

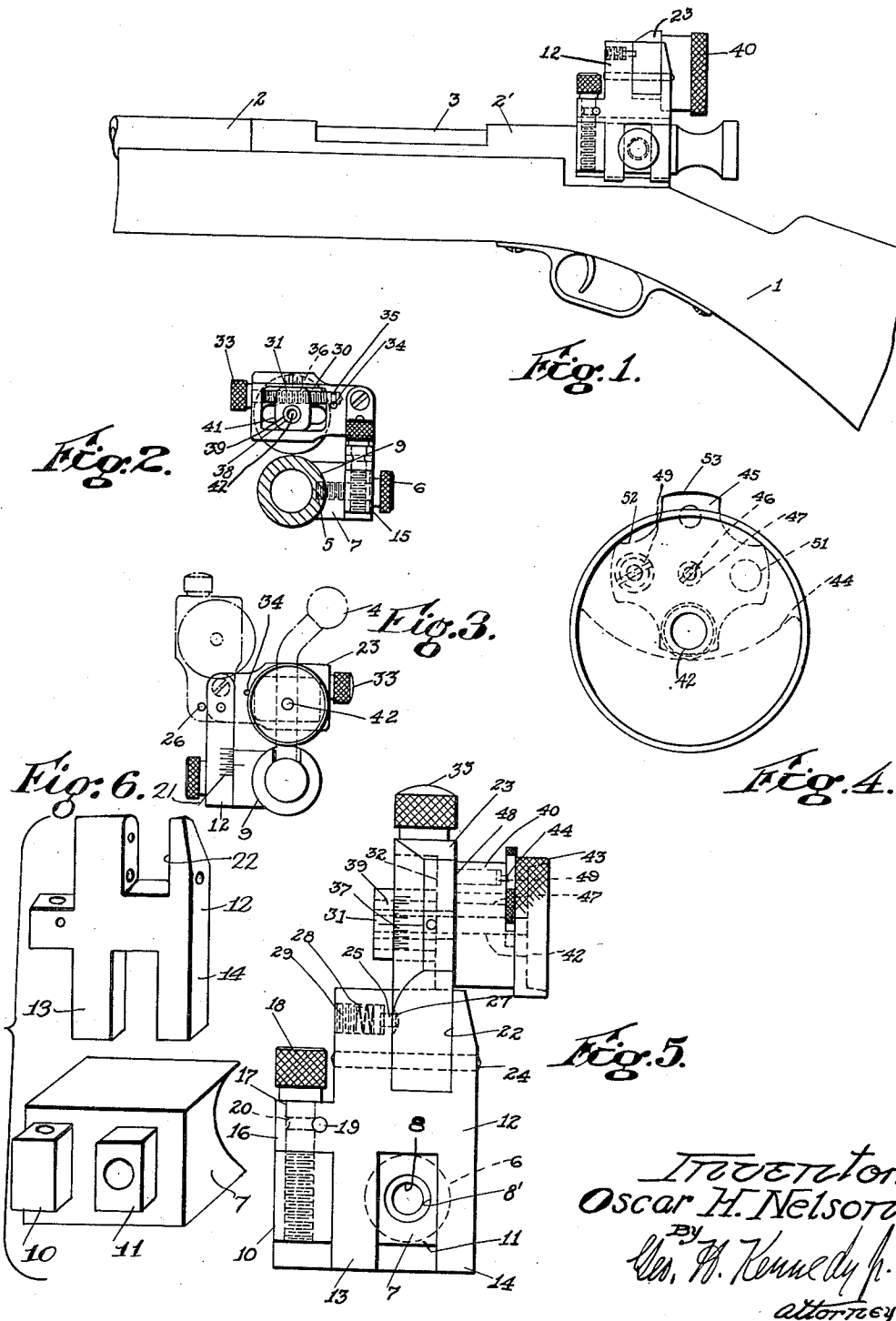
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SIGHT FOR FIREARMS

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SIGHT FOR FIREARMS

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The present invention relates to a sight for fire-arms and particularly to a peep sight having a provision for adjusting the size of the opening through the sight, as well as a provision for elevation and windage adjustment.

In prior devices of this character the size of the opening in the peep sight has been changed by substituting one disk for another having a different size of opening, and there is always the possibility that the interchangeable disks may become lost, making impossible the substitution of a sight having the desired size of opening. One object of the present invention is to provide a peep sight having a provision for varying the size of the opening in the sight by the use of a single disk which is an integral part of the sight.

