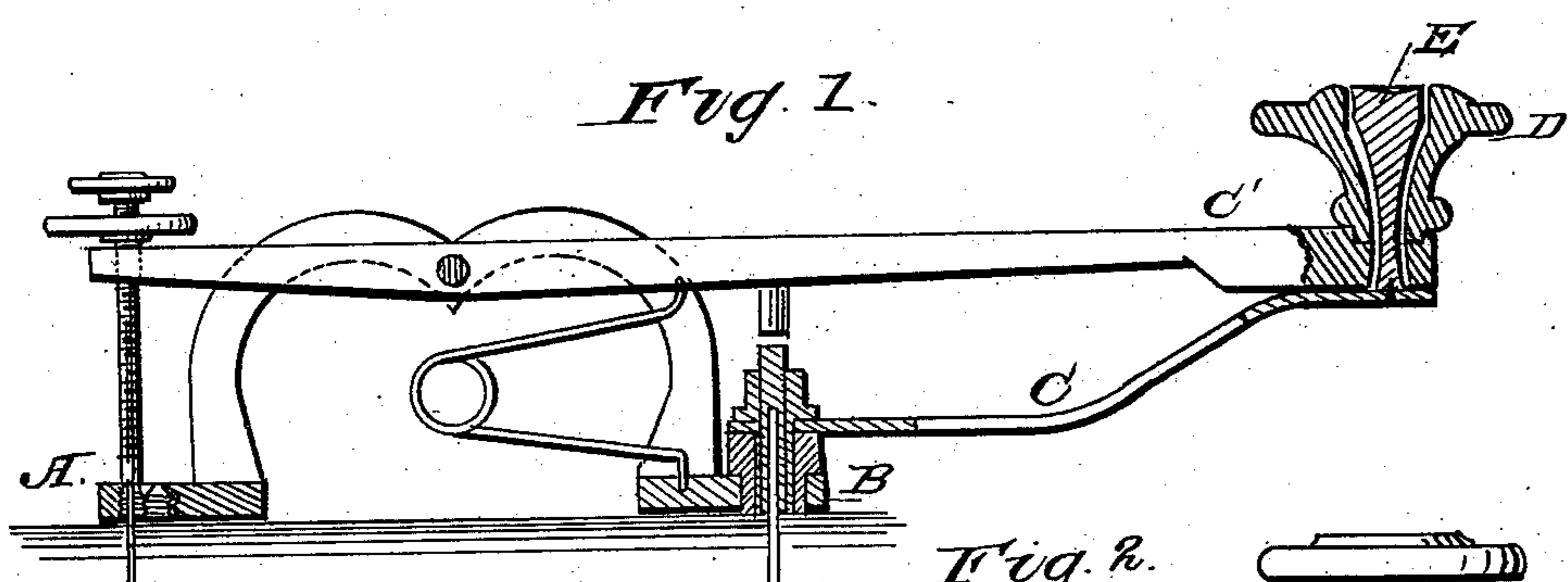


J. H. McELROY.

Telegraph Key.

No. 93,728.

Patented Aug. 17, 1869.



Witnesses  
C. Rattig  
Alex L. Roberts

Inventor  
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# United States Patent Office.

JAMES H. McELROY, OF WARWICK, NEW YORK.

Letters Patent No. 93,728, dated August 17, 1869.

## IMPROVEMENT IN SELF-CLOSING TELEGRAPH-KEYS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, JAMES H. McELROY, of Warwick, Orange county, New York, have invented a new and improved Self-Closing Telegraph-Key; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in telegraph-keys, whereby it is designed to provide an improved self-closing arrangement, by the employment of only one spring, so guarded that it cannot be opened by any slight inadvertent touch, or by anything dropping on it; also the combination therewith of a simple and convenient cut-out device.

In the accompanying drawings—

Figure 1 represents an elevation of a key having my improved arrangement, shown partly in section;

Figure 2, a side elevation of the same; and

Figure 3, represents a plan view of the same.

Similar letters of reference indicate corresponding parts.

A represents one pole of the instrument, and B, the other.

To the latter, a spring, C, is connected and fixed, so as to have a constant tendency to bear against the under side of the end of the key C', whereon the finger-piece D is located.

The said finger-piece D is made hollow, the said hollow being enlarged near the upper end, and a secondary finger-piece, E, is arranged therein, having a concave top of about the proper size to receive the end of the finger sufficiently to be pressed slightly downward when the finger is applied to the piece D, to operate the key, but the said secondary finger E does not project above the top of the piece D.

It is made of non-conducting material, and passes down through the end of the key C', and is connected to the spring C.

When the operator ceases working, the circuit will be instantly closed, through the spring C resuming its connection with the end of the key, and when the finger is applied to operate the instrument, the circuit

through the springs will be instantly broken by the pressing of the springs away from the key, through the action of the finger-piece E.

I am aware that finger-pieces, rising up through the piece D, and connected with weighted levers for closing and breaking the circuit, have been employed, but the objection to them, as heretofore arranged, is, that they project so prominently as to often encounter inadvertent touches, or the dropping of anything thrown, or other casualties whereby the circuit becomes broken, whereas, by my improved arrangement, no such liability exists, and interruptions, which frequently occur by the old arrangement, are entirely avoided.

In order to provide a convenient means for cutting out the circuit, I provide a bottom, *a*, having a small stud at one end, and cam-shaped at the other, and pivot it to the key in a recess, the shoulders of which will prevent the key from turning more than required, of non-conducting material, and so arranged, with reference to the spring, that it will bear upon the upper surface thereof, and separate it from the key when moved in one direction, and suffer it to restore itself when moved in the other.

By preference, I arrange the said button on the right side of the key C', and in such a position that the thumb will be in contact with it while the key is being operated, whereby it is most conveniently arranged to be moved in one direction or the other, as the operator applies his hand to or takes it from the key, without delay.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The combination, with the key C', and spring C, of the cut-out *a*, arranged substantially as and for the purpose specified.

The above specification of my invention signed by me, this 5th day of November, 1868.

JAMES H. McELROY.

Witnesses:

FRANK BLOCKLEY,  
ALEX. F. ROBERTS.