J. H. McELROY.

Telegraph-Key Attachment.

No. 91,955. Patented June 29, 1869.

Fig. 1

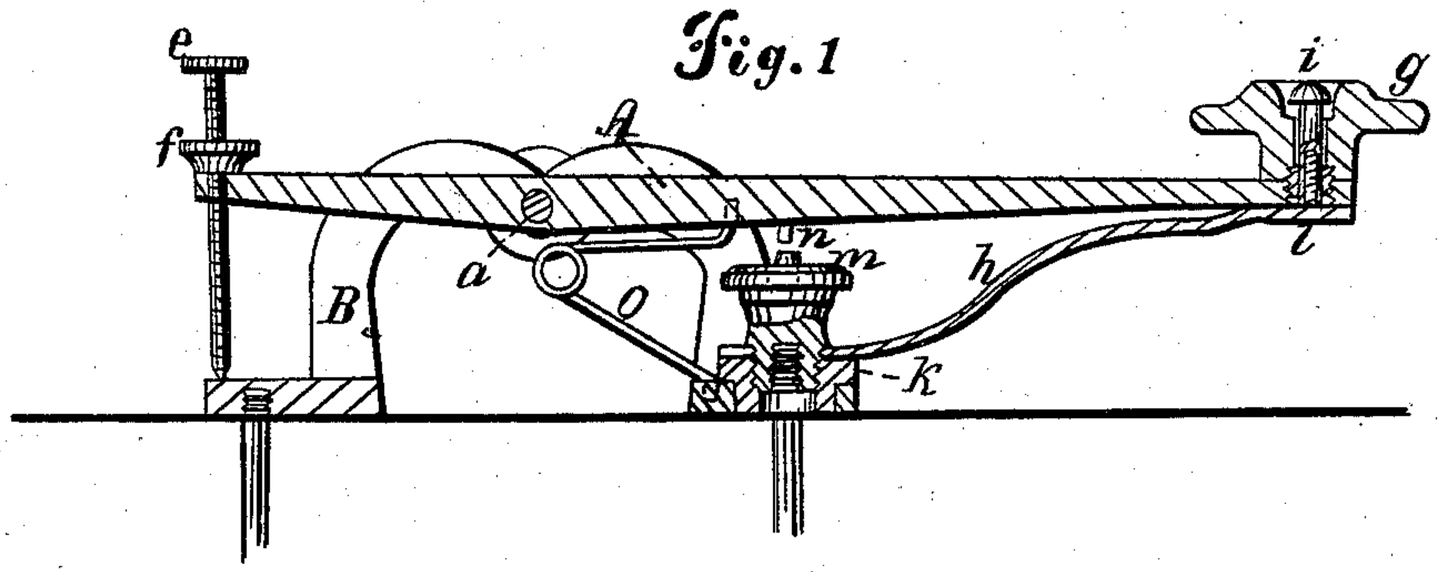
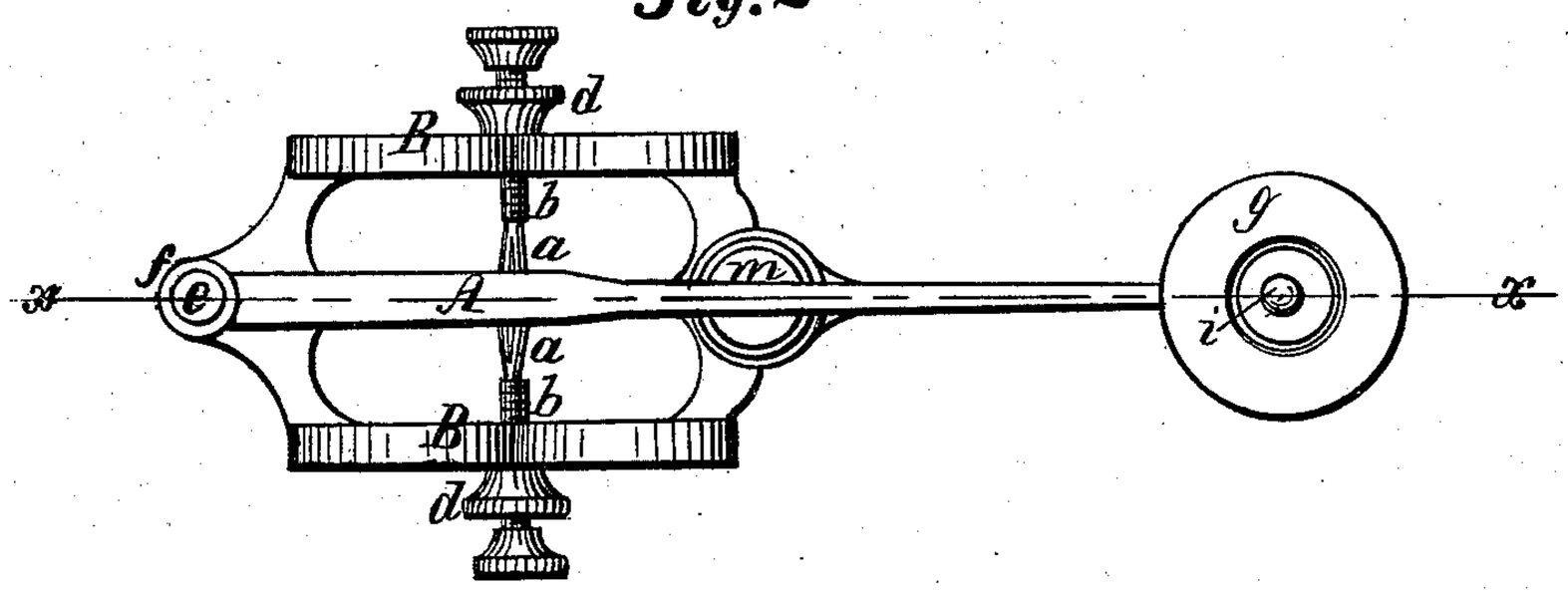


