July 7, 1970 R. H. GODWIN 3,519,299

SAFETY LOCK FOR CONTAINER

Filed March 6, 1968 6 Sheets-Sheet 1

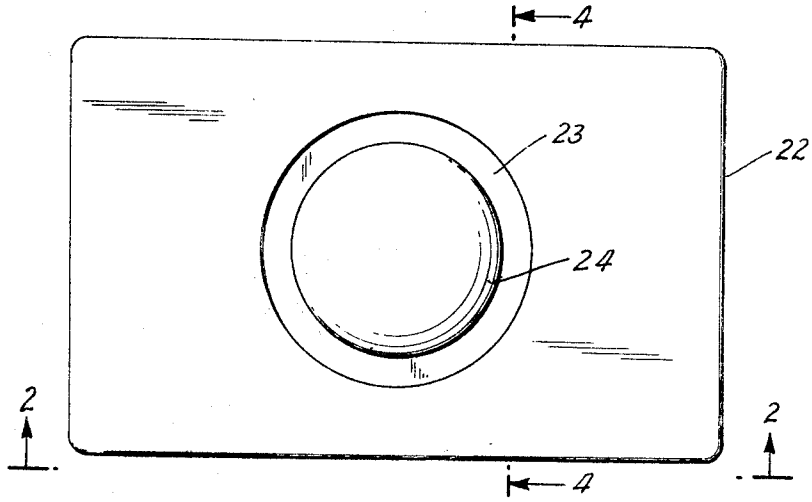


FIG. 1

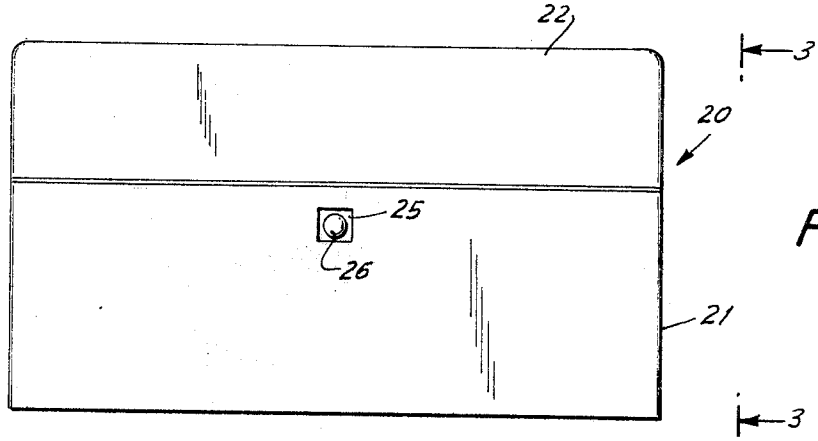


FIG. 2

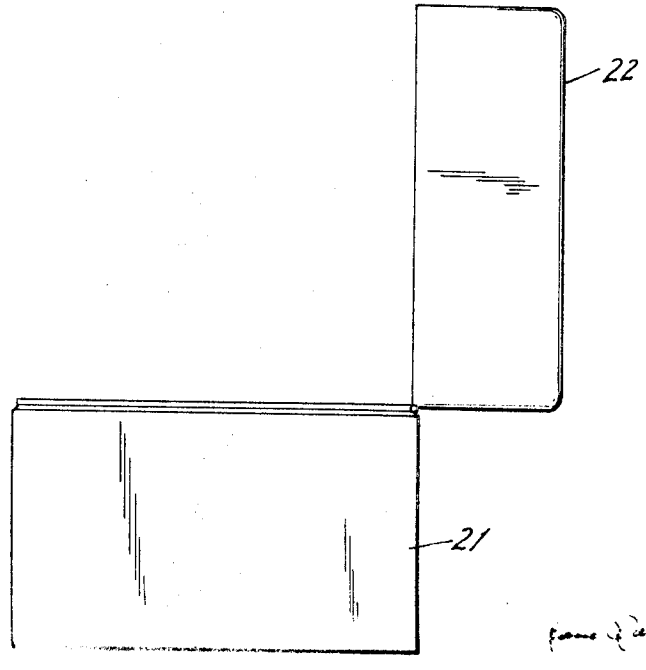


FIG. 3

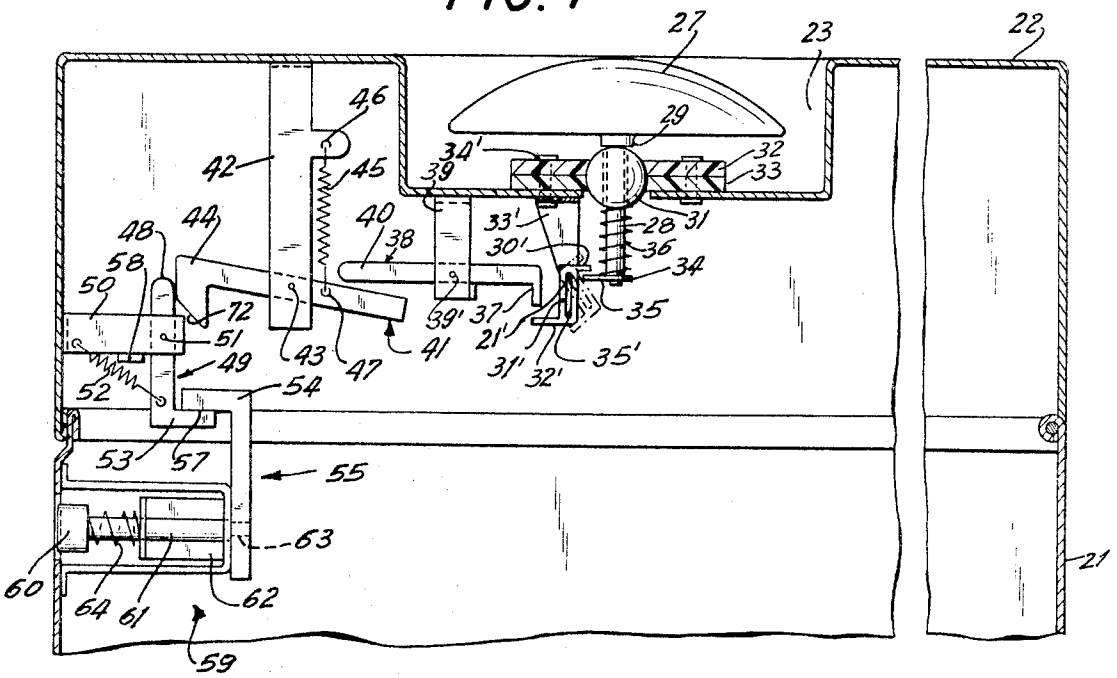
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July 7, 1970 R. H. GODWIN 3,519,299

