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Feb. 24, 1948. W. E. P. SCHULZ 2,436,453

GUN SIGHT

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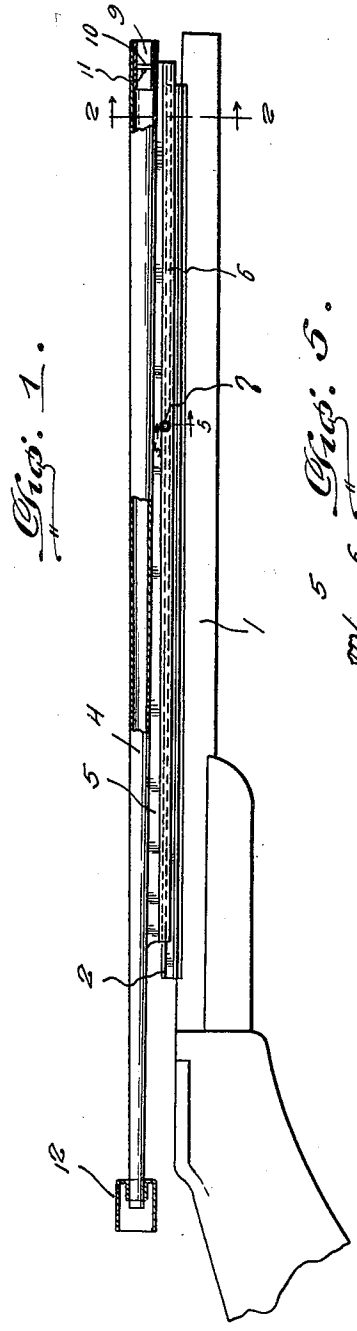


Fig. 1.

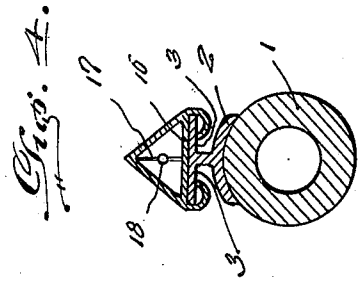


Fig. 4.

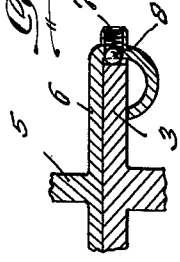


Fig. 5.

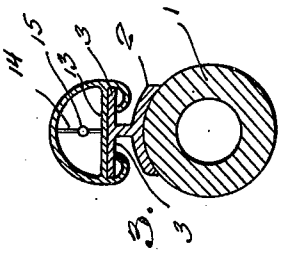


Fig. 3.

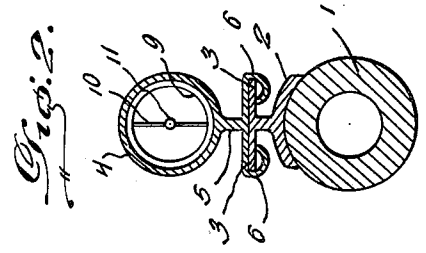


Fig. 2.

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GUN SIGHT

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4 Claims. (Cl. 33—47)

1

This invention relates to firearm sights, and more particularly to sights for rifles, although it is applicable to other types of equipment.

A main object of this invention is to provide an improved firearm sight of extremely simple construction.

A further object of this invention is to provide an improved mounting means for a firearm sight which is arranged for quick and easy removal of the sight from the firearm, and for accurate replacement thereof on the mounting structure.

A still further object of this invention is to provide an improved gun sight wherein glare and confusing light reflections are eliminated and wherein only a sight aperture with a target finder therein will be seen by the person aiming the gun.

Further objects of this invention will appear from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a side elevational view of a portion of a rifle equipped with a sight structure in accordance with this invention.

Figure 2 is a cross-sectional view taken on line 2—2 of Figure 1.

Figure 3 is a cross-sectional view similar to Figure 2 but disclosing a modification of the gun sight of this invention.

Figure 4 is a cross-sectional view similar to Figure 2 but disclosing a still further modification.

Figure 5 is a detail sectional view taken on line 5—5 of Figure 1, disclosing a spring biased detent structure for positioning the gun sight in proper position with respect to its guide support member.

Referring to the drawings, 1 designates the barrel of a rifle equipped with the improved sight of this invention. Secured to the top surface of barrel 1 and extending for a substantial portion of its length is a guide support rail 2 having a pair of upper horizontal flanges 3, 3 provided thereon.

