

(No Model.)

C. A. HARRISON.

AUXILIARY MOUTH PIECE FOR TELEPHONES.

No. 327,393.

Patented Sept. 29, 1885.

Fig. 1

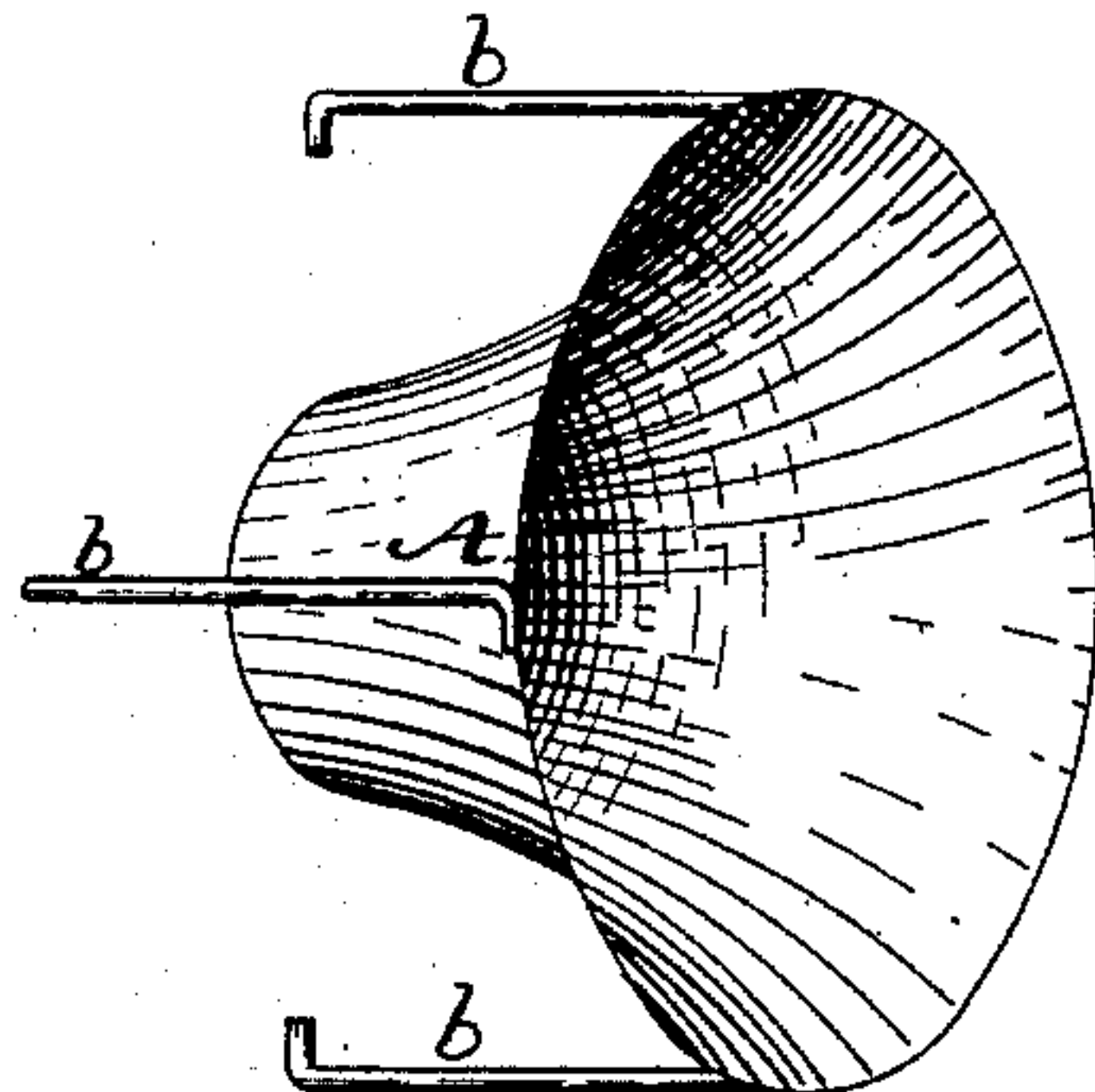


Fig. 2

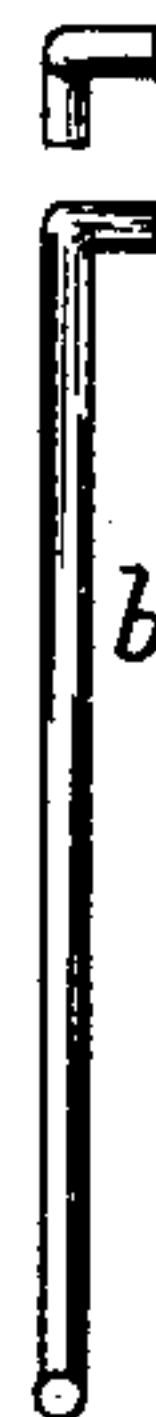
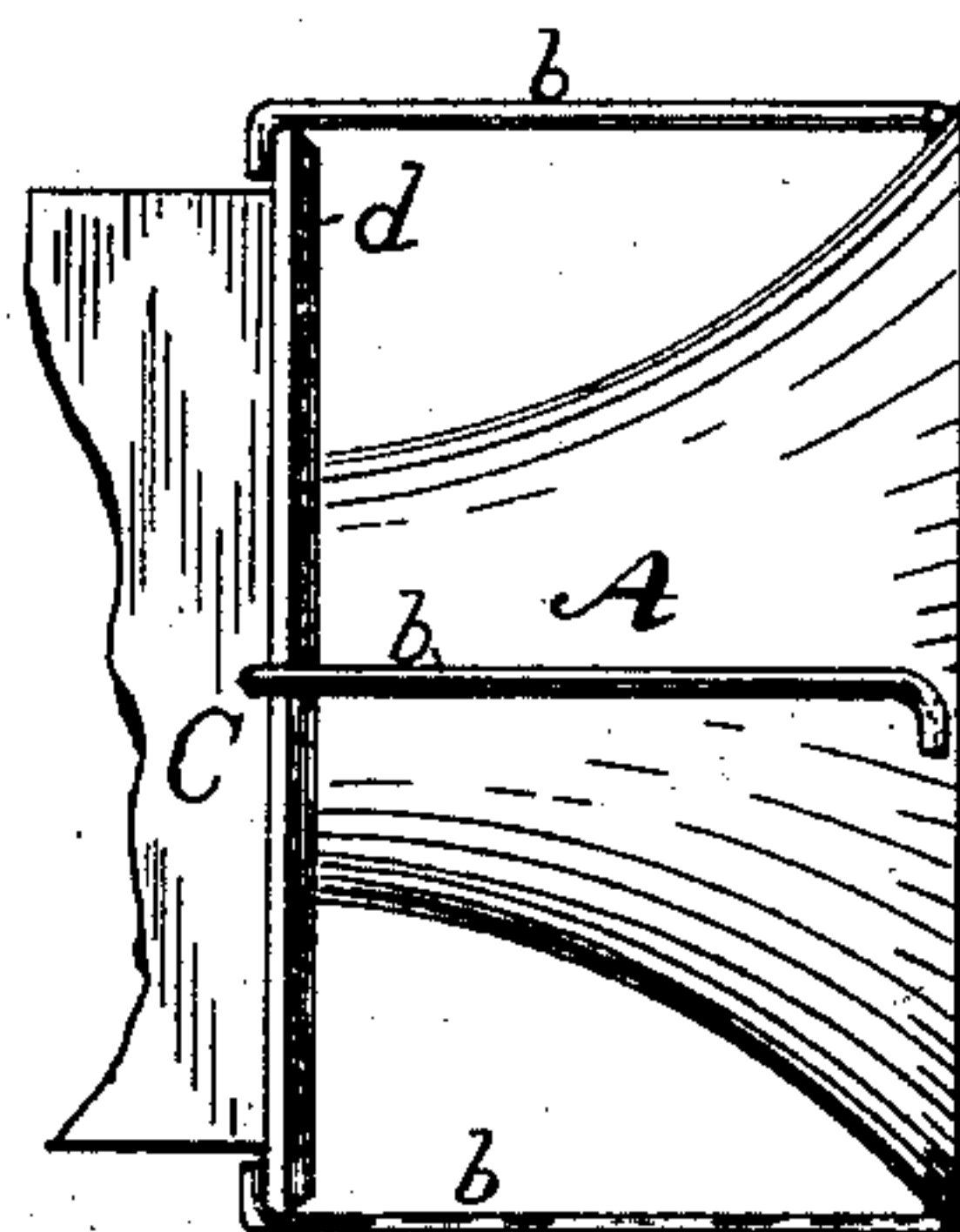


Fig. 3



WITNESSES:

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AUXILIARY MOUTH-PIECE FOR TELEPHONES.

SPECIFICATION forming part of Letters Patent No. 327,393, dated September 29, 1885.

Application filed August 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. HARRISON, a citizen of the United States, residing in the city of Bridgeport, in the county of Fairfield and State of Connecticut, have invented an Auxiliary Mouth-Piece for Telephone-Transmitters, of which the following is a specification.

My invention relates to an improvement in telephones; and the object of my improvement is to provide an auxiliary mouth-piece for telephone-transmitters.

The invention consists of a bell-mouthed funnel adapted for convenient attachment to ordinary transmitters, as hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of my auxiliary mouth-piece with grappling-rods attached; Fig. 2, views of one of the attaching grappling-rods *b*. Fig. 3 shows the mouth-piece attached to the case of a telephone-transmitter.

In the drawings, A designates my auxiliary mouth-piece. It is funnel-shaped, open at each end, with inwardly-curving sides, and is formed of metal, rubber, or other sonorous material. Arranged equidistantly around the funnel, and parallel to its axis, are four grappling-rods, *b*, of the form shown, each fastened at one end to the outer surface of the funnel near its largest end. The free ends of the rods are bent radially inward to form hooks for securing the funnel to the transmitter-case.

