

(No Model.)

W. GILLETT.

TELEPHONE.

No. 331,052.

Patented Nov. 24, 1885.

Fig. 1.

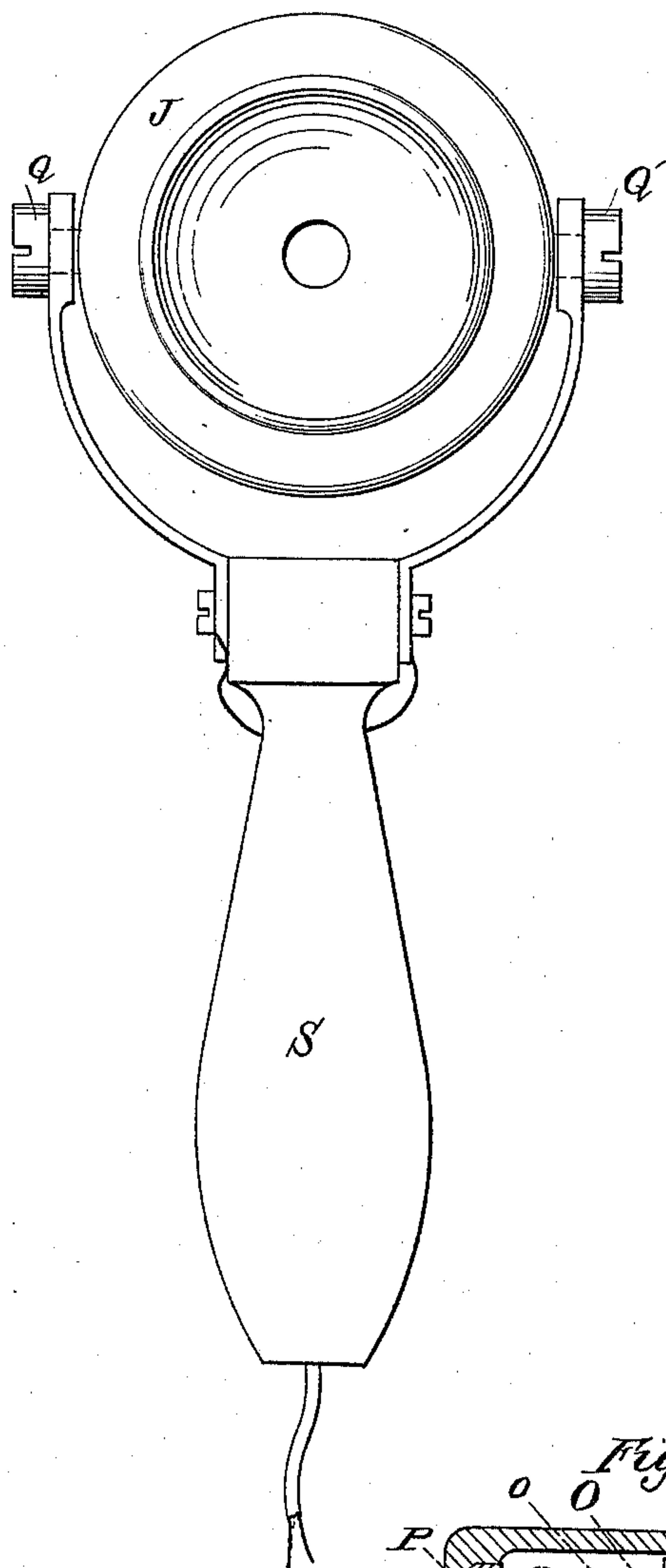


Fig. 2.

