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E. A. SODERBERG

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ELECTRIC WIRE TAKE-UP RECEPTACLE

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FIG. 1.

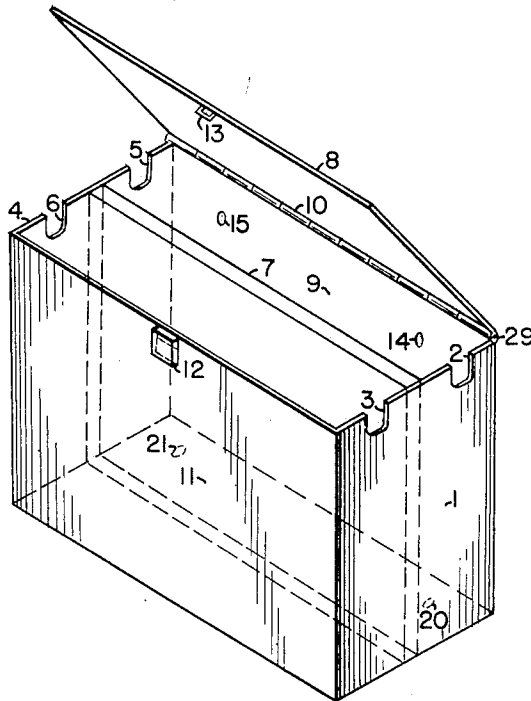


FIG. 2.

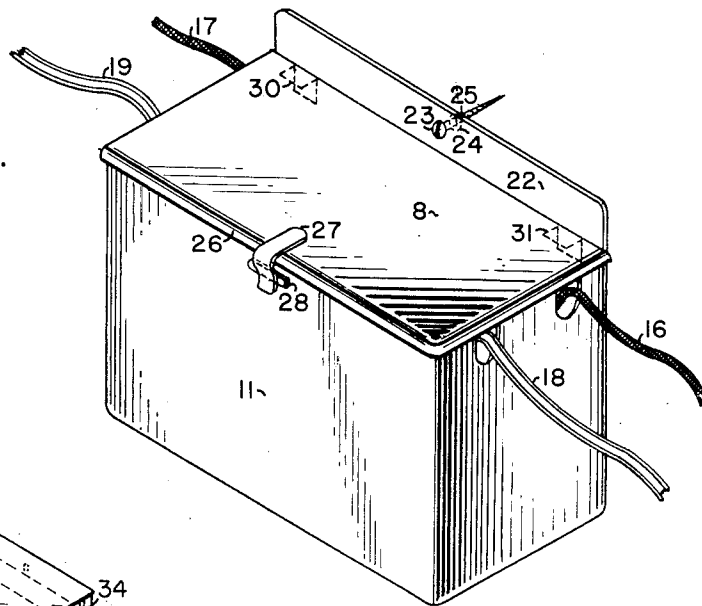
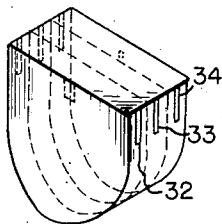


FIG. 3.



INVENTOR.
ELSA A. SODERBERG
BY *Harry R. Lubcke*
AGENT

2,763,707

ELECTRIC WIRE TAKE-UP RECEPTACLE

Elsa A. Soderberg, Los Angeles, Calif.

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1 Claim. (Cl. 174—50)

This invention relates to a box particularly adapted to contain wires associated with a television receiver or like apparatus.

Such a receiver, and short-wave and even ordinary radios, are often purposely installed with considerable excess wire between the affixment thereof to the building and the termination on the receiver. This allows the receiver to be moved according to taste within the room in which it is located. Also, it is not common practice to cut and re-plug the power cord nor to accurately set the length of the signal-carrying lead, since additional work of the installer is required in the first instance and ultimate breakage of the wires at the receiver terminals, etc. requires an allowance as a practical matter in the second instance.

Consequently, it is almost universal that a tangle of wires is to be found behind receivers of this type. These interfere with proper house-cleaning of that area and are unsightly in residence or office, where great pains are otherwise taken to effect neatness. A widespread and important need therefore exists for properly handling this situation. Best performance of the receiver is obtained when the signal-carrying wires are kept separate from the power wires. These wires may not be properly separated when they are tangled on the floor behind the receiver.

