Oct. 4, 1966 W. E. ABRAHAMSON 3,276,127

RIFLE SCOPE MOUNT

Filed Oct. 9, 1964 2 Sheets-Sheet 1

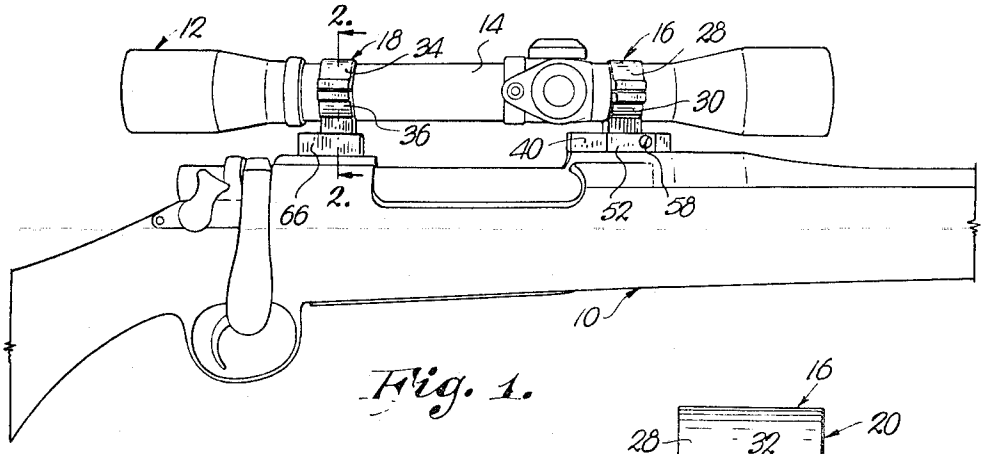


Fig. 1.

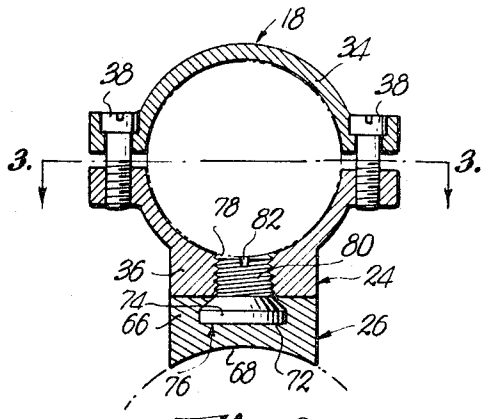


Fig. 2.

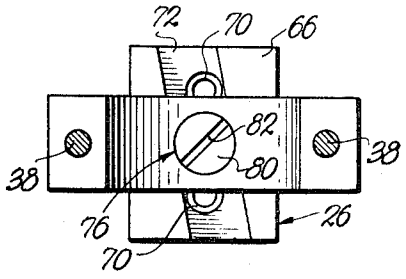


Fig. 3.

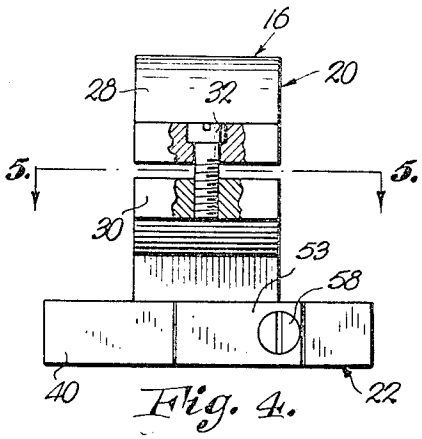


Fig. 4.

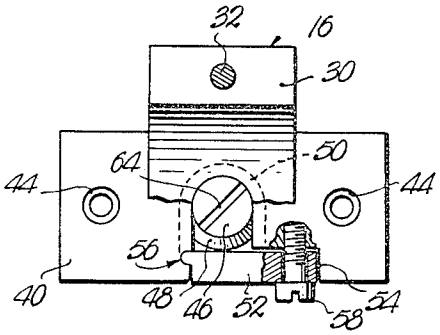


Fig. 5.

INVENTOR.
Wayne E. Abrahamson

BY
Hovey, Schmidt, Johnson & Hovey
ATTORNEYS.