In the use of a sight of this character with rifles having a sliding bolt, with a provision for removing the entire bolt from the end of the barrel extension or frame which is a functionally integral part of the barrel, it is necessary that the sight, if located at the rearward end of the barrel extension, be so positioned as to permit withdrawal of the bolt, and a further feature of the invention resides in a provision for swinging the sight into and out of operative position without the necessity for the removal of the sight from the fire-arm. Moreover, in the use of sights on fire-arms of this character it has been customary to place the sight either on the stock in back of the barrel or on the barrel in front of the bolt. Another feature of the invention resides in the provision for mounting of the sight directly on the rearward end of the extension. A further object of the invention is to provide for elevation and windage adjustment with the use of a minimum number of parts.

Other and further objects and advantages of the invention will appear from the following detailed description of the invention taken in connection with the accompanying drawing in which—

Fig. 1 is a side elevation of the device attached to a rifle.

Fig. 2 is a front elevation of the sight showing the end of the barrel extension in section.

Fig. 3 is a rear elevation of the sight.

Fig. 4 is an enlarged rear elevation of the peep sight.

Fig. 5 is a side elevation on a larger scale of the device.

Fig. 6 is a perspective view of two cooperating parts of the device separated from each other.

Like reference characters refer to like parts in the different figures.

With reference to Fig. 1, the sight is shown attached to a rifle having the stock 1 and barrel extension 2, to which is attached so as to be a permanent part thereof, an extension or frame 2' in which the bolt is slidable. This extension forms a rearward continuation of the barrel substantially in alinement therewith and this extension and barrel are suitably secured to the stock 1 by any usual construction suitably secured together. The bolt 3 of the rifle is actuated by a bolt lever 4, Fig. 3, which normally extends outwardly and downwardly on the right hand (rearward Fig. 1) side of the fire-arm and is accordingly not visible in Fig. 1. The sight is attached to the rearward end of the fire-arm and in the normal position extends over the top of the barrel or extension with the sight opening directly above the center of the barrel. For attachment of the sight, the barrel extension has a threaded opening 5 in the side thereof, Fig. 2, which receives the clamping screw 6 by which the sight is attached to the fire-arm. Although the device is shown in connection with a rifle it will be apparent that it is equally applicable to other types of fire-arms and the rifle is shown merely as one example of a fire-arm to which the device may be secured, and the sight may be secured to the barrel, or extension, or to other parts of the fire-arm.

The device of the invention comprises a base 7 having an opening 8 therethrough to receive the clamping screw 6 and the inner surface of the base is arcuate, as at 9, Figs. 2 and 3, to engage with the barrel extension of the fire-arm. The opening is recessed at its outer end as at 8' to receive a coil spring, not shown, between the base and the head of the screw 6 to hold the base against the barrel extension when the screw 6 is loosened. The side of the base opposite to the arcuate surface 9 has spaced lugs 10 and 11 which provide a guideway for a vertically movable member 12, the latter having depending legs 13 and 14, the former being located between the lugs 10 and 11. The thickness of the lug 11 is slightly less than the thickness of the legs 13 and 14, so that the outer surface 15, Fig. 2, of the lug 11 will be spaced inwardly from the outer surfaces of the legs 13 and 14. The clamping screw 6 accordingly clamps the member 12 against vertical movement when said screw is tightened to hold the device on the fire-arm, the head of the clamping screw 6 being shown in dot and dash lines, Fig. 5, to indicate that it is large enough to overlap the legs 13 and 14.

A laterally projecting lug 16 on the member

12 has a vertical bore 17 to receive a screw 18 which is held against movement in the bore 17 by a pin 19 positioned in the member 12 and engaging with an annular groove 20 in the screw.

5 The lug 10 is threaded to engage with the threads on the screw 18 and turning movement of said screw will accordingly raise or lower the member 12 relative to the base 7, the relative positions of the base 7 and member 12 being shown 10 by indicia 21 on the rearward side of the parts. The screw 18 thus provides for an elevation adjustment of the peep sight and the clamping screw 6, when tightened, holds the sight in adjusted position with relation to the barrel, and 15 also secures the device to the fire-arm.

The upper end of the member 12 has a recess 22 in which is positioned a holder 23, the latter being pivoted on a pin 24 extending horizontally through the member 12. The holder 23 is normally in the horizontal position of Figs. 2 and 3, but may be swung into the vertical position of Fig. 5, (shown in dotted lines in Fig. 3) when desired. A spring pressed plunger 25 positioned in the member 12 engages selectively with recesses 26 and 27 on the holder to hold the device 25 in either its horizontal or vertical position. The plunger is held in notch engaging position by a spring 28 positioned between the plunger and a threaded plug 29. The holder is thus pivotally 30 mounted on an axis substantially parallel to the barrel of the fire-arm.

The holder 23 has a recess 30 in the front side thereof to receive a slide 31, the inner end of the slide engaging with the bottom wall 32 of the recess. A screw 33 having a knurled head extends horizontally of the holder 23 and is held against movement relative to the holder by a pin 34 which engages a small annular groove 35 in the end of the screw. The slide 31 has a 40 threaded bore 36 engageable with the threads on the screw 33 so that turning of the screw 33 moves the slide relative to the holder, the relative position of these parts being indicated by indicia 37 on the holder and slide. The screw 45 33 thus provides for a windage adjustment of the peep sight.

