

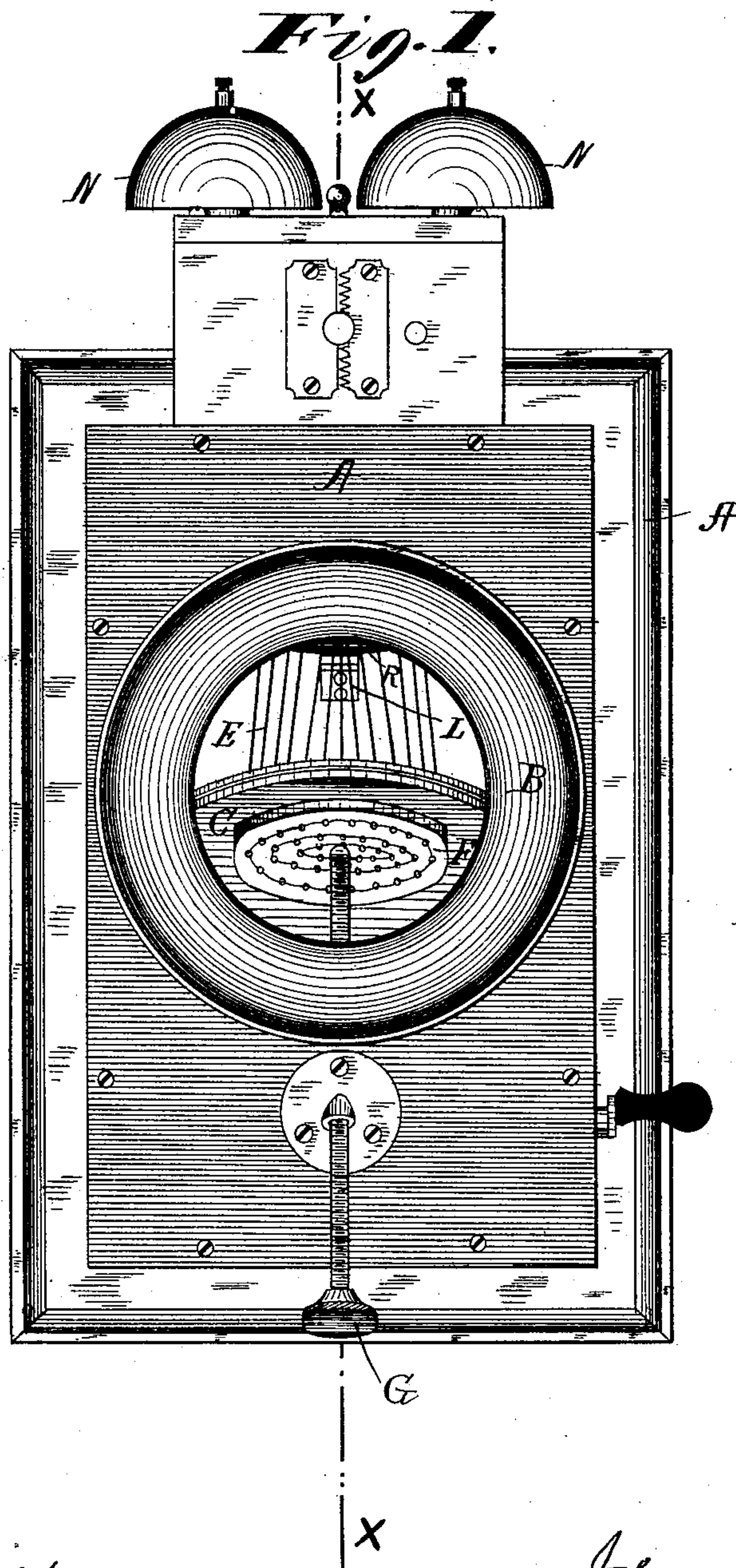
(No Model.)

2 Sheets—Sheet 1.

J. S. JONES.  
MECHANICAL TELEPHONE.

No. 358,357.

Patented Feb. 22, 1887.



WITNESSES:

*Gabriel J. W. Galster*  
*H. C. Knight*

INVENTOR

*John S. Jones*  
BY *Knight Bros*  
ATTORNEYS

(No Model.)