SAFETY LOCK FOR CONTAINER

Filed March 6, 1968 6 Sheets-Sheet 2

FIG. 4



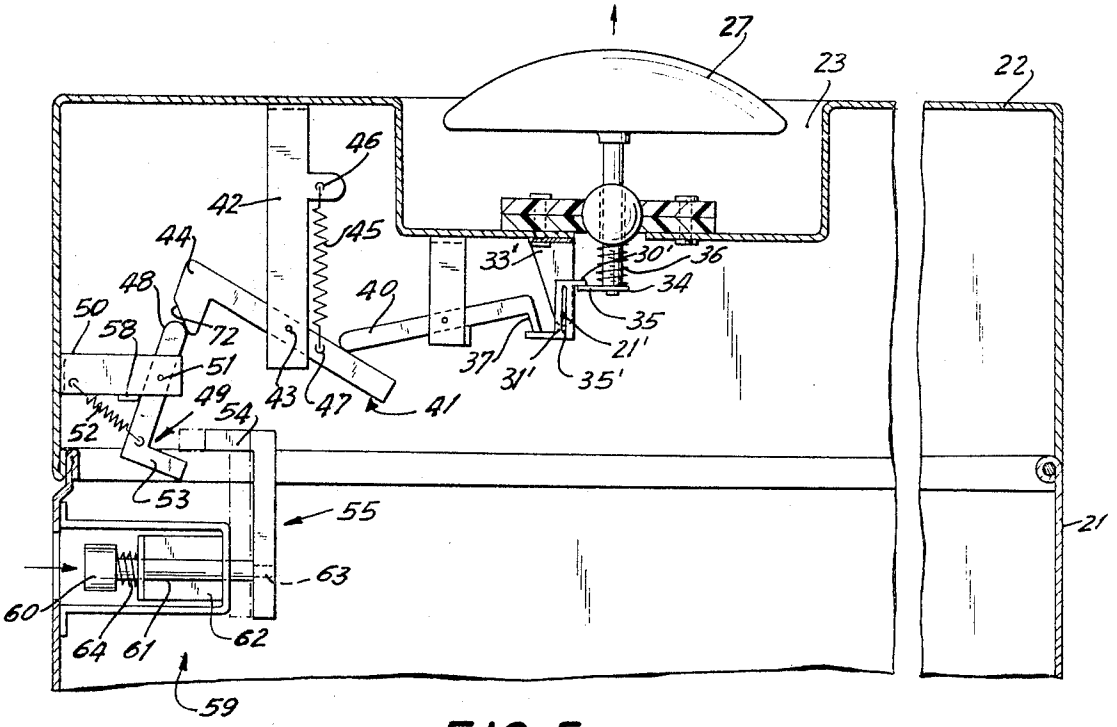


FIG. 5

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July 7, 1970 R. H. GODWIN 3,519,299

