

(No Model.)

B. L. KENYON.
MECHANICAL TELEPHONE.

No. 348,328.

Patented Aug. 31, 1886.

Fig. 1

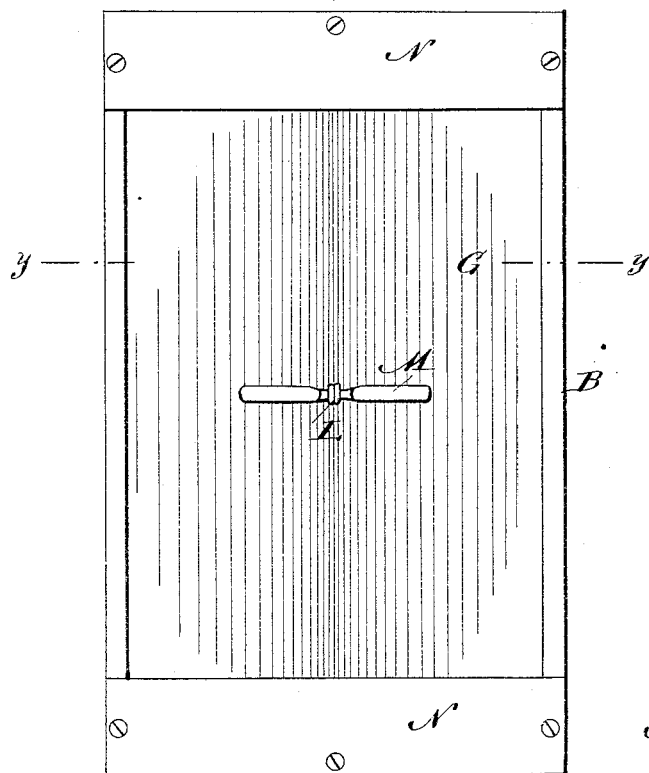


Fig. 2

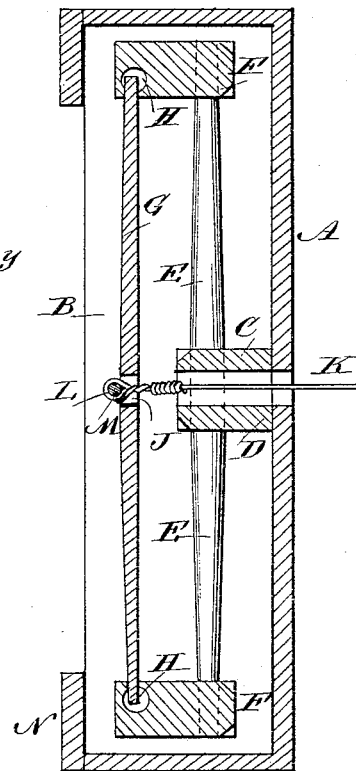
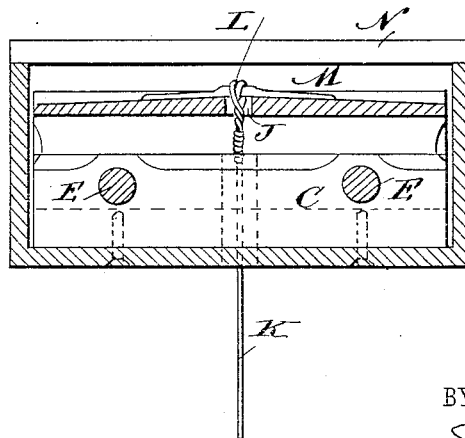


Fig. 3



WITNESSES:

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MECHANICAL TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 348,328, dated August 31, 1886.

Application filed December 21, 1885. Serial No. 186,416. (No model.)

To all whom it may concern:

Be it known that I, BLOOMFIELD LEVI KENYON, of Lee Centre, in the county of Oneida and State of New York, have invented
5 a new and Improved Mechanical Telephone, of which the following is a full, clear, and exact description.

The object of my invention is to provide
10 a new and improved transmitter and receiver for mechanical telephones, which instrument transmits all sounds distinctly and sharply, is simple in construction, and is not apt to get out of order.

The invention consists in the combination,
15 with a box, of rods held in the same, bars secured to the rods, and a diaphragm held by the said bars. A wire is passed through an aperture in the diaphragm, and through a loop formed on the end of the wire a piece
20 of wood is passed, which is held against the front of the diaphragm.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate
25 corresponding parts in all the figures.

Figure 1 is a front view of my improved telephone. Fig. 2 is a longitudinal sectional elevation of the same on the line *x x*, Fig. 1. Fig. 3 is a sectional plan view of the same on
30 the line *y y*, Fig. 1.

On the inner surface of the back, A, of a box, B, a transverse strip, C, is secured, which is provided with an aperture, D, extending from the front of the strip to the back of the
35 box. From the top and bottom of the strip C rods E project upward and downward, and the ends of each pair are united by wooden bars F adjacent to the ends of the box. The said bars F have grooves H in their inner
40 surfaces at the front edges, and in the said grooves the ends of a wooden tympanum or diaphragm, G, are placed. The grooves are widened at their bottoms, and the ends of the diaphragm do not rest on the bottoms of the
45 grooves, as shown.

The diaphragm G is provided with a central aperture, J, through which the transmitting-wire K is passed, provided at its ends with a loop, L, through which a short wooden
50 or metal cross-piece, M, is passed, which is

pressed against the front of the diaphragm. The cross-piece is preferably made of hickory or other hard or tenacious wood.

Cross-pieces N are secured on the front of the box at the top and bottom. As there is
55 no metal, or only very little, in the instrument the ringing and sharp metallic sounds are avoided, and all sounds produced are sonorous, clear, and distinct.

The apparatus is not affected by frost. It can-
60 not corrode. Contraction and expansion of the transmitting-wire does not affect the instrument. The rods E form elastic supports for the bars holding the diaphragm, and the diaphragm is held free and clear from the case
65 or box, which renders it very sensitive. The diaphragm has a very large receiving and very little resisting surface.

Having thus fully described my invention, I claim as new and desire to secure by Letters
70 Patent—

1. In a mechanical telephone-instrument, the combination, with a box, of wooden rods secured on the same, wooden bars held by the rods, and a wooden diaphragm held by said
75 bars, substantially as herein shown and described.

2. In a mechanical telephone-instrument, the combination, with the box B, of the strip C, having an aperture, the rods E on the strip,
80 the bars F, secured to the rods E, and the diaphragm G, held in the bars F, substantially as herein shown and described.

3. In a mechanical telephone-instrument, the combination, with the box B, of the strip C, the rods E, the bars F, having grooves H,
85 and the diaphragm G, having its ends passed into the said grooves, substantially as herein shown and described.

4. In a mechanical telephone-instrument, 90 the combination, with the box B, of the strip C, the rods E, the bars F, the diaphragm G, having the aperture J, the wooden cross-piece M, and of the wire K, substantially as herein shown and described.

BLOOMFIELD LEVI KENYON.

Witnesses:

CHARLES E. STEDMAN,
WILLARD DUNBAR.