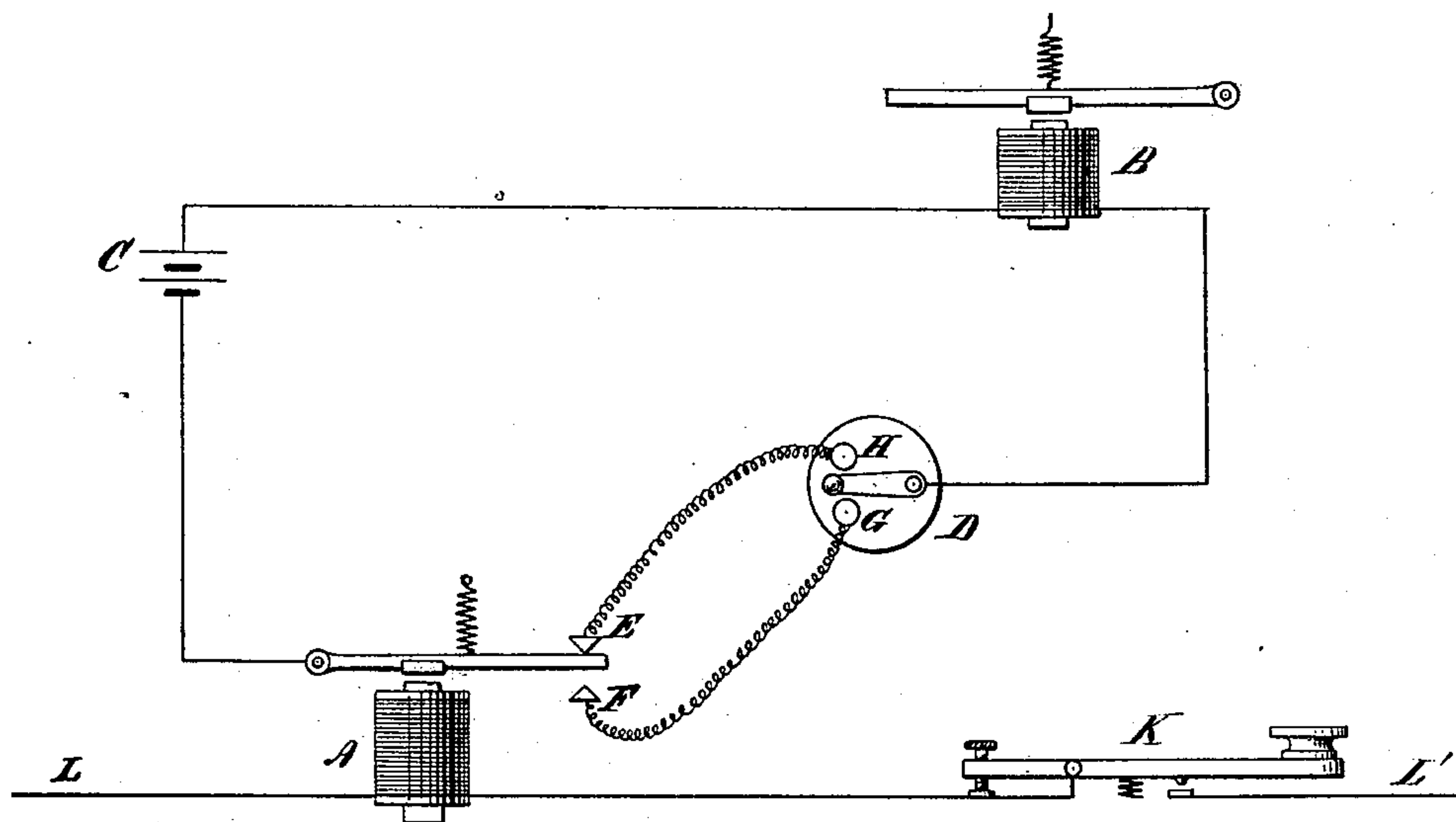


(No Model.)

G. d'INFREVILLE.
Telegraph Apparatus.

No. 233,859.

Patented Nov. 2, 1880.



Witnesses:

Geo. W. Miatt,
S. J. Sullivan.

Inventor:

Georges d'Infreville.
By his Attorney,
E. W. Dickinson, Jr.

UNITED STATES PATENT OFFICE.

GEORGES D'INFREVILLE, OF NEW YORK, N. Y., ASSIGNOR TO THE
WESTERN UNION TELEGRAPH COMPANY, OF SAME PLACE.

TELEGRAPH APPARATUS.

SPECIFICATION forming part of Letters Patent No. 233,859, dated November 2, 1880.

Application filed August 9, 1880. (No model.)

To all whom it may concern:

Be it known that I, GEORGES D'INFREVILLE, of the city, county, and State of New York, have invented a new and useful Improvement in Telegraphic Apparatus, of which the following is a full, true, and exact description, reference being had to the accompanying drawing.

It is well known that there are many stations on Morse telegraph-lines in which a message is very occasionally received, but in which, under the present arrangement, the local battery is constantly in action, destroying itself. This arrangement is rendered necessary by the closed-circuit system now in common use. By my device I provide a switch and a new arrangement of circuits, by which the local battery is not kept constantly closed.

L L' represent the ordinary line-wire, provided with key K and relay A. This relay is adapted to make front and back contacts, F and E, as shown. These two contact-points are connected with the two points of an ordinary two-way switch, D, through the back point of which a local sounder, B, and battery C are connected to the relay A in the usual way.

When the switch is turned upon the point G the apparatus is exactly in the condition of an ordinary local station, and this is the position it should be in while a message is being received. Supposing the line to be closed,

however, and that no message is being sent to the station represented, the operator turns the switch D upon the point H. This breaks the connection of the local battery C and opens the sounder D, the relay A remaining closed. As soon, however, as the relay A is opened it closes the sounder on the back contact. The call, of course, in this case, would be a back-contact call, but an operator would as readily learn to distinguish a back contact as a front-contact call. On hearing his call the operator simply changes the switch D from point H to point G, when he receives the message in the usual way, and at its close replaces the switch D upon the point H. A great saving in battery consumption is thereby produced without the necessity of any complication of apparatus.

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

In combination with a two-contact receiving-magnet, a battery and a sounder, or equivalent instrument, connected with a two-point switch, one point being in contact with the front and the other in contact with the back contact of the relay-magnet, substantially as and for the purpose specified.

GEORGES D'INFREVILLE.

Witnesses:

S. F. SULLIVAN,
GEO. H. EVANS.