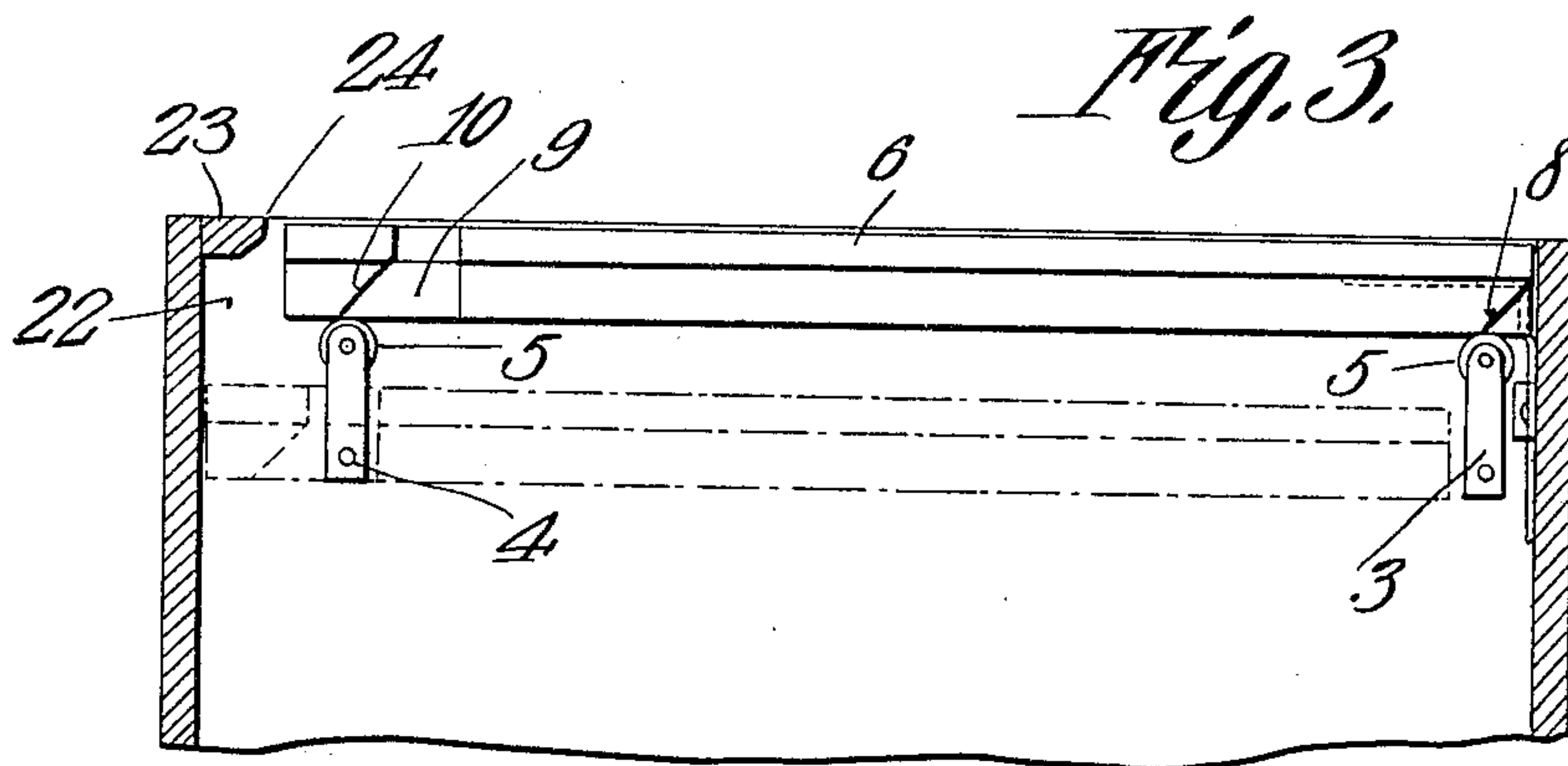
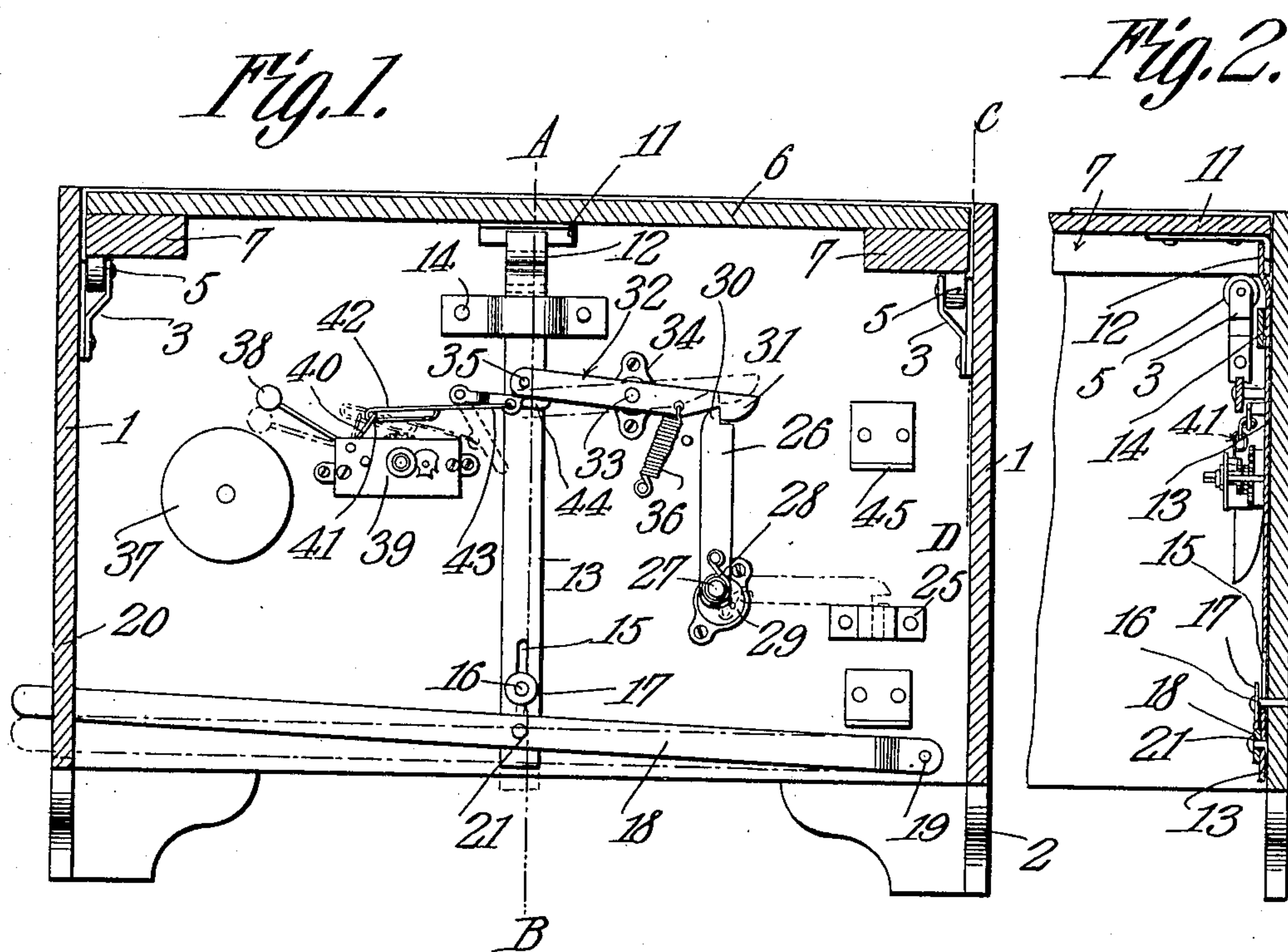


