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ADJUSTABLE SIGHT FOR FIREARMS

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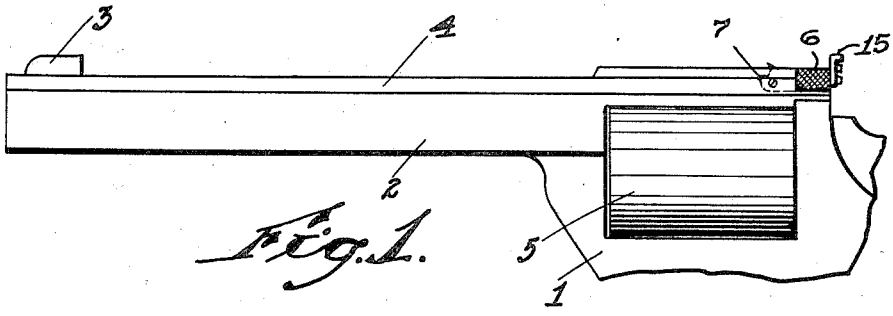


Fig. 1.

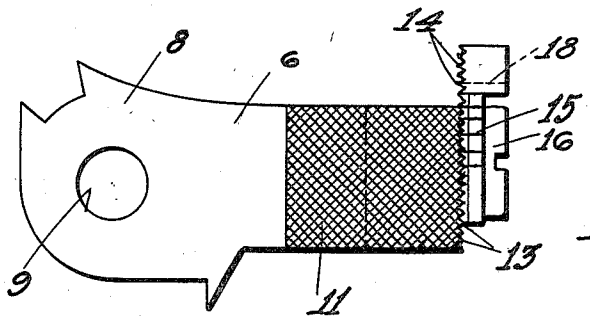


Fig. 2.

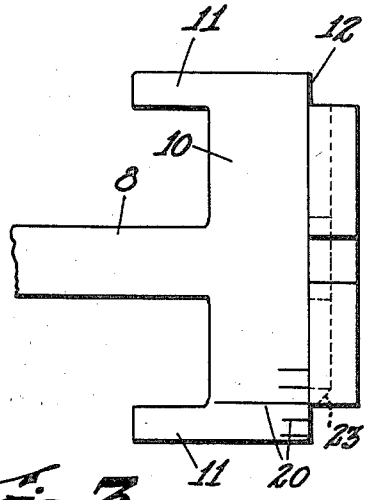


Fig. 3.

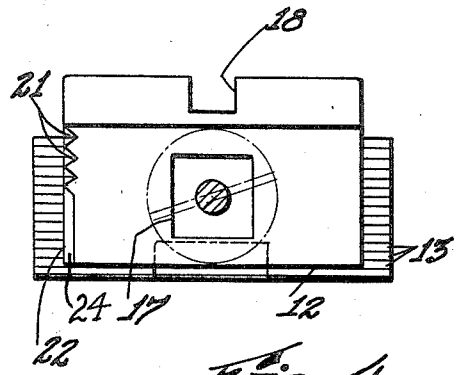


Fig. 4.

1584

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33. GEOMETRICAL INSTRUMENTS

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ADJUSTABLE SIGHT FOR FIREARMS

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6 Claims. (Cl. 33—56)

The present invention relates to an adjustable sight for firearms and particularly to a rear sight for revolvers which provides an adustment both for windage and for elevation.

In prior devices of this character, an adjustable sight has required the provision of at least two adjusting members, such as screws, one of which adjusts for windage and the other for elevation. The provision of a plurality of screws makes the sight relatively complicated and bulky, as well as expensive to manufacture. It is accordingly the principal object of the present invention to eliminate the objections of prior constructions by providing for adjustments both for windage and elevation by a single screw. The invention permits the construction of an extremely simply sight which may be produced at a low cost and which is quickly and easily adjusted.

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

Fig. 1 is a fragmentary elevation of a portion of a revolver showing the novel sight in position thereon.

Fig. 2 is an enlarged elevation of a sight and sight holder embodying the invention.

Fig. 3 is an enlarged fragmentary plan view of a portion of the sight and sight holder.

Fig. 4 is an enlarged end elevation of the sight and sight holder.

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

Referring first to Fig. 1, the revolver 1 has a barrel 2, to the forward end of which the front sight 3 is secured. The reinforcing raised rib 4 on the barrel projects rearwardly of the cylinder 5 of the revolver, and the rear sight holder 6 is carried by the end of said rib on a screw 7 which projects transversely through said rib. The central portion 8 of the sight holder is received in a longitudinal vertical slot in the rib 4 and has an opening 9 through which the screw 7 passes. The forward end of the portion 8 of the sight holder is formed in the usual manner and cooperates with a spring-pressed plunger, not shown, positioned in the rib 4 which latter supports the sight holder in the position shown in Fig. 1.

According to the present invention, the body of the sight holder 6 is substantially T-shaped in plan view, as shown in Fig. 3, with the central portion 8 of the holder forming the leg of the T. The cross bar 10 of the holder, which is integral with the portion 8, is provided at opposite ends with parallel extending knurled grips 11 by which the sight holder is actuated to permit breaking open of the revolver and ejection of the empty shells in the cylinder. The rearward surface 12 of the cross bar 10 is provided with parallel, closely spaced, horizontal grooves 13 which engage and cooperate with corresponding grooves 14 on the forward surface of the adjustable sight 15. The latter is held against the surface 12 by a clamping screw 16 which projects through an enlarged oblong opening 17 in said sight and which engages a threaded opening in the cross bar 10. The opening 17 is substantially larger in width than the diameter of the clamping screw 16 to permit relative adjustment of the sight 15 on the surface 12. The enlarged head of the screw 16 provides a clamping action between itself and the surface 12 of the sight holder for holding the sight 15 in adusted position. The member 15 is provided in the upper surface thereof with the usual notch 18 which is used in connection with the forward sight 3 in aiming the revolver.

