

May 1, 1956

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2,743,526

DETACHABLE TOP MOUNT

Filed Sept. 16, 1954

Fig. 1

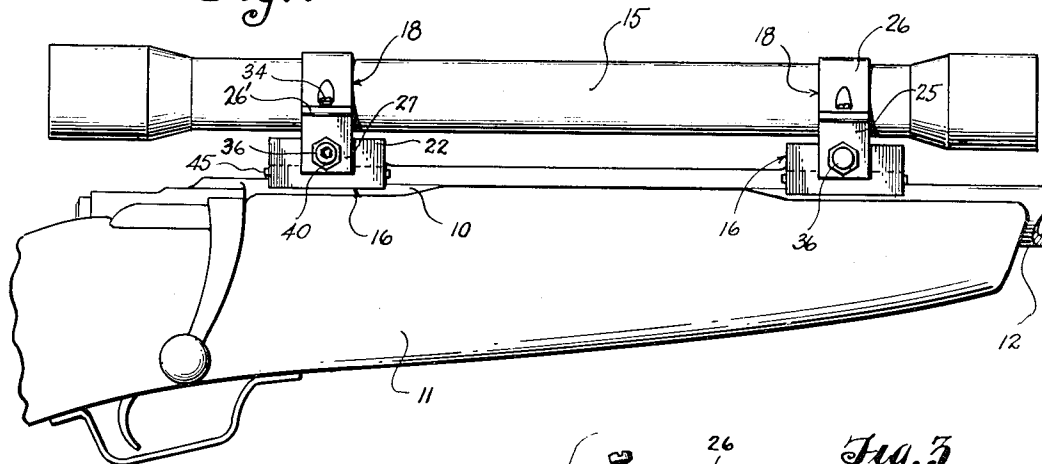


Fig. 2

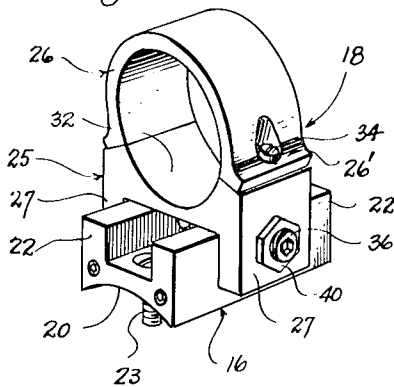


Fig. 3

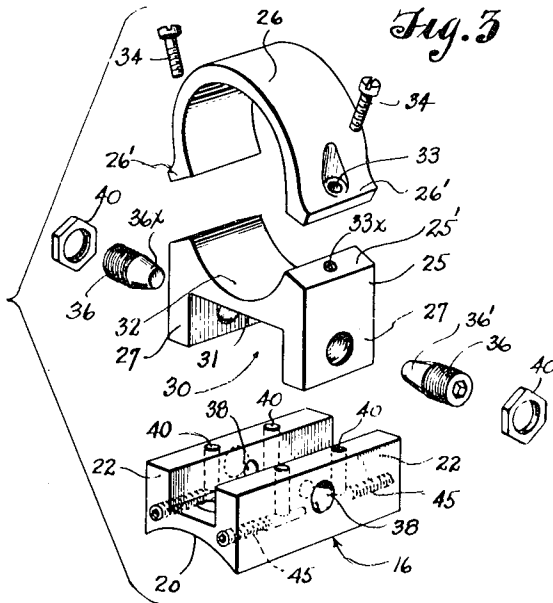


Fig. 4

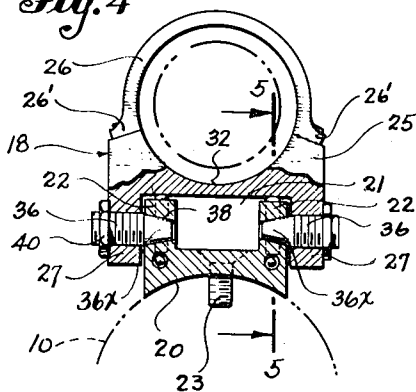
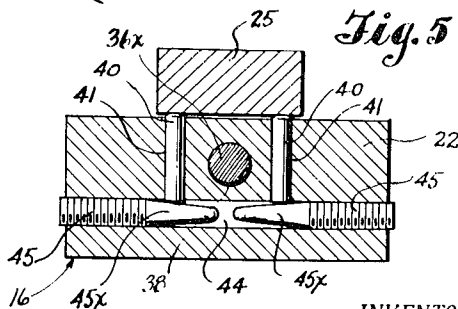


Fig. 5



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2,743,526

DETACHABLE TOP MOUNT

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Application September 16, 1954, Serial No. 456,597

4 Claims. (Cl. 33—50)

This invention relates to telescope mounting means as applied to hunting rifles, or the like, and it has reference more particularly to means that are especially desirable for the mounting of telescopes that are not equipped with internal means for adjusting the position of the reticule.

