April 8, 1941. R. M. SWEET 2,237,395

GUN SIGHT

Filed Sept. 12, 1939

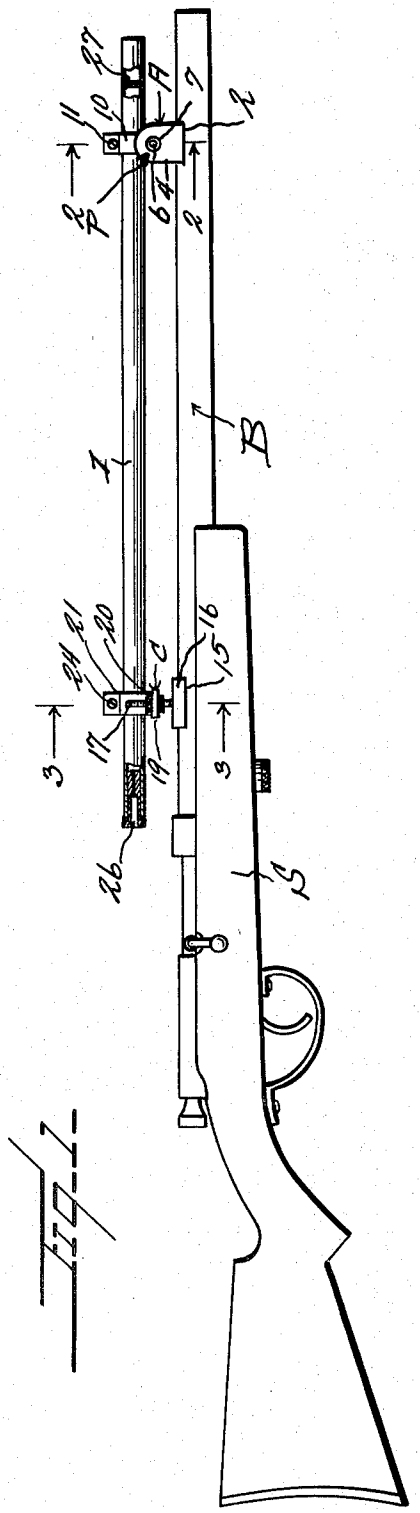


Fig. 1

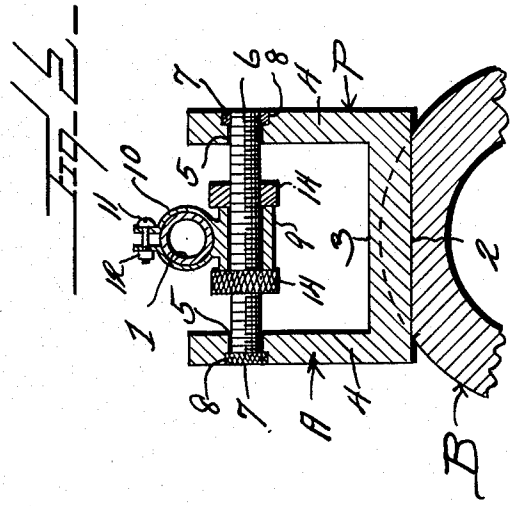


Fig. 2

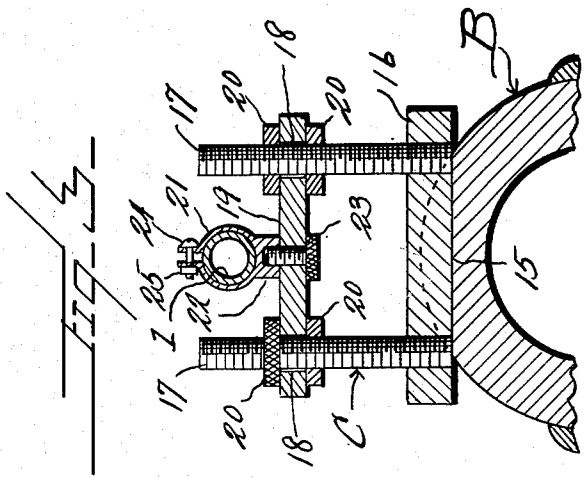


Fig. 3

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GUN SIGHT

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4 Claims. (Cl. 33—50)

This invention relates to a gun sight, and it is an object of the invention to provide a gun sight wherein the actual sighting mechanisms, such as peeps, crotches, crosshairs, etc., are contained within a tube.

