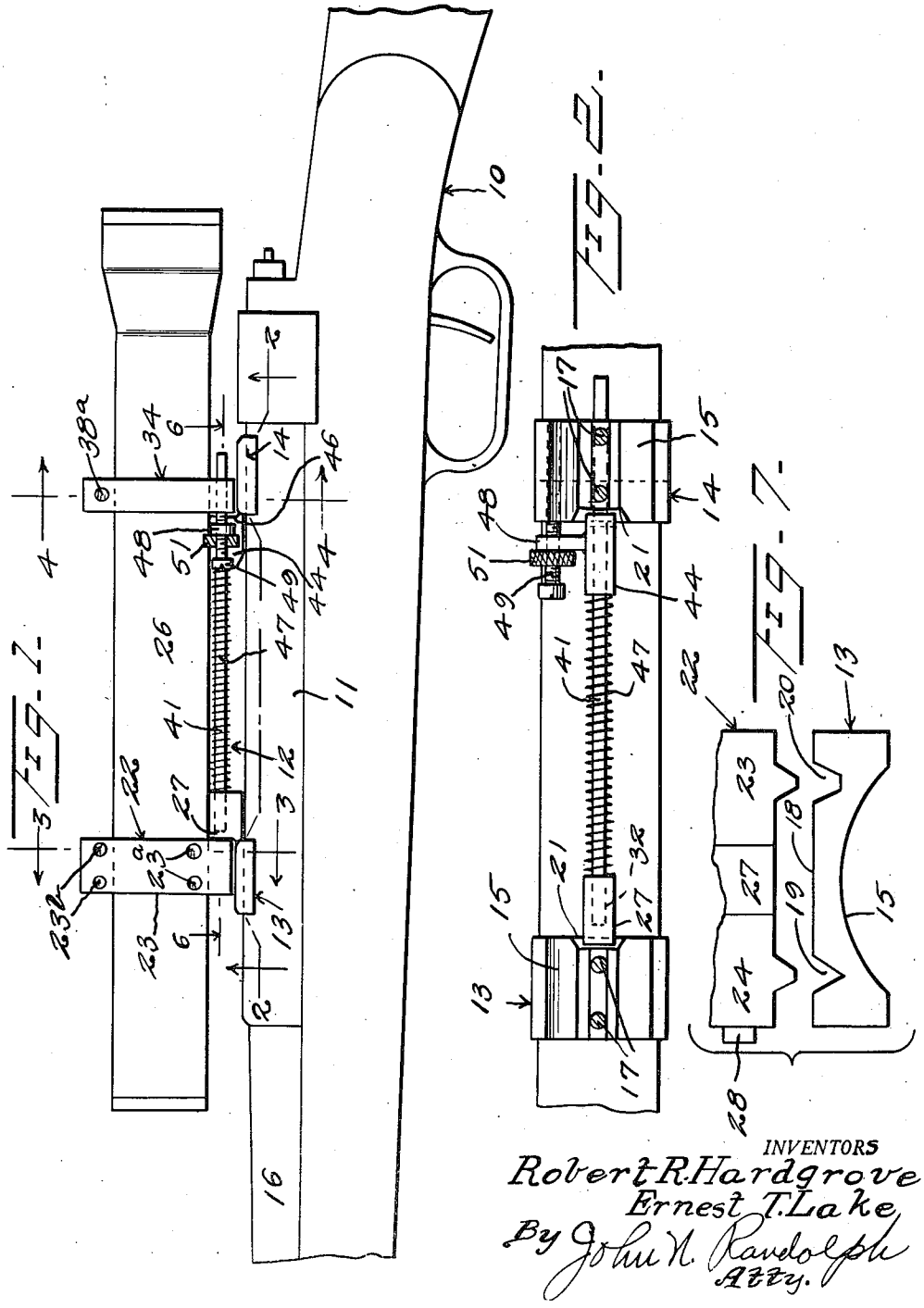
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DETACHABLE TELESCOPE SIGHT MOUNT

Filed Jan. 7, 1953 2 Sheets-Sheet 1



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Filed Jan. 7, 1953 2 Sheets-Sheet 2

FIG. 5.

