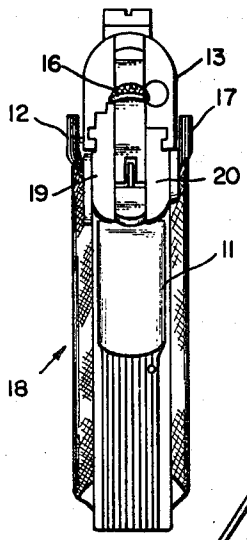
Feb. 3, 1970 A. D. SWENSON 3,492,748

PISTOL SAFETY MECHANISM ADAPTED FOR RIGHT OR LEFT HAND OPERATION

Filed April 5, 1968

Fig. 2.



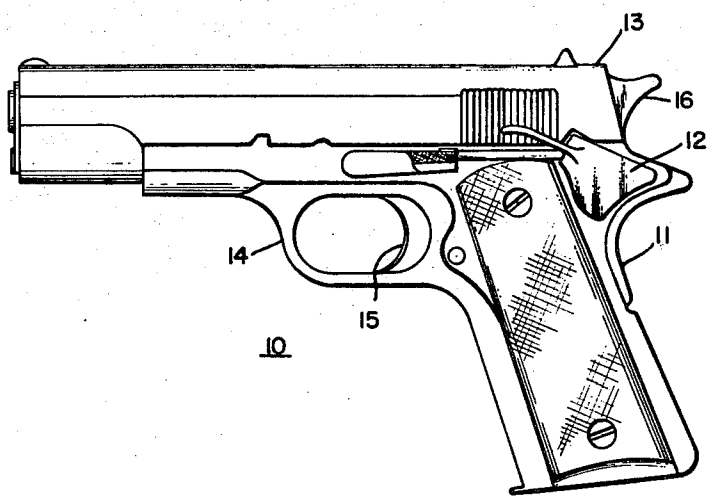


Fig. 1.

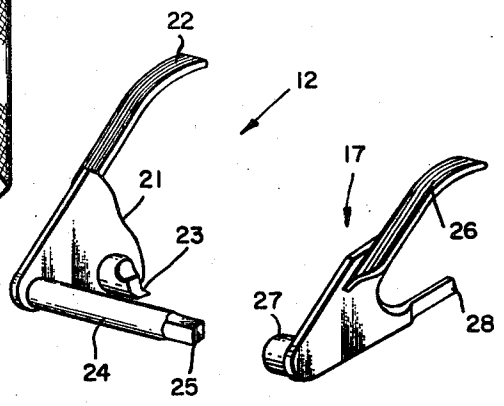


Fig. 3.

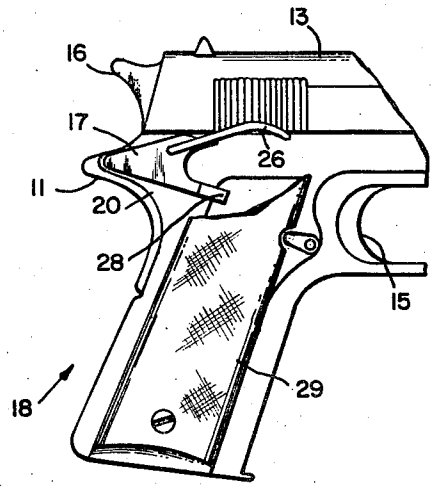


Fig. 4.

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PISTOL SAFETY MECHANISM ADAPTED FOR RIGHT OR LEFT HAND OPERATION

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U.S. Cl. 42—70 7 Claims

ABSTRACT OF THE DISCLOSURE

A safety mechanism constructed for a conventional pistol such as the 1911–A1 model automatic in different calibers (.22, 9 mm., 38 Super, 38/45) and similar types of other pistols. A second thumb lever operated latch is located on the right side of the gun and arranged to be operated by the thumb of the left hand. The safety catch is located on the left side of the gun and operates in the normal manner by pivoting about a shaft located in the bifurcated handle portion. The end portion of the shaft and a hub portion of the second thumb lever are mated together, for example, as in a press fit or are splined together. Operation of the second thumb lever transfers torsional motion through the shaft to the safety latch which is caused to move and operate in the normal manner.

This invention relates to conventional automatic pistols of the type having a pivot type hammer safety catch (safety) usually in the form of a finger actuated lever mounted on one side of the pistol near the hammer. The normal safety for a right handed person is located on the left side of the gun and is operated by the thumb of the right hand. More particularly the invention is concerned with an attachment device for such an automatic pistol which is primarily intended to facilitate the use of the gun by left handed people as well as by right handed people. In the practice of this invention a second thumb lever operating device is attached to the right side of the gun for use by left handed people while at the same time maintaining the original safety mechanism located on the left side of the gun thereby allowing the gun to be used with equal dexterity by either left handed or right handed people.

