Nov. 20, 1962 A. T. THOMPSON 3,064,970

NOVELTY SHOCK UNIT

Filed March 15, 1960

Fig. 1.

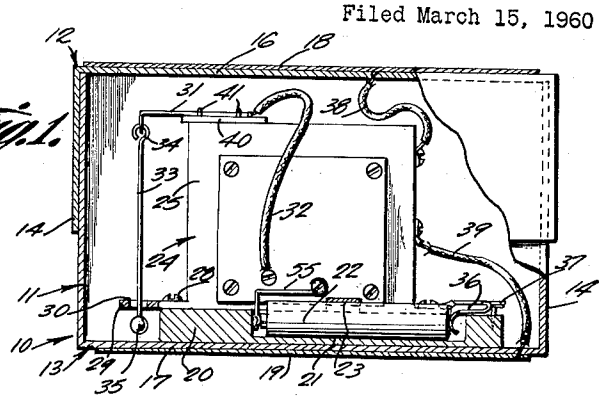
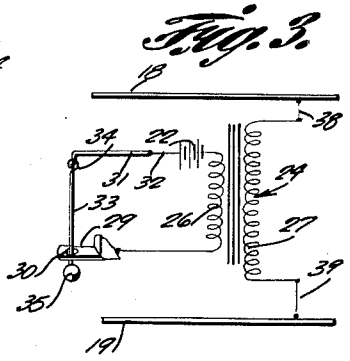


Fig. 3.



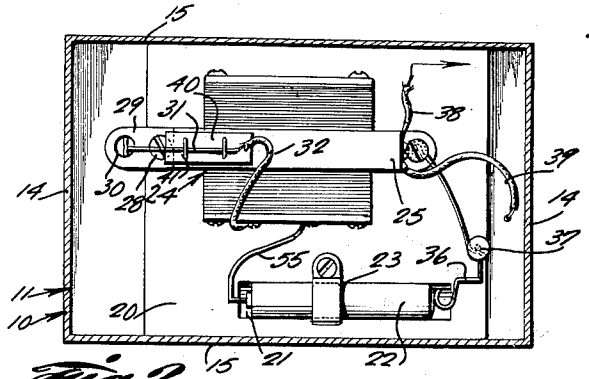


Fig. 2.

Fig. 4.

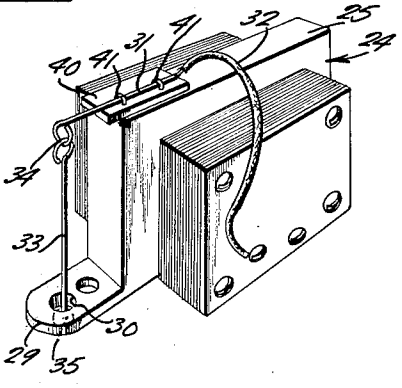
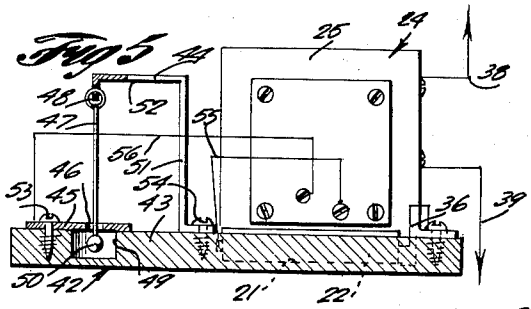


Fig. 5



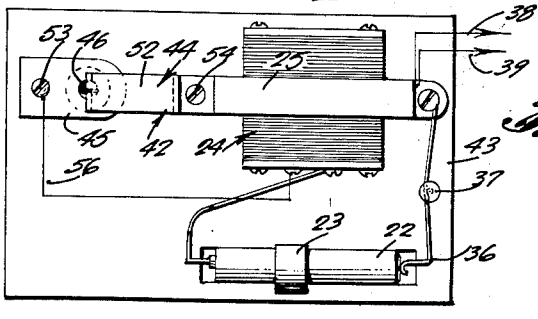


Fig. 6.

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United States Patent Office 3,064,970 Patented Nov. 20, 1962

3,064,970

NOVELTY SHOCK UNIT

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Filed Mar. 15, 1960, Ser. No. 15,091
1 Claim. (Cl. 272—27)

This invention relates to a toy or novelty unit, and more particularly to a novelty unit which is adapted to be used for giving a person a harmless electric shock as a practical joke.

The object of the invention is to provide a novelty shock unit which is adapted to resemble a gift box and wherein when the recipient of the gift box takes hold of the box, he or she will be automatically subjected to a harmless electric shock, and wherein the device is constructed so that a slight movement actuates the electrical circuit so that a continued series of continuous shocks will be given to the person holding the device as long as the device is moved.

Another object of the invention is to provide a novelty shock unit which includes an electrical circuit that is open as long as the unit is level and which is ready for action the moment it is tilted or moved, said device adapted to be incorporated in a suitable box and tied with a ribbon so as to give the appearance of a gift and wherein when the person receives the gift he holds the box so that his or her fingers make contact with the top and bottom of the box and as the box is moved slightly the recipient of the gift will receive an electric shock which is harmless.