SAFETY LOCK FOR CONTAINER

Filed March 6, 1968 6 Sheets-Sheet 3

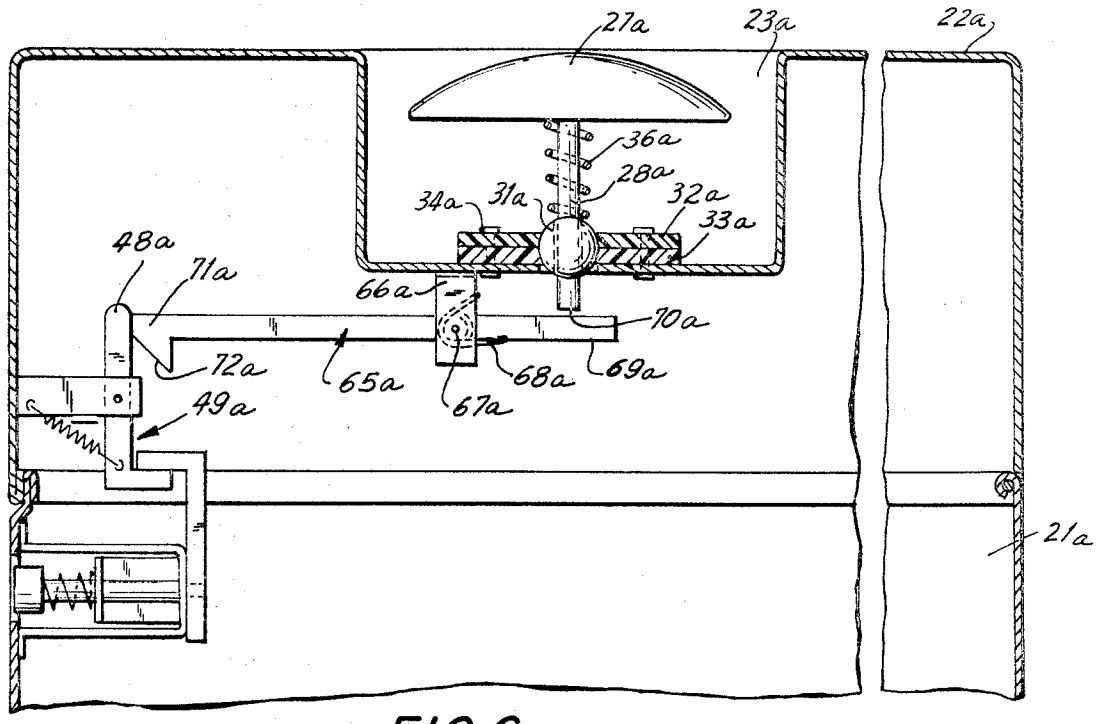


FIG. 6

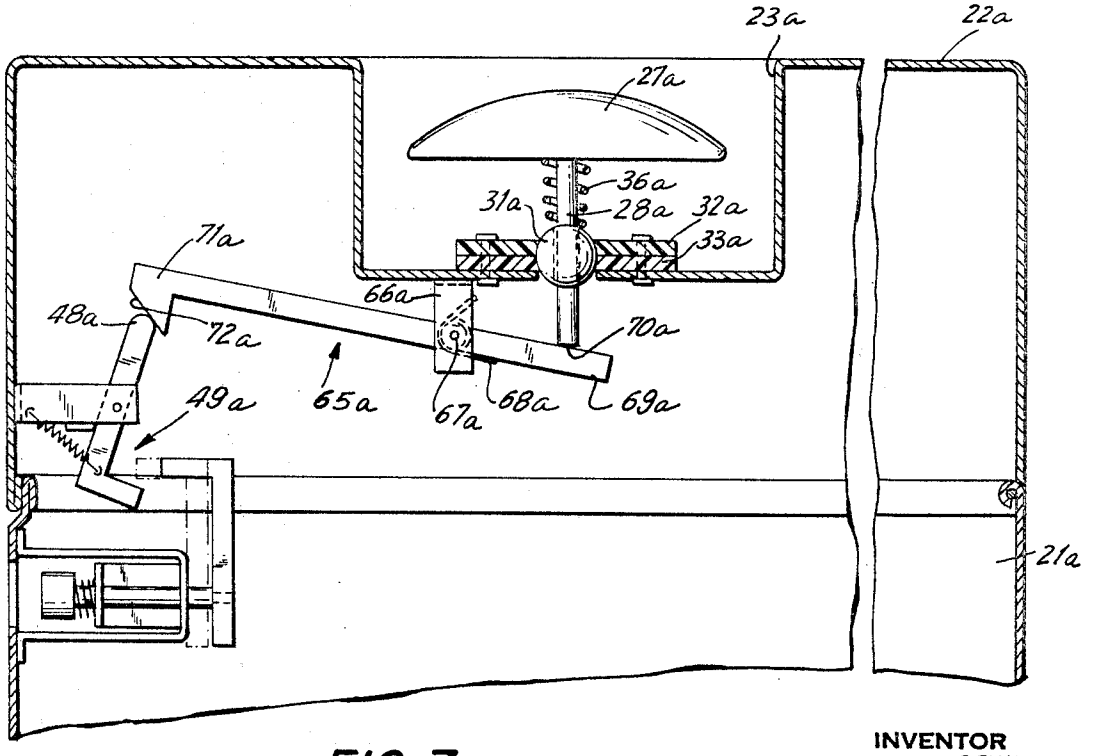


FIG. 7

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SAFETY LOCK FOR CONTAINER

Filed March 6, 1968 6 Sheets-Sheet 4

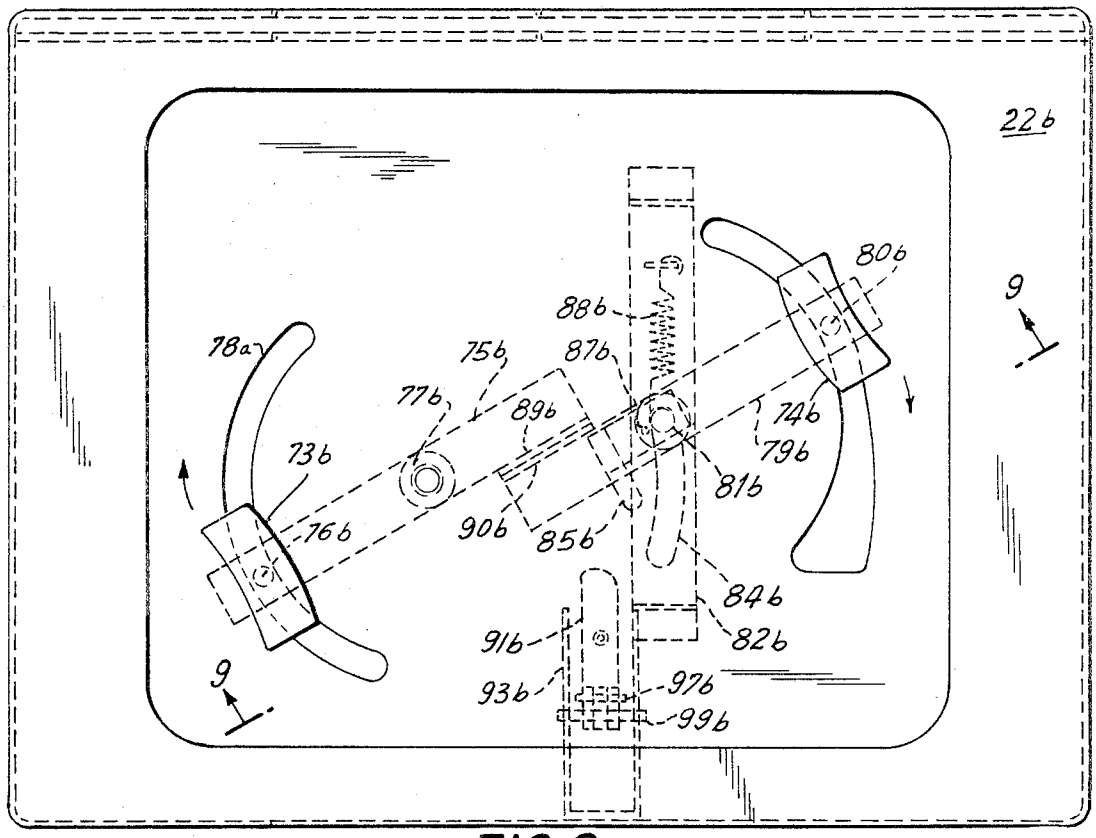


FIG. 8

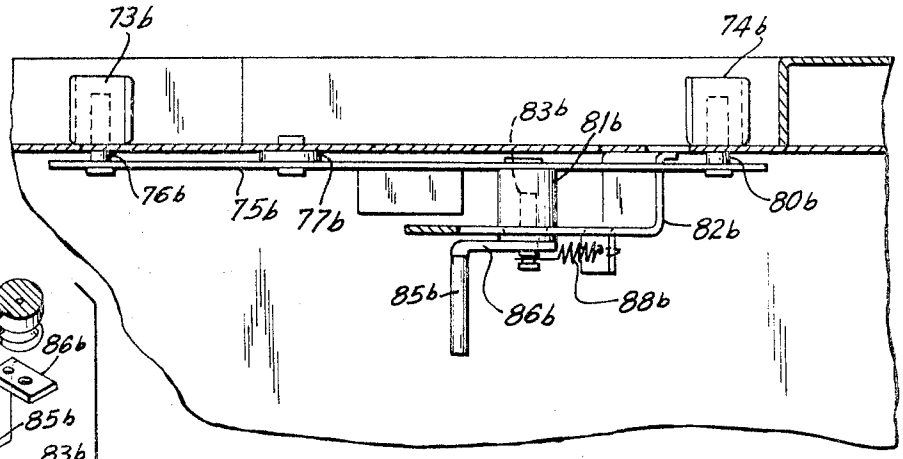


FIG. 9

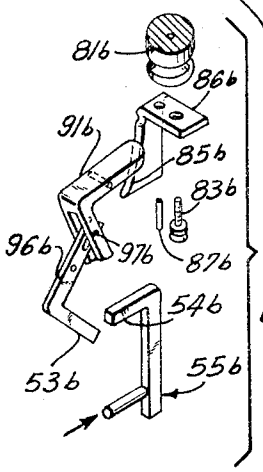


FIG. 12