Accordingly, an object of my invention is to contain surplus lengths of wires behind or similarly associated with an electrical device of the nature of a television receiver.

Another object of my invention is to contain surplus lengths of plural wires associated with a receiver in a suitably segregated manner.

Another object of my invention is to provide a container structure capable of automatically disgorging wires normally contained therein upon an abnormal tensile stress being exerted on the wires.

Other objects of my invention will become apparent upon reading this specification and examining the related drawings, in which:

Fig. 1 shows an isometric perspective view of one form of the television box itself,

Fig. 2 shows a similar view of a modified form of the box with television receiver wires contained therein, and

Fig. 3 shows a similar view of an alternate shape of box.

I prefer to construct the box of a non-metallic material so that it will exercise substantially no effect upon the signal-carrying wires contained within it. A wide variety of materials are suitable. Plastic materials present a pleasing appearance, are available in a variety of colors to match furniture or room decoration and are suitable for quantity production by moulding press processes. Masonite, fiber, wood, Bakelite, semi-ceramic compounds and even stout corrugated cardboard are alternatives. For sale as a separate accessory, plastic is to be preferred; as an included feature of a television re-

ceiver the corrugated cardboard could be considered satisfactory.

Fig. 1 shows the approximate preferred proportions of the box; a relatively thin rectangular parallelepiped. The end 1 is provided with two notches or semi-circular cut-outs 2 and 3. These are for the purpose of allowing wires to pass from within to without the box when the cover is closed; at the top of the opposite end 4 are corresponding apertures 5 and 6. The space within the box is divided approximately in half by vertical partition 7. This is for the purpose of keeping the signal-carrying wires separate from the power wires. Preferably, although not necessarily, the partition is somewhat thicker than the thickness of the sides of the box in order to accomplish this separation most effectively and it may be hollow, with an opening on top, bottom or sides for presswork convenience and economy of material.

A cover 8, is constructed, normally of the same material and thickness as the other exterior sides or bottom, and is preferably hinged to the box along the top of one long side, such as side 9 by hinge 10. The opposite side 11 is provided with a spring retaining type latch 12. A coacting lip 13 is fastened at the appropriate position upon cover 8.

In use, my box is fastened to the rear of the television receiver, the wall or the supporting stand for the television receiver, as the case may be, by means of screws or equivalent fastenings placed through holes 14 and 15 in side 9. The excess power cord is gathered into a roughly coiled irregular bundle and "stuffed" into the space between side 9 and partition 7. In a similar manner the "twinlead," coaxial, double-coaxial or other type feeder from the antenna to receiver antenna terminal is placed within the space between partition 7 and side 11. The two ends 16 and 17 of the power cable are placed in apertures 2 and 5 and the two ends 18 and 19 of the twinlead are placed in apertures 3 and 6. The cover 8 is closed, the latch 12 and lip 13 engaging. It is not necessary that the two leads go through the box in the same direction, as from external plug or antenna to receiver, as the objective is a random and minimum relation between the wires.

Should someone accidentally or purposely pull the wires, or accomplish the same thing by moving the receiver, the spring retaining latch 12 releases the lip 13 under nominal tension and the taut wire is released by virtue of the whole wire surplus becoming available from within the box.

In these ways I accomplish the objects of my invention.

It is to be noted that several variations of construction and manner of use of my box are possible. The thin front to back dimension shown is dictated by the desire to maintain the wall to receiver distance a minimum. If it is desired to mount the box flatwise, as under a table model receiver, the cover 8 becomes the access front. Screw holes 14 and 15 are suited for fastening under the table supporting the receiver. Should wall or back of receiver mounting be desired additional holes 20 and 21 are utilized. The proportions given may be altered should more compelling circumstances of available room dictate.

In the modifications of Fig. 2, side 9 (of Fig. 1) is extended above cover 8 in portion 22. This allows one ordinary screw, self-tapping screw or equivalent fastening 23 to be used to support the box, this being located well above the center of gravity of the structure. A washer 24 is provided and the screw is permanently fastened to the box by upsets 25 on the screw shank, which retain the washer in place. This is of utility in an article of this class, preventing the screw from being mislaid throughout the life of the combination.

