May 21, 1968 R. E. WOOD 3,384,740

JEWELRY INCLUDING MEANS CAUSING INTERMITTENT ILLUMINATION

Filed Sept. 24, 1965 3 Sheets-Sheet 1

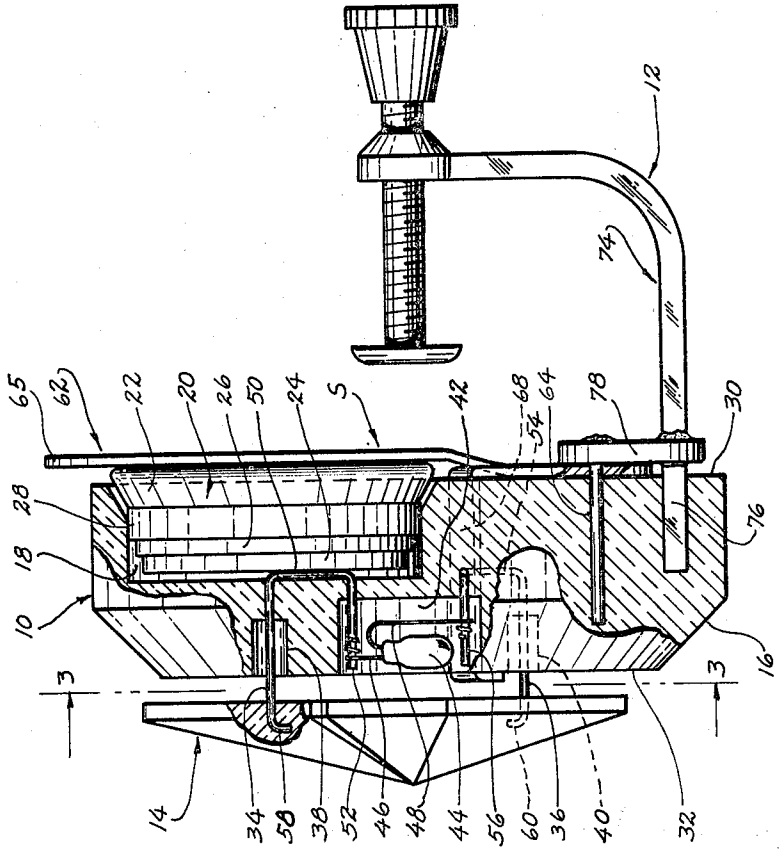

FIG. 2

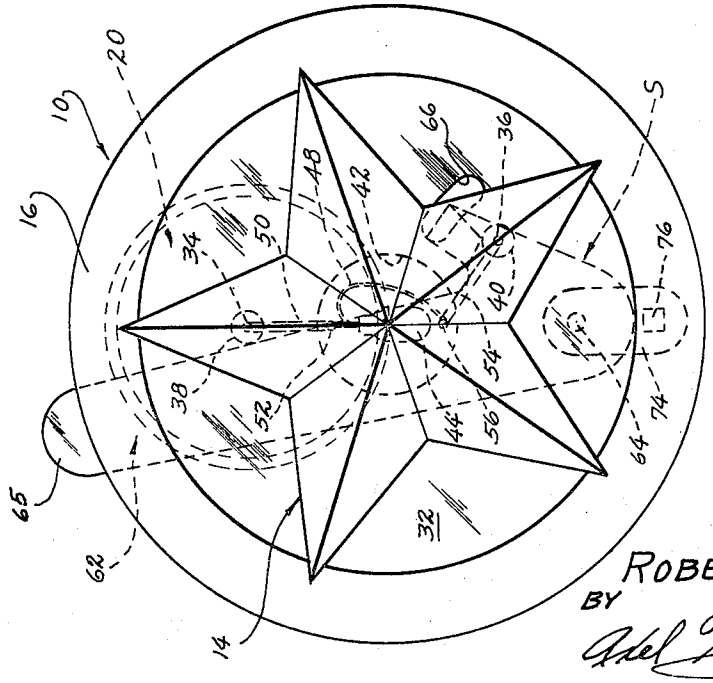

FIG. 1

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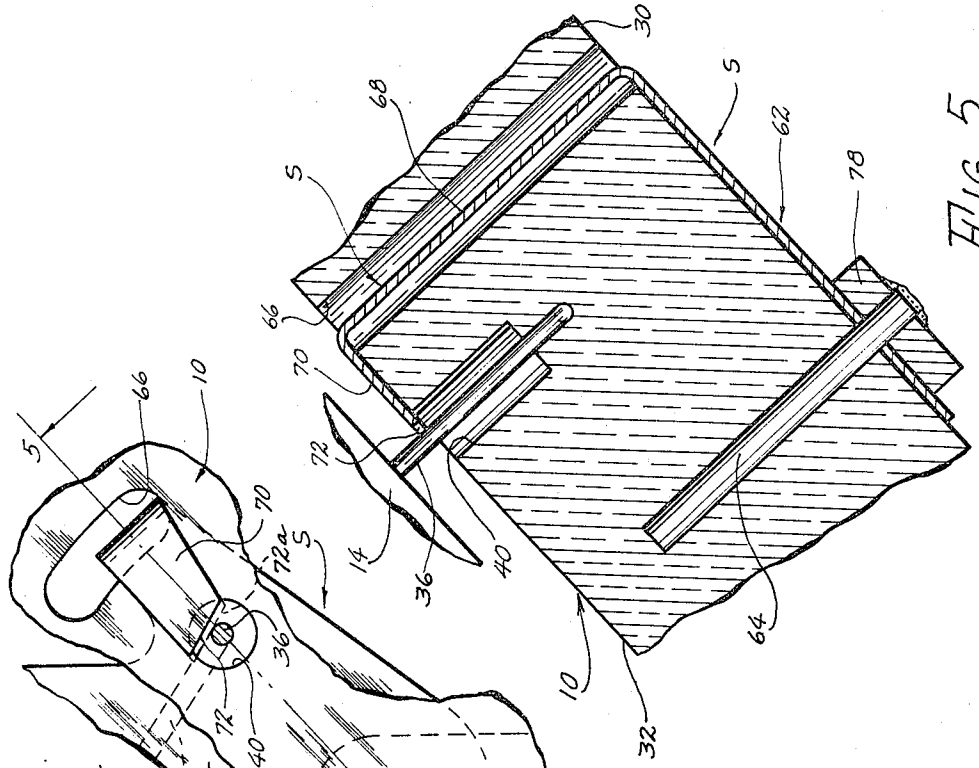

