United States Patent

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[33] **Great Britain**
[31] **34283/68**

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[54] **SECURITY CONTAINER**
10 Claims, 7 Drawing Figs.

[52] **U.S. Cl.** **109/25,**
109/42, 109/44; 317/134
[51] **Int. Cl.** **E05g 3/00**
[50] **Field of Search** 109/25, 29,
35, 42, 44; 70/278; 317/134, 135; 340/280

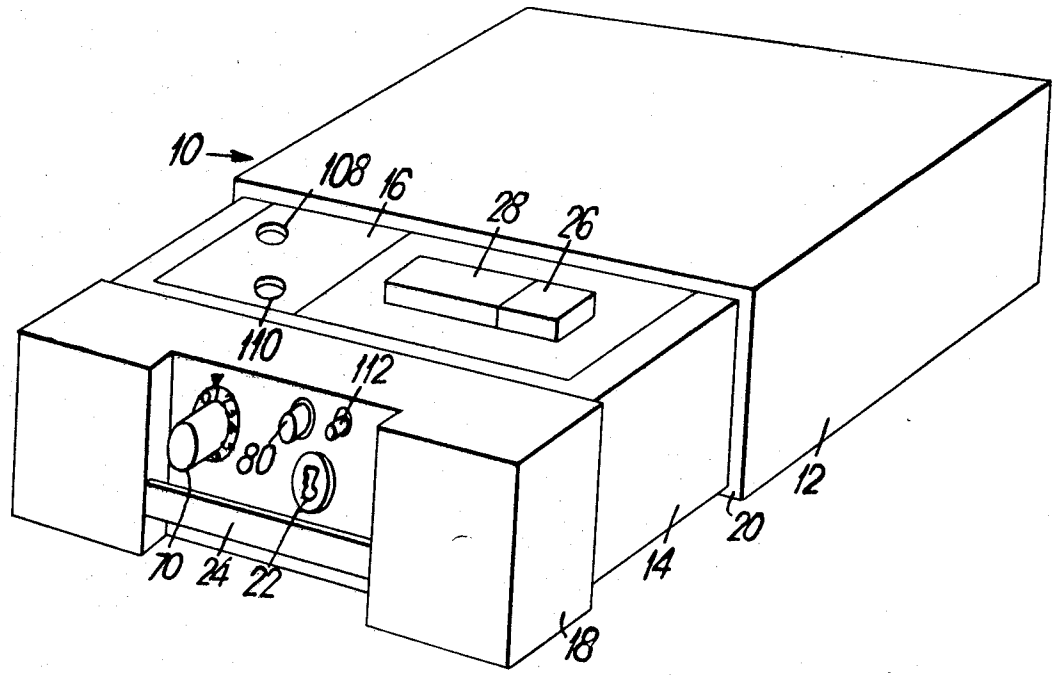
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ABSTRACT: A portable security container adapted to contain valuable articles and comprising a lock which when opened permits access to the interior of the container, a security circuit comprising a plurality of gating circuits, means adapted to apply a voltage from a voltage source within the container to each gating circuit to render it conductive, a further circuit which can take more than one state and which is arranged to change state if the voltage is not applied to the gating circuits in a predetermined sequence, and if the lock is opened before a predetermined number of gating circuits have been rendered conductive, means adapted to destroy or characteristically mark the contents of the container upon said change of state of the further circuit, and voltage-sensing means to cause the further circuit to change state if the said voltage falls below a predetermined value.



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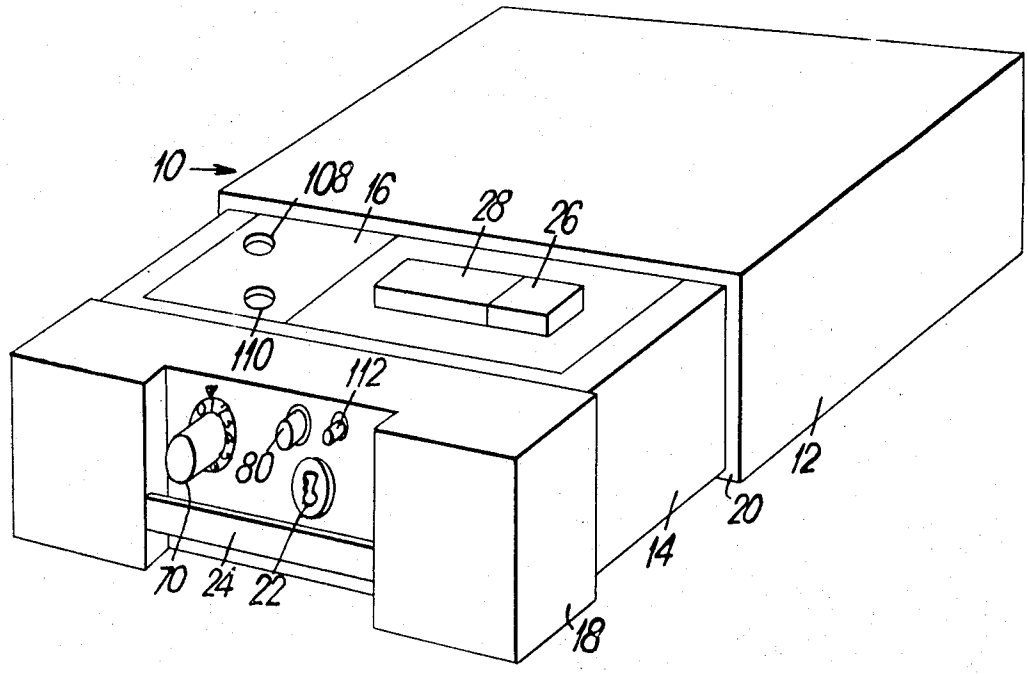


Fig. 1.

