Feb. 9, 1926. 1,571,935

A. L. N. FLEMING ET AL

SAFETY DEVICE

Filed Dec. 15, 1922 4 Sheets-Sheet 1

Fig. 1

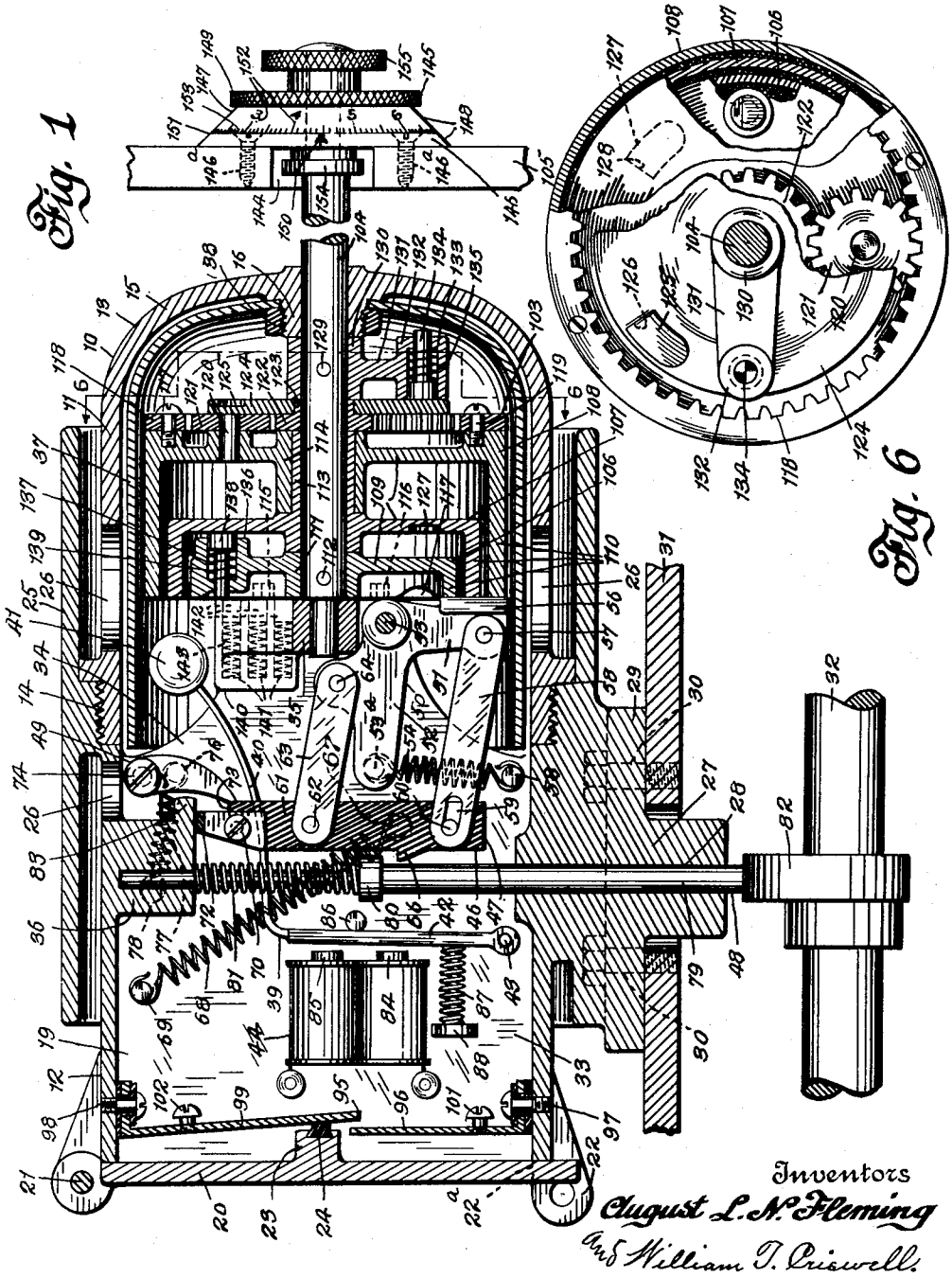


Fig. 6

Inventors
August L. N. Fleming
and William T. Criswell.

