

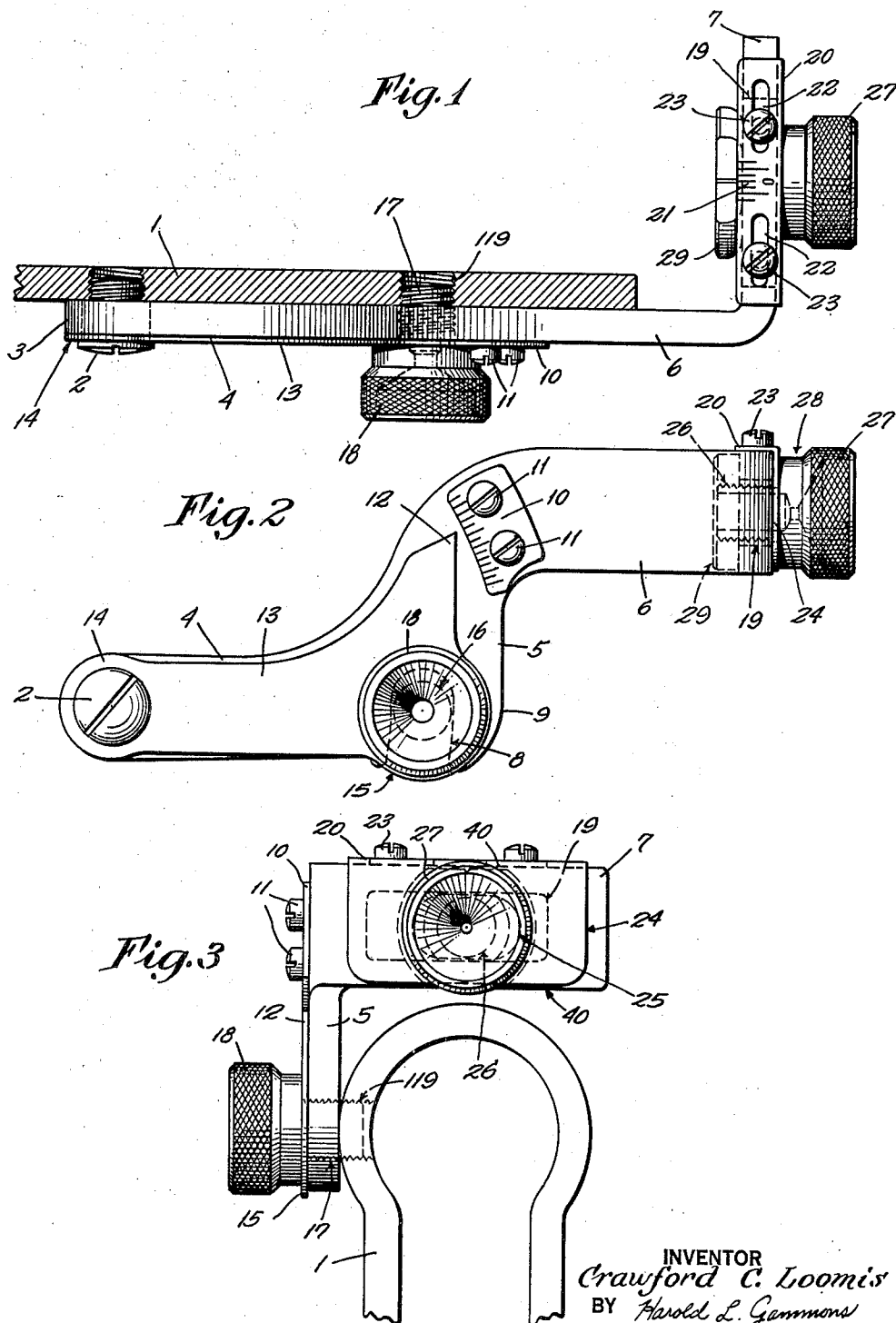
June 9, 1942.

