Nov. 12, 1963 K. KAPLAN 3,110,892

BURGLAR ALARM FOR VENDING MACHINES AND THE LIKE

Filed April 4, 1962

FIG.2

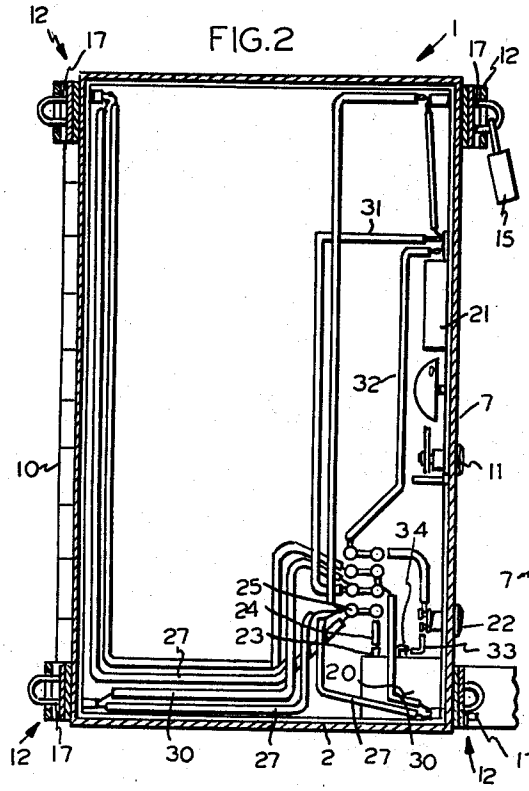
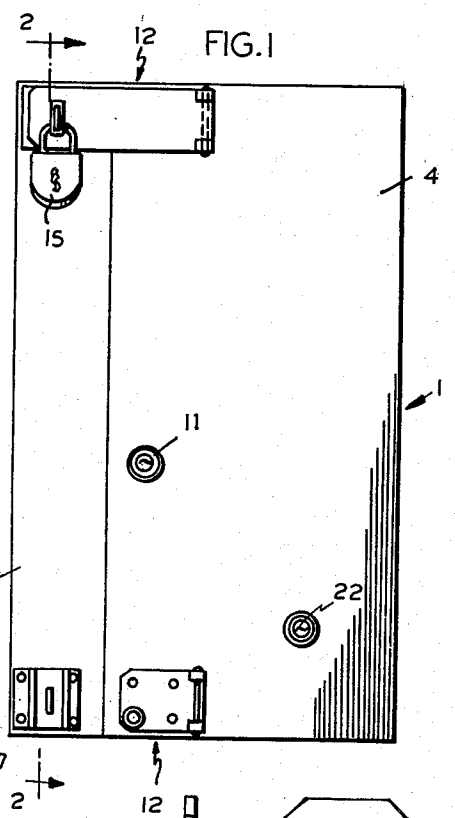