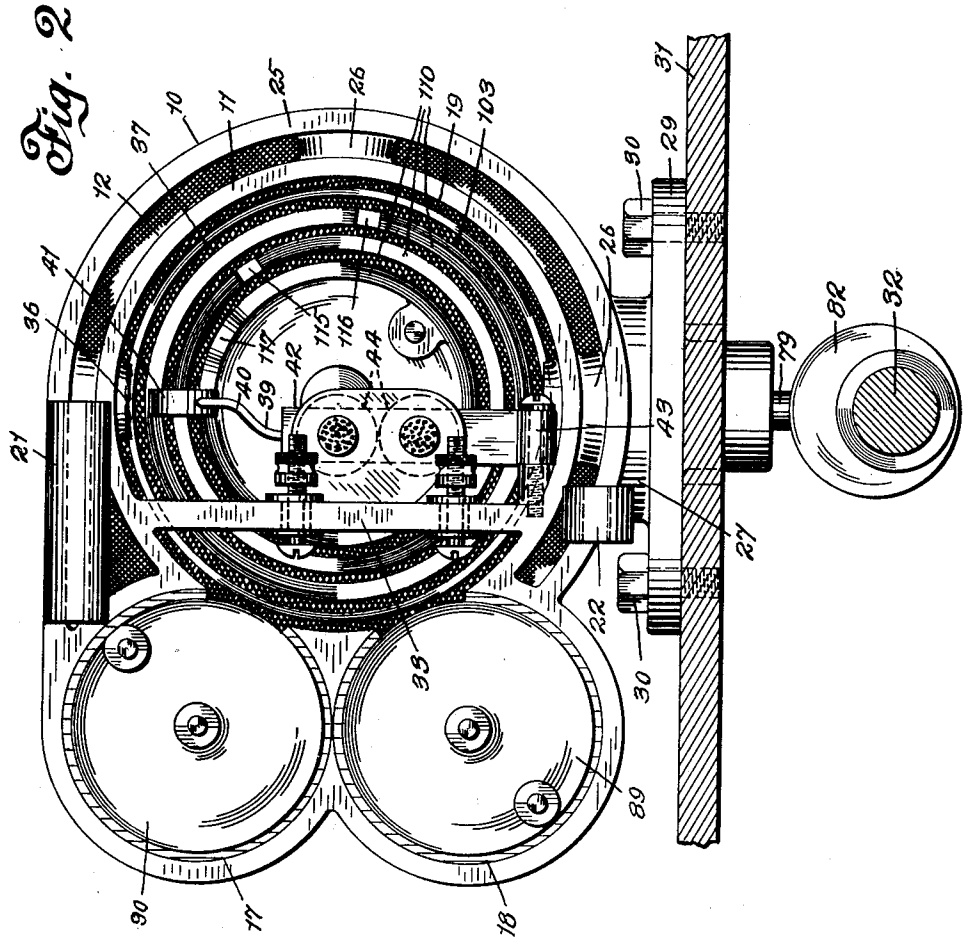
Feb. 9, 1926. 1,571,935

A. L. N. FLEMING ET AL

SAFETY DEVICE

Filed Dec. 15, 1922 4 Sheets-Sheet 2

Fig. 2



Inventors
August L. N. Fleming
and William T. Criswell

Feb. 9, 1926. 1,571,935

A. L. N. FLEMING ET AL

SAFETY DEVICE

Filed Dec. 15, 1922 4 Sheets-Sheet 3

Fig. 3

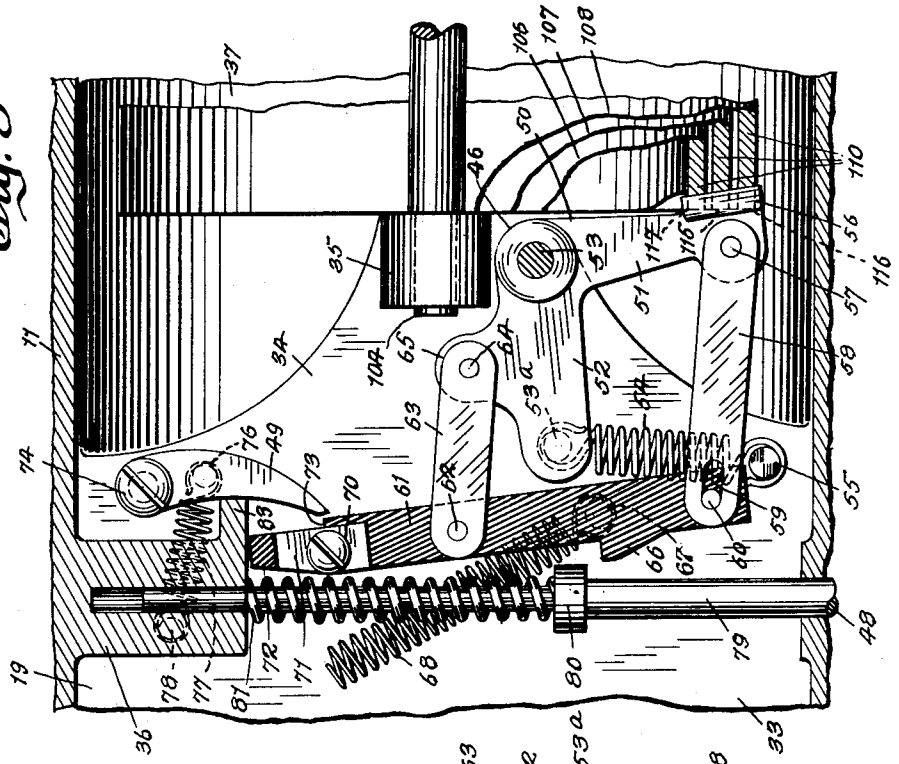
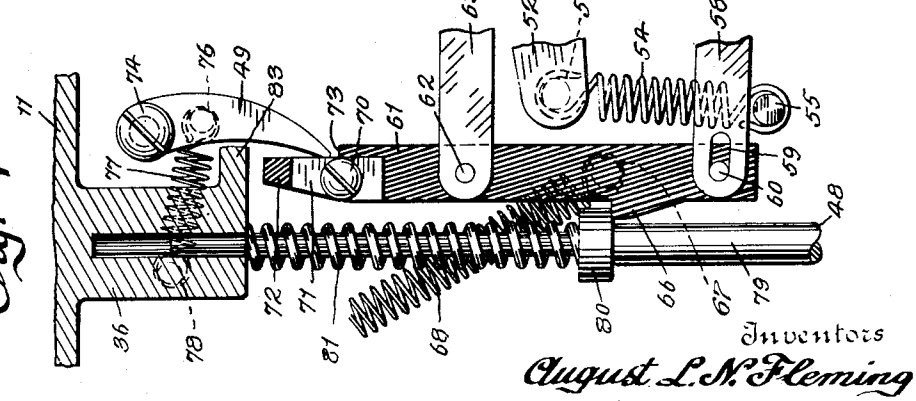


Fig. 4



Inventors

August L. N. Fleming

and William T. Criswell

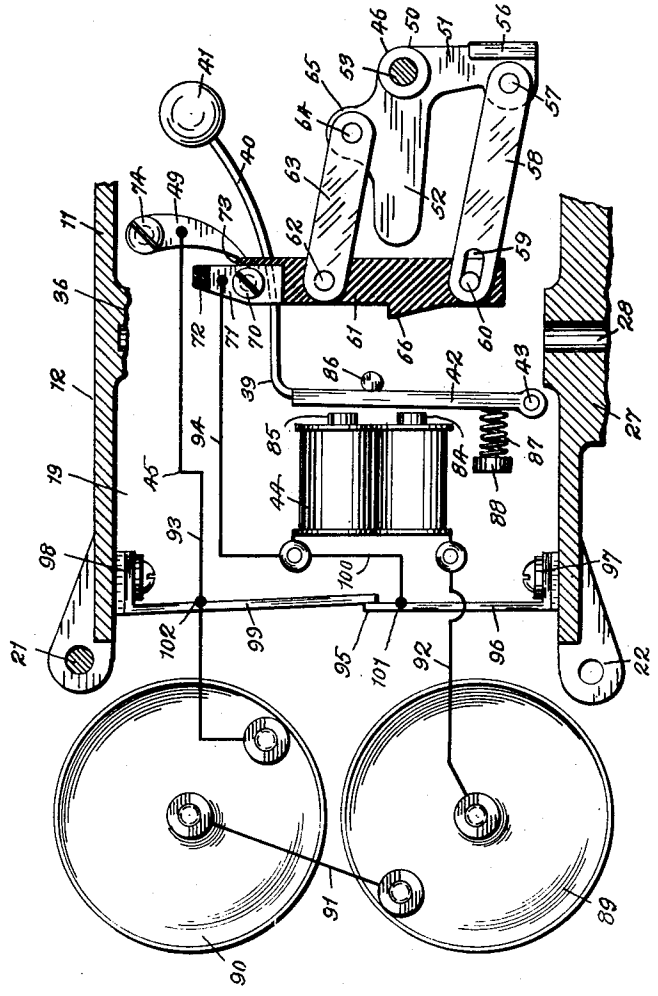
Feb. 9, 1926. 1,571,935

A. L. N. FLEMING ET AL

SAFETY DEVICE

Filed Dec. 15, 1922 4 Sheets-Sheet 4

Fig. 5



Inventors
August L. N. Fleming
and William T. Criswell.

Patented Feb. 9, 1926. 1,571,935

UNITED STATES PATENT OFFICE.

AUGUST L. N. FLEMING, OF LYNDHURST, NEW JERSEY, AND WILLIAM T. CRISWELL, OF NEW YORK, N. Y.

SAFETY DEVICE.

Application filed December 15, 1922. Serial No. 607,127.

To all whom it may concern:

Be it known that we, AUGUST L. N. FLEMING and WILLIAM T. CRISWELL, a citizen of the Republic of France and a citizen of the United States, respectively, and residents of Lyndhurst, in the county of Bergen and State of New Jersey, and of New York, in the county of New York and State of New York, respectively, have invented certain new and useful Improvements in a Safety Device, of which the following is a full, clear, and exact specification.

This invention relates to a class of alarms adapted to be used for sounding a warning in emergency.

Our invention has for its object primarily to provide a safety device of a simple, efficient and durable construction designed to be employed on a movable body or vehicle and elsewhere for preventing wrongful appropriation thereof by sounding an alarm in event of movement of the body or vehicle when at a standstill, and which is particularly adapted for protecting an automobile, autotruck and the like when parked or garaged from being stolen or mistakenly selected or appropriated for use by an unauthorized person. The device is of a form whereby a person having knowledge of its operation may drive the vehicle without causing the alarm to sound as well as being also of a form that avoids obstructing or interfering with the ordinary operation of the operative parts of the vehicle.

The invention consists essentially of an alarm interposed in a normally open electric circuit, and in the circuit is also interposed mechanism which is operative to close the circuit for sounding the alarm. When the device is applied to a movable body or to a vehicle the mechanism is operated by a drive member of the vehicle or by the movement of the body. The mechanism is adapted to be adjusted or controlled or locked against closing the circuit to prevent the alarm from normally sounding to allow an authorized person to drive the vehicle or move the body, and when readjusted or unlocked the mechanism is adapted to be operated with movement of the vehicle or body to close the circuit for sounding the alarm, in order to safeguard the vehicle or body against misappropriation or surreptitious use.

Other objects of the invention are to provide controlling means which is operative for locking and unlocking or for adjusting and readjusting the mechanism; to provide the mechanism of a form including driven parts or means adapted to be operated by a drive member of a vehicle and which is also operative to cause the mechanism to operate for closing the circuit to sound the alarm in event of the device being broken or purposely separated from the vehicle and to provide lockable parts whereby the mechanism when unlocked and when operated to close the circuit for sounding the alarm will be releasably held for causing the circuit to remain closed for sounding the alarm until the lockable parts are relocked.

With these and other objects in view the invention will be hereinafter more fully explained with reference to the accompanying drawing forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views, and will then be pointed out in the claims at the end of the description.

In the drawings, Figure 1 is a detail sectional view, partly fragmentary and partly broken away, taken through one form of safety device embodying our invention, and which shows the device applied to a movable body or vehicle.

Fig. 2 is a rear elevation, partly fragmentary and partly in section, of the device shown in Fig. 1 with the cover of the casing of the device removed.

Fig. 3 is an enlarged fragmentary sectional view taken through a portion of the device, and which shows an elevation, partly in section and partly broken away, of the operative mechanism for sounding the alarm and a portion of the controller of the device in position for releasably locking the mechanism.

Fig. 4 is an enlarged fragmentary view, partly in section, showing an elevation of the parts of the mechanism when unlocked.

Fig. 5 is a fragmentary view, partly in section and partly in detail, taken through a portion of the device, and which shows parts of the casing, the batteries with a layout of the wiring of the electric circuit with the portions of the operating mechanism which are interposed in the circuit, and

Fig. 6 is a reduced detail sectional view, partly broken away, taken on the line 6—6 of Fig. 1.

