Dec. 22, 1931. J. H. REDFIELD 1,837,290

TELESCOPE SIGHT MOUNTING

Filed Dec. 21, 1928

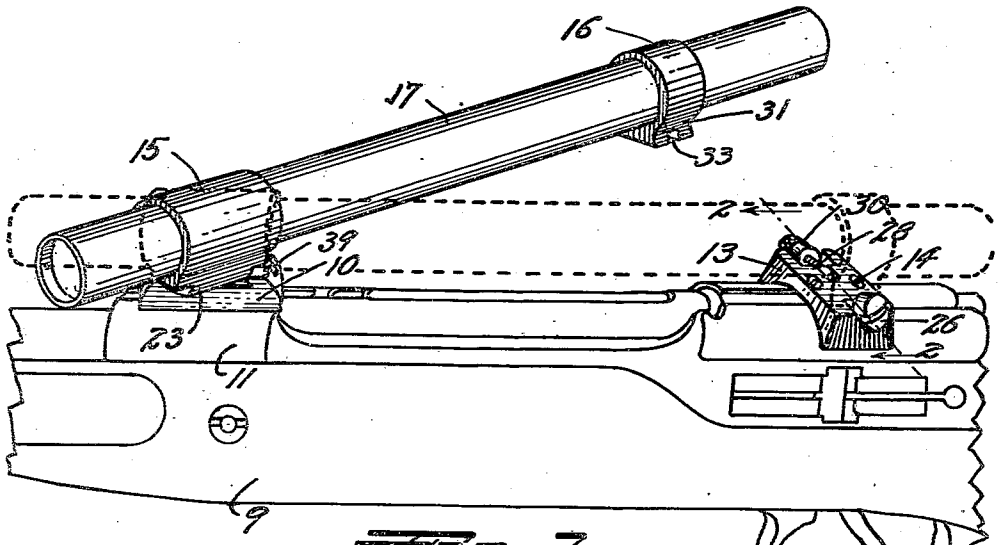


Fig. 1

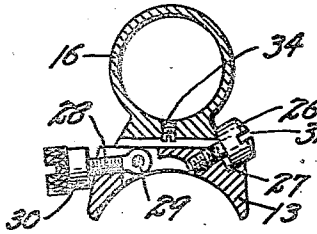


Fig. 2

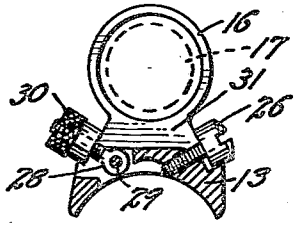


Fig. 3

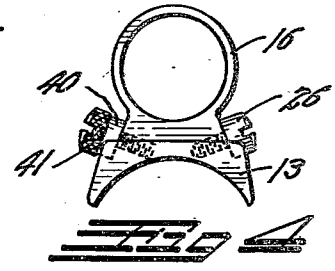


Fig. 4

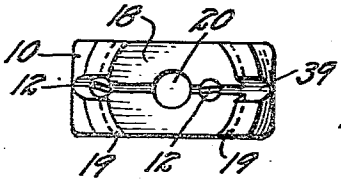


Fig. 5

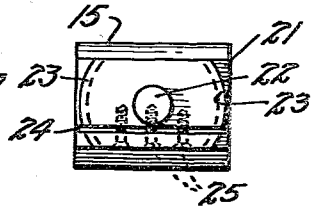


Fig. 6

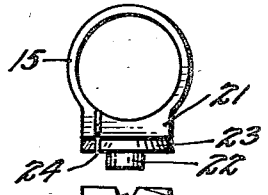


Fig. 7

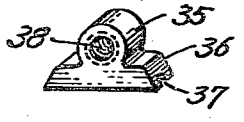


Fig. 8

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UNITED STATES PATENT OFFICE

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TELESCOPE SIGHT MOUNTING

Application filed December 21, 1928. Serial No. 327,494.

This invention relates to means for mounting a telescope upon the barrel of a rifle for sighting purposes and has for its principal object the provision of a simple and efficient means which will allow the telescope to be quickly and easily mounted or dismounted and which will maintain the telescope rigidly in accurate alignment while in use.

Another object of the invention is to provide a mounting which will cause the telescope to always align with a previously determined position when swung to the mounted position so that it will not be necessary to adjust the alignment each time the telescope is mounted.