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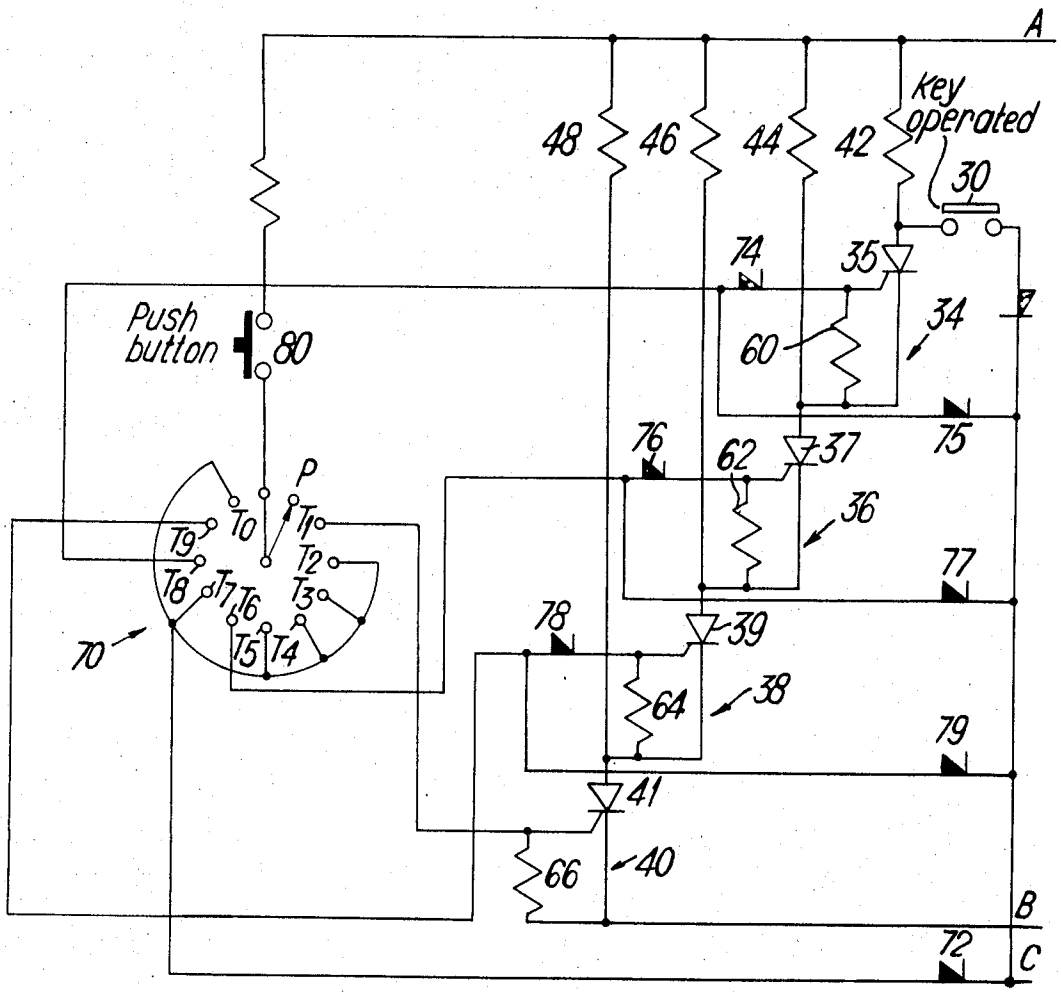


Fig. 2a.

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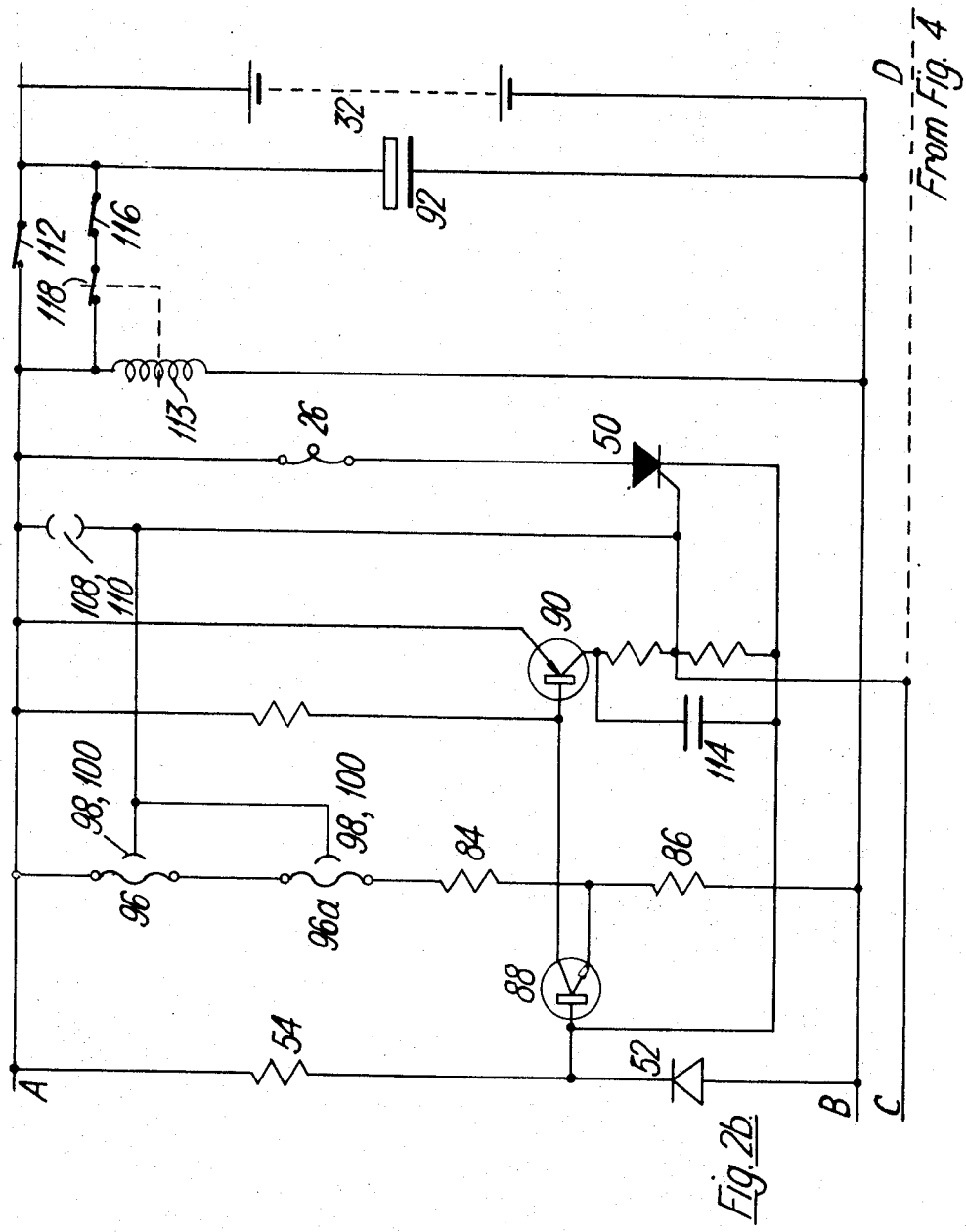