A further object of the invention is to provide a novelty shock unit which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

FIGURE 1 is a side elevational view illustrating the novelty shock unit of the present invention, and with parts broken away and in section.

FIGURE 2 is a top plan view, with parts broken away and in section.

FIGURE 3 is a schematic view illustrating the wiring diagram of the present invention.

FIGURE 4 is a perspective view of the electrical unit which may be a transformer, or induction coil frame.

FIGURE 5 is an elevational view illustrating a modification, and with parts broken away and in section and showing portions of the electrical circuit schematically.

FIGURE 6 is a plan view of the modification of FIGURE 5.

Referring in detail to the drawings, and more particularly to FIGURES 1 through 4 of the drawings, the numeral 10 indicates the novelty shock unit of the present invention which comprises a hollow casing or box 11 which includes upper and lower sections 12 and 13, FIGURE 1. The casing 11 is shaped to include ends 14 which are vertically disposed and which are arranged in spaced parallel relation with respect to each other, and the casing also includes spaced parallel vertically disposed sides 15 as well as horizontally disposed top and bottom walls 16 and 17. Conductor plates 18 and 19 which may be made of foil like material are arranged contiguous to the outer surfaces of the top and bottom walls 16 and 17 and are secured thereto in any suitable manner, for a purpose to be later described.

Mounted in the lower portion of the casing 11 is an insulated base 20 which is provided with a cutaway or recessed or chambered portion 21 for receiving therein a source of electrical energy such as the battery 22, and

a clamp or bracket 23 is provided for maintaining the battery 22 in the chamber 21. The numeral 24 indicates an electrical unit which may be an induction coil or a transformer which includes a frame 25 as well as windings 26 and 27, and the electrical unit 24 may be secured to the base 20 as for example by means of securing elements 28.

Secured to or formed integral with the lower portion of the frame 25 of the electrical unit 24 is a horizontally disposed flange or lug 29 which is provided with an aperture 30. The numeral 31 indicates a horizontally disposed arm which is electrically connected to the electrical unit 24 by means of a conductor 32, and the numeral 33 indicates a movable pendulum which is swivelly or pivotally connected to the outer end of the arm 31 as at 34. The lower portion of the pendulum 33 extends through the aperture 30 in the flange 29, and there is mounted on the lower end of the pendulum 33 a weight 35. The numeral 36 indicates a spring contact or conductor which serves to electrically connect the battery 22 to the electrical unit 24, and a securing element 37 is arranged in engagement with the spring contact 36. Electrical conductors 38 and 39 serve to conduct the electrical unit 24 to the top and bottom conductor plates 18 and 19, FIGURE 1. The arm 31 is adapted to be supported on a pad 40 of insulation material which is arranged contiguous to the upper portion of the frame 25, and the arm 31 may be fastened to the pad 40 by means of securing elements 41.

Referring now to FIGURES 5 and 6 of the drawings, there is illustrated a modified novelty shock unit which is indicated generally by the numeral 42 and which includes an insulated base 43 that is adapted to be arranged in a casing such as the casing 11, but in FIGURES 5 and 6 only portions of the device have been shown and portions of the device have been omitted as for example the casing 11 which houses the mechanism has been omitted, for clarity of illustration. The numeral 44 indicates a support member or holder which includes a vertically disposed section 51 as well as a horizontally disposed arm 52, and the numeral 45 indicates a horizontally disposed bar or plate which is provided with an opening or aperture 46 therein and the bar 45 may be secured to the base 43 as for example by means of a screw or securing element 53. The bar 45 has an opening 46 which is arranged in registry with or alignment with a recess 49 in the base 43, and a pendulum 47 is pivotally or swivelly connected to the arm 52 as at 48. The numeral 50 indicates a weight on the lower end of the pendulum 47 and the weight 50 is arranged in the recess 49 of the base 43, the pendulum 47 extending through the aperture 46 in the bar 45.

In FIGURES 5 and 6 the numeral 54 indicates a securing element or screw for retaining the framework connected in place, and the numeral 55 in the various views indicates a conductor for connecting one end of the battery 22 to the electrical unit 24.

From the foregoing, it is apparent that there has been provided a novelty shock unit and with the parts arranged as shown in the drawings, and considering FIGURES 1 through 4 for example, it will be seen that by gripping the casing 11 at the ends 14 or at the sides 15, the holder of the device will receive no electric shock. However, with the box or casing decorated to resemble a gift package or box, it will be seen that the person receiving the gift like box will touch or grip the conductor plates 18 and 19 and as soon as the casing or device is moved slightly, the pendulum 33 will swing on its pivot 34 so as to complete the electrical circuit from the battery 22 to the plates 18 and 19 so as to give the holder or receiver a harmless electric shock. The electrical circuit

will thus be completed from the battery **22** through the pendulum **33** which is also made of conductor material such as a suitable wire or metal, then through the bar **29** and then through the electrical unit **24** whereby electrical energy will be supplied to the conductor **38** and **39** to the plates **18** and **19**.

