

(No Model.)

J. A. LAKIN.
ACOUSTIC TELEPHONE.

No. 255,174.

Patented Mar. 21, 1882.

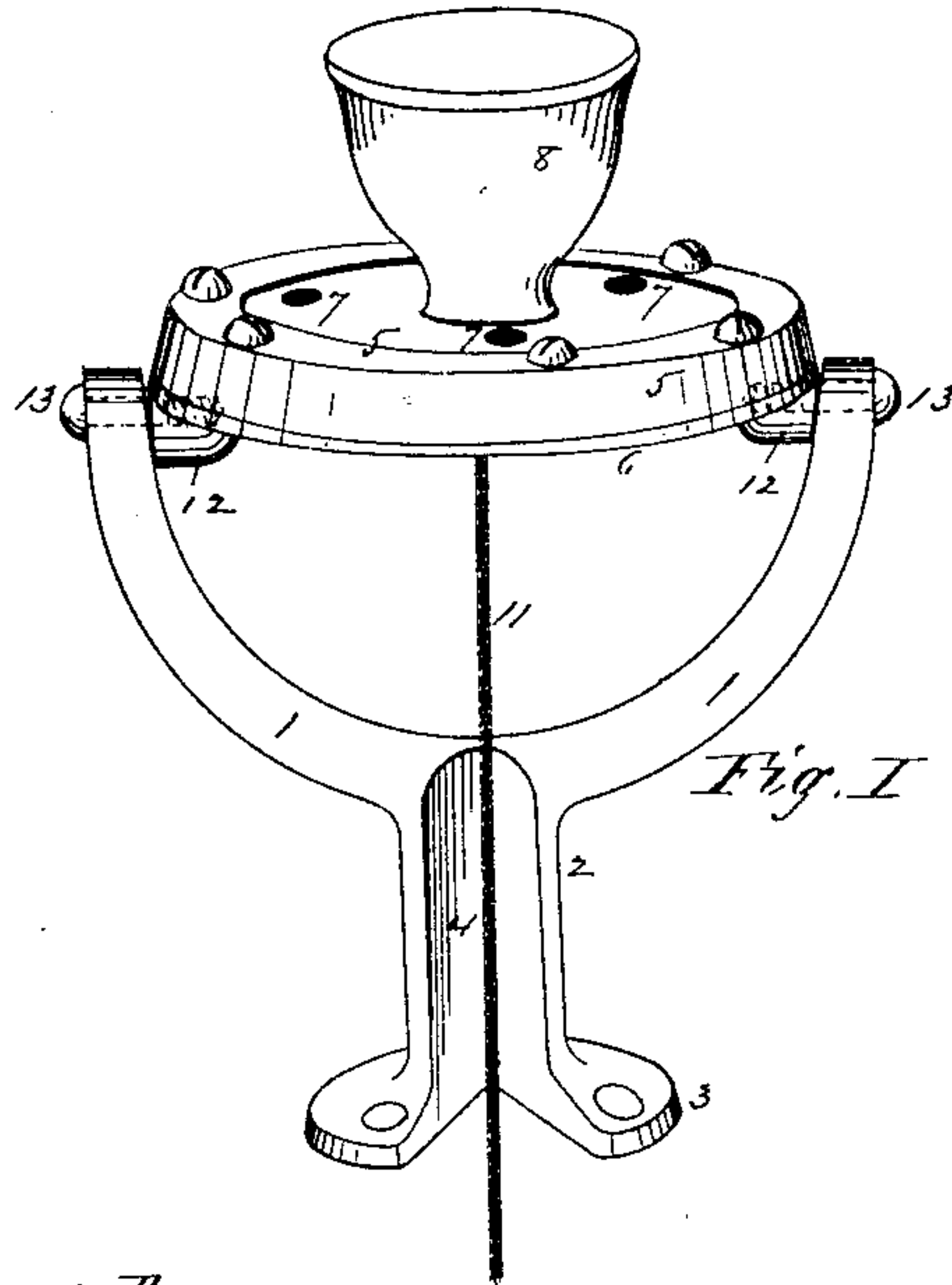
