

(No Model.)

W. J. BOWEN.
MECHANICAL TELEPHONE.

No. 285,004.

Patented Sept. 18, 1883.

Fig. 2

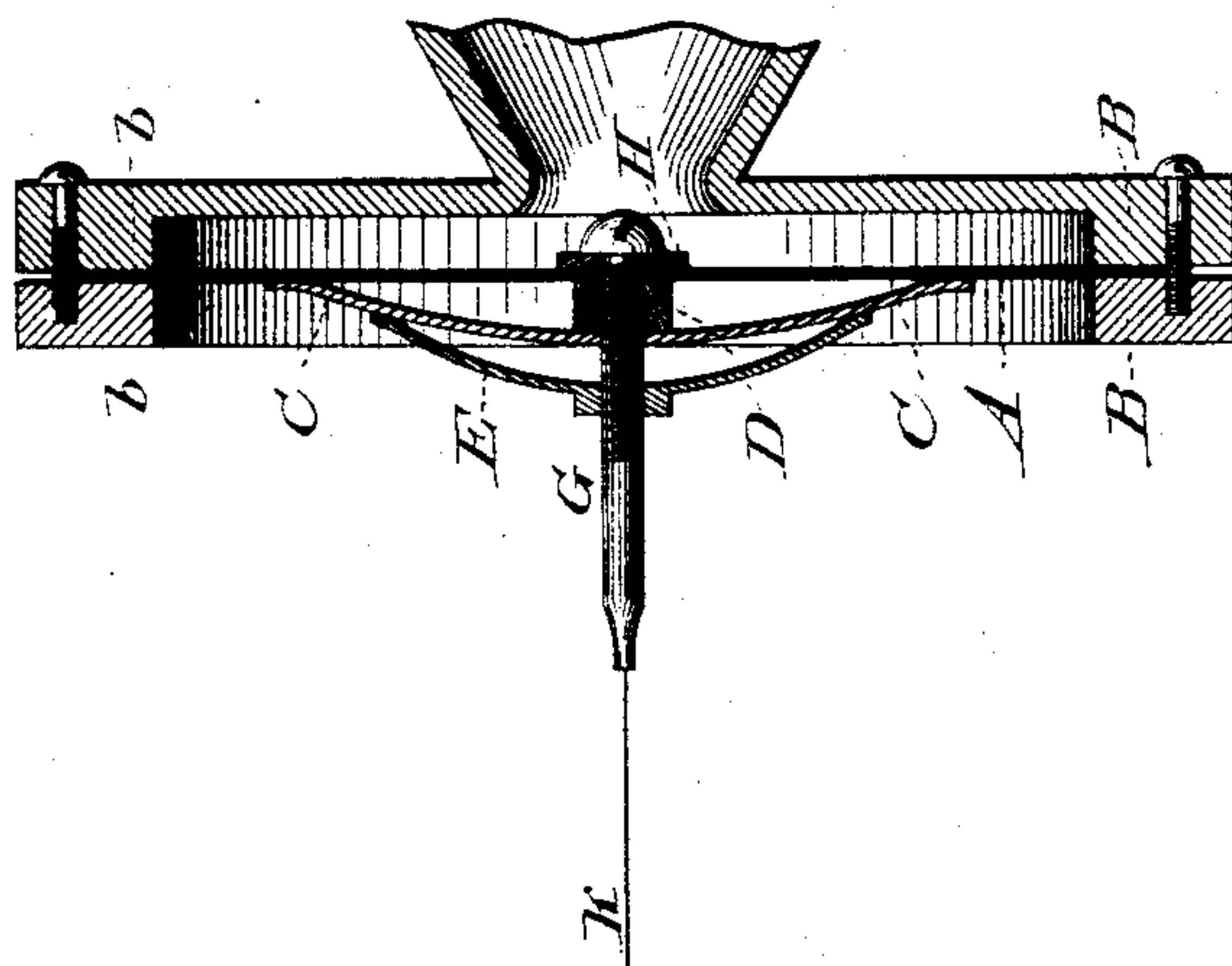
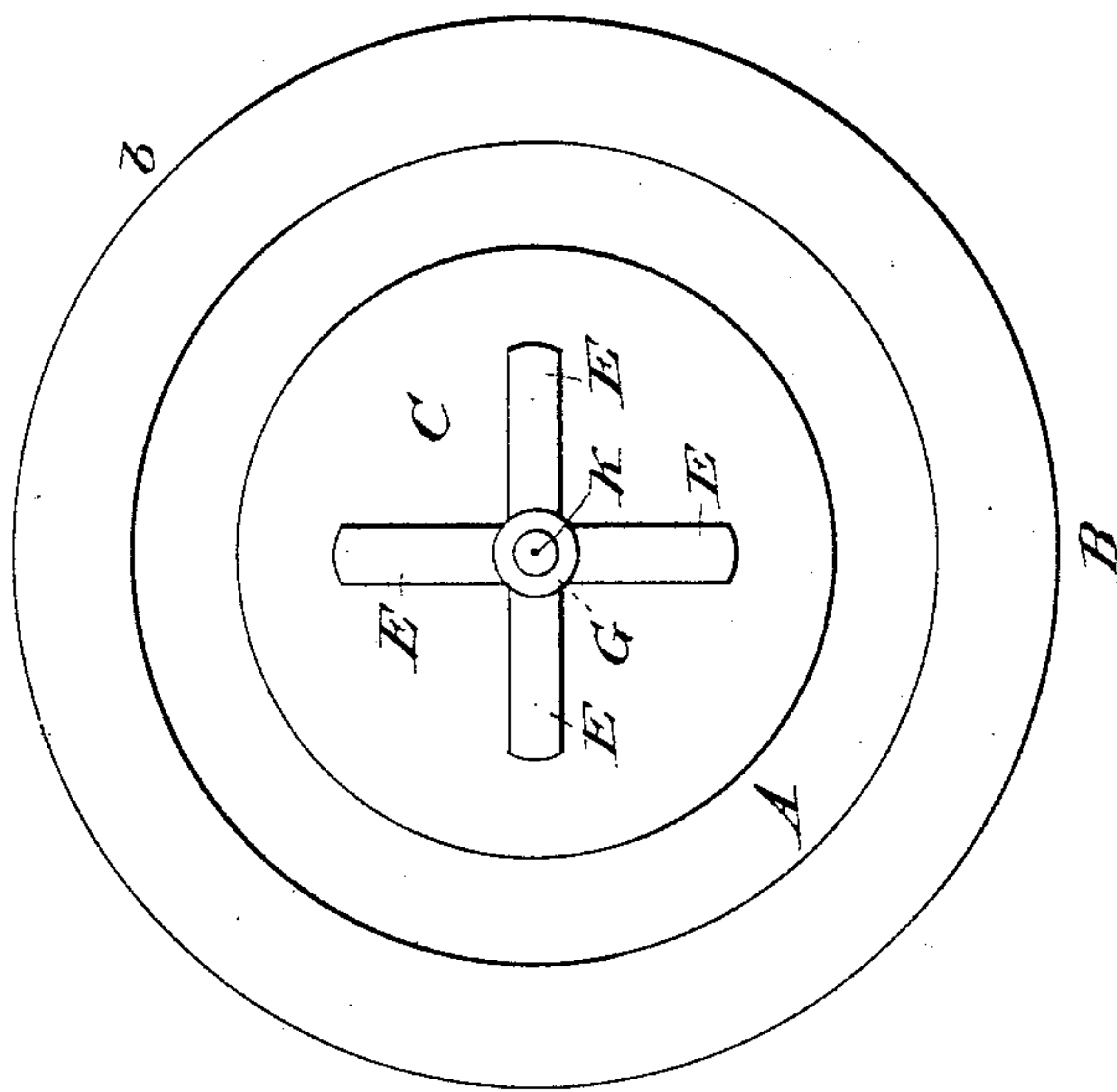


