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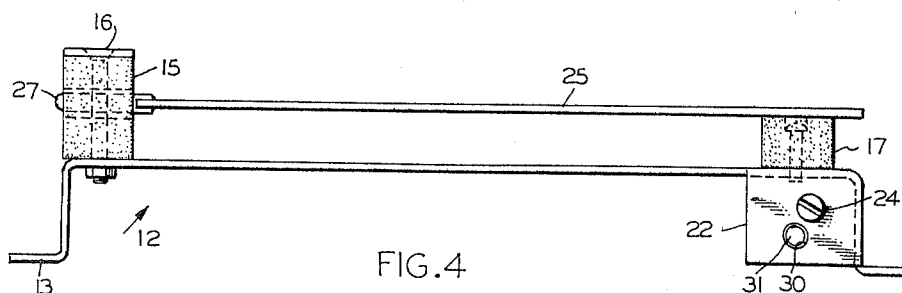
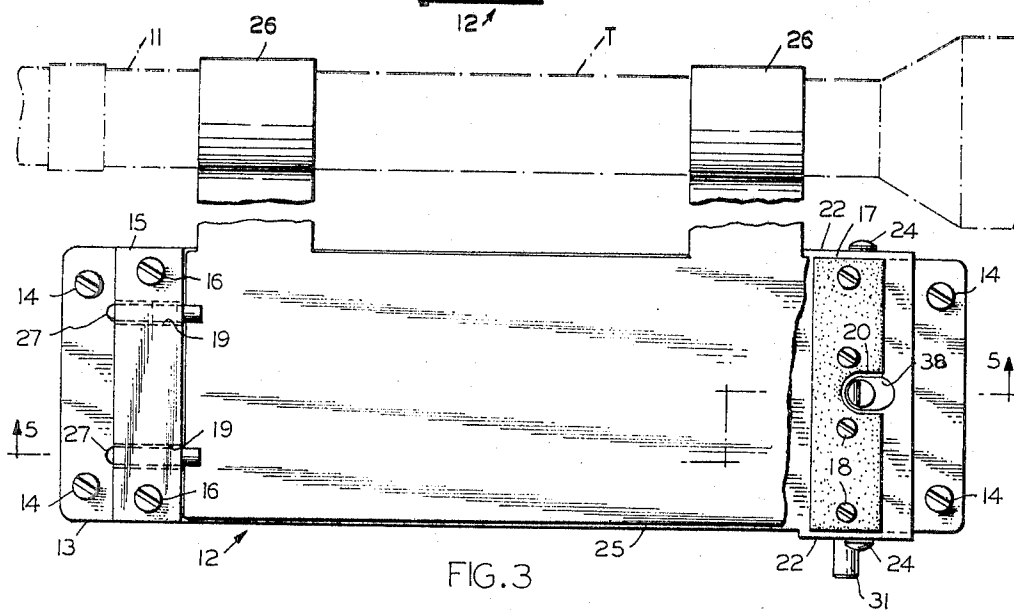
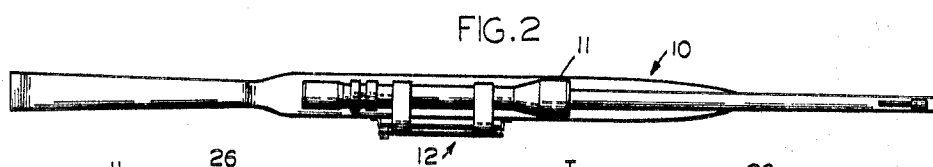
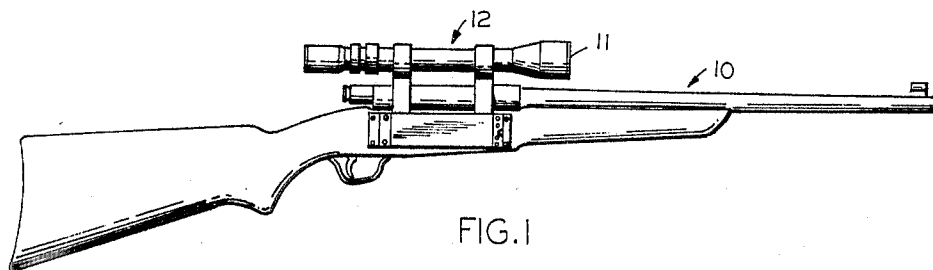
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3,483,623