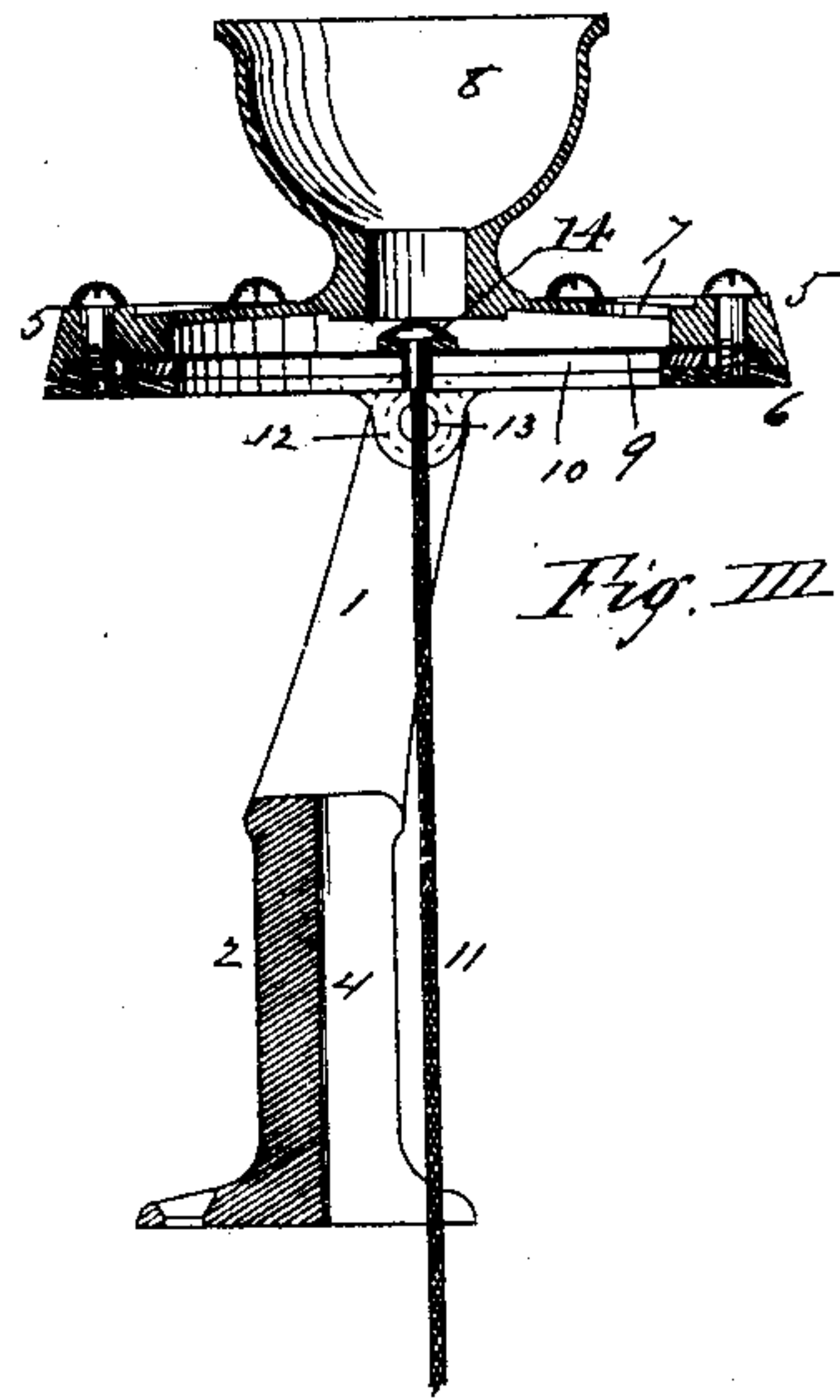
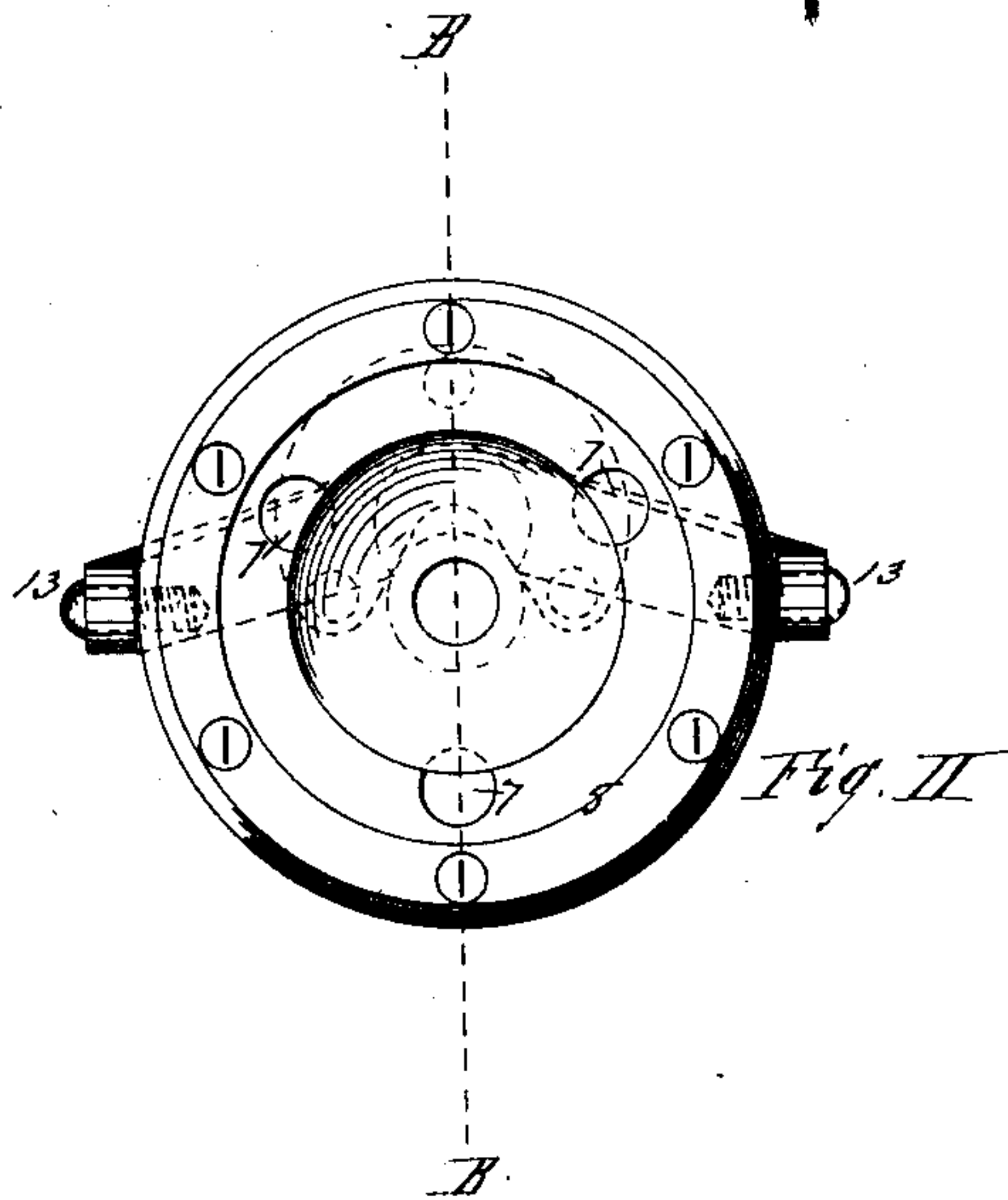


