

- [54] WALL MOUNTED SELECTIVELY CONTROLLED ALARM
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- [*] Notice: The portion of the term of this patent subsequent to Aug. 10, 1988, has been disclaimed.
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- [52] U.S. Cl. 340/326, 340/376, 340/331, 240/2 R
- [51] Int. Cl. G08b 23/00
- [58] Field of Search..... 340/371, 366 R, 378, 383, 340/110, 111, 112, 89, 366 B, 326, 331, 332; 240/11.2 R, 25, 2 R

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3,624,635	11/1971	Less	340/371 X
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[57] ABSTRACT

A lighting and signalling device adapted to be mounted on a wall surface, said device comprising an enclosure, a first selectively energizable lamp mounted in the enclosure for illuminating the surroundings, a second selectively energizable lamp readily distinguishable from the first lamp and mounted in the enclosure for providing a visual alarm signal, and an electrical siren mounted in the enclosure for providing audio emergency signals and being energizable simultaneously with the second lamp. The enclosure is decorative in appearance and is provided with inconspicuous inlet and outlet openings adjacent the siren.

3 Claims, 5 Drawing Figures

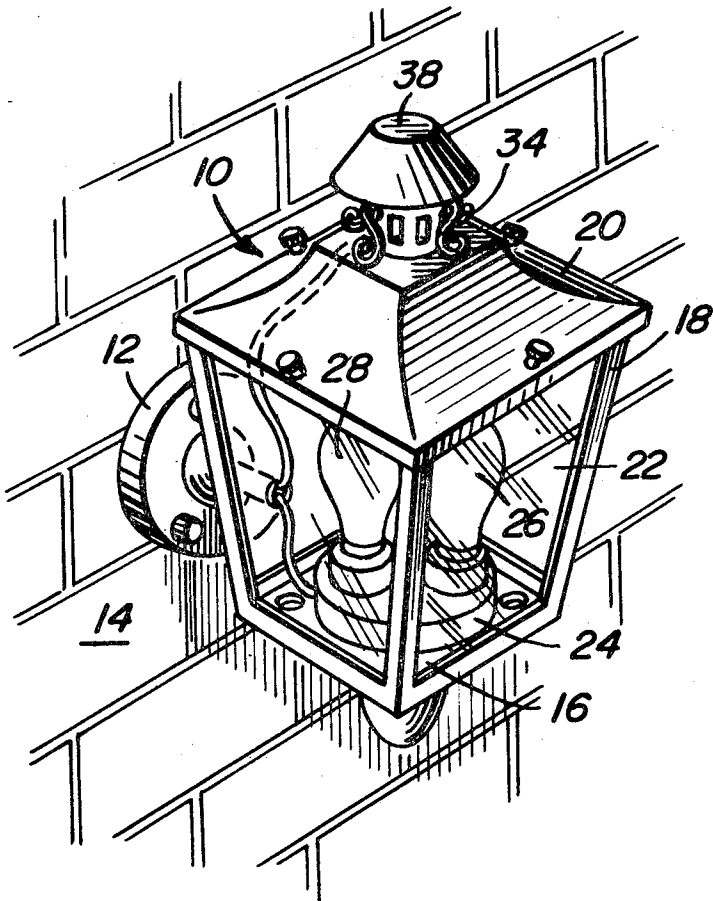


Fig. 1

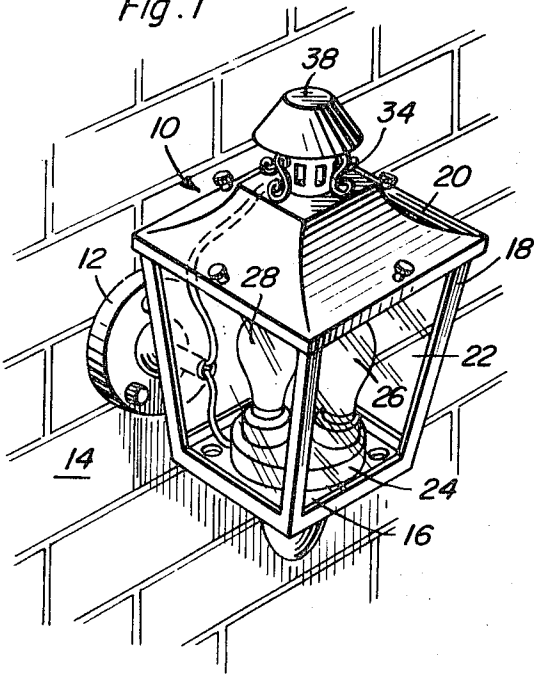


Fig. 3

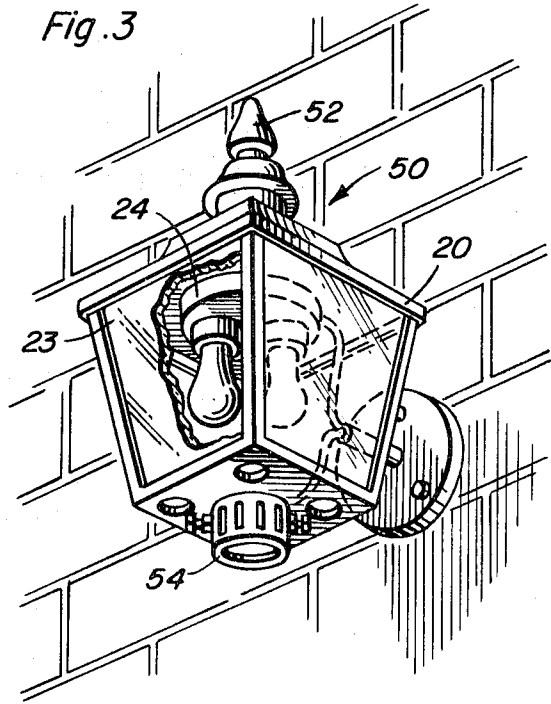


Fig. 2

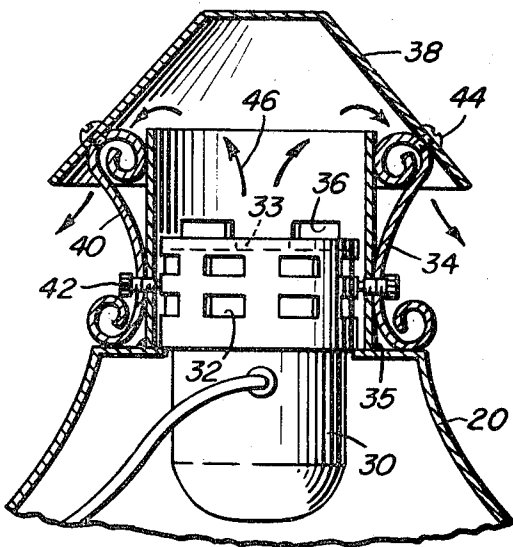


Fig. 4

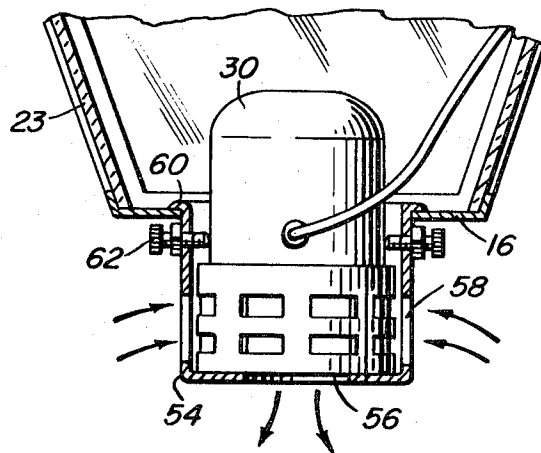
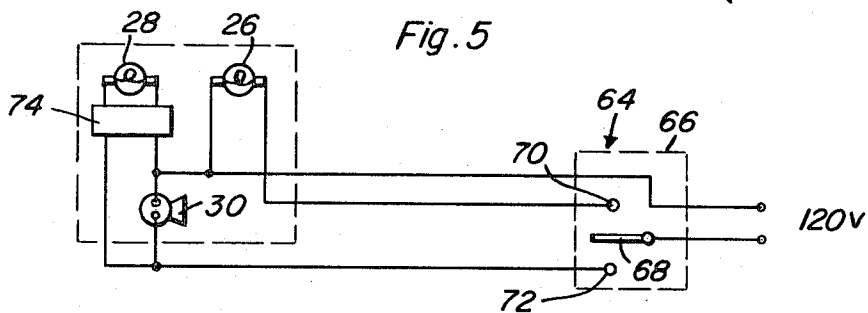


Fig. 5



WALL MOUNTED SELECTIVELY CONTROLLED ALARM

RELATED APPLICATION

This is a modification of the device in U.S. Pat. No. 3,599,201, issued Aug. 10, 1971, in which applicant was co-inventor.

FIELD OF THE INVENTION

The present invention is generally related to emergency alarms and, more particularly, to an audio visual alarm and illumination device for mounting outdoors to provide lighting under normal conditions and to inform passersby of an emergency situation in the event such should occur.

In the past, various alarm systems have been proposed for the detection of fire, warning of intruders, or the like. Such conventional devices, for the most part, have been unattractive, and most conspicuous in appearance, rendering them impractical for residential use. Furthermore, most conventional alarm systems were prohibitively expensive to manufacture and install, such that they were beyond the financial means of many homeowners.