FIG.1



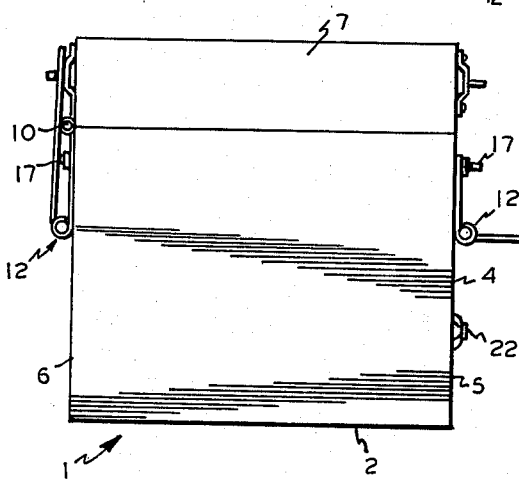


FIG.3

FIG.4

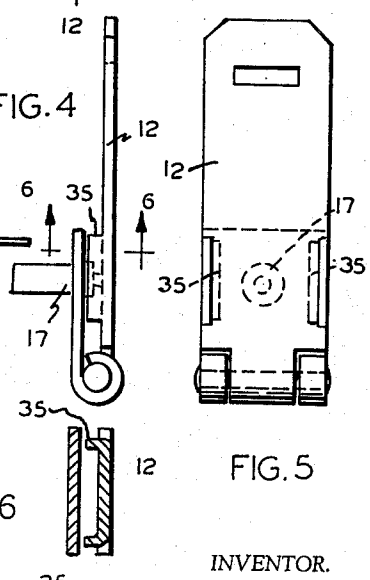


FIG.6

FIG.5

INVENTOR.
KARL KAPLAN
BY Henry J. R. Metzler
ATTORNEY

United States Patent Office 3,110,892 Patented Nov. 12, 1963

3,110,892
BURGLAR ALARM FOR VENDING MACHINES AND THE LIKE

Karl Kaplan, 151 W. 86th St., New York, N.Y.
Filed Apr. 4, 1962, Ser. No. 184,983
3 Claims. (Cl. 340—274)

The present invention relates to improvements in burglar alarm devices, and, more specifically, to an alarm for items which are locked by means of one or more padlocks such as vending machines, lockers, tool boxes, doors and the like, although the principle of my invention can be applied also to items locked by other locking devices.

One object of the present invention is the provision of a device of the character described which automatically sets off an alarm when a burglar starts any attempt to open the vending machine or the like, thus even before the complete opening of the vending machine or the like, the alarm sounds already and cannot be silenced unless a special key is used for this purpose.

Another object of the present invention is the provision of a device of the character described which is absolutely tamperproof, which can be actuated from a battery or the like mounted within the protected enclosure, so that even a cutting of all wires in the vicinity will not prevent a sounding of the alarm, and which is adapted for use on stationary objects as well as on portable items or vehicles.

A further object of the present invention is the provision of a device of the character described which can be used as a window protective alarm, for homes, offices or stores, as well as for music boxes, coin-operated washing machines or amusement devices as well as any vending machines, because it requires only very little space and can be installed easily and inexpensively in existing devices which are already in use as well as in newly manufactured vending machines or the like, and which is reliable in operation, fool-proof in use, and simple in construction, but also sturdy, durable and well adapted for withstanding the rough usage to which devices of this type ordinarily are subjected.

With the foregoing and other objects which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangements of parts of the embodiment disclosed without departing from the spirit of the invention as claimed.

In the accompanying drawing I have set forth an illustrative embodiment of my invention.

In said drawing:

FIGURE 1 is a side elevational view of a preferred embodiment of my invention;

FIG. 2 is a sectional view on the line 2—2 of FIG. 1;

FIG. 3 is a bottom plan view;

FIG. 4 is an enlarged detailed side view of a hasp;

FIG. 5 is a front view of the hasp of FIG. 4; and,

FIG. 6 is a sectional view on the line 6—6 of FIG. 4.

Similar reference characters refer to similar parts throughout the several views.

In the drawing the numeral 1 denotes a housing for a vending machine or the like having a bottom 2, a top 3, side wall portions 4, 5 and 6 and being closed by a lid member 7 which is pivoted to the side wall 6 at 10. A key-operated latch lock 11 can keep the lid member 7 in a closed position and one or more hasps 12 (four hasps in the instance shown) in connection with padlocks 15 keep the device safely locked and are provided with my new and improved alarm. My new and improved alarm consists of one or two push button

switches 17, which are constructed and arranged for closing an electric alarm circuit whenever any one of the hasps 12 is being moved from a folded position on to an unfolded position. I prefer to carry out this feature of my invention in the manner shown in the drawing, where it will be seen that at least one switch 17 is extended through a wall portion of the container 1 beneath each hasp 12 and is conductively connected to a battery 20 (FIG. 2) or any other source of electrical current as well as to an alarm such as a bell 21 or the like. In the instance shown the source of electrical current 20 as well as the alarm bell 21 is contained within the container or vending machine enclosure 1, but either the bell 21 or the battery 20 or both of them may be located outside of, and a distance away from, the container 1 and connected thereto by means of wires.