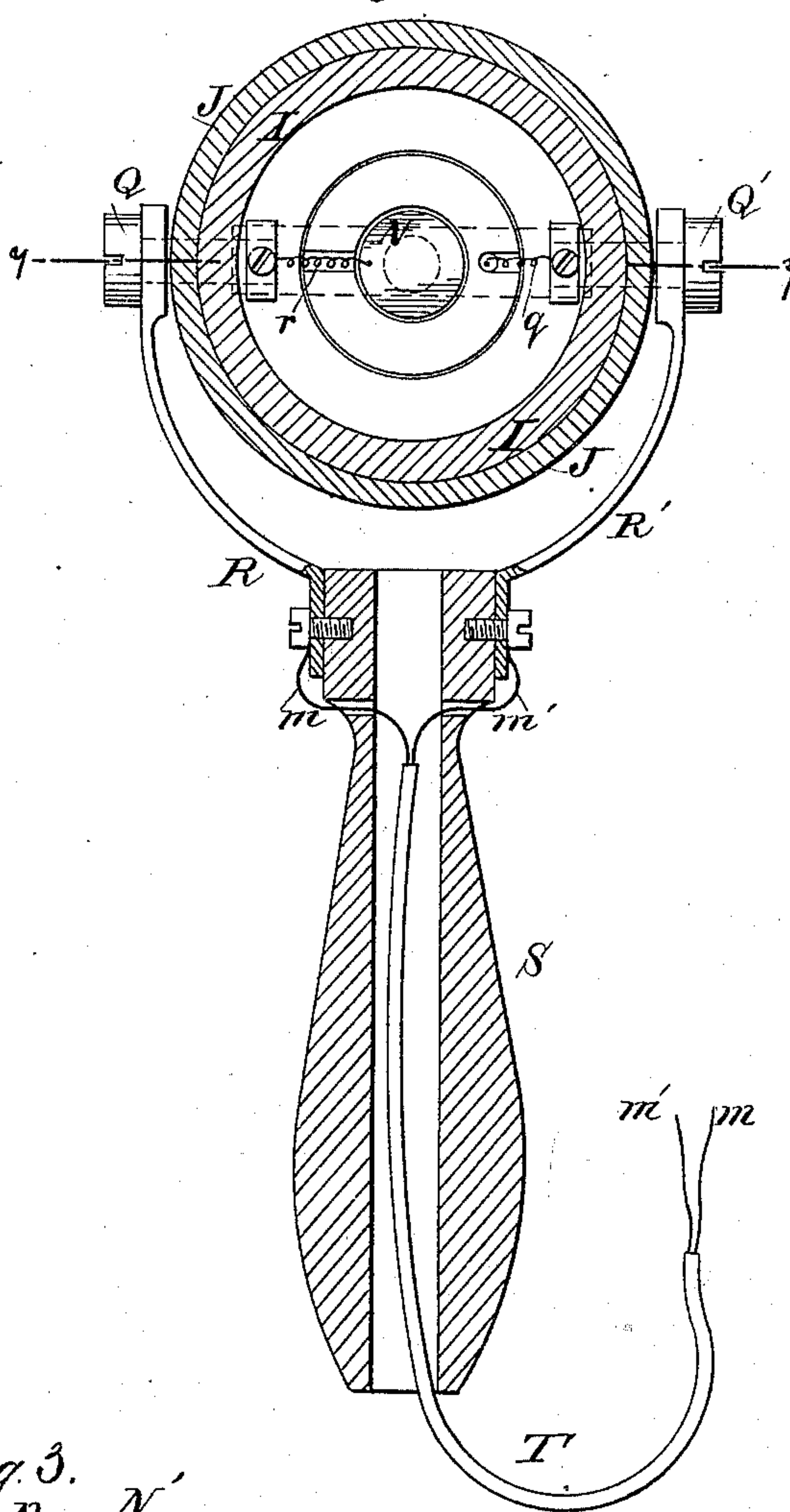
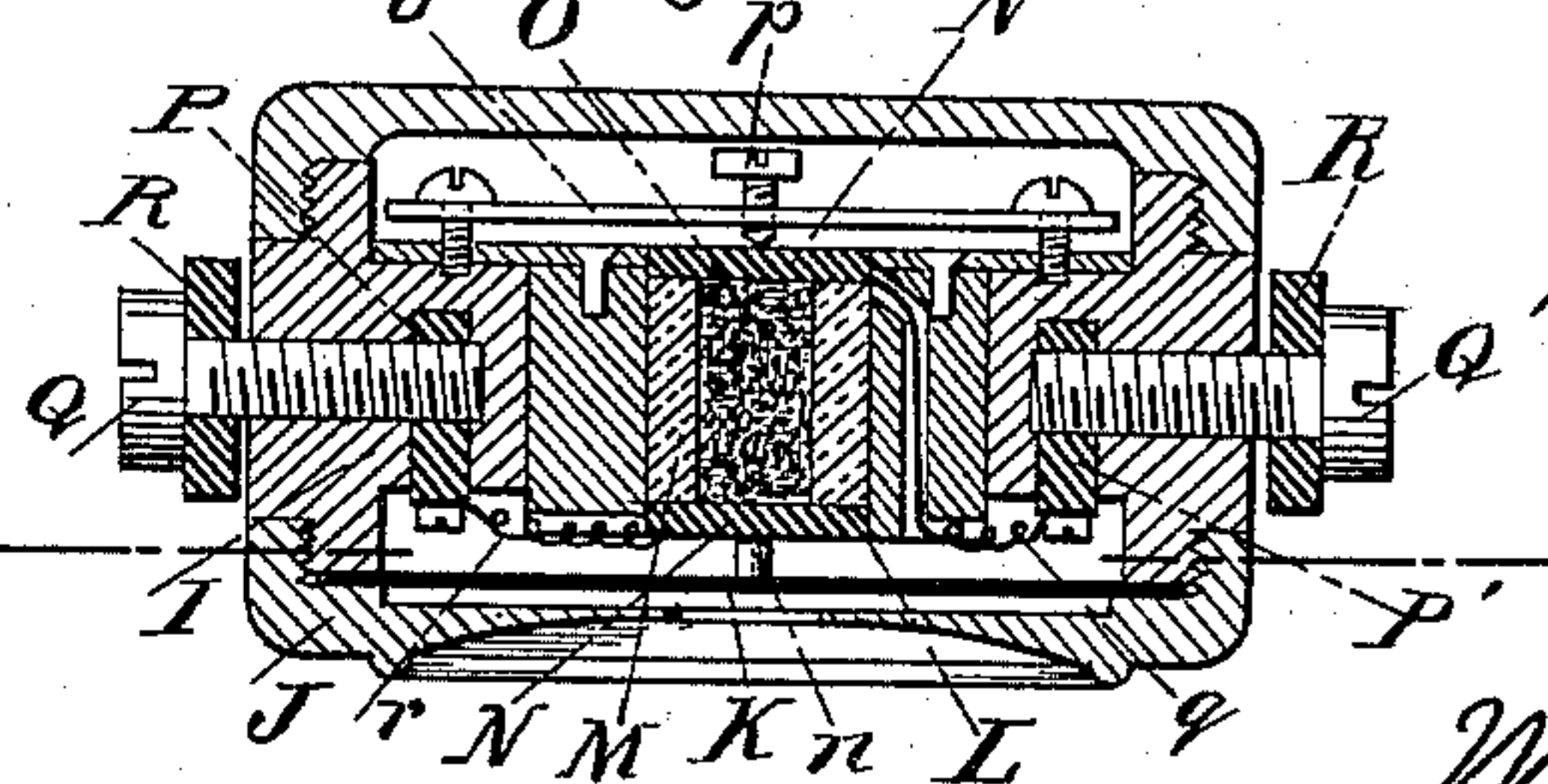