Fig. 2



Witnesses;
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JIM. H. McELROY, OF WARWICK, NEW YORK.

Letters Patent No. 91,955, *dated June* 29, 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, JIM. H. McELROY, of Warwick, in the county of Orange, and State of New York, have invented a new and improved Self-Closing Attachment for Telegraphic Keys; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those 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 is a longitudinal central section of the key, through the line *x x*, Figure 2, which latter is a top view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a key for telegraphic apparatus, which is so constructed and combined with a device for closing and breaking the current, as to permit the operation of breaking the current, and holding the same broken, to be conveniently performed by the operator when manipulating the key, and also to cause the current to be closed in a self-acting manner when the operator removes his hand from the key, thereby avoiding the inconvenience and delay which frequently arise from the inadvertence of the operator in neglecting to close the circuit through the key after he has finished operating.

It consists of a spring-pole plate, in combination with any upright lever-key, and so arranged as to bring the finger-piece, by which the pole-plate is removed from contact with the key when the current is to be broken, in the centre of the finger-plate by which the key is operated.

In the drawings—

A is a lever-key, vibrating on trunnion-studs *a a*, working in the hollow ends of the screws *b b*, which latter pass through the frame-plate B.

d d are jam-nuts.

e is a set-screw, to adjust the vibration of the key, and

f is its jam-nut.

o is a spring to keep the key-lever raised, so as to break the connection at *n* and *m*, which are the points where the current is closed and broken in operating.

l is the pole-plate at the end of the metal spring *h*, the opposite end of which latter is insulated from the frame-plate B, by hard rubber or gutta-percha, *k*, or other insulating-material.

The plate *l* is provided with a stem, which passes up through the insulated finger-plate *g*, and terminates in a finger-piece, *i*, of any suitable insulating-material.

The current enters the key-frame and key through the north pole or wire N, and sensitizes the key.

The circuit is closed by the pole-plate *l* being in contact with the key, as shown; and the current passes, through the spring *h*, to the boss *m*, with which the south pole or negative wire S is connected, as shown, the said boss being insulated from the frame B by the insulating-material *k*.

When the operator is using the key, the finger-plate *g* is held between the thumb and second finger, leaving the first finger free, and conveniently over the finger-piece, *i*, of the attachment, so that the circuit can be broken, and so retained, by simply pressing upon the said finger-piece.

When the hand is removed from the key, the spring *h* causes the pole-plate to come in contact with the key, and the circuit is closed, thus obviating trouble and delay by negligence in closing the circuit, as before mentioned.

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

The arrangement of the contact-spring *h*, depressed by the insulated thumb-piece *i*, in connection with the key A, substantially as described, for the purpose specified.

JIM. H. McELROY.

Witnesses:

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