SHOCK-PROOF TELESCOPIC GUN SIGHT MOUNT

Filed Aug. 20, 1968

2 Sheets-Sheet 1



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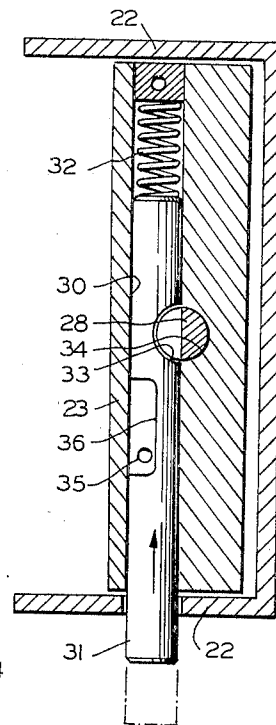
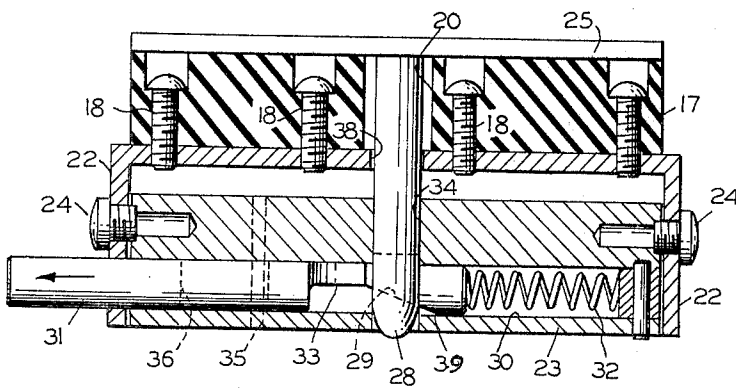
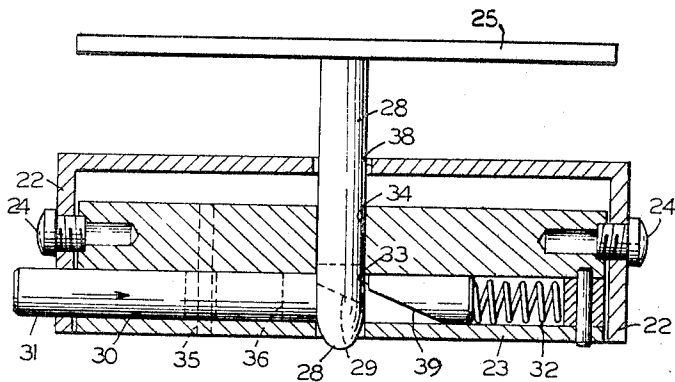
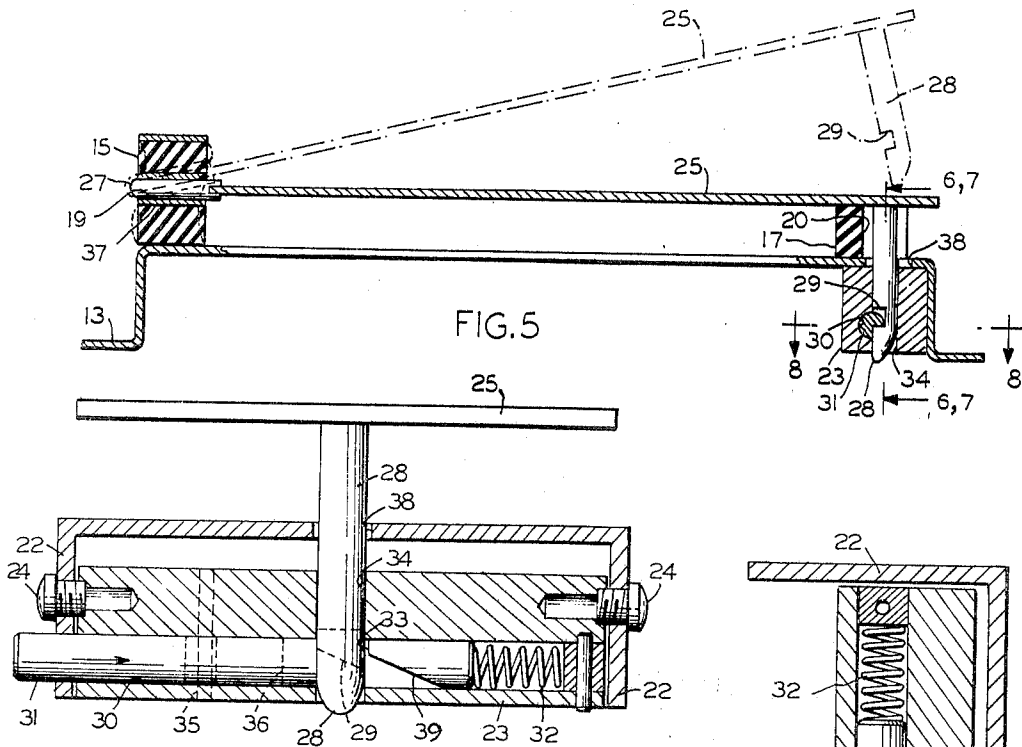
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2 Sheets-Sheet 2



