

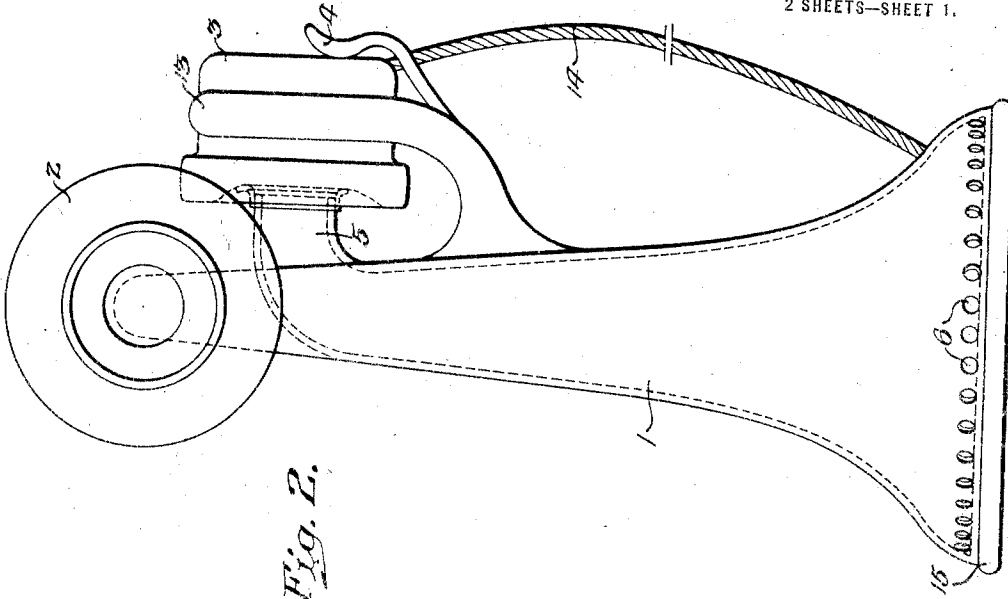
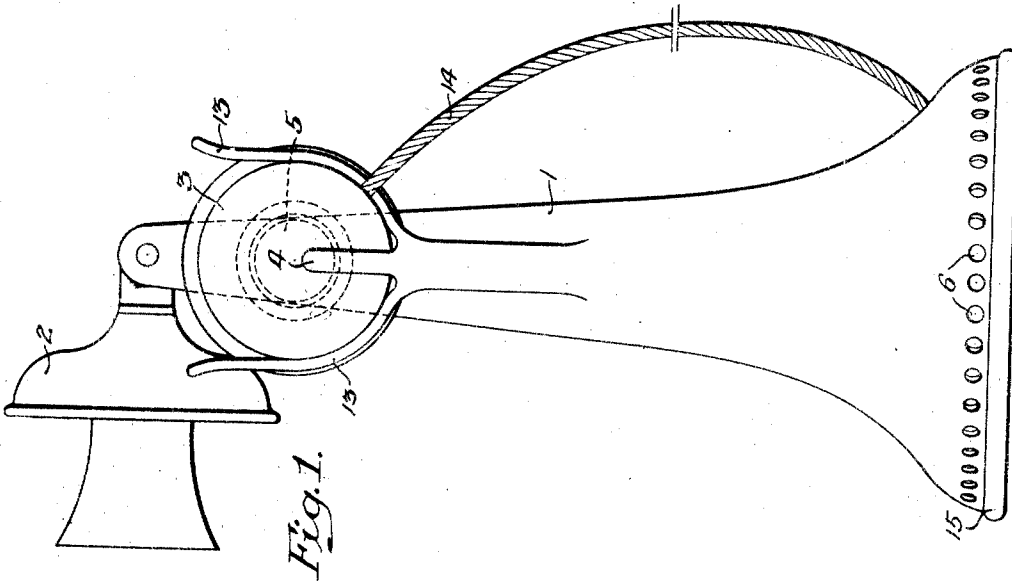
J. S. TIMMONS.
TELEPHONE.

APPLICATION FILED MAR. 25, 1919.

1,385,286.

Patented July 19, 1921.