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SAFETY LOCK FOR CONTAINER

Filed March 6, 1968 6 Sheets-Sheet 5

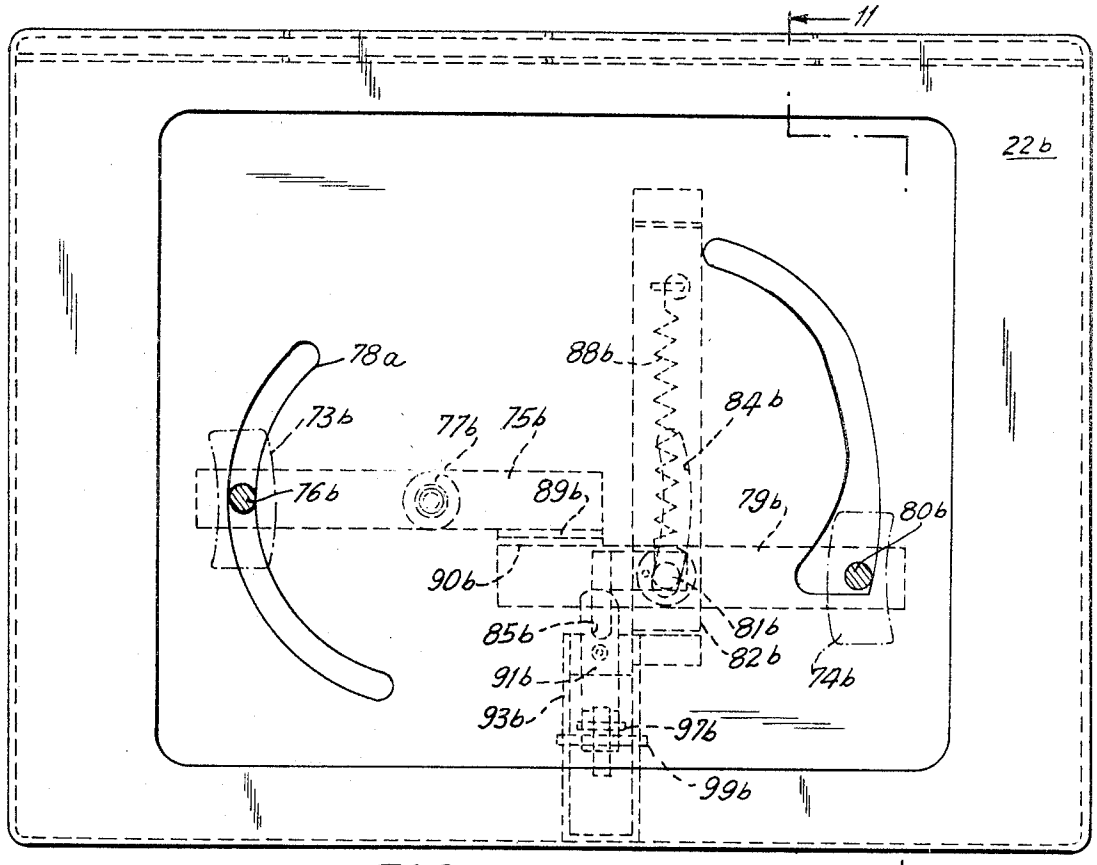


FIG. 10

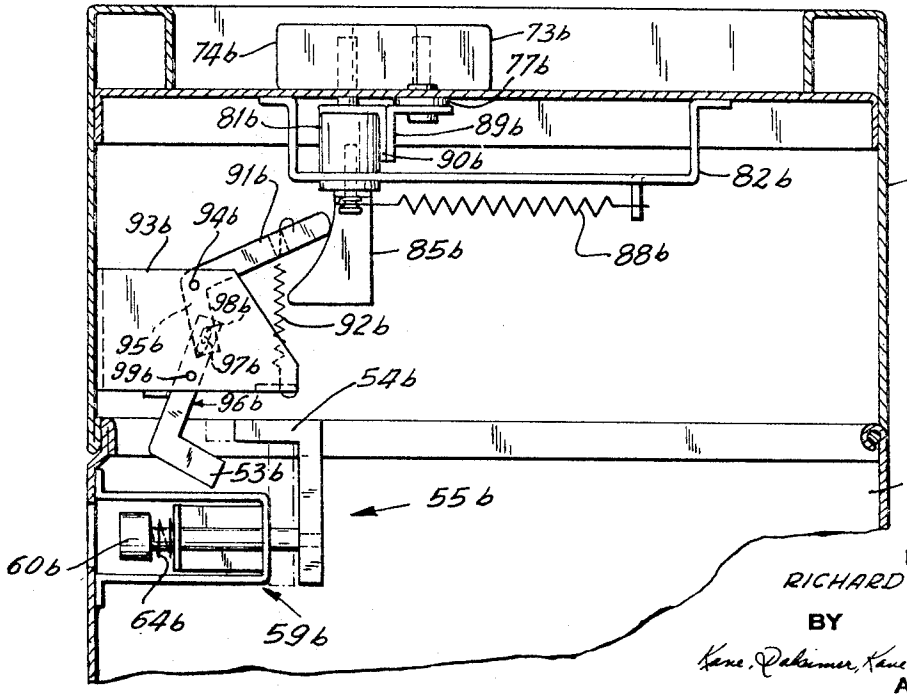


FIG. 11

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July 7, 1970 R. H. GODWIN 3,519,299

SAFETY LOCK FOR CONTAINER

Filed March 6, 1968 6 Sheets-Sheet 6

FIG. 13

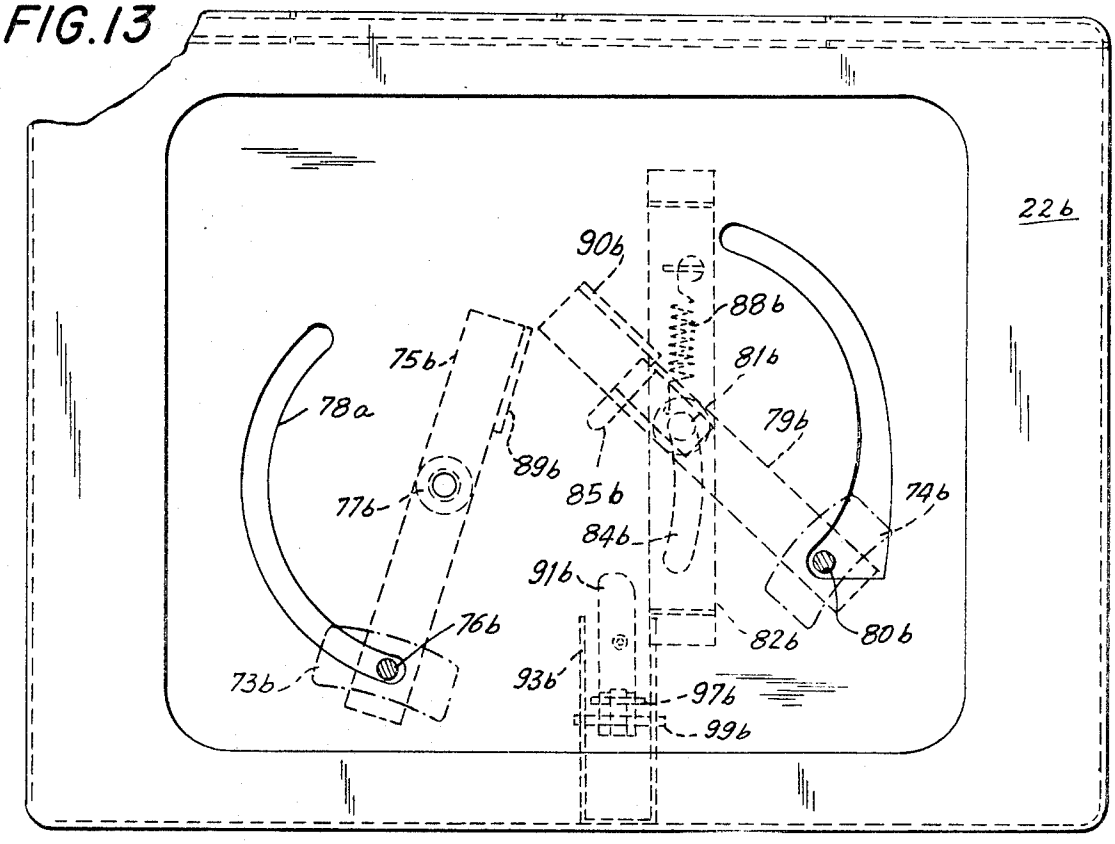
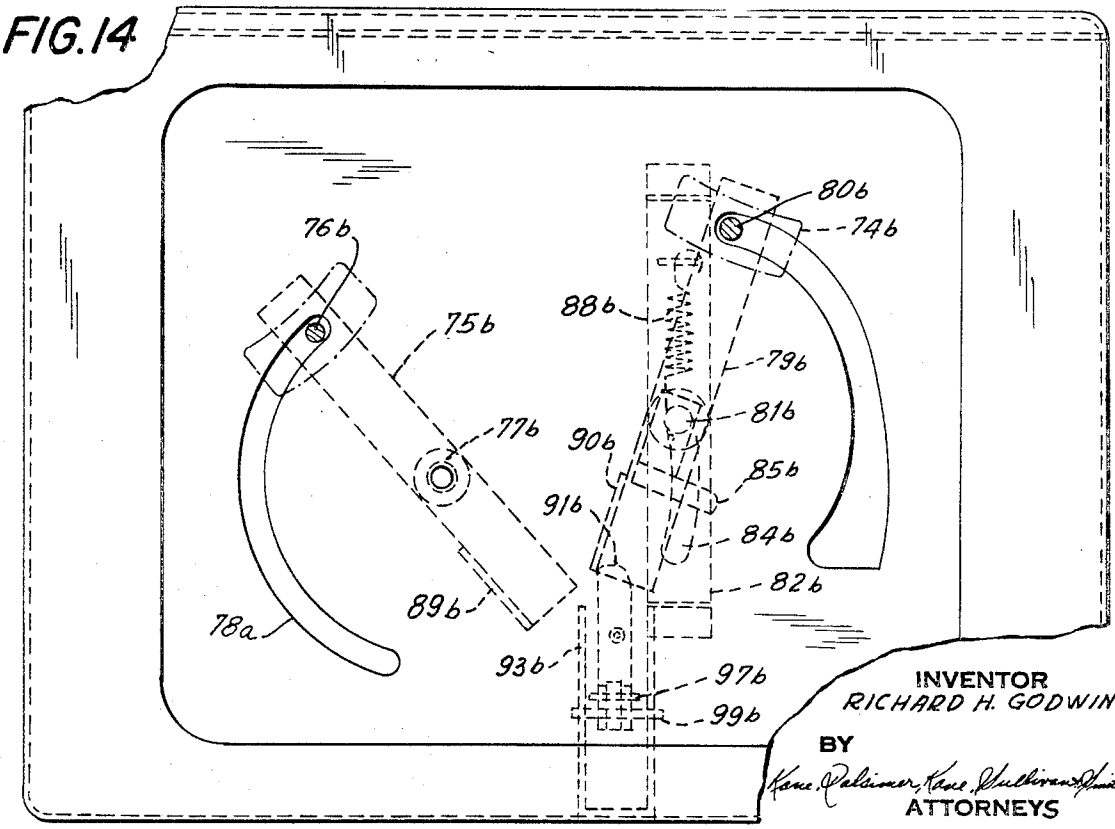


