Oct. 13, 1931 H. G. LEACH ET AL 1,826,797

AUDIPHONE UNIT

Filed Nov. 26, 1929 2 Sheets-Sheet 1

Fig. 1.

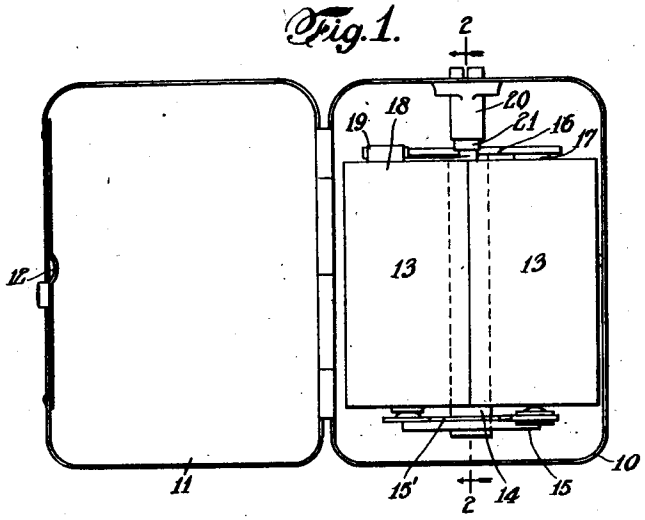


Fig. 2.

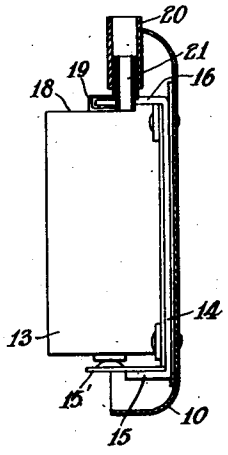
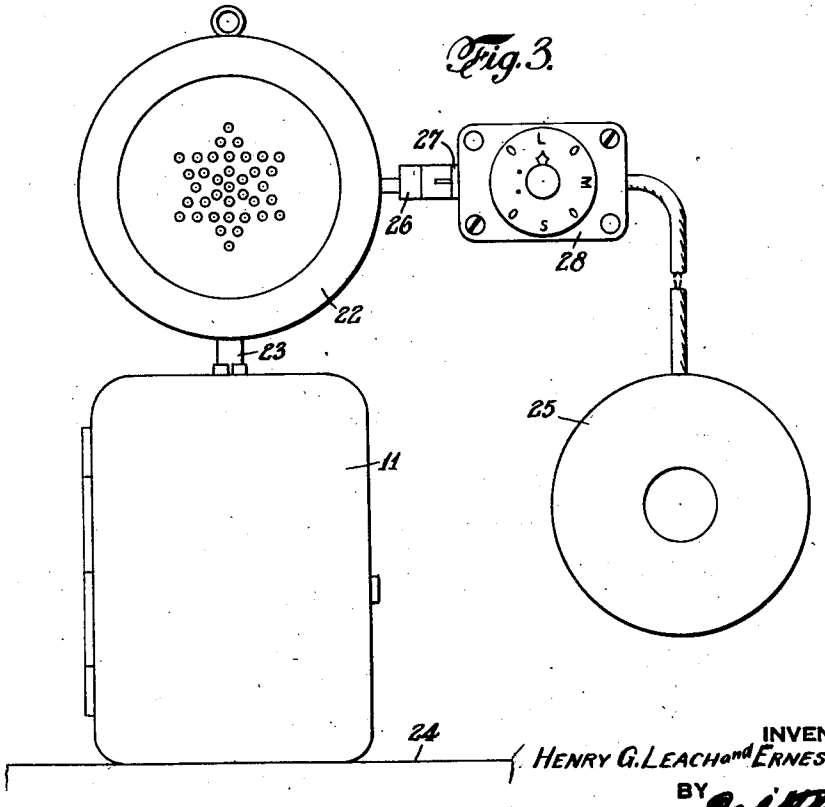


Fig. 3.