The invention is designed as an improvement over, and a more simplified form of, the mounting disclosed in the applicant's copending application, Serial No. 275,621 filed May 7, 1928.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention reference is had to the accompanying drawings which form a part hereof. Like numerals refer to like parts in all views of the drawings and throughout the description.

In the drawings:

Fig. 1 is a perspective view illustrating my improved telescopic mounting in place upon the receiver of a rifle. In this view the telescope is shown in solid line swung to one side to illustrate the mounting and dismounting action and in broken line in the mounted position.

Fig. 2 is a cross section through the rear mounting block taken on the line 2—2, Fig. 1, illustrating the rear telescope collar in position thereon.

Fig. 3 is a similar cross section illustrating the telescope in the locked position.

Fig. 4 is an elevation of a simplified form of the invention.

Fig. 5 is a plan view of the forward mounting block.

Fig. 6 is a bottom view looking upwardly at the base of the forward telescope collar.

Fig. 7 illustrates end views of the front telescope collar and front mounting block.

Fig. 8 is a detail perspective view illustrating a sight disc base which may be mounted on the rear mounting block, when the telescope is not in use.

In the drawings a sighting telescope is illustrated at 17, and a typical rifle at 9 with its receiver at 11. The invention is more particularly designed to be attached to the receiver 11 but can be adapted for attachment to the barrel or other portions of the rifle 9.

My invention employs a front mounting block 10 and a rear mounting block 13, both designed to be attached to the receiver 11 by means of pairs of attachment screws 12 and 14, respectively. The front mounting block 10 co-operates with a front telescope collar 15 and the rear mounting block 13 co-operates with a rear telescope collar 16, to maintain the telescope 17 in place.

The forward mounting block 10 is provided with a cylindrical concavity in its bottom to fit over the top of the receiver 11. In the upper face of the block 10 a circular depression 18 is formed having inwardly extending or dovetailed sides 19 which open to the sides of the block 10. Concentrically arranged within the depression 18, is a pivot hole 20.

The forward telescope collar 15 carries a base 21 from which extend a pivot stud 22 and a circular dovetail 23. The collar 15 is split, as indicated at 24, to allow it to be expanded to slip over the telescope 17. When in place, the split is clamped together by means of suitable clamp screws 25.

The rear mounting block 13 is also provided with a cylindrical concavity in its lower face to fit the contour of the rifle receiver 11. A windage screw 26 is threaded into the block 13 at one side and at an angle to the plane of the upper face thereof. The windage screw 26 is provided with a relatively large head which fits into a counterbore 27 in the block. At the other side of the block a clamp screw 28 is hinged upon a hinge pin 29 and provided with a clamp nut 30. The

rear telescope collar 16 is provided with a base 31 having inwardly-flared sides.

To mount the telescope, the base 21 of the forward collar 15 is placed across the front block 10 so that it drops into the depression 18 with its pivot pin 22 in the pivot hole 20. The telescope is then swung to alignment with the rifle barrel causing the dovetail 23 of the base 21 to enter under the dovetailed sides 19 of the depression 18. As the telescope approaches the position of alignment, the base 31 of the rear collar 16 will slide over the upper surface of the rear block 13 until it contacts with the head of the windage screw 26. The attachment screw 28 is now raised about the hinge pin 29 and the clamp nut 30 is tightened. This clamps the telescope rigidly into sighting position with the alignment determined by the position of the windage screw 26.

By relative adjustment of the windage screw 26 and the attachment nut 30 the alignment and windage of the telescope 17 can be adjusted. When the alignment and windage angle has once been set the telescope can be dismounted and remounted without it being again necessary to make this adjustment since the screw 26 will always stop the telescope at the proper position.

In constructing the device, the counterbore 27 should be of a size to frictionally engage the head of the screw 26 so that this screw can not be accidently rotated to affect the windage adjustment. Both the screw 26 and the clamping nut 30 are provided with coin slots 32 in which a coin can be inserted to assist in rotating these members.

The base 31 of the rear collar 16 is provided with a transverse groove 33, which provides clearance for the screws 26 and 28 when the telescope is in position. This groove also provides space for the head of a set screw 34 which clamps the rear collar 16 into position upon the telescope.

