April 12, 1932. W. H. CHASE 1,854,019

SOUND CONTROLLING MEANS

Filed Sept. 18, 1929

Fig. 1

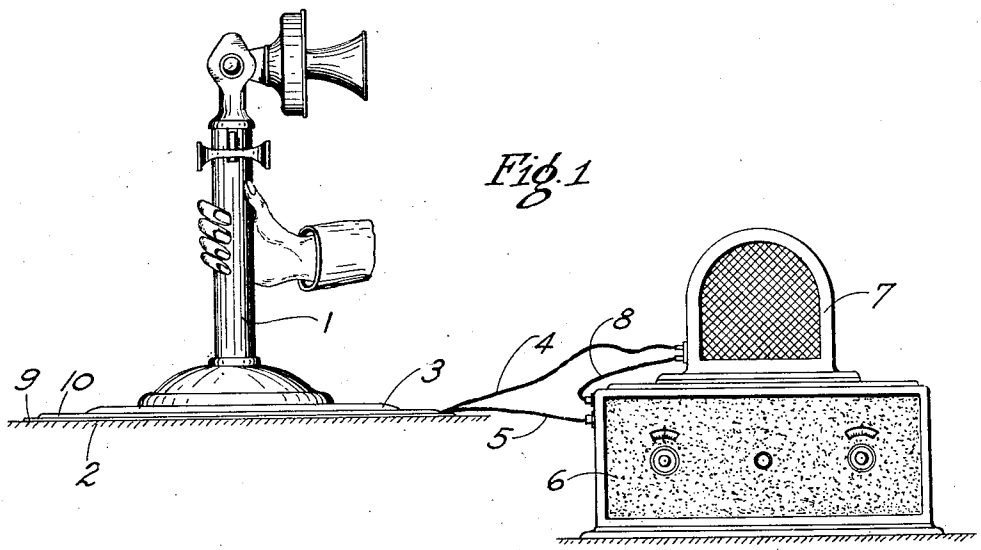


Fig. 2

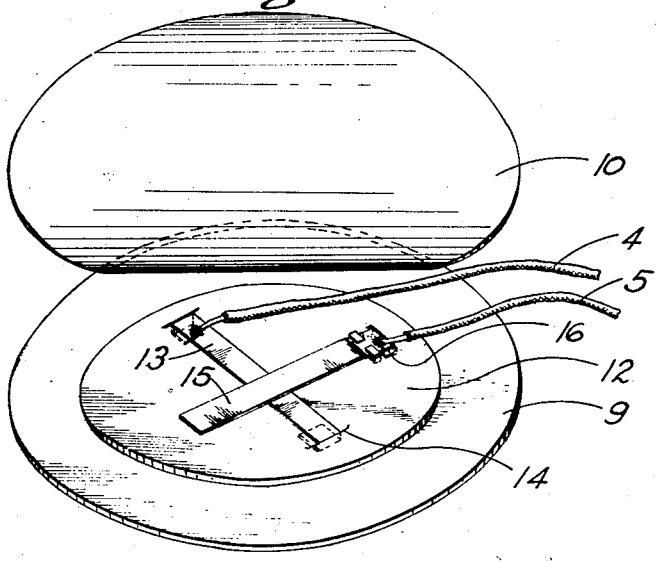
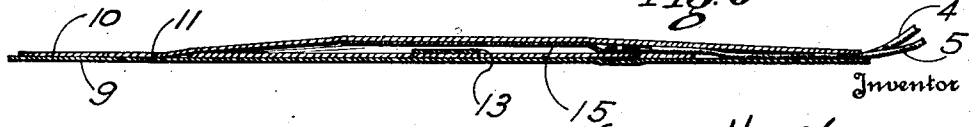


Fig. 3



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UNITED STATES PATENT OFFICE

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SOUND CONTROLLING MEANS

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This invention relates to the elimination of disturbing noises while a person is using a telephone or the like.

Frequently much annoyance is caused when a person desires to telephone by interfering noises caused by such instruments as the radio, phonograph, or the like, or by machinery, such as electric motors in shops or fans in offices, which prevents the person telephoning from properly hearing the conversation issuing from the receiver, and also disturbs the sounds received by the transmitter and reproduced at the other end of the line.

