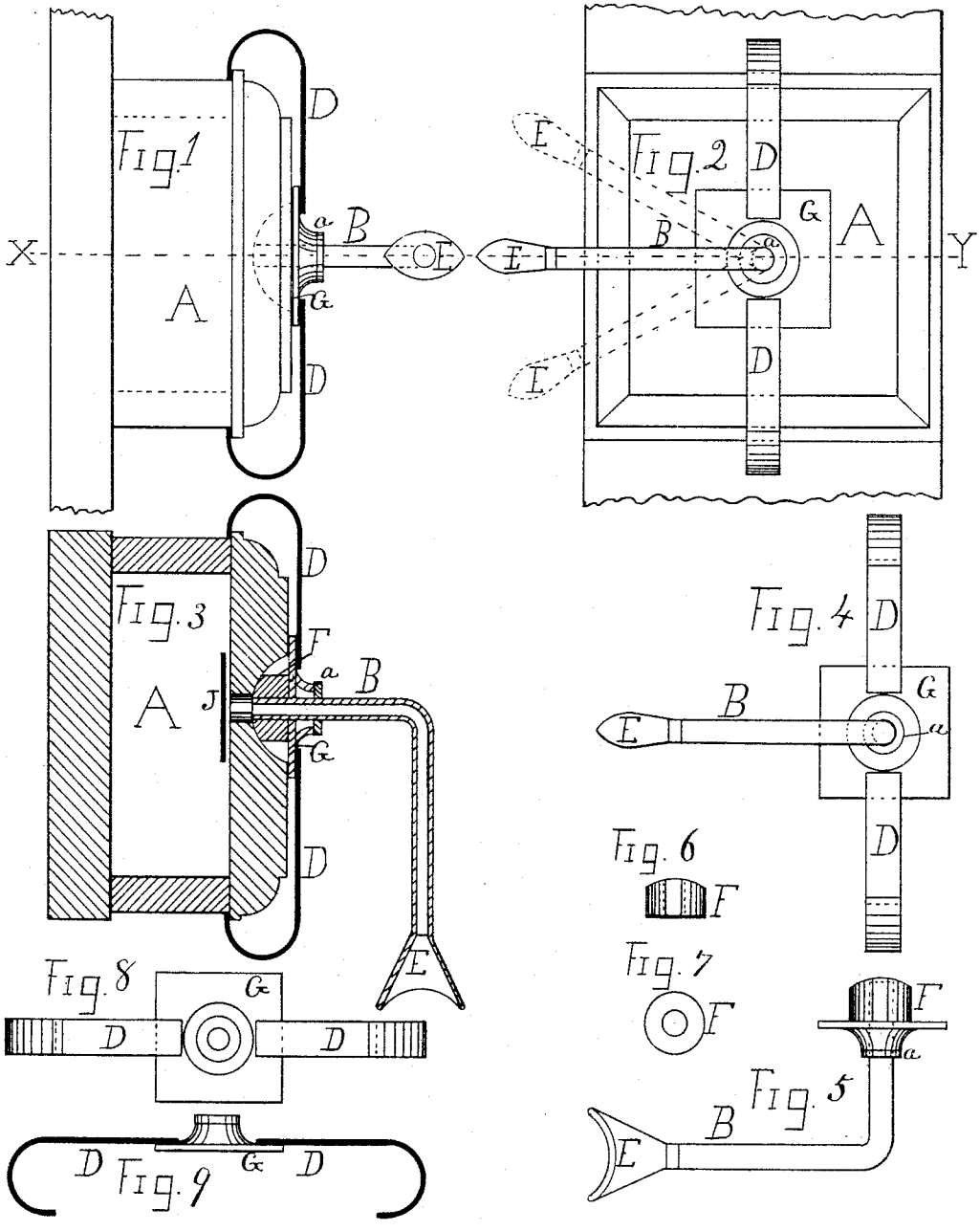
(No Model.)

