March 7, 1967 M. E. LENTZ 3,307,755

FIREARM SAFETY BOX

Filed Oct. 22, 1965 3 Sheets-Sheet 1

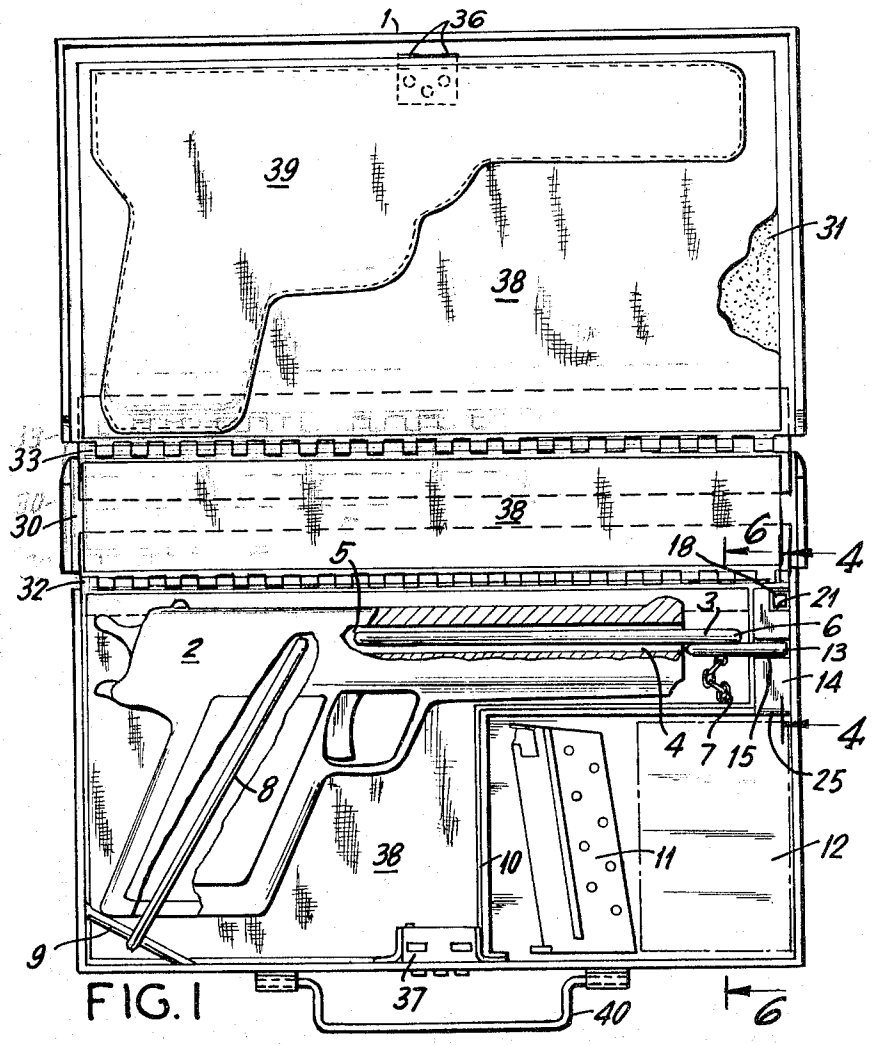


FIG. 1

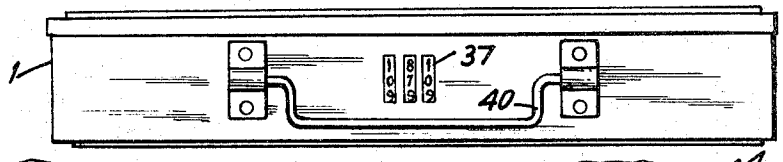


FIG. 2

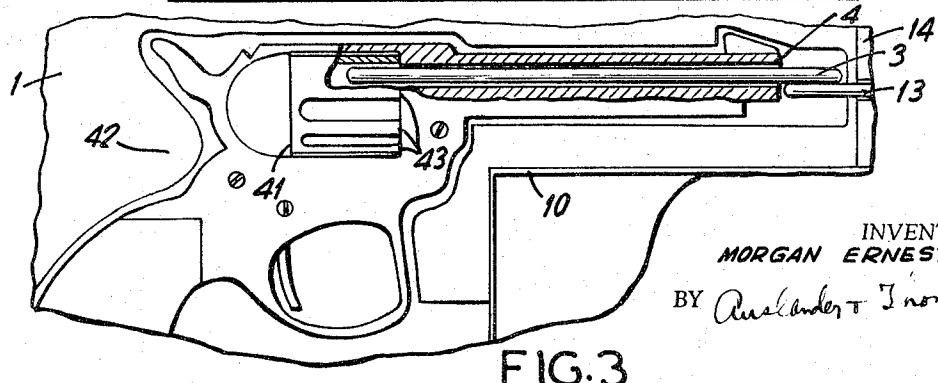


FIG. 3

INVENTOR.
MORGAN ERNEST LENTZ
BY Alexander & Thomas
ATTORNEYS.

March 7, 1967 M. E. LENTZ 3,307,755