E. DE MOULIN.
TRICK PLATFORM.
APPLICATION FILED DEC. 10, 1908.

925,877.

Patented June 22, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

ERASTUS DE MOULIN, OF GREENVILLE, ILLINOIS.

TRICK-PLATFORM.

No. 925,877.

Specification of Letters Patent.

Patented June 22, 1909.

Application filed December 10, 1908. Serial No. 466,853.

To all whom it may concern:

Be it known that I, ERASTUS DE MOULIN, a citizen of the United States, residing at Greenville, in the county of Bond and State of Illinois, have invented a new and useful Trick-Platform, of which the following is a specification.

This invention relates to initiation devices and more particularly to collapsible platforms of that type designed to be released whenever desired, to drop a person standing thereon.

The object of the invention is to provide a platform the top or floor of which is rigidly held while the parts are set so that no impression of insecurity will be produced thereby while a person is standing thereon.

A further object is to provide simple and efficient means for unlocking the top of the platform and for causing it to fall straight downward within the casing of the device without danger of any parts of the mechanism catching and interfering with this movement of the top.

A further object is to provide mechanism actuated by the release of the platform for simultaneously exploding a detonator and for sounding a bell or the like.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a vertical transverse section through the platform and showing, in elevation, the locking, detonator-exploding, and bell-ringing mechanisms. Fig. 2 is a section on line A—B Fig. 1. Fig. 3 is a section on line C—D Fig. 1.

