

(No Model.)

G. W. LORD.
MECHANICAL TELEPHONE.

No. 359,216.

Patented Mar. 8, 1887.

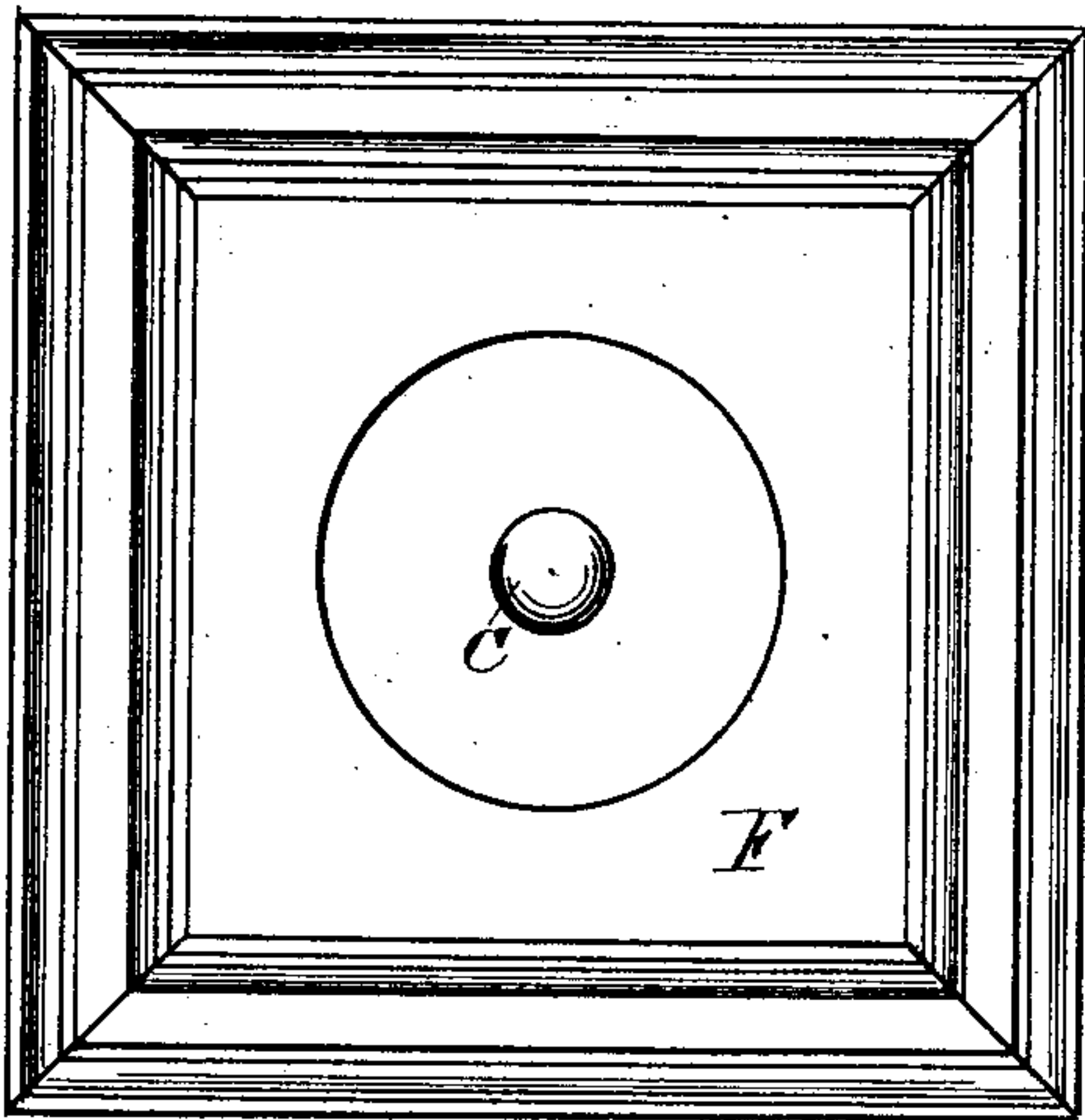


Fig. 1.