Fig. IV

11



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES A. LAKIN, OF WESTFIELD, MASSACHUSETTS.

ACOUSTIC TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 255,174, dated March 21, 1882.

Application filed May 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. LAKIN, of Westfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Acoustic Telephones, of which the following is a specification and description.

The object of my invention is to increase the volume of sound transmitted between two connected telephones, to facilitate the hearing of the transmitted sound without removing the mouth from the mouth-piece of the instrument, and to permit the wire or connecting medium to extend out through the room or building in any desired direction from the instrument without changing the location of the latter, and I accomplish this in the manner substantially as hereinafter described, and illustrated in the accompanying drawings, in which—

Figure I is a perspective view of my invention. Fig. II is a plan view of the same. Fig. III is a section of the same at line B of Fig. II, and Fig. IV is a view of one modification of the wire or medium which I use to connect the diaphragms of two telephones.

In the drawings, 2 denotes a bracket provided with a flange, as 3, having holes by which to secure it in any position to the wall by screws, and which bracket terminates in two arms, as 1, and the main part of the bracket 2 may have a recess, as 4, therein, extending along its length, and the arms 1, instead of extending in the same plane with the part 2, extend therefrom at a slight angle, the said arms terminating at a point in a plane at one side of the part 2, as shown clearly in Fig. III.

The telephone itself consists of a disk, as 5, provided with an ordinary mouth-piece, as 8, said disk being secured firmly to a back piece, as 6, provided with a central opening, through which extends the wire or medium, as 11, which is attached to the diaphragm 9, or to a button, as 14, connected with said diaphragm, the latter being firmly clamped between the disk 5 and the piece 6, in the ordinary manner. The disk 5 is provided with any desired number of apertures, as 7, through which the

sound passes in receiving a message, so that when two persons are using two telephones connected by a wire or suitable medium the sound received in the sound-chamber between the diaphragm 9 and disk 5 passes out through the apertures 7, and is distinctly heard by the person receiving the message without removing his mouth from the mouth-piece.

Instead of an ordinary single wire secured to and connecting the diaphragm of one telephone with that of another, I use two or more placed side by side and touching each other at short intervals. I have obtained the best results from the use of such wires twisted or braided together, forming a single braided strand or cable similar to the ordinary wire picture-cord, as the sound seems to be more diffused, conveyed more distinctly, and to fill the sound-chamber between the diaphragm and front disk, 5, much better than when conveyed through a single wire, or a wire merely doubled. The braided cable 11 is attached to the ordinary button in the diaphragm, as shown clearly in the drawings.

The telephone-instrument, consisting of the disk 5, with its mouth-piece, and the piece 6, between which and the front disk the diaphragm is secured, may all be made quite thin and suspended between the arms 1 of the bracket by screws or pivots inserted through the extremity of the arms into holes in the piece 6, or into sockets made thereon to receive said screws or pivots, as shown in the drawings.

In some cases the brackets 2 may be secured to the wall in such position that it will be necessary for the connecting medium 11 to pass out through the side of the room or building in very close proximity to the bracket, in which case the said medium may extend along the recess 4 in the bracket without liability of coming in actual contact with the bracket, and thereby interfering with the perfect transmission of the sound. This feature of the recess 4 in the bracket is not essential to its practical and successful use for the purpose of suspending a telephone therein, inasmuch as the bracket may be so fastened with reference to

the position of the connecting-wire 11 as that the latter shall not interfere with the bracket.

It will be seen that the bracket 2 may be secured to the wall of a room, or to a fixed table, and the instrument itself may be tilted on its pivots to any desired angle, so that the wire or connecting medium may extend in different directions to pass out through the building without disturbing the bracket itself; but with the recess made in the bracket there is less liability of being obliged to change the position of the bracket on account of any change in the line-wire, and the latter may also be adjusted so that its tension shall be more in the direction of the length of the bracket, and thereby be firmer and more substantial.

Having thus described my invention, what I claim as new is—

1. The combination of a bracket adapted to be secured in a permanent position upon a table or wall, and terminating in two supporting-

arms, one opposite the other, and a telephone suspended between said arms upon pivots secured thereto, so as to tilt to any desired inclination therein, substantially as described. 25

2. The combination, in a telephone, of the diaphragm and the front disk or cover supporting the mouth-piece, and provided with sound-apertures through said front disk, for the diffusion of the sound from the sound-chamber, substantially as described. 30

3. The combination of the diaphragms of two telephones and a series of sound-conducting wires intertwined or braided together, and connecting said diaphragms by suitable means of attachment of said wires thereto, substantially as described. 35

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Witnesses:

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