FIG. 14



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SAFETY LOCK FOR CONTAINER

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U.S. Cl. 292—175 16 Claims

ABSTRACT OF THE DISCLOSURE

A safety lock to be mounted in a container having an open side and normally having a closure positioned over the opening to form a closed container. The container is for housing potentially dangerous articles such as medicines, and has a locking means relatively easily opened by an adult but which is virtually impossible for a small child to open. The safety lock includes a catch means mounted in the container and release means mounted on the container with one portion extending within the container and another portion extending without the container. The portion within the container is associated with the catch means and the other portion has an enlarged grasping surface larger than the normal hand span of a small child and yet smaller than the span of a person other than a small child. An auxiliary catch release means is also mounted on the container which cooperates with the release means to release the catch. The catch means is released when the release means is activated in a predetermined manner and in cooperation with the auxiliary catch release means which also must be activated so the closure may then be removed allowing access to the interior of the container. However, if only the release means is operated and not the auxiliary catch release, the catch means will not be released.

BACKGROUND OF THE INVENTION

The frequency and seriousness of poisoning particularly in small children is well recognized among doctors, hospital authorities and public health agencies throughout the world. The cardinal requirement in poison prevention is to keep all potential poisons out of sight and out of the reach of small children, and the need for a safety device more effective than those presently available is apparent.

There are several types of existing devices which are occasionally employed to isolate these dangerous items.

For instance, there are existing devices or containers which require the use of a key to lock and unlock the container. However, these devices are totally dependent on the availability of the key which could become lost or easily misplaced. Furthermore, the key could be used by a child who discovers its location and is able to obtain possession of it. Certainly every parent is aware of the ingenuity of his child who, after observing a person using a key to open and close a container, could easily follow the example and gain access to the interior of the container and the dangerous items within.

The use of combination locks, another alternative, provides certain other problems. For instance, the opening of the lock requires dependence on memory or the availability of unlocking information. It would not be unreasonable to assume that a parent could store the combination information in a safe place, and then not be able to recall its location when needed. In addition, opening the combination lock requires some adeptness in manipulation of the lock. All of these factors could pose a serious hindrance in situations of haste or emergency when the articles contained within the box are quickly needed.

Other existing devices require a maze-type or other complicated manipulation of a mechanism to open the container. Some of these complicated maze-type devices could easily confuse a responsible individual in his attempt to open the container particularly if he is in an agitated state of mind and in a great hurry. Moreover, children have been known to demonstrate how to open a medicine container of this type to a parent who was himself unable to do so.

Naturally, it should be also kept in mind that any known type of unlocked container no matter where it is located within the house could be discovered and reached by a curious child with a normal amount of ingenuity.

From the above, it obvious that there is a great need in the art for an improved container which will permit easy access by the parent or adult but which will make access by a small child highly unlikely or virtually impossible.

SUMMARY OF THE INVENTION

Therefore, the primary objective of this invention is to provide a device which solves the several above-mentioned problems, first by incorporating the entire unlocking mechanism in a single unit thus eliminating the need for a key, by providing a more rapid and direct method of opening a locked container when the need is pressing as in an emergency, and by eliminating the danger existing when a container of medicines or poisonous household products is inadvertently left unlocked or improperly closed after use. Furthermore, the invention provides a safety lock which is quite simple and depends upon natural physical competence rather than on mental solution for the opening procedure. That is, a child may discover from observing a parent exactly how to open the box and still be unable to do so. Alternatively, the simple directions can be spelled out or graphically indicated on the container without in any way increasing the likelihood of its being opened by a small child. Finally, the safety lock may be used on portable boxes as well as on permanently installed medicine cabinets and, in addition, it may be used on cupboards under the kitchen and bathroom sinks where many toxic household products are normally stored.

The safety lock is mounted on a container which has an opening on one surface and a closure normally positioned over the opening to form a closed container. The container houses articles which are normally dangerous to small children. The safety lock includes catch means adapted to be mounted within the container and release means adapted to be movably mounted on the container. The release means has one portion extending within the container and another portion extending outside of the container. The portion within the container is associated with the catch means and the portion outside of the container has an enlarged grasping surface which has a diameter larger than the normal span of the hand of a small child, and smaller than the span of a person other than a small child. When a person other than a small child grasps and moves the grasping means with one hand in a predetermined manner, the portion within said container will engage and release the catch means thereby unlocking the container and permitting the closure to be removed to allow the operator to gain access to the interior of the container.

With the above-mentioned objects and others in mind, reference is had to the attached drawing of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a top plan view of a container having a safety lock embodying this invention;

FIG. 2 is a side elevation view thereof;

FIG. 3 is an end elevation view thereof with the closure of the container being in an open position;

FIG. 4 is a sectional elevation view of a container including a safety lock embodying this invention in the locked position taken along the plane of line 4—4 of FIG. 1;

FIG. 5 is a side elevation view thereof with the safety lock in the unlocked position;

FIG. 6 is a side elevation view of an alternate embodiment of a container having a safety lock embodying this invention in locked position taken along the plane of line 4—4 of FIG. 1;

FIG. 7 is a side elevation view thereof in the unlocked position taken along the plane of line 4—4 of FIG. 1;

FIG. 8 is a top view of another alternate embodiment of a container employing a safety lock of this invention shown in locked position with an arrow showing the direction of rotation of both pins to the unlocked position;

FIG. 9 is a fragmentary sectional view of the embodiment of FIG. 8 taken along the plane of line 9—9 of FIG. 8;

FIG. 10 is a top plan view of the embodiment of FIG. 8 and showing the safety lock in an unlocked position;

FIG. 11 is a fragmentary side elevation view thereof taken along the plane of line 11—11 of FIG. 10;

FIG. 12 is an exploded perspective view of the portion of a safety lock of the embodiment of FIG. 8 which is contained primarily within the container;

FIG. 13 is a top plan view of the embodiment of FIG. 8 showing the safety lock in a locked position and the position of the handles when they have been independently moved in one direction; and

FIG. 14 is a top plan view thereof with the two handles having been moved independently in the opposite direction.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

For illustrative purposes, the safety lock embodying this invention will be applied to a simple type of box or container **20** having a base portion **21** and a hinged closure portion **22**. FIGS. 1–3 illustrate this type of container. You will note in FIG. 1 that the upper surface of closure **22** will contain a recess portion **23** to contain the exterior portions **24** of the safety lock. This renders all portions of the safety lock flush with the surface of the container so that there are no projections. In accordance therewith you will also note recess **25** in the base of the container in which is positioned auxiliary catch **26** once again to guard against any projections beyond the general outer surface of container **20**. It can be easily seen how recessing of these exterior mechanisms can help to avoid accidental opening of the safety lock. Naturally, as discussed above, the lock in its various embodiments may be employed in many other types of containers for principally the similar purpose of protecting against dangerous articles coming into the hands of small children particularly in the home.

Turning to the mechanics of operating the safety lock itself, one embodiment is depicted in FIGS. 4 and 5 which may be obviously applied to the container depicted in FIGS. 1–3.