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2,286,147

FIREARM SIGHT

Filed Feb. 27, 1941



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Patented June 9, 1942

2,286,147

UNITED STATES PATENT OFFICE

2,286,147

FIREARM SIGHT

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Application February 27, 1941, Serial No. 380,802

4 Claims. (Cl. 33—56)

This invention relates to firearms and more particularly to a rear peep sight assembly.

An object of this invention is to provide an improved gun sight having a windage plate for maintaining the amount of windage adjustment constant for each relocation of the zero of the gun sights.

A further object is to provide an improved gun sight with a windage plate having means for shielding the eyes of the shooter from extraneous light rays.

A further object is to provide an improved rear peep sight having a windage plate with an apertured apron adapted to project in front of the rear peep sight and cut off the light rays on each side thereof.

Other objects, features and advantages will become apparent in the following specification which describes the detailed construction of the invention designed for simplicity, economy and production manufacturing methods.

In the drawing:

Fig. 1 shows a plan view of the peep sight assembly including the improved windage plate.

Fig. 2 is a side elevation of the peep sight and windage plate of Fig. 1.

Fig. 3 is a rear view of the peep sight showing the rear face of the apron of the windage plate.

In the drawing, numeral 1 represents a longitudinal section of the side of the firearm or receiver to which the sight lever, indicated generally by numeral 4, is pivotally secured at its end 3 by a suitable screw 2. The pivoted sight lever, as shown in Fig. 2, comprises a fore-arm portion 4, an upper arm 5 substantially vertical to said fore-arm, and a rear-arm portion 6 extending substantially parallel to said fore-arm 4 provided with a slotted or bifurcated end portion 7 bent substantially at right angles to the plane of said rear arm 6 so as to overlie the gun barrel or receiver 1 in a plane substantially perpendicular to the longitudinal axis of said barrel. An arcuate open-ended slot 8 is suitably formed in the lower edge of the fore-arm 4 adjacent the elbow 9 thereof and a scale 10 shaped as part of a sector is secured by screws 11, or other suitable means, to the upper arm 5 adjacent the intersection of said upper arm and the rear arm portion 6. This vertical adjustment scale 10 is primarily for use in elevating or lowering the peep sight in accordance with different range requirements, and is termed in the art a "site" scale, which terminology, as hereinafter used, shall be clearly understood to mean the scale used for making vertical adjustments of the peep

sight. An index or pointer 12 is adapted to be located adjacent said site scale 10, and to this end said index is formed as a projection on one end of a link or index arm 13. The latter is indicated as being a thin leaf-like sheet metal piece secured by the sight lever pivot screw 2 to the side of the receiver 1 at the end 14 and flush against the vertical outside surface of the sight lever 4. The opposite end 15 of the index link 13 is provided with a drilled hole 16 adapted to overlie and be substantially in axial alignment with the open-ended slot 8 of said pivoted sight lever 4. A screw (see Fig. 1) comprising an exteriorly threaded stud 17 of an interchangeable peep sight eye cup 18, is adapted to pass through the drilled hole 16 of said index link and the slot 8 of said pivoted sight lever and to be threadedly engaged in a tapped hole 19 in the side of the receiver. The interchangeable peep sight serves thus as an adjusting or binding screw for securing the pivoted lever 4 in different elevated positions relative to the pointer 12 of the index link 13, the degree or amount of elevation being determinable by noting the reading of the indicia of the movable site scale 10 opposite the substantially fixed index 12. Referring to the angular end 7 of the sight lever, which is adapted to project across or bridge the receiver and to support the adjustable windage peep sight as hereinafter disclosed, said bridge portion is provided with a cut-out or slot as indicated by the dotted lines 19 which might have the outlines of a substantially closed rectangle or other geometrical figure having at least two parallel sides 40, 40, or may comprise an open-ended rectangle as would be characterized by a bifurcated bridge portion having substantially parallel furcations. As hereinafter used, the term "furcations" shall be understood to designate the spaced parallel arms or forked members of a bifurcated element, and in accordance with these methods of construction, either one of which is adapted to the purpose of this invention, the angular end 7 may be hereinafter defined or referred to as a sight bridge, a bridge portion, a slotted part or a bifurcated part.