The significantce of the present invention will not be appreciated by right handed people until it is realized that the world contains devices primarily adapted for use by right handed persons and as a result the left handed person must adapt his bodily functions to the right hand standard. In many fields it is possible for the left handed person to purchase special tools. However, it is recognized that he pays a premium for these special tools when and if they are available. The left handed rifle, for example, costs considerably more than a similar rifle constructed for a right handed person. A set of golf clubs constructed for a left handed person similarly costs considerably more than the same clubs constructed for a right handed person when and if they are available. In the field of firearms and particularly in the use of automatic pistols it has been the custom for a left handed person to order a special safety located on the right hand side of the gun. In firing a pistol the safety is operated by the thumb of the hand holding the gun. Preparatory to shooting, the thumb operates the safety mechanism thereby placing the gun in a safe condition until he is on target at which time the thumb releases the safety allowing the trigger to be operated. After firing, the thumb is again used to operate the safety which places the gun in a safe condition. It is impossible for a left handed person to safely operate a pistol with a right handed safety.

In this invention the original safety mechanism supplied with the gun and located on the left side of the frame is not altered but rather is left in place. A second thumb operating lever located on the right side of the frame and contaning a hollow cylindrical hub is mated with the shaft of the safety. The end portion of the shaft is adapted to mate with the hollow cylindrical portion whereby movement of the second thumb lever will cause a rotational movement of the shaft that is transmitted through the mating surfaces to thereby operate the safety mechanism located on the left side. This invention does not add a second safety mechanism but only adds a second thumb lever operating device adapted for use by the thumb of the left hand which motion is imparted to the original safety device still located on the left side of the gun. A gun constructed to the teachings of this invention is adapted for use by either a left handed or right handed person.

Further objects and advantages of this invention will be apparent as the description progresses, reference now being made to the accompanying drawings wherein:

FIGURE 1 is a left side elevation of a conventional type automatic pistol having a safety mechanism adapted for use by the thumb of the right hand;

FIGURE 2 is a rear view of the gun illustrated in FIGURE 1 illustrating the relative position between the conventional safety mechanism located on the left side and the newly added thumb operating lever added to the right side of the gun as provided by this invention;

FIGURE 3 is an exploded view illustrating the cooperation between the original thumb operated safety and the newly added thumb actuating lever added according to the teachings of this invention; and

FIGURE 4 is a section of a right side elevation of the gun illustrated in FIGURES 1 and 2 and illustrates the added second thumb lever shown in FIGURE 3.

Referring now to FIGURE 1 there is shown a conventional automatic pistol **10** of a conventional type. Pistols of this type normally incorporate safety features such as a grip safety **11** and the original slide stop safety **12** for holding the slide **13**. While normally not thought of as a safety device the trigger guard **14** covering the trigger **15** is also a safety feature for preventing accidental discharge of the hammer **16**. The important feature of the present invention resides in the fact that the added thumb operating lever placed on the right hand side of the gun does not alter or change the safety feature of the originally installed safety devices of the gun. For example, the grip safety **11** and the trigger guard **14** still opearte in the manner as originally designed. In addition, the original safety **12** still operates in the same manner as originally designed for the pistol **10**.

As shown in the back view of FIGURE 2 a second thumb operating lever **17** is located on the right hand side of the gun **10** and is arranged to co-act with the original safety **12** whereby movement of the thumb lever **17** operates the original safety **12**. The second thumb lever **17** is located directly opposite the safety **12** thereby making the gun appear completely symmetrical. The handle portion **18** is bifurcated with the left section **19** supporting safety **12** and the right section **20** supporting lever **17**.

Referring now to FIGURE 3 there is shown an exploded view of the original safety **12** located on the left side of the gun and the thumb operating lever **17** located on the right side of the gun. The slide stop safety **12** is comprised of a substantially flat metal portion **21** having a contour approximating that of the handle portion of the gun which abuts the safety. The thumb operating portion **22** of the original safety **12** protrudes from the side of the plate **21** and extends laterally in the direction of the slide **13** to accommodate the thumb of the right hand. The particular shape of the thumb portion **22** is of no importance to the present invention and is dictated

solely by the desire of the shooter. Member **23** is attached to plate **21** and protrudes into and cooperates with the hammer of the gun in a conventional manner to prevent movement of the hammer when the safety mechanism is in the operated position. The original safety **12** also contains a shaft **24** having an end portion that is formed preferably as a regular polygon **25**.