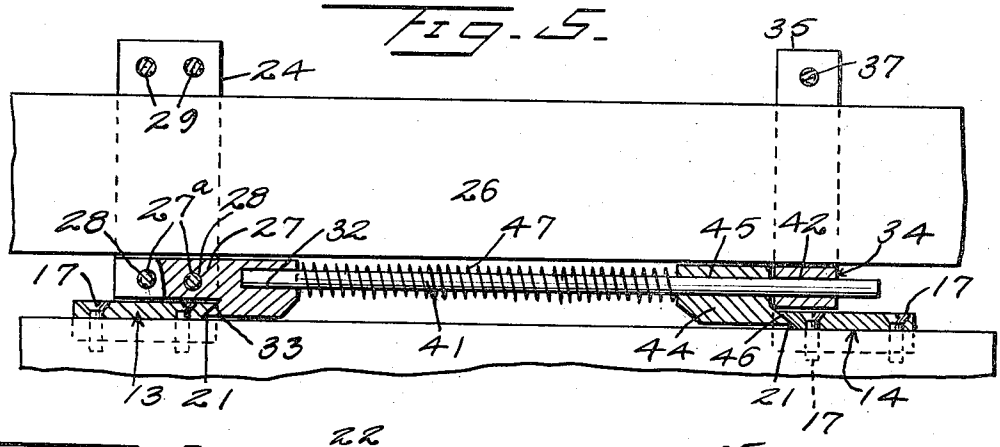


FIG. 3.

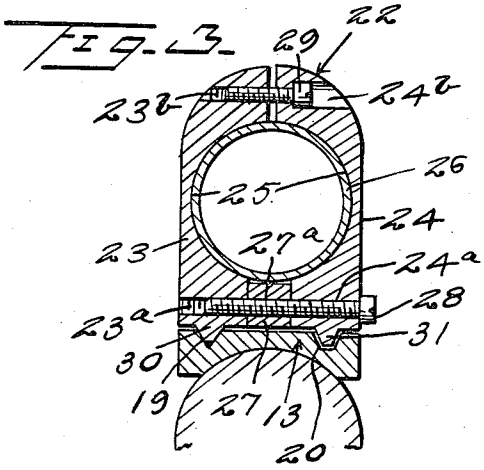


FIG. 4.

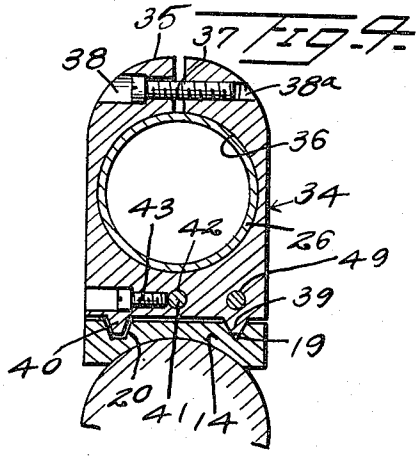
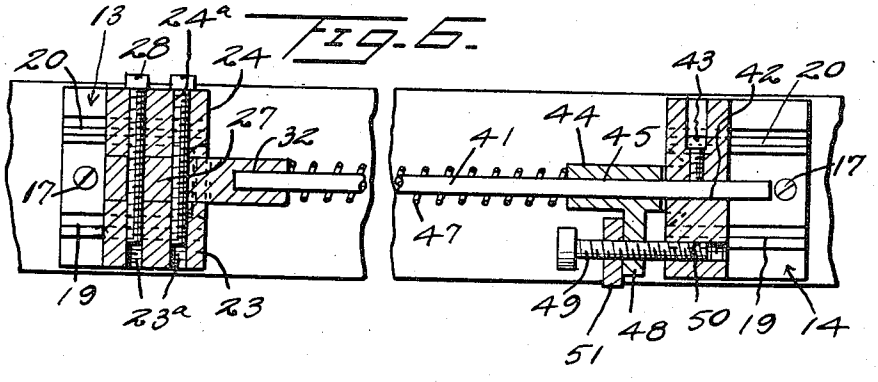


FIG. 6.



