April 28, 1936. H. ADLER 2,038,625

THEFT ALARM FOR ATTACHÉ CASES AND SIMILAR ARTICLES

Filed Oct. 18, 1933

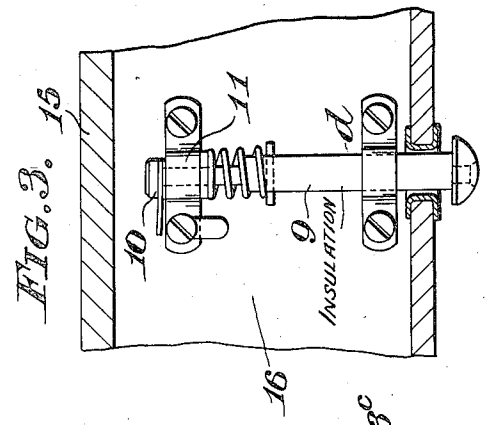


FIG. 3.

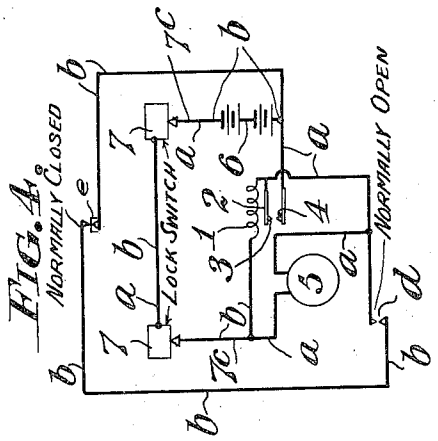


FIG. 4.

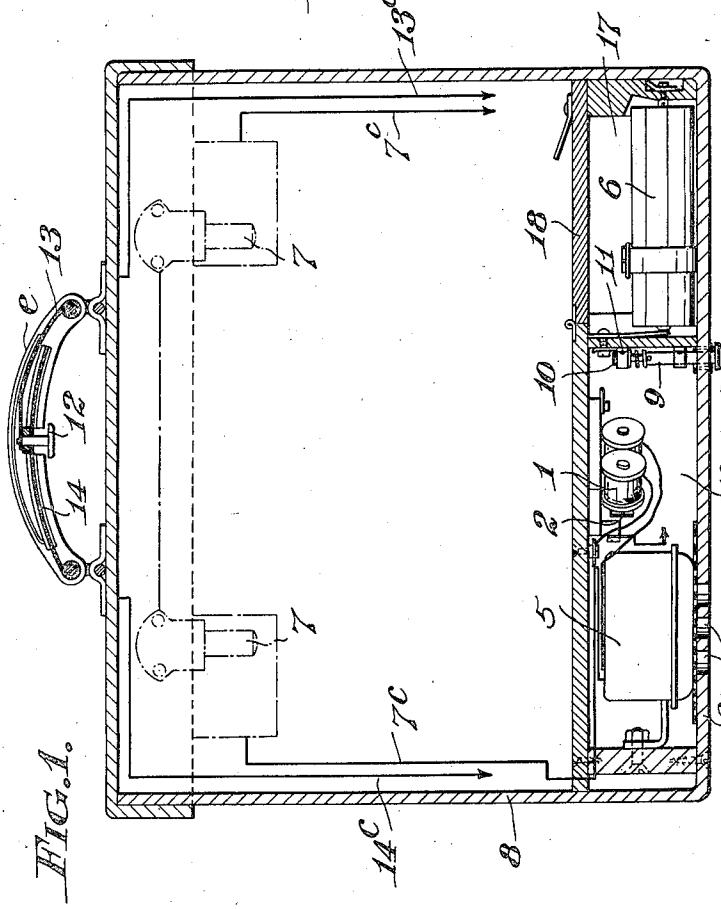


FIG. 1.

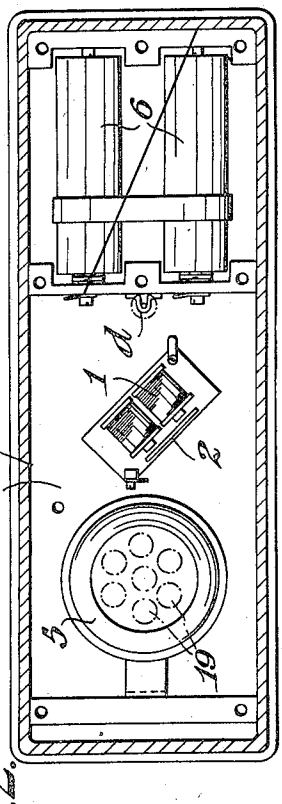


FIG. 2.

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THEFT ALARM FOR ATTACHÉ CASES AND SIMILAR ARTICLES

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Application October 18, 1933, Serial No. 694,124
In Great Britain November 9, 1932

2 Claims. (Cl. 177—316)

This invention relates to theft alarms for attaché cases and similar articles, of the kind having an alarm system housed within the case which is adapted to operate as soon as the case is lifted from a support or snatched from the person carrying it in order to bring into action an electric buzzer or similar audible device so that a warning is instantly given when the case is lifted or taken from the owner.

The alarm system in accordance with this invention comprises a main circuit incorporating a buzzer or the like, and a relay circuit incorporating one or more switch devices the operation of any one switch or all of them simultaneously functioning to complete the relay circuit, completion of the relay circuit completing the main circuit which remains in the operative condition even when the relay circuit has been opened.