By a slight loosening of the clamping screw 16, the clamping action is released and the sight is movable horizontally parallel to the cooperating grooves, being guided by said grooves on the surface of the sight and on the sight holder. This horizontal movement provides for a windage adjustment, and the extent of this adjustment is indicated by a series of indicating marks 20 on the upper surface of the sight holder. The central indicating mark is longer than the marks on either side thereof for indicating the central position of the sight. The grooves support the sight against the vertical movement on said holder during the windage adjustment and thus maintain a uniform elevation of the sight independently of the extent of said windage adjustment.

In adjusting for elevation, the clamping screw is loosened to a greater extent to permit the sight to be withdrawn from the grooves in the holder and said sight is then moved vertically to position the serrations on the sight in different grooves on the sight holder. The extent of the elevation adjustment is indicated by a series of notches 21 in one edge 22 of the sight, and the spacing between the bottom of successive notches 21 corresponds to twice the spacing between the grooves on the sight holder. The notches are positioned so that the base of the top notch 21 will be in alinement with the upper surface of the sight holder when the sight is in the lowermost position on said holder. Vertical adjustment of the sight from its lowermost position, to raise the

sight a distance corresponding to the width of one groove in the sight holder, will position the peak 23 between the first and second notches 21 in alinement with the upper edge of the sight holder. The notches thus indicate the extent of the adjustment for elevation and the provision of a plurality of notches provides for indicating the vertical adjustment in any position of said sight. The edge 22 of the sight beneath the notches 21 is chamfered as indicated at 24, so that the notches 21 are more readily apparent.

From the foregoing, it will be noted that the single clamping screw 16 provides for adjustment of the sight 15 independently for either windage or for elevation, and said screw also maintains one of the adjustments in proper position while the other adjustment is being made, thereby eliminating the plurality of adjusting screws necessary in prior art constructions, and making the sight materially less expensive in construction.

I claim,

1. In a adjustable sight construction, a sight holder, a sight mounted thereon, parallel cooperating grooves and ridges in adjacent surfaces of said sight and sight holder, a clamping member for holding said cooperating grooves and ridges in interengagement and for holding said sight against movement on said holder, said sight being adjustable on said holder parallel to said grooves by a slight release of said clamping member, and adjustable transversely of said grooves by a greater release of said clamping member.

2. In an adjustable sight construction, a sight holder, a sight mounted thereon, said sight having an opening therein, a clamping screw projecting through said opening and engaging said holder, said opening being larger than the diameter of the screw to provide for adjustment of said sight, parallel cooperating grooves and ridges in adjacent surfaces of said sight and sight holder, said sight being adjustable on said holder in a direction parallel to said grooves by a slight release of said clamping screw, and adjustable transversely of said grooves by a greater release of said clamping screw, the latter normally holding the cooperating grooves and ridges in interengagement.

3. In an adjustable sight construction, a sight holder, a sight mounted thereon, said sight having an opening therein, a clamping screw projecting through said opening and engaging said holder, said opening being larger than the diameter of the screw to provide for adjustment of said sight, interengaging horizontal grooves and ridges in adjacent surfaces of said sight and sight holder, said sight being adjustable horizontally on said holder by a slight release of said clamping screw for a windage adjustment of said sight, and adjustable transversely of said grooves by a greater release of said clamping screw for an elevation adjustment of said sight.

4. In an adjustable sight construction, a sight holder, a sight mounted thereon, said sight having an opening therein, a clamping screw projecting through said opening and engaging said holder, said opening being larger than the diameter of the screw to provide for adjustment of said sight, interengaging horizontal grooves and ridges in adjacent surfaces of said sight and sight holder, said sight being adjustable horizontally on said holder by a slight release of said clamping screw for a windage adjustment of said sight, adjustable transversely of said grooves by a greater release of said clamping screw for an elevation adjustment of said sight, and means in the form of notches in said sight for indicating the elevation adjustment of said sight on said holder.

5. In an adjustable sight construction, a sight holder, a sight mounted thereon, said sight having an opening therein, a clamping screw projecting through said opening and engaging said holder, said opening being larger than the diameter of the screw to provide for adjustment of said sight, cooperating parallel grooves and ridges in adjacent surfaces of said sight and sight holder, said clamping screw normally holding said grooves and ridges in interengagement, said sight being adjustable transversely of and parallel to said grooves, said grooves and ridges maintaining one adjustment while the other adjustment parallel to said grooves is being made.

6. In an adjustable sight construction, a sight holder, a sight mounted thereon, said holder and sight each having a plurality of cooperating guide members to provide for movement of said sight in one direction in said holder in any one of several relative positions of said sight on said holder transversely of the guide members, a clamping member for holding said cooperating guide members in engagement and for locking said sight against movement, said sight being slidable on the sight holder in said one direction upon slight release of said clamping member, and said sight being adjustable transversely of said guide members upon a greater release of said clamping member.

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