SUMMARY OF THE INVENTION

The present invention includes both audio and visual alarm components mounted in a lighting enclosure including a pair of lamps one of which is normally adapted to light the surrounding area. Control switches are located remotely from the enclosure in the associated house or structure and permit selective energization of an illumination lamp or an emergency lamp and siren. Preferably, the emergency lamp is of different color than the illumination lamp, with the illumination lamp being de-energized upon energization of the emergency lamp. The structure of the enclosure is attractive in appearance and decoratively conceals the electrical alarm components from the view of passersby. Thus, the present invention satisfies a long existing need of homeowners by providing a combination illumination and alarm signalling means.

It is an object of the present invention to provide a novel alarm system which is attractive and inconspicuous in appearance and suitable for outdoor residential installation.

Another object of the present invention is to provide a unique illumination and alarm device including separately energizable lamps within the same lighting enclosure to provide either illumination of the surroundings or visual warning signals to passersby in the event of an emergency.

It is a further object of the present invention to provide a versatile audio visual alarm device including an outdoor lighting enclosure which is attractive in external appearance and which houses an emergency warning lamp and an electrical siren in an inconspicuous manner such that they are not readily apparent to passersby.

Still another object of the present invention is to provide a novel illumination and alarm device which is of attractive, durable, compact construction including a relatively small number of parts and which is economical to manufacture and install.

These together with other objects and advantages which will become subsequently apparent reside in the

details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a first embodiment of the illumination and signalling device of the present invention.

FIG. 2 is an enlarged partial sectional view of the enclosure associated with the device illustrated in FIG. 1.

FIG. 3 is a perspective view of a second embodiment of the present invention with sections removed.

FIG. 4 is an enlarged partial sectional view of the enclosure associated with the device illustrated in FIG. 3.

FIG. 5 is a schematic diagram of a preferred embodiment of the control circuitry associated with the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now, more particularly, to FIGS. 1 and 2 of the drawings, the first embodiment of the present invention is generally indicated by the numeral 10 and includes a lantern-like enclosure supported by a mounting bracket 12 adapted to be fastened to a wall surface, such as that indicated at 14. The enclosure is comprised of a generally rectangular base 16, formed from sheet metal, or the like, with frame members 18 extending upwardly therefrom to support a top member 20. Panels of light-transmitting material 22 are embraced between opposite frame members 18 to define a somewhat frusto-pyramidal configuration for the main body of the enclosure. Preferably, panels 22 are made from well known materials such as glass or plastics and may be transparent or translucent in nature, as desired.

A light fixture 24 is mounted to base 16 in the interior of the enclosure and is provided with a pair of lamps 26 and 28, which are at least partially surrounded by panels 22. Lamp 26 is of a conventional type normally utilized for illumination purposes, while lamp 28 is colored, or otherwise readily distinguishable from lamp 26, to provide a readily recognizable emergency warning signal when energized. The lamps are wired to provide independent, selective energization, as hereinafter explained.

An electrical siren 30, or the like, is mounted near the top of the enclosure and is appropriately connected to the control circuit, hereinafter explained. Preferably, the siren is of a conventional type which produces an audible warning signal by the passage of air through inlet ports, such as those indicated at 32, and exhausted through an outlet port, as indicated at 33. In order to accommodate the unimpeded flow of air through the siren's inlet and outlet ports, the enclosure is provided with a generally cylindrical member 34 which defines a partial housing around the siren. The cylindrical member is provided with axial openings at each end and a plurality of circumferentially spaced openings 36. Siren 30 is partially disposed within the confines of the cylindrical member, such that its intake ports 32 are in general alignment with inlet openings 36. The upper axial opening of cylindrical member 34 provides an exit path for the air exhausted by the siren during operation.

In order to protect the siren against contaminants, such as weather elements, a cap member or cover 38 is positioned above the exhaust opening of cylindrical member 34 and is spaced from the cylindrical member by way of a plurality of support brackets 40, preferably 5 ornamental in configuration. Each support bracket is fastened to cylindrical member 34 by way of thumb screws 42, or the like. Preferably, cap member 38 is of generally frustoconical configuration and is held in position by way of screw fasteners 44, or similar means, 10 engaging support brackets 40. Such a mounting arrangement provides adequate spacing between cap member 38 and cylindrical member 34, whereby the air from the siren may be easily exhausted, as indicated by the arrows shown at 46. It will be appreciated, that the overall external appearance of the lighting and signaling device is highly decorative and inconspicuous in nature as it is similar in appearance to conventional lantern-like lighting fixtures. It will also be appreciated, 15 that by providing panels which are translucent, rather than transparent, the presence of the emergency warning lamp and siren is fully obscured or concealed from passersby.