The device has a casing 10 which may be of any appropriate shape and size, though the form of the casing illustrated has a substantially cylindrical side wall 11, and the casing is preferably divided into two sections 12 and 13 by the side wall 11 being divided crosswise intermediate their ends. An end of the side wall of the section 13 interfits the opposed end of the section 12, and these interfitting ends are threaded, as at 14, as well as being screwed together for allowing the sections to be separated as occasion may require. On the second end of the section 13 is a partially spherical end wall 15 having on the center of its inner face an exteriorly threaded bearing, as 16, with its bore leading through the end wall 15 of this section. On the side wall of the section 12 of the casing are two chambers, as 17 and 18, both preferably of cylindrical shapes and one arranged above the other, as shown in Fig. 2. These chambers communicate with the interior or chamber 19 of the casing, and the entrances to all of the chambers are at the second end of the section 12 of the casing. The entrances to the chambers are adapted to be opened and closed by a door or cover, as 20, which may be hinged, at 21, to the upper part of the wall of the entrances, and on the lower part of the wall of the entrances may be a protruding apertured lug or ring, as 22, while in the lower edge of the door 20 may be a notch 22^a, Fig. 1, of a size to allow the lower end of the door when closed on the chambers to straddle the ring 22 so that by using a suitable padlock or the like, not shown, in the ring the door will be releasably locked to the casing. Protruding from the central part of the door interiorly of the chamber 19 may be a lug, as 23, having on its free end a projecting plug or stop 24 of insulating material. Formed on the section 12 and surrounding a portion of the side wall 11 ot the casing 10 may be a jacket, as 25, with its end portions spaced from this side wall, and in the side wall of the casing may be a number of spaced lower and upper openings 26 serving as sound vents which lead into parts of the spaces between the side wall of the casing and the jacket 25 to prevent an implement from being surreptitiously inserted into the casing. Moreover, by providing a suitable number of the sound vents in the upper part and in the lower part of the wall of the casing sand or water or other foreign material when passed the upper vents will flow through from the casing through the lower vent instead of remaining therein. Extending downwardly from the side wall of the casing is an apertured base or bearing, as 27, having its bore, as 28, leading into the chamber 19 of the casing, and this bearing may be provided with an annular flange 29 on its lower end for permitting the bearing and casing to be bolted, as at 30, or otherwise fastened to the support, as 31, of a movable body or vehicle, not shown, the support being preferably adjacent to a drive member of the body or vehicle, such as a drive shaft, as 32. Extending into the chamber 19 of the casing 10 from the entrance of this chamber is a vertically disposed wall or partition, as 33, which may be of a form terminating with a tapered end, as 34, disposed in the section 13 of the casing. On the central part of one of the faces of the tapered end of the partition 33 is a bearing 35 having its bore in register with the bore of the bearing 16 of the end wall 15 of the section 13 of the casing. Protruding into the chamber 19 from the upper part of the side wall of the section 12 of the casing is a bearing, as 36, having its bore or socket in register with the bore 28 of the base bearing 27 of the casing.

Within the section 13 of the casing 10 is a sound producing device or alarm 37 which may be of any suitable type for being operated to give a timely warning in emergency, though the alarm illustrated is in the form of a bell disposed in the section 13 of the casing 10. The alarm 37 is of a shape and size so that it closely fits in spaced relation to the walls of the section 13 of the casing, and in the arched end of the alarm or bell is an opening through which extends the bearing 16 of the section 13 of the casing, and the alarm is removably held to the section 13 by a nut, as 38, which is screwed on the free end of the bearing for clamping the alarm between the nut and the end wall 15 of the section 13 of the casing. Serving as means for sounding the alarm or bell, a hammer, as 39, is provided. This hammer may be in the form of a spring rod 40 having on one of its ends a head or ball, as 41, arranged so that when the rod 40 is moved toward and from the bell or alarm it will be struck by the head for ringing the bell to sound an alarm. The other end of the rod 40 of the sound producing device, or bell or alarm 37 is held on the upper end of an electromagnetic bar or armature 42 having its lower end pivoted, at 43, to the partition 33 of the chamber 19 of the casing 10, and this armature is operative by the energizing of the magnets, as 44, of an electric circuit 45, as will be hereinafter more fully explained. While any appropriate form of alarm may be used we prefer to employ a class of bell or alarm adapted to produce a distinctive noise or ring so that when rung its sound waves will pass through the vents 26 of the casing for attracting the attention of persons.

In order to cause the circuit to be opened and closed at intervals, we provide a mechanism 46 adapted when the device is used on a movable body or vehicle to be adjusted or releasably locked against closing the cir-

cuit to prevent sounding of the alarm when the body or vehicle is moved, and when readjusted or unlocked the mechanism is adapted to be operated with movement of the body or vehicle for closing the circuit to sound the alarm to safeguard misappropriation of the vehicle when at a standstill. The mechanism 46 may be of any suitable formation, though the mechanism shown includes the alarm sounding means 39, circuit closing means or lockable parts or a switch, as 47, operative means or driven means or unlockable parts, as 48, and a conductive part or trip, as 49.

The circuit closing means or switch or parts 47 has a lever, as 50, of substantially the shape of an inverted L to provide a depending arm 51 and an angularly disposed arm 52. The elbow of the lever 50 is rotatably mounted on a stud 53 protruding from the partition 33 under the bearing 35 so that the arm 52 extends toward the armature 42 of the alarm sounding means or hammer 39 and so that the arm 51 extends downwardly in the casing 10. To the free end of the arm 52 of the lever 50 is held, at 53^a, the upper end of a spring 54 having its lower end held, at 55, to the lower part of the partition 33 in proximity to the base bearing 29 of the casing, and this spring is tensioned for normally serving to force the arm 51 of the lever yieldingly toward the end wall 15 of the section 13 of the casing by yieldingly forcing the arm 52 in a downward direction. On the lower part of the edge of the arm 51 of the lever 50 opposed to the end wall 15 of the casing is an angular locking bolt 56, and to the free end of this arm 51 of the lever is pivoted, at 57, one end of a link or bar 58 disposed in a direction toward the armature 42 of the alarm sounding means 39. The second end of the link 58 is slotted, at 59, and in this slot is a slidable pivot or pin 60 protruding from the lower end of a bar 61 adapted to be moved upwardly and downwardly toward and from the bearing 36 of the section 12 of the casing. The bar 61 is preferably of nonelectro-conductive material as well as being of a length so that its upper end is spaced from the bearing 36. To the central part of the bar 61 is pivoted, at 62, one end of a link or bar 63 having its other end pivoted, at 64, to a lug, as 65, extending upwardly from the central part of the arm 52 of the lever 50. Projecting from the lower part of the bar 61 opposite to the lever 50 is a lug 66 preferably of the shape of a ratchet tooth having its straight edge in opposed relation to the upper end of the bar 61 and having its inclined edge in opposition to the bore 28 of the base 27 of the casing 10. To the bar 61 in proximity to this tooth is held, at 67, one end of a spring 68 which extends on an upward incline toward the door 20 of the casing, and the upper end of this spring is held, at 69, to the upper part of the partition 33 of the casing. The spring 68 is tensioned for normally serving to yieldingly force the bar 61 in a direction toward the bearing 36 of the casing, but the tension of this spring 68 is not sufficient to offset the tension of the spring 54, in order to prevent the spring 68 from causing the lever 50 to be swung whereby the arm 51 with the locking bolt 56 may be moved by the spring 68 from its normal direction of movement toward and from the end wall 15 of the section 13 of the casing. The bar 61 is preferably of a flat substantially rectangular shape, and fastened, at 70, to the upper end of this bar is a conductive part or lug or contact 71 which protrudes above the bar toward the bearing 36 of the casing 10. On the free end of the contact or conductive part 71 is an insulating tip, as 72, normally in abutting position against the bearing when the bar 61 is also in its normal position by the mechanism being locked to prevent sounding of the alarm, and this tip 72 serves to insulate the contact 71 from bearing 36 of the casing. The contact 71 is of a size as well as being arranged on the bar 61 so that one of the upper corners of the bar protrudes from the contact to provide a shoulder or stop 73, and to the upper part of the partition 33 contiguous to the bearing 36 of the casing is fastened, at 74, the upper end of the conductive part or trip or pawl 49. This conductive trip or pawl 49 is preferably of a slightly curved downwardly tapered form of a length so that its lower end is separated from the contact 71 by being movably positioned against the bar 61 below the shoulder or stop 73 when the mechanism 46 is locked. To the central part of the trip is held, at 76, one end of a spring 77 having its other end held, at 78, to the bearing 36 of the casing, and the spring 77 is tensioned for serving to normally force the trip yieldingly in a direction so that when the bar 61 is moved downwardly the spring will cause the trip to move over the stop 73 into engagement with the contact 71 of the bar 61 when the circuit closing means or lockable parts 47 of mechanism 46 is unlocked and when the bar 61 is moved in a downward direction.

The driven means or operative means or unlockable parts 48 which are adapted to be operated by a movable body or by the drive shaft 32 for operating the lockable parts or switch 47 when unlocked, are preferably composed of a rod or bar 79 reciprocably mounted in the bearings 29 and 36 of the casing of the device, and this rod is of a length so that its lower end extends below the bearing 29. On the central part of the rod is a collar or presser member 80

which is in spaced proximity to the tooth or lug 66 of the bar 61, and encircling part of the reciprocable rod 79 between the collar 80 and the bearing 36 is a spring 81 tensioned for normally serving to force the rod downwardly in the bearings 36 and 29 and in a direction for causing the collar to press upon the tooth 66 of the bar 61. The lower end of the rod 79 engages the peripheral edge of a cam or sleeve 82 which is eccentrically held on the shaft 32 so that with the rotation of this shaft the rod 79 with its collar 80 will be reciprocated in the bearings 29 and 36 of the casing. When the switch or circuit closing means or parts 47 of the mechanism 46 are locked the switch or lockable parts, as shown in Fig. 3, will be moved to a position so that the bar 61 will be swung whereby its tooth 66 will be moved from the path of movement of the collar 80 of the reciprocable rod 79 and the contact 71 will be moved from being engaged by the conductive trip 49. The movement of this trip toward the bar 61 and toward the contact 71 is limited by a stop, as 83, which is provided on the bearing 36 of the casing 10. When the switch or lockable parts 47 are unlocked the switch will be moved to the position, shown in Figs. 1 and 5. The switch will then be moved so that the bar 61 will be swung whereby its tooth 66 will be in the path of movement of the collar 80 of the rod 79 and so that the upper end of the bar 61 adjacent to the shoulder or stop 73 will be engaged by the trip 49.

