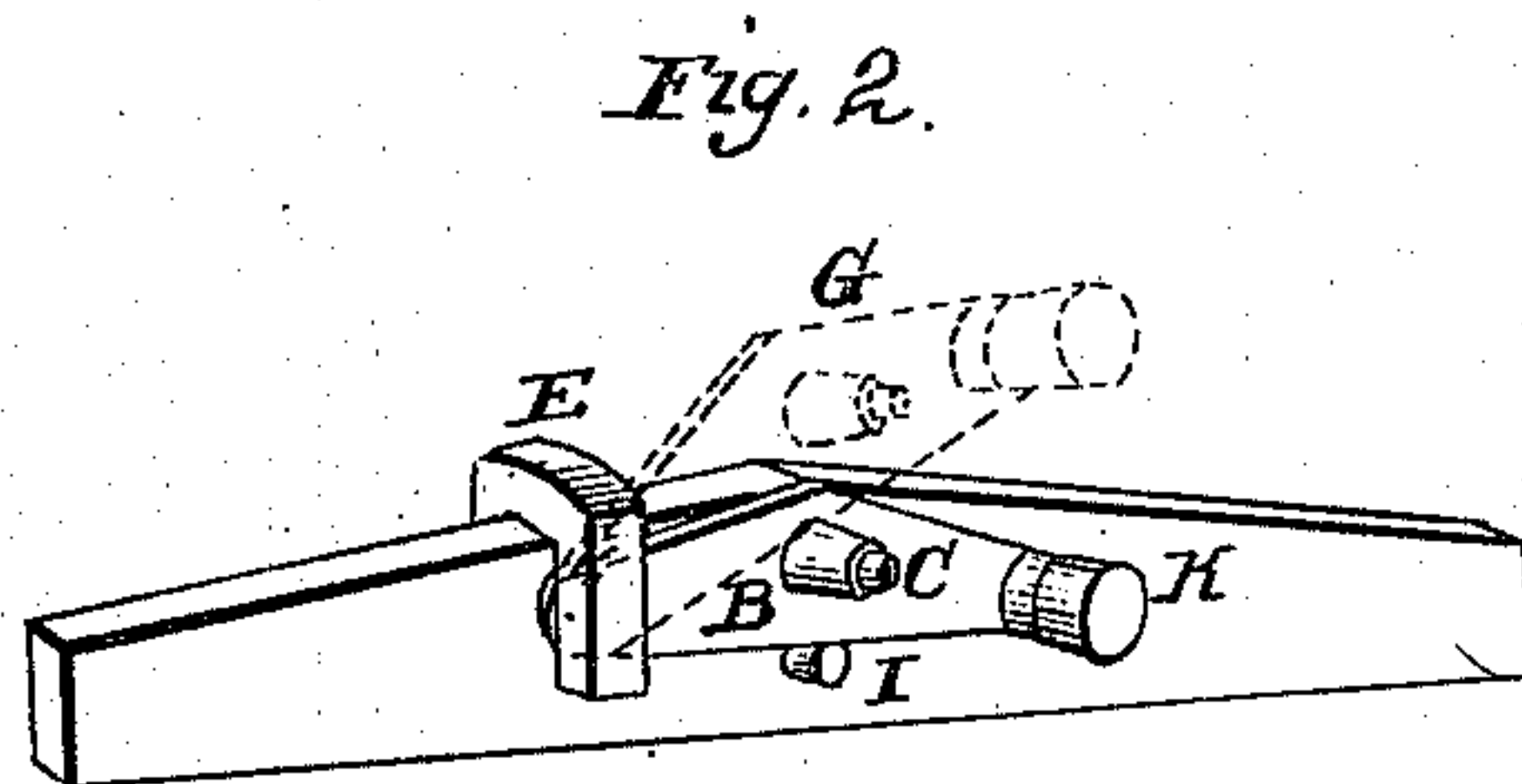
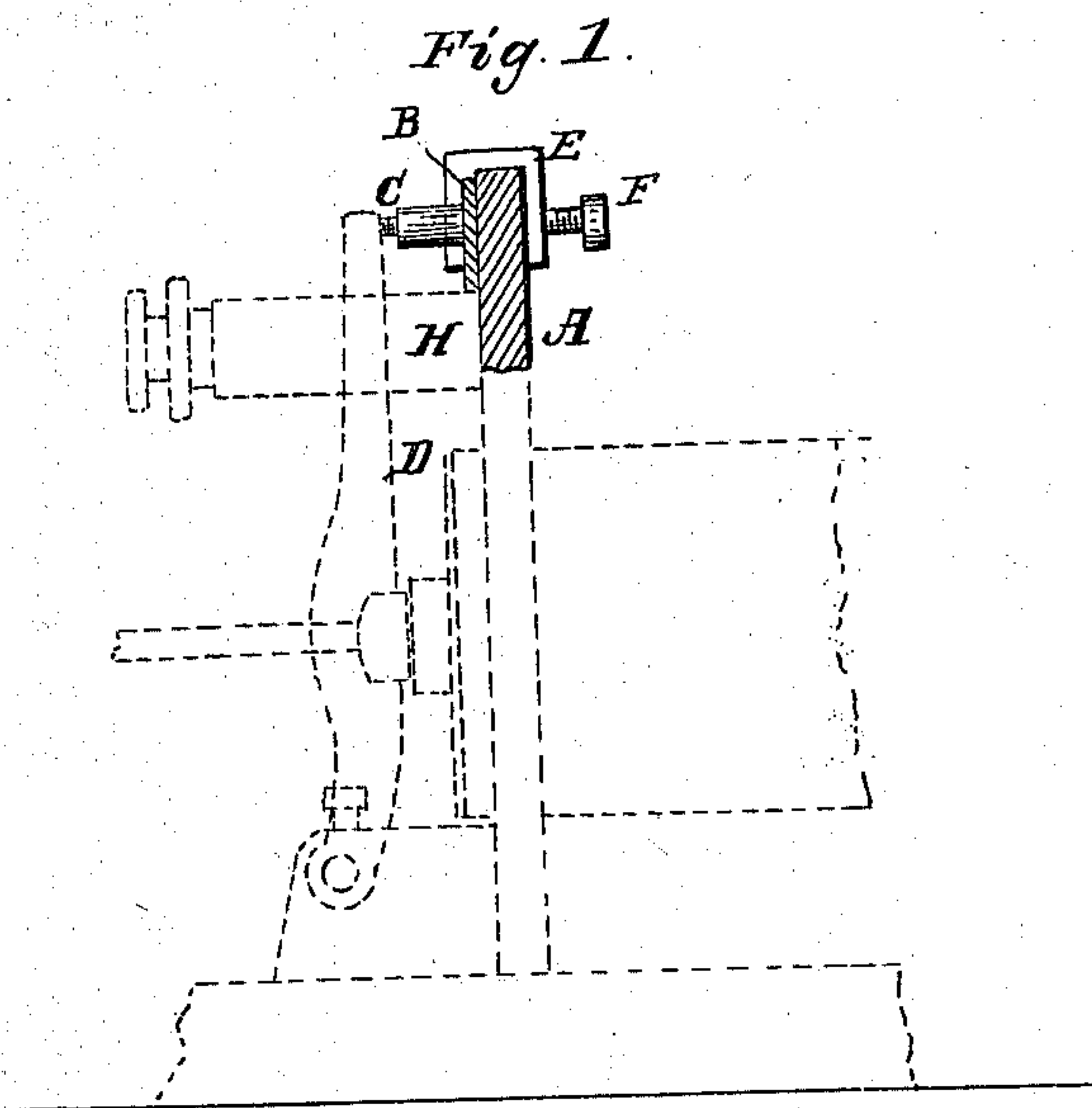


