

(No Model.)

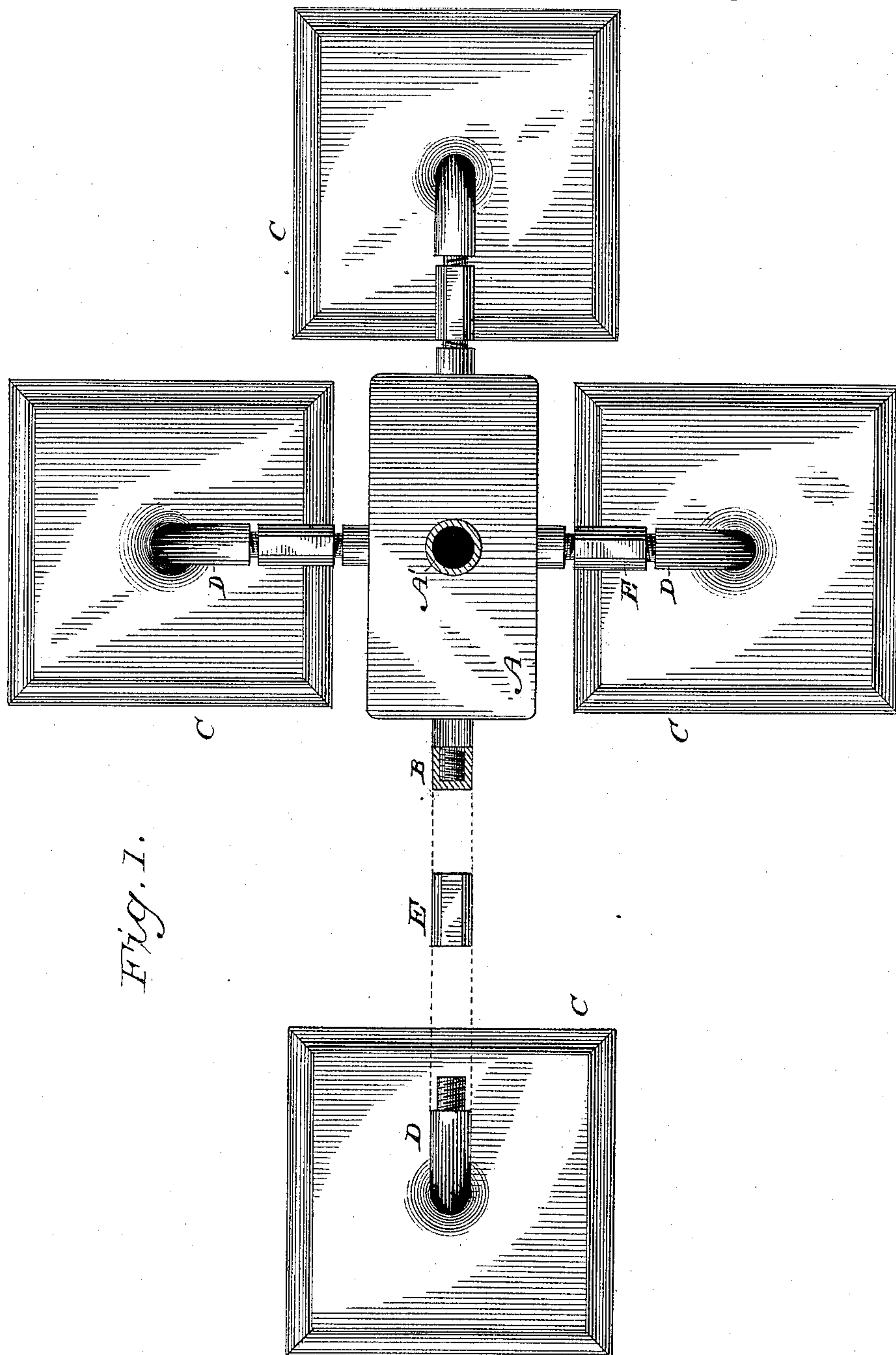
2 Sheets—Sheet 1.