FIG. 5

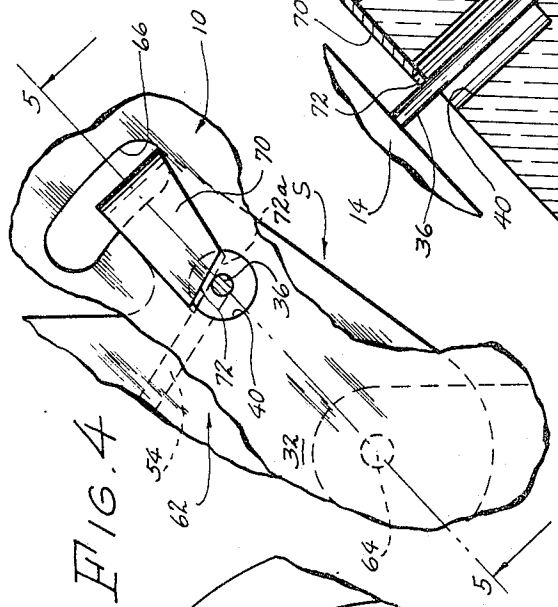

FIG. 4

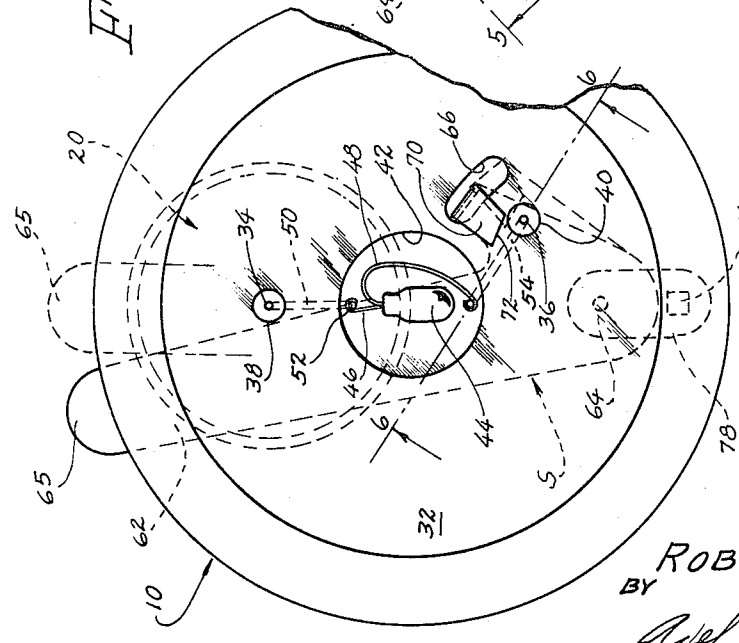

FIG. 3

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JEWELRY INCLUDING MEANS CAUSING INTERMITTENT ILLUMINATION

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