FIG. 4 depicts the safety lock in a locked position. The device consists primarily of a large grasping handle located entirely within the recess **23** of closure **22** of the container. Handle or knob **27** is of a configuration which lends itself to no sharp or pointed edges to cause possible damage to the hands of the user. Additionally, the minimum exposed diameter of knob **27** is larger than the diameter or span of a hand of a small child, with the knob diameter preferably being at least four inches. Knob **27** is mounted on rod **28** the upper end of which slidably fits within downward extension **29** of knob **27** and is fixed therein by any common means. It will be

further noted that rod **28** is journaled within ball **31** which is seated in a socket formed on the surface of container **20** by means of plates **32** and **33** which are bolted by bolts **34** to closure **22**.

Rod **28** is limited in its downward motion relative to ball **31** by the fact that the outer diameter of extension **29** is greater than the bore **30** in ball **31**.

At the lower end of rod **28** is mounted a horizontal bar **34** having one end thereof **35** which will engage with a portion of the catch mechanism to unlock the container. A spring **36** is positioned on rod **28** so that it acts on the lower surface of ball **31** and the upper surface of bar **34** thereby biasing knob **27** downwardly along with end **35** in the locked position.

The play of ball **31** in its socket formed by plates **32** and **33** allows a tipping motion of knob **27** should any one side of the knob be raised or depressed such as by the fingers of a small child. Should such an action take place, end **35** will not engage with any portion of the catch mechanism within the closure so that the locks would become unlocked. In order for end **35** to engage with and release with the catch mechanism, the knob must be grasped by a hand having a relatively large span so that it will be pulled upwardly along an axis substantially equivalent to the axis of rod **28**. Under those circumstances, end **35** will properly engage with upper stud **30'** of kicker bar **31'** in a manner which will bring lower stud **32'** of kicker bar **31'** into engagement with downwardly extending stud **37** of bar **38**. Kicker bar **31'** is part of the catch mechanism and is slideably and pivotally mounted on U-shaped bracket **33'** by means of pin **21** which slides in slots **35'** of kicker bar **31'**. U-bracket **33'** is mounted by any common means to the underside of closure **22** and pin **34'** is journaled in channels in the U-bracket. Bar **38** is also part of the catch means and is pivotally mounted on the interior surface of closure **22** by means of brackets **39** and pin **39'**.

When the proper engagement between end **35** and stud **37** for release takes place and the adjacent end of bar **38** is pivoted upwardly, the distal end **40** of bar **38** is consequently pivoted downwardly to engage one end of bar **41**.

Bar **41** is also pivotally mounted on the interior surface of closure **22** by means of brackets **42** and pin **43**. Distal end **44** of bar **41** is normally biased downwardly by means of spring **45** mounted at one end in opening **46** of bracket **42** and at the other end in opening **47** of bar **41**. When distal end **40** of bar **38** forces one end of bar **41** downwardly against the bias of spring **45**, the distal end **44** of bar **41** is displaced upwardly thereby freeing it from engagement with the upper end **48** of L bracket **49**. Once again, L bracket **49** is pivotally mounted to the interior surface of closure **22** by means of brackets **50** and pin **51**.

When upper end **48** is free of distal end **44** of bar **41**, spring **52** will tend to free the lower portion **53** of L bracket **49** from engagement with the upper portion **54** of inverted L bracket **55**. This mating of surfaces, that is, the upper surface of lower portion **53** of L bracket **49** and the lower surface of the upper portion **54** of inverted L bracket **55** forms the locking surface **57** which prevents closure **22** from being removed from base **21**.

However, spring **52** which is mounted at one end to bracket **50** and at the other to L bracket **49** can only remove lower portion **53** from upper portion **54** to a certain extent. This is due to block **58** mounted on the underside of brackets **50**. In this manner, the safety lock cannot be entirely unlocked by means of an upward motion of knob **27** alone since L bracket **55** is positioned, as shown in phantom in FIG. 5, such that part of upper portion **54** will still engage with part of lower portion **53** of L bracket **49**. An additional auxiliary catch release **59** is necessary to complete the unlocking of the container. This feature is an additional safeguard in that while one hand of the older person or adult is engaged with pulling

knob **27** upwardly, his other hand will have to be employed with releasing auxiliary safety catch **59** in order to completely open the closure. In this manner, it is virtually impossible to open container **20** by the use of two two hands on knob **27**.

Auxiliary safety catch **59** is comprised principally of a push button **60** mounted on one end of a rod **61** which is slideably mounted in suitable holes in bracket arrangement **62** so that when button **60** is pushed inwardly it will also push rod **61** inwardly and its distal end **63** which is mounted in the lower end of inverted L bracket **55** will horizontally move L bracket **55** sufficiently to allow clearance between upper portion **54** and lower portion **53** thereby freeing closure **22** to be opened. A spring **64** is mounted on rod **61** and serves to bias button **60** outwardly so that when the pressure thereon is released it will return to its normal position.

FIG. 5 depicts the position of the above described elements of this embodiment in their respective positions when container **20** is in an open position and closure **22** may be open to permit entrance to the interior of container **20**. Naturally, because of springs **36** and **64**, when the container is re-locked knob **27** must be pulled upwardly and button **60** must be depressed in order to permit clearance between portions **53** and **54** so that the box may be closed.

Turning to the embodiment of FIGS. 6 and 7, once again the type of container and positioning of the exterior portion of the safety lock may be the same as that of the embodiment discussed above. However, the operational mechanism is comprised of somewhat different elements.

Knob **27***a* is virtually identical with knob **27** of the previous embodiment and this substantially holds true with respect to rod **28***a*, ball **31***a*, plates **32***a* and **33***a*, and bolts **34***a*.

However, in this embodiment, the unlocking action is a downward pressure upon knob **27** and therefore spring **36***a* is located between ball **31***a* and knob **27***a* instead of below ball **31***a* as in the previous embodiment. This naturally tends to return knob **27***a* to its normal position after the pressure on knob **27***a* to unlock the container has been released. Once again, the downward pressure on knob **27***a* must be substantially concentrated about a central axis so that rod **28***a* slides through ball **31***a* and contacts the desirable portion of the locking means. Therefore, any pressure on any one corner or side or edge of knob **27***a* will serve to rotate ball **31** a certain amount and prevent the proper downward motion of rod **28***a* so that it contacts the locking means properly. As previously discussed, knob **27***a* is of sufficient size to minimize the possibility of a small child exerting the proper downward pressure with one hand. In both of these embodiments the downward pressure of one hand is primarily necessary since a box of the type shown would normally have to be held in position with the other hand of the operator in order to exert the proper amount of pressure on **27***a* to unlock the locking mechanism.

The portion of the catch means of this embodiment which primarily associates with rod **28***a* is of a different structure than that in the previous embodiment. An elongated horizontally extending rod **65***a* is mounted on the interior surface of closure **22** by means of brackets **66***a* and pin **67***a* in a conventional manner. Naturally this conventional manner of pivotally mounting a member between two brackets by means of a pin extending therebetween also applies to the previously mentioned similar situations in the previous embodiment. A spring **68***a* is mounted on brackets **66***a* and associated with bar **65***a* so as to tend to bias one end **69***a* of bar **65***a* upwardly and into engagement with the lower end **70***a* of bar **28***a*. The other end **71***a* of bar **65***a* engages with the upper end of **48***a* of L bracket **49***a* which is similar to L bracket **49** of the previous embodiment. It should be noted that both end **71***a* of this embodiment and end **44** of bar **41** of the previous embodiment have bevel surfaces **72** and **72***a* respectively on their undersides to facilitate disengagement and re-engagement with upper portions **48** and **48***a* of L brackets **49** and **49***a*. This can be most advantageously seen from the position of these parts in the locked and unlocked position as illustrated in this embodiment in FIGS. 6 and 7 respectively.