The magnets 44 of the electric circuit 45 are arranged so that their cores 84 and 85 are in spaced proximity to the armature 42 of the alarm sounding means 39, and the movement of the armature in a direction from the magnets is limited by a pin or stop, as 86, which extends from the partition 33 of the casing 10. The armature 42 is also yieldingly forced normally toward the stop 86 by a spring, as 87, which is provided on a lug 88 protruding from the partition 33 so that the spring presses against the lower part of the armature. The circuit 45 may lead from any suitable source of electrical energy, such as one or more batteries, as 89, 90, which are preferably of any well-known dry cell types, removably arranged in the chambers 17 and 18 of the casing 10. Two of the opposite terminals of batteries are conductively connected by a wire 91, and from the other terminal of the battery 89 leads a wire 92 to one pole of the magnets 44, while from the second terminal of the battery 90 leads a wire 93 to the conductive part or trip 49 of the circuit closing means or switch 47 of the mechanism 46. To the conductive part or contact 71 of the switch 47 is connected a wire 94 which leads to the other pole of the magnets. Following the unlocking of the switch 47 and with its movement so that the upper end of the bar 61 is in contact with the trip 49 and so that the tooth 66 of the bar is in the path of movement of the collar 80 of the rod 79 of the operative means or driven means 48, as shown in Fig. 1, the operation of the driven means will cause the collar 80 to engage the tooth 66. The bar 61 will thereby be moved downwardly sufficient distance for the tension of the spring 78 to cause the trip to engage the contact 71 of the bar 61, and the circuit will be closed from one terminal of the batteries over the wire 92 to the magnets. From the other terminal of the batteries the circuit will be closed over wire 93 to and through the trip 49, through the contact 71 and over wire 94 to the magnets. The magnets will then be energized for attracting the armature 42 to the cores 84, 85 of the magnets, and the spring rod 40 of the hammer 39 will cause the head 44 of the hammer to sound the alarm by striking the bell. With the movement of the trip 49 for engaging the contact 71 the trip will move over the shoulder or stop 73 of the bar 61, and when the circuit is closed by the operation of the switch 47 the disengagement of the trip 49 from the contact 71 will be prevented by the stop 73 for causing continuous sounding of the alarm until the switch is relocked, or by cutting the upper end of the bar 61 so that the position of the shoulder or stop 73 will be spaced a suitable distance below the contact 71, and by making the contact 71 of suitable length, the alarm will be intermittently sounded with the reciprocable movements of the rod 79 when operated by the driving or the driven means 48, the bar 61 being of non-electro-conductive material the engagement between the contact 71 and the trip 49 will then be broken at intervals which will cause intermittent opening and closing of the circuit.

Moreover, should the casing 10 be knocked or otherwise separated from the body or vehicle when applied thereto, the tension of the spring 78 will cause the rod 79 to move outwardly of the casing which in turn will cause the collar 80 of the rod to engage the tooth 66 of the bar 61 for actuating the bar to close the circuit for sounding the alarm, as above explained, to give timely warning.

When the door 20 of the casing 10 is opened the circuit 45 will be closed by a circuit closer, as 95, Figs. 1 and 5, in order to prevent attempt being made to obtain access into the interior of the casing for the purpose of tampering with the operative parts of the device. The circuit closer 95 may be of any appropriate form, though the closer illustrated is composed of a conductive strip or bar 96 having its lower end fastened, at 97, to the lower part of the wall 11 within the casing 10. The conductive

strip 96 is in proximity to the door 20, and this strip is of a length so that its upper end terminates closely to the lug 23 of the door. To the upper part of the wall 11 of the casing is secured, at 98, the upper end of a conductive spring strip or bar 99, and this spring strip is sprung against its tension to a position as well as being of a length so that its lower end portion presses against the insulating plug 24 of the lug 23 of the door while its lower free end extends below the upper end of the strip 96. Both of the strips 96 and 99 are relatively arranged whereby the lower end of the spring strip 99 will be normally held by the insulating plug 24 in spaced proximity to the upper end of the strip 96 when the door 20 of the casing is closed. The conductive strip 96 is interposed in the electric circuit 45 by a wire 100 which is fastened, at 101, to the strip, and this wire leads with the wire 94 to one pole of the magnets 44. The conductive strip 99 is also interposed in the electric circuit by the wire 93 of the circuit being fastened, at 102, to the strip 99. When the door of the casing is opened it will separate the insulating plug 24 from the conductive strip 99 of the closer 95. The strip 99 will then spring into contact with the strip 96, and the electric circuit will be closed from one terminal of the batteries over wire 93 to the strip 99 and over wire 100 to one terminal of the magnets. From the second terminal of the batteries the circuit will be closed over wire 92 to the second terminal of the magnets. The magnets will then be energized for attracting to their cores the armature 42 which will cause operation of the alarm sounding means 39 to sound the alarm.

Serving to cause the mechanism 46 to be adjusted and readjusted or locked and unlocked, a controller or permutation device or locking means 103 is provided. This permutation device or controller may be of any suitable formation, though the controller shown has a shaft 104 having one of its ends journaled in the bearing 35 of the partition 33 of the casing 10. This shaft is also journaled in the bearing 16 of the end wall 15 of the section 13 of the casing, and the shaft is preferably of a length so that its second end portion extends beyond the casing. The second end of the shaft 104 may lead to a suitable support, as 105, when the device is applied to a movable body or vehicle. On the shaft 104 within the section 13 of the casing 10 are a number of drums, as 106, 107, 108, each of which is preferably of a cap shape to provide a bottom wall 109 and an annular flange or wall 110 on the outer edge of the bottom wall. The drums or caps are of sizes so that they are in nesting arrangement with their annular walls and bottom walls being in spaced relation. These drums are also arranged so that the free edges of their annular walls 110 are on alinement as well as being adjacent to the tapered end of the partition 33 of the casing and so that the bottom wall of the outer drum 108 is spaced from the bearing 16 of the section 13 of the casing. The inner drum 106 has a hub 111 through which the end part of the shaft 104 adjacent to the bearing 35 is disposed, and this drum is held to the shaft by the hub being bolted at 112, to the shaft so that the inner drum will revolve when the shaft is rotated. The intermediate drum 107 has a hub 113 surrounding the shaft 104, and this hub is of a length so that one of its ends abuts against the hub 111 of the inner drum while the other end of the hub 113 extends through an opening in the bottom wall 109 of the outer drum 108. The outer drum 108 also has a hub 114 which encircles the hub 113 of the intermediate drum 107, and the outer drum and intermediate drum are both freely revolvable on the shaft. In part of the free edge of the annular wall 110 of the outer drum 108 is a notch 115 which is preferably of right angle triangular shape, and in part of the free edge of the annular wall 110 of the intermediate drum 107 is a notch 116 which is also preferably of a right-angular triangular shape. In part of the free edge of the annular wall 110 of the inner drum 106 is a cam notch 117 of a partial circular shape. The notches 115 and 116 are of size to freely admit the angular locking bolt 56 of the lever 50 of the switch 47 when the intermediate drum and outer drum are rotated so that these notches are in register, and the angular shapes of the notches and locking bolt serve to prevent these drums from rotating until the locking bolt is removed from the notches. When the inner drum 106 is revolved by rotating the shaft 104 so that its cam notch 117 is in register with the registered notches 115 and 116 the locking bolt will also enter the cam notch for locking the switch 47 of the mechanism 46.