It is the principal object of this invention to provide what is designated as a "top mount" for supporting a telescope on the frame or barrel of a hunting rifle or shot gun and which mount permits the ready and easy removal of the telescope from the gun when such is desired; which provides for the quick and easy remounting of the telescope on the gun and which provides for all adjustments required for an accurate "sighting in" of the telescope after being mounted. Another object is to provide a top mount that does not interfere with the normal use of the gun sights.

Still further objects of the invention reside in the details of construction and combination of parts embodied in the mounts and in their mode of assembly, and use for the holding of a telescope.

In accomplishing the above mentioned and other objects of the invention, I have provided the improved details of construction, the preferred forms of which are illustrated in the accompanying drawing, wherein:

Fig. 1 is a side view of a portion of a hunting rifle equipped with a telescope and "top mounts" for the telescope embodied by the present invention.

Fig. 2 is a perspective view of one of the mountings detached from the rifle.

Fig. 3 is a perspective view, showing the various parts comprised in the mounting of Fig. 2, in separated relationship.

Fig. 4 is an end elevation of the mounting of Fig. 2, shown partly in section for better understanding of certain details of construction.

Fig. 5 is a section taken on the line 5—5 in Fig. 4.

Referring more in detail to the drawings:

In Fig. 1, the frame portion of a rifle is designated by numeral 10 and a part of the stock to which the frame is secured is designated at 11. The gun barrel, mounted in the frame, is designated by numeral 12 and a sighting telescope, which is typical of a certain type now commonly used on hunting rifles, is designated in its entirety by reference numeral 15.

The telescope 15 is mounted on the gun frame 10 by means of a forward and a rearward mount, each of which is like the other to the extent that each comprises a base block 16, that is adapted to be permanently fixed to the gun frame, and a collar 18 that is applicable about the telescope barrel and is adapted to be adjustably and also detachably applied to its corresponding base block 16.

Since the forward and rearward mounts are alike, both in construction and mode of application in use, the present description will be applied to the parts as comprised in the mount shown best in Figs. 2 to 5 inclusive, with the understanding that the description applies equally

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to both the rearward and the forward of each mount, as illustrated in Fig. 1.

The base block 16, is formed with a cylindrically curved under surface 20 extending the full length of the block and adapted to conform to the cylindrically curved top surface of the gun frame 10 at the point of application of the block. Also, the block is channeled longitudinally and centrally of its top surface to provide it with an open, longitudinal channel 21 defined between the two parallel opposite side flanges 22 and 22. This base block 16 has its cylindrically curved under surface 20 fitted to the top surface of the frame 10 and permanently attached thereto by two screws 23 that are applied downwardly through the base wall of the channel 21 near its opposite ends; the screws being threaded into the frame and having their heads counter-sunk in the channel bottom as has been shown in Fig. 4.

The collar 18 which is associated with the base block 16 comprises a base portion 25 and a top portion 26. The base portion is in block-form and is disposed transversely of the base 16 as well shown in Fig. 2. It has leg portions 27—27 extended directly downward from its opposite sides, spaced apart to receive the opposite side flanges 22—22 of the base block 16 between them with some clearance, thus to provide for limited lateral shifting of the collar on the base. The two depending leg portions, 27—27, define the opposite sides of a downwardly opening recess 30 that has a flat top wall surface 31.

The base member 25 of the collar is formed with a cylindrically curved, upwardly facing seat 32 adapted to receive the cylindrical body portion of the telescope 15 thereagainst in the functional mounting of the telescope.

The top portion 26 of the collar is in the form of a cylindrically curved band that is shaped to conform to and applicable over the telescope barrel when the latter is engaged against the seat 32, and at its opposite ends, this band has outwardly and downwardly directed feet or flanges 26' that are flatly engageable with seats 25' on the base member 25 at opposite sides of the seat 32, and are equipped with holes 33 to receive screws 34 therethrough for the securing of the parts 25 and 26 together, and also for the clamping of the telescope therebetween.

When the parts 16 and 18 are assembled, they assume the relationship in which they are shown in Figs. 2 and 4, and they are joined together by adjusting means best shown in Figs. 4 and 5, and which will now be described.

Threaded inwardly through the opposite leg portions 27—27 of the base portion 25 of the collar 18 are screws 36—36. These screws are in axial alignment with each other and they have conically tapered inner end portions 36x adapted to be seated in similarly tapered conical, and axially aligned sockets 38 formed through the flanges 22—22 of the base member 16. These screws have "Allen" heads to facilitate their adjustment and are equipped with lock nuts 40 adapted to be tightened against the outer faces of the legs 27—27 to hold whatever adjustments of the screws 36 may be made.

It will be understood that by reason of the clearance provided between the legs 27—27 of the part 26, and the flanges 22—22 that extend along opposite sides of the block 16, it is possible to make certain lateral adjustment of the collar 18 relative to the block 16. Such adjustments are made for example, by threading one screw 36 outwardly and the opposite screw 36 inwardly. When the desired lateral adjustment of the collar 18 relative to the base block 16, has thus been made, it is then secured by tightening the lock nuts 40 on the screws against the adjacent legs 27.