As long as a hasp 12 is closed or in a folded position, as shown on the top of FIGS. 1 and 2, the bottom of the switch 17 is depressed, so that the alarm circuit relating to that switch 17 is interrupted. However, even the slightest initial movement of any one of the hasps 12 toward an unfolding of the same, will cause the button of a switch 17 to be released, so that the alarm circuit is closed and the bell 21 rings until a key-operated main switch 22 is operated for shutting off the alarm. If the switch 22 is closed and all the hasps 12 are in closed or folded positions, the alarm circuit is interrupted. But as soon as one of the hasps 12 is broken open, or even only tampered with, an electrical current passes from a terminal 23 of the battery 21 through conductors 24, 25 and 27 to a first terminal of a closed switch 17, through that switch 17 and through conductors 30 and 31 to a first terminal of the alarm bell 21, through the alarm 21, through a conductor 32, through the key-operated switch 22 and through another conductor 33 to a terminal 34 of the battery 21, thus causing a sounding of the alarm.

In order to make the insertion of a thin blade between the button of a switch 17 and a hasp member 12 impossible, I prefer to bend inwardly a pair of opposite edge portions 35 of each hasp 12, as may be seen in FIGS. 4, 5 and 6.

Any hasp 12 may be of any desired width, and it may be made so wide that it will cover a major portion of a container, like a so-called piano hinge, and several switches 12 may be arranged beneath the same.

While I have shown in the drawing an acoustical alarm, any other alarm may be used, such as warning lights, or/and a camera photographing the burglars, or any other electrically operated safety device may be actuated by the switches 17.

Since certain changes may be made in the above article and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which as a matter of language might be said to fall therebetween.

Having thus fully described my said invention, what I claim as new and desire to secure by Letters Patent is:

1. A burglar alarm comprising a hasp having a pair of longitudinal members hinged to one another and being provided with an aperture in a first one of said members and with angular edge portions on opposite sections of a second one of said members extending therefrom toward the first member at both sides of the aperture, a pressure-actuated switch extended through the aperture

in one of said hasp members being operated by the other hasp member, and an electrical alarm circuit controlled by said switch.

2. In an enclosure having a closure member, an alarm device consisting of a hasp having a pair of longitudinal members hinged to one another and being provided with an aperture in a first one of said members and with a U-shaped portion in a second one of said members having flange sections extending toward the first member at both sides of the aperture, a pressure actuated switch extended from the enclosure through the aperture in said first hasp member, and an electrical alarm circuit controlled by said switch, said switch being opened by the second one of said hasp members folding upon the first hasp member and being constructed and arranged for closing the alarm circuit when released from said second hasp member by unfolding the same.

3. A device of the character described comprising a container having an open portion and having side walls as well as a bottom, a lid member hinged to said container, at least one hasp secured to said container near said lid member having a pair of longitudinal members hinged to one another, a pressure actuated switch extended from said container through a first one of said

hasp members, a source of electrical current within said container being conductively connected to a first terminal of said switch, an electrically operated alarm device mounted on said container, and an electrical circuit for operating said alarm device by means of said source of current being provided in said container and being connected to a second terminal of said switch, said switch being opened by a second one of said hasp members folding upon the first hasp member and being constructed and arranged for closing the alarm circuit when released from said second hasp member by unfolding the same, the second hasp member having a U-shaped portion provided with opposite flange sections extending toward the first member at both sides of the switch.

References Cited in the file of this patent

UNITED STATES PATENTS

1,029,281	Davis	June 11, 1912
2,620,411	Liley	Dec. 2, 1952

FOREIGN PATENTS

163,545	Great Britain	May 26, 1921