The movement of the switch is accomplished by the tension of the spring 54 swinging the arm 52 of the lever 50 in a downward direction, while the arm 51 of the lever swings toward the drums for causing the locking bolt 56 to be inserted in the registered notches. When the shaft 104 is adjustably rotated accordingly the inner drum will be likewise revolved, and the curved shape of the cam notch 117 will cause the locking bolt 56 to be removed from all of the notches. The mechanism 46 will then be unlocked by reverse movement of the lever 50, the tension of the spring 54 of the lever serving to force the lever in a direction whereby the bolt 56 will be maintained in yielding engagement with

the edges of the drums so that the bolt will be forced into the notches when again in registered positions by the rotation of the drums during their locking process. On the marginal edge portion of the face of the bottom wall 109 of the outer drum 108 in opposition to the end wall 15 of the section 13 of the casing 10 is an internal gear 118 which is fastened, at 119, to the bottom wall of the outer drum. On a pin or stud 120 held in the bottom wall 109 of the outer drum 108 is a freely revolvable pinion 121, and in mesh with this pinion is a gear 122 which is freely revolvable on the shaft 104. Extending from the face of the gear 122 in opposition to the bearing 16 of the section 13 of the casing may be a boss 123 which surrounds the shaft 104, and on this boss is held an apertured plate 124 of a circular shape as well as being of a diameter whereby it overlaps the pinion 121 in spaced relation to the internal gear 118. In part of the exposed face of the circular plate 124 in proximity to its edge is a curved socket, as 125, which is of a wedge shape with one of its end walls, as 126, being straight while its other end tapers to nothing at the face of the plate. In part of the inner face of the bottom wall 109 of the intermediate drum 107 is a curved socket 127 also of a wedge shape to provide one straight end wall, as 128, with its other end tapering to nothing at the face of the plate. The sockets 125 and 127 are oppositely disposed so that their straight end walls are in relative opposition. On the part of the shaft 104 between the plate 124 and the bearing 16 of the end wall of the section 13 of the casing is held, at 129, a sleeve, as 130, provided on one end of a bracket 131 having on its other end a boss or head, as 132, with a recess 133 arranged so that its entrance is opposed to the circular plate 124. In the bottom wall of the recess 133 is a hole in which is movably disposed a pin or pawl, as 134, having its other end movably engaging the circular plate, and in this recess surrounding the pawl is a spring 135 tensioned for serving to normally force the pawl outwardly of the recess and into yielding contact with the plate 124. The bracket 131 and the pawl 134 are of sizes as well as being so arranged that when the shaft is revolved from right to left the pawl will move into the socket 125 of the plate 124 for engaging the end wall 126 of this socket, and by further rotating the shaft 104 the plate 124 will be revolved for rotating the gear 122, pinion 121 and internal gear 118. The outer drum 108 will then be rotatably adjusted according to the adjustment of the shaft 104. In part of the bottom wall 109 adjacent to the annular wall 110 of the inner drum 106 is a boss 136 having the entrance to its recess 137 in opposed relation to the bottom wall 109 of the intermediate drum 107. In the bottom of the recess 137 is a hole in which is slidably disposed a pin or pawl 138 movable inwardly and outwardly of the entrance of the socket, and encircling the pawl within the recess is a spring 139 tensioned for yieldingly forcing the pawl into movable contact with the bottom 109 of the intermediate drum 107. The boss 136 and pawl 138 are so arranged that when the shaft 104 and the inner drum 106 are rotated from left to right the pawl 138 will enter the socket 127 and engage the end wall 128 of the socket for adjustably rotating the inner drum and intermediate drum according to the adjustment of the shaft 104 and outer drum 108 for registering the notches 115, 116, 117 of the drums when it is desired to releasably lock the mechanism 46. By properly proportioning the bracket 131, plate 124, gear 122, pinion 121 and internal gear 118 as well as by varying the positions of the drums 106, 107, 108 whereby the positions of the pawls 134 and 138 will be varied relative to the sockets 125 and 127 various combination adjustments may be provided for requiring the shaft to he rotatably adjusted according to different determined adjustments, in order to releasably lock the mechanism when it is desired to open the circuit for preventing the alarm from sounding. By reversing the rotation of the shaft 104 for revolving the inner drum 106 so that the locking bolt 56 of the switch 47 will be removed from the notches 115, 116, 117 of the drums the mechanism will then be unlocked for being operated to close the circuit for sounding the alarm when the drive member 32 is driven with movement of the body or vehicle, as hereinbefore explained. On the partition 33 of the chamber 19 of the casing is provided a brake element 140 which serve to frictionally hold the drums against accidental movement when adjusted.

The brake element 140 is preferably in the form of a boss of a size as well as being disposed so that it extends across parts of the alined edges of the annular walls of the drums, and in the boss are three spaced recesses, as 141, each having its entrance in opposed relation to the free edge of the annular wall 110 of each of the drums. Movable inwardly and outwardly of the entrances of the recesses 141 are a number of blocks or shoes 142 all in contact with the free edges of the annualr walls of the drums, and in the recesses 141 of the boss 140 are springs, as 143, which are tensioned for forcing the blocks 142 with sufficient pressure against the drums to frictionally hold the drums and the shaft 104 against accidental movement when in adjusted positions. The use of the blocks 142 in this manner also serve to frictionally hold the freely revolvable drums 107 and 108

against tendency to accidentally move when adjusted on the shaft 104. The support 105 may be the dash board of the body when the device is used on a vehicle to permit the device to be conveniently operated by the operator of the vehicle, and in this support may be an opening 144 through which the shaft 104 extends. The shaft 104 with the drums 106, 107, 108 may be adjusted according to a determined combination or adjustment for locking and unlocking the mechanism 46 by providing any suitable means, such as a key element or combination operative device, as 145, which may be of a form commonly used in conjunction with a class of combination locks. The key element 145 has a circular disk 146 which is fastened, at 46ª, to the support 105, and in the center of this disk is a hole or opening in register with the opening 144 of the support. The shaft 104 extends through these registered openings some distance beyond the disk 146. On the shaft 104 in movable contact with the disk 146 is a scond circular disk or dial 147, and both of the disks may be formed with inclined peripheral edges, as 148. On the edge of the disk or dial 147 may be a knurled rib or edge part, as 149, to allow the disk 148 to be readily revolved. On part of the fixed disk 146 is a symbol or mark, as 150, for serving as a guide to indicate determined positions to which parts of the dial 147 may be rotated. On the inclined edge of the dial 147 adjacent to the disk 146 is an annular scale 151 divided into equidistant sections 152 which may be appropriately numbered, as indicated, and each section may be subdivided into parts representing points or degrees, as 153. The characters of the sections 152 and the characters of the points or degrees 153 of the dial are adapted to register with the guide symbol or mark 150 of the disk 146 when the dial is revolvably adjusted accordingly for rotatably adjusting the shaft 104 and the drums 106, 107, 108. When a combination is selected for rotating the dial 147 a number of revolutions or parts of revolutions in different directions, the drums 106, 107, 108 are relatively adjusted on the shaft 104 according to the locking bolt 56 of the mechanism. The plate 124, gear 122 and pinion 121 may also be proportioned accordingly, and during the working of the locking process the dial is then revolved a suitable number of times so that selected characters of the sections 152 and selected characters of the degrees 153 are registered with the guide symbol 150 of the disk 146 for adjusting the shaft 104 and drums 106, 107, 108 to cause the notches 115, 116, 117 to be in register as well as being in positions whereby the locking bolt 56 of the mechanism 46 will be yieldingly forced into the notches, as hereinbefore explained. The circuit closing means or switch 47 of the mechanism will then be in a position for opening the circuit to prevent sounding of the alarm when the drive member 32 is driven by movement of the vehicle. By turning the dial 147 in either direction the shaft 104 and the drum 106 will be revolved, and the curved notch 117 of the drum 106 will cause removal of the locking bolt 56 of the mechanism from all of the notches. The mechanism will thereby be unlocked so that the driving of the drive member 32 with movement of the vehicle will operate the driven means 48 which in turn will operate the switch 47 for causing the mechanism to close the circuit to sound the alarm, as above explained, for giving a timely warning in emergency. When the combination key element 145 is set in locked or unlocked positions the element may also be releasably locked to prevent accidental movement of the dial 147 by providing on the shaft 104 a fixed sleeve 154 which abuts against the disk 146 of the key element 145. The shaft 104 protrudes beyond the dial 147, and this protruding end of the shaft is threaded. On this threaded end is screwed a thumb nut 155 which when rotated accordingly will releasably clamp the dial 147 against the disk 146 of the key element for releasably holding the dial from accidentally moving when adjusted to operate the controller or locking means 103 for locking or unlocking the mechanism 46. Thus a simple, efficient and durable device is provided for preventing the theft or misuse of a movable body or vehicle, and the term movable body, as used herein may include the doors of safes, doors of buildings and elsewhere, while the term "vehicle" may include any travelling conveyance. When the device is employed on a vehicle, and supposing that the vehicle is stopped with the cam member 82 swung downward on the drive shaft 32 and with the rod 79 moved outwardly of the casing to a distance so that the collar 80 of the rod is below the lug 66 of bar 61, the rod will move upwardly in the casing with the upward movement of the cam above the shaft 32 by the driving of this shaft should the vehicle be moved a short distance. When the mechanism 46 is unlocked the bar 61 will be in a position so that its lug or tooth 66 is in the path of movement of the collar 80 of the rod 79, as shown in Figs. 1 and 4, and with the upward movement of the rod the collar 80 will contact with the inclined edge of the lug to cause the bar 61 to yieldingly move for allowing the collar to pass above the lug. The bar 61 will then be reversely moved by the tension of the spring 54 of the mechanism to position the lug 66 for being contacted by the collar 80 with the downward movement of the rod by the tension of its spring 81. The mechanism 46 will then be operated to sound the alarm with movement of the vehicle, as hereinbefore explained.

In the foregoing description, we have embodied an illustrative form of our invention, but we do not wish to be understood as limiting ourselves thereto, as we are aware that modifications may be made therein without departing from the principle or sacrificing any of the advantages of this invention. Hence we reserve to ourselves the right to make such changes in the device, as fairly fall within the spirit or scope of the invention.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:—

1. A safety device having an alarm, comprising an electric circuit leading to the alarm, means interposed in the circuit for sounding the alarm, operative means, circuit closing means operative by the operative means when operated for closing the circuit to operate the alarm sounding means, said closing means controllable according to different determined adjustments for being releasably locked against closing the circuit to prevent normally operating the alarm sounding means with the operation of the operative means and the closing means readjustable for being unlocked and operated by the the operation of the operative means to close the circuit for operating the alarm sounding means, and permutation means operative for controlling the selective adjustments of the closing means.