Referring now to FIGS. 3 and 4 of the drawings, a second embodiment of the present invention is generally indicated by the numeral 50. The second embodiment is similar to the first embodiment illustrated in FIGS. 1 and 2, but provides opposite mounting locations for the siren and light fixture. In addition, an ornamental fitting 52 is provided at the top of the enclosure, rather than cap member 38 of the first embodiment. The second embodiment is illustrated with translucent panels 23, rather than transparent panels as illustrated with the first embodiment. Of course, transparent panels may be utilized with the second embodiment, if so desired. Light fixture 24 is fastened to top member 20 by appropriate means, while a cylindrical member 54 is provided at the bottom of the enclosure. The cylindrical member is provided with an outlet opening 56 and a plurality of circumferentially spaced inlet openings 58. Preferably, the upper end of member 54 is provided with a flared edge 60 to fasten the member to base 16. The siren 30 is oriented in a mounting position opposite that of the first embodiment, such that a substantial portion of the siren is disposed within the confines of cylindrical member 54 with inlet ports 32 in general alignment with inlet openings 58. A pair of thumb screws 62 are threadedly received by cylindrical member 54 and are tightened against the siren body to hold such in position.

Referring to FIG. 5, the control circuitry associated with the present invention is generally indicated by the numeral 64 and includes a manual switch mechanism 66, preferably located within the house or building structure upon which the illumination and warning device is mounted. Preferably, the switch mechanism is of a single pole, double throw type and is appropriately connected to a voltage source, such as 120 VAC. The switch mechanism is provided with a manual operator 68 which is selectively movable between contact points 70 and 72. The electrical siren 30 is mounted in parallel with warning lamp 28. Preferably, a flasher unit 74, of a conventional type is connected to lamp 28 to provide an on-off warning signal which is more readily recognizable. Of course, it is not essential that the flasher be provided and, if desired, the warning lamp 28 may be connected directly in parallel with siren 30. 65

When it is desired that neither the alarm nor illumination bulbs be energized, selector 68 is appropriately positioned intermediate contacts 70 and 72. Such would be the case for normal daytime operation of the device. The selector may be switched to contact 70 at nightfall or other times when it is desired to energize lamp 26. When the selector is in this position, neither emergency lamp 28 nor siren 30 is energized. In the event of a fire, burglary, or other emergency, selector 68 may be switched to contact 72, whereby the emergency lamp and siren are simultaneously energized and illumination lamp 26 de-energized. Energization of both the emergency lamp and siren is effective to provide both audio and visual warning signals which may be readily recognized by passersby, in order that they may render assistance. If desired, a plurality of switch mechanisms may be connected in parallel throughout the house to provide control from various switching points.

From the foregoing descriptions, it will be appreciated that the illumination and warning device of the present invention provides a versatile means of exterior lighting together with an alarm system. The compactness and external appearance of both the first and second embodiments are such that the alarm function of the device is not apparent unless the alarm lamp and siren have been energized. Thus, the device of the present invention provides a dual function of both furnishing exterior illumination, as well as providing a selectively controlled audio and visual alarm. Of course, it is not intended that the present invention be limited to the two embodiments illustrated in the drawings, minor changes in shape or configuration of the device being deemed to fall within the scope of the present invention. 35

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

What is claimed as new is as follows:

1. As an article of manufacture, a device for mounting on an exterior wall of a building structure, consisting of:

a combined illumination and emergency signalling device comprising an enclosure mountable upon said exterior wall, providing a generally closed top, bottom, and four corner portions, all of sheet metal, said top wall further forming a weather cap to protect the enclosure from the elements, at least three of the four corners of the enclosure having translucent material therebetween, the fourth open, or unfilled, portion being adjacent the exterior wall for connection to switching means on an interior wall of the building structure, the interior portion of the enclosure further including first and second selectively energizable, and differentially colored electric lamps mounted within said enclosure for providing both conventional illumination and flashing, or other intermittent, illumination respectively, said device further including a generally cylindrical member generally parallel to and vertically disposed with respect to the exterior wall of the building structure, said cylindrical member in-

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cluding a plurality of circumferentially spaced apertures defining air and sound passageways, an electric siren supported in said cylindrical member with inlet and outlet ports generally aligned with said air passageways, and circuit control means located interiorly of the building structure for selective energization of said second lamp and said siren for summoning outside aid in the event of an emergency, or energization of said first lamp only for illumination of the area adjacent said enclosure, laterally extending bracket means attachable to the

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exterior wall of the building structure, wiring for connecting the lamps and siren within the enclosure, through said bracket means, to said circuit control means.

2. The device of claim 1, wherein said siren and passageways are located near the upper portion of said enclosure.

3. The device of claim 1, wherein said siren and passageways are located in and extend partially through the bottom of said enclosure.

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