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DETACHABLE TELESCOPE SIGHT MOUNT

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6 Claims. (Cl. 33—50)

1

This invention relates to a telescope sight mount for firearms and more particularly to a mount which may be readily secured to space portions of the barrel or tube of a telescope sight for detachably mounting a telescope sight on a firearm and with the axis of the telescope sight properly disposed relatively to the axis of the firearm barrel for accurately sighting the firearm through the telescope sight.

More particularly, it is an aim of the present invention to provide a novel supporting connection between adaptor means which are secured to the firearm and mounting elements which are secured to the telescope sight to insure correct alignment and maximum stability between the detachably connected parts.

Another object of the invention is to provide a telescope sight mounting which may be readily locked nondetachably to prevent removal of the telescope sight from a firearm until the locking means of the mounting is released.

A further object of the invention is to provide a mounting of extremely simple construction which may be very economically manufactured and sold, which will be extremely efficient and durable, and which may be readily attached to a firearm and telescope sight for mounting the telescope sight on the firearm.

Various other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, illustrating a presently preferred embodiment thereof, and wherein:

Figure 1 is a side elevational view showing the mounting in an applied position and demountably supporting a telescope sight on a portion of a firearm;

Figure 2 is a longitudinal sectional view taken substantially along a plane as indicated by the line 2—2 of Figure 1 and showing the sight mounting in bottom plan;

Figures 3 and 4 are cross sectional views of the end portions of the mounting taken substantially along planes as indicated by the lines 3—3 and 4—4, respectively, of Figure 1;

Figure 5 is a longitudinal substantially central sectional view partly in side elevation of the mounting shown in an applied position;

Figure 6 is an enlarged horizontal sectional view taken substantially along a plane as indicated by the line 6—6 of Figure 1, and

Figure 7 is a fragmentary end elevational view of one of the adaptor bases and a portion of one of the mounting brackets shown spaced therefrom.

2

Referring more specifically to the drawings, a portion of a conventional firearm such as a rifle is illustrated in the drawings and designated generally 10 and includes a receiver portion 11. The detachable telescope sight mount, designated generally 12, and comprising the invention, includes a pair of adaptors 13 and 14, each of which comprises a base or block having a recessed underside 15 adapted to conformably fit on a portion of the upper surface of the receiver 11 or which could engage upon the upper surface of the barrel 16 of a particular firearm where the barrel is extended rearwardly a sufficient distance. The adaptors or blocks 13 and 14 are detachably secured on the receiver 11 each by a pair of screw fastenings 17 which extend loosely therethrough and which are threadedly anchored in the receiver 11. The blocks or adaptors 13 and 14 have substantially flat top surfaces 18 in which are formed grooves 19 and 20. The grooves 19 and 20 are disposed parallel to one another and to the axis of the firearm 10 and are disposed adjacent the side edges of the adaptors 13 and 14. Said grooves extend from the front end to the rear end of each adaptor and the groove 19 is of substantially V-shaped cross section, as best illustrated in Figure 7, while the groove 20 has a substantially flat bed and upwardly and outwardly inclined side walls, for a purpose that will hereinafter become apparent. The recessed undersides 15 of the adaptors 13 and 14 intermediate of the side edges of said adaptors and at their adjacent ends, are provided with upwardly and outwardly beveled portions forming inclined hook engaging keeper portions 21.

The mounting 12 includes a front mounting bracket, designated generally 22 formed of similar clamp sections 23 and 24, as best seen in Figure 3, having opposed intermediate recessed portions 25 which substantially engage around a portion of the barrel of a telescope sight 26. A hook shank 27 is interposed snugly between the bottom portions of the sections 23 and 24 and is located directly beneath and longitudinally of the telescope sight 26. The sections 23 and 24 have aligned bores 23*a* and 24*a* which align with transverse bores 27*a* of the hook shank 27. Headed screw fastenings 28 extend turnably through the bores 24*a* and 27*a* and threadedly engage the bores 23*a* for securing the sections 23 and 24 together beneath the sight 26 and with the hook shank 27 secured between the bottom portions of said sections. The upper portion of the section 24 is provided with transverse bores