Fig. 2b

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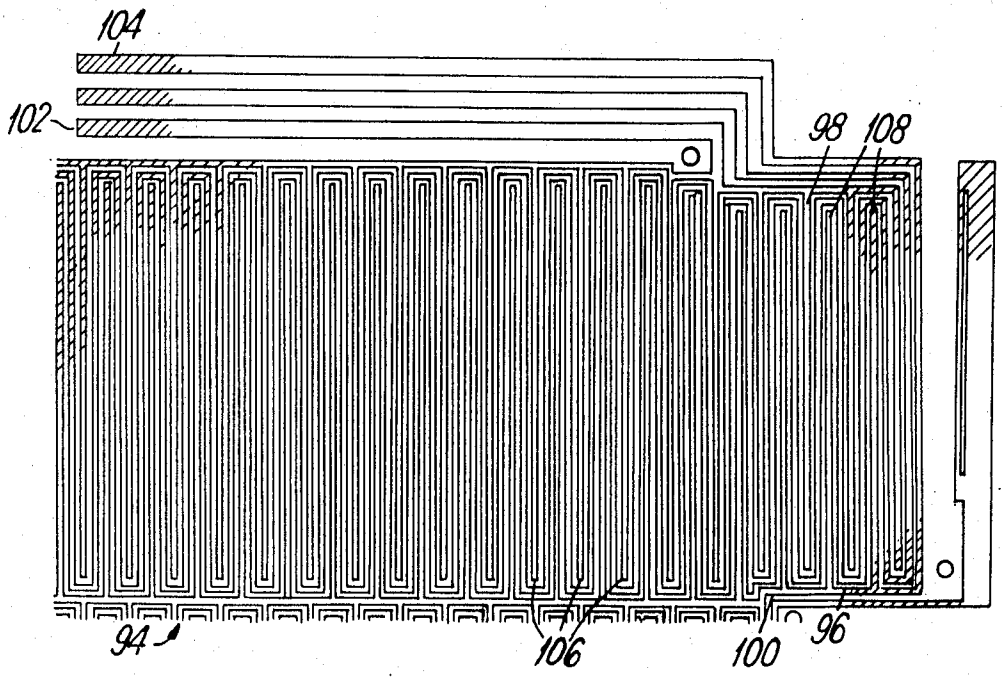


Fig. 3.