Oct. 4, 1966 W. E. ABRAHAMSON 3,276,127

RIFLE SCOPE MOUNT

Filed Oct. 9, 1964 2 Sheets-Sheet 2

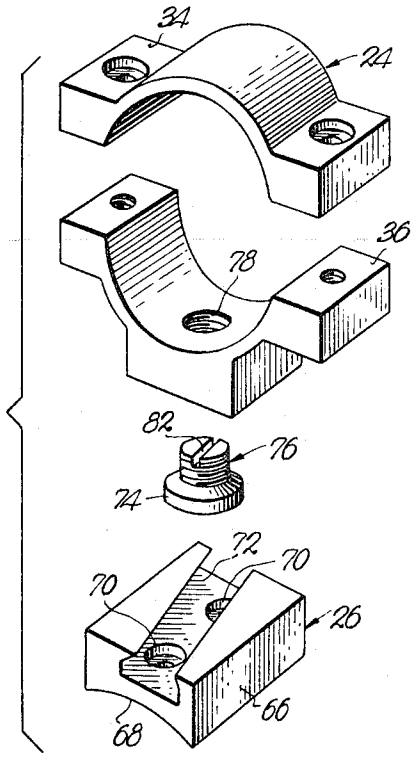


Fig. 6.

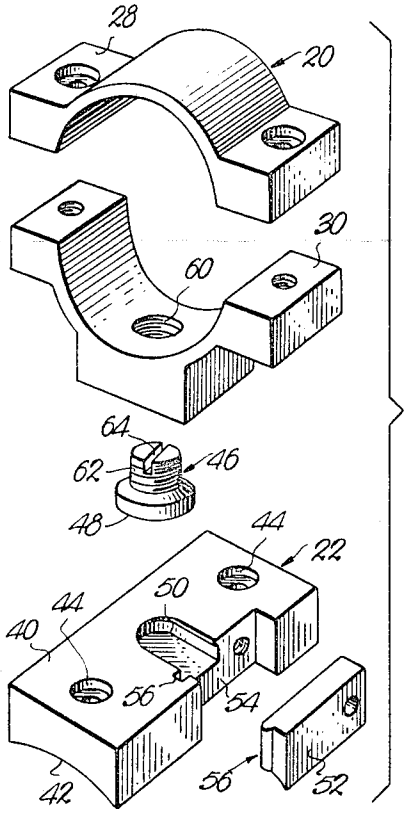


Fig. 7.

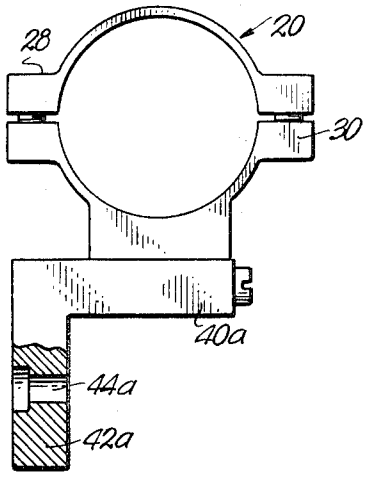


Fig. 8.

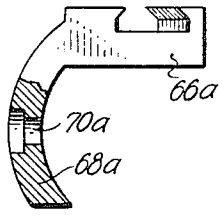


Fig. 9.

INVENTOR.
Wayne E. Abrahamson

BY
Lovejoy, Schmidt, Johnson & Lovejoy
ATTORNEYS.

United States Patent Office 3,276,127 Patented Oct. 4, 1966

3,276,127

RIFLE SCOPE MOUNT

Wayne E. Abrahamson, Calgary, Alberta, Canada
(P.O. Box 5, Penhold, Alberta, Canada)

Filed Oct. 9, 1964, Ser. No. 402,767
1 Claim. (Cl. 33—50)

This invention relates to an assembly for securing a scope to a firearm, the primary object being to provide within the mounting means an arrangement of parts capable of permitting the user to quickly and easily make fine adjustments, that is to say, shift the scope with respect to the firearm and thereby align the scope properly with respect of the firearm barrel, thereby compensating for various conditions such as wind.

It is the most important object of my present invention to provide a scope mount which can be easily and inexpensively manufactured without extreme precision, yet provide for necessary adjustments to properly align the scope with the firearm when mounted thereon and assure desired accuracy, all without need for complicated, delicate and easily damaged component parts.

Still another important object of the instant invention is the provision of an assembly as above described which is unusually rugged, and therefore capable of withstanding considerable abuse, all without adversely affecting initial adjustments made by the user so as to properly align the scope with the firearm.

In fulfillment of the aforementioned objects, the assembly forming the subject matter of my present invention utilizes a pair of spaced mounts, one of which provides, through a pivotal connection, the necessary swinging movement of the scope and the other of which mounts is provided with parts that may be simply shifted fore and aft of the firearm upon loosening of a clamp so as to cause minute swinging of the scope to preselected positions with respect to the firearm.

