April 28, 1925.

1,535,582

J. J. DARRELL

THEFT INDICATING DEVICE

Filed July 5, 1924

2 Sheets-Sheet 1

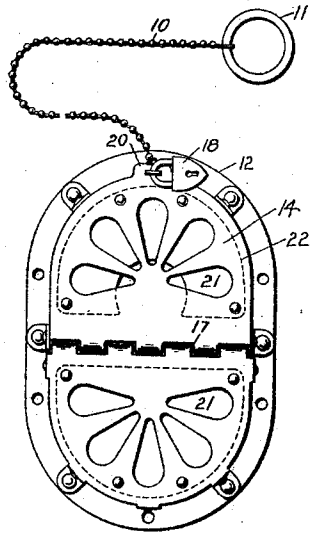


Fig. 1

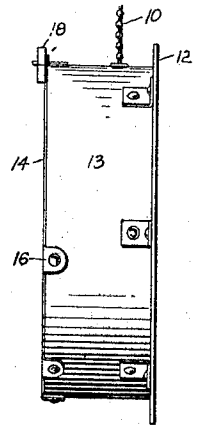


Fig. 2

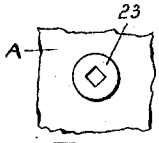


Fig. 4

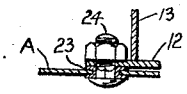


Fig. 5

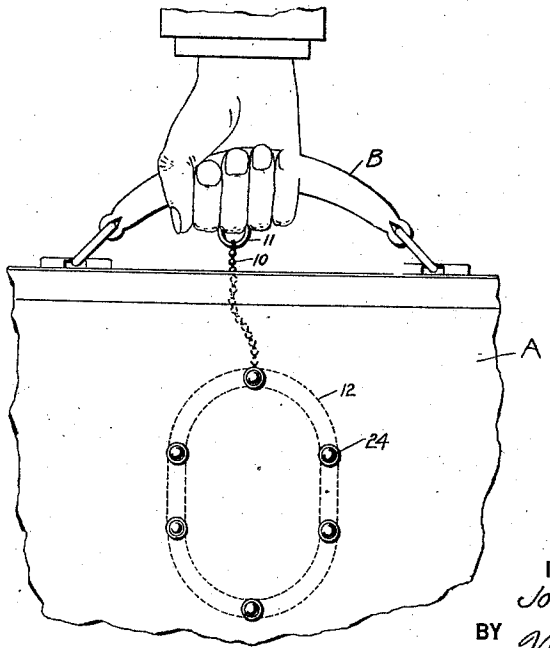


Fig. 3

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2 Sheets-Sheet 2

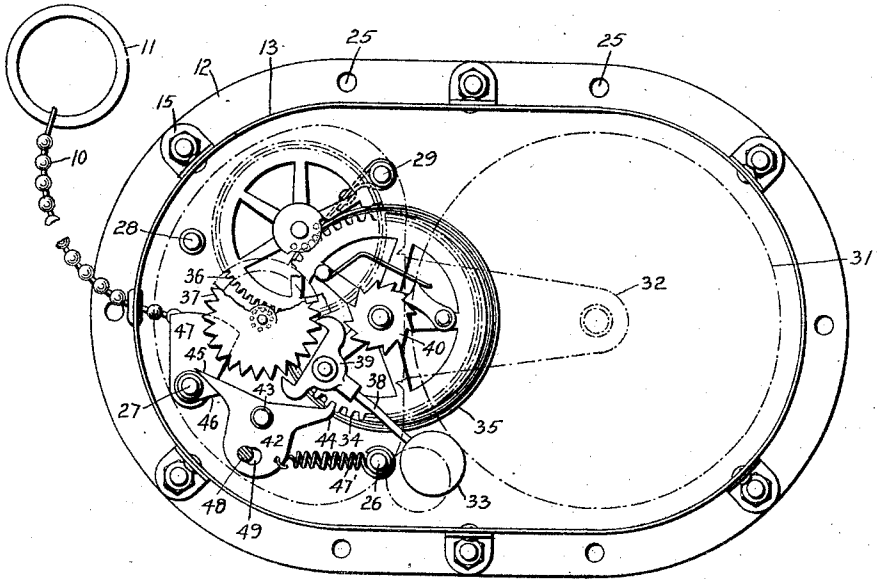


Fig. 6

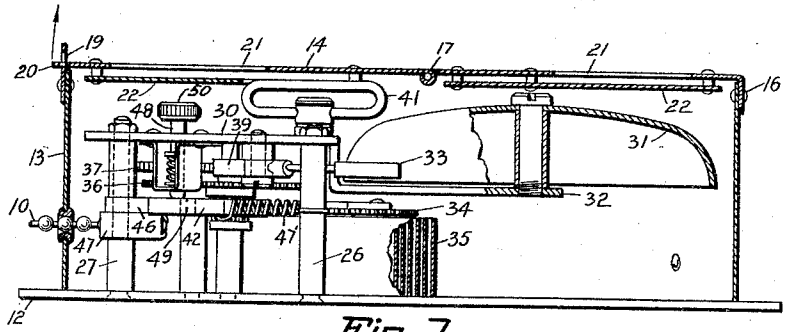


Fig. 7

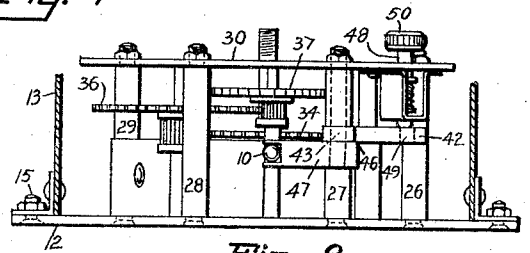


Fig. 8

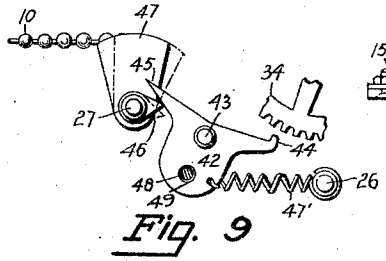


Fig. 9

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Patented Apr. 28, 1925. 1,535,582

UNITED STATES PATENT OFFICE.

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THEFT-INDICATING DEVICE.

Application filed July 5, 1924. Serial No. 724,323.

To all whom it may concern:

Be it known that I, JOHN J. DARRELL, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Theft-Indicating Devices, of which the following is a specification.

The present invention relates in general to theft-indicating devices, and has for its primary object to provide an audible theft-indicating alarm for use in combination with suit cases, satchels, hand bags and such other portable containers as are used by banks and other establishments for carrying money and valuables on the streets or in other public places.

The salient features of the invention are illustrated in the accompanying two sheets of drawings, and in which the particular form shown includes an alarm or signal, that is adapted to be set off when the container to which it is mounted is forcefully taken from the possession of the person carrying the same.

Further objects and the structural features of the invention will appear from the following description of said drawings, and in which:

Figure 1 is a face view of the device, and Fig. 2 a side view of the same; Fig. 3 is a view of a portion of a satchel showing the device applied thereto.