Numerals 20 indicates a windage plate having a scale 21 suitably marked thereon including a zero at the central point and an equal number of scale marks on either side thereof. Windage plate 20 is shown provided with a pair of elongated holes or slots 22, 22 (see Fig. 1) through which project adjusting screws 23, 23 adapted to be threaded into spaced tapped holes in the upper edge of the bifurcated part 7, whereby the

windage plate 20 may be adjustably secured thereto. Referring to Fig. 2, an end view of the windage plate 20 discloses an apron portion or depending plate 24 formed on or otherwise secured to the rear edge of the windage plate 20 so that said apron may move therewith as an integral unit as hereinafter disclosed. The apron plate 24 depends substantially at right angles to the plane of the windage plate 20, is of the same width as the latter, and its height is substantially equal to the height of the face of the slotted part 7, whereby the apron 20 effectively covers the slot 19 as clearly shown in Fig. 3. For the purpose of economy and simplicity in manufacture, the windage plate 20 and its apron portion 24 may be constructed as a blanked and formed L-shaped sheet steel member, but it will be understood that other methods of manufacture and other materials may be used within the scope of this invention. An elongated hole or peep sight opening, as indicated by the dotted lines 25, is punched or otherwise formed substantially at the geometrical center of said apron, permitting the projection therethrough of the rear peep sight. The height of this opening 25, measured on its central axis, is substantially equal to the height of the slot 19 but the length of the elongated opening 25 is, in accordance with this invention, considerably shorter than the length of the slot 19, whereby the apron 24 comprises means for effectively restricting the light rays passing through the slot 19 to the relatively small area or slot defined by the substantially oval peep sight opening 25 in the apron 24. The dotted circle 26 of Fig. 3 represents the exteriorly threaded stud of the eye cup portion 27 of an interchangeable rear peep sight indicated generally by numeral 28 of Fig. 2, and is adapted to project through the peep sight opening 25 of apron part 24 and the slot 19 of the slotted part 7 from the rear thereof and to be adjustably secured to said supporting parts by threaded engagement at its forward end with the usual sight block 29 slidably mounted in a well known manner to ride on the arms 40, 40 of the slotted part 7. It will be clear that the assembly of the rear peep sight 28 on the apron 24 obstructs, in turn, the passage of light rays through the peep sight slot 25, and in furtherance of this purpose the length of the oval peep sight opening or slot 25 of apron 24 is, as shown, less than the outside diameter of the eye cup portion 27 whereby, when, for example, in the center position shown in the drawings, the overall dimensions of the eye cup effectively cover the slot 25 so that substantially no light rays are permitted to pass through on either side of said eye cup 27. It will be noted also that the dimensions of the oval peep sight slot 25 and the eye cup 27 are such that even though the latter is moved to its maximum right or left position, as limited by the slot 25, the latter remains substantially covered. Hence the apron 24 comprises means for effectively preventing substantially all light rays from passing through the slotted or bifurcated part 7 on either side of the eye cup 27 for any or all windage adjustments thereof.

As noted above, the oval sight slot 25 limits the longitudinal movement of the peep sight 27, the length of said slot 25 being, as shown, such that the line of sight of the peep sight 27, when in its maximum position either to the right or left of its center point, coincides with the maximum scale reading on the windage scale 21. As a further feature of this invention this construc-

