

W. E. DAVIS.
TELEGRAPH KEY.

No. 92,285.

Patented July 6, 1869.

Fig. 2.

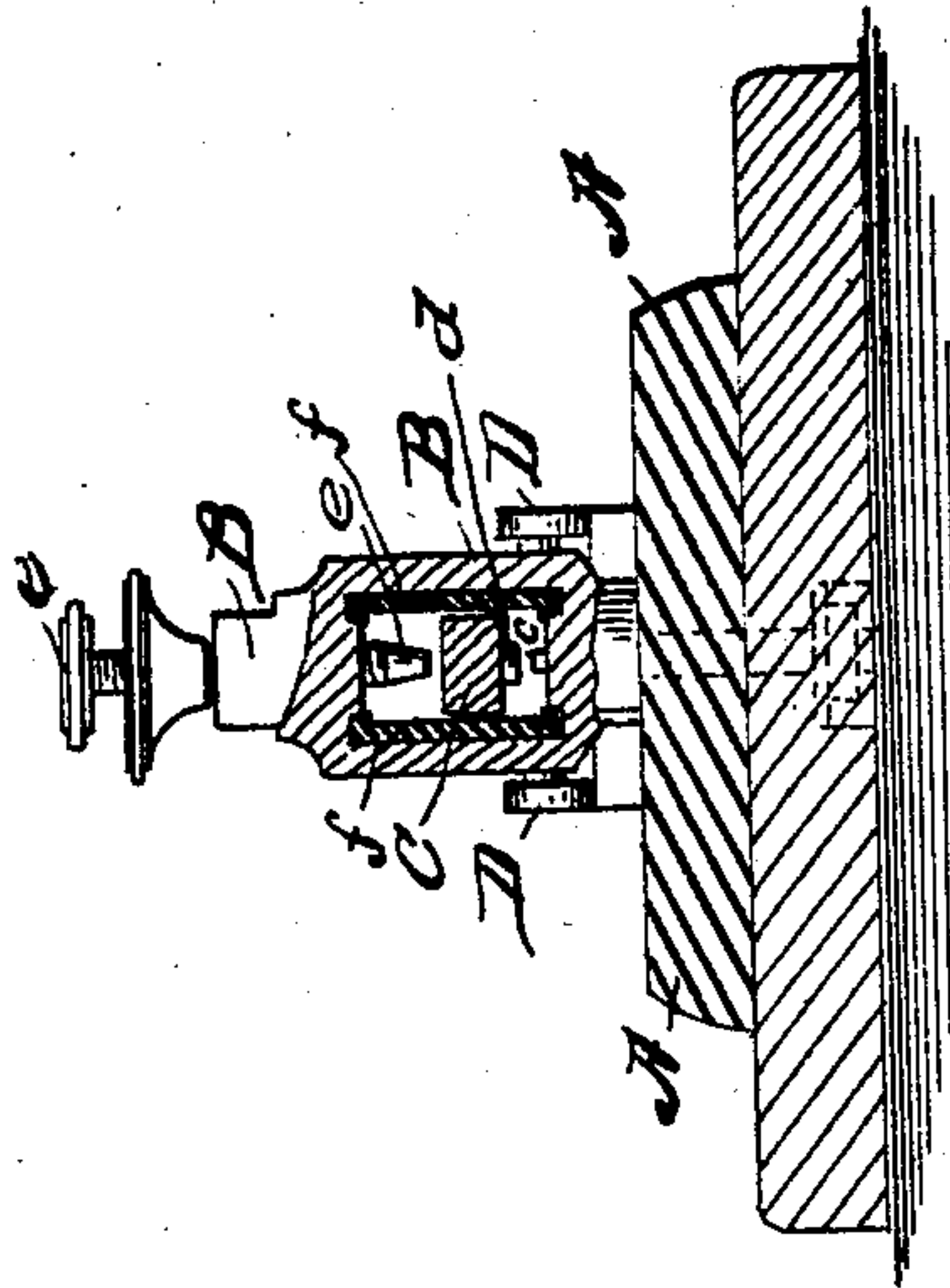
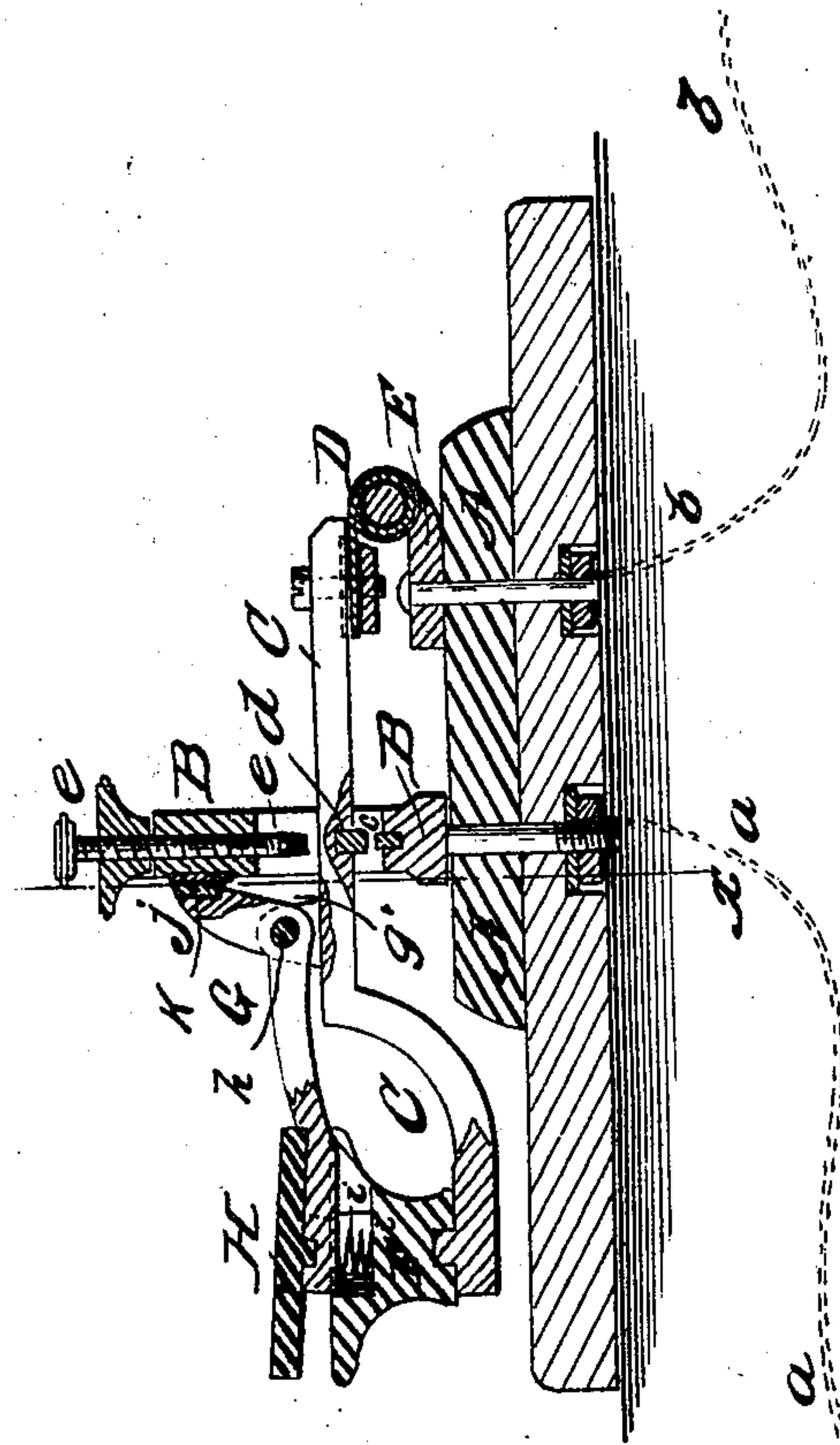


Fig. 1.



