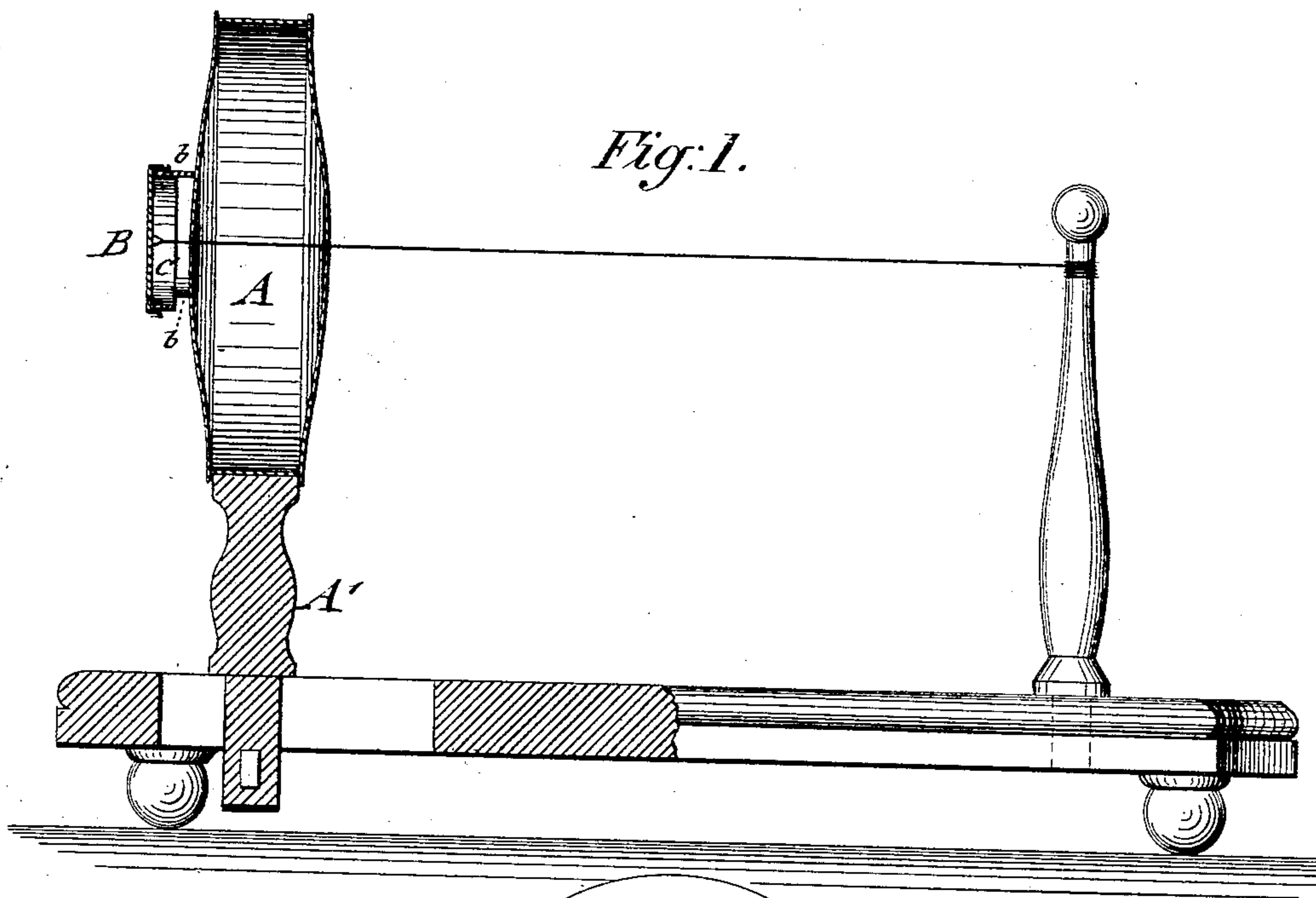


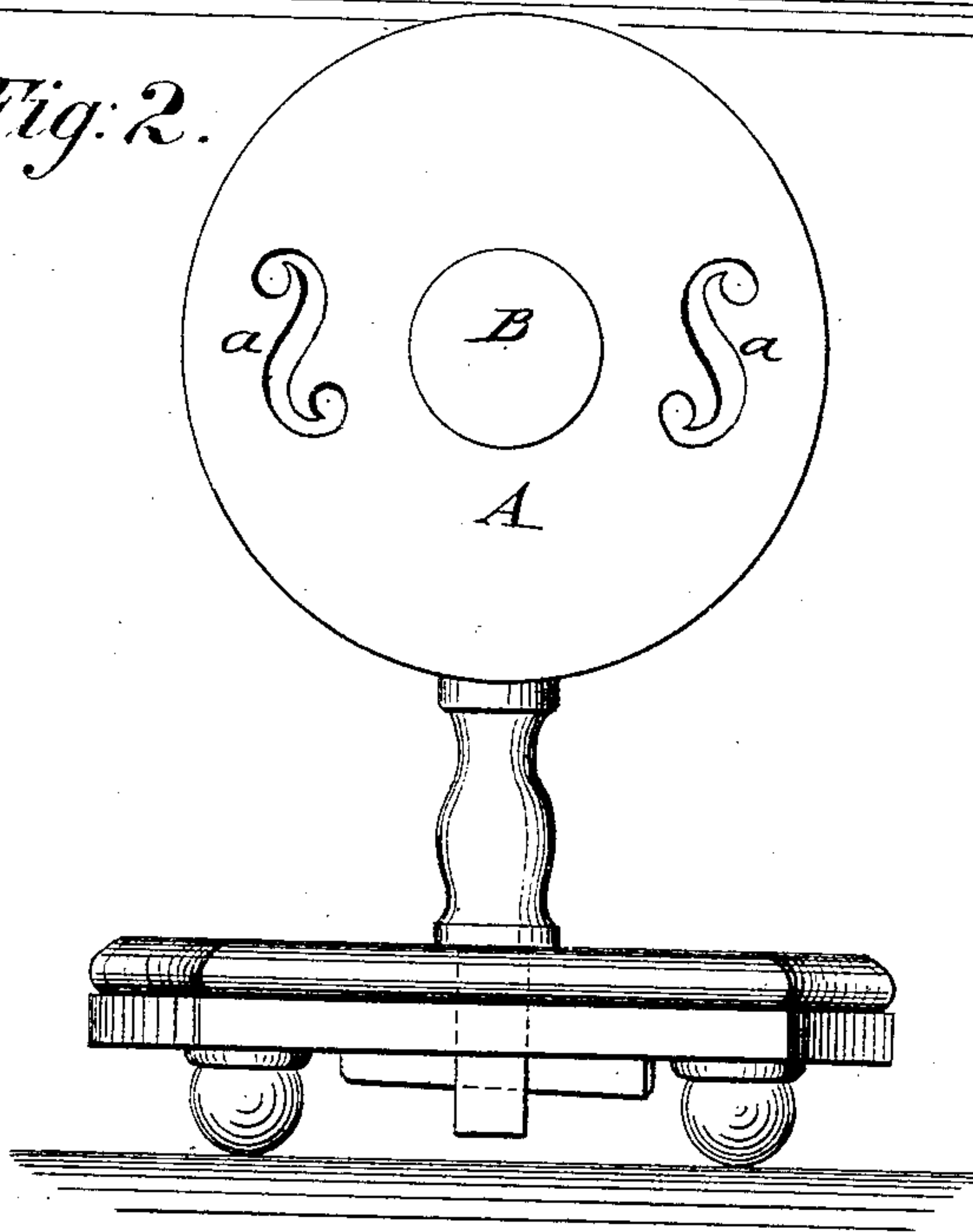
C. E. CARMON.  
Telephone-Resonator.

No. 207,011.

Patented Aug. 13, 1878.



*Fig. 2.*



WITNESSES:

*Achilles Schehl.*  
*C. Sedgwick*

INVENTOR:

*C. E. Carmon*  
BY *Munroe*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CHARLES E. CARMON, OF LYONS, OHIO.

## IMPROVEMENT IN TELEPHONE-RESONATORS.

Specification forming part of Letters Patent No. **207,011**, dated August 13, 1878; application filed June 14, 1878.

*To all whom it may concern:*

Be it known that I, CHARLES E. CARMON, of Lyons, in the county of Fulton and State of Ohio, have invented a new and Improved Telephone-Resonator, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a sectional side elevation of my improved telephone-resonator; and Fig. 2, an end elevation of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide an improved resonator or resounding-chamber for telephones, for the purpose of increasing the tone or sound transmitted to the vibrating diaphragm by means of electricity or any other means; and the invention consists of a hollow resonator, to which the vibrating diaphragm is applied and supported thereon by a metallic band with feet. The post of the resonator is made adjustable in the base for imparting the required tension to the transmitting-wire.

Referring to the drawing, A represents a resonator or resounder, that is made of thin wood or other material, in the nature of the sounding-board of a stringed musical instrument. The resonator is hollow, the sides being convex at the outside and concave at the inside, with openings *a* cut into the face side, to which the diaphragm B of a telephone is applied.