tion warrants an effective light shield for the peep sight 27 irrespective of re-adjustments of the windage scale 21 for zeroing because both the windage scale 21 and the sight slot 25 are carried on the same member and move as a unit. Hence, for any adjustment or re-adjustment of the windage plate 21 for zeroing, i. e., correcting the alignment of the firearm barrel and sights, the amount of windage adjustment remains a constant, and the maximum adjustment to the right of the center point or zero of the windage scale 21 will always be equal to the maximum adjustment to the left. It will be recalled that heretofore any re-adjustment of the zero of the windage scale resulted in maximum windage adjustments to one side of the zero being greater than at the other, which in itself is an obvious disadvantage and furthermore necessitated a sight slot of maximum length from which light rays could not be cut off to shield the eyes of the shooter for every position of the sight. By the device of the present invention the length of the sight slot 25 may be constant, i. e., limited to the exact amount of windage adjustment required, and when partially obstructed by the peep sight eye cup 27 as described above, said sight slot 25 prevents substantially all light rays from passing through the slotted part or sight bridge 7 on opposite sides of the eye cup 27 for all possible windage adjustments of the sight and at any adjusted or re-adjusted zero of the gun sights.

The embodiment of the invention which has been illustrated and described is to be understood as typical and representative only, the invention being susceptible to embodiment in other forms, all falling within the scope of the appended claims, which claims are to be broadly construed.

What is claimed is:

1. In a firearm sight, the combination comprising a sight lever pivoted at one end to the side of said receiver, the opposite end of said sight lever having a portion intercepting said line of sight in a plane at an angle thereto, said intercepting portion having a slot; an index arm secured at one end to said firearm by the sight lever pivot; means for securing said sight lever in different vertical positions relative to said index arm; a peep sight adjustably mounted in said slot; and a windage scale adjustably mounted on the upper edge of the slotted portion having an apron portion adapted to overlie said slot for substantially preventing light rays from passing through said slot on opposite sides of said peep sight for all adjustments of said scale relative to said slotted portion.

2. In a firearm sight, the combination comprising a sight lever pivoted at one end to the side of said receiver, the opposite end of said sight lever having a portion thereof bent substantially at right angles to the longitudinal axis of the firearm so as to intercept the line of sight in a plane substantially vertical thereto, said intercepting portion having a slot; a substantially vertical slot in said lever; a scale adjacent said vertical slot; an index arm secured at one end to said firearm by said sight lever pivot, having a drilled hole in its opposite end substantially opposite said vertical slot and an index adjacent said scale; a screw adapted to pass through said hole and said vertical slot and to be secured into the side of the firearm for securing said index arm and pivoted sight lever in relative vertical positions; a peep sight having a stud adjustably mounted in the slotted portion of said sight lever

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and adapted for lateral movement therein; and a windage scale adjustably mounted on the upper edge of said slotted portion provided with an integrally formed apron adapted to be interposed between the rear face of said slotted portion and said peep sight for substantially preventing light rays from passing through said slot on opposite sides of said peep sight for all adjustments of said scale relative to said slotted portion.

3. In a firearm sight, the combination comprising a sight lever pivoted to said receiver having a portion intercepting the line of sight in a plane at an angle thereto, said portion having a slot; a sight piece in said slot; a windage scale carried by the slotted portion having a center point; and a light shield on said windage scale having an elongated slot for said sight piece coaxial with the center point of said scale, adapted to overlie the slot of said slotted portion and relatively shorter than the slot of said slotted portion for maintaining the amount of windage adjustment of said sight on each side of said

center point constant for each adjustment of the scale relative to the slotted portion.

4. In a firearm sight, the combination comprising a sight lever pivoted to one side of said receiver having a portion at substantially right angles to the line of sight and in a plane substantially vertical thereto, said portion being bifurcated; a sight piece secured between the furcations; an adjustable windage scale on said bifurcated portion having a center point; and a light shield depending from said scale substantially at right angles thereto, said light shield having an elongated slot for said sight piece coaxial with the center point of said scale, adapted to overlie the slot of the bifurcated portion and relatively shorter than the slot of said bifurcated portion for maintaining the amount of windage adjustment of said sight on each side of said center point constant for each adjustment of the windage scale relative to the slotted portion and for preventing light rays from passing between said furcations on opposite sides of said sight piece.

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