

(No Model.)

J. F. McLAUGHLIN.
TELEPHONE TRANSMITTER.

No. 341,264.

Patented May 4, 1886.

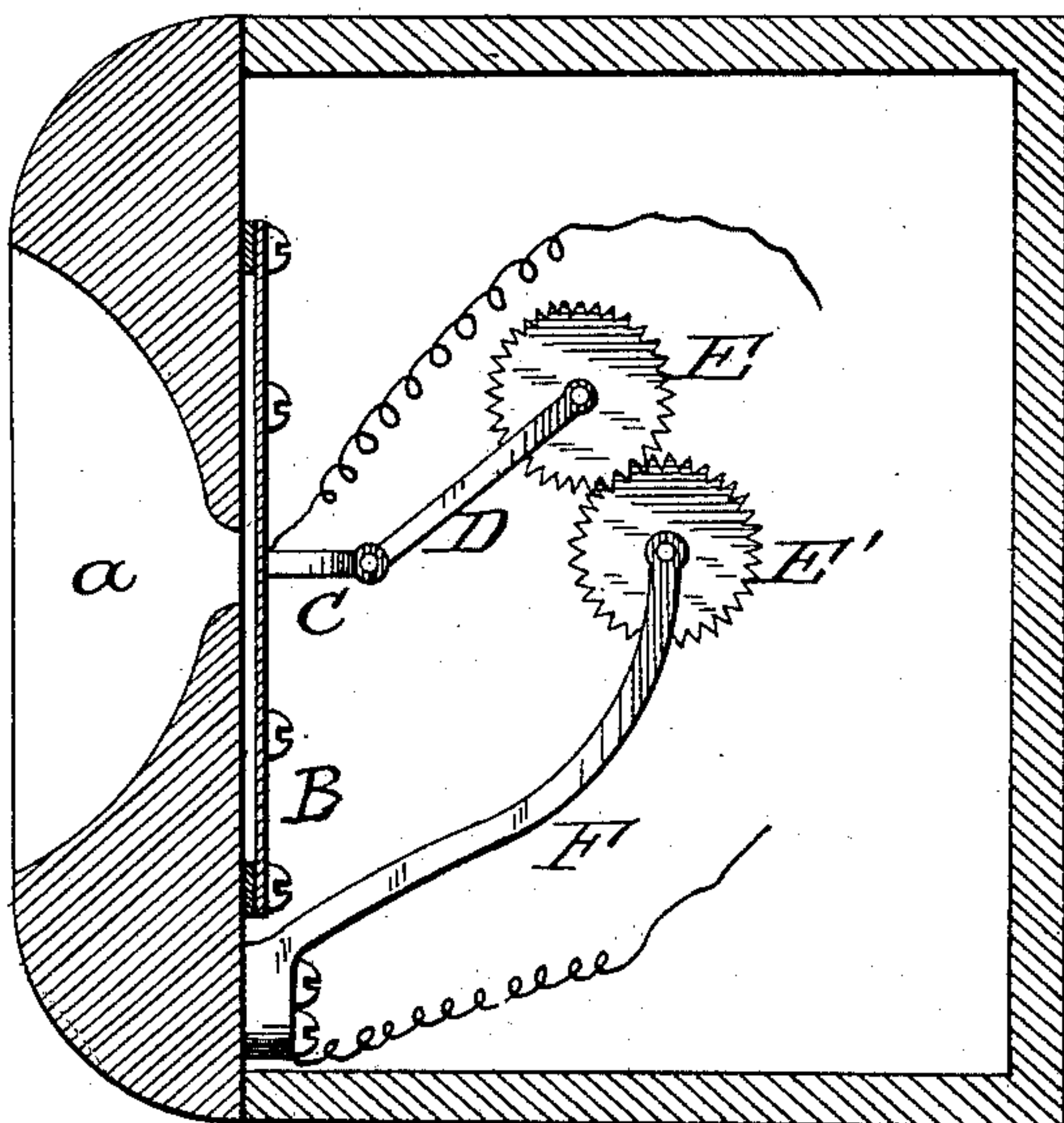


Fig. 1

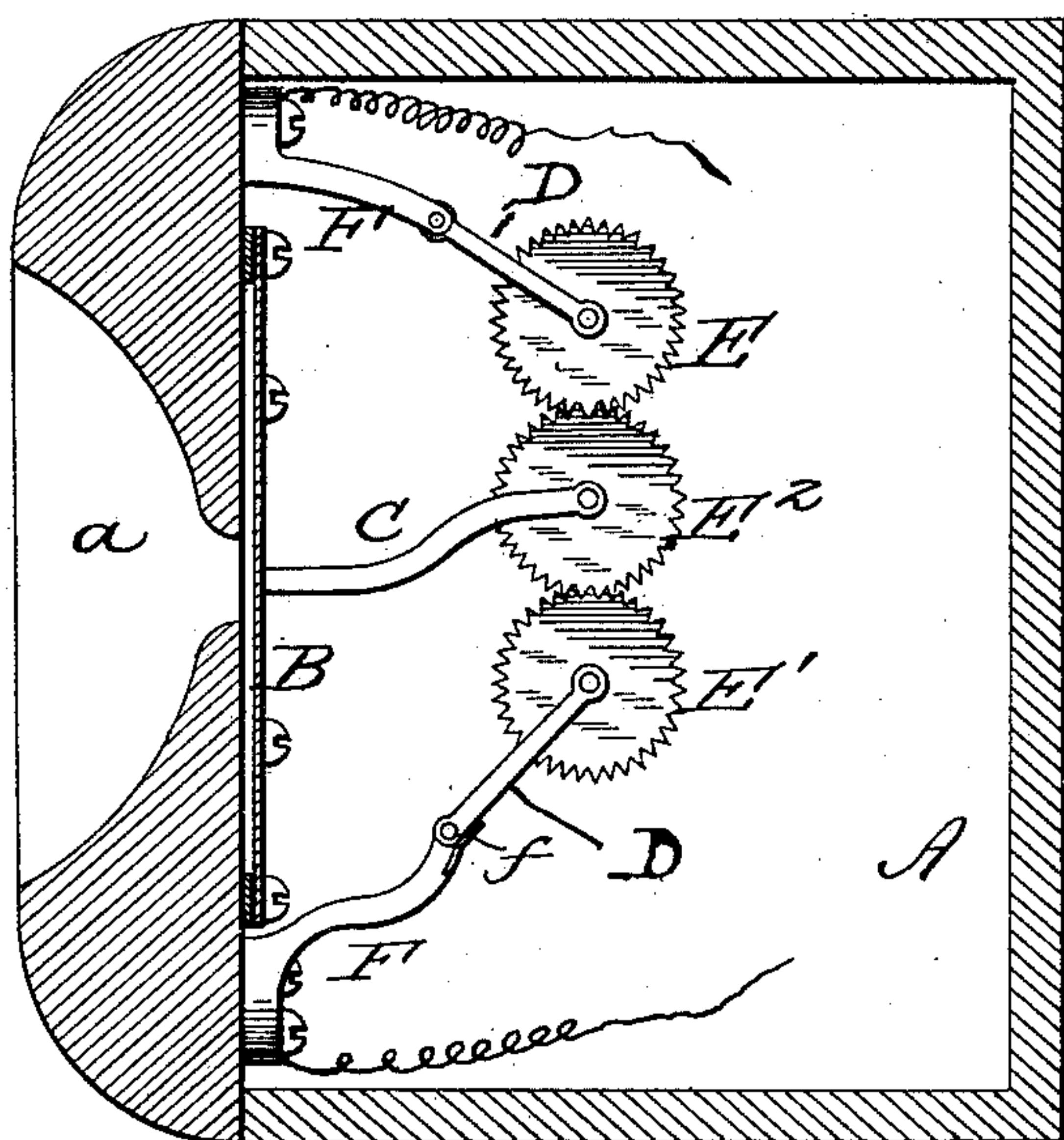


Fig. 2

WITNESSES:

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JAMES F. McLAUGHLIN, OF PHILADELPHIA, PENNSYLVANIA.

TELEPHONE-TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 341,264, dated May 4, 1886.

Application filed March 23, 1885. Serial No. 159,761. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. McLAUGHLIN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Telephonic Transmitters, of which the following is a specification, reference being had therein to the accompanying drawings, wherein—

Figures 1 and 2 are longitudinal vertical sections of telephonic transmitters embodying my improvements.

My invention has relation to telephonic transmitters in which one of the carbon electrodes is in the form of a cog or toothed wheel and is rotated or moved as the diaphragm vibrates to vary the pressure on the electrodes, as described in an application filed by me of an even date herewith, Serial No. 159,760; and it has for its object to multiply the points or provide greater intimacy of contact between the electrodes.

My invention accordingly consists of a telephonic transmitter having two or more electrodes of the form of cog, ratchet, or toothed wheels in peripheral contact or in gear with each other, to provide electrodes having multiple contact, the pressure of which is adapted to be varied to pulsate the current by the vibration of the diaphragm, as hereinafter more particularly described and claimed.

In the drawings, A, Fig. 1, represents a suitable case or box having a hinged door or side, *a*, to which is attached the diaphragm B. Upon the rear or inner side of the latter and at its center is secured a stud, C, to the outer end of which is pivoted a link, D. Upon the outer end of link D is mounted a carbon or like cog, ratchet, or toothed-wheel electrode E, which impinges or meshes by gravity with a like electrode, E', journaled in a fixed bracket, F, secured to door or side *a*.

