May 28, 1968 U. A. SALAIZ 3,384,988

ACCURACY SHOE FOR A PISTOL

Filed Feb. 9, 1967

Fig-1

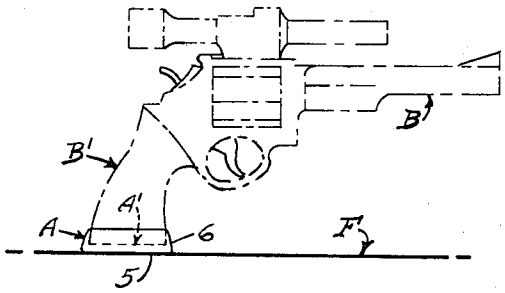
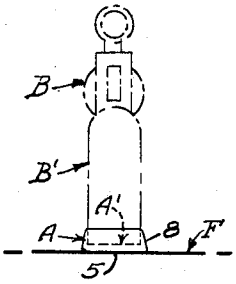


Fig-2



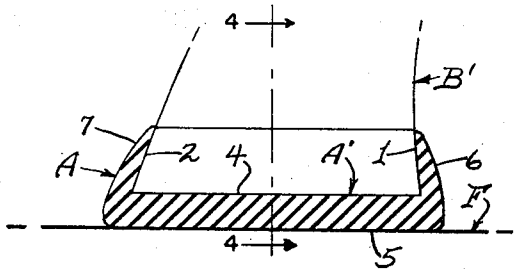


Fig-3

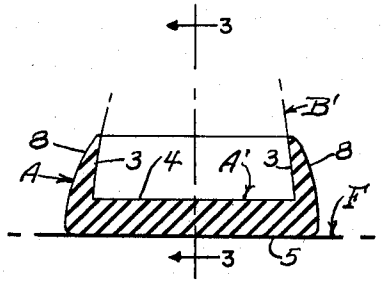


Fig-4

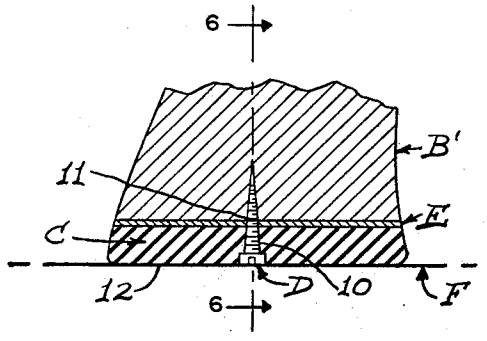


Fig-5

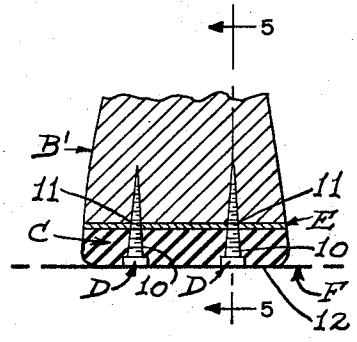


Fig-6

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ACCURACY SHOE FOR A PISTOL

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ABSTRACT OF THE DISCLOSURE

A pistol when fired has a definite recoil due to the exploding shell. This recoil action interferes with the accurate aiming of the piston because it tends to move the pistol upwardly and rearwardly when fired. The placing of the butt end of the pistol grip on a rigid supporting surface at the time of shooting aids in the accuracy of firing but even then the recoil of the pistol at the moment of firing causes inaccurate aiming. I provide a resilient shoe for the pistol butt end that absorbs this recoil and prevents the pistol from moving unduly when fired. More accurate shooting is made possible.

Background of the invention

When a pistol is entirely supported by the hand at the time of firing the recoiling force of the exploding shell will move the pistol and hand in an upward and rearward direction. This involuntary movement of the pistol at the moment of firing causes inaccurate aiming. The operator can rest the butt end of the pistol grip on a rigid supporting surface for more accurate aiming as in taget practice, but the recoil force of the exploding shell will still lift the pistol off from the support and interfere with accurate aiming. I discovered from actual practice that by mounting a resilient shoe on the butt end of the pistol grip and resting the shoe on a rigid supporting surface while aiming and firing the pistol during target practice, my marksmanship was improved because the resilient shoe absorbed the recoil force from the exploding shell.