2 Sheets—Sheet 2.

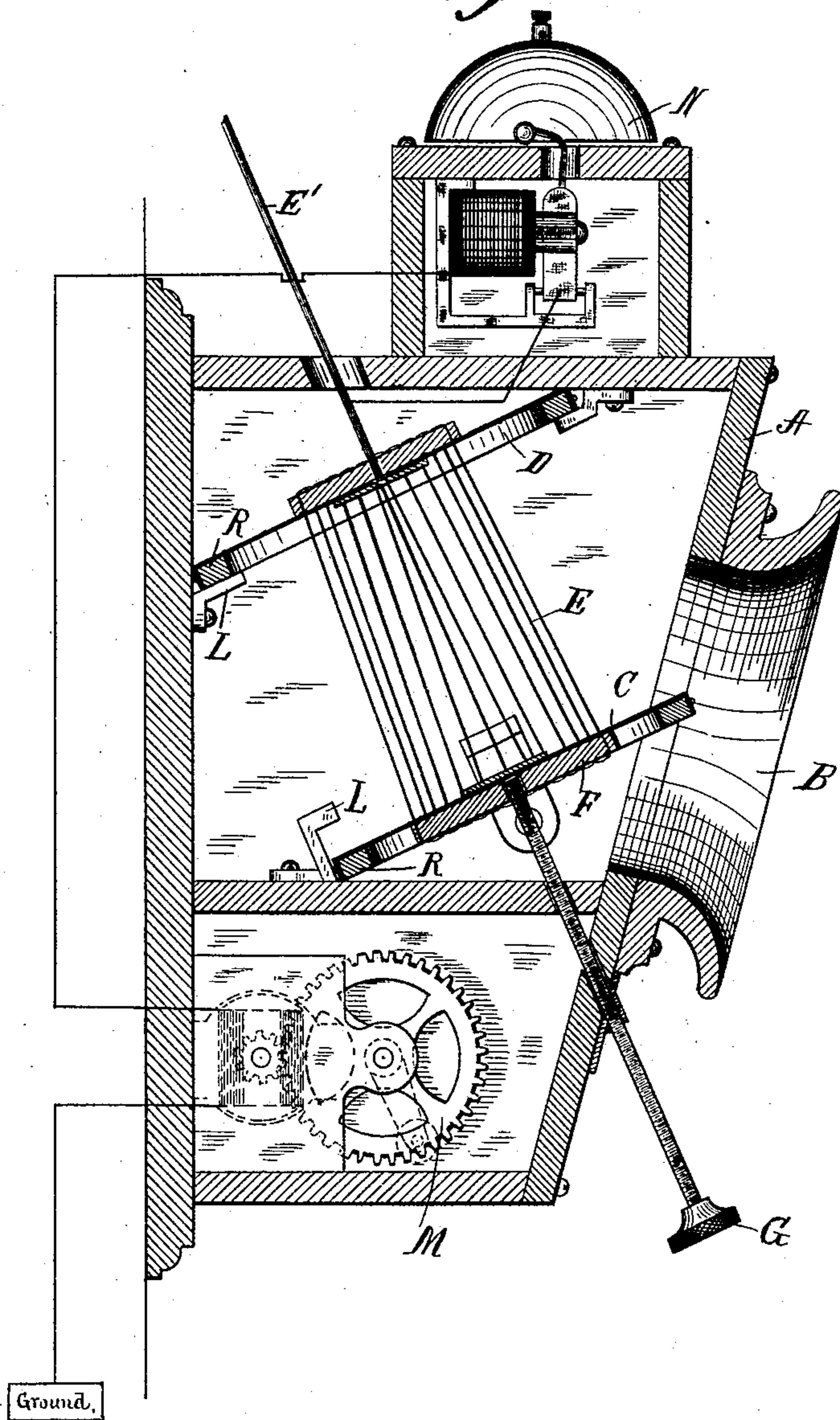
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*Fig. 2.*



WITNESSES:

*Gabriel J. W. Chalotz.*  
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# UNITED STATES PATENT OFFICE.

JOHN S. JONES, OF NEW YORK, N. Y.

## MECHANICAL TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 358,357, dated February 22, 1887.

Application filed June 19, 1886. Serial No. 205,664. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN S. JONES, residing at New York, in the county and State of New York, have invented certain new and useful  
5 Improvements in Acoustic or Mechanical Telephones, of which the following is a specification.

My invention relates to a telephone adapted to receive and reproduce sound-waves mechanically; and it consists of two or more diaphragms connected together by means of a number of fine wires, the rear diaphragm being connected directly to the line-wire and  
15 both diaphragms being exposed in order to directly receive or reproduce the sound-waves, as will be described.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is a front elevation of my improved telephone. Fig. 2 is a vertical section on the line X X, Fig. 1.

In the drawings, A is a casing having an opening, B, in the front.

C D are two diaphragms set at an angle to the front of the casing or telephone, as indicated in Fig. 2, and connected together by a number of fine wires, E. For the purpose of strengthening the diaphragms where the wires E are threaded over them, I interpose disks of wood, F. A screw, G, connected at one end to the outer diaphragm, C, and extending through the casing A, serves as a means for adjustment of the tension of the wires E, stretching between the two diaphragms. These diaphragms are mounted on rings R, and suitable  
35 lugs or brackets, L, are provided on the interior of the casing to prevent the diaphragms from becoming displaced.

A suitable magneto-call, M, connecting with  
40 the call-bells N, is provided for signaling purposes. The signal connects directly with the line-wire E'.

The object of the construction of the telephone as I have shown and described it is to  
45 procure a much greater efficiency as regards the sound-reproducing powers of the telephone, as I employ it as a receiver and reproducer of the sound-waves as well as a trans-

mitter. The improved results so obtained are due to the arrangement of the diaphragms, 50 whereby they are both directly exposed to the opening in the telephone-casing, thereby utilizing to a greater extent the action of the sound-waves than any acoustic or mechanical telephone heretofore produced.

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

1. In an acoustic or mechanical telephone, the combination of the telephone-casing having an opening for the reception of the sound-waves, with two diaphragms set at an angle to the front of the casing and arranged opposite and directly exposed to the opening, and connections between the diaphragms, and with  
65 the line and the line-wire, as shown and described.

2. In an acoustic or mechanical telephone, the combination of the line-wire with the telephone-transmitter having an opening for the reception of the sound-waves, and two diaphragms arranged one behind the other and both exposed directly to the opening, with connections between the two diaphragms and the line-wire, as shown and described.

3. In an acoustic or mechanical telephone, the combination of the telephone-casing having an opening for the reception of the sound-waves, with diaphragms arranged parallel to each other and opposite and directly exposed to the opening, a number of wires connecting said diaphragms, and the line-wire connected to the inner diaphragm, as shown and described.

4. In an acoustic or mechanical telephone, the combination of the two diaphragms connected to each other by a number of fine wires, the interposing pieces of wood for preserving the diaphragms, the line-wire connected to the inner diaphragm, and an adjusting-screw connected to the outer diaphragm, substantially as shown and described.

JOHN S. JONES.

Witnesses:

GABRIEL J. W. GALSTER,  
E. J. GRISWOLD.