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ADJUSTABLE RADIO SILENCER

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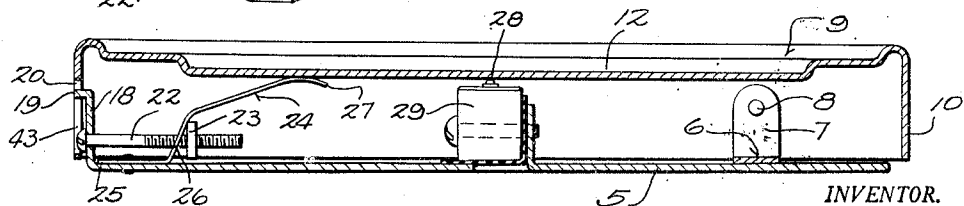
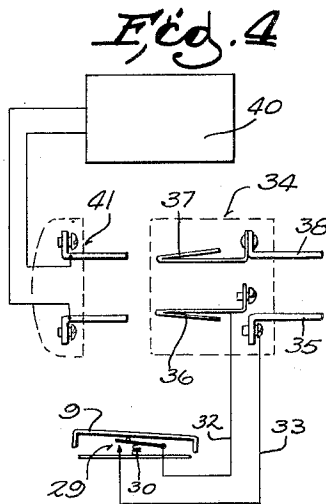
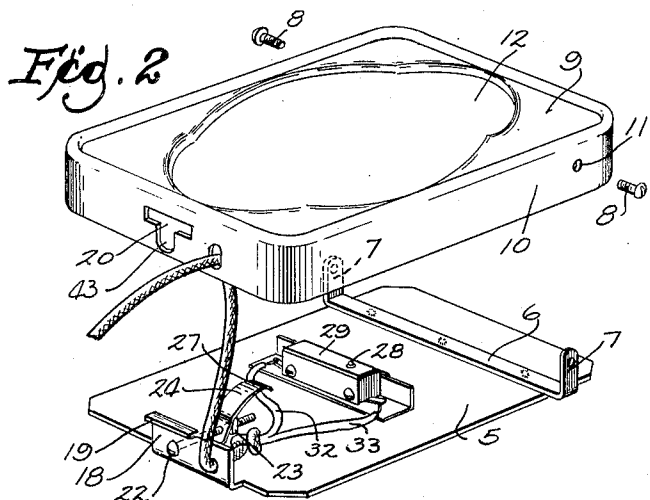
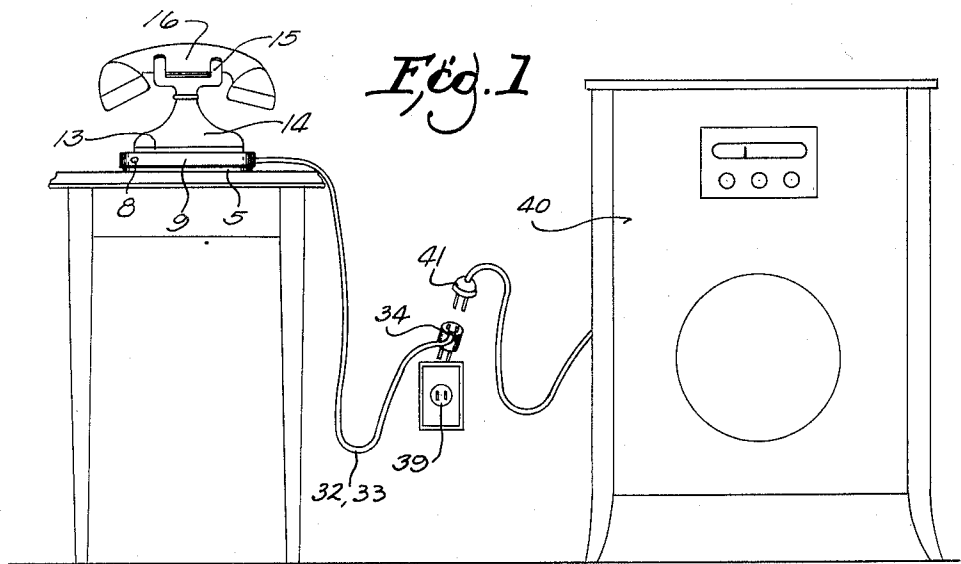


Fig. 3

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ADJUSTABLE RADIO SILENCER

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5 Claims. (Cl. 200—85)

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This invention relates to an adjustable radio silencer operable automatically to silence a radio when a telephone receiver or hand set is lifted from its cradle.