2. A safety device having an alarm, comprising an electric circuit leading to the alarm, means interposed in the circuit for sounding the alarm, operative means, circuit closing means operative by the operative means to close the circuit for operating the alarm sounding means, said closing means adjustable according to different determined adjustments to avoid being engaged by the operative means when operated for opening the circuit to prevent normally operating the alarm sounding means with the operation of the operative means and the closing means readjustable for reengagement by the operative means with its operation whereby the circuit will be closed for operating the alarm sounding means, and permutation means operative for controlling the selective adjustments of the closing means.

3. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, mechanism associated with the alarm, operative when the body is in motion for closing the circuit to cause sounding of the alarm, and a permutation device adjustable according to different selective adjustments for adjusting the mechanism against closing the circuit to prevent normally sounding of the alarm with movement of the body and the permutation device readjustable to readjust the mechanism for operating with the movement of the body to close the circuit for sounding the alarm.

4. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, mechanism associated with the alarm, adapted to be operated when the body is in motion for closing the circuit to cause sounding of the alarm, said mechanism having lockable parts and having unlockable parts operative by the body when in motion, the lockable parts movable from being engaged by the unlockable parts, and a permutative device adjustable according to different selective adjustments for releasably locking the disengaged lockable parts for opening the circuit to prevent the alarm from normally sounding with the operation of the unlockable parts by movement of the body and the permutative device readjustable to unlock and reversely move the lockable parts for reengagement by the unlockable parts when operated by movement of the body whereby the lockable parts will operate to close the circuit for sounding the alarm.

5. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, mechanism associated with the alarm, operative to close the circuit for sounding the alarm, said mechanism having parts operative by the body when in motion and having lockable parts interposed in the circuit, and a permutative device adjustable according to different selective adjustments for releasably locking the lockable parts for opening the circuit to prevent the alarm from normally sounding with the operation of the operative parts and the permutative device readjustable for unlocking the lockable parts whereby the operative parts when operated by movement of the body will cause operation of the lockable parts to close the circuit for sounding the alarm, said operative parts being independently operative with separation of the device from the body for causing the lockable parts to close the circuit for sounding the alarm.

6. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, mechanism associated with the alarm, adapted to be operated to close the circuit for sounding of the alarm, said mechanism having normally separated conductive parts, both interposed in the circuit, and controlling means adjustable according to different selective adjustments for releasably locking one of the conductive parts against closing the circuit to prevent the alarm from normally sounding with operation of the mechanism when the body is in motion and the controlling means adapted to be operated to release the locked conduc-

tive parts whereby the mechanism with its operation will cause retained engagement between both conductive parts to close the circuit for continuously sounding the alarm until the lockable conductive parts are relocked, the conductive parts which are free of direct control of the controlling means being independently operative with separation of the device from the body for causing the controlled conductive parts to operate for closing the circuit to sound the alarm.

7. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, means interposed in the circuit for sounding the alarm, mechanism associated with the alarm, operative when the body is in motion for closing the circuit to cause sounding of the alarm, and means adjustable according to different selective adjustments for releasably locking the mechanism against closing the circuit to prevent operation of the alarm sounding means with movement of the body and the adjustable means readjustable to unlock the mechanism for operating with the movement of the body to close the circuit for operating the alarm sounding means, and permutation means for controlling the selective adjustments of said adjustable means.

8. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, means interposed in the circuit for sounding the alarm, mechanism associated with the alarm, operative for closing the circuit to operate the alarm sounding means, said mechanism having lockable parts and having unlockable parts operative by the body when in motion, the lockable parts movable for being engaged by the unlockable parts, and means adjustable according to different selective adjustments for releasably locking the disengaged lockable parts for opening the circuit to prevent operation of the alarm sounding means with the operation of the unlockable parts by movement of the body and the adjustable means readjustable to unlock and reversely move the lockable parts for reengagement by the unlockable parts when operated by movement of the body, whereby the lockable parts will operate for operating the alarm sounding means, and permutation means for controlling the selective adjustments of said adjustable means.

9. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, means interposed in the circuit for sounding the alarm, mechanism associated with the alarm, operative to close the circuit for operating the alarm sounding means, said mechanism having normally separated conductive parts, both interposed in the circuit, and means adjustable according to different selective adjustments for releasably locking one of the conductive parts against closing the circuit to prevent operation of the alarm sounding means when the body is in motion and the adjustable means readjustable to release the locked conductive parts whereby the mechanism with its operation will cause reengagement between both conductive parts to close the circuit for operating the alarm sounding means until the lockable conductive parts are relocked, permutation means for controlling the selective adjustments of said adjustable means.

10. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, driven means adapted to be operated when the body is in motion, circuit closing means operative by the operation of the driven means for closing the circuit to cause sounding of the alarm, and a permutative device adjustable according to different selective adjustments for releasably locking the circuit closing means against closing the circuit to prevent the alarm from normally sounding with operation of the driven means by the movement of the body and the permutation device selectively readjustable to release the circuit closing means whereby the driven means with its operation by movement of the body will operate the closing means to close the circuit for sounding the alarm.

11. In a safety device for a movable body, in combination, an alarm adapted to be mounted on the body, an electric circuit leading to the alarm, driven means adapted to be operated when the body is in motion, circuit closing means operative by the operation of the driven means to close the circuit for sounding the alarm, said circuit closing means movable to a position from being engaged by the driven means when operated, and a permutation device adjustable according to different selective adjustments for releasably locking the circuit closing means when free of engagement by the driven means to prevent the alarm from normally sounding with the operation of the driven means by movement of the body and the permutative device selectively readjustable to release the circuit closing means whereby the driven means with its operation by movement of the body will operate the closing means to close the circuit for sounding the alarm, said driving means being independently operative with separation of the device from the body to cause operation of the circuit closing means for sounding the alarm.

12. A safety device for a vehicle, com-

prising a casing adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, mechanism in the casing, operative for closing the circuit to cause sounding of the alarm, said mechanism having lockable parts and having unlockable parts operative by the driving of the drive member of the vehicle when in motion, the lockable parts movable from being engaged by the unlockable parts, and controlling means adjustable according to a determined adjustment for releasably locking the disengaged lockable parts for opening the circuit to prevent the alarm from normally sounding with the operation of the unlockable parts by the driving of the drive member when the vehicle is travelling and the controlling means adapted to be readjusted to unlock and reversely move the lockable parts for reengagement by the unlockable parts when operated by the driving of the drive member with movement of the vehicle whereby the lockable parts will operate to close the circuit for sounding the alarm.

13. A safety device for a vehicle, comprising a casing adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, means in the casing, interposed in the circuit for sounding the alarm, mechanism in the casing, operative by a drive member of the vehicle when in motion for closing the circuit to operate the alarm sounding means, and controlling means adjustable according to different selective adjustments for releasably locking the mechanism against closing the circuit to prevent operation of the alarm sounding means with the driving of the drive member when the vehicle is travelling and the controlling means readjustable to unlock the mechanism for operating by the driving of the drive member with movement of the vehicle to close the circuit for operating the alarm sounding means, said mechanism also being independently operative with separation of the casing from the vehicle for closing the circuit to operate the alarm sounding means, and permutation means for selectively adjusting said controlling means.

14. A safety device for a vehicle, comprising a casing adapted to be mounted on a vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, driven means in the casing operative by a drive member of the vehicle when in motion, circuit closing means in the casing, operative by the operation of the driven means to close the circuit for sounding the alarm, said circuit closing means adapted to be moved to a position from being engaged by the driven means when operated, and controlling means adjustable according to a determined adjustment for releasably locking the circuit closing means when free of engagement by the driven means to prevent the alarm from normally sounding with the operation of the driven means by the driving of the drive member when the vehicle is travelling and the controlling means adapted to be readjusted to release the circuit closing means whereby the driven means with its operation by the driving of the drive member with movement of the vehicle will operate the closing means to close the circuit for sounding the alarm as well as causing the closing means to keep the circuit closed until the closing means is relocked.

15. A safety device for a vehicle, comprising a casing adapted to be mounted on a vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, driven means in the casing, operative by a drive member of the vehicle when in motion, a conductive trip in the casing interposed in the circuit, a switch in the casing operative by the driven means when operated for engaging the trip to close the circuit for sounding the alarm, controlling means adjustable according to a determined adjustment for releasably locking and disengaging the switch from the trip for opening the circuit to prevent normally sounding the alarm with operation of the driven means by the driving of the drive member when the vehicle is travelling and the controlling means adapted to be readjusted to release the switch for being operated by the driven means with its operation by the driving of the drive member with movement of the vehicle to cause reengagement of the switch with the trip whereby the circuit will close for sounding the alarm, and a stop on the switch for retaining its engagement with the trip until the switch is relocked.