FIREARM SAFETY BOX

Filed Oct. 22, 1965 3 Sheets-Sheet 2

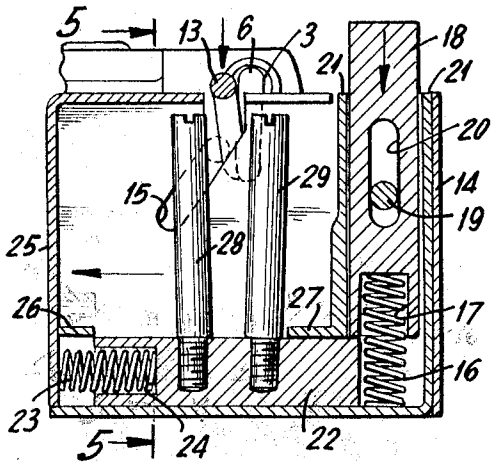


FIG. 4

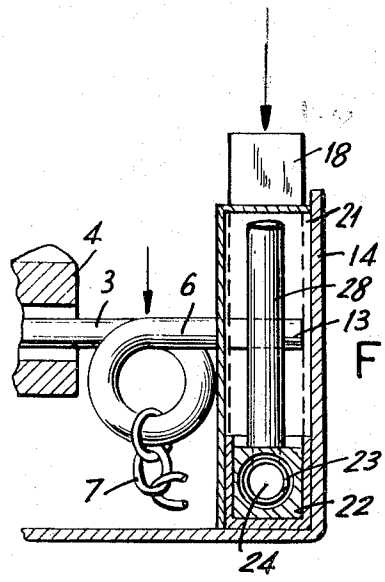


FIG. 5

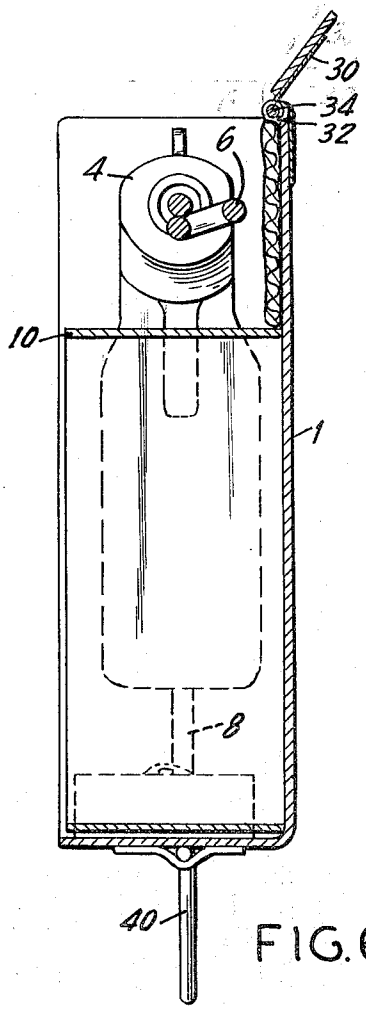


FIG. 6

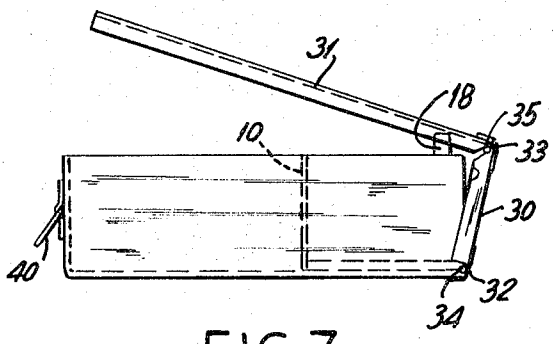


FIG 7

INVENTOR.
MORGAN ERNEST LENTZ
BY Auslander & Thomas

ATTORNEYS.