It is, therefore, another important object of the present invention to provide an assembly which will permit quick release and removal of the scope from the firearm by virtue of the fact that there is provided a pair of substantially identical interchangeable clamps that impale the scope each of which is in turn releaseably secured to bases or blocks, the latter of which are adapted for rigid joinder to the firearm.

In the drawings:

FIGURE 1 is a fragmentary side elevational view of a firearm and a scope showing the latter attached thereto through use of the novel mount of my present invention;

FIG. 2 is an enlarged cross-sectional view taken along line 2—2 of FIG. 1 with the firearm and the scope omitted;

FIG. 3 is a cross-sectional view taken along line 3—3 of FIG. 2;

FIG. 4 is an enlarged elevational view similar to FIG. 1 illustrating one of the mounts of the assembly, parts being broken away and in section for clearness;

FIG. 5 is a transverse cross-sectional view taken on line 5—5 of FIG. 4, parts being broken away and in section to reveal details of construction;

FIG. 6 is an exploded perspective view of one of the mounts of the assembly;

FIG. 7 is a view similar to FIG. 6 illustrating the other of the mounts of the assembly;

FIG. 8 is a rear elevation view, partially in section, illustrating a slightly modified form of one of the mounts; and

FIG. 9 is a view similar to FIG. 8 illustrating a slightly modified form of the other mount, partially in section.

The firearm 10 chosen for illustration of the invention about to be described may be a conventional rifle as seen in FIG. 1, and it is to be appreciated that the particular nature of the scope 12 to be mounted thereon is of little consequence to the invention. For the most part, scopes that are normally employed with rifles include an elongated cylindrical portion 14 adapted to be impaled by a pair of spaced apart clamps as will hereinafter be made clear. The assembly of the instant invention for securing the scope 12 to the firearm 10 includes a first mount broadly designated by the numeral 16 and a second mount 18, it being understood at this juncture that these two mounts might well be reversed with mount 16 rearwardly and mount 18 forwardly if such is desired.

The first mount 16 includes an appliance broadly designated by the numeral 20 connected with a unit broadly designated by the numeral 22. Similarly the second mount 18 includes a coupling broadly designated by the numeral 24 that is connected with apparatus designated generally by the numeral 26.

It is advantageous for the appliance 20 and the coupling 24 to be identical so that the parts thereof are fully interchangeable; accordingly, they are both in the nature of sectional clamps which normally impale and tightly grasp the cylindrical portion 14 of the scope 12. To this end then the clamp or appliance 20 includes a pair of sections 28 and 30 releasably interconnected by a pair of diametrically opposed bolts 32. In the same manner, the coupling or clamp 24 has a pair of sections 34 and 36 releasably held together by bolts 38.

The unit 22 forming a part of the mount 16 is in the nature of a block 40 which may be provided with an interface 42 contoured to conform with the configuration of that part of the firearm 10 to which the block 40 is rigidly secured, as for example through use of fasteners (not shown) received by openings 44 in the block 40.

Connecting this mechanism between the appliance 20 and the unit 22 includes a pivot pin 46 having a head 48 which is received within an undercut recess 50 formed in the block 40. One end of the recess 50 is open to permit insertion of the head 48 thereinto, and ready release of the scope 12 from the firearm 10 as will hereinafter be more fully explained. Such open end of the recess 50 is normally closed by a small plate 52 set within a cavity 54 of the block 40. Plate 52 is releasably held in place by a tongue and groove arrangement 56 and a suitable fastener 58.

Clamp section 30 has a capped opening 60 which receives threaded shank 62 of the pivot pin 46, the latter of which in turn is provided with a tool receiving kerf 64.

The apparatus 26 forming a part of the mount 18 includes a base 66 having a contour 68 similar to and for the same purpose as the contour 42. Here again, openings 70, comparable to the openings 44, are provided in the base 66 to permit rigid securement of the base 66 to the firearm 10.

Base 66 has an elongated, undercut slot 72 that extends obliquely of the longitudinal axis of the firearm 10 for purposes hereinafter to be explained. The slot 72 slideably receives head 74 of a fastener 76 serving as interconnecting structure between coupling 24 and apparatus 26. A tapped opening 78 in clamp section 36 receives threaded shank 80 of fastener 76, such shank 80 having a tool receiving kerf 82.

In operation, the block 40 and the base 66 are rigidly secured in spaced relationship to the firearm 10 in overlying relationship thereto substantially as illustrated in FIG. 1 of the drawings. The clamp section 30 is attached to the block 40 through use of the pivot pin 46 and to this

end it is but necessary to insert a screwdriver into the kerf 64 through the opening 60 in order to draw the clamp section 30 against the upper face of the block 40. The plate 52 may then be placed into the cavity 54, it being noted that the tongue and groove connection 56 operates as a fulcrum as the fastener 58 is manipulated to draw the plate 50 tightly against the head 48, thereby securing the latter tightly within the undercut recess 50. It is to be appreciated at this point that while a rather firm abutment between clamp section 30 and block 40 is desirable, the clamping should not be so tight as to preclude swinging movement of the mount 16 with respect to the unit 22 when adjustments are to be made as about to be described.

