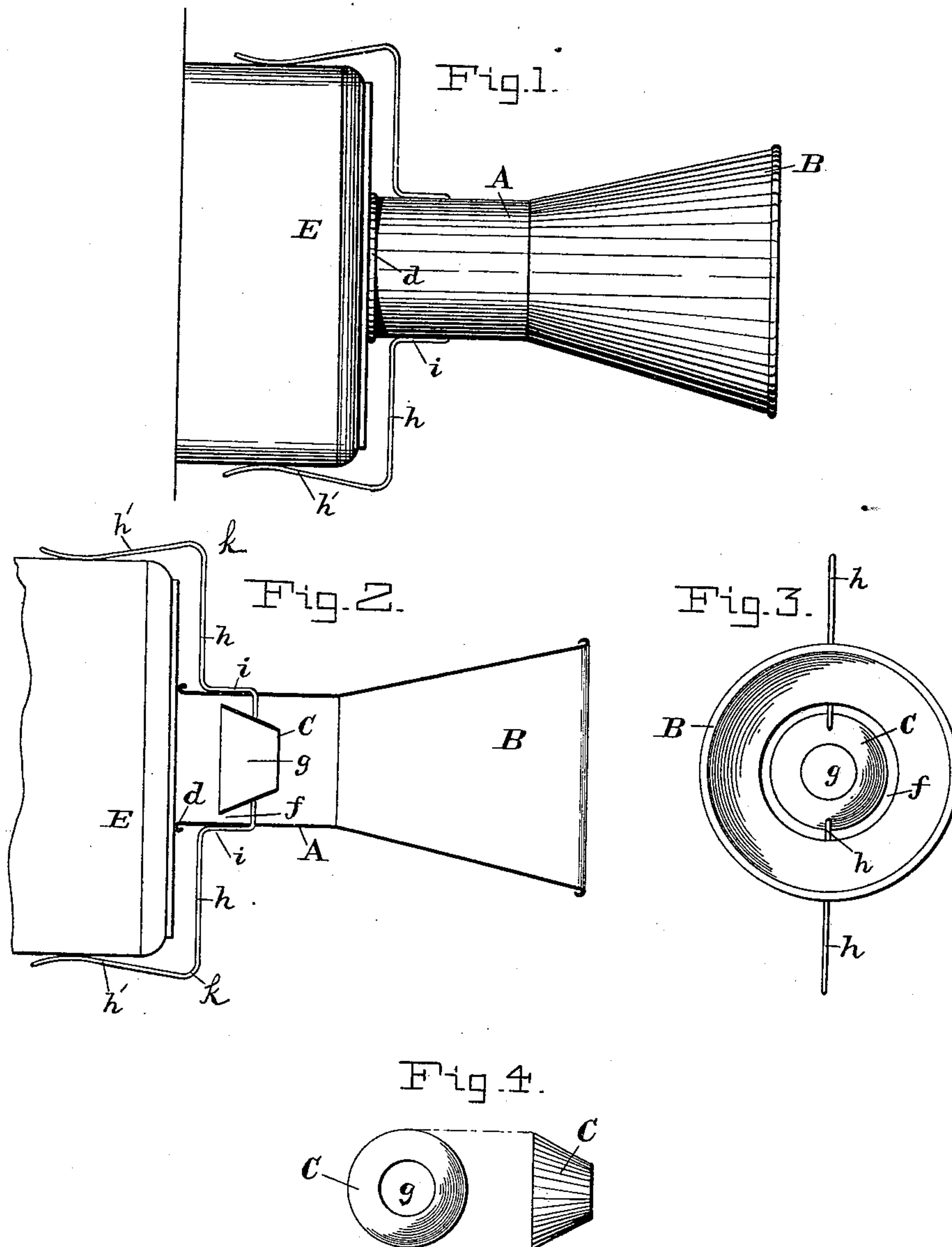


(No Model.)

E. L. HALL.
TELEPHONE TRUMPET.

No. 350,737.

Patented Oct. 12, 1886.



Witnesses:

A. C. Eader.

John E. Morris.

Inventor:

Edw L. Hall

By Chas B. Mann
Attorney

UNITED STATES PATENT OFFICE.

EDWARD L. HALL, OF BALTIMORE, MARYLAND, ASSIGNOR TO LOUIS
NELKE, OF SAME PLACE.

TELEPHONE-TRUMPET.

SPECIFICATION forming part of Letters Patent No. 350,737, dated October 12, 1886.

Application filed March 3, 1886. Serial No. 193,832. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. HALL, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Telephone-Trumpets, of which the following is a specification.

My invention relates to a trumpet attachment for telephone-transmitters, and is illustrated in the accompanying drawings, in which—

Figure 1 is a side view of an ordinary transmitter-box with the trumpet attached. Fig. 2 is a side view of a transmitter-box and a section view of the trumpet. Fig. 3 is a front or mouth end view of the trumpet. Fig. 4 shows two views of the sound-wave divider.

The letter A designates a straight tube or cylinder, B a flaring or bell-shaped mouth-piece attached to the straight tube, and C a ring-shaped sound-wave divider secured in the straight tube. This sound-wave divider has a peculiar shape, to wit: It is flaring or tapering in a direction opposite from the flare of the mouth-piece. An accurate description, perhaps, of the shape of this divider would be to state that it is of thin metal, ring shape, and viewed sidewise has the shape of a frustum of a cone.

It will be understood from the foregoing that the largest diameter of the sound-wave divider is nearest the small end *d* of the trumpet—the end which is placed against the front of the transmitter-box E. An annular space, *f*, is left around the sound-wave divider and between it and the straight tube A. This annular space constitutes one passage-way for the sound-waves, and the central opening, *g*, through the divider constitutes another. Practical test demonstrates that this particular construction serves at once to concentrate and augment the voice-tones, and adapts the trumpet to work well with a Blake transmitter.

Two spring-wires, *h*, are each secured at *i* to diametric opposite sides of the straight tube, and the end of each passes through the side of the tube, and is attached to the sound-wave divider C. From the point *i* where the wires are secured they project in opposite directions, and each has an angle-bend, *k*, and an end, *h'*. The two ends *h'* act as clamp-arms to take on the top and bottom of the transmitter-box A, and thereby hold the trumpet to its position. The two wires therefore have their inner ends holding the sound-wave divider, while their outer ends clamp the transmitter-box.

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

1. A trumpet for attachment to telephone-transmitters, comprising a tube with a flaring mouth, and a sound-wave divider having a central passage-way, *g*, and secured in the tube, and forming an annular passage-way, *f*, as set forth.

2. A trumpet for attachment to telephone-transmitters, comprising a tube with a flaring mouth, and a sound-wave divider having a ring shape and tapering like a frustum of a cone, and secured in the tube, as set forth.

3. A trumpet for attachment to telephone-transmitters, comprising a tube with a flaring mouth, and a ring-shaped sound-wave divider forming an annular passage-way, *f*, and two attached wires whose inner ends pass through the side of the tube and hold the said divider, while the outer ends serve as a clamp to grasp the transmitter-box, as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWARD L. HALL.

Witnesses:

JOHN E. MORRIS,
JNO. T. MADDOX.