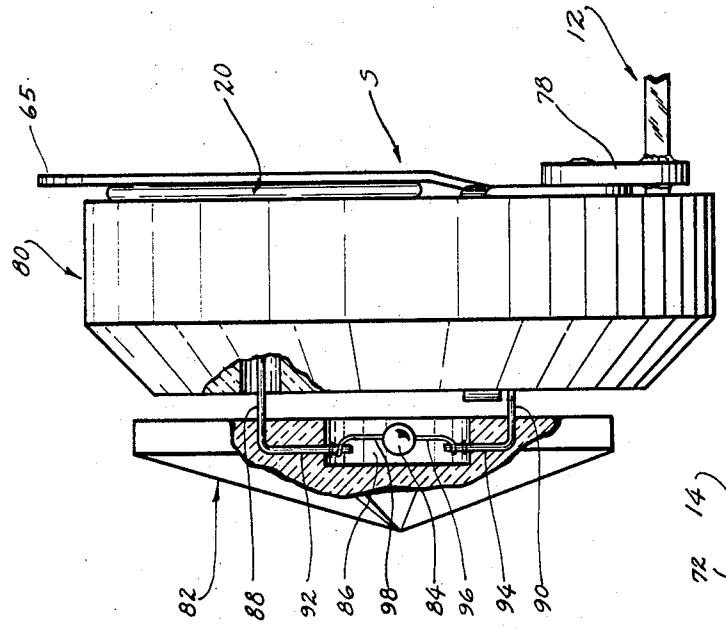

FIG. 8

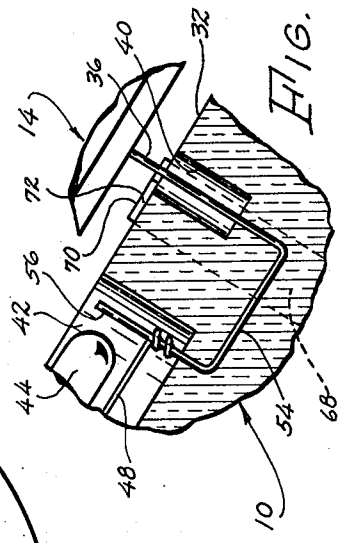

FIG. 6

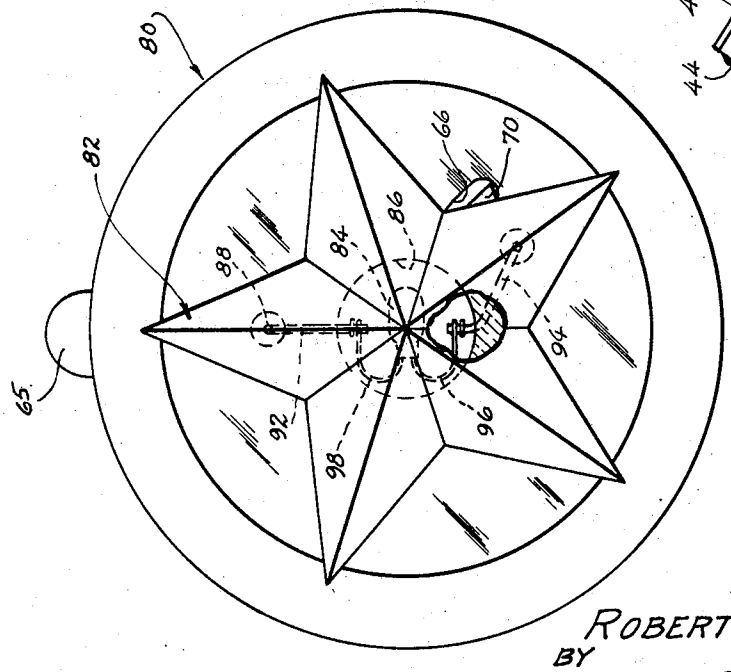

FIG. 7

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United States Patent Office 3,384,740 Patented May 21, 1968