The invention also has for an object to provide a gun sight of a character which will substantially eliminate light reflection, fuzziness, blur, shadows, glare, etc. resulting from different degrees and variations of light coming from different angles.

Another object of the invention is to provide a gun sight which, when looked through by a shooter, will appear as a single unit and thus enabling the shooter to concentrate only on two things when sighting, viz. the sight and the object being shot at.

A further object of the invention is to provide a gun sight which can be readily mounted on different kinds of guns and wherein the sight is so constructed and arranged to allow for refined adjustments for both windage and elevation and thus enable the shooter to do precision shooting.

An additional object of the invention is to provide a gun sight that will not require adjusting to offset distortion of the sighting mechanisms or parts because of light falling on the sights from different angles.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved gun sight whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawing, wherein:

Figure 1 is a view in side elevation with portions broken away of a gun sight constructed in accordance with an embodiment of my invention and in applied position upon a gun barrel;

Figure 2 is an enlarged fragmentary sectional view taken substantially on the line 2—2 of Figure 1 with parts in elevation;

Figure 3 is an enlarged detailed sectional view taken substantially on the line 3—3 of Figure 1 with parts in elevation.

As disclosed in the accompanying drawing, B denotes a conventional barrel of a bolt action type of gun and which is associated in a conventional manner with a general type of stock S.

My improved gun sight as herein embodied comprises an elongated sight tube 1 the inside and outside diameters of which together with its length to be varied to suit an individual shooter or a particular gun. A supporting unit A is provided for the muzzle end portion of the tube 1, said unit being also constructed and arranged to provide for adjustment for windage. A supporting unit C is associated with the rear end portion of the sight tube 1 and this unit C is also constructed and arranged to provide means to adjust the tube 1 for elevation.

The top portion of the barrel B at a desired point inwardly from the muzzle of the barrel is provided thereacross with a groove or channel 2 in which is held the intermediate member 3 of an upstanding U-shaped post P. The side arms 4 of this post P, as herein disclosed, are straight from end to end and in parallelism and at right angles to the intermediate member 3. As is clearly illustrated in Figure 2, the arms 4 of the post P are spaced apart in a direction transversely of the barrel B and the upper extremities of the arms 4 are provided with the openings 5 through which are freely insertible the elongated threaded bar 6. The bar 6 is of a length substantially equal to the distance between the outer faces of the arms 4 and threading upon the opposite end portions of this bar 6 are the nuts 7. These nuts 7 are round and are snugly received within the rabbets 8 at the outer ends of the openings 5.

The bar 6 is freely disposed through a collar or sleeve 9 which provides a base for the upstanding spring clamping arms 10. These arms 10 straddle from below the forward or muzzle end portion of the sight tube 1 and are tightly engaged therewith in a conventional manner by the coacting screw 11 and nut 12.

The sleeve or collar 9 readily moves or shifts lengthwise of the bar 6, such movement being under control of the nuts 14 threaded upon the bar 6. The sleeve or collar 9, as particularly illustrated in Figure 2 of the drawing, is positioned between the nuts 14 which are preferably of a round type. By requisite turning of the nuts 14 the sleeve or collar 9 may be moved or shifted lengthwise of the bar 6 to effect desired adjustment for windage for the forward or muzzle end of the sight tube 6. Upon obtaining the desired selective adjustment of the sleeve or collar 9 such adjustment is maintained by causing the nuts 14 to have close or tight contact with the ends of the collar or sleeve 9.

The mounting of the collar or sleeve 9 upon the bar 6 also provides means to provide for the tilting of the tube 1 in a plane at right angles to the bar 6.

The upper surface of the gun barrel B at a desired point inwardly of the groove or channel 2 is provided thereacross with a second transversely disposed groove or channel 15 in which is snugly engaged a base plate 16 comprised in

the structure of the unit C. Threading into the opposite end portions of this base plate 16 at points spaced lengthwise thereof are the lower end portions of the upstanding screw rods 17. The mounting of these screw rods 17, as particularly illustrated in Figure 3, is such as to have these rods 17 spaced laterally with respect to the barrel B.

The rods 17 are freely disposed through the openings 18 provided in the opposite end portions of an elongated bar 19. This bar 19 is, of course, above the base plate 16 and is also disposed transversely with respect to the barrel B.

Threading upon each of the rods 17 are the nuts 20, one of which is positioned above the bar 19 and the other therebelow. These nuts 20 are preferably round and have close contact with the adjacent end portion of the bar 19. By requisite rotation of the nuts 20 on the rods 17 the bar 19 may be readily moved up and down on the rods 17 and rigidly support said bar in desired selected adjustment along the rods 17.