It is evident that the grappling-rods may be fastened to the outer edge of the funnel in several ways. In the drawings they are shown as fastened, preferably, by means of soldering; also, that the number of rods may be increased or diminished to conform to the shape of the

case of the transmitter, and that these rods may be attached to the case in other ways than by hooking them.

In operation, when attached by means of rods, the funnel is placed in front of the transmitter-case C, with its smallest end circumscribing the ordinary mouth-piece in the transmitter-case. In this position the grappling-rods are sprung over the flange *d* of the case, hooking back of it, and holding the funnel securely against the case, the length of the rods *b* being adapted correspondingly.

The funnel can be easily removed by springing the grappling-rods outward until the hooks are disengaged from the flange *d*.

This auxiliary mouth-piece is thus cheaply manufactured, easily applied to ordinary transmitter-cases, and when in position effectually collects sound and delivers it intensified to the transmitter, rendering telephonic intercourse more easy and distinct and audible at greater distances.

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

1. An auxiliary funnel-shaped mouth-piece for telephones, having inwardly-curving sides, and adapted, by means of grappling-rods, to be readily attached to and removed from the transmitter-case, substantially as described.

2. The combination, with a telephone-transmitter-case, of the auxiliary detachable mouth-piece A, having grappling-rods *b*, adapted to act in the manner specified.

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Witnesses:

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