T. J. PERRIN.

TELEPHONE TRANSMITTING APPARATUS.

No. 324,728.

Patented Aug. 18, 1885.



WITNESSES

Ed. A. Newman,
Cal. C. Newman,

INVENTOR

Thomas J. Perrin.

By his Attorneys

Baldwin, Hopkins & DeGow.

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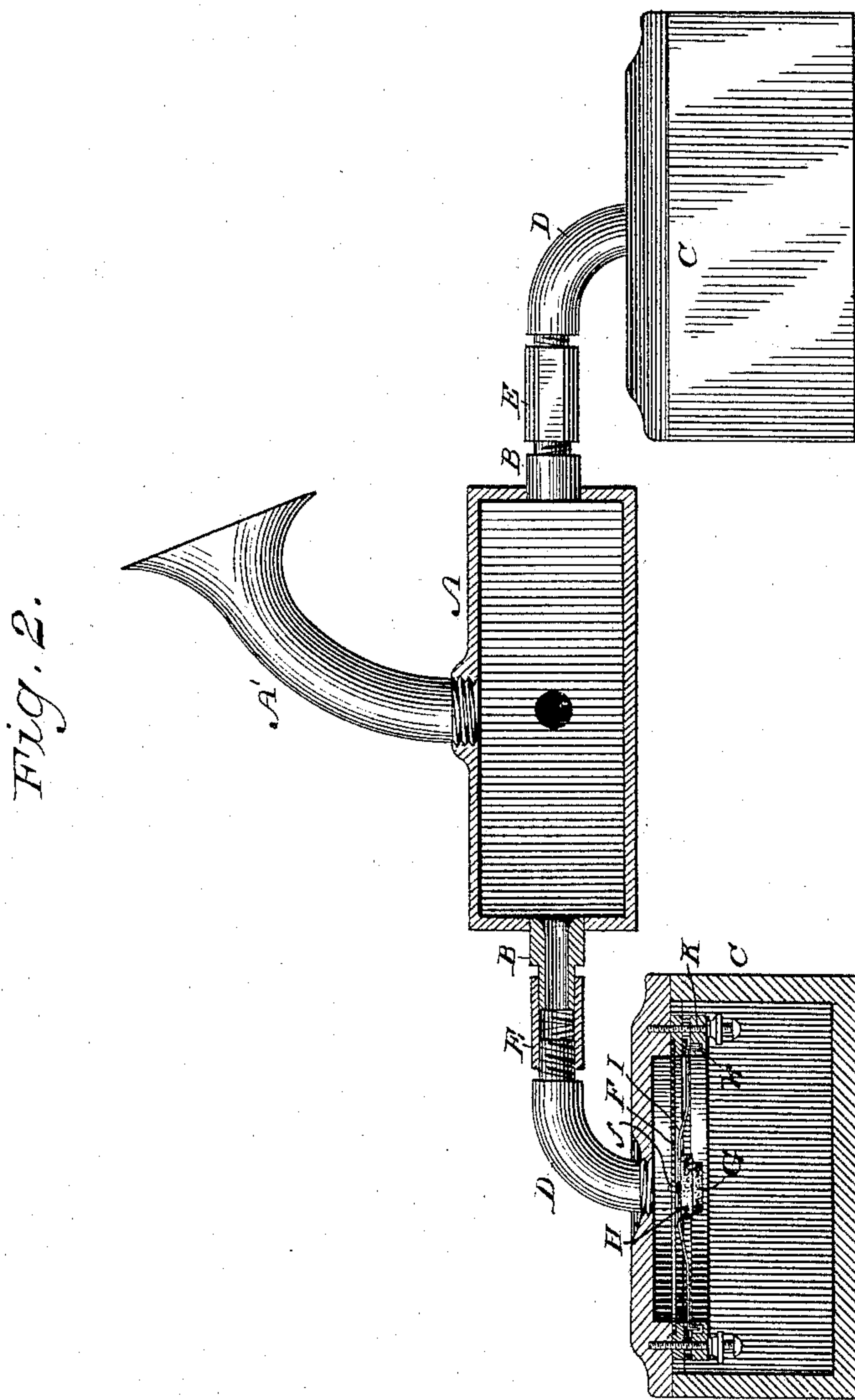
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UNITED STATES PATENT OFFICE.