The head 74 of the fastener 76 is inserted into the slot 72 through either end of the latter and here again, through use of a screwdriver in opening 78, engaging kerf 82, the clamp section 36 may be drawn tightly against the upper face of the base 66.

Finally, the portion 14 of the scope 12 is placed within the clamp sections 30 and 36, the clamp sections 20 and 24 are placed over the scope 12 and the fasteners 32 and 38 employed to cause the clamps 20 and 24 to tightly grip the scope portion 14. When the scope 12 is to be adjusted, it is but necessary to loosen the fasteners 38 and thereupon shift the clamp section 36 with respect to the base 66 causing the head 74 of fastener 76 to slide within the slot 72 longitudinally of the latter. It is necessary therefore to point out that while fastener 76 should be sufficiently tight to hold the clamp section 36 firmly against the upper face of base 66, it should not be so tight as to permit ready movement of the clamp section 36 with respect to the base 66 for adjustment purposes.

It is now apparent that by virtue of the fact that the slot 72 extends generally fore and aft of the firearm 10, yet obliquely with respect thereto, the movement of the clamp section 36, and therefore the head 74 along with slot 72 will cause lateral swinging of the scope 12 as the result of clamp 20 swinging about the pivot pin 62 and hence with respect to the block 40.

One of the advantageous features of the assembly as above described and as herein initially indicated is the ready removal ability of the scope 12 from the firearm 10 without need of removal of block 40 and base 66. It is but necessary to remove the plate 52 so as to release the head 48 from the recess 50 whereupon the head 74 may be slipped from place within the slot 72. This leaves the fastener 76 on the clamp section 36, the pivot pin 46 on the clamp section 30, the two clamps 20 and 24 on the scope 12 and the two devices 40 and 66 on the firearm 10.

It is extremely important to note that by virtue of the fact that the clamps 20 and 24 remain attached to the scope 12 with the distance therebetween unchanged, the scope 12 is again automatically aligned as before with the firearm 10 when the scope 12 is again reassembled with the firearm 10 by insertion of the heads 48 and 74 in recess 50 and slot 72 respectively.

The same principles of my invention are employed in

the modifications of FIGS. 8 and 9 of the drawings. The differences lie solely in the manner of attachment to the firearm 10. In FIG. 8 block 40*a* may be identical with block 40 in all respects except for elimination of the contour 42 and the addition of a depending flange 42*a*, the latter of which is provided with one or more openings 44*a* comparable to openings 40.

In FIG. 9 base 66*a* is comparable to base 66 except for elimination of the contour 68 and openings 70. Instead, an arcuate flange 68*a* depends from base 66*a* and such flange 68*a* has openings 70*a*. It is to be understood that these slight alterations of FIGS. 8 and 9 are included to illustrate differing attachments to the firearm depending upon the particular nature and contour of the latter, all without altering or varying the concepts as hereinabove outlined and explained.

It can now be appreciated that all of the objects herein initially set forth, including ruggedness, inexpensive manufacture, ease of adjustment and adaptability for use with various types of firearms are accomplished by following my invention as described and illustrated.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

An assembly for securing a scope to a firearm comprising:

a first mount having a unit adapted for attachment to a firearm and an appliance adapted for attachment to a scope;

mechanism connecting said appliance with said unit for swinging movement of the appliance with respect to the unit; and

a second mount spaced from said first mount and having a base adapted for attachment to said firearm and a clamp having a pair of releasably interconnected sections adapted to impale the scope, said base having an undercut slot formed thereon extending obliquely of the firearm, and said clamp having a head complementally received in said slot, the clamp being movable along the scope upon release of the sections for relatively shifting said head in said slot to swing the scope laterally as the appliance swings relative to the unit.

References Cited by the Examiner

UNITED STATES PATENTS

1,816,195	7/1931	Redfield	33—50
2,135,774	11/1938	Tildin	33—50
2,306,972	12/1942	Meisel	33—50
2,445,595	7/1948	Bengert	33—50
2,545,419	3/1951	Williams	33—50
2,563,849	8/1951	Lebherz	33—50

BENJAMIN A. BORCHELT, *Primary Examiner.*

SAMUEL FEINBERG, *Examiner.*

R. V. LOTTMANN, S. W. ENGLE,
Assistant Examiners.