In the modification of FIGURES 5 and 6, the parts are again adapted to be arranged in a suitable box resembling a gift package or the like, and as long as the box is held by the ends or sides and in a level position, the electrical circuit will be interrupted, but when a person grips the top and bottom of the box and touches the plates such as the plates **18** and **19** and then inadvertently moves the box slightly, the electrical circuit will be completed from the battery **22** through the conductors **55** and **36** to the electrical unit **24** and the electrical circuit will also be completed through the portions **51** and **52** of the holder **44** and through the pendulum **47** and then through the bar **45** and through the conductor **56** whereby the electrical circuit will be completed through the conductors **38** and **39** to the plates **18** and **19** so as to give a harmless electric shock to the person having his or her hands in engagement with these plates.

The parts may be made of any suitable material and in different shapes or sizes.

The electrical unit **24** may consist of a transformer frame **25** or induction coil frame as desired. In FIGURES 5 and 6, the pendulum action is mounted externally from the transformer, and the recess **49** in the base **43** serves to limit travel of the pendulum, the pendulum **47** being supported by the holder **44**. The battery such as the battery **22** is snugly seated in a recess or chamber **21** in the base **20** or in the base **43**. The element **37** may consist of a pin stop, tack, or the like. As stated previously either a transformer or induction coil may be used. Also, the unit of the present invention is adapted to be placed in a gift box so that it does not have to be opened in order to be effective, but the mechanism of the present invention can be mounted in other types of enclosures besides gift boxes.

When the unit is level, the contacts between the pendulum and the adjacent bar is open, but when the unit is tipped or moved slightly, the pendulum causes contact and completes the circuit by touching the adjacent portion of the bar. When the fingers touch both the top and bottom foil plates **18** and **19**, and the unit is tilted or moved, an electrical shock will be received.

It will therefore be seen that there has been provided a unit which will produce an electric shock to be used in jokes and novelty situations, and the mechanism may be incorporated in a box and tied with a ribbon to resemble a gift so that when the person receives the gift, the person holds the box so that his or her fingers make contact with the top and bottom of the box and as soon as the box is moved slightly the person will receive a harmless electric shock.

The unit consists of a standard radio output transformer **24** which has its primary connected in series with a battery **22** in such a way that the transformer frame **25** becomes part of the circuit, and there is also provided a switching device which includes a spring steel wire or pendulum such as the pendulum **33** or the pendulum **47** which is suspended and insulated from the top of the transformer frame in such a way that it forms a pendulum action. The wire **33** or **47** has a weight **35** or **50** to give it more of a positive pendulum action.

The battery **22** is held in place and under tension to give good positive connections by being placed in a chamber or slot **21** which may be formed in the base of the unit. The numeral **36** indicates a steel or metal tension spring member which is shaped to apply tension to the negative side of the battery **22**, and tension may be maintained at the fulcrum point by a securing element **37**. The numeral **23** indicates a hold down arm for the battery which serves to prevent the battery from dropping out when the unit is dropped. The secondary leads **38** and **39** of the output transformer are connected to suitable metal surfaces of the novelty being used. On a gift box a metal foil plate **18** and a plate **19** may be arranged on the top and bottom so that when contact is made at these two plates when the unit is moved so that the pendulum comes in contact with the frame of the transformer, the person will receive a harmless electric shock.

Some of the advantages of the present invention are as follows. Heretofore previous units of this type have used a complicated vibrating spring which was placed in motion by a magnet and steel surface being pulled apart and a shock is given only once and previous devices have also depended upon the unit being open for action to place. The present invention is constructed so that no complicated spring and magnet arrangement need be used, and the unit need only be moved very slightly to give an electrical shock and the unit will keep giving a series of continuous shocks as long as it is moved. The circuit is open as long as the unit fits level and yet it is ready for action the moment it is tilted or moved. It is easy to manufacture because it uses a standard radio output transformer so as to eliminate the winding of a special coil. The battery spring tension to the negative end is unique in that it requires only a piece of bent steel spring wire and no soldering connections are required and the tension spring serves as electrical lead as well.

Minor changes in shape, size and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice if so desired.

What is claimed is:

A novelty shock unit comprising a hollow casing in the form of a closed box having electrically isolated conductive portions provided on its top and bottom walls, an insulated base amounted in the lower portion of said casing and formed with a recessed portion, a source of electric energy retained within said recessed portion, a voltage step-up induction unit mounted on said base and having its output leads connected to said conductive portions on said top and bottom walls, said induction unit having input leads, said unit including a metal frame having an extension on its base portion, said extension being formed with a vertical opening therethrough, an arm mounted on an insulation pad supported on the top of said frame and projecting therebeyond and overlying said extension, an electrically conductive pendulum suspended from said arm and passing freely through the opening in said extension, and circuitry connecting said source of energy through said pendulum and extension and to the input leads of said unit.

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