THOMAS J. PERRIN, OF NEW YORK, N. Y., ASSIGNOR TO THE NATIONAL IMPROVED TELEPHONE COMPANY, OF NEW ORLEANS, LOUISIANA.

TELEPHONE TRANSMITTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 324,728, dated August 18, 1885.

Application filed March 23, 1885. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. PERRIN, of New York city, State of New York, have invented certain new and useful Improvements in
5 Telephonic Transmitting Apparatus, of which the following is a specification.

My invention relates to that class of instruments in which several transmitting - diaphragms are employed either to transmit the
10 same utterance into different circuits or to intensify the effect in a single circuit; and the invention consists in certain improvements in the apparatus for conveying the vibrations of the sound uttered to the several diaphragms.

15 In the accompanying drawings, Figure 1 is a plan view of my improved apparatus, and Fig. 2 a part elevation partly in section.

A sounding or resonating box, A, of suitable depth, breadth, and length, and preferably rectangular in cross-section, is made of
20 some resonant material, such as light, well-seasoned wood, and is provided with a mouth-piece, A', which is screwed or otherwise secured centrally in its upper face. Short outwardly-projecting tubes, B, are secured in
25 apertures in the flat sides of the resonating-chamber A, and the outer ends of these tubes are screw-threaded, as shown. Each diaphragm is secured in a suitable case, C, in the
30 upper face of which, and centrally over the diaphragm, a sound-conveying tube, D, is screwed or otherwise secured. The upper end of this tube is screw-threaded in a direction reverse to that of its corresponding tube,
35 B, and the tubes B and D are drawn together by a reversely internally-threaded sleeve or nut, E. I have illustrated in the present instance transmitters having horizontal diaphragms, as clearly shown at the left-hand
40 side of Fig. 2, and have therefore employed curved sound-conveying tubes D in connection with them, as shown. The diaphragm F is shown as carrying a downwardly-projecting pin, f, on the lower end of which an electrode, G, is carried. The other electrode, H,
45 rests loosely on top of the electrode G, and the pin f passes through it. The upper electrode, H, carries a light metal arm, I, which pro-

jects radially from opposite sides, and is turned down at its ends, so that its ends run
50 in an annular well, k, in a ring, K, secured in the frame. This well is to contain mercury or other suitable conducting-fluid, and the primary circuit will be from one pole of the local battery to the mercury, thence through the arm I, button H, lower button, G, to opposite pole of the battery.

No claim is made herein to this construction; it is merely illustrated as one form of transmitter which may be used in connection
60 with my improved sound-distributing apparatus, and it forms the subject-matter of another application, filed March 27, 1885, and numbered 160,314.

By employing a central resonating or sound-
65 ing chamber and separable tubes leading from thence each to an independent diaphragm I am able to connect or disconnect a transmitting-diaphragm with any of the tubes, so that I may use as many as the sounding-chamber
70 affords connection for; or I may disconnect some of them and plug up their tubes B.

I prefer to make the sounding-chamber rectangular in cross-section and of resonant material, so that it will take up and more effectively convey the sound-vibrations to the several diaphragms.

I claim as my invention—

1. The combination of the independent central resonating-chamber, the jointed separable
80 sound-conveying tubes radiating therefrom, and the transmitting diaphragms and electrodes.

2. The combination of the independent central resonating-chamber, a mouth-piece and
85 sound-conveying tube connected therewith, the curved jointed or separable sound-conveying tubes leading to the several transmitters, and horizontal transmitting diaphragms and electrodes.

In testimony whereof I have hereunto
90 subscribed my name.

THOMAS J. PERRIN.

Witnesses:

JNO. R. JUDEN,
E. C. DAVIDSON.