2 SHEETS—SHEET 1.

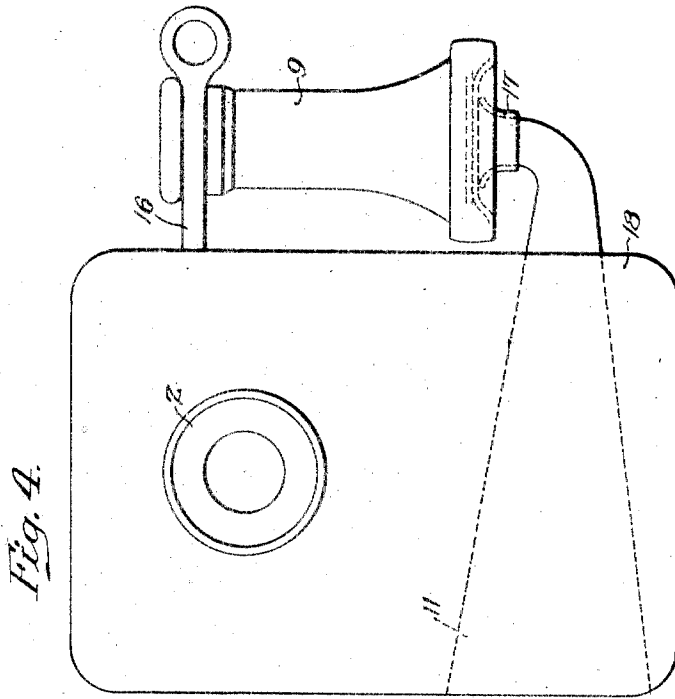
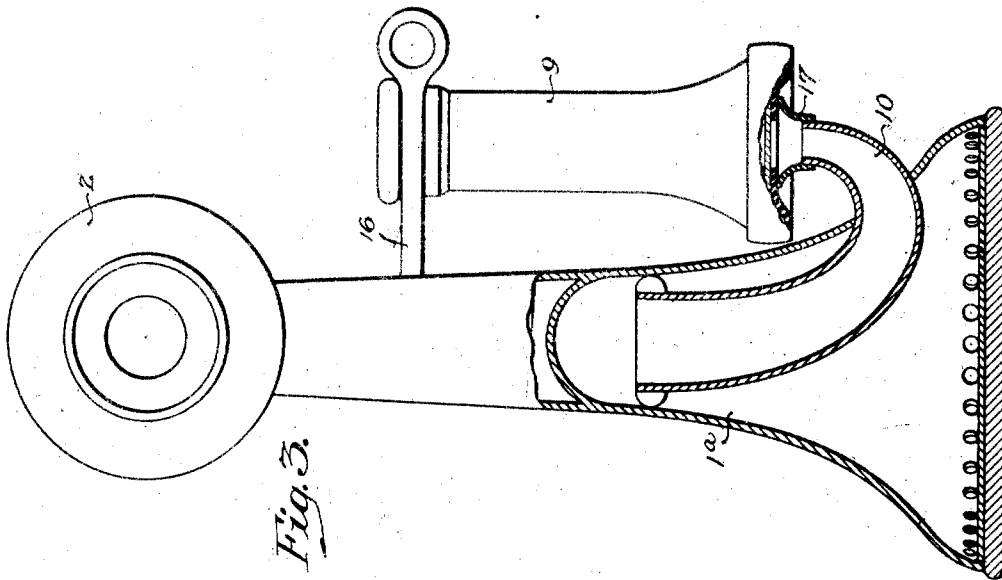


Inventor:
John S. Timmons,
by his Attorneys.
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UNITED STATES PATENT OFFICE.

JOHN S. TIMMONS, OF NEW YORK, N. Y.

TELEPHONE

1,385,286.

Specification of Letters Patent.

Patented July 19, 1921.

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To all whom it may concern:

Be it known that I, JOHN S. TIMMONS, a citizen of the United States, residing in New York city, in the State of New York, have invented the Telephone, of which the following is a specification.

One object of this invention is to provide a relatively simple, compact and inexpensive form of telephone whereby sounds produced by a telephone receiver of any of the ordinary forms in common use may be magnified or amplified so as to be clearly audible at a distance from the instrument;—the invention contemplating a novel form of combined telephone support and horn particularly adapted for use with a receiver supported by a hook or bracket in the customary manner.

These objects and other advantageous ends I attain as hereinafter set forth, reference being had to the accompanying drawings, in which,

Figures 1 and 2 are respectively a side and a front elevation of a telephone instrument constructed in accordance with my invention;

Fig. 3 is a front elevation partly in vertical section illustrating a slightly modified form of the invention; and

Fig. 4 is a front elevation of the invention applied to a box telephone.

In Figs. 1 and 2 of the above drawings, 1 represents a telephone base or stand of the general form in common use although preferably somewhat more conical in outline. This stand 1 is hollow and as shown in Fig. 1, its conical cavity communicates at the upper or small end with an open end, lateral extension 5 projecting horizontally so as to constitute in effect a continuation of the body of the horn formed by the main portion of the stand.

A transmitter 2 of any desired construction is pivotally or otherwise mounted on the upper portion of the stand which in that form of the invention shown in Figs. 1 and 2, has a holder 13 formed by three fingers whereby a telephone receiver 3 may be normally though removably supported. The tubular extension 5 of the stand is so positioned that its open or inlet end terminates at one side of this holder in such position that when the receiver 3 rests in the latter, it is substantially concentric with said open

end and an annular portion of its face surrounding the opening to its diaphragm engages the edges of said extension.

The receiver is electrically connected through the customary cord 14 with the terminals whereby the instrument is connected to the line, which terminals, in accordance with my invention, may be mounted on a base plate 15 within the hollow interior of the stand 1 or at any other suitable point and said stand has a series of openings through the sides of its flared end immediately adjacent the base plate to permit of the escape of the sound waves from its interior.