March 7, 1967 M. E. LENTZ 3,307,755

FIREARM SAFETY BOX

Filed Oct. 22, 1965 3 Sheets-Sheet 3

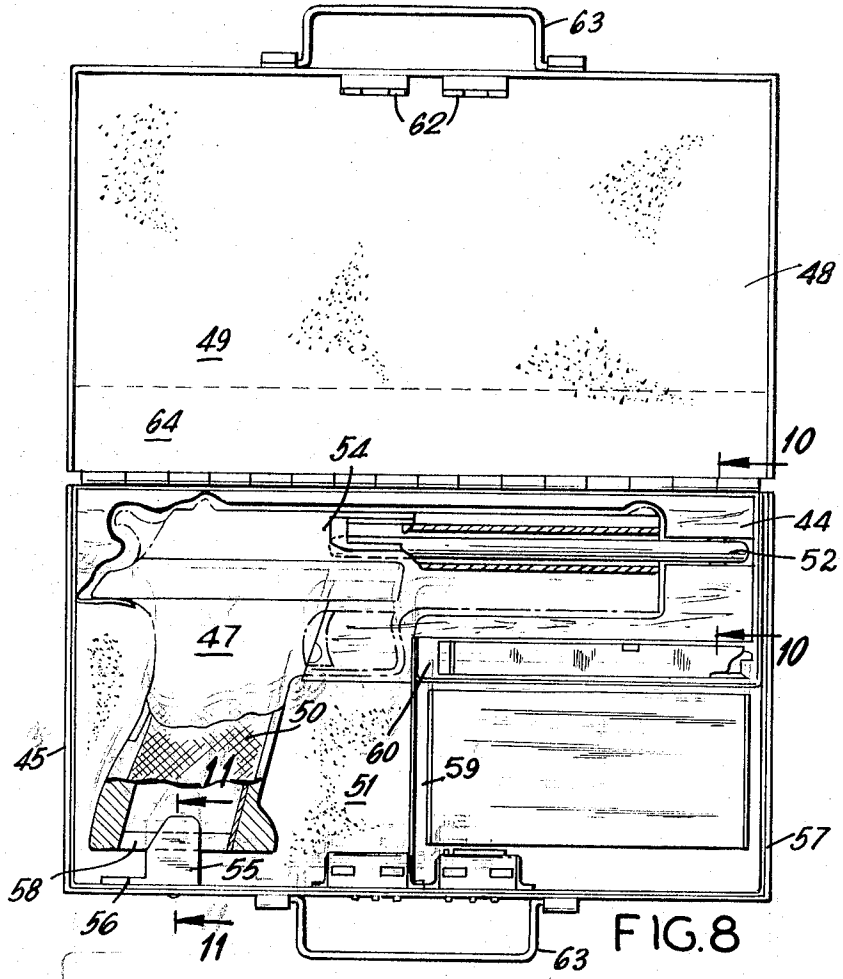


FIG.8

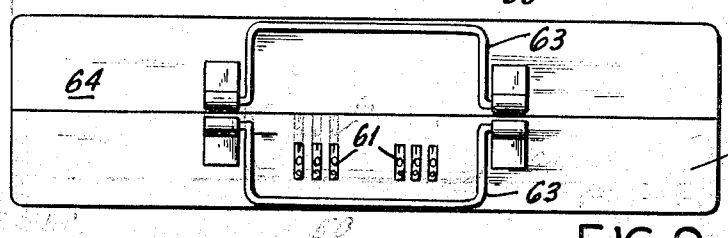


FIG.9

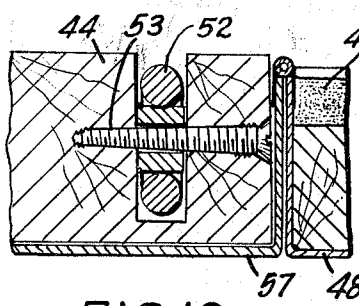


FIG.10

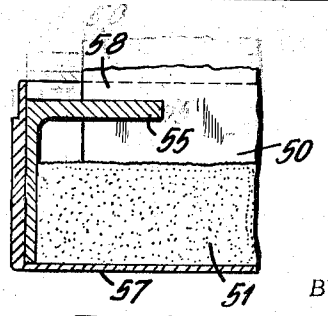


FIG.11

INVENTOR.
MORGAN ERNEST LENTZ

BY Quarles & Thomas

ATTORNEYS.

United States Patent Office 3,307,755 Patented Mar. 7, 1967

3,307,755

FIREARM SAFETY BOX

Morgan E. Lentz, 60 Addison Ave., Rutherford, N.J. 07070

Filed Oct. 22, 1965, Ser. No. 501,447
4 Claims. (Cl. 224—2)

In the past newspaper accounts and word of mouth have recounted the numerous accidents and tragedies associated with the accidental discharge of firearms.

A gun owner naturally must have a safe storage means to protect a gun against accidental discharge or misuse. While the present invention is of great aid in protecting any firearm, it is particularly effective in the protection of the firearm used for target purposes.

While the safety box of the present invention is fail safe if properly used in conjunction with an automatic pistol, it is nonetheless an advance of prior devices in providing safety with regard to revolvers also. Besides providing safety, the integrity of the use of a box or covering device also has the advantage of not exposing unnecessarily the fact that the device of the present invention encloses a weapon. While locking means have been provided in the past, the inclusion of a combination lock provides a further degree of safety integrity against the unauthorized use of a key by another.

In the past the mere enclosure of a firearm in a closure or lockable enclosure has not been protection against unauthorized or accidental use. In particular, such protection of the past has not protected against the accidental discharge of a loaded weapon, either from within the enclosure or after removal, authorized or unauthorized, from the enclosure.