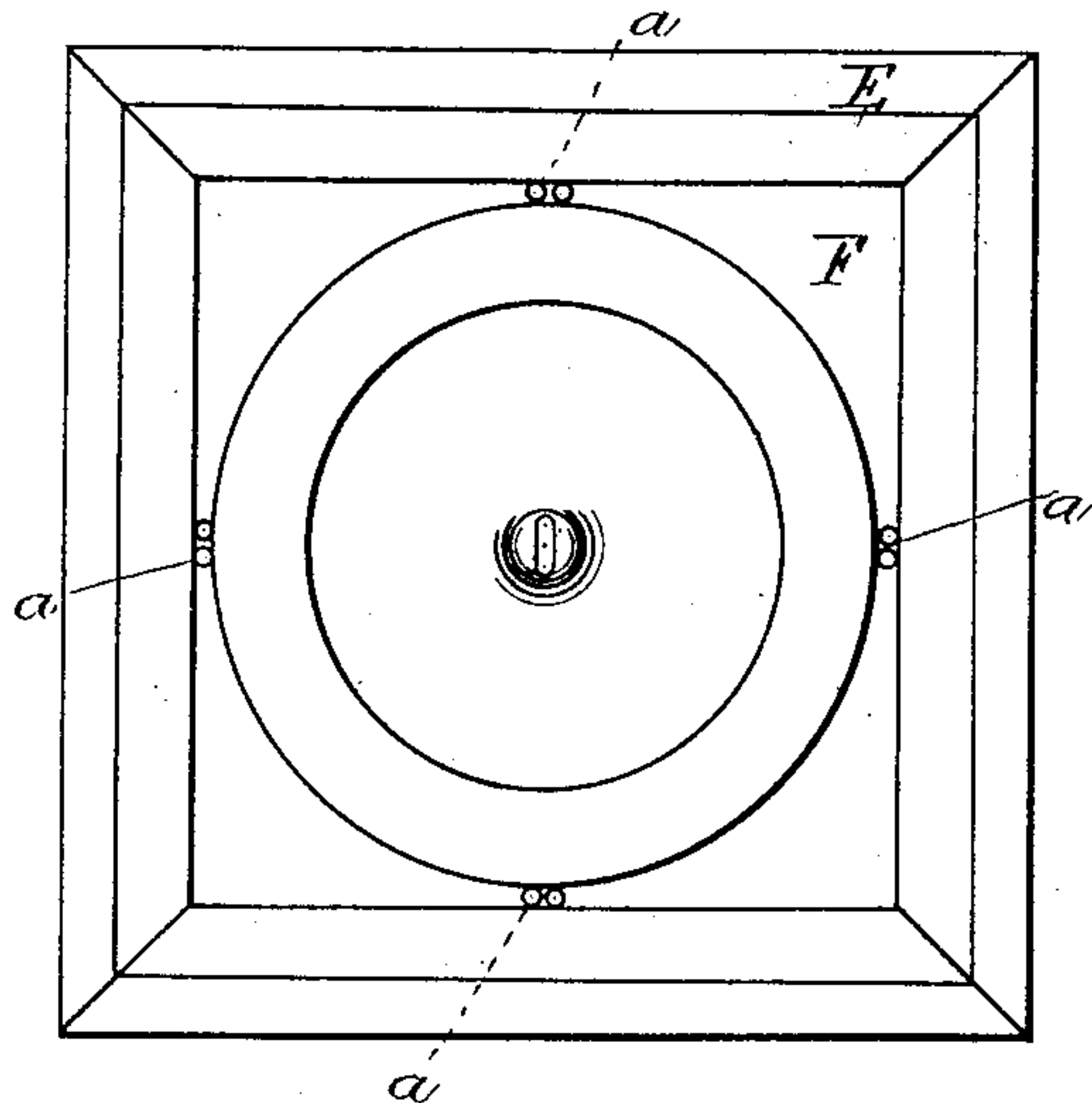


Fig. 2.