With the above described arrangement of parts, the receiver is so connected as to be at all times included in the line circuit, so that when it is desired to utilize the instrument, the voice of a person speaking into the transmitter of a sending instrument will at any time energize the diaphragm of the receiver. By reason however, of the proximity of the end 5 of the horn to said diaphragm, the voice of the person calling will be greatly magnified so as to be audible at a distance from the instrument. Thereafter the receiver 5 may be removed from its holder 4 and the telephone used in the ordinary manner, the receiver being returned to said holder at the termination of such use with its opening or diaphragm immediately adjacent the inlet end of the horn extension 5.

In that form of my invention shown in Fig. 3 I have as before so formed the main portion of the base structure 1* of a telephone stand as to provide a conical or tapering horn chamber. In this instance however, I have also provided a tapering conduit 10 whose larger end extends up into the hollow interior of the stand, which is so formed as to reflect sound waves delivered to it from said conduit and amplify them as before so as to materially increase their intensity. The smaller end of said conduit 10 is extended through the side of the stand and is turned upwardly into a position substantially coaxial with a telephone receiver 9 supported on a hook 16 carried by said stand in the well known manner. The transmitter 2 is likewise mounted as usual on the upper end of the stand. The upturned end of the conduit 10, as well as the open end of the

extension 5 (Figs. 1 and 2) are preferably provided with an end or mouth piece 17 of flexible material such as rubber so that they may closely though yieldingly engage the receiver and insure the passage of sound waves therefrom into the horn provided by the stand.

In that form of my invention shown in Fig. 4, I have mounted a horn structure 11 so that it extends transversely through the box 12 of a well known form of telephone instrument in which the transmitter 2 is mounted on the door or front 18 while the receiver 9 is removably supported on a hook 16 projecting from one side. The small end of the horn structure 11 in this case projects from one side of the box and is turned up into position so that its mouth piece 17 will contact with the open end of the receiver 9 when this is hung from the hook in the well known manner. In this case as well as in all of the others above described, the receiver and transmitter are both constructed, mounted and capable of use in the ordinary manner, while the receiver-supporting structure is so modified as to itself form or provide a tapering chamber constituting a horn whose small or inlet end terminates immediately adjacent the open or diaphragm end of the receiver when this is supported in its normal or idle position not in use. Said receiver, being at all times included in the line circuit, will coact with the horn provided by the supporting structure or stand to so magnify the sounds from the receiver as to cause these to be clearly heard at a distance from the instrument.

Obviously it is immaterial as to whether the stand upon which the telephone apparatus is mounted is designed primarily as part of such apparatus or whether it in addition possesses other useful or ornamental functions such as that of supporting a lamp structure or the like, since in any case my invention contemplates the combination of a supporting stand formed to serve as a sound amplifier or horn, with a transmitter carried by the stand and a receiver removably mounted on said stand in position to utilize its sound amplifying quality.

I claim:

1. The combination in a telephone instrument of a hollow substantially conical supporting structure having an inlet opening for its small end; a transmitter mounted on said structure; and a receiver removably carried by the structure with its diaphragm

normally in a position immediately adjacent the inlet opening to the interior thereof.

2. The combination of a horn formed to constitute a telephone stand; a transmitter mounted on the horn; a receiver; and means on the horn for removably supporting the receiver with its diaphragm immediately adjacent the inlet end thereof.

3. The combination of a telephone support in the shape of a casing formed with a tapering chamber and including a projecting tubular portion constituting the small or inlet end of said chamber; a transmitter; and a receiver removably carried by the support with its diaphragm immediately adjacent the open end of the tubular projecting portion of the support.

4. The combination of a telephone stand having a cavity of generally conical form and mounted with its larger end downward, said stand having an opening into the small end of its conical cavity; a transmitter carried by said stand; and a receiver removably supported by the stand with its opening or diaphragm immediately adjacent the opening into the small end of the cavity thereof.

5. The combination of a telephone stand having a flaring base and formed with a tapering hollow interior having openings through said base, the stand having also an open end lateral projection forming a continuation of its hollow interior; a transmitter mounted on the stand; and a receiver removably carried by the stand with its diaphragm normally immediately adjacent the opening into said lateral projection.

6. The combination of a telephone stand having a substantially conical form and provided with a tapering chamber; a tapering conduit having its small end extending outside of the stand and its larger end terminating adjacent the small end of the tapering chamber; a transmitter carried by the stand; and a receiver removably supported by the stand with its open face in substantial engagement with the small end of the tapering conduit.

7. The combination with the receiver and the transmitter of a telephone of a hollow stand for supporting the same; with means connecting the receiver independently of the transmitter with said stand for utilizing the latter as a horn to magnify sounds produced by said receiver.

In witness whereof I affix my signature.

JOHN S. TIMMONS.