F. M. PERRY.  
Electric Switch.

No. 105,975.

Patented Aug. 2, 1870.



Witnesses:  
*Auguste Dietrich*  
*E. S. Mabey*

Inventor:  
*F. M. Perry*  
per *Munn & Co*  
Attorneys

# United States Patent Office.

FREDERIC M. PERRY, OF BARTON, VERMONT.

*Letters Patent No. 105,975, dated August 2, 1870.*

## IMPROVEMENT IN CUT-OFF FOR RELAYS AND OTHER ELECTRO-MAGNETIC INSTRUMENTS.

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, FREDERIC M. PERRY, of Barton, in the county of Orleans and State of Vermont, have invented a new and improved Cut-Out for Electro-Magnetic Instruments; 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 drawing forming part of this specification.

This invention relates to improvements in cut-off apparatus for electro-magnetic instruments, and consists in a platinum point mounted on a lever, pivoted adjustably to the brass plate of the relay or machine, by means of a yoke and set-screw, so arranged that the lever may be attached and the point may be adjusted relatively to the armature without taking the machine out of circuit.

Figure 1 represents a section of my improved apparatus, and a partial elevation of an electro-magnet, the latter being in dotted lines; and

Figure 2 is a perspective view of my improved apparatus.

Similar letters of reference indicate corresponding parts.

A represents the brass plate of the relay or machine, to which the lever is attached;

B is the lever;

C is the platinum point, attached to the said lever; and

D is the armature of the machine, working in conjunction with this platinum point.

This lever B is pivoted to the clamp E, and connected to the brass plate A by the clamp F and the clamping-screw F, so that it may be readily attached to any machine in use, without taking it out of circuit.

The lever is raised on its pivot, as shown in dotted lines at G, to break the circuit, and turned down, as represented by the black lines in fig. 2, to close it.

When the lever is down, it rests on the brass bars H of the relay, between which the armature of the magnet vibrates.

The stud pin I, fig. 2, is merely shown on the plate A as a temporary substitute for the said bars H, in the absence of them.

The lever B is provided with a thumb-bit, K, to be used for working it.

Having thus described my invention,

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

The combination of the lever B, platinum point C, clamp E, and clamping-screw F, when arranged for application to the plate A and to the armature D, all substantially as specified.

FREDERIC M. PERRY.

Witnesses:

FORDYCE S. FRENCH,  
WILLIAM GRAVES.