Aug. 12, 1930. L. LUDWIG 1,772,776

ANTENNA ELIMINATOR AND RADIO SET PROTECTOR

Filed June 19, 1928

Fig 1

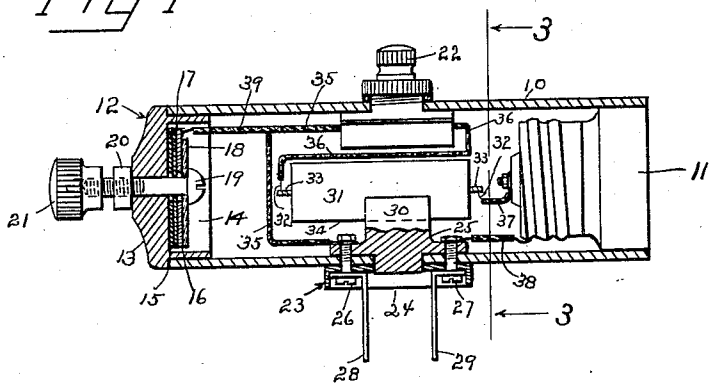
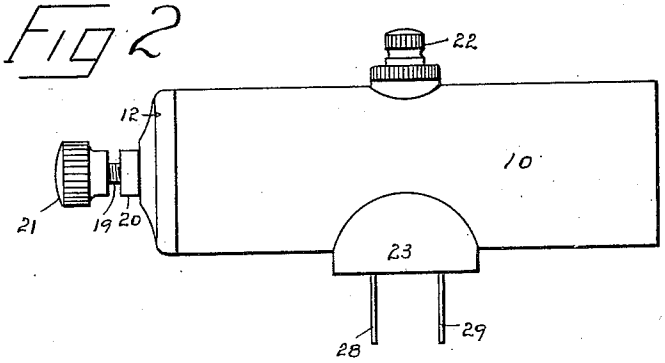


Fig 2



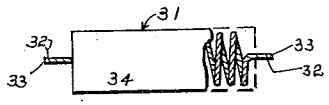
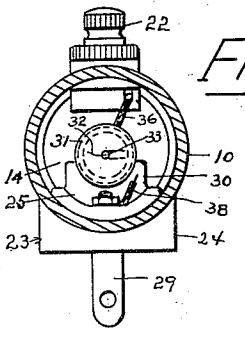


Fig 4

Fig 3



INVENTOR
Louis Ludwig
BY
Henrick J. Schmidt
ATTORNEY

Patented Aug. 12, 1930 1,772,776

UNITED STATES PATENT OFFICE

LOUIS LUDWIG, OF BROOKLYN, NEW YORK

ANTENNA ELIMINATOR AND RADIO SET PROTECTOR

Application filed June 19, 1928. Serial No. 286,701.

My invention relates to a combination antenna eliminator and set protector for use with radio sets employing commercial current. It has for its main object to provide a device which may readily be attached to any radio set, such as described above, and which will permit the elimination of the ordinary antenna and at the same time protect the set from injury, such as would be caused by an increase in the potential of the current normally used. A further object is to provide a device which will act as a fuse and thus further protect the set from injury. A still further object is to provide a device of pleasing appearance, compact in size, simple in construction, and inexpensive to manufacture.

These and other objects and advantages will be readily understood from the following description and from the accompanying drawing, but it will be noted that certain modifications might be made without departing from the scope of the invention. In the drawing,

Fig. 1 is a cross-sectional top view of a preferred embodiment of the device,

Fig. 2 is a top view,

Fig. 3 is a cross-sectional end view taken on line 3—3, Fig. 1, and

Fig. 4 is a side view of one of the parts with a portion broken away to show the interior.

The device consists of a tubular body member 10, having a fixture socket 11 secured in one end and an antenna eliminator 12 secured in the other end. The antenna eliminator consists of a cap 13 having a chamber 14 formed in its inner end in which is contained two metal discs 15 and 16, a separating mica disc 17 and an insulating washer 18. These parts are secured to the cap by a screw 19 and a nut 20 and the holes in the metal discs are made so large that there will be no contact between these discs and the screw. A knurled nut 21 is also provided, so that a wire may be clamped between it and the nut 20.

A suitable switch 22 is inserted in one side of the tubular body member and a plug 23 in the other side. The plug, which is of the two-pronged type, consists of an outer, annular member 24 and an inner member 25 secured together by the bolts 26 and 27. These bolts also clamp the prongs 28 and 29 in place. A cradle 30 is made integral with the inner member 25 and in this cradle a resistance coil 31 is secured.

Referring now particularly to Fig. 4, the resistance coil is of a special construction and consists of a thin wire 32 wound on an asbestos cord 33. This asbestos cord is wound in a helix and imbedded in a suitable plastic composition 34. The whole coil is either glued or otherwise secured to the cradle 30.

The several parts are electrically connected in the following manner. A wire 35 connects the prong 28 with one side of the switch 22. A wire 36 connects the other side of the switch with one end of the resistance wire 32, the other end of this wire being connected to the center contact of the fixture socket 11 by a wire 37. A wire 38 connects the outer contact of the socket with the prong 29. The metal disc 16 of the antenna eliminator is connected to the switch by a wire 39.

In actual operation, when the plug 23 is inserted in an outlet or fixture socket and the switch 22 is closed, current will flow through the prong 28, wire 35, switch 22, wire 36, resistance wire 32, wire 37, socket 11, and hence through the radio set to which the device is attached and back through socket 11 and wire 38 to prong 29. The antenna eliminator is connected to the antenna connection on the set by means of a wire secured between the nuts 20 and 21. The coil is wound to allow only a certain voltage to pass to the set.

Having described my invention, what I claim as new and wish to protect by Letters Patent is—

In a device of the class described, a tubular

body member of insulating material, a pronged attachment plug for connecting the device to an electric current secured on the side of the body member, a lamp socket for connecting the device to a radio set secured in one end of the body member, a fixed condenser secured in the other end by means of a binding post used for connecting a wire to the antenna connection of the radio set, a resistance element contained within the body member, one prong of said attachment plug electrically connected with one contact of the lamp socket, and the other prong connected with the condenser and through the resistance element with the other contact of the lamp socket.

LOUIS LUDWIG.