The slide 31 has a threaded bore 38 there-through below and at right angles to the bore 36 for engagement with the threaded stud 39 50 on the eye piece 40 of the peep sight, said stud extending through a slot 41 provided in the holder 23. When the desired windage adjustment is made by shifting the slide relative to the holder the slide is held in adjusted position by tightening the eye piece 40, thereby clamping the slide 31 against the bottom wall 32 of the recess 30. The eye piece and associated stud have an opening 42 therethrough to form the sight opening and the rearward side of the eye piece preferably has a projecting flange 43 which is customary in peep sights. 60

The arrangement for adjusting the surface of the sight opening is best shown in Figs. 4 and 5. Referring to these figures, the eye piece has a radial slot 44 which receives a disk 45 pivoted 65 on the projecting end 46 of a threaded pin 47, the latter extending inwardly from the surface 48 of the eye piece which engages with the rear side of the holder 23. In spaced relation to the pivotal support for the disk is a spring pressed plunger 49, the end of which engages in spaced openings 51 in the disk, these openings being so spaced as to hold the disk releasably against turning movement when another of the openings 70 51 in the disk is in alignment with the bore 42.

The openings 51 vary in size to provide for varying the size of the sight opening. The disk 45 is preferably provided with cut out portions 52 in the outer edge thereof to provide projecting lugs 53 for easy turning of the disk. The 5 plunger 49 is held in position by a spring and threaded plug similar to the spring 28 and threaded plug 29 above described, said plug being accessible from the surface 48 of the eye piece. It will be noted that the eye piece 40 is so located 10 with reference to the holder that the lugs 53 by which the sight disk is turnable are in substantially horizontal alignment with the axis of the eye piece, when the latter is tightened to clamp the slide, so that the person using the 15 fire-arm can easily turn the disk with his right thumb without moving the hand from the customary position on the fire-arm.

In use the disk 45 is adjusted until the desired size of opening is provided for the sight and the eye piece is adjusted for a windage correction by temporarily loosening the eye piece, thereby allowing the slide to move relative to the holder. The eye piece is then tightened to hold the parts in adjusted position. Elevation 25 adjustment of the eye piece is provided by loosening the clamping screw 6 and turning the screw 18 to raise or lower the eye piece, after which the clamping screw 6 is again tightened to maintain the adjustment. When the bolt is to be removed from a rifle when the sight is attached to a fire-arm of this character, the holder 23 is pivoted relative to the member 12 into the dot-dash line position of Fig. 3 and the holder is then out of alignment with the bolt lever 4 35 when said lever is raised, so that the bolt will be removed at the rear of the barrel extension. It is to be noted that the sight is attached to the extension at the rear thereof rather than forwardly of the bolt, as is frequently the case. 40

From the foregoing it will be apparent that the device provides a peep sight having a provision for changing the size of the opening in the sight and also providing for elevation and windage adjustment of the sight relative to the 45 fire-arm on which the sight is positioned. The sight is also arranged to be attached to the side of a barrel or barrel extension of the fire-arm adjacent its rearward end thereof so that the sight will not interfere with the bolt action of 50 the arm to which the sight is attached.

I claim:

1. A sight for fire-arms comprising a base having an arcuate surface for engagement with the barrel or barrel extension of a fire-arm, a supporting member vertically slidable on the base, means for adjusting the relative position of said member and the base, a single clamping screw for holding the base on the fire-arm and for clamping the member against movement on the base, and a sight carried by said member. 60

2. A sight for fire-arms comprising a base having an arcuate surface for engagement with the barrel or barrel extension of a fire-arm, a supporting member vertically slidable on the base, means for adjusting the relative position of said member and the base, a single clamping screw for holding the base on the fire-arm and for clamping the member against movement on the base, a holder pivotally mounted on the member on an axis substantially parallel to the barrel of the arm, a sight carried by said holder, and means providing for a relative adjustment of the sight on the holder. 70 75

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3. A sight for fire-arms comprising a base having an arcuate surface for engagement with the barrel or barrel extension of a fire-arm, a supporting member guided by and movable relative to the base, means for adjusting the relative position of said member and the base, a clamping screw for holding the base on the fire-arm and for clamping the member against movement on the base, a holder pivotally mounted on the member on an axis substantially parallel to the

barrel of the fire-arm, a slide movable on the holder, an eye piece having a threaded stud engageable with the slide, and means for shifting the slide relative to the holder in a direction substantially at right angles to the direction of adjustment of the member on the base when the eye piece is in operative position, said slide being clamped against movement by tightening the eye piece in the slide.

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