24b in which the headed ends of fastenings 29 are turnably countersunk and which fastenings 29 threadedly engage transverse bores 23b of the section 23 for drawing the upper portions of said mounting bracket sections together for clamping a part of the telescope sight 26 in said mounting bracket. The mounting bracket sections 23 and 24 have substantially flat bottom surfaces which are provided with ribs 30 and 31 which extend longitudinally of the telescope sight 26 and which are spaced apart a proper distance by the shank 27 to fit the grooves 19 and 20 of the front adaptor 13. The ribs 30 and 31 in cross section each define downwardly and inwardly inclined side walls and a flat bottom surface. The side walls of the ribs 30 contact the side walls of the groove 19 but the flat bottom of said rib 30 is spaced from the bed of the V-shaped rib 19. The flat bottom of the rib 31 contacts the flat bed of the groove 20 and a slight space exists between the side walls of the rib 31 and the side walls of said groove 20. The hook shank 27 extends rearwardly from the mounting bracket 22, as best seen in Figure 5, and has a longitudinally extending recess 32 which opens outwardly of its rear end. The hook shank 27 has a depending rear portion provided with a downwardly and forwardly inclined forward end forming a hook 33 the face of whch conformably fits against the keeper face 21 of the adaptor 13 and which inclined abutting faces tend to cam the hook and mounting bracket downwardly for properly seating the ribs 30 and 31 in the grooves 19 and 20.

A rear mounting bracket 34 of one piece construction having a divided upper part 35 is recessed to define a bore 36 which fits around another part of the telescope sight 26. A fastening 37 engages an unthreaded bore 38 and a threaded bore 38a of the divided upper part 35 for drawing said parts together to restrict the bore 36 for clamping the rear mounting bracket 34 around the telescope sight 26. The flat bottom surface of the mounting bracket 34 is provided with ribs 39 and 40 corresponding to the ribs 30 and 31, respectively, and which engage the grooves 19 and 20 of the rear adaptor 14, respectively, in the same manner that the ribs 30 and 31 engage the grooves 19 and 20 of the front adaptor 13, and as previously described.

A rod 41 has a forward end seated in the rearwardly opening recess 32 and has a portion adjacent its opposite rear end extending slidably through a bore 42 formed in the bottom part of the mounting bracket 34 and directly beneath the axis of the telescope sight 26. A set screw 43 is threaded transversely into the mounting bracket 34 for adjustably securing the rod 41 thereto. A hook 44 has a bore 45 extending longitudinally through the upper part thereof and in which the rod 41 is slidably received for slidably mounting said hook 44 on the rod 41 between the mounting brackets 22 and 34. The hook 44 is provided with a downwardly and rearwardly inclined hook face 46 which engages against the face 21 of the block 14. An expansion coil spring 47 is disposed on the rod 41 between the hook shank 27 and the hook 44 and urges the hook 44 rearwardly so that the two hook faces 33 and 46 are cammed downwardly by the keeper faces 21 to retain the ribs 30 and 39 and the ribs 31 and 40 in engagement with the grooves 19 and 20, respectively.

The hook 44 is provided with a laterally extending apertured ear 48 through which the shank of a headed screw 49 loosely extends. The shank end of the screw 49 is threaded into a bore 50 of the mounting bracket 34 so that the screw extends from said mounting bracket toward the mounting bracket 22. A locking nut 51 is threadedly mounted on the screw 49 between the ear 48 and the head of said screw. It will be readily apparent that the screw 49 together with the ear 48 will effectively function to prevent the hook 44 from turning on the rod 41.

