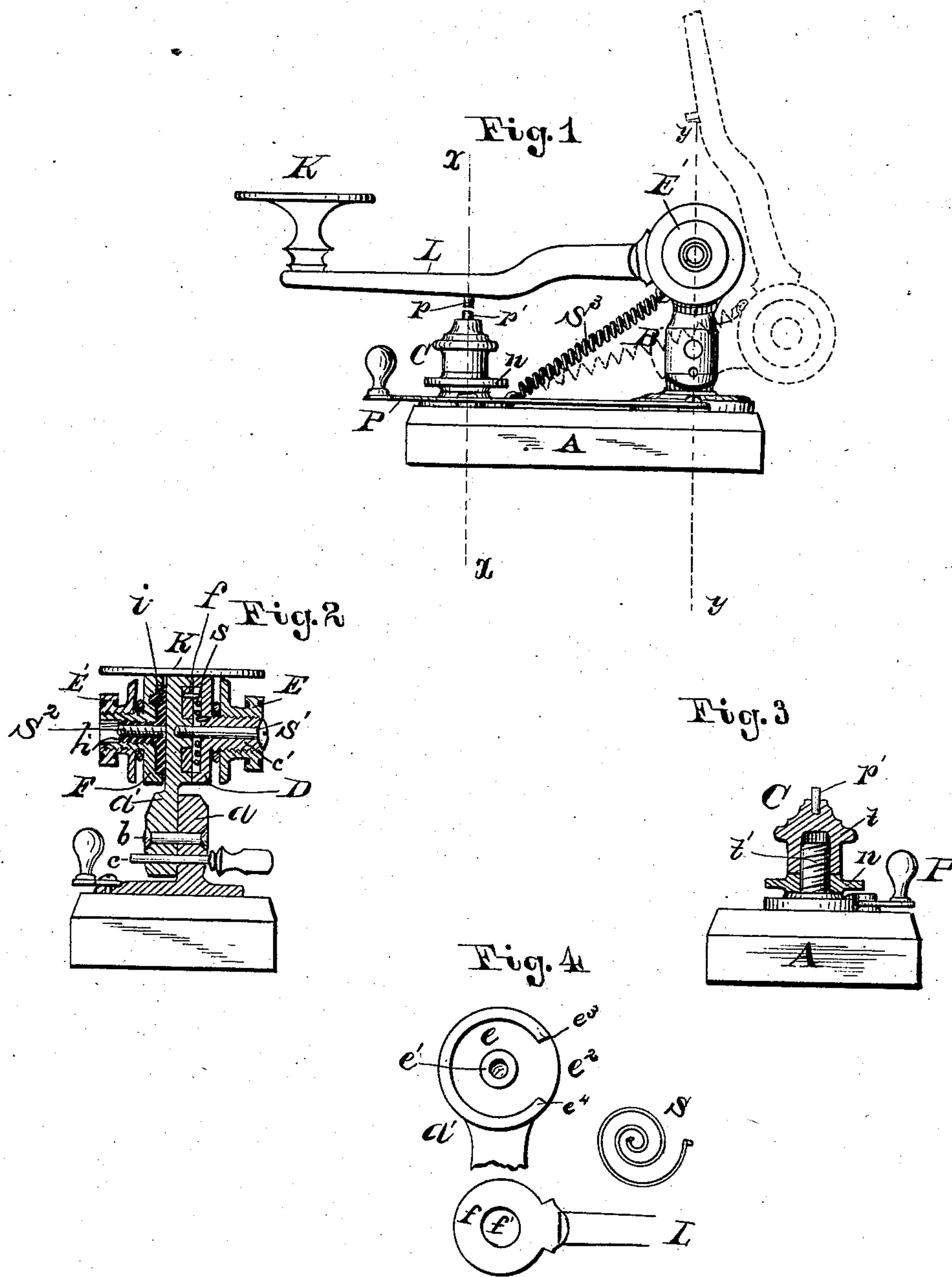


(No Model.)

T. BURN.  
TELEGRAPH KEY.

No. 260,449.

Patented July 4, 1882.



Attest  
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# UNITED STATES PATENT OFFICE.

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## TELEGRAPH-KEY.

SPECIFICATION forming part of Letters Patent No. 260,449, dated July 4, 1882.

Application filed March 25, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS BURN, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Telegraph-Keys, of which the following is a specification.

My invention relates to telegraph-keys.

The object of my invention is to provide a telegraph-key which shall be simple and compact in construction, and so arranged that the lever may be thrown back for cleaning the points without disconnecting said lever.

To this end my invention consists in an arrangement of parts hereinafter fully described with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved key, with the position of the lever when thrown back for cleaning shown in dotted lines. Fig. 2 is a vertical sectional view taken on the line *yy* in Fig. 1. Fig. 3 is a vertical sectional view taken on the line *xx* in Fig. 1. Fig. 4 is a detailed view, referred to hereinafter.