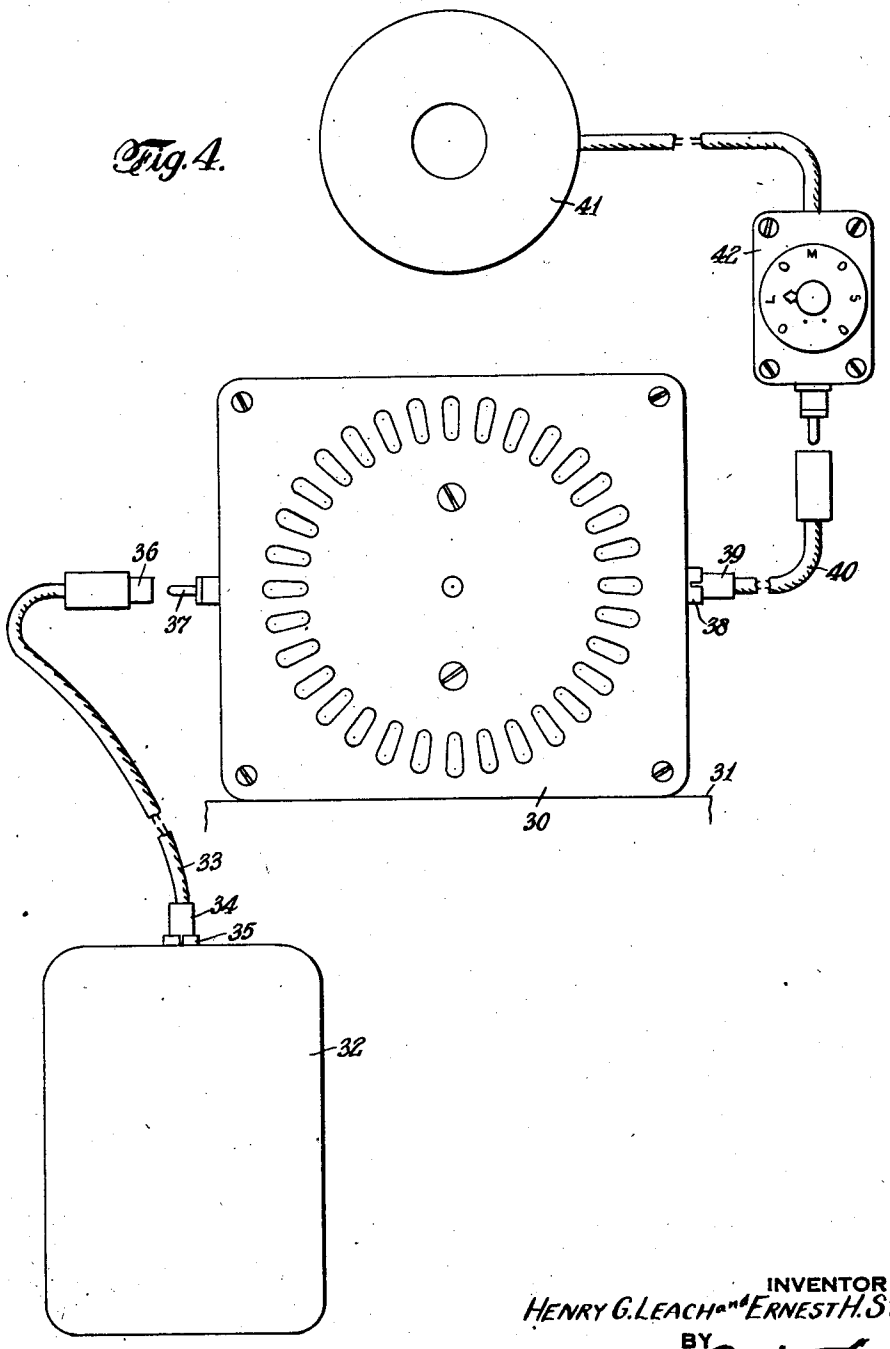
INVENTORS
HENRY G. LEACH and ERNEST H. STOLZ
BY Edward C. Schuster
ATTORNEY

Oct. 13, 1931. H. G. LEACH ET AL 1,826,797

AUDIPHONE UNIT

Filed Nov. 26, 1929 2 Sheets-Sheet 2

Fig. 4.



INVENTOR
HENRY G. LEACH and ERNEST H. STOLZ
BY
ATTORNEY

Patented Oct. 13, 1931 1,826,797

UNITED STATES PATENT OFFICE

HENRY G. LEACH, OF RED BANK, NEW JERSEY, AND ERNEST H. STOLZ, OF NEW ROCHELLE, NEW YORK

AUDIPHONE UNIT

Application filed November 26, 1929. Serial No. 409,789.

The invention relates to an audiphone unit embodying a battery, a microphone and a receiver member; and it has for its object to provide for a ready and convenient interconnection and arrangement of the various members, more especially in the provision of a novel type of battery casing admitting of renewal of the cells and adapted for supporting, if desired, a microphone element of the type adapted to be carried about one's person. The invention has for its object, also, to provide an association of audiphone elements which will admit conveniently of the use of interconnecting extension cables.

In carrying out the invention, a battery casing is provided of two hingedly connected members, one of which carries a double terminal connector element upon the exterior of the casing and to which may be directly connected and removably the microphone member to be supported by the said battery casing; or the former may be connected to the battery by means of an extension cable having means cooperating with the terminal connector. The said microphone in either embodiment is removably connectible to a receiver member which admits also of the use of an extension cord, if desired.