If it is desired to make a vertical adjustment of the

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collar relative to the base, this can be accomplished by loosening both the screws 36—36 to a certain extent so that their conically tapered inner end portions 36X do not fully seat in the tapered sockets 38. Then the base 25 is lifted to take up the slack thus provided. This lifting is effected by certain means shown best in Figs. 4 and 5 which comprises a pair of vertical pins 40—40, slidably fitted in vertically bored holes 41 in the opposite flanges 22—22 of the base block 16. At their upper ends, these pins 40 bear against the flat base surface 31 of the recess formed in the underside of the part 25, and at their lower ends they extend into horizontally bored holes 44 in the base portion of block 16. Threaded into the opposite ends of these holes 44 are screws 45 with conically tapered inner end portions 45X engaged with the lower ends of the pins 40. By adjusting the screws 45 inwardly, their tapered ends can be made to push the pins 40—40 upwardly, to the extent permitted by the extent of looseness of the screws 36. It is the usual practice in making this particular adjustment to fully loosen the screws 36, and to then lift the collar to the height desired by the inward adjustment of the screws 45. Then, to tighten the screws 36 into the tapered sockets to hold the part 25 firmly against the upper ends of the pins 40.

Assuming that the parts are so constructed, and that the blocks 16—16 have been fixed to the gun frame in a desired or proper spacing therealong, as shown in Fig. 1, and that the base blocks 25 of the two collars have been applied to the blocks 16, the telescope 15 is then laid in the seats 32 of the two mounts and the collar portions 26 applied over the telescope barrel and secured by the bolts 34. Before tightening the screws 34, the telescope can be adjusted endwise to a position to best suit the user, then clamped by tightening the screws into the holes 33X.

It is customary in sighting in the telescope as thus held in the mounts, to adjust for elevation by use of the adjusting screws 45 of the rearward mount. Then, when this adjustment has been made, to adjust for windage, by means of the screws 36—36 of the forward mount. However, since both mounts are alike, either or both adjustments may be made by either mount.

Due to the fact that the blocks 16 are longitudinally channeled, it will be understood that an un-obstructed view of the gun sights is had even with both mounts and telescope in place and this is of advantage in sighting on moving targets.

If it is not desired to use the telescope, it can be readily removed merely by threading the mounting screws 36 outwardly to clear the flanges 22, and then lifting the telescope off.

Having thus described my invention, what I claim as new therein and desire to secure by Letters Patent is:

1. A telescope mount of the character described comprising a base block adapted to be disposed upon and fixed to a gun frame, and a collar that is adapted for mounting on said base block and to be secured about a telescope barrel; said collar having leg portions at its opposite sides, depending along opposite sides of the base block with clearance that permits limited lateral adjustment of the collar relative to the base block, adjust-

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ing screws threaded inwardly through said leg portions of the collar, in axial alignment, and having conically tapered inner end portions; and said base block being longitudinally channeled centrally of its top surface and to its full length providing an open sighting passage through which the gun sights are visible and provided with correspondingly tapered sockets containing the tapered ends of said adjusting screws therein, and said screws being equipped at their outer ends with means for effecting their adjustment whereby the transverse position of the collar relative to the base block is established.

2. A telescope mount of the character described comprising a base block adapted to be disposed upon and fixed to a gun frame, and a collar that is applicable about a telescope barrel for the securement of said barrel therein; said base block having conically tapered sockets formed therein in axial alignment transversely of the block, and said collar having leg portions at its opposite sides depending at the opposite sides of said base block with clearance that permits limited lateral adjustment of the collar relative to the block, adjusting screws threaded inwardly through said legs, and formed with conically tapered inner ends, corresponding to the taper of the block sockets and adapted to be seated in said sockets for fixed support of the collar, said screws being equipped at their outer ends with means for their adjustment, as may be required for effecting a lateral adjustment and fixed securement of the collar on the block, or for providing looseness in the sockets whereby the collar is permitted limited vertical adjustment in accordance with the degree of looseness, and means associated with the block and collar for fixing the collar in that position of vertical adjustment relative to the base block as permitted by the looseness of the tapered ends of the adjusting screws in the block sockets.

3. A telescope mount as recited in claim 2 wherein lock nuts are threaded onto the outer end portions of said adjusting screws, adapted to be tightened against the legs of the collar to secure an adjustment as established by the set screws.

4. A telescope mount as recited in claim 2 wherein the means for fixing the collar in a position of vertical adjustment relative to the base block as permitted by a looseness of the tapered ends of the collar adjusting screws in the base block sockets comprises push pins that are mounted for endwise movement in the block, with their upper ends engaging against the under surface of the collar as applied to the base block, and adjusting screws threaded into the base block; said screws having conically tapered inner end portions engaged against the lower ends of said push pins with an upward wedging effect for lifting the pins to effect a consequent lifting of the collar to the extent provided for by the looseness of the adjusting screws as mounted in the collar legs, and its securement in that lifted position.

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