By turning the nut 51 to displace it away from the ear 48 and toward the head of the screw 49, the mounting 12 is unlocked so that by exerting a rearward pressure thereon or on the telescope sight 26, the rod 41 will be displaced rearwardly through the hook 44 so that the front hook 33 can be disengaged from the adaptor 13 and the front part of the mounting rocked upwardly. The rear hook 44 may then be readily disengaged from the rear adaptor 14. By reversing this procedure and engaging the rear hook face 46 with the keeper surface 21 of the rear adaptor 14, the other parts may be displaced rearwardly relatively to the hook 44 by a rearward pressure thereon and which will cause the rod 41 to slide through the hook 44 until the hook face 33 can be displaced downwardly behind the keeper face 21 of the front adaptor 13. The spring 47 will then displace the parts forwardly and engage said hook face 33 with the front keeper face 21 while maintaining the rear hook face 46 in tight engagement with the rear keeper face 21. By simply rotating the locking nut 51 to displace it toward and against the ear 48, the mount is locked so that the hook 44 cannot slide relatively to the rod 41 and so that said rod may not be displaced rearwardly through said hook. The nut 51 is shown in a locking position of Figures 1, 2 and 6. It will also be apparent that when the hook 44 is moved relatively to rod 41 or conversely, that relative movement will occur between the hook 4 and mounting bracket 34 so that the ear 48 will slide relatively to the screw 49, assuming that the locking nut 51 is backed off from the ear 48. As previously stated, the cam faces of the hooks cooperate with the inclined keeper faces 21 and with the spring 47 to displace the mounting brackets 22 and 34 downwardly toward the adaptors 13 and 14 to cause the mounting bracket ribs to seat in the grooves 19 and 20. The side bearing and tip clearance between the ribs 30 and 39 and the grooves 19 and the bottom bearing and side clearance between the ribs 31 and 40 and the grooves 20 provide a structure affording maximum stability and alignment for the telescope sight as the two ribs which engage the grooves 19 effectively prevent lateral displacement of the mounting brackets and telescope sight whereas the two ribs which engage the grooves 20 effectively prevent vertical displacement of said parts.

Various modifications and changes are contemplated and may obviously be resorted to without departing from the spirit or scope of the invention as hereinafter defined by the appended claims.

We claim as our invention:

1. A telescope sight mounting for a firearm comprising a pair of adaptor blocks adapted to be secured to spaced portions of a firearm in longitudinal alignment, a pair of mounting brackets adapted to be detachably clamped to a telescope sight and disposed over said adaptor blocks and in engagement therewith, a first hook fixed to the first one of said mounting bracket and engaging under an end of a first one of said adaptor blocks, said hook having a socket open-

ing outwardly thereof toward the other, second mounting bracket, a rod having one end seated in said socket and having a portion remote to said end extending through said second mounting bracket, means detachably securing the second mounting bracket adjustably to said rod, a second hook slidably mounted on said rod, spring means urging said second hook toward the second mounting bracket and the other second adaptor block for positioning a bill portion of the second hook under a part of said second adaptor block for detachably retaining said mounting brackets in engagement with the adaptor blocks.

2. A telescope sight mounting for a firearm as in claim 1, a threaded member adjustably fixed to and extending from the second mounting bracket toward the first mounting bracket, an apertured ear fixed to and projecting laterally from said second hook and slidably engaging said threaded member for guiding said second hook in sliding movement on the rod.

3. A telescope sight mounting for a firearm as in claim 2, and an adjustable locking stop threadedly engaging said threaded member between said apertured ear and the first mounting bracket for limiting displacement of the second hook away from said second adaptor block and for selectively locking the second hook in engagement with the second adaptor block to prevent detachment of the mounting brackets from the adaptor blocks.

4. A telescope sight mounting for a firearm as in claim 1, said adaptor blocks having downwardly and inwardly inclined keeper faces in the undersides of their adjacent ends, and said hooks having downwardly and outwardly inclined upper surfaces disposed in camming engagement with said keeper faces for displacing the mounting brackets toward and into tight engagement with the adaptor blocks when said slidably mounted hook is spring urged away from said first hook.

5. A telescope sight mount for a firearm as in claim 4, said adaptor blocks and mounting brackets having adjacent faces provided with interfitting ribs and grooves disposed parallel to the axis of the firearm and telescope sight.

6. A telescope sight and mount for a firearm as in claim 5, certain of said grooves being of V-shaped cross section and other of said grooves having flat beds and upwardly and outwardly diverging side walls, certain of said ribs having tight fitting engagement with the side walls of the V-shaped grooves and clearance between the bottoms of said ribs and the beds of the V-shaped grooves, and other of said ribs having bottom surfaces contacting the bottom surfaces of the flat beds of said other grooves and having slight clearance between the side walls of said last mentioned ribs and the upwardly diverging side walls of said last mentioned grooves.

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