A sight post 35, such as illustrated in Fig. 8, is provided which can be clamped upon the rear mounting block 13 by means of the clamp nut 30. This allows an ordinary sight disc to be used in place of the telescope 17 when desired. The sight disc block 35 is provided with a dovetailed base 36 to receive the nut 30 and the head of the screw 26, and with a bottom groove 37 to provide clearance for the screws 26 and 28. A threaded sight socket 38 is provided for the reception of any suitable sighting disc. A sighting groove 39 is cut entirely over the front mounting block 10 to allow the rifle to be used for ordinary sighting without interference by the front mounting block 10.

In Fig. 4 I have illustrated an alternate and more simplified form of the invention. This form is similar to the previously described form except that the hinged attachment screw 28 is eliminated and in its place a second angularly-placed, windage screw 40 is employed. The second screw 40 coacts with the first windage screw 26 to clamp either the base 31 of the rear telescope collar 16 or the post 35 in position. Windage adjustment can be obtained by relative adjustment of the screws 26 and 40. The screw 40 is provided with a knurled head 41 to facilitate its being operated by the fingers to mount and dismount the telescope. In this form of the invention the screw 40 must be entirely removed to dismount the telescope.

It is desired to call particular attention to the efficient action of the angularly placed screws 26, 28, and 40. This angular placement causes the screws to act both inwardly and downwardly so as to firmly lock the telescope against both vertical and horizontal movement.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what I claim and desire secured by Letters Patent is:—

1. Means for mounting a telescope upon a rifle barrel comprising: a forward mounting block; a rear mounting block; a forward telescope sleeve; a rear telescope sleeve; there being a circular dovetailed depression in said forward mounting block opening to the sides thereof and having its side walls undercut; a circular dovetail base on said forward sleeve terminating in the sides thereof and adapted to enter said mounting block depression; a second base formed on said rear telescope sleeve and adapted to rest on said rear mounting block; and screws extending into said rear mounting block so that their heads will engage and maintain said second base in position, one of said screws being hinged so that it can be swung out of the line of travel of said second base.

2. Means for mounting a telescope upon a rifle comprising: a forward mounting block; a forward telescope member adapted to pivot in said mounting block; co-acting means carried by said telescope member and said mounting block so as to lock said telescope in position when it is in alignment with said rifle and to release said telescope when substantially out of alignment therewith; means for maintaining said telescope in alignment with said rifle, said means comprising: a rear mounting block; a rear telescope member; a base on said rear telescope member adapted to slide over said rear mounting block as said telescope is swung; and means for locking said base to said rear block, said means comprising: screws extending into said rear block at a lateral downward angle at each side of said base so that their heads will engage said

base and clamp it between them and toward said mounting block.

3. Means for mounting a telescope upon a rifle comprising: a forward mounting block; a forward telescope member adapted to pivot in said mounting block; co-acting means carried by said telescope member and said mounting block so as to lock said telescope in position when it is in alignment with said rifle and to release said telescope when substantially out of alignment therewith; means for maintaining said telescope in alignment with said rifle, said means comprising: a rear mounting block; a rear telescope member; a base on said rear telescope member adapted to slide over said rear mounting block as said telescope is swung; and means for locking said base to said rear block, said means comprising: screws extending into said rear block at each side of said base so that their heads will engage said base and clamp it between them and toward said mounting block, one of said screws being hingedly mounted to allow it to swing below the upper surface of said rear mounting block to allow said base to be slid thereover.

4. Means for mounting a sighting member on a rifle comprising: a base block having a plane upper surface; screws oppositely threaded into the base block adjacent and at acute angles to its upper surface; heads formed on said screws so as to project above said upper surface; and a sight supporting member arranged to rest upon said upper surface and be clamped between said heads.

5. Means for mounting a sighting member on a rifle comprising: a base block having a plane upper surface; screws oppositely threaded into the base block adjacent and at acute angles to its upper surface; heads formed on said screws so as to project above said upper surface; and a sight supporting member arranged to rest upon said upper surface and be clamped between said heads, said sight supporting member having angularly positioned sides so as to cause said screws to act inwardly and downwardly upon said member.

6. Means for mounting a sighting member on a rifle comprising: a base block having a plane upper surface; screws oppositely threaded into the base block adjacent and at acute angles to its upper surface; heads formed on said screws so as to project above said upper surface; and a sight supporting member arranged to rest upon said upper surface and be clamped between said heads, one of said screws being hingedly mounted to allow it to be depressed below the upper surface of said block.

In testimony whereof, I affix my signature.

JOHN H. REDFIELD.