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

WEBSTER GILLETT, OF NEW YORK, N. Y., ASSIGNOR TO THE ATLANTIC
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TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 331,052, dated November 24, 1885.

Application filed June 6, 1884. Serial No. 134,025. (No model.)

To all whom it may concern:

Be it known that I, WEBSTER GILLETT, of New York, in the county of New York and State of New York, have invented a new and
5 useful Improvement in Telephones, of which the following is a specification, reference being had to the annexed drawings, forming a part hereof, in which—

Figure 1 is a front elevation. Fig. 2 is a
10 vertical section taken on the line $x x$ in Fig. 3, and Fig. 3 is a transverse section taken on line $y y$ in Fig. 2.

Similar letters of reference indicate the same parts in all of the figures of the drawings.

15 The object of my invention is to provide a compact and convenient telephone-transmitter which may be readily held in the hand and will adapt itself to the position of the user.

The transmitter has a diaphragm-cell, I,
20 provided with a mouth-piece, J, of the usual form, which clamps the diaphragm K in the cell. In the center of the diaphragm-cell is formed the cylindrical cavity L, in which is placed the elastic rubber tube M, having at
25 opposite ends the conducting-plates N N', which, together with the said elastic tube L, form a chamber, O, which is filled with granulated carbon. In the body of the diaphragm-cell, at diametrical points, are placed metallic
30 nuts P P', which are in electrical communication with the plates N N', and which receive the pivotal screws Q Q', passing through spring-arms R R', attached to the handle S, and form the pivotal support of the transmitter as
35 well as the electrodes by which the current is introduced to the instrument. The diaphragm K carries a stud, n , which presses upon the center of the conducting-plate N, and in a cavity formed in the back of the diaphragm-
40 cells I is secured a cross-bar, c , provided with a central adjusting-screw, p , which bears upon the center of the conducting-plate N', and is employed to vary the normal pressure upon the granulated carbon contained in the elastic
45 tube M. The handle S of the telephone-transmitter is made tubular to receive the double

conductor T, containing the wires $m m'$, communicating with the curved arms R R'. The current arrives at the granulated carbon contained in the elastic cell through the wire m' , 50 curved arm R', screw Q', and nut P', wire q , and plate N', and passes from thence through the plate N, wire r , nut P, screw Q, arm R, and wire conductor m . Sounds made in the vicinity of the mouth-piece J vibrate the dia- 55 phragm K, and the diaphragm, acting through the stud n , exerts a greater or less pressure upon the granulated carbon contained in the elastic cell M, thus altering its conductivity and producing fluctuations in the primary 60 current, which induce currents in the secondary wire of the induction-coil, by which the speech is transmitted along the line.

My improved transmitter may be used in any desired position, and adapts itself readily 65 to varying inclinations of the head of the user. It is particularly adapted to the transmitting of messages which are read from manuscripts or books, and to dictating to a stenographer or amanuensis in another apartment. 70

I am aware that pulverized carbon placed in a cell having elastic sides and subjected to variable pressure by the diaphragm has been employed in a telephone-transmitter; therefore I do not broadly claim this construction. 75 I am also aware that telephones have been pivoted in fixed standards inclosing the conductors, and this I do not claim.

Having thus described my invention, what I claim as new, and desire to secure by Letters 80 Patent, is—

The combination, in a telephone-transmitter, of the rigid diaphragm-cell I, elastic cell M, and granular filling contained therein, conducting-plates N N', conducting pivotal screws 85 Q Q', conducting-arms R R', and connecting-wires, as herein specified.

WEBSTER GILLETT.

Witnesses:

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CHAS. L. COHN.