Complicated devices of the past have provided some form of lock on the trigger guard (that is, aside from the normal gun safety mechanism) inhibiting the pulling of a trigger, thus discharging a loaded firearm. Some devices have, especially in the case of revolvers, provided rods locked in the barrels of guns inhibiting rotation of the cylinder against the firing of a loaded chamber in position to be fired.

According to the present invention, a firearm safety box is provided with a safety rod in connection with an effective box assuring that a firearm has no bullet in its chamber while properly in such box.

In the case of an automatic firearm there is the further assurance that there is no bullet in the gun at all. The safety box may not be locked unless the chamber is empty and the box itself can only accommodate and lock the firearm for which it is intended.

This latter feature is important in the protection of target pistols which, when closed in the box of the present invention and locked with a combination lock, assures the owner that he has his own gun and that it cannot be discharged, nor easily removed from its box by an unauthorized person.

Although such novel feature or features believed to be characteristic of the invention are pointed out in the claims, the invention and the manner in which it may be carried out may be further understood by reference to the description following and the accompanying drawings.

FIG. 1 is a plan view of an embodiment of the present invention, showing a partially cut-away firearm.

FIG. 2 is a front elevation of FIG. 1.

FIG. 3 is a partial plan view of another embodiment of the present invention adapted for use with a revolver.

FIG. 4 is a view of FIG. 1 at lines 4—4.

FIG. 5 is a view of FIG. 4 at lines 5—5.

FIG. 6 is a view of FIG. 1 at lines 6—6.

FIG. 7 is a side elevation of FIG. 1 without a firearm inside.

FIG. 8 is a plan view of another embodiment of the present invention, showing a partially cut-away firearm.

FIG. 9 is a front elevation of FIG. 8.

FIG. 10 is a view of FIG. 8 at lines 10—10.

FIG. 11 is a view of FIG. 8 at lines 11—11.

Referring now to the figures in greater detail, where like reference numbers denote like parts in the various figures.

