Oct. 30, 1962 M. I. GLASS ET AL 3,060,625

TOY

Filed July 24, 1959

Fig. 1

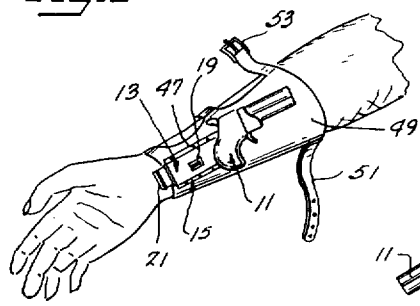


Fig. 2

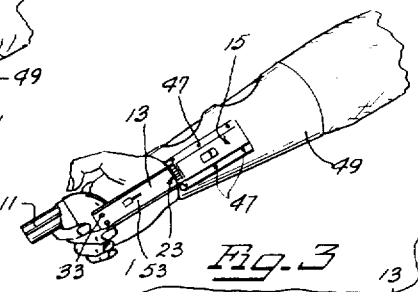


Fig. 3

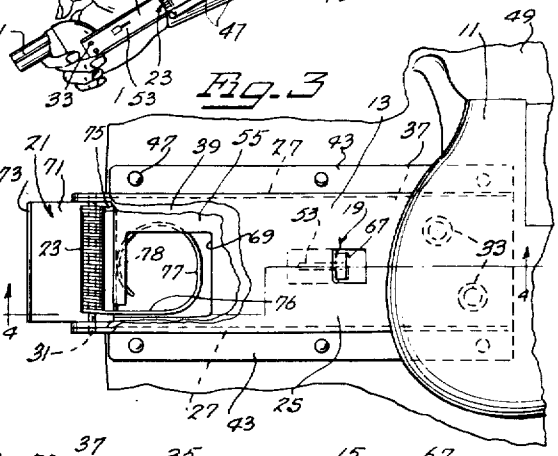


Fig. 4

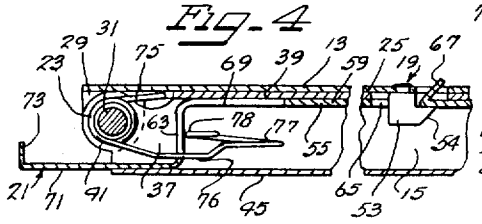


Fig. 5

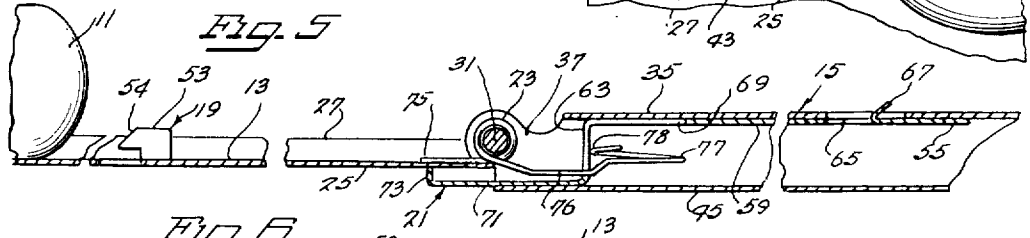


Fig. 6

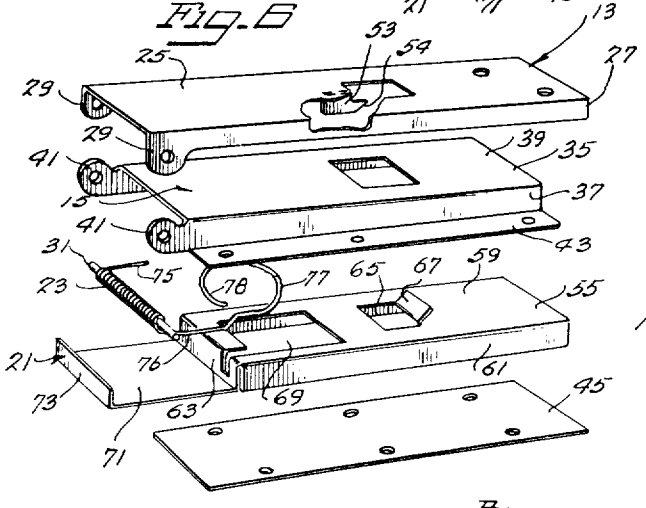
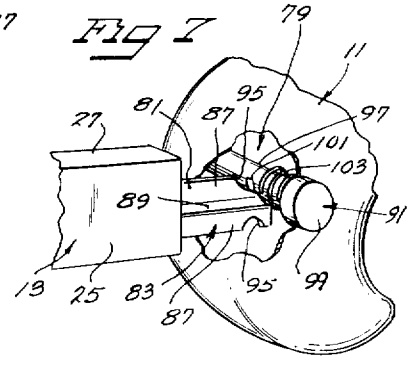


