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RECEIVING APPARATUS FOR WIRELESS COMMUNICATION

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RECEIVING APPARATUS FOR WIRELESS COMMUNICATION.

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To all whom it may concern:

Be it known that we, HARRY H. HIPWELL and HARRY T. HIPWELL, of Pittsburgh, Pennsylvania, have invented a new and useful Improvement in Receiving Apparatus for Wireless Communication, of which the following is a specification.

This invention aims to provide a simple means whereby a number of persons will be permitted to listen simultaneously to signals transmitted by wireless telephone or telegraph, but one receiver being used, and it being unnecessary for the operator to provide himself with a costly amplifier or other mechanism generally resorted to when several persons are to listen at once to the operation of a single receiving station.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

Although the preferred embodiments of the invention are shown and described, it will be understood that, within the scope of what is claimed, a mechanic may make alterations, without departing from the spirit of the invention, or avoiding the charge of infringement.

In the accompanying drawings:—Figure 1 shows in top plan, a device constructed in accordance with the invention; Figure 2 is a section on the line 2—2 of Figure 1, parts being in elevation; Figure 3 is a section on the line 3—3 of Figure 1; Figure 4 is a bottom plan of the base member; Figure 5 is a cross section wherein a modification is delineated.

Referring to Figures 1 to 4, both inclusive, there is shown a base 1, constructed as desired, and made of any chosen material, the base embodying a depending flange 2 which is fashioned into a supporting beard 3. At its upper edge, the flange 2 carries an inwardly extended annular shoulder 4 supporting a tubular body 5, provided with a top 6 having an opening 7, of any desired size. A protecting screen 8 is secured to the under surface of the top 6 and extends across the opening 7. Adjacent to its periphery, the top 6 is downwardly concaved, as at 9, whereas, the central portion of the top is upwardly convexed, as at 10, to the end that the top may fit upon the cap 33 of a receiver 26.

A bottom or sound deflector 11 is provided, the same including a flat rim 12 and an upwardly convexed central portion 14, the rim 12 being secured to the under surface of the shoulder 4. The body 5, the bottom 11 and the top 6 connect to form a sound chamber 15. Connectors 16, which may be tubes, are mounted in the body 5 of the base 1. The highest portion of the bottom member 11 is disposed adjacent to the opening 7 in the top 6, the lowest or peripheral portion of the bottom member being disposed adjacent to the connectors 16, the result being, that the sound, entering through the opening 7, is distributed laterally and outwardly, to the connectors 16. An ear tube 17 is mounted on each connector 16 and has branches 18 carrying ear pieces 19.

On the top 6 rests a cushion 24, which may be of any desired form, it being observed, however, that this cushion is in the form of a mere disk having no tubular neck, or the equivalent thereof, and devoid, of ridges, grooves, recesses or other friction means for engaging the cap 33 of the receiver 26, the cushion being made of felt or other suitable material, and exercising its function without resort to any of the expedients above alluded to. The cap 33 of the receiver 26 rests on the cushion 24, the cushion having an opening 25 coinciding with the opening 7 in the top 6. A means is provided for holding the receiver 26 in place, as shown in Figures 2 and 3, and this means may be of various forms: it may be a curved spring tongue 20, concaved at one end, as shown at 21, to rest on the receiver 26, and to form a finger 22 whereby the tongue may be manipulated conveniently, the spring being arched away from the base 1, to serve as a handle for the device. At its lower end, the tongue 20 extends, as shown at 23, through the flange of the base 1, and is secured to the rim 12 of the bottom or sound deflector 11.

The general construction of the device is such that an operator having but one receiver 26 may, nevertheless, permit a number of persons to listen in, it being necessary, merely, to slip the receiver under the part 22 of the tongue 20, as shown in Figure 2, any desired number of ear tubes 17 being employed.

In case that it is desired to sell the base 11 and the receiver, together, as an article of manufacture, it may be expedient to resort
to that form of the invention which is disclosed in Figure 5. In Figure 5, parts here described have been designated by numerals previously used, with the suffix "a". The top 6 is bent upon itself to define an angular shoulder 27 merging into an upstanding tubular neck 28, a ring 29 being supported on the shoulder, to afford a firm bearing for the diaphragm 30 of the receiver, the main member 31 of the receiver being threaded out of the cap (such as the element 33 of Figure 3) and being threaded at 32, directly into the neck 28, the threading constituting means for holding the receiver in place, the spring tongue 20 having this function, in Figure 2.

What is claimed is:

1. In a device of the class described, a base comprising a top having an opening, the base being provided with an internal sound chamber, and having connectors for lateral earphones, the base carrying a convexed deflector which forms the bottom of the chamber, the highest portion of the deflector being located adjacent to the opening, and the lowermost portion of the deflector being located adjacent to the connectors.

2. A device of the class described, constructed as set forth in claim 1, and further characterized by the provision of a curved spring secured at one end to the base and extended above the top, the spring being arched away from the base to serve as a handle whereby the device may be manipulated, the spring constituting means for holding a receiver on the top.

3. In a device of the class described, a tubular body, the body having a plurality of devices for connecting earphones to the body at points spaced circumferentially of the body, means for holding a receiver on one end of the body, and a bottom assembled with the body and located adjacent to the other end of the body, the bottom being convexed from its approximate center toward its periphery so as to extend across a plane transverse to the axis of the body and passing through said devices, thereby to effect a lateral distribution of receiver-sounds to said devices.

In testimony that we claim the foregoing as our own, we hereunto set our hands, in the presence of witnesses.

HARRY H. HIPWELL.
HARRY T. HIPWELL.

Witnesses as to HARRY H. HIPWELL:
E. M. PATETTA,
L. M. STENGEL.

Witnesses as to HARRY T. HIPWELL:
FULDA L. SEARCH,
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