16. A safety device for a vehicle, comprising a casing adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, mechanism in the casing, operative by a drive member of the vehicle when in motion for closing the circuit to cause sounding of the alarm, said mechanism having a locking bolt, a shaft journaled in the casing, rotatably adjustable according to a determined adjustment, and a notched drum in the casing on the shaft for releasably engaging the locking bolt with adjustment of the shaft to lock the mechanism against closing the circuit to prevent normally sounding of the alarm when the drive member is driven with the travel of the vehicle and the shaft adapted to be rotatably readjusted to unlock the drum and the bolt whereby the mechanism will operate with the driving of the drive member when the vehicle is moved to close the circuit for sounding the alarm.

17. A safety device for a vehicle, compris-

ing a casing adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, mechanism in the casing, operative for closing the circuit to cause sounding of the alarm, said mechanism having lockable parts with a locking bolt and having unlockable parts operative by the driving of the drive member of the vehicle when in motion, the lockable parts movable from being engaged by the unlockable parts, a shaft journaled in the casing, rotatably adjustable according to a determined adjustment, a drum in the casing on the shaft, having a notch for receiving the locking bolt to releasably lock the disengaged lockable parts for opening the circuit to prevent the alarm from normally sounding with the operation of the unlockable parts by the driving of the drive member when the vehicle is travelling and the shaft adapted to be rotatably readjusted to unlock the drum and the bolt for reversely moving the lockable parts for reengagement by the unlockable parts when operated by the driving of the drive member with movement of the vehicle whereby the lockable parts will operate to close the circuit for sounding the alarm.

18. A safety device for a vehicle, comprising a casing adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, mechanism in the casing, operative to close the circuit for sounding the alarm, said mechanism having parts operative by the drive member of the vehicle when in motion and having lockable parts with a locking bolt interposed in the circuit, a shaft journaled in the casing, a plurality of drums in the casing on the shaft, and each drum having a notch, said drums adapted to be rotated with the rotation of the shaft for registering all of the notches to receive the bolt of the lockable parts for releasably locking the lockable parts to open the circuit to prevent the alarm from normally sounding with the operation of the operative parts by the driving of the drive member when the vehicle is travelling and the shaft adapted to be rotatably readjusted to unlock the drums and the bolt for unlocking the lockable parts whereby the operative parts when operated by the driving of the drive member with movement of the vehicle will cause operation of the lockable parts to close the circuit for sounding the alarm, and means operative according to a determined adjustment for adjustably rotating the shaft and drums to lock and unlock the lockable parts.

19. A safety device for a vehicle, comprising a casing adapted to be mounted on a vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, driven means in the casing operative by a drive member of the vehicle when in motion, circuit closing means in the casing, operative by the operation of the driven means to close the circuit for sounding the alarm, said circuit closing means adapted to be moved to a position from being engaged by the driven means when operated, a drum in the casing rotatably adjustable according to a determined adjustment for releasably locking the circuit closing means when free of engagement by the driven means to prevent the alarm from normally sounding with the operation of the driven means by the driving of the drive member when the vehicle is travelling and the drum adapted to be rotatably readjusted to release the circuit closing means whereby the driven means with its operation by the driving of the drive member with movement of the vehicle will operate the closing means to close the circuit for sounding the alarm as well as causing the closing means to keep the circuit closed until the closing means is relocked, and means operative for rotatably adjusting the drum.

20. In a safety device having operative mechanism with a locking bolt, controlling means comprising a journaled shaft, and inner drum held on the shaft, an intermediate drum and an outer drum freely revolvable on the shaft, each drum having an annular side wall surrounding the shaft and all of the drums being disposed in nested relation with the free edges of their side walls in alinement adjacent the bolt of the mechanism and all of the drums having in the free edges of their side walls notches adapted to be registered when the drums and shaft are rotated accordingly for removably receiving the bolt to releasably lock the mechanism, means for releasably locking the inner drum and the intermediate drum when the shaft and inner drum are rotated in one direction, means for releasably locking the outer drum and the shaft when rotated in an opposite direction, and means on the shaft adapted to be rotatably adjusted according to a determined adjustment for rotating the shaft and drums in different directions whereby the drums will be revolved and releasably locked for registering their notches to receive and remove said bolt for locking and unlocking the mechanism.

21. In a safety device having operative mechanism with an angular locking bolt, controlling means comprising a journaled shaft, an inner drum held on the shaft, an intermediate drum and an outer drum freely revolvable on the shaft, each drum having an annular side wall surrounding the shaft and all of the drums being disposed in nested relation with the free edges of their side walls in alinement adjacent the bolt of the

mechanism, and the intermediate drum and outer drum having in the free edges of their side walls angular notches and the inner drum having in the free edge of its side wall a partial circular notch, said notches adapted to be registered when the drums and shaft are rotated accordingly for removably receiving the bolt to releasably lock the mechanism, means for releasably locking the inner drum and the intermediate drum when the shaft and inner drum are rotated in one direction, means for releasably locking the outer drum and the shaft when rotated in an opposite direction, and a dial on the shaft adapted to be rotatably adjusted according to a determined adjustment for rotating the shaft and drums in different directions whereby the drums will be revolved and releasably locked for registering their notches to receive and remove said bolt for locking and unlocking the mechanism.

22. In a safety device having operative mechanism with an angular locking bolt, controlling means comprising a journaled shaft, an inner drum held on the shaft, an intermediate drum and an outer drum freely revolvable on the shaft, each drum having a bottom wall and an annular side wall surrounding the shaft and all of the drums being disposed in nested relation with the free edges of their side walls in alinement adjacent the bolt of the mechanism, the bottom wall of the intermediate drum having a socket and both the intermediate drum and outer drum having in the free edges of their side walls angular notches and the inner drum having in the free edge of its side wall a partial circular notch, said notches adapted to be registered when the drums and shaft are rotated accordingly for removably receiving the bolt to releasably lock the mechanism, a pawl in the inner drum adapted to removably engage the socket of the intermediate drum when the shaft and inner drum are rotated in one direction, an internal gear on the bottom wall of the outer drum, a pinion rotatable on the outer drum in mesh with the internal gear, a gear freely revolvable on the shaft in mesh with the pinion, a plate having a socket freely revolvable on the shaft adjacent the gear and pinion, a bracket held on the shaft, a pawl carried by the bracket, adapted to removably engage the socket of said plate when the shaft and inner drum are rotated in an opposite direction, and a dial on the shaft adapted to be rotatably adjusted according to a determined adjustment for rotating the shaft and drums in different directions to cause the pawl of the inner drum to engage the socket of the intermediate drum and cause the pawl of the bracket to engage the socket of the plate to operate said gears and pinion whereby the drums will be revolved for registering their notches to receive and remove said bolt for locking and unlocking the mechanism.

23. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a member reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the reciprocable member to open and close the circuit for controlling the sounding of the alarm, and means in the casing rotative according to selective adjustments for adjusting and locking the mechanism to prevent its engagement by the reciprocable member when operated and to open the circuit for preventing sounding the alarm when the body is in motion and said rotative means selectively readjustable to unlock and readjust the mechanism for being engaged by the reciprocable member when operated by movement of the body to close the circuit for sounding the alarm.

24. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a member reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the reciprocable member to open and close the circuit for controlling the sounding of the alarm, means in the casing rotative according to selective adjustments for adjusting and locking the mechanism to prevent its engagement by the reciprocable member when operated and to open the circuit for preventing sounding the alarm when the body is in motion and said rotative means selectively readjustable to unlock and readjust the mechanism for being engaged by the reciprocable member when operated by movement of the body to close the circuit for sounding the alarm, and a spring in the casing for forcing the reciprocable member outwardly of the casing with separation of the device from the body to engage said mechanism when unlocked for closing the circuit to independently sound the alarm.

25. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a member reciprocable inwardly and outwardly of the casing with movement of the body, lockable meschanism adjustable for engagement and disengagement with the reciprocable member to open and close the circuit for controlling the sounding of the alarm, means in the casing rotative according to selective adjustments for adjusting and locking the mechanism to prevent its engagement by the reciprocable member when operated and to open the circuit for preventing sounding the alarm when the body is in motion and said rotative means selectively readjustable to unlock and readjust the mechanism for

being engaged by the reciprocable member when operated by movement of the body to close the circuit for sounding the alarm, a shaft journaled in the casing for rotating the rotative means, and permutation means adjustable according to different selective adjustments for rotating said shaft.

26. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a member reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the reciprocable member to open and close the circuit for controlling the sounding of the alarm, means in the casing rotative according to selective adjustments for adjusting and locking the mechanism to prevent its engagement by the reciprocable member when operated and to open the circuit for preventing sounding the alarm when the body is in motion and said rotative means selectively readjustable to unlock and readjust the mechanism for being engaged by the reciprocable member when operated by movement of the body to close the circuit for sounding the alarm, a spring in the casing for forcing the reciprocable member outwardly of the casing with separation of the device from the body to engage said mechanism when unlocked for closing the circuit to independently sound the alarm, a shaft journaled in the casing for rotating the rotative means, and permutation means adjustable according to different selective adjustments for rotating said shaft.

27. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a member reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the reciprocable member to open and close the circuit for controlling the sounding of the alarm, and nesting drums in the casing having registrable notches, said drums rotative according to selective adjustments to cause registration of the notches for releasable locking engagement by the mechanism to prevent its engagement by the reciprocable member when operated and to open the circuit for preventing sounding the alarm when the body is in motion and said drums selectively adjustable rotatively to unlock the mechanism for being engaged by the reciprocable member when operated by movement of the body to close the circuit for sounding the alarm.

28. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a member reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the reciprocable member to open and close the circuit for controlling the sounding of the alarm, nesting drums in the casing having registrable notches, said drums rotative according to selective adjustments to cause registration of the notches for releasable locking engagement by the mechanism to prevent its engagement by the reciprocable member when operated and to open the circuit for preventing sounding the alarm when the body is in motion and said drums selectively adjustable rotatively to unlock and readjust the mechanism for being engaged by the reciprocable member when operated by movement of the body to close the circuit for sounding the alarm, a spring in the casing for forcing the reciprocable member outwardly of the casing with separation of the device from the body to engage said mechanism when unlocked for closing the circuit to independently sound the alarm.

29. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a member reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the reciprocable member to open and close the circuit for controlling the sounding of the alarm, nesting drums in the casing having registrable notches, said drums rotative according to selective adjustments to cause registration of the notches for releasable locking engagement by the mechanism to prevent its engagement by the reciprocable member when operated and to open the circuit for preventing sounding the alarm when the body is in motion and said drums selectively adjustable rotatively to unlock and readjust the mechanism for being engaged by the reciprocable member when operated by movement of the body to close the circuit for sounding the alarm, a shaft in the casing for rotating the drums, and permutation means adjustable according to different selective adjustments for rotating said shaft.

30. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a member reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the reciprocable member to open and close the circuit for controlling the sounding of the alarm, nesting drums in the casing having registrable notches, said drums rotative according to selective adjustments to cause registration of the notches for releasable locking engagement by the mechanism to prevent its engagement by the reciprocable member when

operated and to open the circuit for preventing sounding the alarm when the body is in motion and said drums selectively adjustable rotatively to unlock and readjust the mechanism for being engaged by the reciprocable member when operated by movement of the body to close the circuit for sounding the alarm, a spring in the casing for forcing the reciprocable member outwardly of the casing with separation of the device from the body to engage said mechanism when unlocked for closing the circuit to independently sound the alarm, a shaft journaled in the casing for rotating the drums, and permutation means adjustable according to different selective adjustments for rotating said shaft.

31. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a rod reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the rod when reciprocated, conductive connections operative by the mechanism to open and close the circuit for controlling the sounding of the alarm, and means in the casing rotative according to selective adjustments for adjusting and locking the mechanism to prevent its engagement by the rod when operated and to prevent operation of the conductive connections to open the circuit for preventing sounding the alarm when the body is in motion and said rotative means selectively readjustable to unlock and readjust the mechanism for being engaged by the rod when operated by movement of the body for causing operation of the conductive connections to close the circuit for sounding the alarm.

32. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a rod reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the rod when reciprocated, conductive connections operative by the mechanism to open and close the circuit for controlling the sounding of the alarm, means in the casing rotative according to selective adjustment for adjusting and locking the mechanism to prevent its engagement by the rod when operated and to prevent operation of the conductive connections to open the circuit for preventing sounding the alarm when the body is in motion and said rotative means selectively readjustable to unlock and readjust the mechanism for being engaged by the rod when operated by movement of the body for causing operation of the conductive connections to close the circuit for sounding the alarm, and a spring in the casing for forcing the rod outwardly of the casing with separation of the device from the body to engage said mechanism when unlocked for operating the conductive connections to independently sound the alarm.

33. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a rod reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the rod when reciprocated, conductive connections operative by the mechanism to open and close the circuit for controlling the sounding of the alarm, means in the casing rotative according to selective adjustment for adjusting and locking the mechanism to prevent its engagement by the rod when operated and to prevent operation of the conductive connections to open the circuit for preventing sounding the alarm when the body is in motion and said rotative means selectively readjustable to unlock and readjust the mechanism for being engaged by the rod when operated by movement of the body for causing operation of the conductive connections to close the circuit for sounding the alarm, a shaft journaled in the casing for rotating the rotative means, and permutation means adjustable according to different selective adjustments for rotating said shaft.

34. In a safety device for a movable body, a casing, an alarm in the casing, an electric circuit leading to the alarm, a rod reciprocable inwardly and outwardly of the casing with movement of the body, lockable mechanism adjustable for engagement and disengagement with the rod when reciprocated, conductive connections operative by the mechanism to open and close the circuit for controlling the sounding of the alarm, and drums in the casing having registrable notches, said drums rotative according to selective adjustments to cause registration of the notches for releasable locking engagement by the mechanism to prevent its engagement by the rod when operated and to prevent operation of the conductive connections to open the circuit for preventing sounding the alarm when the body is in motion and said drums selectively adjustable rotatively to unlock and readjust the mechanism for being engaged by the rod when operated by movement of the body for causing operation of the conductive connections to close the circuit for sounding the alarm.

35. A safety device for a vehicle, comprising a casing having a door closed entrance, adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit leading to the alarm, means in the casing, operative by a drive member of the vehicle when in motion, circuit closing means in the casing, operative by the operative means when operated for closing the circuit to cause sounding of the alarm, said clos-

ing means adjustable according to different selective adjustments for being releasably locked against closing the circuit to prevent normally sounding of the alarm with the operation of the operative means when operated by the driving of the drive member when the vehicle is travelling and when unlocked the closing means readjustable for being operated by the operation of the operative means by the driving of the drive member with movement of the vehicle to close the circuit for sounding the alarm, and means operative with the opening of the door of the casing to close the circuit for sounding the alarm, said closing means also being independently operative with separation of the casing from the vehicle for closing the circuit to sound the alarm.

36. A safety device for a vehicle, comprising a casing having a door closed entrance, adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit leading to the alarm, means in the casing operative by a drive member of the vehicle when in motion, circuit closing means in the casing, operative by the operative means when operated to close the circuit for sounding of the alarm, said closing means adjustable according to different selective adjustments from being engaged by the operative means when operated for opening the circuit to prevent normally sounding of the alarm with the operation of the operative means by the driving of the drive member when the vehicle is travelling and the closing means readjustable for reengagement by the operative means with its operation by the driving of the drive member with movement of the vehicle whereby the circuit will be closed for sounding the alarm, and means operative with the opening of the door of the casing for closing the circuit to sound the alarm, and a permutation device operative for controlling the selective adjustments of the closing means.

37. A safety device for a vehicle, comprising a casing having a door closed entrance, adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit leading to the alarm, means in the casing interposed in the circuit for sounding the alarm, means in the casing, operative by a drive member of the vehicle when in motion, circuit closing means in the casing, operative by the operative means to close the circuit for operating the alarm sounding means, said closing means adjustable according to different selective adjustments for being releasably locked from being engaged by the operative means when operated for opening the circuit to prevent normally operating the alarm sounding means with the operation of the operative means by the driving of the drive member when the vehicle is travelling and the closing means movable when unlocked to reversely move for reengagement by the operative means with its operation by the driving of the drive member with movement of the vehicle whereby the circuit will be closed for operating the alarm sounding means, and means operative with the opening of the door of the casing for closing the circuit to sound the alarm, said closing means being independently operative with separation of the casing from the vehicle for closing the circuit to sound the alarm, and a permutation device for controlling the selective adjustments of the closing means.

38. A safety device for a vehicle, comprising a casing having a door closed entrance, adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit leading to the alarm, means in the casing, interposed in the circuit for sounding the alarm, means in the casing, operative by a drive member of the vehicle when in motion, a conductive trip in the casing, interposed in the circuit, a switch in the casing, operative by the operative means when operated for engaging the trip to close the circuit for operating the alarm sounding means, said switch controllable according to different selective adjustments for being disengaged from the trip for opening the circuit to prevent normally operating the alarm sounding means with the operation of the operative means by the driving of the drive member when the vehicle is travelling and the switch readjustable for being operated by the operative means with its operation by the driving of the drive member with movement of the vehicle to reengage the trip to close the circuit for operating the alarm sounding means, a stop on the switch for retaining its engagement with the trip until the switch is disengaged from the trip, means operative with the opening of the door of the casing for closing the circuit to sound the alarm, and a permutation device for controlling the selective adjustments of said switch.

39. A safety device for a vehicle, comprising a casing adapted to be mounted on the vehicle, an alarm in the casing, an electric circuit in the casing leading to the alarm, mechanism in the casing, operative by a drive member of the vehicle when in motion for closing the circuit to cause sounding of the alarm, controlling means in the casing adjustable according to different selective adjustments for releasably locking the mechanism against closing the circuit to prevent normally sounding of the alarm when the drive member is driven with the travel of the vehicle and the controlling means readjustable to unlock the mechanism for operating by the driving of the drive

member with the movement of the vehicle to close the circuit for sounding the alarm, means operative with the opening of the door of the casing for closing the circuit to sound the alarm, said mechanism also being independently operative with separation of the casing from the vehicle for closing the circuit to sound the alarm, and permutation means for selectively controlling the adjustments of the controlling means.

This specification signed this 14th day of December A. D. 1922.

AUGUST L. N. FLEMING.
WILLIAM T. CRISWELL.