

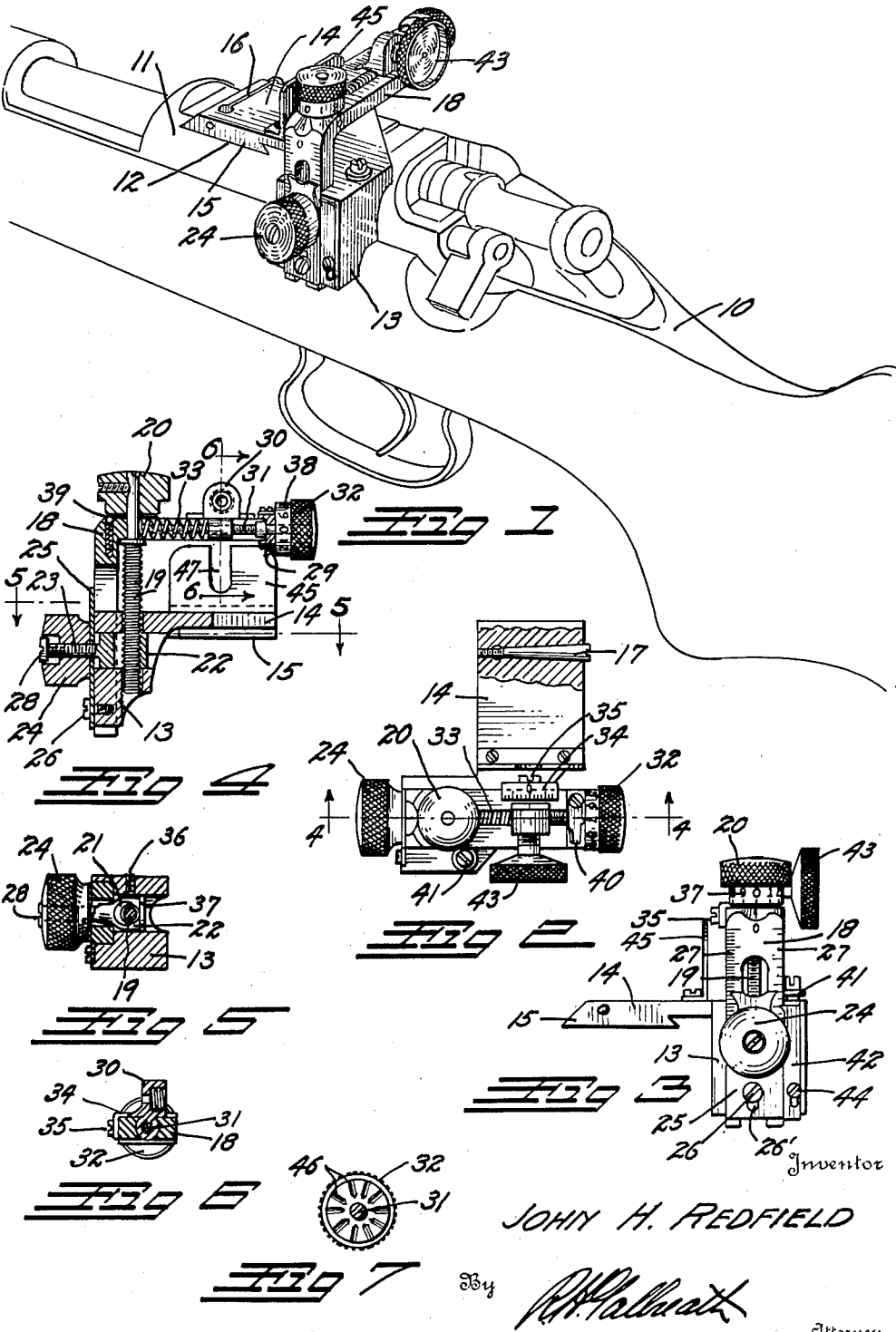
Aug. 21, 1934.

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1,970,623

REAR SIGHT FOR GUNS

Filed Jan. 19, 1932



1584

1416

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Patented Aug. 21, 1934

1,970,623

UNITED STATES PATENT OFFICE

1,970,623

REAR SIGHT FOR GUNS

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Application January 19, 1932, Serial No. 587,525

5 Claims. (Cl. 33—56)

This invention relates to a gun sight, more particularly to the type of sight known as a receiver sight, that is, a rear sight adapted to fit over the receiver of a rifle.