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SHOCK-PROOF TELESCOPIC GUN SIGHT MOUNT

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8 Claims

ABSTRACT OF THE DISCLOSURE

A shock-proof mount adapted to be affixed to a gun for mounting a telescopic gun sight thereon which comprises a base member having an apertured elastomerically resilient block means or cushion at each opposite end with a locking block and locking plunger at one end beneath one of the cushions. A scope carrier, having tongues at one end and a locking pin at the other, is attached to the base member by insertion of its tongues into one of the resilient cushions and thereafter locking the carrier in place on the base member by means of its locking pin which engages with the plunger through the locking block and the other resilient cushion.

The present invention relates generally to a gun telescope mounting and more particularly, to a completely shock-proof mounting designed for simple, rapid and precise attachment to and removal from a gun without the need of additional equipment or tools.

In current telescope mountings of the type disclosed in my U.S. Patent No. 2,635,341, issued Apr. 21, 1953, the repeated shock forces generated by gun recoil upon firing are transmitted to the sighting telescope which can cause both damage of the scope lenses and mis-alignment of the gun sight on the gun. Accordingly, lens replacement or fine adjustment of the scope may become necessary. Of the many shock-proof means designed for the various gun scope mountings, none have proven to be sufficiently adequate to dampen the heavy shock forces transmitted to the telescopic gun sight and at the same time allow for a simple and positive attachment of the scope mount onto the gun.

It is therefore one of the objects of the present invention to provide a gun scope mount which minimizes the recoil shock transmitted to the telescope at the gun firing.

Another object of the instant invention is to provide a shock-proof telescopic gun sight mount of a design which will insure that the telescope will have less tendency to mis-align, due to gun recoil when affixed to a gun and which will insure that when the scope is removed and replaced, will not require readjustment or realignment.

A further object of the present design is to provide a shock-proof gun scope mount capable of easy and extremely rapid removal and attachment.

A still further object of the instant design is to provide a shock-proof gun scope mounting in which the scope carrier is locked and unlocked simply by means of an easily operable finger-controlled locking plunger.

A still further object of the present invention is to provide a mounting for telescopic gun sights in which elastomerically resilient cushions or blocks are provided between a base member attached to the gun and a scope carrier having tongues and a locking pin thereon, the tongues and locking pin engageable, respectively, with each of the flexible blocks so that the shock produced by gun recoil and transmitted to the gun sight is accordingly minimized.

Other objects, advantages and novel features of the present invention will become apparent from the following, detailed description of the invention when con-

sidered in conjunction with the accompanying drawings wherein:

FIGURE 1 is a side elevational view of a gun showing the instant shock-proof mounting in place with a telescope affixed to the carrier;

FIGURE 2 is a top plan view of the apparatus shown in FIGURE 1;

FIGURE 3 is an enlarged side elevational view of the mount shown in its locked position with part of the scope carrier broken away;

FIGURE 4 is a longitudinal end view of the mount shown in FIGURE 3;

FIGURE 5 is a sectional view taken substantially along the line 5, 5 of FIGURE 3 with the scope carrier shown, in phantom, before being locked into position;

FIGURE 6 is a section view taken substantially along line 6, 6 of FIGURE 5 showing the scope carrier in an unlocked position with the resilient blocks omitted for purposes of clarity;

FIGURE 7 is a section view taken substantially along line 7, 7 of FIGURE 5 showing the scope carrier in its locked position;

FIGURE 8 is a sectional view taken substantially along the line 8, 8 of FIGURE 5.