Fig. 4 is a detail view of the mounting or attaching grommet, and Fig. 5 is a cross-section of the mounting or attaching means.

Fig. 6 is a plan of the device with the top plate of the cover removed, also the plate covering and supporting the spring mechanism has been removed to clearly show the parts thereunder, the outline of the latter plate and the bell is shown in dot-and-dash lines. Fig. 7 is a longitudinal sectional view of the cover, and a side view of the mechanism in elevation, and Fig. 8 is an end view of the said mechanism. Fig. 9 is a detail view of the tripping mechanism released or disengaged.

In my co-pending application Serial Number 690,985, filed February 6, 1924, I have described and claimed a similar device, but in the present case the alarm is actuated by a spring mechanism as compared to the electro-mechanical actuating mechanism in the former case. Both forms of the invention are capable of serving the same objectives, and the difference in the two forms are concerned principally with the actuating mechanism.

Referring now to the drawings in detail: The letter A represents a satchel or any other container suitable for the purpose, and the device is attached to the inside of the satchel so as to leave the chain 10 or pull cord free to extend exteriorly of the satchel, so that the ring 11 may be gripped or otherwise engaged by the finger or hand of a person grasping the handle B.

The case for the alarm mechanism is preferably made in three major parts, consisting of a base 12 oval in shape but not necessarily so, a cover 13, and a top plate 14 therefor. The cover may be secured to the base by bolted ears 15, fastened at spaced intervals around the extending edge of the base, and the top plate 14 is riveted or otherwise fastened to the cover as at 16. The cover is further made with a section hinged as at 17, Figs 1 and 7, so as to obtain access to the alarm mechanism when necessary to reset the same.