The shaft **24** is pivotly mounted within the bifurcated handle portion **19** shown in FIGURE 2. The handle portion **18** is bifurcated in order to allow the hammer **16** to be located therebetween. The shaft **24** is pivotly mounted in the handle at **19** and extends through the bifurcated handle portion and extends to section **20** but preferably does not pivot in the opening in **20**. As shown in FIGURE 3 the thumb operating lever **17** contains a thumb operating portion **26** and a hollow cylindrical hub **27** which is adapted to receive and mate with the polygon end **25** of the shaft **24**. An extension member **28** forms an integral portion of lever **17** and is used to prevent accidental loss of the lever **17** due to accident or carelessness. The outside diameter of the cylindrical hub **27** is preferably greater than the outside diameter of shaft **24** for strength reasons. It is necessary that the pivotal opening in the right hand portion **20** of the bifurcated handle portion **18** have a diameter sufficient to accept the outside diameter of the hollow hub **27**.

Referring now to FIGURE 4 there is shown a view of the right side of the gun **10** illustrating the thumb lever **17**. The thumb lever **17** is located on the right hand side of the gun **10** with the outside diameter of the hollow cylindrical hub **27** pivotly located at **20**. The safety **12** is inserted in the normal manner in the left hand side of the gun which causes the polygon end **25** of shaft **24** to mate with the hollow cylindrical hub **27**. Due to the close fit in the mating surface existing between the shaft **24** and the hub **27** any motion imparted to the thumb lever **17** at portion **26** will cause a torsional force to be transmitted from the lever **17** to shaft **24** which will operate and rotate the safety **12** thereby locking the slide **13** and the hammer **16** in the normal and conventional manner. In order to prevent accidental loss of the thumb lever **17** the projection **28** has a substantially tapered portion made long enough to extend into and under the right hand grip plate **29** located on the right hand side of the gun. The grip plate **29** is undercut a sufficient amount to accept the projection of the extension **28**. The width of the extension **28** is chosen so that movement of the thumb lever **17** from the extreme up or down position will not disengage the extension **28** from engagement under the grip plate **29**. In this manner the grip plate provides simple and effective means of preventing the second thumb lever **17** from becoming disengaged and falling off the gun.

This completes the description of the embodiment of the invention illustrated herein. However, many modifications and advantages thereof will be apparent to persons skilled in the art without departing from the spirit and scope of this invention. For example, it is recognized that different mating means may be used to join the shaft **24** with the thumb lever **17**. It is not necessary that a polygon end portion be used since other suitable and acceptable mating surfaces such as a splined shaft and accepting hub may also be used. In addition different means for locking the second thumb lever **17** to the shaft may be used such as a simple set screw located at the end of the shaft **24** and having a head portion sufficient to hold the thumb lever **17** firmly against the screw may also be used. In addition it is possible for the shaft **24** to pivot on both sides of the bifurcated handle portion as at **19** and **20** rather than having the shaft **24** pivot only at **19** and the cylindrical hub **27** pivoting at **20**. The embodiment described herein is a preferred embodiment only and is meant to illustrate how a pistol having a conventional safety device can be modified to include a second actuating device thereby making the gun ambidextrous without altering or changing the originally designed safety features of the pistol. The specific means for connecting or interconnecting the added thumb operating lever to the original safety device is dictated only by the design criteria of the individual pistol and technology of the art.

What is claimed is:

1. A safety mechanism for an automatic pistol having a bifurcated handle portion defining a first slide and a second side comprising:

a first safety latch adapted to be thumb operated and located on the first side of said handle portion;

said safety latch mounted for pivotal motion about a shaft supported by said handle portion;

said shaft integrally connected with said safety latch and extending transversely through said handle portion whereby said shaft is exposed on the opposite or second side of said handle;

the exposed end of said shaft compirsing a first mating portion; and

a second thumb lever operating latch adapted to be located on the second side of said handle portion and having a second mating portion for connecting said shaft and said latch together whereby rotational movement of said second thumb lever imparts a torsional force through said mating portion causing said first safety latch to operate.

2. A mechanism according to claim **1** in which said second thumb lever includes a hollow cylinder for mating with said shaft.

3. A mechanism according to claim **2** in which said shaft pivots only in the first side of the handle and said cylinder pivots in the second side of the handle.

4. A mechanism according to claim **1** in which the exposed end of said shaft defined as said first mating portion is a polygon.

5. A mechanism according to claim **2** in which said internal hollow cylinder is a polygon.

6. A mechanism according to claim **1** in which said handle includes a pair of grip plates one for each side and in which said grip plate on said second side covers a portion of said second thumb lever thereby preventing its removal.

7. A mechanism according to claim **1** in which said second thumb lever contains a projecting portion which extends under a grip plate located on the sceond side of the handle thereby preventing the loss of said second thumb lever.

References Cited

UNITED STATES PATENTS

1,376,165	4/1921	Rosebush	42—70
3,109,345	11/1963	Norman	42—70

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