C. T. BUCK.

EAR DEVICE.

APPLICATION FILED MAY 4, 1920.

1,384,595. Patented July 12, 1921.

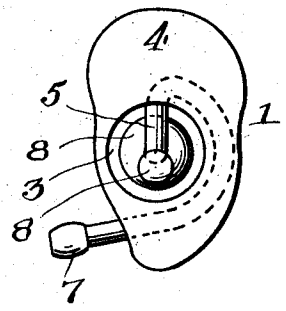


Fig. 1.

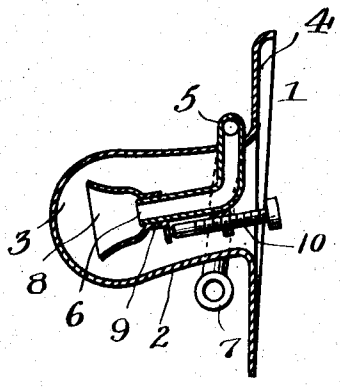


Fig. 2.

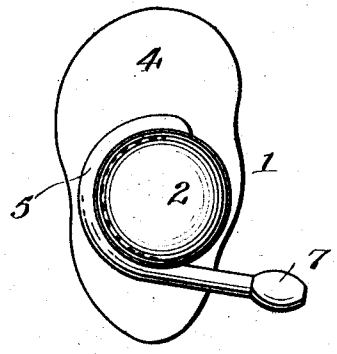


Fig. 3.

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EAR DEVICE.

1,384,595. Specification of Letters Patent. Patented July 12, 1921.

Application filed May 4, 1920. Serial No. 378,896.

To all whom it may concern:

Be it known that I, CHARLES T. BUCK, a citizen of the United States, residing at Waukegan, in the county of Lake and State of Illinois, have invented new and useful Improvements in Ear Devices, of which the following is a specification.

This invention relates to an ear device and more particularly to a device so constructed as to aid a person whose hearing is affected to readily detect the slightest sound.

An object of the invention is the construction of a simple device of few parts that cannot very readily get out of order for collecting sound waves, concentrating same, and passing the concentrated waves toward the drum of the ear so that the concentrated wave energy may properly actuate the drum of the ear.

A feature of my invention is the adjustable feature of the sound amplifier so that the communication of the sound waves on the drum of the ear may be regulated.

With these and other objects in view the invention will be better understood from the following detailed description taken in connection with the accompanying drawing wherein:

Figure 1 is a front elevation of the device.

Fig. 2 is a sectional view.

Fig. 3 is a rear elevation.

Again referring to the drawing illustrating one construction of my invention the numeral 1 designates a sound receiver consisting of a casing 2 having one end shaped to provide a spherical sound chamber 3 while the other end opens through a plate 4 shaped somewhat similar to the human ear. A sound tube 5 is shaped and arranged in position to have one end 6 arranged in the sound chamber 3 while the other end 7 is shaped and arranged to be inserted into the sound passage of the ear. As far as I have proceeded it will be seen that sound waves will be directed into the chamber 3 from whence they will pass through the tube into the sound passage of the ear. To increase this action I provide the sound amplifier 8 which is in the shape of a bell and provided with a neck 9 slidable on the tube. I provide an adjusting screw 10 for fixing the position of the bell 8 with relation to the walls of the sound chamber thereby increasing or decreasing the sound effect.

It is, of course, to be understood that the invention may be constructed in various other manners and the parts associated in different relations and, therefore, I do not desire to be limited in any manner except as set forth in the claims hereunto appended.

Having thus described my invention what I claim is:

1. An ear device comprising a sound receiver consisting of a casing one end of which is spherical shape to form a spherical sound chamber, and a sound tube having one end arranged exterior of the casing and one end arranged in communication with said sound chamber, a sound amplifier for passing sound waves from the chamber into the tube, and a device for adjusting said sound amplifier for regulating its position relative to said spherical sound chamber.

2. In an ear device, a sound receiver having one end closed and rounded to form a substantially spherical sound chamber, a tube having one end opening into said receiver and the other end adapted to be inserted into the ear, a sound amplifier on said tube within said receiver and opening out toward said round closed end, and means for adjusting the position of said amplifier relative to said round closed end to regulate sound waves passing through the tube.

3. In an ear device, a sound receiver having a round closed end, a tube having one end opening into said receiver toward said round closed end and its other end shaped to be inserted into the ear, a sound amplifier slidably mounted upon said tube and adapted to guide sound waves to the tube from the receiver, and an adjustable screw connected to said amplifier for regulating the distance between said round closed end and the mouth of the amplifier.

In testimony whereof I affix my signature.

CHARLES T. BUCK.