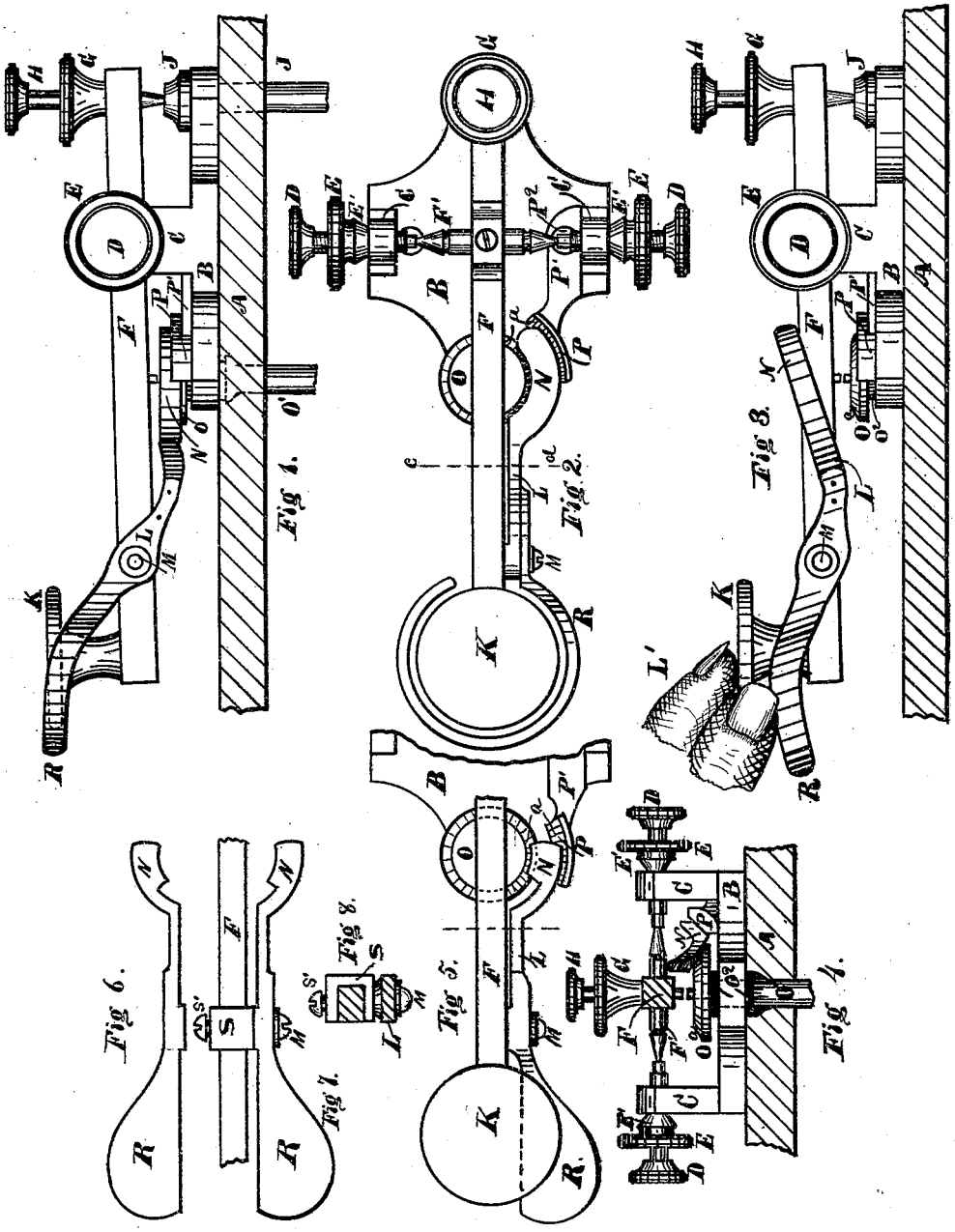
G. SOUTHARD.

SELF-CLOSING TELEGRAPH KEYS.

No. 180,669. Patented Aug. 1, 1876.



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GEORGE SOUTHARD, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN SELF-CLOSING TELEGRAPH-KEYS.

Specification forming part of Letters Patent No. **180,669**, dated August 1, 1876; application filed January 3, 1876.

To all whom it may concern:

Be it known that I, GEORGE SOUTHARD, of Indianapolis, county of Marion, State of Indiana, have invented a Self-Closing Attachment for Telegraph-Keys, of which the following is the specification:

My invention consists of devices adapted to be applied to an ordinary telegraph-key, to be operated by the fingers used on the knob, to open or cut the circuit while the operator is manipulating the key of the instrument, and to close the circuit automatically when the operator removes his fingers from the knob, thus preventing the key from being left open by mistake or carelessness.

Figure 1 represents a side view of an ordinary telegraph-key, showing the improved automatic attachment with the circuit closed. Fig. 2 is a plan view of the same. Fig. 3 is a side view, same as in Fig. 1, showing the circuit-closer open, as it would appear while operating the key. Fig. 4 represents a sectional view taken through the line *c d* of Fig. 2, showing more fully the manner of making the connection between the insulated post and the bed of the key or post that is not insulated. Fig. 5 represents another form of the insulated end of the circuit-closer. Figs. 6 and 7 represent right and left circuit-closers, arranged to operate on either side of the key-lever. Fig. 8 represents a section of the key-lever, showing a clamp, to which is attached the circuit-closer, also shown in Fig. 7.

A represents the table. B is the bed of the telegraph-key, provided with uprights C C on each side, in which operate the pivot-screws and binding-nuts D E, and support the lever F by means of the pivot-bar F′. The lever F is also provided at one end with the insulating-knob K, and at the other end with the adjusting-screw H and jam-nut G. To one end of the base B is secured the post J, and at the other end of the base is secured the insulated post O O′, all arranged to operate in the ordinary manner. My improved circuit-closer is represented by the letters R L N, and is arranged with the insulated part R in any desired form for convenience. In Figs. 1, 2, and 3 the insulated part R is represented as encircling the insulated knob K of the lever F, with a pivot-joint at M with the lever. In Figs. 5, 6, and 7 the insulated part R is arranged so as to be adapted either to the right or left side of the knob-lever F. L N represent the metallic end, which is formed so as to make positive connections with the insulated head O of the post O′, and the bed B or post J of the key. The piece P^1 is formed with an inclined plane or projection, P, and is secured to the bed B by the screw P^2, (shown in Fig. 2,) either on the right or left side of the lever F, as may be required.

The end of the circuit-closer N is designed to be wedge-shaped, and is arranged to drop between the inclined projection P and the inclined edge of the top O of the insulated post O′, and make a positive connection between them, and prevent the key from being left open, which often causes much trouble, especially in railroad-telegraphing, where, if a key is left open by accident or carelessness, it often leaves the wires in a condition not to be operated for considerable time, which cannot be the result with my improved circuit-closer.

I claim—

1. An attachment for telegraph-keys, consisting of a lever having an insulated end, R, and beveled end N, adapted to be hung to the lever of the instrument, and the plate P^1, having a projection, P, and adapted to be secured to the base of the instrument, as and for the purpose described.

2. The combination of the lever F, lever R L N, hung to the side of the lever F, and plate P^1, having a projection, P, and secured to the base-plate, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. SOUTHARD.

Witnesses:
E. O. FRINK,
J. E. LUDLUM.