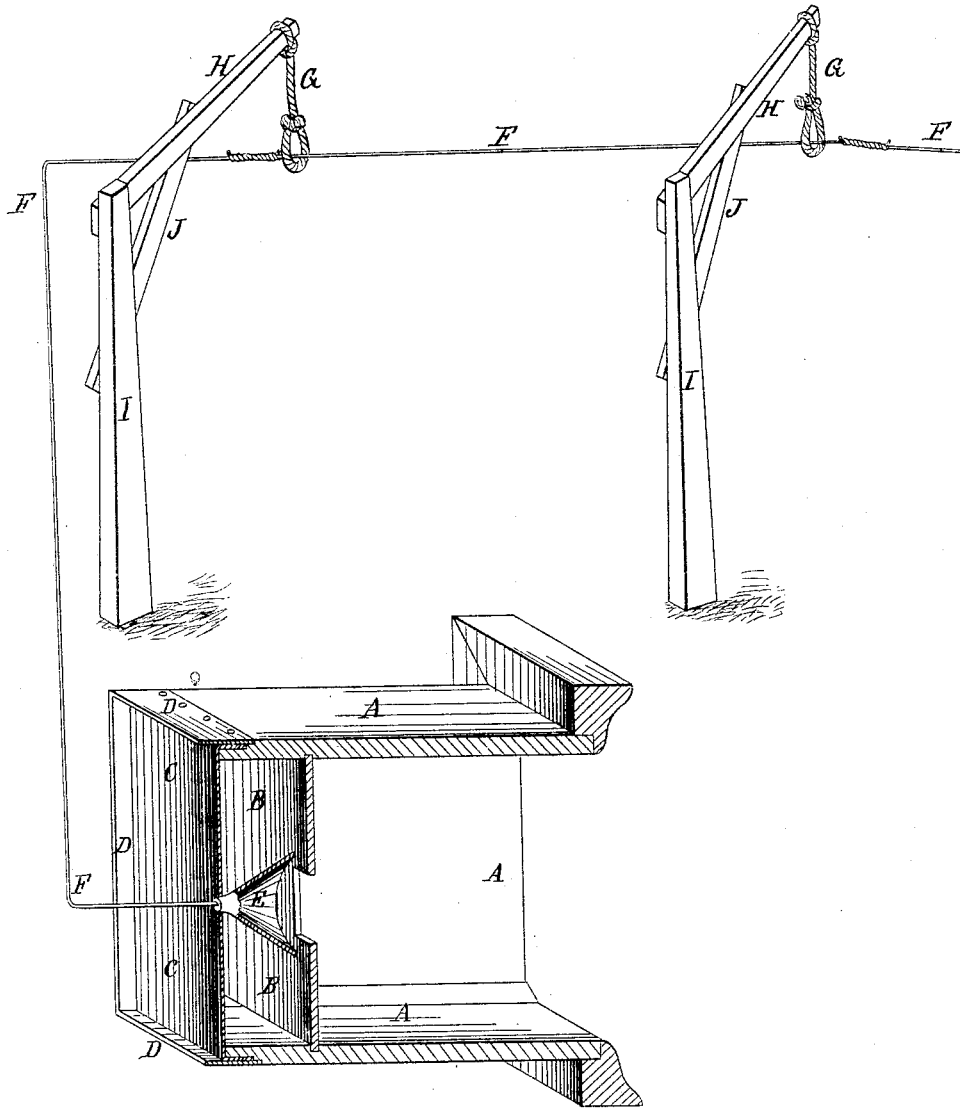


H. D. & I. D. JEWETT.
Mechanical Telephone.

No. 211,161.

Patented Jan. 7, 1879.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

HIRAM D. JEWETT AND ISRAEL D. JEWETT, OF ST. OMER, INDIANA.

IMPROVEMENT IN MECHANICAL TELEPHONES.

Specification forming part of Letters Patent No. **211,161**, dated January 7, 1879; application filed October 12, 1878.

To all whom it may concern:

Be it known that we, HIRAM D. JEWETT and ISRAEL D. JEWETT, of St. Omer, in the county of Decatur and State of Indiana, have invented a new and useful Improvement in Agophones, of which the following is a specification:

The figure is a sectional perspective view of our improved agophone, showing the connecting-line and its supports.

The object of this invention is to furnish an apparatus which shall be so constructed as to receive the full volume and force of the voice and other sounds, magnify them, and transmit them to the instrument at the other end of the line with distinctness, so that they can be clearly heard at considerable distance from the instrument.

The invention consists in the combination of the box, the wooden sounding-board, coated with glue and having an opening formed through its center, the metal diaphragm, and the metal cone, with each other and with the line; in the line formed of pieces or sections of brass and copper wires; and in the combination of the hemp cords with the line and its supports, for supporting and insulating the said line, as hereinafter fully described.

A is a square or round box, made of thin wood or other suitable material, and which is provided with a sounding-board or bottom board, B, at the distance of an inch, more or less, from its farther end. The sounding-board or bottom B is made of thin white pine or its equivalent, and is rabbeted into and firmly glued in the said box. The sounding-board or bottom B, before being secured in the box A, is covered all over with a solution of glue, and thoroughly dried, to strengthen it and increase its vibratory qualities.

C is a diaphragm, made of thin sheet metal, placed upon the farther end of the box A, so as to form a sounding-chamber between it and the sounding-board B, and having its edges bent down over the sides of the edge of the said box A, which bent-over edges are covered

by a sheet-metal rim or band, D, secured near its inner edge to the said box A, and having its outer edge projecting a little beyond the diaphragm C.

The sounding-board B has a square or round opening formed through its center, and in the sounding-chamber is placed a hollow cone or intensifier, E, with its open base directly opposite the said opening through the said sounding-board B. The cone or intensifier E is designed to increase or intensify the sound, is made of thin sheet-brass or equivalent material, and has small holes formed in it near its apex, in which is secured the end of the line F, which passes out through a hole in the center of the diaphragm C, and its other end is connected with a similar instrument at the place to which the sounds are to be transmitted.

The line F is formed of pieces or sections of brass and copper wires, the ends of which are overlapped, and the end of each section is wrapped around the body of the adjacent section. The line F is suspended and insulated by being passed through loops in the lower ends of the hemp cords G, the upper ends of which are secured, by a slip-noose or otherwise, to the outer ends of the arms H. The arms H, at their inner ends, are attached to the upper ends of the posts I, and are strengthened in position by the inclined braces J, attached to them and to the said posts I.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination of the box A, the wooden sounding-board B, coated with glue and having an opening formed through its center, the metal diaphragm C, and the metal cone or intensifier E, with each other and with the line F, substantially as herein shown and described.

HIRAM DAYTON JEWETT.
ISRAEL DAVID JEWETT.

Witnesses:

PERRY LANE,
JOHN B. HOLMES.