Fig. 7



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TOY

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This invention relates to the carrying of toy weapons, such as a pistol, and more particularly, to a toy pistol which is carried by the forearm and which can be suddenly positioned in the hand ready for firing from a concealed position along the inner forearm.

The principal object of the invention is a toy weapon which incorporates means affording carrying of the toy weapon on the body. Another object of the invention is a toy weapon which can be worn either on the left or right forearm and which is swingable between a concealed position along the inner forearm to a firing position in the hand. A further object of the invention is the provision of a toy pistol which incorporates the features mentioned above and which is economical in construction and simple in operation. A still further object of the invention is the provision of a hinged holding device for carrying toy weapons. Other objects and advantages of this invention will be understood by reference to the following description, and to the accompanying drawings in which:

FIGURE 1 is a perspective view of a toy pistol embodying various features of the invention. The pistol is shown carried by the forearm in concealed position;

FIGURE 2 is a perspective view similar to FIGURE 1 showing the pistol in the hand;

FIGURE 3 is an enlarged side view, partially broken away, of a portion of FIGURE 1;

FIGURE 4 is a sectional view taken generally along line 4—4 of FIGURE 3;

FIGURE 5 is a view similar to FIGURE 4 showing the hinge connected to the pistol in open position;

FIGURE 6 is an enlarged perspective view, partially broken away, showing parts of the hinge in exploded condition; and

FIGURE 7 is a perspective view, partially broken away, illustrating an arrangement for detachably securing the toy weapon to the hinge.

Basically, a combination in accordance with the invention includes a toy weapon, such as the pistol 11 which is carried by one leaf or element 13 of a hinge. The other leaf or element 15 includes means for fastening the hinge to the forearm so that the gun is swingable between a concealable position along the inner forearm to a firing position in the hand. In the embodiment shown in FIGURES 1 and 2, the hinged elements 13 and 15 are maintained in closed position, as seen in FIGURE 1, by means of a latch 19 and are biased toward the open position, as seen in FIGURE 2, under action of a spring 23. The latch 19 is releasable by manipulation of the hand with a latch trigger 21 to unexpectedly swing the pistol into the hand ready for firing.

The hinge element 13 is generally of channel formation having a web 25 and a pair of flanges 27 which include at one end a pair of apertured ears 29 receiving a hinge post 31. Carried at the other or free end of the hinge element 13 by suitable means, such as screws 33, is the pistol 11. Preferably, the pistol 11 includes a cap firing mechanism but is small in size so as to be concealable by the forearm. Of course, numerous other toy weapons could be carried by the disclosed holder including, for example, a water pistol, a rubber knife blade, etc.

The other hinge element 15 comprises a channel-shaped member 35 having a pair of flanges 37 which extend

from a web 39 and include a pair of forwardly loc apertured ears 41 receiving the hinge post 31, the swingably connecting the two hinged elements toget The channel-shaped member 35 also includes a pai laterally extending flanges 43 to which a plate 4 secured by suitable means, such as rivets 47, to pro a rectangular guide-way in which a part of the latch is slidably contained.

While various arrangements can be employed to fa the hinge element 15 to the forearm, in the disclo construction, the hinge element 15 is connected to wrist and adjoining forearm by an elongated gaur or wristband 49 which is preferably fabricated fro flexible material, such as leather or plastic. Suit means, such as the illustrated series of belts 51 buckles 53, are incorporated in the gauntlet for det ably securing it to the arm. As shown, the hinge ment 15 is secured to the gauntlet 51 by the rivets with the forward or hinge post end of the hinge elen 15 disposed along the forward end of the gauntlet.