If desired, more than two toothed wheel electrodes, E E', may be used, as shown in Fig.

2, in which case the center electrode, E², is journaled upon the free end of stud C, which is then prolonged, and the link D of electrode E is pivoted to a bracket, F, secured to the box A or its hinged side *a*.

If desired, the electrode E' may be connected by a pivoted link, D, to its bracket F, as shown in Fig. 2, in which case the latter has a stud, *f*, to maintain said link D in an upright or inclined position.

The foregoing described construction and arrangement of electrodes provide a multiple contact between or upon the electrodes, the pressure of which contact is varied as the diaphragm vibrates to produce electric variations in the battery-current for transmission to a suitable receiving-instrument for reproducing articulate speech.

If desired, the middle electrode, E², or any one of the electrodes, may be made of brass, platinum, or other suitable metal.

What I claim is—

1. A telephonic transmitter having electrodes composed of cog or toothed wheels meshing with one another, substantially as shown and described.

2. In a telephonic transmitter, the combination of diaphragm B, the fixed toothed-wheel electrodes E E', and a like electrode, E², vibrating with the diaphragm, and located between and meshing with the electrodes E E', substantially as shown and described.

3. In a telephonic transmitter, the combination, with the diaphragm, of a series of toothed-wheel electrodes, part of which vibrate with the diaphragm, and one of which is made of metal, substantially as shown and described.

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

JAMES F. McLAUGHLIN.

Witnesses:

JOHN RODGERS,
S. J. VAN STAVOREN.