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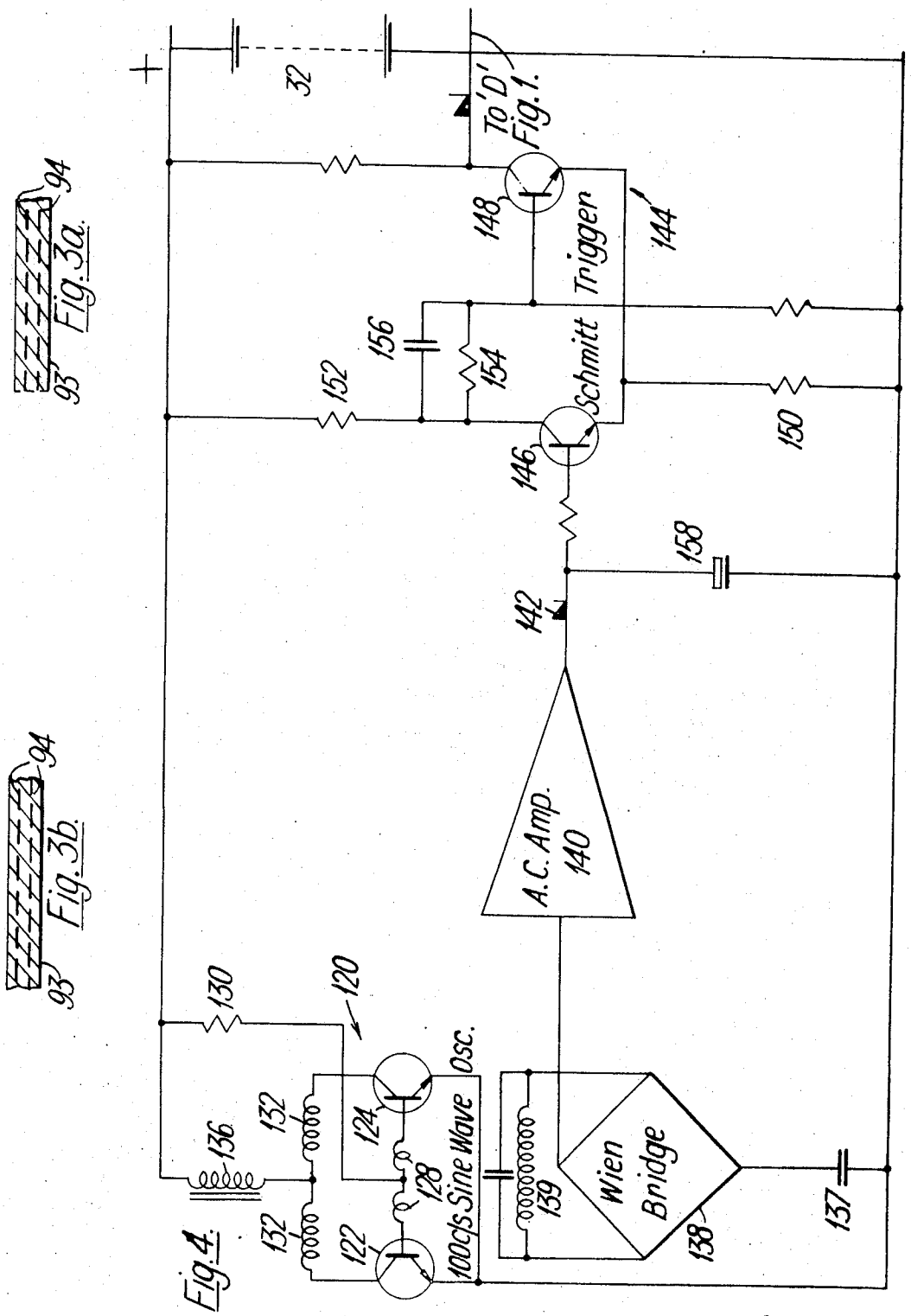


Fig. 4.

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SECURITY CONTAINER

This invention relates to a portable security container.

In one aspect, although not so restricted, the invention provides a portable security container adapted to contain valuable articles and comprising a lock which when opened permits access to the interior of the container, a security circuit comprising a plurality of gating circuits, means adapted to apply a voltage from a voltage source within the container to each gating circuit to render it conductive, a further circuit which can take more than one state and which is arranged to change state either if the voltage is not applied to the gating circuits in a predetermined sequence, or if the lock is opened before a predetermined number of gating circuits have been rendered conductive, means adapted to destroy or characteristically mark the contents of the container upon said change of state of the further circuit, and voltage-sensing means to cause the further circuit to change state if the said voltage falls below a predetermined value.

There may be a selector device having a plurality of outputs, some of which are selectable to apply respectively the said voltage to respective gating circuits, other outputs being connected to the further circuit whereby if a said output is selected and the said voltage applied thereto, the further circuit changes state.

The gating circuits may be arranged in cascade, an input terminal of each gating circuit being respectively connected to one terminal of the voltage source, the input terminals of the gating circuits, with the exception of the input terminal of that gating circuit forming the first cascade stage, each also having a respective parallel connection to an output terminal of the gating circuit of the preceding cascade stage, the said predetermined sequence starting with the gating circuit forming the last cascade stage and finishing with the gating circuit forming the first cascade stage.

The input terminal of each gating circuit may be an anode terminal, the output terminal being a cathode terminal, each gating circuit also having a respective control terminal, the control terminal being connected to the respective cathode terminal via a bias resistor and, except in the gating circuit forming the last cascade stage, being adapted to receive respectively the said voltage via a respective unilaterally conductive device arranged so that it only conducts if the potential at the control terminal is less than the potential at the anode terminal, the said voltage, when the said device is nonconductive being fed to the said further circuit to change the state thereof.

The said further circuit may comprise at least one silicon-controlled rectifier, the cathode terminal of the gating circuit forming the last stage of the cascade being connected to the other terminal of the voltage source, the cathode of a silicon-controlled rectifier of the further circuit also being connected to the said other terminal via a zener diode.

The cathode of the said silicon-controlled rectifier of the further circuit may be connected to the said one terminal of the voltage source via a further bias resistor, in parallel with its connection to the said other terminal.

The further circuit may comprise a control terminal to which are connected, in parallel, the said other outputs of the selector device and respective leads each adapted to receive the said voltage when the said respective unilaterally conductive device is nonconductive.

The voltage-sensing means may be adapted to compare a first voltage having a fixed relation to the voltage of the voltage source with a second substantially constant voltage, a trigger means causing the further circuit to change state when the first voltage becomes less than the second voltage.

There may be a potential divider connected across the terminals of the voltage source to derive the first voltage, the second voltage being the Zener voltage of the said Zener diode..

The further circuit may comprise an explosive fuse which is arranged to explode when the further circuit changes state to release into the interior of the container an indelible dye or a corrosive substance.

The security container may be provided with a guard circuit comprising an electrically continuous elongated convoluted conductor, and at least one open-circuited elongated convoluted or branched conductor closely proximate the continuous conductor but insulated therefrom, the further circuit being adapted to change state in response to a change in the resistance of the continuous conductor, or to change state if continuity is established between an open-circuited conductor and the continuous conductor.

The conductors may be arranged in two layers, coextensive with each other and with the wall, the continuous conductor and at least one said open-circuited conductor being provided in each layer.