In FIG. 1 the firearm safety box 1 is shown in open position with an automatic pistol 2 in safety position. The safety rod 3 is inserted into the barrel 4. The safety rod 3 end is preferably of a length to extend the entire length of the barrel and the bullet chamber 5. The safety rod 3 does not in FIG. 1 extend such full length, but it may be advisable to have such length for absolute security. The loop 6 in the safety rod 3 is a convenience adapted to receive the chain 7 which is connected to the firearm safety box 1 so that the safety rod 3 may not get separated from the firearm safety box 1.

A clip safety rod 8 is rotatably mounted on a mounting bar 9 which is integrally mounted in the firearm safety box 1.

The positioning of the mounting bar 9 is particularly gauged so that only the particular model automatic pistol 2 may fit into the firearm safety box 1. The thickness of the inside dimension of the firearm safety box 1 is such that the automatic pistol 2 will fit snugly inside the firearm safety box 1 and the firearm safety box 1 could not otherwise close with another firearm placed in the firearm safety box 1 even if the safety rod 3 and clip safety rod 8 were properly engageable.

A bracket 10 forms a further guide for the outside of the barrel 4 providing secure engagement of the automatic pistol 2 in the firearm safety box 1.

The area described by the bracket 10 may serve as a convenient receptacle for the holding of the automatic pistol 2, clip 11 and an ammunition box 12 or other accessories. The snugness of fit keeps the automatic pistol 2 from jiggling once the firearm safety box 1 is closed as shown in FIG. 2.

The front portion 13 of the safety rod 3 is adapted to actuate lock open mechanism 14 as shown in FIGS. 1, 4, 5 and 7.

When the safety rod 3 is not engaged snugly in the angulated slot 15 a spring 16 engaged in a cavity 17 extends a detent 18, whose upward and downward movement is limited by a pin 19 in a channel 20. The detent 18 is normally unremoveable and guided by walls 21.

In its extended position the detent 18 is under engaged by a detent 22 which is actuated by a spring 23 engaged in a cavity 24 in the detent 22 and compressed against the outer wall 25 of the lock open mechanism 14. The detent 22 is guided by guides 26, 27 so that it neatly slides under the detent 18 in normal open position.

Integral to the detent 22 are pins 28, 29 which are substantially vertically set.

When an automatic pistol 2 is properly engaged with a safety rod 3, the safety rod 3 slides along the slot 15 against the pin 28, moving it backward against the pressure of its spring 23, drawing the detent 22 from under the detent 18, allowing movement of the detent 18 within the range allowed by its channel 20.

While the spring 23 normally acts to reactivate the locking between the detents 18, 22, failure of the spring may be overcome normally to lock the detents 18, 22 as the safety rod 3 is removed by pushing the detent 22 into locked position with pressure against pin 29. When an automatic pistol 2 is not safely engaged in the firearm safety box 1, the firearm safety box 1 cannot close as shown in FIG. 7.

For convenience, the firearm safety box 1 may have a back portion 30 and a top 31 joined by hinges 32, 33

whose pins **34**, **35** are only accessible from the inside when the firearm safety box **1** is closed as a safety precaution against unauthorized entry.

Once the automatic pistol **2** is safely engaged in the firearm safety box **1**, the top **31** may be closed and locked with the teeth **36** engaged in the combination lock **37**. The combination lock **37** is preferable to personalize the protection of the firearm safety box **1** and have only the owner or authorized person have the combination available to him and prevent against key loss and unauthorized use.

As a matter of convenience, the firearm safety box **1** is generally covered with a protective lining **38**. For target use the firearm safety box **1** may lie flat with both hinges **32**, **33** covering the back **30** and top **31**. A patch **39** serves as a marker for placing the automatic pistol **2** when not in use at a range or other target shooting.

In use, the automatic pistol **2** is engaged with the safety rod **3** and clip safety rod **8**. In this position, it is both impossible for a bullet to be in the chamber **5** and for a clip **11** to be in the automatic pistol **2** with or without bullets in it. One prior danger was that although the chamber **5** might be empty, the clip **11** in the automatic pistol **2** might still have live bullets in it, rendering dangerous a gun removed from the firearm safety box **1**. Once put away, the user of automatic pistol **2** can feel secure that there can be no accidental discharge of a weapon removed from the firearm safety box **1** until it has been consciously loaded.