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JEWELRY INCLUDING MEANS CAUSING INTERMITTENT ILLUMINATION

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Filed Sept. 24, 1965, Ser. No. 489,928
1 Claim. (Cl. 240—6.4)

ABSTRACT OF THE DISCLOSURE

An article of personal jewelry provided with an electrical cell and a lamp. An ornamental member is mounted on the body of the article by means of flexible metal members, which members are part of a make-and-break circuit actuated by vibration of the ornamental member upon movement, causing one of the flexible members to engage a switch member, resulting in an intermittent flashing of the lamp. Means is provided to prevent closing the circuit when desired.

This invention relates to costume jewelry, and especially to such jewelry having illuminating means integral therewith, and an object thereof is to provide an added attraction to such jewelry.

Another object is to provide an illuminating means integral with an article of jewelry.

Another object is to provide means to cause the illumination to be intermittent because of the movements of the body of the wearer.

Another object is to provide means to prevent illumination when the article is not being worn.

Further objects and advantages of the invention will become apparent from a consideration of the following detailed description taken in connection with the accompanying drawings, wherein an embodiment of the invention is shown. It is to be understood, however, that the invention is not limited to the details disclosed but includes all such variations and modifications as fall within the spirit of the invention.

Referring to the drawings:

FIG. 1 is a front view of an earring embodying the invention.

FIG. 2 is a side view of the earring of FIG. 1, partly in section.

FIG. 3 is a view taken at 3—3 of FIG. 2 and with parts broken away.

FIG. 4 is an enlarged view with parts broken away, showing the switch lever in position for intermittent operation.

FIG. 5 is a section taken at 5—5 of FIG. 4.

FIG. 6 is a section taken at 6—6 of FIG. 3.

FIG. 7 is a front view of a modification of the earring of FIG. 1, and FIG. 8 is a side view of FIG. 7.

Costume jewelry, while attractive, has often a lifeless appearance, and loses its appeal if worn frequently. This invention adds a feature to costume jewelry such as earrings and similar articles of ornamentation that enhances their attractiveness.

FIGS. 1 and 2 show an earring which embodies the preferred form of the invention, and which comprises a body portion **10** having the customary earlobe clamp **12** and a pendant or ornamental portion **14**.

Body **10** is in this instance, is of transparent plastic material and preferably of the circular shape shown. In this instance a chamfer **16** is provided for the purpose of ornamentation. A cavity **18** is provided at the back of body **10** to receive a mercury cell **20** of the type customarily used in hearing aids. Cell **20** comprises a shell **22** which provides one of the electrical poles, and a pad **24** which provides the other electrical pole of the cell.

Shell **22** and pad **24** are electrically insulated from each other by insulating material as at **26**. Cylindrical body portion **28** of cell **20** is of a diameter to support cell **20** axially in the cavity **18**. Shell **22** flares outwardly as shown and protrudes beyond the back face **30** of body **10** to permit easy removal of the cell **20** when the latter is to be replaced.

Pendant **14**, in this instance, is of transparent plastic material, and of any desired configuration; the star shown being preferred. Pendant **14** is spaced from the face **32** of body **10** and and is resiliently supported on the body by slender filaments or wires **34** and **36**. These wires are embedded in the plastic of body **10**. To assure freedom for flexing of filaments or wires **34** and **36**, bores **38** and **40** are provided in body **10** surrounding the wires.

A cavity **42** in face **32** receives a sub-miniature lamp **44** having leads **46** and **48**. Filament **34** extends into cavity **18** as shown in FIG. 2, and has a portion **50** in contact with the bottom of cavity **18**, and which portion **50** provides a contact with pad **24** of cell **20**. Portion **50** continues in a terminal portion **52** which extends into cavity **42**. Lead **46** of lamp **44** is soldered to portion **52**.