Summary of the invention

An object of my invention is to provide a resilient shoe that may be readily secured to the butt end of a pistol hand grip by any desired means. The resilient shoe may be made of rubber or other type of material that has a cushioning effect.

Brief description of the drawing

FIGURE 1 is a side elevation of the accuracy resilient shoe and it is shown applied to the butt end of a pistol. The pistol is illustrated by dot-dash lines in the same figure.

FIGURE 2 is a rear elevation of the accuracy resilient shoe and again the pistol is shown in dot-dash lines.

FIGURE 3 is a longitudinal section through the accuracy resilient shoe and is taken along the line 3—3 of FIGURE 4. The shoe is shown full size.

FIGURE 4 is a transverse section through the accuracy resilient shoe and is taken on the line 4—4 of FIGURE 3.

FIGURE 5 is a longitudinal section through a modified form of accuracy resilient shoe and is taken along the line 5—5 of FIGURE 6. The shoe is shown secured to the butt end of the pistol by screws.

FIGURE 6 is a transverse section through the accuracy resilient shoe and is taken along the line 6—6 of FIGURE 5. The shoe is shown secured to the butt end of the pistol by screws.

Description of the preferred embodiments

In carrying out my invention I provide an accuracy resilient shoe that is made of a resilient material such as neoprene or rubber. The shoe is indicated generally at A in FIGURES 1 to 4 inclusive. The shoe is made cup-shaped in form and it has a recess A′ that is formed to snugly receive the butt end of a pistol B, as is clearly shown in FIGURES 3 and 4. The recess A′ has a front inner surface 1 shaped to conform to the front surface portion of the pistol hand-grip B′, and it has a rear inner surface 2 shaped to conform to the rear surface portion of the hand-grip. The two inner side walls 3 of the recess A′ are identical to each other and they are shaped to snugly receive the associate side walls of the pistol hand-grip as shown in FIGURE 4. The bottom wall 4 of the recess is designed to have the butt end of the pistol hand-grip bear thereagainst.

It will be seen that the shape of the recess A′ is designed to act as a suction cup for engaging with the butt end of the pistol hand-grip for securing the accuracy resilient shoe to the pistol without the need of any additional fastening means. The thickness of the shoe between the bottom 4 of the recess A′ and the bottom 5 of the shoe itself is about one-fourth of an inch although I do not wish to be confined to any exact measurement. The outer side walls of the shoe are made to conform to the general shape of the pistol hand-grip as closely as possible so that they will not interfere with the natural grip of the operator's hand on the hand-grip during the actual aiming and firing of the pistol.

In FIGURES 1 to 4 inclusive the front outer wall 6 of the accuracy resilient shoe is shaped so as to substantially merge into the front portion of the pistol hand-grip. The thickness of the top front edge of the shoe is made about one-sixteenth of an inch thick while the thickness of the shoe wall adjacent to the bottom 4 of the recess A′ is about three-sixteenths of an inch. Again, I do not want to be confined to any precise measurements. The rear outer wall 7 of the shoe, see FIGURE 3, is also shaped to substantially merge into the rear portion of the pistol hand-grip. The same is true of the outer side walls 8 of the shoe, see FIGURE 4, these walls being shaped to merge into the side portions of the pistol hand-grip. The entire top edge of the recess A′ is about one-sixteenth inch thick and the thickness of the recess wall increases gradually to about three-sixteenths of an inch at points that lie in the same plane that is flush with the bottom wall 4 of the recess. Both FIGURES 3 and 4 further illustrate how the lower corners of the front, rear and side outer walls of the shoe, that constitute a perimeter for the bottom 5, are slightly rounded so as to obviate any sharp corners on the shoe.

The shapes of the recesses A′ would be designed to conform to the shape of the pistol hand-grip to which the shoe is secured. The walls of the recess would snugly engage with the adjacent surfaces of the pistol hand-grip and this will create a suction effect that will keep the shoe A secured to the butt end of the pistol hand-grip without the need of any extraneous fastening means.