Where a bullet is in the chamber **5**, the safety rod **3** cannot be engaged in the lock open mechanism **14** and the detent **18** must remain in extended position. Where the automatic pistol **2** is fully safe, the gentle pressure of closing the top **31** depresses the detent **18**, allowing the firearm safety box **1** to be locked and carried as desired, or by its handle **40**.

In FIG. 3 a revolver **41** is provided with a conforming shaped inner portion **42**. The firearm safety box **1** works the same way except the protection of the clip safety rod **8** is not provideable.

Security is provided in this instance such that the revolver **41** cannot be discharged and the cylinder may not be rotated, but no assurance may be had that all of the chambers **43** are unloaded.

In FIGS. 9, 10 and 11, a further embodiment of the present invention is shown. In this instance, a molded or conformed template **44** is provided in the firearm safety box **45** to conform to the exact contours of the barrel portion **46** of the particular model automatic pistol **47**. The top portion **48** of the firearm safety box **45** is provided with a flexible material **49** such as sponge rubber to securely hold the automatic pistol **47** in the template **44** and to protect the automatic pistol **47** against damage.

Since the stocks **50** of even similar models of automatic pistol **47** may vary, a flexible portion **51** is provided which can adapt to a selection of stocks **50**.

The safety rod **52** is rotatably engaged on a pivot **53** engaged through the template **44** as shown in FIG. 10 and is of a length to fit into the chamber **54** of the automatic pistol **47**. A clip safety finger **55** protrudes from the wall **56** of the bottom portion **57** of the firearm safety box **45** into the clip opening **58** of the automatic pistol **47**.

A utility area **59** and a clip rack **60** are provided in the bottom portion **57** for convenience.

It has been found useful to provide two locks **61** since

for the simple combination lock as used in the prior embodiment, a diligent test of 1,000 combinations might open the box, whereas with locks **61**, they combine to require 100,000 combinations so as to make the locks **61** in effect tamper proof. The teeth **62** engage the locks **61**. The firearm safety box **45** may be provided with a plurality of handles **63** for the convenience of opening, closing and carrying.

In placing the automatic pistol **47** in the firearm safety box **45**, the shape of the template **44** and the safety block **64** in the top **48** underneath the flexible material **49** prevent the wrong gun being placed in the firearm safety box **45** since a smaller one would not match the template **44**, the diameter of the safety rod **52** or match the combination of the elements of the clip safety finger **55** so that the firearm safety box **45** could close.

While it is not necessary to have a mirror image template, the safety block **64** further provides a width limitation preventing the firearm safety box **45** from closing with the wrong automatic pistol **47**.

The proper automatic pistol **47** may be easily rotated on the safety rod **52** and when the clip opening **58** is free of a clip, the automatic pistol **47** fits neatly and safely in place and the firearm safety box **45** may be easily closed and locked with full assurance of no bullets in a loaded clip and no bullets in the chamber **54**.

The terms and expressions which are employed are used as terms of description; it is recognized, though, that various modifications are possible within the scope of the invention claimed.

Having thus described certain forms of the invention in some detail, what is claimed is:

1. A firearm safety box comprising a box structure, a template, said template adapted to receive the upper part of a selected firearm, a safety rod, said safety rod rotatably attached to said template, said safety rod adapted to fit into the barrel of said selected firearm and said firearm having an opening adapted to receive a bullet clip, said safety rod adapted to extend into the chamber of said firearm, a safety finger adapted to fit into the bullet clip opening of said firearm, and said box being in closeable condition when said safety rod is engaged extending into the chamber of said firearm and said safety finger is interposed in said bullet clip opening.

2. The invention of claim **1** wherein said box includes a closure lock.

3. The invention of claim **2** wherein said lock is a combination lock.

4. The invention of claim **2** wherein the top of said box includes a block adapted to limit the thickness of the barrel of said gun fitting in said box to a selected thickness.

References Cited by the Examiner

UNITED STATES PATENTS

2,327,334	8/1943	Parker	42—1
2,887,807	5/1959	Santangelo	42—1
3,031,069	4/1962	Hirsch	206—16
2,803,909	8/1957	Soski et al.	224—2 X

FOREIGN PATENTS

97,329	6/1898	Germany.

GERALD M. FORLENZA, *Primary Examiner*,

F. WERNER, *Assistant Examiner*.