The diaphragm B is connected to the wire that transmits the vibrations, the wire passing through central holes of the sides of the resonator and out at the rear of the same.

The diaphragm B is supported on the face of the resonator by a metallic band, C, to which it

is secured by a circumferential flange that laps over a rim of the band. The metal band C rests by feet *b* on the resonator, for the purpose of giving a more distinct and clear tone.

The resonator A is supported on a post, A', that is adapted to be adjusted back and forth on its base support by means of screws, wedges, or other mechanism, for the purpose of giving the desired tension in acoustic telephones to the transmitting-wire. The resonator increases the tone or sound transmitted to the vibrating diaphragm by electricity or other means, and renders the same more clearly audible, so as to dispense with the necessity of a bell device or other call apparatus that is required in telegraph-lines before the telephones can be operated.

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

1. The combination of a resonator or resounding-chamber, having central openings in the sides for the passage of the wire or cord through the said chamber, with a vibrating diaphragm or disk, substantially as set forth.

2. The combination of a vibrating diaphragm or disk, attached to a transmitting-wire and supported by a metallic band having feet, with a resonator, substantially as set forth.

3. The combination of a vibrating disk or diaphragm, attached to the transmitting-wire, with a resonator that is made adjustable on its base-support, so as to give the required tension to the wire, substantially as specified.

CHARLES E. CARMON.

Witnesses:

B. R. RICHARDSON,  
S. H. CARMON.