Since it is highly desirable to prevent unauthorized tampering with the alarm mechanism, particularly after it has been set off by some one forcefully taking possession of it, I have made provisions for locking the hinged section of the cover plate to the cover. This may be accomplished in several ways, but I have shown a pad-lock 18 for engaging in the eye 19 of a lug which extends through an opening in the tongue 20 on the edge of the top plate. The top is still further made with openings 21 for sound-outlets, and with protective plates 22 beneath the openings and spaced therefrom, so as to leave unobstructed sound-openings and at the same time prevent anyone inserting an instrument through the openings to silence the alarm or stop the mechanism.

To attach the device to a satchel or other container, I would suggest providing grommets 23, Figs. 4 and 5, or other reinforced holes in the material of the container, and use carriage bolts or the like 24 through the holes and engage alternate holes 25 in the flange of the base 12 Fig. 6.

The alarm mechanism is mounted upon the base 12 by standards 26, 27, 28, and 29 positioned in suitably spaced relation to support the mechanism, and also to provide se-

curing means for the plate 30 in which the spindles for the gear wheels are mounted. The alarm comprises a bell 31 supported on the end of the arm 32 integral with plate 30, and a clapper 33.

The clapper is actuated by a gear wheel train, comprising a master wheel 34 directly rotated by the clock spring 35, an intermediate wheel 36, and a toothed clapper wheel 37. The end of the clapper arm 38 is fixed to a pivotally mounted and double-ended rocker segment 39, the pointed fingers of which contact with the clapper wheel 37 so as to be rocked thereby when the wheel is rotated.

The master wheel 34 includes a dogging device 40, and a winding means 41 for the spring 35. The dogging device holds the spring wound under tension but leaves the wheel free to rotate in the proper direction.

This part of the mechanism is adopted from the principle of an ordinary alarm clock, and for this reason I do not consider it necessary to go into further detail concerning the same.

The tripping device preferably comprises a double-ended disk-like piece 42, the same being pivoted as at 43 to rock back and forth with an oscillatory movement. The pointed fingers 44 and 45 on the flaring ends of the piece, engage the teeth on the master wheel 34 and a cam 46 respectively, Fig. 9. The cam is pivoted on the spindle post 27 which latter also provides a pivoted mounting, and integral with the cam, for the anchor block 47 to which the end of the chain or pull cord 10 is attached.

The mechanism is normally maintained inactive by the finger 44 engaging with the teeth of the master wheel 34, Fig. 6, so as to hold the same against rotation under the influence of the spring 35. The opposite finger 45 should lay against the cam 46, so that a pull on the chain or cord 10 will cause the block to move and impart a wiping contact to the finger 45 by the cam, thus rocking the piece 42 and releasing the finger 44 from holding engagement with the master wheel 34 as shown to advantage in Fig. 9. This tripping release leaves the spring 35 free to drive the gear train and through it actuate the clapper 33.

Although a spring 47′ is connected to hold the finger 44 in engagement with the master wheel 34 under tension, its influence is overcome after the trip has worked by a spring-pressed post 48 dropping into a hole 49 in the piece 42. This locks the trip open and the bell continuously sounds until the trip is manually reset to normal position again.

In order to reset the tripping device, the top plate 14 is opened and the head 50 of the spring-pressed post 48 is raised by the fingers to disengage its extremity from the hole 49. Immediately upon disengagement the coil spring 47′ functions to reengage the finger 44 with the teeth of the master wheel 34 to silence the alarm, and simultaneously through its opposite finger 45 reset the anchor block 47 and control-chain 10 to the normal or emergency position again.

Having thus illustrated and described my invention in its preferred form, I wish it understood that the same may be modified as practice suggests. Therefore, the patent protection that I desire, is all of that which comes within the spirit and scope of the invention as claimed.

I claim:—

In an alarm device of the class described, a bell, a clapper for the bell, a spring driven gear wheel train for actuating the clapper, a master wheel in said train, a tripping device for arresting rotation of the master wheel comprising a disk-like member pivoted to rock back and forth, a finger on one end of said member adapted to engage the master wheel to arrest the rotation of the same, and means for releasing said arresting engagement comprising a finger at the opposite end of the disk-like member, a cam having a wiping contact with said last-named finger, said cam adapted to rock said disk-like member to move the first-named finger away from its engagement with the master wheel to release the same, a spring-pressed post adapted to engage a hole provided in said disk-like member to hold the first-named finger out of engagement with the master wheel, a spring for returning the disk-like member to a position where the said first-named finger will reengage the master wheel when said spring-pressed post is raised out of said hole, and means for turning said cam comprising a pivoted block to which the cam is mounted and a pull chain connecting the block substantially as and for the purpose described.

In testimony whereof I affix my signature.

JOHN J. DARRELL.