Witnesses:
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*The drawing in this patent
is not on print.*

United States Patent Office.

WILLIAM EDWARD DAVIS, OF JERSEY CITY, NEW JERSEY.

Letters Patent No. 92,285, dated July 6, 1869.

IMPROVEMENT IN 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, WILLIAM E. DAVIS, of Jersey City, in the county of Hudson, and State of New Jersey, have invented a new and improved Self-Closing Circuit-Key for Telegraphs; 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 part of this specification, in which—

Figure 1 represents a side elevation, partly in section, of my improved telegraph-key.

Figure 2 is a vertical transverse section of the same, taken on the line *xx*, fig. 1.

Similar letters of reference indicate like parts.

This invention relates to an improved key for automatically closing the circuits of telegraph-lines; and

The invention consists in the combination of a supplementary lever and spring with the operating-lever, the slotted standard, the contact points arranged above and below the operating-lever, and the insulated point of the adjusting-screw, all arranged as will be hereinafter more fully described, whereby the circuit is automatically closed when the apparatus is not in use.

A, in the drawing, represents the base of my improved key. Said base is made of rubber, bone, or other suitable non-conducting material, and is supported in suitable manner.

From the bed or base A, projects upward a standard, B, which is, with its lower part, connected with one of the lines *a*.

In the standard is formed an aperture, through which the lever *c* is fitted, as shown in fig. 1.

The rear end of the lever C is, by means of a spring, D, attached to a plate, E, which is secured to the bed A, as shown.

The plate E is connected with the other line *b*.

The spring D is a coiled or flat spring of suitable construction, and serves to transmit the current from the wire *b* to the lever C, or *vice versa*. It also serves to hold up the front end of the lever C, to keep it from contact with a pin, *e*, projecting from below into the aperture of the standard B.

This pin *e*, as well as a pin, *d*, projecting downward from the lever, are both of platina.

On the front end of the lever C, is a handle or knob

F, made of rubber or other non-conducting material.

By pressing upon this knob, the points *c* and *d* are brought into contact, but as soon as the knob is released, the spring D will at once raise the lever so as to separate the points *c d*. Thus by moving the lever up and down, the circuit will be alternately opened and closed, and when motion is stopped, the direct circuit will be stopped.

The degree of motion of the lever is regulated by means of a screw, *e*, inserted into the upper part of the standard B, the lower end of said screw being insulated, as shown.

The sides of the aperture of the standard are also insulated, as shown at *f*, in fig. 2, to prevent the current from passing from the lever to the sides of the standard.

From the lever C, projects an ear or ears, *g*, to which, by means of a pin, *h*, an elbow-lever, G, is pivoted.

This lever has also an insulated knob, H, between which and the knob F, a spring, *i*, is interposed to keep these knobs apart, and to force the platinum-covered end *j* of the lever G, against the platinum *k*, on the face of the standard B, as in fig. 1. Thus, when the apparatus is at rest, the circuit is completed by means of the lever G, while, when it is to operate, the knob of the lever G is pressed down upon the knob F, in which case the circuit is entirely interrupted, as then the points *j k*, as well as *c d*, are separated.

The apparatus is operated by holding the knobs F H together, and alternately raising and lowering them, in which case the circuit will be alternately broken and closed at the points *c d*. The screw *e* is so adjusted as to prevent, during operation, the points *j* and *k* from meeting.

Having thus described my invention.

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

The bent lever G and spring *i*, in combination with the spring-lever C, slotted standard B, contact points *c k*, and the insulated point of the adjusting-screw *e*, all arranged as described for the purpose specified.

WILLIAM EDWARD DAVIS.

Witnesses:

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