The invention is also directed to any novel feature or combination of features herein described and/or shown in the drawings.

The invention will be described, merely by way of example, with reference to the accompanying drawings, wherein:

FIG. **1** shows a security container according to the invention;

FIGS. **2***a* and **2***b* show a security circuit incorporated in the container of FIG. **1**, FIGS. **2***a* and **2***b* interconnecting at A, B, C;

FIG. **3** shows part of the structure of FIG. **1**;

FIGS. **3***a* and **3***b* are scrap plan sections of parts of the container incorporating the structure of FIG. **3**, in two different embodiments; and

FIG. **4** shows a further circuit incorporated in the container of FIG. **1**, FIGS. **2***b* and **4** interconnecting at D.

FIG. **1** shows a security container **10** comprising an outer casing **12** and a removable inner tray **14**, both of toughened glass fibre. The inner tray **14** has a recess or compartment **16** for containing valuable articles, particularly cash or negotiable bonds. The tray **14** is a sliding fit within the outer casing **12**, and has a flanged end face **18** which abuts the end **20** of the outer casing **12** when the tray **14** is received therein. The tray **14** is locked inside the outer casing **12** by means of a suitably high-quality (e.g. **10** lever) lock **22** in the end face **18** of the tray. Alternatively, the lock **22** may be a magnetic or electrostatic lock. The container **10** is provided with a handle **24** for transportation thereof.

The inner tray comprises in its recess **16** and attached to one of the bounding walls thereof an explosive black powder fuse **26** which is arranged to explode if an unauthorized entry to the container is attempted. Adjacent the fuse **26** is a dye container **28** containing a quantity of indelible dye. The container **28** and fuse **26** are separated by only a thin membrane such that if the fuse is detonated, the explosion forcibly disperses the dye throughout the recess **16**, drenching its contents. The dye is of a characteristic color, rendering the contents of the container **10** instantly recognizable and, if cash, worthless to a thief. Alternatively a corrosive substance, e.g. acid may be substituted if it is preferred to completely destroy the contents of the container **10** rather than to allow an unauthorized person access to them in any form. This is of use if the contents of the container are classified documents.

FIGS. **2***a* and **2***b* show the security circuit incorporated in the container **10** to react to attempted unauthorized access to the contents thereof.

The lock **22** comprises a normally open key-operated switch (**30** FIG. **2***a*) which is closed when the key is inserted in the lock and turned. If the security circuit of FIG. **3** has not previously been set in a predetermined condition, closing the switch **30** explodes the fuse **26**.

The security circuit comprises a voltage source **32**, e.g. a 12 v. dry battery housed in the recess **16** of the container. Across the battery **32** are connected in cascade a plurality of gating circuits **34, 36, 38, 40**. Each gating circuit comprises a silicon-controlled rectifier **35, 37, 39, 41**, the input or anode terminals of which are respectively connected to the positive terminal of the battery **32** via respective resistors **42, 44, 46, 48**. With the exception of the silicon-controlled rectifier **35** of the gating circuit **34** forming the first cascade stage, the anode of each silicon-controlled rectifier **37, 39, 41** of each cascade

stage is also connected to the output or cathode terminals of the siliconrcontrolled rectifier of the preceding cascade stage, this connection being in parallel with the connection of the silicon-controlled rectifier to the positive terminal of the battery via the appropriate resistor **44, 46, 48**.

The anode of silicon-controlled rectifier **35** of the first cascade stage **34** is connected, in parallel with its connection to the positive terminal of the battery, via the key-operated switch **30** to a silicon-controlled rectifier **50** forming part of a further circuit incorporating the fuse **26**. The anode of the silicon-controlled rectifier **50** is connected via the fuse **26** to the positive terminal of the battery **32**. The cathode of the rectifier **50** is connected via a Zener diode **52** to the battery's negative terminal, and to its positive terminal via a resistor **54**.

The control or gating terminals of the silicon-controlled rectifiers **35, 37, 39, 41** are respectively biased from their respective cathodes via respective gate resistors **60, 62, 64, 66** and are also respectively connected to respective selectable outputs T_8, T_6, T_9 and T_1 of a 10-position rotary selector switch **70** provided on the end face **18** of the inner casing **14** (FIG. **1**).

The connections of the control terminals of the silicon-controlled rectifiers **35, 37, 39** to the outputs T_8, T_6, T_9 are via respective unilaterally conductive diodes **74, 76, 78**.

The remaining selectable outputs T_0, T_2, T_3, T_4, T_5, T_7 are connected via a common line passing through a unilaterally conductive diode **72** to the control terminal of the silicon-controlled rectifier **50**.

The outputs T_8, T_6, T_9 are also connected to the control terminal of the silicon-controlled rectifier via respective leads from the anodes of the diodes **74, 76, 78** via further diodes **75, 77, 79**.

The rotary switch **70** is connected via a push button switch **80** (FIG. **1**) on the end face **18** of the inner tray **14** to the battery positive terminal. Thus, by operating the rotary selector switch and briefly closing the switch **80**, a voltage pulse can be emitted from a chosen selectable output T_0—T_9.

Assuming the container **10** to be closed and locked, the security circuit permits the container to be unlocked and opened only if the outputs T_1, T_9, T_6 and T_8 are selected in that order and the switch **80** briefly closed after each selection.