Quite generally, the noise making apparatus is situated at a point not readily accessible to the telephone instrument, so that the person telephoning must either set the telephone down and go and turn off the disturbing mechanism, or be subjected to the annoyance of trying to mentally eliminate the interfering sounds. After the conversation has been completed, it is also necessary to turn on the device which has been shut off.

An object of the invention is to provide a means for automatically eliminating disturbing noises while the telephone is in use.

Other objects will hereinafter appear.

The invention will be better understood from the description of one practical embodiment thereof, illustrated in the accompanying drawings, in which;

Figure 1 is an elevational view of one embodiment of the invention shown as controlling sounds which issue from a radio set;

Figure 2 is a perspective view of a part of the controlling mechanism opened up to expose an inner control switch; and

Figure 3 is a central transverse section of the switch and its coverings.

Referring first to Figure 1, there is shown a telephone 1 of the usual desk or table type resting upon a support 2. Interposed between the telephone and its support is a pad-like member 3 containing a switch mechanism to be hereinafter described, so that the switch therein is operated by the weight of the telephone, closing a circuit when the instrument it set upon it and opening the circuit when the telephone is picked up to be used. Two conductors 4 and 5 extend from the switch and serve as a connection between a radio receiving set 6 and loud speaker 7, the other connection of the circuit being a cable 8 extending directly from the receiving set to the loud speaker.

The switch and its coverings are best illustrated in Figures 2 and 3, the same consisting of a base or lower sheet 9 conveniently of leather or like relatively soft material which will not mar furniture upon which it is placed, and an upper flexible sheet 10 also conveniently of leather of about the same shape and size as the lower sheet to which it may be secured as by stitching 11.

Upon the lower sheet 9 is a rigid sheet or plate 12 of cardboard, fibre or other suitable insulating material, and carried by this sheet are two strips of conducting material, the first 13 being secured as by having both ends extending through slots 14 and bent over on the underside of the plate to cause the strip to lie flat upon the surface thereof, while the second strip 15 has one end secured, as at 16, to the plate and is bent to normally space itself just above strip 13.

The conductors 4 and 5 are connected to the strips 13 and 15 respectively by soldering or in any other suitable manner. When a weight, such as that of the telephone, is imposed upon the top of the pad, the strips 13 and 15 are pressed together, closing the switch and completing the circuit in which the switch is, while when the weight is removed, the resiliency of strip 15 causes it to spring upwardly as shown in Figure 3, breaking the circuit.

If switch is interposed in the power circuit of the loud speaker, it will be obvious that whenever a person picks up the telephone, the power circuit will be interrupted and the sounds issuing from the radio stopped until the telephone is replaced on the pad, when the circuit will be again completed and the sound again emitted from the loud speaker. Of course, the switch can be shunted around the loud speaker, or interposed in any other circuit of the radio, as in the A battery circuit, and similar results would be obtained. However, by shunting the switch around the loud speaker, the radio will not be rendered

completely silent but the volume of sound will be greatly reduced. This may be more desirable in some instances than entirely stopping the sound would.

A switching means of this kind may be used to control any type of electrical apparatus such as electrical phonographs, electric fans, motors and the like, or to control a relay mechanism which in turn may control any type of apparatus, whether electrical or not.

Also, obviously, many other variations will readily occur to those skilled in this art, and I do not, therefore, limit myself to the precise details shown and described, but claim as my invention all variations, modifications and embodiments thereof coming within the scope of the appended claims.

I claim:

1. The method of controlling an electrically operated sound producing device which comprises connecting a switch in a circuit of said device, placing the switch in a position to support a telephone set, placing a telephone set upon the switch, lifting the telephone set when it is desired to use the same, and thereby operating the switch to quiet the sound producing device.

2. In combination, a sound producing device, a flat weight operated switch enclosed in a flexible insulating cover and connected in a circuit controlling the sound producing device, and a telephone set adapted to be selectively placed upon or removed from the switch and by its weight to operate the same and control the sound producing device.

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