The remainder of the locking mechanism and this embodiment including the auxiliary catch means is substantially identical with that of the previous embodiment and the description of the operation of those parts is equally applicable here. The principal difference in operation between the embodiments is that in the first embodiment knob **27** must be pulled upward so that rod **28** is moved upwardly along an axis relatively perpendicular to the upper surface of the closure whereas in this embodiment knob **27***a* must be pushed downwardly so that rod **28***a* is moved downwardly along an axis substantially perpendicular to the upper surface of the container. Once again it should be kept in mind that FIGS. 4 and 6 show the safety lock in a locked position while FIGS. 5 and 7 depict the safety lock in an open position which will permit closure **22** to be opened.

A third embodiment is depicted in FIGS. 8–14 of the drawings. In this embodiment the portion of the release means extending upwardly and externally from closure **22***b* consist of two handles or knobs **73***b* and **74***b*. It should be noted that although **73***b* and **74***b* extend from the upper surface of closure **22***b*, they are recessed so that no portion thereof extends above the uppermost surface of closure **22***b*. **73***b* is mounted on a slat **75***b* by means of pin **76***b*. Slat **75***b* is pivotally mounted to the underside of closure **22***b* by means of pivot **77***b* which may be any common type of fastening means which will permit the rotation of slat **75***b*. An arcuate slot **78***a* in the surface of closure **22***b* restricts the rotational movement of slat **75***b*.

Knob **74***b* is similarly mounted on slat **79***b* by means of pin **80***b*. Slat **79***b* is mounted on pivot **81***b* which, in turn, is mounted on bracket **82***b* by means of pin **83***b*. Bracket **82***b* is mounted by any convenient means to the undersurface of closure **22***b*. There is an arcuate slot **84***b* in bracket **82***b* which allows pivot **81***b* a predetermined amount of sliding movement.

It should be noted that only knobs **73***b* and **74***b* are exposed with the remainder of the release mechanism being housed on the undersurface of the closure so that operation of the release means requires a grasping of both knobs.

A downwardly extending finger **85***b* having a horizontal extension **86***b* by which it is mounted to slideable pivot **81***b* by means of pin **83***b* extends into the container. An additional pin **87***b* may be inserted into extension **86***b* and pivot **81***b* in order to assist in preventing any rotational movement of finger **85***b* with respect to pivot **81***b*. A spring **88***b* mounted at one end to pin **83***b* and at its other end to a downwardly extending portion of bracket **82***b* biases pivot **81***b* to one extremity in slot **84***b*.

Slat **75***b* and **79***b* have downwardly extending panels **89***b* and **90***b* respectively which form engaging surfaces for the slats at same portion of their rotation about their respective pivots.

To unlock the safety lock, both knobs **73***b* and **74***b* must be grasped simultaneously when the safety lock is in the locked position as shown in FIG. 8 and rotated in a clockwise direction. Due to the engagement between panels **89***b* and **90***b* both slat **75***b* and **79***b* will now rotate about pivot **77***b* so that slideable pivot **81***b* is moved against the bias of spring **88***b* to the other extremity of slot **84***b*. Consequently, finger **85***b* will be moved in the same direction to the same degree where it will contact portions of the catch mechanism within the container and unlock the lock.

In particular, in the opened position as depicted in FIGS. 10 and 11, finger **85***b* has displaced one end of angle bar **91***b* against the bias of spring **92***b*. Angle bar **91***b* is pivotally mounted on bracket **93***b* by means of pin **94***b*. In turn bracket **93***b* is conveniently mounted to the interior surface of closure **22***b*. In accordance therewith, spring **92***b* is fastened at one end to bracket **93***b* and at its other end to angle bar **91***b* so that it tends to bias the end to which it is attached in a downward direction. The lower end **95***b* of angle bar **91***b* is connected to the upper end of a second angle bar **96***b*. This connection is accomplished by means of pin **97***b*. It should be noted that a slot **98***b* exists in the upper end of angle bar **96***b* to permit a predetermined amount of sliding play between the connected ends of angle bar **91***b* and angle bar **96***b*. Angle bar **96***b* is pivotally mounted to bracket **93***b* by means of pin **99***b*.

The lower portion **53***b* of **96***b* combines with the upper portion **54***b* of another angle bar **55***b* in order to form the locking surface of the container which is similar to that the previous embodiments. Once again, an auxiliary catch means **59***b* is employed in a similar matter as in the previous embodiments to achieve the complete disengagement between the locking portion of the container. Also, as in previous embodiments auxiliary catch means **59***b* is mounted to base **21***b* of container **20***b* and serves to support angle bar **55***b* which aids in forming the locking surface. As similarly discussed in the other embodiments when knob **73***b* and **74***b* are released and button **60***b* is released, spring **88***b* and spring **64***b* will return these mechanisms to their normal locked position. Therefore, when it is desirable to re-close and relock the container, the external release mechanisms need only be moved to their unlocked position, the closure closed and the external mechanisms released.

The distance between knob **74***b* and **73***b* is substantially equivalent to the diameter of knob **27** and **27***a* of the previously discussed embodiments. Therefore, having to grasp both knobs **73***b* and **74***b* and turn simultaneously with one hand is substantially the same as grasping knob **27** and **27***a* with one hand and either pulling and pushing the knob with respect to the container as the particular embodiment dictates.

As previously stated, the safety lock will not operate in this embodiment if either knob **73***b* or knob **74***b* is rotated independently. This is particularly demonstrated in FIGS. 13 and 14 which shows that the rotational action of slat **75***b* and **79***b* when either knob **73***b* or **74***b* is moved to either extremity. Slat **75***b* will rotate about pivot **77***b* while slat **79***b* will rotate about pivot **81***b* which will not slide within slot **84***b*. Therefore, finger **85***b* will then not be brought into contact with any portion of the catch means on the interior of the container. In order for the safety lock to be opened as previously discussed, both knobs **73***b* and **74***b* must be grasped simultaneously and rotated in a clockwise direction so that moveable pivot **81***b* is displaced within slot **84***b*.

It is also contemplated that this embodiment. among others, may be electrically operated in a common well known manner so that knobs similar to **73***b* and **74***b* in design and position would have to be both depressed in order to activate the release mechanism and release the catch inside the container. Similarly the auxiliary catch means could be electrically operated so that a depression of the button would completely release the locks electrically. Once again, any common electrical system would be adequate.

It should also be kept in mind that in all of the previously discussed embodiments, all of the release and catch mechanism is mounted to the closure portion of the container with the exception of only the auxiliary catch means and the lowest locking angle bar. This naturally provides the greatest storage area within the container base portion without having any major portion of the lock mechanism interfering therewith.

I claim:

1. A safety lock for a container having an opening on the surface thereof and a closure normally positioned over the opening to form a closed container for housing articles dangerous to small children comprising; catch means adapted to be mounted within said container, release means adapted to be moveably mounted on said container and having one portion thereof extending within said container and another portion thereof extending without said container, said one portion being associated with said catch means, said other portion having a grasping surface which has a diameter of at least approximately four inches, said one portion releasing said catch means when moved in a predetermined direction with respect to an axis by a person other than a small child grasping and moving said grasping means in said direction with only one hand thereby permitting said closure to be removed and allowing said person to gain access to the interior of said container, and an auxiliary catch release mounted on said container including means interior of said container to cooperate with said release means in releasing said catch means and means exterior of said container to be operated by said person substantially at the same time as said release means to release said catch means whereby if only one of said release means and said auxiliary catch release is operated, said catch means will not be released.