The circuit operates as follows: when the selectable output T_1 is selected and the switch **80** briefly closed, a voltage pulse is applied to the control terminal of the silicon-controlled rectifier **41**, rendering it conductive and reducing the voltage at the cathode of the silicon-controlled rectifier **39**. If the output T_9 is then selected and the switch **80** briefly closed a voltage pulse is applied to the silicon-controlled rectifier **39**, rendering it in turn conductive. If the outputs T_6 and T_8 are selected in turn and a similar procedure adopted, then all four silicon-controlled rectifiers **35, 37, 39, 41** are rendered conductive. When the silicon-controlled rectifier **35** is conductive, the voltage at its anode is reduced. The resistances **42, 44, 46, 48** are chosen such that this anode voltage is sufficiently reduced that if the key switch **30** were closed the voltage applied to the control terminal of the silicon-controlled rectifier **50** would not be sufficient to make it conduct. Conversely, if the key switch **30** is closed before the silicon-controlled rectifier **35** is conducting, a much higher voltage is applied to the silicon-controlled rectifier **50**, causing it to conduct and exploding the fuse **26**. Thus, if the key switch is operated before a predetermined number (i.e. four) of the gating circuits **34, 36, 38, 40** have been rendered conductive the further circuit comprising the silicon-controlled rectifier **50** and the fuse **26** changes state.

If the outputs T_1, T_9, T_6, T_8 are not selected in the correct order, then again the fuse **26** is made to explode. For example, if a given gating circuit (e.g. **38**) is not conducting, then the cathode of the silicon-controlled rectifier (e.g. **37**) of the preceding gating circuit **36** is at the full positive voltage developed by the battery, since the gating circuit **38** represents an infinite impedance. Consequently, the control terminal of the silicon-controlled rectifier **37** is also at substantially the full battery voltage, being connected from its cathode via the gate resistor **64**. Thus when a voltage pulse is wrongly applied via output T_6 to the diode **76**, there is no potential drop across the diode which therefore does not conduct. The pulse instead passes via the diode **77** to the silicon-controlled rectifier **50**, causing it to conduct and explode the fuse **26**.

Thus, if the voltage pulses are not applied to the gating circuits in a predetermined sequence starting with the gate **40** forming the last stage of the cascade and finishing with the gate **34** forming the first cascade stage, the further circuit **50, 26** changes state.

The resistor **54** and the Zener diode **52** ensure that the maximum forward voltage drop of the silicon-controlled rectifiers **35, 37, 39, 41** in series is not quite sufficient to cause the silicon-controlled rectifier **50** to conduct.

If any of the remaining outputs T_0, T_2, T_3, T_4, T_5, T_7 are selected then the voltage pulse is applied directly to the control terminal of the silicon-controlled rectifier **50**, exploding the fuse **26**.

In order to prevent a prospective thief gaining access to the interior of the container by keeping it until the battery is exhausted, the security circuit embodies a voltage sensing circuit including a trigger to explode the fuse **26** if the battery voltage falls below a predetermined value.

A potential divider **84, 86** is disposed across the battery terminals, and biases the emitter of a transistor **88** at a constant fraction of the battery voltage. The base of the transistor **88** is connected to the junction of the Zener diode **52** and the resistor **54** and is initially at a lower potential than the emitter. The potential at the base is thus the Zener voltage and is substantially constant.

As the battery voltage falls with time, the emitter voltage of transistor **88**, initially greater than the base voltage, finally falls below a substantially constant voltage which is the Zener voltage minus the emitter-base bias voltage (characteristic of the transistor) necessary for the transistor **88** to conduct. The transistor **88** then conducts, switching on a further transistor **90** and applying a voltage via the emitter-collector circuit thereof to the control terminal of the rectifier **50**. The rectifier **50** conducts, exploding the fuse **26**.

A large capacitor **92** is provided across the battery terminals to ensure that sufficient energy is available, even when after a considerable life the impedance of the battery has increased, to explode the fuse **26** when the rectifier **50** conducts.

Disposed at the walls of the outer container **12** and the tray **14** (including the end face **18** thereof) is a guard circuit such that an attempt to cut, burn or otherwise penetrate the walls of the container will result in the fuse **26** exploding. In this embodiment, the guard circuit is embedded in the walls by being moulded therein.

The guard circuit (FIG. **3**) comprises two parallel layers **94** of closely spaced conductors (e.g. copper wires or strips), the layers being coextensive with each other and with the walls. One conductor **96** is electrically continuous and is convoluted, e.g. folded back upon itself. Each layer comprises two further open-circuited conductors **98, 100** having a plurality of open-circuited branches. It will be appreciated that the open-circuited conductors **98, 100** alternatively, or in addition to being branched may be convoluted, provided they remain, as a whole, open-circuited. The conductors **96, 98, 100** are electrically separate from each other, being insulated by the glass fibre in which they are embedded.

The conductors **98, 100** are each connected at one end to a respective common lead **102, 104**. The other (branched) ends **106, 108** of theses conductors are left electrically discontinuous, that is to say unconnected or "floating."

The conductors **96, 98, 100** have spaced-apart parallel portions. The parallel portions of the conductor **96** are interposed between similarly spaced-apart neighboring parallel portions of the conductors **98, 100**. Consequently, an attempt to cut or drill through the walls of the container will result in the conductor **96** being severed, and/or continuity or a short circuit

being established between adjacent portions of the conductors **96** and **98** or **100**, exploding the fuse **26** as described hereinafter. Such a short circuit can of course occur between the conductors **96**, **98**, **100** of different layers.

Although the conductors are shown as laminarly arranged in FIG. **3**, they can of course be wrinkled in the plane of the drawing, to combat attempts to grind away the surface of the container wall until the guard circuit is completely exposed.

Referring to FIG. **3***a*, which shows a scrap section through a wall **93** taken perpendicularly to the conductors in the layers **94**, it will be seen that the layers **94** are disposed relative to each other in the wall **93** so that the parallel portions of the conductors of one layer are aligned behind the parallel portions of the conductors of the other layer (i.e. directly one behind the other) when viewed normally of the layers. This conductor-for-conductor alignment results in the conductors presenting a confusing pattern if an attempt is made to X-ray the container **10** to investigate its construction.