Referring to the figures by characters of reference, 1 designates a box-like casing of any desired external appearance, said casing being open both at the top and bottom, and, if desired, being mounted on suitable legs or corner supports 2.

Secured to the side of the casing near the ends of the inner faces thereof are brackets 3 and 4 and in each of which is journaled a supporting roller 5.

The top 6 of the casing and which constitutes the floor of the platform is provided upon its lower surface with side cleats 7, each of which has one end beveled as indi-

cated at 8, while a transversely extending recess 9 is formed in the outer side of each cleat near its other end, said recess also extending upwardly through the side of the top 6. One wall of the recess 9 is beveled as indicated at 10, said beveled portion being parallel with the beveled end 8. The two beveled portions 8 and 10 rest upon the rollers 5 as clearly indicated in Fig. 3, and in order that the top 6 may be held against movement upon the rollers, locking mechanism of novel form is provided. A keeper 11 preferably in the form of an L-shaped strap, is secured to the lower surface of the top 6 at the center of that end thereof adjoining the beveled portions 8 and the depending portion of this keeper is designed to be lapped and retained by the upper offset end 12 of a locking bolt 1. This bolt is mounted to slide within a guide 14, secured to one end wall of the casing 1, and the lower portion of the bolt is slotted longitudinally as indicated at 15 to receive a guide pin 16 having a head 17 thereon. A tripping lever 18 is pivotally mounted at one end as indicated at 19 within the casing 1 and upon the end wall thereof, the other end of this lever projecting through a slot 20 in one side of casing 1 and said lever being connected at an intermediate point with the lower portion of bolt 13, said connection being preferably formed of a pivot pin 21 extending through the lever 18 and loosely engaging the bolt 13. Obviously when the keeper 11 is engaged by the upper end of the bolt 12 it becomes impossible for the top 6 to move away from the bolt and therefore the lower ends of the beveled faces 8 and 10 are held against movement upon the rollers 5. The top 6 is slightly shorter than the platform casing 1, so that a space 22 is formed between said top and that end of the casing farthest removed from the bolt 13. The upper portion of this space is preferably partly closed by means of a cleat 23, the lower free edge of which is preferably cut off or beveled as indicated at 24, said bevel being parallel with the beveled faces 8 and 10.

Secured to the end wall of casing 1 to which the bolt 13 is connected is a block 25 for holding a detonator, said block being disposed in the path of the end of a striker 26 consisting of a metal strip pivotally mounted on a stud 27, there being a spring 28 coiled about the stud and secured

at one end to the striker while its other end is fastened to a base-plate 29 from which the stud extends and which is fastened in any suitable manner to the end wall of casing 1. The free end of the striker has a projection 30 extending therefrom and designed to be engaged by the head 31 of a locking lever 32. This lever is fulcrumed between its ends upon a stud 33 extending from a base-plate 34 and that end of the lever farthest removed from head 31 is pivotally connected as at 35 to the bolt 13. A spring 36 is connected at one end to the lever 32 adjacent the head 31 and the other end of this spring is attached to the wall of casing 1. This spring exerts a constant downward pull on the head end of lever 32 so as to hold said head either in engagement with the striker 26 or in the path thereof. It will be seen therefore that the spring also operates to hold the bolt 13 and the tripping lever 18 normally elevated.

A bell 37 may be secured to the end wall of casing 1 and the clapper 38 thereof is designed to be actuated by an ordinary spring motor 39. An arm 40 moves with the clapper and has a laterally extended end portion 41 constituting an eye designed to slidably engage an elongated loop 42 formed by a rod 43. This rod is pivotally connected to a strip 44 which is pivotally mounted upon the end wall of the casing, and which projects under and in the path of the pivot pin 35 heretofore referred to. The strip 44 is held in this position by frictional engagement with its pivot and when it is thus arranged the rod 43 is so located that the arm 40 bears against one end of the loop 42 and the clapper 38 as well as the motor 39 are thus held against movement.

When it is desired to use this device a detonator is placed within the holder 25 and the striker 26 is swung upward into engagement with the head 31. The strip 44 is moved into the position shown in Fig. 1 so as to prevent the motor 39 from operating. The top 6 is then placed in the upper end of casing 1 so as to rest on rollers 5, and it is held in this position by the keeper 11 engaging the off-set portion 12 of the bolt 13.