Filament **36** is similar to filament **34** with respect to its purpose and comprises a portion **54** and a terminal portion **56** which extends into cavity **42**. Lead **48** of lamp **44** is soldered to portion **56**.

Flament portions **34** and **36**, and terminal portions **52** and **54** and **56** are embedded in the plastic of body **10** as shown in FIGS. 2 and 6. The ends of filaments **34** and **36** are also embedded in the pendant **14** as shown, the ends of the filaments being formed as shown at **58** and **60** to assure a firm anchorage in the pendant.

Mercury cell **20**, if employed to furnish uninterrupted power for the lamp **44**, would have a comparatively-short life. A constant illumination may also be uninteresting. In view of this, a novel switch S had been devised. This switch comprises a lever **62** pivoted on a pin **64**, which pin is embedded in body **10**. Lever **62** extends upwardly and is so formed as to positively contact shell **22** of cell **20** and to urge the latter into electrical contact with portion **50** of the filament **34**. Switch S is also the means of providing the contact with filament **36** which function will be later described. Lever **62** terminates beyond body **10** as at **65** to provide the means to be engaged by the finger of the wearer when it is desired to actuate the switch S.

A passageway **66** is provided in body **10** and which extends from face **32** and terminates at back face **30**. A leg **68** is made integral with lever **62** and is formed as shown in FIG. 5, and terminates in a contact blade **70**. Blade **70** is in close proximity to filament **36** and terminates in an end-face **72**. When switch S is in the "off" position as shown in FIGS. 1 and 3, deflection of filament **36** will not permit the latter to contact face **72** and close the circuit and light the lamp **44**. However, if switch S is shifted clockwise to the dotted position of portion **65**, as shown in FIG. 3, face **72** will be in a position to be engaged by filament **36**. The end of passageway **66** being engaged by leg **68**. The distance between filament **36** and face **72** can be varied by the wearer in order to regulate the sensitivity of the intermittent flashing of the lamp **44**.

Ear-lobe clamp **12** comprises the customary bow portion **74** which extends into the body **10** and is secured by molding therein as at **76**. A lug **78** embraces pin **64** and portion **76**, apertures being provided therein so that pin **64** and portion **76** can be soldered therein.

When being worn, the above piece of costume jewelry is fastened to the ear lobe of the wearer in the customary manner with the portion **65** of switch S in the position as in FIG. 1 which is the "off" position, as when no illumination is desired. When it is desired to have the lamp operate

intermittently, the wearer moves the portion **65** of switch S clockwise thus bringing the face **72** into proximity to filament **36** as shown in FIG. 4. A slight movement of the head of the wearer will cause filament **36** to engage face **72** and light the lamp **44**. Owing to the flexibility of filament **36**, the circuit will open and close intermittently, thus giving the effect of a shimmer or sparkle.

It has been determined that this "make-and-break" operation permits the mercury cell **20** to recuperate, thereby extending its life substantially. However, if a constant illumination is desired, face **72** can be modified so as to assume the position shown by dotted lines, and indicated as **72***a* in FIG. 4.

FIGS. 7 and 8 show a modification having a body **80** and a pendant **82** substantially as previously described. However, the lamp **84** is placed in a cavity **86** of the pendant **82**. Filaments **88** and **90** have portions **92** and **94** which terminate in cavity **86**, permitting leads **96** and **98** to be secured by soldering thereto. The other details of the modification shown in FIGS. 7 and 8 are similar to those shown and described with respect to FIGS. 1 through 6.

The above being a complete description of an illustrative embodiment of the invention, what is claimed as new and desired to be secured by Letters Patent of the United States is:

1. An article of jewelry, comprising, in combination a body, means for attaching said body to a wearer, means

movably supporting a pendant on said body including a first and a second filament, a lamp mounted on said body having leads electrically connected thereto, a cell mounted in said body having a plurality of electrical poles, said first filament engaging one of said poles, a switch means mounted on said body, said switch means including a movable lever engaging the other of said poles, said switch means having a portion electrically connected to said lever positionable in proximity to said second filament for engagement therewith upon deflection of said second filament to establish a circuit including said lamp and said cell, each of said leads extending from said lamp to one of said filaments and secured thereto.

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