Fig. 1.



Witnesses:
L. A. Gates
L. D. Lindsay

Inventor.
Wm. J. Bowen

UNITED STATES PATENT OFFICE.

WILLIAM J. BOWEN, OF NORWALK, OHIO, ASSIGNOR TO HIMSELF, T. T. KECHLER, OF CINCINNATI, OHIO, AND Z. C. THWING, OF MARSHALL, MICH.

MECHANICAL TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 285,004, dated September 18, 1883.

Application filed October 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BOWEN, a citizen of the United States, residing at Norwalk, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Mechanical Telephones, of which the following is a full, clear, and exact description.

The object of my invention is to obtain a more perfect operation of mechanical telephones in respect to clearness of sound.

To this end my invention consists in an adjustable dampener, which is so constructed and connected with the diaphragm as to be entirely supported by and to vibrate with it.

Reference being had to the accompanying drawings, (forming a part of this specification, in which similar letters of reference indicate corresponding parts in both figures, Figure 1 is a rear view of the instrument, and Fig. 2 is a cross-section of same.

A, Fig. 2, is the diaphragm, clamped between the two sections of the case B B b b, as usual.

Behind the diaphragm A is a disk, C, of soft and elastic material, preferably india-rubber, pressed down at its edge upon the diaphragm, from which its center is raised and supported by the tubular rubber spring D.

E E E E are the back-pressure springs, which are flat metallic springs, fastened to a common center, each spring forming an arm radiating out from the center and bent inward, so that their extremities press in toward the diaphragm at different points, and at

a short distance from the edge of the disk C, the pressure being adjustable by means of screw G. The back-pressure springs E E E E are thickened at the center by soldering on another piece of metal for the purpose of boring and threading to receive the screw G, which passes from the front of the diaphragm back through the washer H and the center of diaphragm A, the tubular rubber spring D, and the disk C, and is turned into the center of back-pressure springs E E E E, drawing them toward the diaphragm A and forming an adjustable dampener on the same, preventing false vibrations and delivering the sound clear and distinctly.

K is a portion of the main line, which is connected with the diaphragm by means of screw G.

I do not claim, broadly, the invention of a dampener applied to telephones; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In combination with the diaphragm of a telephone, the adjustable dampener, entirely supported by and vibrating with said diaphragm, as herein set forth.

2. The combination of the screw G, the back-pressure springs E E E E, elastic disk C, and tubular spring D, with the diaphragm A and case B B b b, substantially as described, and for the purposes set forth.

WILLIAM J. BOWEN.

Witnesses:

ANSON T. BOWEN,
S. T. A. VAN SCIVER.

Correction in Letters Patent No. 285,004.

It is hereby certified that in Letters Patent No. 285,004, granted September 18, 1883, upon the application of William J. Bowen, of Norwalk, Ohio, for an improvement in "Mechanical Telephones," the name of one of the assignees was erroneously written and printed "T. T. Kechler;" that said name should have been written and printed *T. Keckeler*; and that the proper correction has been made in the files and records pertaining to the case in the Patent Office, and should be read in the Letters Patent to make it conform thereto.

Signed, countersigned, and sealed this 27th day of May, A. D. 1884.

[SEAL.]

M. L. JOSLYN,
Acting Secretary of the Interior.

Countersigned:

BENJ. BUTTERWORTH,
Commissioner of Patents.