To all whom it may concern:

Be it known that I, Charles T. Asbury, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Sound-Wave Amplifying Devices, of which the following is a specification.

My invention relates to certain improvements in sound wave amplifying devices known as radio loud speakers.

The object of my invention is to simplify the construction of the device and to make it compact and substantial.

In the accompanying drawing,

Fig. 1 is a front view of my improved amplifying device;

Fig. 2 is a side view;

Fig. 3 is a vertical sectional view of the body portion, the translating device being in full lines; and,

Fig. 4 is a sectional plan view showing the translating device in full lines.

The body 1 of the amplifying device is made of cast metal and has a hemispherical section 2 and a base 3. The front of the hemispherical section is open and has lugs 4 to which is attached a sheet metal disc 5 by screws 6. The plate has a series of openings 7 near its periphery and in the openings are screws 9 of any suitable mesh. At the center of the disc is an opening 8 through which extends the knob 10 of the adjusting screw of the translating device 11. This translating device may be of any form desired without departing from the essential features of the invention. On the inner end of the translating device is a screw threaded projection 12 perforated for the passage of the sound. Screwed on to this extension is a horn 13 made of cast metal and flared as shown in Figs. 3 and 4. The horn terminates some distance away from the hemispherical section 2 so that the sound can escape between the horn and the section as indicated by the arrows in Fig. 3, the shape of the section 2 being such as to deflect the sound into the room in which the device is located without distortion. The sound is substantially free of vibration, producing a clear tone. The horn 13 has lateral extensions 14 which are secured by screws 16 to lugs 15 cast integral with the body 1. 17, 18 are binding posts to which the conducting wires are attached.

I claim:

1. The combination in a sound amplifying device of a hemispherical body portion; a horn located within the hemispherical body portion and terminating short of the inner surface thereof; means for securing the horn to said body portion; and a translating device, attached to the horn, located within the body portion at the open front thereof.

2. A sound wave amplifying device, having a hemispherical section and a base said section being made of cast metal; a sheet metal disc secured to the open front of the said section, said disc being perforated and having an opening in the middle; a translating device located back of the said disc and having a knob projecting through the central opening; and a horn connecting the translating device with the body portion, said horn terminating short of the inner surface of the body portion.

3. The combination in a sound wave amplifying device, of a hemispherical body portion; a perforated plate secured to the open face of the said body portion; lugs on the body portion; a horn secured to the lugs; a translating device located directly back of the plate; a screw threaded projection on the horn extending into the screw threaded opening in the translating device; and a knob on the translating device extending through a central opening in the plate.

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