5 The principal object of the invention is to provide a sight of this type which can be immediately moved to the desired distance adjustment so as to eliminate the tedious turning of an adjusting screw.

10 Another object of the invention is to provide means for taking up all wear and lost motion in the adjustment screws so that the sight will remain accurate indefinitely.

15 A further object is to provide an efficient means for locking a dove-tailed member into its socket so that it will not become loosened therein.

A still further object is to provide means for shielding the user's eyes from light shining beneath the sight supporting bridge.

20 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.

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

30 In the drawing:

Fig. 1 is a perspective view illustrating the invention in place upon a rifle.

35 Fig. 2 is a plan view of the improved sight, partially broken away to show the dove-tail locking screw.

Fig. 3 is a side view thereof.

40 Fig. 4 is a vertical section taken on the line 4—4, Fig. 2.

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

Fig. 6 is a detail section taken on the line 6—6, Fig. 4.

Fig. 7 is a detail view illustrating the rear face of the knurled heads.

45 In the drawing, a typical rifle is indicated at 10, with its receiver at 11. The receivers of certain types of rifles, more particularly target rifles, are usually provided with a laterally extending, dove-tailed groove 12. The present invention is more particularly designed to be attached in the dove-tailed groove 12.

50 The invention comprises a base block 13, having a horizontally extending portion 14 arranged to pass over the top of the receiver 11. On the bottom of the forward extremity 14, a dove-tailed boss 15 is formed and arranged to normally slide into the dove-tailed groove 12 of the receiver. It will be noted that this forward extremity is provided with a laterally extending slit 16 which extends almost entirely across the portion 14. A

tapered expanding screw 17 is positioned within the slit 16. When in place in the dove-tail 12, the expanding screw 17 may be turned to expand or increase the width of the dove-tailed boss 15 so as to clamp it securely into the groove 12. The major portion of the length of the screw 17 is without threads and is smoothly tapered. The extremity is threaded into the non-split portion of the base block.

65 The base block 13 is formed so as to overhang the left side of the receiver 11. Two parallel vertical grooves are formed in this overhanging portion to receive the furcations of a bifurcated vertical leg formed on an L-shaped bridge member 18 which supports the sight proper. The bridge member 18 is adjusted and supported at any desired height above the base block 13 by means of a distance screw 19 which terminates above the bridge member in a knurled head 20. The distance screw 19 may pass freely through the base block 13 as it is not threaded therein. It is, however, threaded into an elongated screw opening 21 in a nut member 22. The nut member 22 is carried on the extremity of a clamp screw 23 and is laterally slidable within the base block 13.

70 The clamp screw 23 may be tightened by means of a knurled clamp nut 24 which is threaded thereon. A small stop screw 28 is threaded into the extremity of the clamp screw 23 so as to prevent the nut 24 from being entirely unscrewed therefrom. The nut 22 is prevented from being entirely withdrawn, should the distance screw 19 be removed, by means of a set screw 36 which is threaded into the block 13 so as to engage a peripheral flange 37 formed upon the nut 22.

75 A leaf friction spring 25 is positioned under the clamp nut 24 and is secured to the base block 13, between the furcations of the vertical leg, by means of a suitable screw 26. Therefore, it can be seen that when the clamp nut 24 is tightened it will draw the threaded portion of the elongated screw opening 21 against the screw 19 so that when the latter is rotated it will thread itself up and down therein.

80 However, when the clamp nut 24 is loosened and is pushed inwardly by the user's thumb, it will force the threaded portion of the elongated opening 21 away from the distance screw 19 so that the latter may be freely raised or lowered to the desired position without rotation. The leaf spring 25 serves to normally clamp the nut 22 against the screw 19 until the nut 24 is pressed upon.

85 The upper extremity of the spring 25 is formed into two indicating points which indicate positions upon distance scales 27, marked on the face of the vertical leg of the bridge member. The spring 25 can be adjusted to the proper position.

tion along the scales 27 by loosening the screw 26 which passes through an elongated adjustment opening 26' in the spring.

The horizontal leg of the bridge member 13 is also bifurcated, the open extremity being closed by means of a cross piece 29. A sight member 30 slides along the horizontal leg and projects into the slot therein to receive a windage screw 31. The sight member is designed to receive any of the usual sights, such as the disk sight 43 of Fig. 1. The windage screw 31 is journaled in the cross piece 29 and terminates in a knurled head 32.