It is the primary object of the invention to provide means whereby a pivoted platform adapted to receive a telephone instrument may be balanced to compensate for the weight of any instrument placed thereon so that the removal of the receiver or hand set, as the case may be, will automatically open a switch controlling a circuit with which the radio receiver may be connected.

More specifically, it is the purpose of the invention to provide an extremely simple and inexpensive device which will not only be serviceable but neat in use and will be readily adjustable whereby to provide novel and inexpensive means to compensate for the weight of any telephone receiver.

In the drawings:

Fig. 1 is a view in side elevation showing how my device appears when in use, the radio receiver plug and a combination plug and receptacle incorporated with my invention being shown disconnected.

Fig. 2 is a view in perspective showing on an enlarged scale the component parts of my invention as they appear when separated to expose the interior construction.

Fig. 3 is a view in longitudinal section through the device shown in Fig. 2.

Fig. 4 is a diagrammatic showing of the circuit connections involved in the use of my apparatus.

My improved apparatus comprises a base at 5 having a bracket at 6 formed by attaching a piece of strap metal by welding or otherwise to the base, the strap having upturned ends at 7 comprising ears tapped to receive pivot screws 8 upon which the pivoted platform 9 is oscillatable. The bracket and the parts mounted on the base are enclosed within a skirt 10 integral with platform 9. The skirt 10 is provided with the apertures through which the screws 8 extend for the pivotal support of the platform. The center of the platform may be recessed by forming it downwardly somewhat at 12 to provide a depressed portion into which the base 13 of a conventional telephone instrument 14 is receivable. The instrument 14 has the usual cradle at 15 for a receiver or hand set at 16.

Near one end of the base the base is provided with an upstanding arm 18 having an outwardly formed flange at 19. The cover skirt 10 has an aperture at 20 with which the flange 19 is en-

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gaged to limit the range of oscillatory movement with the cover or platform 9.

Guided in an aperture in the upstanding arm 18 is an adjusting screw 22 carrying a nut at 23 slidable along the base 5. A leaf spring 24 has an upwardly extending portion at 25 apertured to receive the screw 22 and engaged by the nut 23. The lower end of the leaf spring 25 abuts the arm 18 while the upper end of the leaf spring extends obliquely upwardly from the nut into supporting contact with the lower surface of the pivoted platform 9 and then terminates in a reversely curved free end 27.

When the platform is in its lowermost position of oscillation in response to the weight of the telephone instrument and receiver, the central portion of the platform engages the operating button 28 of a conventional switch 29 which is designed to operate between open and closed positions with very slight range of movement. As shown in the circuit diagram in Fig. 4, the switch 29 is normally open, its contacts being biased by a compression spring 30. When the platform 9 is weighted by the telephone receiver as well as the instrument 14, the combined weight of these parts is sufficient to lower the platform 9 and close the circuit through switch 29.

Leading from the respective contacts of the switch 29 are the insulated leads 32 and 33 which extend to the combination plug and receptacle 34, having prongs 35 and 38 and receptacle contacts 36 and 37. The body of the combination plug and receptacle separates and mutually insulates the prong 35 and the corresponding receptacle contact 36. The leads 32 and 33 are connected therebetween so that the switch 29 controls the electrical communication between plug prong 35 and receptacle contact 36. At the other side, the receptacle contact 37 and the plug prong 38 are directly connected with each other.