As previously mentioned, the hinge elements 13 15 are maintained in their closed position, as show FIGURES 1, 3, and 4, against the action of the sp 23, by means of the latch 19. The latch constitute hook 53 carried by the hinge element 13 and a s 55 which includes the trigger 21 and is carried in guide-way formed by the hinge element 15 for eng ment with the hook 53. As shown, the hook 53 incl a camming surface 54 to assist in interengagement the slide as will be more fully described.

The slide 55 includes a main portion of channel-sha formation having a top face 59, side flanges 61 and end wall 63. Located centrally in the face 59 is a hc admitting opening 65 which is bounded on one side a transversely disposed tab 67 extending upwardly rearwardly for camming action with the hook 53 du engagement of the latch.

The face 59 and a portion of the end wall 63, as s particularly in FIGURE 6, are also apertured as i cated at 69 to permit insertion of a part of the spring between the slide 55 and the plate 37. Extending wardly from the end wall 63 is the latch trigger 21 wh constitutes a flat arm 71 having at its outer end an wardly directed flange 73. This flange is contacted move the slide rearwardly by the base of the hand effect release of the latch. The flange 73 also functi to limit opening movement of the hinge element 13 r tive to the hinge element 15 when these elements roughly in co-planar relationship.

The spring 23, which urges the hinged elements to o position, is formed of spring wire and is carried on hinge post 31. One end 75 of the spring 23 is in engi ment with the under surface of the hinge element 25, as seen particularly in FIGURES 4 and 6. The o end 76 extends inwardly of the hinge element 15, betw the slide 55 and the plate 45, to urge the hinge elemen away from the element 13. This end 76 is formed wi flat coil 77 having a portion 78 which bears against inner surface of the slide end wall 63 to bias the slide wardly, thereby retaining the slide in engagement v the hook 53. Thus, the spring 23 serves the two-fold fu tion of urging the hinged elements apart and assistin retaining them in locked condition.

When the gauntlet 49 carrying the hinge elements and 15 is secured to the forearm and when the hinged ments are in latched closed position, the pistol 11 is ried in concealed position on the innerside of the forea The latch trigger 21 extends forwardly, relative to hinge post to a position at the base of the hand. A sl movement of the hand toward the body will push slide rearwardly thereby releasing the latch and permit

the spring to swing the hinge elements open, thereby suddenly placing the gun in the hand for firing.

The pistol can be returned to its concealed position by a quick rearward movement of the arm. Such movement causes the pistol carrying hinge element **13** to swing about the hinge post **31** into closed position. In this connection, the slide **55** is urged rearwardly to permit passage of the hook **53** through the opening **65** in the slide **55** by engagement of the camming surface **54** with the tab **67**. When movement of the hook **53** through the opening **65** is completed, the slide again moves forwardly to engage the hook, thereby retaining the hinged elements in closed position.

As shown in FIGURE 7, the hinge element **13** and the pistol **11**, or other toy weapon, can be constructed for detachable assembly to permit use of the holder with several different toy weapons and to allow use of the holder on either the right or left arm. While these features can be realized through various connecting arrangements in the disclosed construction, they are provided by a detachable connection **79** which includes a socket **81** in the butt of the pistol and a male prong **83** which extends from the hinge element **13** and is insertable within the socket **81**.

The prong **83** is constructed, in cooperation with the socket **81**, to permit inverted assembly of the pistol with the hinge element **13**, thereby accommodating both left and right hand usage, and to prevent pivoting of the pistol about an axis extending along the prong. These features are achieved by forming the prong **83** with a generally cross-shaped cross-section which includes pairs of vertical and horizontal vanes **87** and **89** and by forming the socket **81** with a mating cross-section. Locking engagement of the prong **83** with the socket **81** is provided by a catch **91** which includes a locking pin in the pistol and an arcuate cut-out or notch **95** in each of the vertical vanes **87**.