Similar letters of reference refer to like parts throughout the several views.

In the drawings, A represents the base of the key, which I prefer to make of wood, but which may be made of any suitable material.

L is the lever, provided with the customary knob, K, and point *p*.

B is the rear post, to which the lever L is hinged, and with which the connections are made, in the manner hereinafter more fully described.

C is the front post or anvil, having the adjustable point *p'*. The rear post, B, is made in two parts, *a a'*, the lower one, *a*, being secured to the base A in any appropriate manner, and the upper one, *a'*, hinged thereto by a pin or rivet, *b*, in such a manner that it may be thrown back, as shown in dotted lines, Fig. 1. The parts *a a'* are held coincident with the key, ready for operation, by a pin, *c*, which passes through each part *a a'* below and parallel with pin *b*. The upper end of the part *a'* of post B is enlarged and provided with a circular recess, *e*, in which fits the circular end *f* of lever L, the circular opening *f'* in end of *f* fitting over the hub *e'* in center circular recess, *e*. The surface around the recess *e* is cut away

at *e<sup>2</sup>*, forming an opening to allow the lever L to protrude, said opening being sufficient to allow the lever L a vertical movement, limited by the shoulders *e<sup>3</sup>* and *e<sup>4</sup>*. (See Fig. 4.) The end *f'* of lever L, when in place in recess *e*, comes flush with or a trifle below the face of part *a'*, against which comes a cap, D, one face of which is provided with a hub or projection, *c'*, and the other recessed to receive a spiral spring, S, one end of which is attached to lever L and the other to cap D. The cap D is held in its position by a screw, S', which passes through the hub *c'* and screws into the hub *e'* of part *a'*, the head of said screw being countersunk in the end of hub *c'*.

The spiral spring S serves to keep the lever L at the limit of its upward stroke, and the tension thereof may be at any time increased or diminished by loosening the screw S' and turning cap D around on S', it being held in any position by tightening the screw S'.

The hub *c'* of cap D is screw-threaded, and thereon is screwed a binding-screw, E, referred to hereinafter. On the other face of part *a'*, directly opposite screw S', is a stud, S<sup>2</sup>, on which is screwed a piece of hard rubber or other insulating material, *i*. On this is screwed a collar, F, having hub *h*, on which is a binding-screw, E', similar to the one, E, referred to above.

To the collar F is attached one end of a metallic coiled spring, S<sup>3</sup>, the other end of which is attached to the base of post or anvil C. If desired, this connection may be made by a metallic strip, the spring being then dispensed with.

The post C is made of two pieces, *t* and *t'*, the upper one, *t*, of which screws over the lower, *t'*, as shown in Fig. 3, thus furnishing the means of raising or lowering the point *p'* and regulating the movement of lever L, a lock-nut, *n*, serving to hold it in any desired position.

P is the circuit-closer, made in the ordinary manner.

The line-connections are made to the upper part of post B, one end being placed around hub *c'* of cap D and held by binding-screw E, and the other around hub *h* and held by binding-screw E', the circuit being formed with post C and point *p'*, through metallic spring S<sup>3</sup>.



Upon opening circuit-closer P the key is operated in the ordinary manner from knob K.

The lever L may be thrown back at any time desired, as shown in dotted lines in Fig. 1, for the purpose of cleaning the points or otherwise, by simply removing pin *c*, the connection being maintained through spring S<sup>3</sup>.

It will be readily seen that the construction of this key is quite simple and not liable to get out of order, all the connections being made above the base, and can be readily examined at any time.

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

1. In a telegraph-key, a post composed of two parts pivoted together, in combination with a lever attached to one of said parts, and means for holding the parts coincident, substantially as described.

2. In a telegraph-key, the combination of a post having a pivoted half or side, a lever attached thereto and provided with a contact-point, an anvil having an adjustable point, and suitable connections, substantially as shown and described.

3. The combination of post B, composed of parts *a a'*, the upper one, *a*, of which is provided with a circular recess, *e*, lever L, having circular end *f*, recessed cap D, and spring S, substantially as described and shown.

4. The combination of a hinged post, B, lever L, post or anvil C, and spring S<sup>3</sup>, substantially as shown and described.

5. A hinged post, B, to the upper part of which is hinged the lever L, the cap D, with binding-screw E, and the insulated collar F, with binding-screw E', in combination with and connected by a metallic spring, S<sup>3</sup>, to post C, substantially as described and shown.

6. The combination of hinged post B, lever L, having point *p'*, cap D, having binding-screw E, insulated collar F, with binding-screw E', metallic spring S<sup>3</sup>, and post C, having point *p'*, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS BURN.

Witnesses:

H. HARRISON,  
FRANK JOHNSON.