Referring now to the drawings wherein like reference numerals refer to like and corresponding parts throughout the several views, there is shown in FIGURES 1 and 2, a gun, of a conventional design, generally designated by reference numeral 10 with a telescopic gun sight mounting 12 affixed thereto and a gun scope 11 shown mounted in place. In FIGURE 3, the mount 12 is shown in side elevation in its locked position in a manner more clearly shown in FIGURE 5 with the scope T and its supporting split rings 26 broken away. A base member 13, which may be channel-shaped in cross-section as shown in FIGURES 4 and 5, is provided with means on its opposite ends, such as screws 14, for attachment to the side of a gun stock, as shown in FIGURES 1 and 2. On the top face of base member 13, at one end thereof, a resilient block means or cushion 15 of rubber or other suitable material is attached thereto by any convenient means, as by screws 16, the block 15 being of a length, for example, as shown in FIGURE 3. At the opposite end of base member 13 another resilient block means or cushion 17, of rubber or any other suitable material is secured thereto as by screws 18. The resilient block 15 is provided with a pair of apertures 19 whose axes are parallel to the face of base member 13, while the resilient block 17 is provided with a channel-shaped bore 20 (see FIGURE 3), whose axis is perpendicular to the face of base member 13. At the underface of base member 13 and between a pair of side plates 22 (see FIGURE 4), a locking block 23 is provided and held in place by a pair of screw pins 24 at opposite ends thereof, which pins are threaded into side plates 22, but are frictionally inserted into the ends of block 23, as clearly shown in FIGURES 6 and 7. The purpose of using this type of fastener will be subsequently herein-after explained.

A scope carrier 25, comprising a generally rectangular metal plate, is provided with a pair of split scope rings 26, of a conventional design as shown in FIGURE 3, to accommodate a telescope T in position on the carrier. The rings 26 and scope T are omitted from FIGURES 4, 5, 6 and 7, for purposes of clarity. At one end of scope carrier 25, a pair of tongues 27 are provided which, for example, are shown to be a horizontal extension of the carrier 25. At the other end of the carrier, a locking pin 28 is provided having a slotted passage or recess 29 intermediate its length of a configuration as clearly shown in FIGURES 6 and 7. Within a longitudinal bore 30 in the locking block, a locking plunger 31 is slidably

mounted and resiliently urged out of the locking block by means of a coil spring 32, said plunger being provided with a semi-circular recess 33, as clearly shown in FIGURE 8. The locking block 23 is also provided with a bore 34 into which locking pin 28 is inserted, as clearly shown in FIGURES 6 and 7. Locking plunger 31 has an inclined surface 39 which is out of engagement, in FIGURE 6, with the bottom wall of recess 29 in pin 28 and in engagement with the bottom wall of recess 29, in FIGURE 7. A stop pin 35 is also provided in the locking block 23 so as to limit the extent of movement of the plunger 31 out of the block 23 when the device is not in use. An elongated recess in plunger 36 is accordingly provided to allow for in-and-out sliding movement of the plunger 31. In FIGURE 5, it can also be observed that a bushing or sleeve boss 37 is provided within each aperture 19 of resilient block means 15 in order to prevent an undue amount of wear when the scope carrier is being attached to the base member.

For a clear and complete understanding of the operation of the instant design, reference is made first to FIGURES 3 and 5 of the drawings, wherein it can be observed that the scope carrier 25, as shown in phantom in FIGURE 5, is initially attached by insertion of the tongues 27 into the bushings 37 of the horizontal apertures 19 when it is desired to affix the gun scope mount to the gun 10. As shown, the bushings may be countersunk in order to facilitate easy entry of the tongues 27 therein. Locking pin 28 is then inserted into the bore 20 of resilient block 17, the bore 20 being channel-shaped to facilitate angular insertion of the pin. As the carrier 25 approaches its locked position, pin 28 passes through an oval aperture 38 in base member 13 and into the locking block 23 through the bore 34 therein. As shown in FIGURES 6 and 8 of the drawings, the locking pin 28 moves through recess 33 of the plunger 31 only when the plunger is shifted by the operator into the locking block 23, as shown by the arrows, a sufficient distance for the semi-circular recess 33 to axially align with the recess 34 of the locking block. Then, as clearly shown in FIGURE 7, the locking plunger 37 is released by the operator, in the direction of the arrow, to allow the inclined portion 39 of the plunger to mate with the bottom wall of passage 29 of the pin 28 thereby securely locking the scope carrier in position on the gun. Because the locking pin 28 is being inserted at an angle, shown by FIGURE 5 of the drawings, the aperture 20 must be made elongated in the longitudinal direction of the device and the locking block 23 must be made freely to rotate a slight angle to facilitate angular insertion of the locking pin. For this purpose, the screw pins 24, by being frictionally inserted into block 23, are designed to permit such a slight rotation. The scope is now positively and securely mounted on the gun for immediate use.