Therefore, it can be seen that rotation of the head 32 will cause the sight member 30 to travel across the horizontal leg of the bridge member 13. A compression spring 33 is placed about the windage screw 31 between the sight member 30 and the distance screw 19. This spring will always be under compression so that it will constantly force the sight member 30 against its threads on the windage screw 31 so as to take up any wear, play, or lost motion. Therefore the motion imparted to the sight member 30 will be positive regardless of any looseness between its threads and the threads of the windage screw 31 or between the windage screw and its bearings.

The user can read the windage position upon an adjustable windage scale 34, which is secured to the horizontal leg of the bridge member 13 by means of a slotted opening and a set screw 35. A micrometer adjustment can be read upon the distance screw by means of a scale 37 upon the head 20. A similar adjustment can be read upon the windage screw 31 by means of a scale 38 on the head 32.

Both heads 20 and 32 are stopped at each indication on the scales 37 and 38 by means of spring actuated ball clicks 39 which ride into notches 46 in the bottoms of the heads. The head 32 may be locked at any desired adjustment by means of a locking lever 40 provided with a point, as illustrated, which when the lever is swung to the right, enters one of the click notches 46 in the head 32.

A point blank screw 41 is threaded into the block 13 and is provided with a peripheral flange which will engage the bottom of the leg 18 when the latter is forced downward, to stop it at any pre-determined point-blank position. A second distance indicator 42 is secured on the face of the block 13 so as to indicate on one of the scales 27. This indicator is adjustable to any desired position by loosening a set screw 44.

A light shield 45 may be permanently fixed to the horizontal portion 14 of the base block 13 so as to stop light from passing under the bridge member 18 to the eyes of the user. The shield 45 is provided with a vertical slot 46 which prevents it from interfering with the line of sight.

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 is claimed and desired secured by Letters Patent is:—

1. Means for attaching a gun sight to a gun

comprising: a dove-tailed boss formed in said sight and arranged to enter a dovetail groove in said gun, said boss having a split extending partially thru it parallel to the sides of said dovetail; there being a non-split portion closing one extremity of said split, a screw extending longitudinally of said split and threaded into the non-split portion of said boss; and a tapered portion on said screw arranged to force the two sides of said split apart so as to wedge said boss into said groove.

2. A gun sight comprising: a base block; means for securing said base block to one side of said gun; an L-shaped bridge member, the vertical leg of which is arranged to slide in a vertical groove in said base block, the horizontal leg of which extends over said base block; a sight member supported by said horizontal leg; a vertical screw journaled in said bridge member and arranged to raise and lower the latter over said base block, said screw being free to pass thru said base block; a nut member in said base block arranged to engage the threads of said screw; a clamp screw projecting to the exterior of said block from said nut member; a head threaded on said clamp screw; and a spring between said head and said vertical leg so as to urge said nut member into engagement with said vertical screw and so as to prevent said leg from dropping when said nut member is disengaged from said screw.

3. A gun sight comprising: a base block; means for securing said base block to a gun; a bifurcated bridge member supported by and extending over said base block; a cross member closing said bifurcation at one extremity; a windage screw journaled in said cross member and extending longitudinally of said bifurcation; a sight member threaded on said windage screw arranged to slide on said bridge member; a head on said windage screw, having notches formed on its under surface; a click arranged to enter said notches; and a locking lever arranged to engage said notches so as to lock said head in any desired position.

4. A gun sight comprising: a base block; means for securing said base block to one side of said gun; an L-shaped bridge member, the vertical leg of which is arranged to slide in a vertical groove in said base block, the horizontal leg of which extends over said base block; a sight member supported by said horizontal leg; a vertical screw journaled in said bridge member and arranged to raise and lower the latter over said base block; scales marked on said vertical leg; a flat leaf spring arranged to clamp against and frictionally engage said vertical leg; pointers formed on said spring to indicate positions on said scales; and a second pointer member carried by said base block so as to indicate positions on one of said scales, said spring and said second pointer being adjustable with reference to said scales.

5. In a gun sight of the type having a vertically adjustable bridge member extending over a base block, means for preventing light rays from passing under said bridge member comprising: a light shield secured to said base block adjacent said bridge member, said light shield being provided with a vertical notch in alignment with the line of vertical movement of said sight.

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