A preferred form of the invention is illustrated in the accompanying drawing wherein:—

Figure 1 is a vertical sectional elevation of a case fitted with the alarm system.

Figure 2 is a plan of same from beneath with the case bottom removed.

Figure 3 is a detail view of the case switch, and

Figure 4 is a circuit of the alarm system.

Referring to the drawing there is provided in the main circuit *a*, *a*, *a*, the electro-magnet 1 of a relay which also includes the armature 2 and contacts 3, 4, which are closed when the armature is attracted. The electro-magnet 1 is also included in the circuit *b*, *b*, *b* so that when such circuit *b* is closed the electro-magnet 1 is energized, thereby causing same to attract the armature 2. The attracted armature 2 closes the two contacts 3, 4 thereby completing the main circuit *a* which maintains the armature 2 in the attracted position so that the buzzer 5 which is included in the main circuit *a* continues to operate after the relay circuit *b* has opened. A pair of batteries 6, 6 is provided for the main and relay circuits. The lock or locks 7, 7, provided on the attaché case 8 or the like, are of strong construction and connected together electrically and with the main and relay circuits *a* and *b* so that the system is rendered inoperative when the lock or any one of the locks 7 is opened. The wires 7^c, 7^c connecting the locks 7, 7 to the components of the system are preferably located in two of the thick corner seams of the case or in some other parts equally resistant to destruction. The alarm components are housed in the bottom of the case 8, if desired, in a metal casing to prevent interference from the exterior.

Two switches are employed in the present embodiment as shown in Fig. 4. Both of these switches are adapted to be restrained in open position and unless one or the other is maintained open by external means, the alarm will sound. It is, of course, only necessary that one of the switches be kept open in order to prevent the sounding of the alarm. One of the switches is located in the base of the case, and the other in the handle. The base switch *d* (Figure 3 especially) consists of a plunger 9 of insulating material, the head 10 of which is adapted to be held away from a fixed contact element 11 when depressed, e. g. when the case is at rest upon a counter or the like, so as to keep the relay circuit *b* open. As soon as the case 8 is lifted the head 10 of the plunger 9 is drawn on to the contact 11 by spring influence, the plunger 9 thereby assuming its normal position which is that of completing the relay circuit *b*.

The handle switch *e* (Fig. 1) consists of a button 12 connected to a contact strip 13 which is adapted to bear upon a second contact strip 14 when the button 12 is unrestrained by hand. During use the button 12 is depressed by the hand to separate the two contact strips 13, 14 thereby keeping the relay circuit *b* open. The wires 13^c, 14^c connecting the strips 13, 14 to the system are located in the other two thick corner seams of the case 8 or in some other parts equally resistant to destruction. In the event of the case being snatched away the button 12 when released by the hand of the person carrying it is moved under pressure of the springiness of the strip 13 to bring it to bear upon contact strip 14, thereby closing the relay circuit. The spring strip 13 has sufficient strength to resist operation under the mere weight of carrying the case or under the conditions which exist by the grabbing or grasping of the handle before actual lifting by a person unfamiliar with the fact that the case is protected by the alarm system of my invention. Under normal conditions of grabbing or grasping the handle, there will not be sufficient force applied to open the contacts between the strips 13 and 14. The operative who is familiar with the operation of the alarm system is careful to exert pressure enough on button 12 to maintain the contacts carried by strips 13 and 14 in open position, but anyone unfamiliar with the case will not be apprised of the fact that button 12 must be depressed to prevent sounding of the alarm. That is to say, when an authorized person is

carrying the case and grasping the handle of the case he is aware that it is essential to depress button 12 to prevent operation of the alarm.

The alarm components are accommodated within the case 8 beneath a false bottom 15, the buzzer 5, magnet 1 and armature 2 and base switch *d* being housed in a compartment 16 and the batteries 6, 6 in a second compartment 17, accessible from the case interior through a hinged flap 18. Perforations 19 are provided in the bottom 20 of case 8 for emission of sound from the buzzer 5.

I claim:—

1. In combination, a case having a cover and a lock therefor, including a switch opened when the lock is unlocked, a handle for the case, a switch disposed in the handle and including a pair of contact strips and an actuating button adjacent thereto, said contact strips having such resilience as will resist normal forces of lifting or carrying said case, said contact strips being normally closed but separable under conditions of manual force applied to said button, a second switch in series relation with said first switch and having means for maintaining it open when the case is placed upon a support, a main circuit including a source of potential, an alarm device and said lock controlled switch, another circuit including each of said first two switches and an electromagnetic switch, the actuating coil of which is in shunt with the alarm device and in series with the first three switches and the source of potential, the contacts of said electromagnetic switch being in series with the alarm device and source of potential, whereby when the case is lifted from its support the closing of the circuit of said coil will be effected and the electromagnetic switch maintained closed as long as the lock switch remains closed.

2. In combination, a case, a handle therefor, said case having incorporated therein a main circuit, an audible signal included in said circuit, a second circuit, a plurality of switch devices included in the second circuit, a lock for said case including contact elements disposed in a path common to each of said circuits, means responsive to the completion of the said second circuit for completing the main circuit, and means connected with said main circuit and operative to maintain the said main circuit active when the said second circuit is subsequently interrupted by either of said switch devices, said main circuit being rendered inactive by opening said lock and the contact elements associated therewith, one of the second recited switch devices being disposed in said handle and including a pair of contacts and an actuating button adjacent thereto, such contacts tending to resist normal forces of lifting or carrying the said case, and said contacts being normally closed but separable under conditions of manual force applied to said button.

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