FIG. **3***b* shows an alternative arrangement of the parallel portions of the conductors. The parallel portions of the conductors of one layer **94** are offset relative to the parallel portions of the conductors of the other layer, so as to be aligned with the adjacent edges of neighboring portions of the other layer. The parallel portions are pitched an equal distance apart in each layer, the width of the gaps between the said adjacent edges being less than one half pitch. This produces a confusing X-ray pattern of a different type.

As can be seen from FIG **3**, the convoluted or branched pattern of the conductors is repeated at intervals, whether the conductors are arranged as in FIG. **3***a* or **3***b*. The conductor **96** is continuous throughout the repetitions of the pattern. The conductor **96** also extends through the other layer **94**, although if desired a separate conductor **96***a* could be used, and connected in series with the conductor **96** as described hereinafter, to form an electrically continuous conductor. The exact number of layers, and the number of conductors in each layer is a matter of choice. Thus more than two open-circuited conductors could be provided.

The guard circuit may extend by means of for example a connector across at least one of the interfaces between the outer casing **12** and the inner tray **14**, so that any significant relative movement of the tray **14** and casing **12** (such as would occur if the tray was withdrawn from the casing) whilst the guard circuit is active breaks the continuity of the conductor **96** and results in the fuse **26** exploding.

The electrically continuous conductor **96** is connected in series with and thus effectively forms part of the potential divider **84**, **86** of the trigger circuit shown in FIG. **2**. Any further continuous conductors **96***a* may also be similarly connected. If the continuity of the conductor **96** is broken, or if its resistance is significantly increased due to it being partially cut through, then the voltage at the emitter of transistor **88** is decreased, as if the battery **32** were exhausted, and the silicon-controlled rectifier **50** is caused to conduct, as described hereinbefore, exploding the fuse **26**.

The conductors **98**, **100** are connected via their common leads **102**, **104** to the control terminal of the silicon-controlled rectifier **50** (FIG. **2***b*). Normally there is no electrical continuity between the conductor **96** and the conductors **98**, **100** and there is a very high resistance therebetween. If continuity is established however, e.g. by a would-be thief trying to drill through the container **10** by means of a metal drill, or by attempting to bypass the continuous conductor **96** by injecting into the wall of the container **10** a conductive fluid, the positive battery voltage is applied via the conductors **98**, **100** to the silicon-controlled rectifier **50**, exploding the fuse **26**.

A pair of thermostats **108**, **110** are provided on an inside wall of the inner tray **14**. Each comprises a respective pair of normally open contacts, one pair becoming closed if the temperature of the container **10** exceeds a predetermined value, the other pair becoming closed if the temperature of the container **10** falls below a second lower predetermined value (e.g. if an attempt is made to freeze the dye in the dye container **28**). The pairs of contacts are connected in parallel between the battery positive terminal and the control terminal of the rectifier **50**. Thus if either pair of contacts close, the fuse **26** explodes.

The container **10** is also provided with a priming circuit which allows the container to be handled when opened by authorized persons. The priming circuit comprises a normally open push button switch **112** (FIGS. **1** and **2***b*) connected in the main lead from the positive terminal of the battery. When the switch **112** is open, the security circuit of FIGS. **2***a* and **2***b* isolated from the battery and from the capacitor **92**. A relay **113** which is energized when the switch **112** is closed, is provided with a pair of hold-on contacts in parallel with the switch **112**. Thus, once the switch **112** has been briefly closed, the security circuit remains connected to the battery and the capacitor **92**. A capacitor **114** is provided across the control and cathode terminals of the rectifier **50** to prevent any stray voltage surge that may occur when the switch **112** is closed, from causing the rectifier to conduct and exploding the fuse **26**.

The lock **22** comprises a second key-operated switch **116** (FIG. **2***b*) having normally closed contacts. The lock is such that when the key is turned therein, the key operated switch **30** closes before switch **116** opens.

The switch **116** is in series with the contacts **118**, and when open thus deenergizes the relay **113**, allowing the inner tray **14** to be withdrawn without the fuse **26** being exploded when the continuity of the conductor **96** is interrupted.

A modification of the security circuit is shown in FIG. **4**. This modification makes the further circuit **50**, **26** also change state in response to a significant change in another electrical property of the guard circuit, its capacitance.

In order to detect capacitance change, an alternating voltage is provided by an oscillator **120**. The alternating voltage is typically sinusoidal at a frequency of 1,000 Hz. The oscillator **120** comprises a pair of transistors **122**, **124**, the bases of which are connected via a center tapped secondary winding **128** of a three-winding transformer **126** and a resistor **130** to the positive terminal of the battery **32**. The collectors of the transistors **122**, **124** are similarly connected via a center-tapped primary winding **132** of the transformed and a choke **136**. The choke **136** is a constant current device, enabling the oscillator to produce a sinusoidal output. An approximately square wave output would be obtained if the choke were omitted.

The output of the oscillator **120** is applied via a DC blocking capacitor **137** across a balanced capacitance bridge **138** (e.g. a Wien bridge). A third winding **139** of the transformer **126** is also connected across the bridge **138** as shown in FIG. **4**.

The bridge **138** has one of its "arms" the self capacitance of the guard circuit as measured for example between the conductor **96** and the conductors **98** and/or **100**. The remaining capacitances of the bridge are chosen so that the bridge is balanced and produces no output in its difference circuit. However, if the container **10** is tampered with and the capacitance between the conductor **96** and the conductors **98**, **100** changes significantly (e.g. due to a wall of the container being deformed, or by the glass fibre insulation being partially cut away) then the bridge **138** becomes unbalanced, and produces an output. This output is amplified in an AC amplifier **140** rectified in a diode **142** and fed to a Schmitt trigger **144**.