Mounted on support rail 3 in slidable relation therewith is a tapered sight tube 4 provided with a lower depending web member 5 provided with downwardly curled resilient gripping flanges 6, 6 embracing flanges 3, 3, as shown in Figure 2. One of the flanges 6 is provided with a cupped socket portion 7 containing a spring member acting against a detent ball 8 which cooperates with a notch provided in the side edge of flange member 3 to releasably lock the sight tube 4 in an optimum position with respect to gun barrel 1.

Sight tube 4 is mounted so that its axis is substantially parallel to the axis of barrel 1. Said sight tube is inwardly tapered, and, in optimum position, has its inner end about seven inches from the eye of the person aiming the gun, whereas the length of the tube is such that the outer end thereof is adjacent the end of gun barrel 1. The inward taper of tube 4 is such that the silhouette thereof appearing to the eye of the marksman is a figure corresponding to the cross-sectional shape of the tube, said figure being a circle in the embodiment of Figures 1 and 2.

2

Provided at the outer end of sight tube 4 is a reticle member 9 comprising a short tubular element having positioned therein a transparent diaphragm marked with a vertical line or crosshair 10 having a dot or globule 11 at the center thereof. Reticle member 9 is secured inside sight tube 4 by frictional engagement, or by soldering, welding or the like. A vertical fine wire carrying a central globule may be mounted in reticle member 9 without the use of a transparent diaphragm if so desired. The location of the crosshair member 10 is sufficiently inwardly positioned with respect to the outer end of sight tube 4 so that no interference from glare is present in viewing the crosshair. A glare shield member 12 may also be provided at the inner end of sight tube 4 to block out disturbing reflections from gun barrel, 1, although this feature may interfere somewhat with viewing the objects around the target outside the field of view afforded by the tapered bore of tube 4, and may not be desirable for aiming at moving targets. When not desired, glare shield 12 may be easily slipped off the inner end of tube 4 since it is merely in frictional engagement with said tube.

Instead of being circular in cross-section, tube 4 may be semi-circular, having a flat base portion 13 slidably supported on flanges 3, 3 as shown in Figure 3. In this embodiment the tube is also tapered longitudinally, as in the embodiment of Figures 1 and 2, so that the appearance of the tube to the eye of the marksman is merely the cross-sectional shape of the tube. A vertical crosshair element 14 carrying a globule 15 is provided in the tube adjacent its outer end, said globule 15 being so positioned that the line of sight between the eye of the marksman and the globule will be parallel to the axis of gun barrel 1.

A further embodiment is disclosed in Figure 4 wherein the cross-sectional shape of the sight is triangular, having a base 16 slidably engaging guide flanges 3, 3 of guide rail 2. A verti-

cal crosshair element 17 having a globule 18 mounted thereon is provided in the sight tube adjacent its outer end, said globule 18 being so positioned in the tube that the line of sight between the eye of the marksman and the globule will be parallel to the axis of gun barrel 1.

Guide rail 2 may be provided with appropriate compensating devices to vary the alignment thereof with respect to rifle barrel 1 to allow for range and windage errors. These devices form no part of this invention.

While certain specific embodiments of gun sights have been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention will occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention other than as defined by the scope of the appended claims.

What is claimed is:

1. A sight attachment for a barreled firearm, comprising a longitudinal guide rail secured to the top surface of the barrel of the firearm and extending throughout the major portion of the length of the barrel, said guide rail having undercut opposite longitudinal side portions extending throughout the length of the rail, and a sighting tube element having a flattened under portion to rest slidably on said guide rail, said flattened under portion of the sighting tube element having longitudinal gripping portions at opposite sides thereof to slidably and interlockingly engage the undercut longitudinal opposite side portions of said guide rail, and releasably interengageable

securing means being provided between said guide rail and said sighting tube element to releasably fasten the sighting tube element in a selected longitudinal position on said guide rail.

2. The structure of claim 1, and wherein said tube element is of circular cross-section.

3. The structure of claim 1, and wherein said tube element is of semi-circular cross-section and said flattened under portion determines the bottom boundary of the cross-section.

4. The structure of claim 1, and wherein said tube element is of triangular cross-section and said flattened under portion determines the bottom boundary of the cross-section.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
210,115	Gipperich	Nov. 19, 1878
837,223	Hennessy	Mar. 16, 1906
912,050	Wanee	Feb. 9, 1909
915,670	Gibbs	Mar. 16, 1909
1,339,248	Winder	May 4, 1920
1,774,053	Foster	Aug. 26, 1930
2,028,055	Forsling	Jan. 14, 1936
2,276,446	Zimmerman	Mar. 17, 1942

FOREIGN PATENTS

Number	Country	Date
22,921	Norway	1913