After a person has been placed upon the platform the operator presses downwardly on the projecting end of the tripping lever 18. This causes the bolt 13 to slide downwardly and as soon as the off-set portion 12 becomes disengaged from the keeper 11 the top 6, under the weight of a person, will shift longitudinally and downwardly on the rollers 5, this operation being caused by the beveled faces 8 and 10 bearing on the rollers 5. The top 6 will escape past the rollers and be shifted thereby away from the mechanism shown in Fig. 1 and which is located upon one end wall of the casing. Said platform will drop to the bottom of the casing,

and the person will of course fall therewith. While this operation is taking place the bolt 13 shifts the lever 32 so as to release the striker 26, and the spring 28 of the striker which is placed under stress when said striker is set, will shift the striker downwardly and into contact with the detonator, thus exploding it. At the same time the pivot pin 35 will press downward on the strip 44 and cause the rod 43 to shift longitudinally. The arm 40 will thus be released from frictional engagement with the end portion of the loop 42 and both the arm and the clapper 38 will be free to oscillate, because the motor 39 will thus be released. The operation of dropping the person, discharging the detonator and ringing the bell, will, obviously, produce a startling effect. It will be noted that in this construction there is absolutely nothing to become caught and interfere with the dropping of the top 6. As soon as the bolt has been disengaged from the keeper 11 the platform is shifted longitudinally and downwardly past the rollers and into the clear space there-below. If desired, and as shown in Fig. 1, shields 45 may be secured to the end wall of the casing 1 at points above and below the holder 25, so that the flame produced by the exploding detonator will not flare upwardly or downwardly into contact with the top 6 and the floor respectively.

What is claimed is:—

1. The combination with a casing and anti-friction supporting devices therein; of a top having beveled portions normally bearing upon said devices, means for locking the top against movement relative to said devices, and means for unlocking the top.
2. The combination with a casing and oppositely disposed supporting devices therein; of a top having beveled faces bearing upon said devices, means for holding the top against movement relative to said devices, and means for releasing the top.
3. The combination with a casing and oppositely disposed supporting devices therein; of a top having beveled faces bearing upon said devices, means for holding the top against movement relative to said devices, and means for releasing the top, said top having recesses for the reception of the supporting devices during the downward movement of the released top.
4. The combination with a casing having supporting rollers therein; of a top having inclined bearing faces mounted on the rollers, there being recesses in the top to permit the passage of the rollers, means for locking the top against movement upon the rollers, and mechanism for actuating said means to release the top.
5. The combination with supporting rollers; of a member having inclined bearing

faces mounted on the rollers, there being recesses in the sides of the said member to permit the passage of the said rollers during the movement of the member in one direction, means for locking the said member against movement upon the rollers, and mechanism for actuating said means to release the member.

6. The combination with supporting rollers; of a member having inclined bearing faces mounted on the roller, said member having recesses to permit movement past the rollers in a downward direction, means for holding said member against movement upon the rollers, a detonator-holder, detonator-discharging means, and mechanism for simultaneously releasing said discharging means and the roller-supported member.

7. The combination with supporting rollers; of a member having inclined faces bearing upon the rollers, said member being provided with recesses to permit its passage downwardly past the rollers, means for holding said member against movement upon the rollers, a detonator-holder, a spring-controlled striker cooperating therewith, means connected to and shiftable with the member-holding means for holding the striker in a predetermined position, and means for simultaneously releasing said member and striker.

8. The combination with supporting rollers; of a member having inclined bearing surfaces mounted on the rollers, said member having recesses in the sides thereof to permit downward passage of the member between the rollers, a slidable locking bolt for holding the member against movement, a detonator-holder, a spring-controlled striker cooperating therewith, a locking lever piv-

otally connected to the bolt and engaging the striker to hold it set, and a tripping device for shifting the bolt to simultaneously release the member and striker.

9. The combination with supporting rollers; of a top having inclined bearing faces mounted on the rollers, said top being provided with recesses to permit downward movement of the top past the rollers, a sliding bolt for holding the top against movement upon the rollers, means for actuating the bolt to release the top, a detonator-holder, a spring-actuating striker cooperating therewith, a locking lever for engaging the strike and holding it set, said lever being pivotally connected to the bolt.

10. The combination with supporting rollers; of a top having inclined bearing faces mounted on the rollers, said top being provided with recesses to permit downward movement of the top past the rollers, a sliding bolt for holding the top against movement upon the rollers, means for actuating the bolt to release the top, a detonator-holder, a spring-actuated striker cooperating therewith, a locking lever for engaging the striker and holding it set, said lever being pivotally connected to the bolt, a motor-operated sounding device, means for locking the motor against movement, and means operated by the movement of the bolt when releasing the top, for releasing the motor.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ERASTUS DE MOULIN.

Witnesses:

PHIL J. DIEHL, Jr.,
EMIE STREIFF.