The locking pin is carried transversely in the pistol butt and comprises a shaft **97** having a head **99**. The shaft **97** includes a groove **101** which can be aligned with the vertical vanes **87** and is of sufficient depth to permit passage of the unnotched portion of the adjacent vertical vane. The pistol **11** is locked to the hinge element **13** through the operation of a spring **103** which carries the shaft **97** into a position of misalignment between the vertical vanes **87** and the groove **101**, thereby engaging the notch **95** by the shaft **97**. Of course, the pistol can be removed from the hinge element **13** by inwardly pressing the head of the pin to align the groove **101** with the vertical vanes **87**, and then by withdrawing the prong **83** from the butt of the pistol.

The novel toy disclosed herein provides quick and unexpected delivery of a weapon from a concealed position on the forearm to a position in the hand ready for use. This surprise action takes place in response to a hardly noticeable manipulation of the hand. In addition, the weapon is readily returnable to its concealed position by means of a quick rearward arm movement. These action features result in a highly entertaining and desirable toy novelty.

Various features of the invention are set forth in the appended claims.

We claim:

1. A toy adapted to be carried on the forearm of a user and effective upon actuation thereof to cause a toy pistol to move from a position adjacent the forearm to a position in the hand, said toy comprising a first and a second element hingedly interconnected so as to permit relative movement thereof between an open and a closed position, a toy pistol rigidly attached to said first element, means for attaching said second element to the forearm such that hinged movement of the first of said elements relative to the second of said elements is effective to place said pistol in the hand of the user, means spring biasing said hinged elements into said open position, releasable latch means effective to maintain said hinged elen said closed position, and release means connected latch means and operable when actuated to rele latch means.

2. A toy adapted to be carried on the forear user and effective upon actuation thereof to caus pistol to move from a position adjacent the forea position in the hand, said toy comprising a first second element hingedly interconnected so as to relative movement thereof between an open and a position, a toy pistol rigidly attached to said fi ment, means for attaching said second element to tl arm such that hinged movement of the first of s ments relative to the second of said elements is e to place said pistol in the hand of the user, spring biasing said hinged elements into said ope tion, releasable latch means effective to mainta hinged elements in said closed position, and means connected to said latch means and operabl actuated to release said latch means, said release me ing operable by a predetermined movement of th whereby such movement of the hand results in the of said latch means, thereby permitting swing mover said elements to said open position under the influ said biasing means and thereby carrying said pistc its concealed position to a position in the hand re use.

3. A toy adapted to be carried on the forearı user and effective upon actuation thereof to cause pistol to move from a position adjacent the fore a position in the hand, said toy comprising a firs tively rigid element, fastening means attached to sa element and adapted to secure said first element forearm, a second relatively rigid element pivot tached at one end thereof to the end of said first e nearest the hand for swinging movement of said element relative to said first element between a position and an open position with said second e extending toward the hand, a toy pistol, means mounting said toy pistol on said second element i position that said pistol lies in the hand when said element is in its open position, means spring biasir elements toward said open position, latch means car said elements for releasable engagement to hold sa ments in said closed position, and release mean nected to said latch means and operable when ac to release said latch means, said release means bei sitioned to be operable by an inward movement hand at the wrist, whereby such movement of the results in the release of said latch means, thereby p ting swinging movement of said elements to said position under the influence of said biasing mear thereby carrying said pistol from its concealed posi a position in the hand ready for use.

4. A toy adapted to be carried on the forearm user and effective upon actuation thereof to cause pistol to move from a position adjacent the forea a position in the hand, said toy comprising an elo wristband including fastening means adapted to said wristband to the forearm, a first element fixedl ried by said wristband with one end thereof adjace forward end of said wristband, a second element pi ly carried at one end thereof on said one end of sai element for swinging movement of said second eleme ative to said first element between a closed and ar position, a toy pistol, means detachably connectin toy pistol and the other end of said second element ther of two positions which are inverted with resp each other so as to accommodate use on either the or left forearm, means biasing said elements towar open position, and latch means carried by said ele for releasable engagement to hold said elements i closed position, said latch means including a slide c by said first element and a hook carried by said secon ment, said slide being urged by said biasing means in

leasable engagement with said hook, thereby maintaining said elements in closed position, said slide including a trigger part extending forwardly of the forward end of said wristband for engagement by the base of said hand to effect release of the engagement between said slide and said hook, thereby permitting swinging movement of said elements to said open position under the influence of said biasing means and thereby carrying said pistol from its concealed position to a position in the hand ready for use.

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