W. N. MARCUS.

AUXILIARY MOUTH PIECE FOR TELEPHONES.

No. 450,358. Patented Apr. 14, 1891.



WITNESSES.

C. R. Shinn

H. W. Shinn

INVENTOR.

William N. Marcus,

by John Shinn, Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM N. MARCUS, OF PHILADELPHIA, PENNSYLVANIA.

AUXILIARY MOUTH-PIECE FOR TELEPHONES.

SPECIFICATION forming part of Letters Patent No. 450,358, dated April 14, 1891.

Application filed February 10, 1891. Serial No. 380,972. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. MARCUS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Auxiliary Mouth-Pieces for Telephones, of which the following is a specification.

It is a well-known fact that telephones are extensively used by persons of different heights and most telephones are used by persons standing.

To get the best results from a telephone-transmitter the voice of the speaker must be projected on the transmitter-diaphgram direct. For that reason I have invented an adjustable mouth-piece, which mouth-piece may be adjusted at will, so as to bring the same to a level with the mouth of the person speaking, which enables him to project his voice directly against the transmitter-diaphragm without standing on the toes or bending of the back.

My invention consists of a bent tube, to one end of which is fixed a trumpet mouth-piece, the other end being fitted in a friction-socket, and by which socket the tube is attached to the transmitter-box of the telephone by clamp-springs, as illustrated in the accompanying drawings, in which—

Figure 1 is an edge view of a telephone-transmitter box with my improved mouth-piece attached. Fig. 2 is a front view of Fig. 1. Fig. 3 is a cross-section of Figs. 1 and 2 on line X Y of Figs. 1 and 2. Fig. 4 is a front view of the mouth-piece and friction-socket. Fig. 5 is a top view of Fig. 4. Figs. 6 and 7 are views of the friction-collar. Fig. 8 is a front view of the friction-socket and spring-clamps. Fig. 9 is an edge view of Fig. 8.

Similar letters of reference in all the views indicate like parts.

A represents the transmitter-box, which is constructed in the usual manner and forms a part of the telephone-case.

B is a tube, which may be made of hard rubber or metal. It should be made with a smooth interior.

E is a trumpet mouth-piece fixed on the outer end of tube B. At the other end is a collar F. This collar I prefer to make of cork and fit it tightly on the tube.

a is a small collar and is also fitted tightly on the tube B.

G is a metal socket, to which are fixed spring-clamps D D.

The front lid of the transmitter-box is turned out saucer-shaped directly in front of the transmitter-diaphragm. Over this is fitted the socket-plate G, which is held in place by the spring-clamps D D, as shown in Figs. 1, 2, and 3. The springs D D exert a pressure on the plate G and collar F, which collar being tight on the tube the friction against the plate G and lid of box A will hold the tube in such position as it may be placed.

To use my improved mouth-piece, the speaker raises or lowers the trumpet until it is in line with the speaker's mouth, when the tube B will receive the voice and project it directly against the transmitter-diaphragm J. If desired, the mouth-piece may be used on either side of the box A.

In place of clamp-springs D D, the plate G may be fastened to the box A by wood-screws.

Having as above fully described my invention and the best manner of using the same, what I claim as new, and desire to secure by Letters Patent, is—

1. In an auxiliary mouth-piece for telephones, the combination, with a socket-plate G and clamps for attaching the same to a telephone-box, of a rigid bent tube passing through said socket-plate and capable of rotation therein, having a collar rigidly fixed thereon, the socket-plate being arranged to press against the collar to secure frictional bearing for the tube, substantially as described.

2. In an auxiliary mouth-piece for telephones, the combination, with a socket-plate for attaching the same to a telephone-box, of a rigid bent tube passing through said socket-plate and capable of rotation therein, having a collar rigidly fixed thereon, the socket-plate being arranged to press against the collar to secure frictional bearing for the tube, substantially as described.

WILLIAM N. MARCUS.

Witnesses:
JOHN SHINN,
WM. A. MILLAR.