The Schmitt trigger **144** comprises a pair of transistors **146**, **148**, the emitters of which are biased from the negative terminal of the battery **32** via a bias resistor **15**. The collector of the transistor **146** is connected to the base of the transistor **148** via a potential divider comprising resistors **152**, **154**. A capacitor **156** bridges the resistor **154**.

The amplified rectified output of the bridge **138** is applied to the base of the transistor **146**, and if it is above a predetermined threshold level chosen by suitably selecting the values of the components of the Schmitt trigger **144**, the transistors **146** and **148** conduct, and apply a signal to the control ter-

minal of the silicon-controlled rectifier **50**, thus detonating the fuse **26**.

The capacitor **156** is provided to compensate for any stray capacitance between the base of the transistor **148** and earth (the negative terminal of the battery **32**). Such a stray capacitance would reduce the steepness of the wave front of the pulse emitted by the transistor **146** when it starts to conduct with the result that the Schmitt trigger **144** may fail to trigger if a short pulse, e.g. of order milliseconds were applied to the base of the transistor **146**.

An integrating capacitor **158** ensures that spurious transient signals (e.g. of order microseconds) that may be above the threshold level do not trigger the Schmitt trigger **144** and detonate the fuse **26**.

The security container **10** specifically described herein by way of example only may have the advantage that once closed and locked by means of the lock **22**, a messenger carrying the container is not required to resist an attempt to steal the container, since the thief could not gain entry to the container. Consequently, the messenger need not have the container **10** chained to his wrist, as is often the practice with known containers. Furthermore, the messenger need not take any action to protect the box, or to set off any alarm. The messenger is thus less exposed to physical danger.

It will be appreciated that the invention is applicable to other than portable containers. For example, it may be applied to a safe, either free-standing or incorporated into a building, e.g. as a vault. It may also be applied to a vehicle such as a van used for transporting large amounts of cash.

We claim:

1. A portable security container adapted to contain valuable articles and comprising a lock which when opened permits access to the interior of the container, a security circuit comprising a plurality of gating circuits, a voltage source within the container, means to apply a voltage from said source to each gating circuit to render it conductive, a further circuit which can take more than one state and which is adapted to change state if the voltage is not applied to the gating circuits in a predetermined sequence, and if the lock is opened before a predetermined number of gating circuits have been rendered conductive, means controlled by the further circuit and adapted to destroy or characteristically mark the contents of the container upon said change of state of further circuit, and voltage-sensing means to sense said voltage and adapted to cause the further circuit to change state if the said voltage falls below a predetermined value.

2. A portable security container as claimed in claim **1** and comprising a selector device having a plurality of outputs, some of which are selectable to apply respectively the said voltage to respective said gating circuits, other outputs being connected to the further circuit whereby if a said other output is selected and the said voltage applied thereto, the further circuit changes state.

3. A portable security container as claimed in claim **1** wherein the gating circuits are arranged in cascade, an input terminal of each gating circuit being respectively connected to one terminal of the voltage source, the input terminals of the gating circuits, with the exception of the input terminal of that gating circuit forming the first cascade stage, each also having a respective parallel connection to an output terminal of the gating circuit of the preceding cascade stage, the said predetermined sequence starting with the gating circuit forming the last cascade stage and finishing with the gating circuit forming the first cascade stage.

4. A portable security container as claimed in claim **3** wherein the input terminal of each gating circuit is an anode terminal, the output terminal being a cathode terminal, each gating circuit also having a respective control terminal, the control terminal being connected to the respective cathode terminal via a bias resistor and, except in the gating circuit forming the last cascade stage, being adapted to receive respectively the said voltage via a respective unilaterally conductive device adapted to conduct only if the potential at the control terminal is less than the potential at the anode terminal, and means to feed the said voltage, when the said device is nonconductive, to the said further circuit to change the state thereof.

5. A portable security container as claimed in claim **4** wherein the said further circuit comprises at least one silicon-controlled rectifier, the cathode terminal of the gating circuit forming the last stage of the cascade being connected to the other terminal of the voltage source, the further circuit comprising a silicon-controlled rectifier, the cathode of which is also connected to the said other terminal via a Zener diode.

6. A portable security container as claimed in claim **5** wherein the cathode of the said silicon-controlled rectifier of the further circuit is connected to the said one terminal of the voltage source via a further bias resistor, in parallel with its connection to the said other terminal.

7. A portable security container as claimed in claim **4**, comprising a selector device having a plurality of outputs, some of which are selectable to apply respectively the said voltage to respective gating circuits, other said outputs being connected to a control terminal of the further circuit, there also being connected to said terminal respective leads each adapted to receive the said voltage when the said respective unilaterally conductive device is nonconductive.

8. A portable security container as claimed in claim **1** comprising means to provide a first voltage having a fixed relation to the voltage of the voltage source and means to provide a second substantially constant voltage, the sensing means being adapted to compare said first and second voltages, the sensing means comprising trigger means adapted to cause the further circuit to change state when the first voltage becomes less than the second voltage.

9. A portable security container as claimed in claim **8** comprising a potential divider connected across the terminals of the voltage source to derive the first voltage, and a Zener diode, the second voltage being the Zener voltage of the said Zener diode.

10. A portable security container as claimed in claim **1** wherein the further circuit comprises an explosive fuse, means to explode said fuse when the further circuit changes state to release into the interior of the container an indelible dye or a corrosive substance.