

A. W. DECKER.

Improvement in Telegraph-Key.

No. 132,815.

Patented Nov. 5, 1872.

Fig. 1.

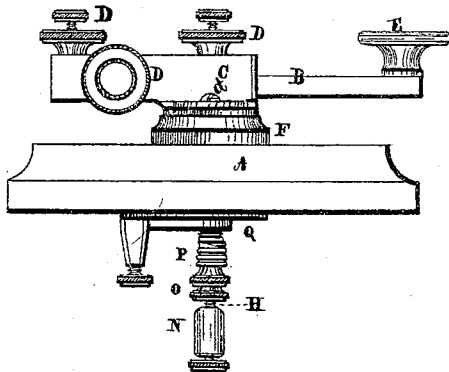


Fig. 2.

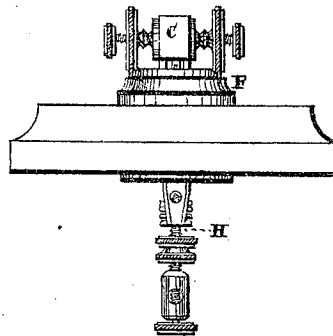


Fig. 3.

Fig. 4.

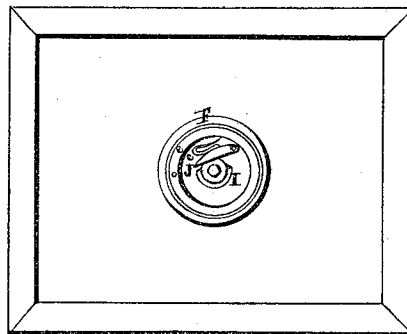
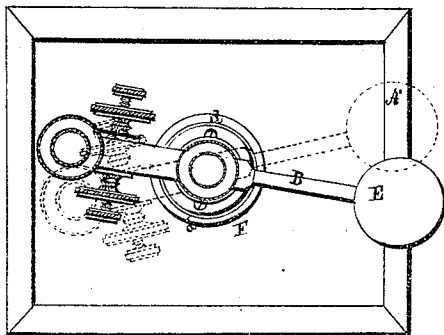


Fig. 5.

Fig. 6.

Fig. 7.

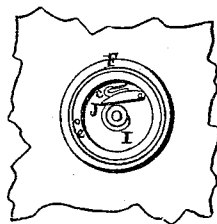
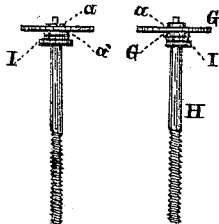
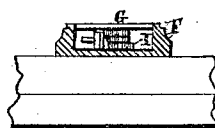


Fig. 8.



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UNITED STATES PATENT OFFICE.

ALMARIAN W. DECKER, OF CLEVELAND, OHIO.

IMPROVEMENT IN TELEGRAPH-KEYS.

Specification forming part of Letters Patent No. 132,815, dated November 5, 1872.

To all whom it may concern:

Be it known that I, ALMARIAN W. DECKER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Telegraph-Key; and I do hereby declare that the following is a full, clear, and complete description thereof, reference being had to the accompanying drawing making part of the same.

Figures 1 and 2 are side views of the key. Fig. 3 is a plan view. Figs. 4, 5, 6, 7, and 8 are detached sections.

Like letters of reference refer to like parts in the several views.

This invention relates to a telegraph-key; and the object thereof is to combine with said key a circuit-breaker, so that the telegraph operator can open and close the circuit by means of the transmitting-lever whereby he is telegraphing. Of the above specified invention the following is a more full and complete description:

In the drawing, A represents the table, to which the key is attached. Said key consists of the lever B, pivoted in the stay C in the ordinary way, and having adjusting-screws D and finger piece E, all of which are constructed and operated as those in common use. F is a chamber, secured to the table. Within the rim of said chamber and flush therewith, is fitted so as to turn therein a plate, G, Figs. 5 and 8. Said plate is secured to the spindle H, Fig. 6, in an insulated manner by rubber insulators *a a'*. Immediately below the insulating-collar *a'* is secured a metallic segment, I, Figs. 4 and 7. Said segment is fixed directly to the spindle, as shown in Fig. 6. In the bottom of the chamber referred to is pivoted a tongue, J, Figs. 4 and 5, having a spring, *c*, attached to it, and which lies between it and the side of the chamber, as shown in said Figs. 4 and 7. To the top of the chamber is secured the lever B referred to by means of the stay, in which it is pivoted; said stay being secured to the plate G by screws *d*, Fig. 3, passing through ears projecting from the side of the stay, thence into the plate, thereby making the connection of the stay to the plate rigid and in close contact with the rim of the cham-

ber, but not fixed thereto; hence the lever can be moved or vibrated sidewise, as the plate will turn within the rim of the chamber, it being loosely fitted therein, as above said. The distance that the lever vibrates is governed by a pin, *c*, projecting upward from the rim of the chamber into the stay; hence the vibration of the lever is equal to the thickness of the lever or the width of the inside of the stay. On the lower end of the spindle is cut a screw, to which is fitted a binding-nut, N, adjusting-nuts and spring O P for regulating the tightness of the connection of the key to the chamber G, and for making connection with the battery.

As above said the purpose of this key is to open and close the circuit, which is done by vibrating the lever laterally, thus: The relative position of the collar or segment I to the tongue, as shown in Fig. 4, is such as to bring neither of the ends of the segment in contact with the tongue, but in contact only with the insulated section of the collar above it, the two ends of the segment being distant therefrom. This position of the segment is produced by turning the lever to the position indicated by the dotted lines A', Fig. 3. The circuit is now open. In order to close the circuit, the lever is pushed to the position in which it is shown in said Fig. 3. This will bring the relation of the segment to the tongue, as shown in Fig. 7, in which it will be seen that one end of the segment is in contact with the tongue, thereby connecting the line by the contact of the spindle, by means of the segment, tongue, and the chamber, and that with the operating lever, but which is again opened by pushing the lever to the position indicated by the dotted lines A', as aforesaid.

The construction of this apparatus is such that the direction for opening and closing the circuit may be reversed from that above described, as convenience or other cause may require, by simply reversing the position of the tongue.

By the use of this invention a special lever for breaking the circuit is avoided, as the one lever is used for telegraphing in the ordinary

way, and by a side movement thereof the opening or closing of the circuit is effected without removing the hand from the lever, which must be done when two keys or levers are used.

Claims.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The tongue J and spring *c*, as arranged in relation to and in combination with the segment I and transmitting-lever B, operated

laterally, in the manner as and for the purpose substantially set forth.

2. The tongue J, spring *c*, segment I, plate G, spindle H, chamber F, and lever B, all constructed and arranged to operate in the manner as described, and for the purpose substantially specified.

ALMARIAN W. DECKER.

Witnesses:

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