The box of Fig. 2 further differs from that of Fig. 1 in having an enclosing edge 26 extending around the three sides of the cover 8 that lift from the box proper. This provides an effective projection to meet with any of the wires 16 to 19 when pulled, more easily opening the cover. The ledge also stiffens the cover as a structure because of the third order increase of the strength of a beam with increase in the depth dimension.

A different latch is also shown. Part 27 is affixed to or formed integral with the cover. It is of plastic or metal having a spring-like property. A lip 28 projects from or is indented into side 11. The dimensions and spacings of elements 27 and 28 are such that the lower portion of the former is sprung from its normal shape as the cover is closed and returns only partly to normal when closure is completed. This provides the nominal securing force preferred for the cover, as has been previously explained.

The edges and corners, or any of them, may be rounded as shown in Fig. 2 for artistic or utilitarian purposes. An interleaved type of hinge with alternate sections formed in cover and wall 9 and secured by a pin 29 is shown in Fig. 1. In Fig. 2 small separate hinges 30 and 31 are shown.

In either figure the apertures 2, 3, 4 and/or 5 may be narrowed and/or deepened according to particular needs. The spring latch of Fig. 1 may be positioned within the wall 11 rather than upon it. The box may be deeper and shorter to accomplish the functional variation of approximately circular coils of wires, with the bottom curved as the extreme. This shape is shown in Fig. 3, along with the in-wall latch, three compartments for a complicated installation and slit apertures 32, 33 and 34. Since it is not essential that the box be rigid it may, in certain applications, be moulded of semi-flexible rubber.

It will be appreciated that the use of this box will promote safety in the operation of electrical appliances of the character described, in that wear and tear upon power cords will be reduced. What possible flexing may take place at the apertures of the box is distributed over a juxtaposed length of cord rather than concentrated at a point as at a plug. This is because of the probability that when the cord is removed and replaced in the box the portion confined will be longer, shorter or occur at a different portion of the length of the cord than before.

It will be understood that my device may also be used to contain wires associated with intercommunicating systems in offices, allowing desks to be moved from time to time as is invariably required. Similarly, loudspeaking, microphone and demonstration systems where plural or singular cords, metallic or otherwise, are involved can be accommodated. It is useful in schools, churches, auditoriums and similar places of assembly where a television receiver or equivalent device may be located in one position for one gathering and elsewhere according to the needs of another. In such instances this proper control of wires may increase public safety by reducing tripping hazards. My box may be constructed with a different

number of compartments than two; i. e., one, three, four, etc., to suit the number of kinds of cords to be accommodated. An additional wire to ground the apparatus may be employed, as may multiple antenna leads.

The utilitarian aspects of my device have been pointed out. In addition, a certain satisfaction as to neatness and purchasable skill in eliminating a condition long the bane of the female sex as housekeepers must be reckoned in assessing its value in fulfilling human wants.

Variations beyond those mentioned are possible in the construction and use of my device and these I include, limited only by the scope of the following claim:

I claim:

In combination, a box, unshielded electrical conductors adapted to carry radio frequency electrical energy to a radio-wave operative receiver, and other conductors adapted to carry electric power to said receiver; said box formed of insulating material and having parallel sides, ends, a bottom, a lid, a hinged connection of said lid to the top edge of one of said sides, a latch with elements attached to said lid and to the top of the other side, one less partition within said box than the number of kinds of conductors to be enclosed, each said partition lying approximately parallel to said sides and coextensive therewith, said partitions having a sufficiently greater overall thickness than the thickness of said parallel sides to separate the electrical fields of said different kinds of conductors, and one slot more than the number of partitions in each of said ends adjacent to said lid and open theretoward, said conductors adapted to carry radio frequency energy disposed to enter said box through one said slot, in a haphazard path traverse one compartment formed within said box by a said partition and leave said box through the slot in the opposite end from said prior slot, said conductors adapted to carry power similarly disposed in another compartment, and said latch constituted to release upon a force being exerted between said box and said lid by tension upon any of said conductors lying in said haphazard path.

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