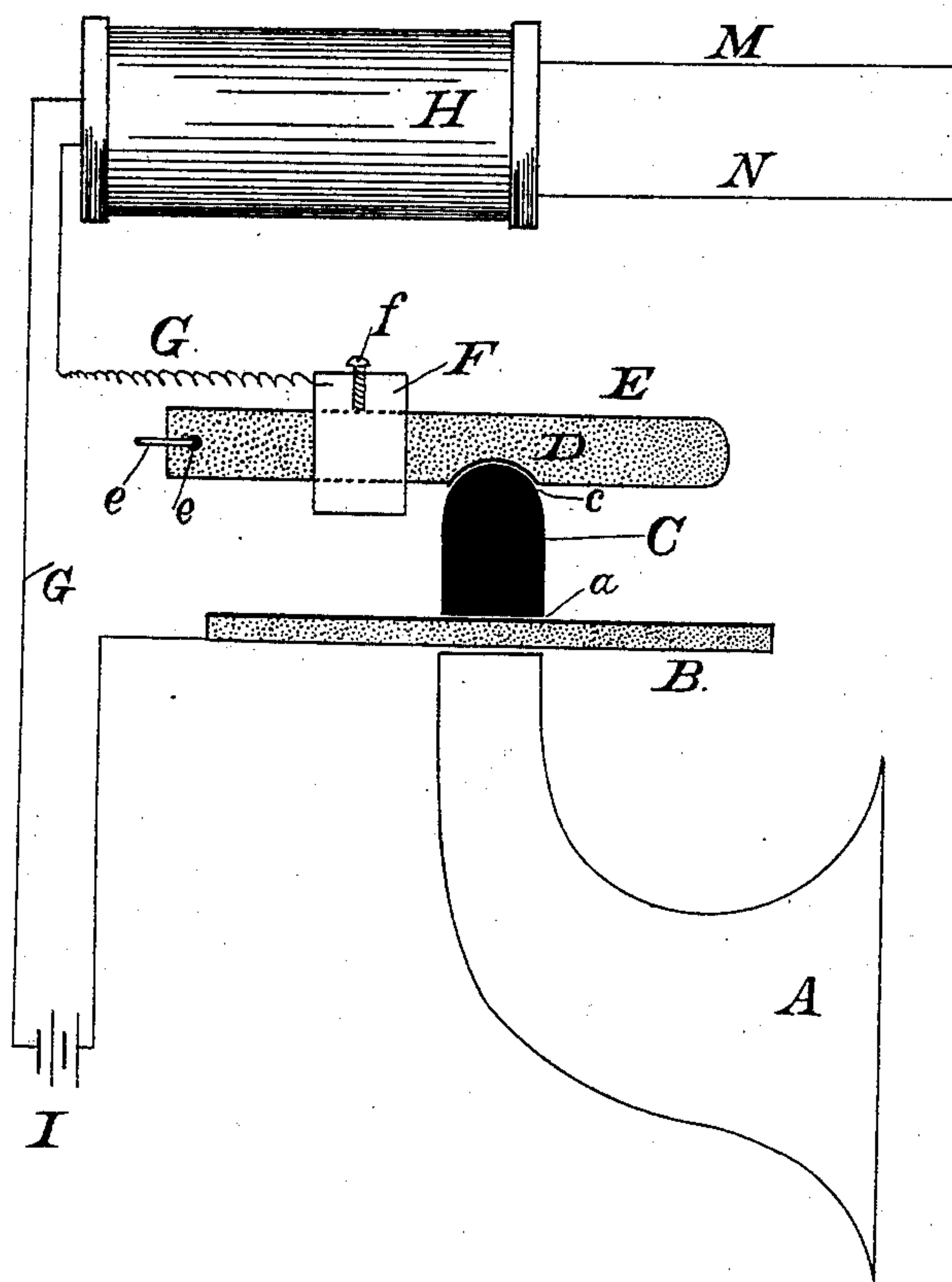


(No Model.)

J. H. ROGERS.
TELEPHONE TRANSMITTER.

No. 310,151.

Patented Dec. 30, 1884.



WITNESSES

Chas H. Baker
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UNITED STATES PATENT OFFICE.

J. HARRIS ROGERS, OF WASHINGTON, DISTRICT OF COLUMBIA.

TELEPHONE-TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 310,151, dated December 30, 1884.

Application filed April 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, J. HARRIS ROGERS, a citizen of the United States, residing at Washington city, in the District of Columbia, have
5 invented certain new and useful Improvements in Telephone-Transmitters, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention has relation to telephone-transmitters, and more particularly to that
10 class known as "gravity" transmitters, wherein springs and their equivalents are dispensed with, whereby the construction is greatly simplified and a uniform and regular adjustment
15 obtained for an indefinite length of time; and to these ends the novelty consists in the construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the
20 claims.

The figure in the drawing is a side elevation illustrating my invention.

A is the mouth-piece; B, the carbon diaphragm, upon which rests the plane base *a* of
25 the carbon button C. The top *c* of this button is convex in form, and it fits into a correspondingly-concaved recess, D, in the carbon bar or rod E. The rear end of this rod
30 E has a hole, *e*, through which passes a staple, *e'*, by means of which the said rod is hinged to the case, (not shown,) so as to have a free vertical movement.

F is a metallic weight sliding along the rod E and secured in place by the set-screw *f*.
35 This weight is provided with a connecting-wire, G, passing through the primary of the coil H, thence through the battery I and back to the diaphragm B.

M N are secondary wires of the coil H,
40 and run to the main line and telephone-receiver in the usual manner. The transmitter being connected to the line, the adjustable weight F is moved along the rod E until the proper adjustment is attained to correspond
45 with the line on which it is used, and when

the best result is obtained the weight is secured in place by the set-screw *f*, and while the line and battery are uniform there will be an even and regular result without further adjustment, which is not the case where spring or mercury
50 adjustments are employed, owing to the changes produced by the variations in temperature.

By making the base *a* of the button C a perfect plane to correspond with the upper face
55 of the diaphragm B, and the top *c* of said button convex to correspond to the concave recess D in the rod E, the button is securely held in place in such a manner as to allow the greatest freedom of motion of the parts, so
60 that it will respond with extreme sensitiveness to the voice.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, 65 is—

1. In a horizontal-diaphragm transmitter, the combination, with a hinged-rod electrode, of a button-electrode, held in place upon said
70 diaphragm, which is in circuit with said electrode, by the gravity of said bar, as set forth.

2. The combination, with the horizontal diaphragm B, having loosely resting thereon the plane base *a* of the button C, of the hinged
75 rod or bar E, having a recess, D, corresponding to the convex face *c* of the said button, provided with circuit-connections, as and for the purpose set forth.

3. The combination, with the diaphragm B and button C, loosely resting thereon by gravity, of the rod E, having the adjustable weight
80 F, and the circuit-connections, as and for the purpose set forth.

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

J. HARRIS ROGERS.

Witnesses:

H. J. ENNIS,

JAS. C. ROGERS.