Mounted upon the bar 19 midway of the rods 17 is a clip or spring clamp 21. This clip or clamp 21 includes a base 22 in direct contact from above with the bar 19 and threading from below through the bar 19 and into the base 22 is a holding or set screw 23.

The clip or spring clamp 22 is of a type of straddle the tube 1 from below and said clip or clamp is tightly held in engagement with the tube 1 in a conventional manner by a tightening screw 24 and associated nut 25. Upon raising or lowering the bar 19 along the upstanding rods 17, the rear end portion of the sight tube 1 is raised or lowered to obtain the desired adjustment of the tube 1 for elevation.

The rear end portion of the tube 1 has inserted therein a rear peep sight insert 26 while within the forward or muzzle end portion of the tube 1 is a front sight insert 27. This insert 27 preferably comprises a device having sighting elements arranged in the form of a cross. It is to be understood that the front sight insert may be of other types.

It is also to be particularly pointed out that the inserts 26 and 27 are positioned inwardly of the adjacent ends of the tube 1 sufficient to substantially free the gun sight from interference due to light reflection, glare, distortion, etc. It is further to be pointed out that the tube 1 serves effectually to cut off practically all direct light from striking the actual sighting parts.

It is to be also stated that fair accuracy can be obtained by using the tube 1 without sight inserts and that the farther the inserts 26 and 27 are installed inwardly from the ends of the tube 1, the less they will be affected by lighting.

From the foregoing description it is thought to be obvious that a gun sight constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. A gun sighting apparatus comprising an elongated tube provided on its interior with sighting elements, means for supporting the forward end of said tube upon the barrel of a gun in such a manner as to provide for the tilting of the tube in a vertical plane and the adjustment of the tube in a horizontal direction transversely of the gun, and means for supporting the rear end of the tube upon the gun, said last mentioned means comprising a base plate adapted to be fixed upon the gun barrel, two laterally spaced upwardly extending screw rods carried by said base, a transversely extending bar mounted to move up and down upon said rods, a clip encircling said tube, a set screw extending through said bar and into the clip, and upper and lower adjusting nuts mounted on said screw rods above and below and in contact with said bar near the ends thereof whereby said bar may be adjusted vertically and held securely in vertically adjusted positions on said screw rods to raise and lower the rear end of the sight tube and support it rigidly in its vertically adjusted position.

2. A gun sighting apparatus comprising an elongated tube provided with sighting means, and means for supporting said tube at its forward and rear ends upon the barrel of a gun for movement horizontally transverse thereof, said means comprising a base plate formed with transversely spaced upstanding arms, a transversely extending screw-threaded rod journaled in said arms, a clip attached to the tube near the forward end of the same and mounted for swiveling movement on said rod, and adjusting nuts secured on said rod at the opposite sides of said clip and adapted to hold the clip and the supported forward end of the tube rigidly in laterally adjusted position in respect to the gun barrel.

3. A gun sighting apparatus comprising an elongated tube, means for supporting the forward end of said tube upon the barrel of a gun in such a manner as to provide for the tilting of the tube in a vertical plane and the adjustment of the tube in a horizontal direction transversely of the gun, and means for supporting the rear end of the tube upon the gun, said last mentioned means comprising a base plate adapted to be fixed upon the gun barrel, two laterally spaced upwardly extending screw rods carried by said base, a transversely extending bar mounted to move up and down upon said rods, a clip encircling said tube, a set screw extending through said bar and into the clip, and upper and lower adjusting nuts mounted on said screw rods above and below and in contact with said bar near the ends thereof whereby said bar may be adjusted vertically and held securely in vertically adjusted positions on said screw rods to raise and lower the rear end of the sight tube and support it rigidly in its vertically adjusted position.

4. A gun sighting apparatus comprising an elongated tube, and means for supporting said tube at its forward end upon the barrel of a gun for movement horizontally transverse thereof, said means comprising a base plate formed with transversely spaced upstanding arms, a transversely extending screw-threaded rod journaled in said arms, a clip attached to the tube near the forward end of the same and mounted for sliding movement on said rod, and adjusting nuts secured on said rod at the opposite sides of said clip and adapted to hold the clip and the supported forward end of the tube rigidly in laterally adjusted position in respect to the gun barrel.

RALPH M. SWEET.