The nature of the invention, however, will best be understood when described in connection with the accompanying drawings, in which:

Fig. 1 is a front elevation of a battery casing with the lid member open.

Fig. 2 is a vertical section taken on the line 2—2, Fig. 1 of the drawings, and looking in the direction of the arrows.

Fig. 3 is an assembly view in elevation of the audiphone unit.

Fig. 4 is a similar view illustrating a modification.

Referring to the drawings, more particularly Figs. 1 and 2 thereof, a battery casing is indicated comprising a back member 10 and a lid member 11 which are hingedly connected to each other, as shown, along corresponding side edges, and are adapted to be held together by a suitable catch or snap lock 12 to enclose a plurality of electric cells 13. The casing is preferably squared at the bottom so that it may be supported in an upright position upon a surface.

The said cells are designed to be removably retained in the back member 10 by means of a resilient frame embodying a longitudinal strip 14 rigidly secured to and insulated from the casing back and having transverse resilient holding arms at its opposite ends, as the arms 15 and 16. Of these, the one arm 15 carries an insulated bridging piece 15′ for connecting the two cells in series, and the other arm 16 grounding, for example, to the casing the one terminal 17 of the battery. The other terminal 18 of said battery is designed to engage an insulated spring contact 19 carried by arm 16. A bushing 20 extends through the top of the back member 10 in contact with the same and thus also with the terminal 17 of the battery, while within the bushing and insulated therefrom is a further bushing or sleeve 21 and in circuit with the contact 19, thus affording a double terminal connector element accessible from the exterior of the casing.

This admits of directly plugging in a microphone member 22 as through a plug 23 thereof and whereby the microphone may be carried directly on the casing and, if desired, on the person of a user; or, the casing may be set upon a suitable support or table 24. A receiver member 25 is also adapted to be plugged to the microphone 22 or rather a socket 26 therefrom fitting a plug 27 of the said receiver cable which is of the required length and includes an adjustable resistance 28 whereby to control the volume of the sound emitted by the receiver.

Referring to Fig. 4, a table type of microphone 30 is illustrated which may rest upon a suitable table 31, while the battery casing 32 to be connected therewith may be located at a different point, for example, in the drawer of a desk or the like (not shown) the top of which carries the microphone. A suitable connector as a flexible cable 33 of the required length is to this end provided between the battery casing 32 and the microphone 30, having the plug 34 for insertion into the terminal socket 35 on the exterior of the casing and also a terminal socket 36 for connection with a

double terminal plug 37 projecting from the side of the microphone. The said microphone, furthermore, is provided with a double terminal socket 38 as for receiving the plug 39 of a receiver flexible cable 40 for connecting the receiver 41 to the microphone. An adjustable resistance member 42 is, moreover, included in circuit to control the volume of sound emitted by the said receiver.

We claim:

1. An audiphone, comprising a portable battery casing adapted to be opened and closed for renewal of the battery cells and having upon its exterior a double terminal connector element, a microphone transmitter adapted for connection with the battery through the casing connector element, and a receiver member and connecting cable adapted for independent electrical connection with the microphone.

2. An audiphone, comprising a portable battery casing adapted to be opened and closed for renewal of the battery cells and having upon its exterior a double terminal connector element, a microphone transmitter, means to removably connect the same with the casing connector element, and a receiver member and connecting cable adapted for independent electrical connection with the microphone.

3. An audiphone, comprising a portable battery casing adapted to be opened and closed for renewal of the battery cells and having upon its exterior a double terminal socket, a microphone transmitter provided with a double terminal plug and a double terminal socket, the former being adapted for connection with the casing socket, and a receiver member and connecting cable adapted for independent electrical connection with the socket of said microphone.

4. An audiphone, comprising a portable battery casing adapted to be opened and closed for renewal of the battery cells and having upon its exterior a double terminal connector element, a microphone transmitter adapted for connection with the battery through the casing connector element, a receiver member, a flexible cable adapted for independently electrically connecting the said receiver with the microphone, and an adjustable resistance included therein.

5. An audiphone, comprising a portable battery casing adapted to be opened and closed for renewal of the battery cells and having upon its exterior a double terminal socket, a microphone transmitter provided with a double terminal plug and a double terminal socket, an intermediate extension cable with plug terminal at one end for connection to the battery socket and a socket terminal at its opposite end for connection to the microphone plug, and a receiver member and connecting cable adapted for independent electrical connection with the socket of the microphone.

6. An audiphone, comprising a portable battery casing adapted to be opened and closed for renewal of the battery cells and having upon its exterior a double terminal connector element, a microphone transmitter adapted for direct connection with the battery through the casing connector element and to be supported by the battery casing, and a receiver member and connecting cable adapted for independent electrical connection with the microphone.

In testimony whereof we affix our signatures.

HENRY G. LEACH.
ERNEST H. STOLZ.