It should also be appreciated that the resilient block 15, of rubber or other elastic material, is alone capable of maintaining the scope carrier mounted in place even without the use of locking plunger 31. For example, the block or cushion 15 is designed to be resilient enough so that it will flex or distort, as shown in phantom in FIGURE 5, as the tongues 27 are inserted. Thereafter, because of the elasticity of the block, apertures 19 will return to a relaxed position thereby urging the scope carrier 25 to accordingly assume a position with its pin 28 inserted through blocks 17 and 23 merely in frictional engagement with the latter without the use of a locking plunger.

From the foregoing, it can be seen that a telescopic gun sight mount has been designed for effective and rapid telescope mounting without the need of additional tools or equipment or the necessity of any adjustments or danger of losing its previous accurate adjustment. Furthermore, the mount of the present invention properly cushions longitudinal shocks occasioned by recoil during gun firing, whereby the life of the mechanical and optical parts of the scope is greatly extended. The instant telescopic

gun sight mount therefore, becomes easy to operate, simple to manufacture and economical for long periods of use.

Obviously, many modifications and variations of the present invention are possible in the light of the above teachings. It is therefore to be understood that the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A shock-proof mount adapted to be affixed to a gun for mounting a telescopic gun sight thereon comprising:
 - a base member having means thereon for attachment to the gun;
 - a first elastomerically resilient block means on one end of said base member; said first block means having an aperture therein;
 - a second elastomerically resilient block means on the opposite end of said base member, said second block means having an aperture therein whose axis is perpendicular to the aperture in said first resilient block;
 - a locking block on said base member beneath said first resilient block; and said locking block having a first bore therein in co-axial alignment with the aperture of said first resilient block means;
 - a scope carrier for mounting the telescopic gun sight onto said base member, said carrier comprising a body portion having tongue means at one end thereof; and
 - a locking pin at its opposite end, said tongue means and locking pin being relatively positioned and of a size to respectively closely interfit said apertures, whereby said scope carrier may be securely mounted onto the gun and completely cushioned from shock upon gun recoil, when said tongue means is inserted into the aperture of said second flexible block means which is distorted upon insertion, and when said locking pin is thereafter resiliently urged into the co-axial aperture and bore of said respective first block means and said locking block, by said second block means as it returns to its relaxed position.
2. The shock-proof mount according to claim 1 wherein said locking block is provided with a second bore whose axis is transverse to the axis of said first bore and wherein a locking plunger, having a semi-circular recess therein, is slideably positioned within and movable along said locking block second bore, the axis of which recess is offset from said locking block second bore axis, whereby said locking pin may be inserted past said rod recess to lock said carrier onto said base member.
3. The shock-proof mount according to claim 2 wherein said locking pin is formed with a recess adjacent its lower end, and wherein said rod is resiliently moveable in-and-out of said locking block second bore and is formed with a flattened portion directly adjacent its semi-circular recess which flattened portion is normally in engagement with the lower wall of said pin recess to lock said pin and scope carrier against vertical displacement when said plunger is actuated to mis-align said semi-circular recess and said pin axially.
4. The shock-proof mount according to claim 3 wherein said locking block is frictionally secured to said base member by a pair of screw pins at opposite ends thereof whereby said locking block may axially pivot to allow insertion of the locking pin therein.
5. The shock-proof mount according to claim 4 wherein a stop pin is provided in said locking block across the path of said locking block second bore, and wherein said plunger is further formed with an elongated recess to accommodate said movement of said plunger within said locking block, said stop pin acting to limit movement of said plunger out of said locking block when the mount is not in use.
6. The shock-proof mount according to claim 5 wherein said tongue means comprises a pair of tongues secured

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to one end of said body portion as a horizontal extension thereof.

7. The shock-proof mount according to claim 6 wherein said second resilient block means includes two apertures and a metal bushing in each aperture in order to facilitate easy insertion and prevent undue wear of said tongues therein.

8. The shock-proof mount according to claim 7 wherein a coil spring provided within said locking block second bore produces the resilient in-an-out movement of said rod therein.

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10 SAMUEL S. MATTHEWS, Primary Examiner