Modified form of accuracy resilient shoe

FIGURES 5 and 6 illustrate a modified form of the accuracy resilient shoe. In these figures the shoe C is preferably made of a resilient neoprene material or rubber. Instead of the shoe being provided with a suction cup recess as illustrated in the preferred form of shoe, the shoe is attached to the butt end of the pistol hand-grip by screws D or other suitable fastening means. Since the shoe itself is made from a resilient material, I have found it advisable to place a thin piece of sheet metal or hard wood E between the shoe and the butt end of the pistol. The sheet of hard material E is cemented to the resilient shoe so as to be a permanent part thereof.

The screws D are inserted in bores **10** in the shoe C and extend through openings **11** in the sheet material E that are alinged with the bores. The screws D are screwed into the stock forming the hand-grip of the pistol B. The bores **10** have enlarged recesses for receiving the heads of the screws and this permits the outer ends of the screw heads to lie flush with the bottom surface **12** of the shoe C.

The perimeters of the shoe C and the sheet material E are the same size and shape as the butt end of the pistol B, so that the shoe will act as a slight extension to the length of the pistol hand-grip as well as act as a cushioning device for absorbing the recoil force of the exploding bullet at the time of firing. The corner formed by the perimeter of the shoe C merging into the bottom surface **12** thereof, is slightly rounded as shown in FIGURES 5 and 6.

Operation

In using the accuracy resilient shoe on the pistol B, the shoe is placed on a rigid supporting surface indicated by the line F in all of the figures. The bottom surface of either shoe A or C may be serrated if desired to prevent slippage of the shoe on the surface. The operator holds the pistol grip in one or both hands in aiming and keeps the shoe resting firmly on the hard supporting surface F. The tighter the hand-grip on the pistol, the better the accuracy in bench-rest shooting or hunting.

The pistol may be provided with custom-made hand-grips and in this event the shoe recess A' would be shaped accordingly. The shoe is used on pistols where pistol bench-rest shooting is being done or when hunting is being carried out and the operator wants to rest the butt end of the pistol on a firm supporting surface to aid him in accurate shooting. A scope can be used with the pistol, but it can be eliminated. FIGURES 1 and 2 illustrate a scope attached to the pistol.

The rigid plate E of rigid material need not be used with the shoe C although I have found that the use of the plate stops undue shifting of the resilient shoe.

The shoe absorbs the initial recoil caused by the exploding bullet and provides time for the bullet to leave the pistol barrel before the barrel is deflected by the explosion. A far more accurate aiming and hitting the target is thus made possible.

The thickness of the resilient shoe may be varied according to the size of the pistol being used. The outer contour of the shoe is made to follow as closely as possible the outer contour of the pistol hand-grip.

I claim:

1. An accuracy shoe for the butt end of a pistol grip where the plane of the butt end parallels the axis of the pistol barrel, comprising:

(a) a body made of a non-porous uniformly resilient material throughout and having sufficient thickness to resiliently support a pistol when the butt end of the pistol with the shoe attached thereto is placed on a rigid supporting surface; said body having a flat wall contacting the butt end of the pistol grip, this wall being parallel to an opposite flat wall that rests on the rigid supporting surface; and

(b) means for securing said body to the butt end of the pistol, the outer perimeter of said body following the outer contour of the pistol grip adjacent to the butt end thereof and keeping free the greater part of the pistol grip for direct grasping by hand.

2. The combination as set forth in claim **1**, and in which:

(a) said body has a recess corresponding in shape to the butt end of the pistol grip for snugly receiving it;

(b) the flexible wall of said recess yieldingly contacting with the adjacent surface of the pistol grip for securing said body thereto, the outer surface of said flexible wall having its upper edge merging into the outer adjacent surface of the pistol grip, said recess being shallow in depth so that said upper edge will be disposed near to the butt end of the pistol grip so as to keep clear a sufficient length of the pistol grip that may be directly grasped by the entire hand for maintaining the accurate aiming during firing.

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