In practice the plug prongs 35 and 38 are plugged into the convenience outlet 39. The plug 41 of the radio or other appliance at 40 is plugged into the receptacle contacts 36 and 37. With the parts thus connected, the switch 29 being closed, as long as the radio receiver is in place, it will be apparent that the radio or other appliance 40 may be operated in the usual manner, receiving current through the separated plug prong 35 and contact 36 by means of switch 29. However, as soon as the receiver 16 is lifted from the cradle 15, the difference in weight resulting from the lifting of the receiver will allow the pivoted platform 9 to be lifted by the bias of spring 24, such bias being adjustable to the particular instrument

by means of the adjusting screw 22. As soon as the platform 9 is pivoted upwardly due to the change in the weight imposed thereon, it will free the button 28, thus allowing switch 29 to open in response to the bias of its own spring at 30.

When the telephone receiver is replaced on the cradle 15, the increased weight on the pivoted platform 9 will again cause the platform 9 to move downwardly against the bias of spring 24 thereby closing the switch 29 and permitting the radio receiver or other appliance to resume its functioning.

A notch at 43 in the skirt 10 communicates with the slot 20 and exposes the end of the adjusting screw 22 so that this screw may be adjusted without disassembling the tilting platform 9 from the base 5.

It will be evident that the arrangement is an extremely simple and inexpensive one and yet presents a very neat appearance in use. The spring 24 and the means by which it is mounted and adjusted are particularly compact and inexpensive and yet very effective for the desired purpose.

I claim:

1. The combination with a base having an upstanding bracket near one end, of a platform having telephone instrument positioning means and a skirt embracing the base and bracket and provided with apertures opposite the bracket and offset from the instrument position determined by said means, pivot means extending from the bracket through the apertures of the skirt and pivoting the platform to the base, and a switch having a contact actuator engaged by said platform in one position of oscillation thereof upon said pivot means, said switch being normally open and adapted to be closed when said platform moves downwardly under the weight of a telephone instrument and receiver, together with biasing means for opening the switch and urging said platform upwardly and so supporting the platform as to raise it from switch closing position when the receiver is removed from the telephone instrument.

2. The combination with a base having upstanding ears nearer one end than the other, and a platform having a free end remote from the ears and having a skirt embracing said base and provided with apertures opposite said ears, pintle screws extending through said skirt apertures and into threaded engagement with said ears, a supporting spring beneath the free end of the platform and comprising a leaf spring having a free end portion engaged with the platform, an adjusting screw extending through an aperture in said spring and provided with a nut engaged with said spring for varying the bias thereof upwardly upon the free end of the platform, and a switch disposed beneath the platform between the free end and the pintle screws thereof, said switch having normally open contacts and an upwardly exposed actuating button engageable by said platform in the downward oscillation thereof against the pressure of said spring, said spring being adjusted to bias said platform upwardly sufficiently to raise said platform when a telephone instrument without a receiver is carried thereon and to permit said platform to be lowered by the weight of the added receiver.

3. In a device of the character described, the combination with a base plate provided near one end with upstanding ears and provided near the other end with an upstanding arm, of a tilting platform pivotally supported by the ears, an adjusting screw extending through the arm and provided with a nut, a spring having one end positioned near said arm on said plate and said spring having a free end thrusting upwardly on the platform, said nut being engaged with an intermediate portion of said spring to adjust the supporting bias thereof against said platform, and a switch mounted on said base plate between said spring and said bracket ears and having an actuating button engageable by said platform in the lowermost position thereof and from which said platform rises pivotally upwardly subject to the bias of said spring, said switch being normally open and adapted to close only when said actuator is engaged by said platform.

4. The combination set forth in claim 3 in which said arm has an outwardly extending flange and the skirt of said platform has an aperture in which said flange is loosely disposed, said flange comprising means for limiting the oscillatory movement of the platform about its pivot.

5. In a device of the character described, the combination with a platform adapted to receive a telephone instrument and provided with a depending skirt, of a base within said skirt provided with an upstanding bracket near one end of the platform having pintle means upon which said platform is oscillatable under the weight of said telephone instrument, a supporting spring biasing said platform upwardly and adapted to compensate for the weight of said instrument exclusive of the receiver thereof, said spring being adjustable and a switch disposed on said platform between the spring and pintle means and comprising contacts normally biased toward open position and a contact actuator engageable by the platform when said platform is depressed against the bias of the spring first mentioned.

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