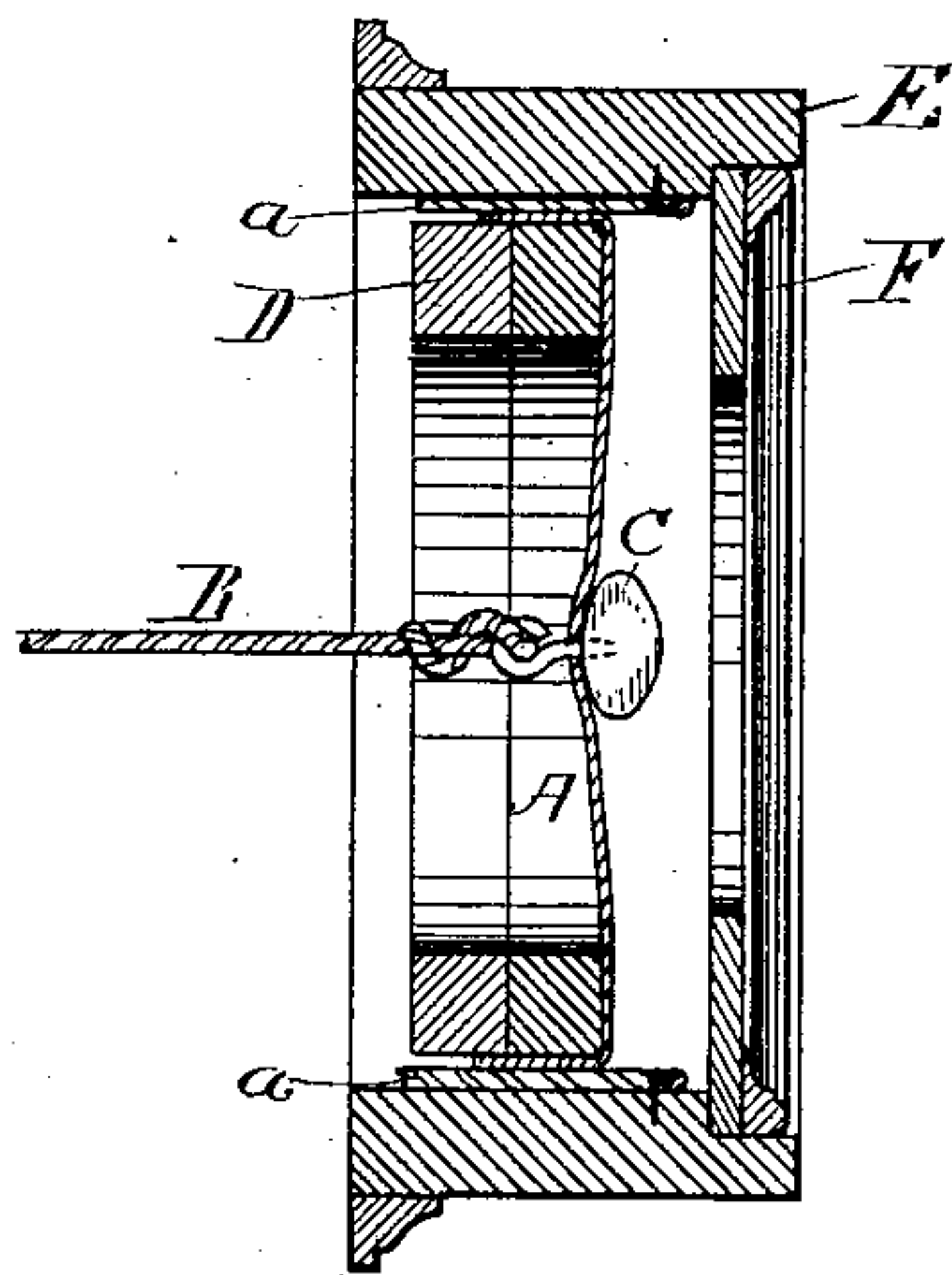


Fig. 3.

WITNESSES.

John M. Briggs.

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UNITED STATES PATENT OFFICE.

GEORGE W. LORD, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE LORD ACOUSTIC TELEPHONE MANUFACTURING COMPANY, OF SAME PLACE.

MECHANICAL TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 359,216, dated March 8, 1887.

Application filed October 20, 1886. Serial No. 216,703. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. LORD, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Mechanical Telephones, of which the following is a specification.

The object of this invention is to prevent the dissipation by the inclosing-case of sound-waves striking upon the diaphragm of a mechanical telephone, or the taking up of sound-waves by the diaphragm through the case, and also to obtain an increase in the efficiency of the instrument.

To these ends the invention consists, first, in insulating the diaphragm from the case by some substance which is a non-conductor of sound, by inserting such substance between the periphery of the ring to which the diaphragm is attached and the inner face of the case, substantially as hereinafter more fully set forth, and, second, in the provision of a chamber in front of the diaphragm, as also hereinafter more fully set forth.

In the accompanying drawings is represented a form of mechanical telephone which embodies the principle of my invention.

In the drawings, Figure 1 is a front view of the telephone. Fig. 2 is a rear view, and Fig. 3 is a sectional view, of the same.

In the several figures the same letters refer to the same parts.

Referring to the drawings, A is the diaphragm. B is the conducting-wire connected

to the diaphragm by a knot, C, in the usual manner; and D is a ring of wood, over which the diaphragm is stretched and to which it is secured. This ring is fitted within the square case E, but is separated from the same where it is tangential to the case by small pieces, *aa*, of some material which is a non-conductor of sound—as, for example, tarred rope—which may be placed in any manner to prevent the contact of the wooden ring with the case. The effect of these insulating-pieces is to prevent the conduction of sound-waves from the diaphragm to the case or from the case to the diaphragm.

F is a thin board of wood, which has a circular opening cut therein, and is fitted in the case a short distance from the diaphragm, so that a resonant chamber is formed between the board F and the diaphragm.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The diaphragm A and ring D, in combination with the square case E and sound-insulating material inserted between the periphery of said ring and the said case at the point of contact, substantially as set forth.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE W. LORD.

Witnesses:

THOMAS F. WELLS,
JOHN H. COOMBS.