2. The invention in accordance with claim **1** wherein the release means includes a knob forming said grasping means mounted on one end of a rod, said rod adapted to be pivotally and slideably mounted on said container with the other end thereof extending into said container, a bar mounted on the other end of said rod at a point intermediate the ends of the bar, and said bar positioned adjacent to said catch means so that when said knob is grasped and pulled away from the surface of said container along a predetermined axis, the bar will engage a portion of said catch means and assist in releasing said catch means.

3. The invention in accordance with claim **2** wherein said rod is slideably mounted in a ball having a channel therethrough to receive said rod, and said ball adapted to be mounted in a socket on said closure thereby permitting the pivotally movement of said rod and knob.

4. The invention in accordance with claim **1** wherein the release means includes an enlarged knob forming said grasping means mounted on one end of a rod, said rod adapted to be pivotably and slideably mounted on the container with the other end thereof extending into said container, the other end of said rod positioned in respect to said catch means so that once said knob is grasped and pushed toward the surface of the container along a predetermined axis, the other end of the rod will engage a portion of said locking means and release the catch means to permit the container to be opened.

5. The invention in accordance with claim **4** wherein said rod is slideably mounted in a ball having a channel therethrough to receive said rod, and said ball is adapted to be mounted in a socket on the container thereby permitting the pivotal movement of said rod and knob.

6. The invention in accordance with claim **1** wherein the release means includes a first slat rotatably mounted on a fixed pivot on the container, a pin on said slat adjacent one end portion thereof adapted to be slideably channelled in an arcuate slot formed by surfaces of the container, a second slat rotatably mounted on a moveable pivot slideably mounted on a slot defined by surfaces on the container and positioned so that a first end portion thereof contacts the other end portion of said first slat at some point during the rotation of said slats, a second pin on said second slat adjacent to second end portion thereof adapted to be slideably channelled in an arcuate slot

formed by surfaces of the container, a finger extending from said moveable pivot, and pins cooperating to form said grasping means so that when the pins are rotated together the contacting portions of said slats will cause said slats to rotate about said fixed pivot and said moveable pivot and attached finger will be displaced so that said finger will engage a portion of said catch means and release the catch means to permit the container to be opened and when either of said pins is rotated independently the slat attached thereto will rotate independently about the pivot to which it is attached with said finger remaining in its normally locked position.

7. The invention in accordance with claim **6** wherein a spring is adapted to be mounted on said container and said releasing means tending to maintain said releasing means in a normally locked position so that when the grasping means is released the releasing means will return to the locked position.

8. A container for housing articles which are dangerous to small children comprising; a base portion having an open side, a closure normally positioned over said open side, a safety lock associated with said container to permit access to the interior thereof to a person other than a small child, said safety lock including catch means mounted within said container, said safety lock including release means moveably mounted on said container and having one portion thereof extending within said container and another portion thereof extending without said container, said one portion being associated with said catch means, said other portion having a grasping surface of a diameter of at least approximately four inches, said one portion releasing said catch means when moved in a predetermined direction with respect to an axis by a person other than a small child grasping and moving said grasping means in said direction with one hand only thereby permitting said container to be opened and permitting access to the interior of said container, and an auxiliary catch release mounted to said container including means interior of said container to cooperate with said release means in releasing said catch means and means exterior of said container to be operated by said person substantially at the same time as said release means to release said catch means whereby if only one of said release means and said auxiliary catch release is operated, said catch means will not be released.

9. The invention in accordance with claim **8** wherein a release means includes a knob forming said grasping means mounted on one of a rod, said rod adapted to be pivotably and slideably mounted on said container with the other end thereof extending into said container, a bar mounted on the other end of the rod at a point intermediate the ends of the bar, and said bar positioned adjacent to said catch means so that when said knob is grasped and pulled away from the surface of said container along a predetermined axis, the bar will engage a portion of said catch means and assist in releasing said catch means.

10. The invention in accordance with claim **9** wherein said rod is slideably mounted in a ball having a channel therethrough to receive said rod, and said ball adapted to be mounted in a socket on said container thereby permitting the pivotal movement of said rod and knob.

11. The invention in accordance with claim **8** wherein the releasing means includes a knob forming said grasping means mounted on one end of a rod, said rod adapted to be pivotably and slideably mounted on the container with the other end thereof extending into the container, the other end of said rod positioned in respect to said catch means so that when said knob is grasped and pushed toward the surface of the container along a predetermined axis, the other end of the rod will engage a portion of said catch means and release the catch means to permit the container to be opened.

12. The invention in accordance with claim **11** wherein said rod is slideably mounted in a ball having a channel therethrough to receive said rod, and said ball is adapted to be mounted in a socket on the container thereby permitting the pivotal movement of said rod and knob.

13. The invention in accordance with claim **8** wherein the releasing means includes a first slat rotatably mounted on a fixed pivot on the container, a pin on said slat adjacent one end portion thereof adapted to the slideably channelled in an arcuate slot formed by surfaces of the container, a second slat rotatably mounted on a moveable pivot slideably mounted in an arcuate slot defined by surfaces on the container and positioned so that a first end portion thereof contacts the other end portion of said first slat at some point during the rotation of said slats, a second pin on said second slat adjacent the second end portion thereof adapted to be slideably channelled in an arcuate slot formed by surfaces of the container, a finger extending from said moveable pivot, said pins cooperating to form said grasping means so that when the pins are rotated together the contacting portion of said slats will cause said slats to rotate about said fixed pivot and said moveable pivot and extending finger will be displaced so that said finger will engage a portion of said catch means and release the catch means to permit the container to be opened and when either of said pins is rotated independently the slot attached thereto will rotate independently about the pivot to which it is attached with said finger remaining in its normally locked position.

14. The invention in accordance with claim **13** wherein a spring is mounted on said container and said releasing means tending to maintain said releasing means in a normally locked position so that when the grasping means is released the releasing means will return to the locked position.

15. A safety lock for a container having an opening on the surface thereof and a closure normally positioned over the opening to form a closed container comprising; catch means including two angle brackets movable becatch means includnig two angle brackets movable between a locked position where portions thereof form interengaging locking surfaces and an unlocked position where said surfaces are disengaged to permit disengagement therebetween, release means adapted to be movably mounted on said container and having one portion thereof extending within said container and the other portion thereof extending outside of said container, said other portion having a grasping surface which has a diameter of at least approximately four inches, said catch means including linkage means connecting said angle brackets with said one portion of said release means so that when said other portion is grasped and moved in a predetermined manner said linkage will move said angle brackets from the locked position to the unlocked position, and an auxiliary catch release mounted on said container including means interior of said container to cooperate with said release means in releasing said catch means and means exterior of said container to be operated by said person substantially at the same time as said release means to release said catch means whereby only one of said release means and said auxiliary catch release is operated, said catch means will not be released.

16. A container for housing articles which are dangerous to small children comprising; a base portion having an open side, a closure normally positioned over said open side, a safety lock associated with said container to permit access to the interior thereof to a person other than a small child, said safety lock including catch means mounted within said container, said catch means including two angle brackets movable between a locked position where portions thereof form interengaging locking surfaces and an unlocked position where said surfaces are disengaged to permit disengagement therebetween, release means adapted to be movably mounted on said container and having one portion thereof extending within said container and the other portion thereof extending outside of said container, said other portion having a grasping surface which has a diameter of at least

approximately four inches, said catch means including linkage means connecting said angle brackets with said one portion of said release means so that when said other portion is grasped and moved in a predetermined manner, said linkage will move said angle bracket from the locked position to the unlocked position permitting said container to be opened, and an auxiliary catch release mounted on said container including means interior of said container to cooperate with said release means in releasing said catch means and means exterior of said container to be operated by said person substantially at the same time at said release means to release said catch means whereby if only one of said release means and said auxiliary catch release is operated, said catch means will not be released.

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