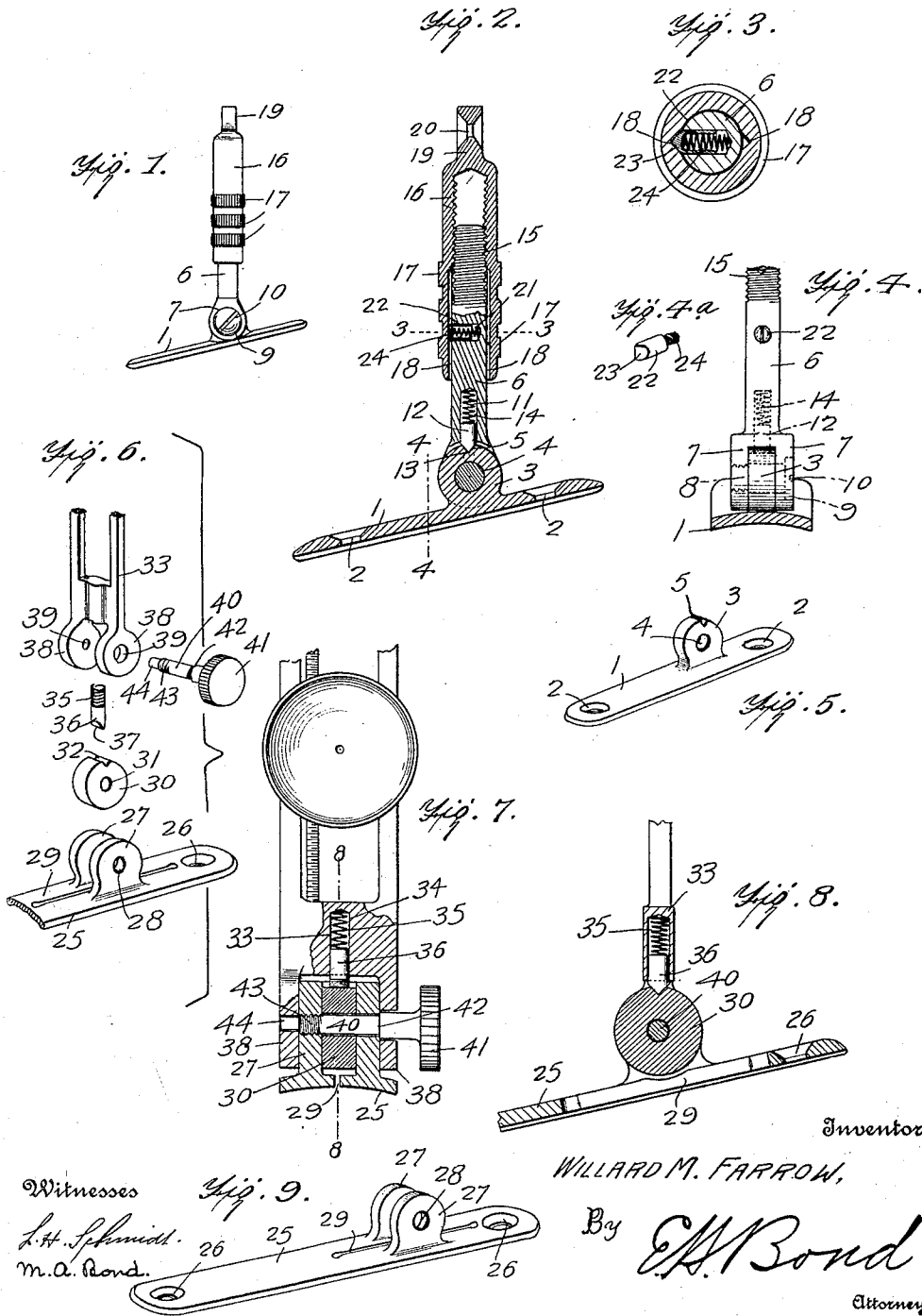


W. M. FARROW.
GUN SIGHT.

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1,057,048.

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Witnesses

L. H. Schmidt.
M. A. Bond.

WILLARD M. FARROW,

By

E. H. Bond

Attorney

UNITED STATES PATENT OFFICE.

WILLARD M. FARROW, OF WASHINGTON, DISTRICT OF COLUMBIA.

GUN-SIGHT.

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To all whom it may concern:

Be it known that I, WILLARD M. FARROW, a citizen of the United States of America, and resident of Washington, in the District of Columbia, have invented certain new and useful Improvements in Gun-Sights, of which the following is a specification.

This invention relates to certain new and useful improvements in gun sights and it has for its objects among others to provide an improved simplified gun sight embodying as its generic features a revoluble eye piece and a neat appearing, attractive and compact joint.

It has for a further object to provide an improved means whereby the sight may be adjustable for any desired trajectory as occasion may require.

I aim further at simplicity in the construction of the parts, ready assemblage thereof and efficiency and reliability in operation.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of my improved gun sight. Fig. 2 is a substantially central vertical section through the same on a larger scale. Fig. 3 is a cross section on the line 3—3 of Fig. 2 on still a larger scale. Fig. 4 is an elevation with the base in section as on the line 4—4 of Fig. 2 and the outer revoluble member removed. Fig. 4^a is a perspective view of the spring actuated bolt removed but shown in its proper relation to the threaded member seen in Fig. 4. Fig. 5 is a perspective view of the base and its integral joint member. Fig. 6 is a perspective view with portions broken away, showing the parts of the modified form of sight illustrated in Fig. 7, separated but shown in their relative positions. Fig. 7 is an enlarged section with parts in elevation, of a modified form of sight. Fig. 8 is a vertical section on the line 8—8 of Fig. 7 with parts removed. Fig. 9 is a perspective view of the base and its integral member of the form shown in Figs. 6, 7 and 8.

Like numerals of reference indicate like parts throughout the different views.

Referring to the drawings, attention be-

ing directed first to Figs. 1 to 5, 1 designates the base having openings 2, 2 for the reception of the screws or other means by which it is secured to the gun member, the base being slightly curved or of other form to correspond to the shape of the member to which it is applied. Rising from this base is a member 3 which serves as the central knuckle or member of the joint. This member 3 is integral with the base 1 and has the transverse opening 4, as seen in Fig. 5, and upon its upper face a notch or substantially V-shaped depression 5.

6 is a stem formed with the ears or the like 7, between which the member 3 is adapted to be received, as seen in Fig. 4, a screw 8 having a head 9 with slot 10 at one end for an obvious purpose, which head may or may not be countersunk in the adjacent member, it being shown countersunk in Fig. 4 and as not countersunk in Fig. 1. This screw has a smooth or unthreaded portion for that portion of its length that extends through the one ear 7 and the member 3, the portion therebeyond being screw-threaded to engage a screw-threaded opening in the opposite ear 7, as seen in Fig. 4, so that when the screw is turned up the member 3 will be bound or clamped between the members or ears 7, 7 to such an extent that the stem will not be accidentally movable but can be moved only by applying pressure thereto. This stem 6 has at its lower end a longitudinally disposed recess 11 in which is mounted a pin or pawl 12, the lower end of which is beveled, as seen at 13, to engage in the notch 5 of the member 3, as seen in Fig. 2. A spring 14 in the recess 11 serves to normally keep the pin or pawl projected but allows of its inward yielding when necessary. The upper end of the stem 6 is screw-threaded, as shown at 15, and upon this screw-threaded member is adjustably engaged the tubular member 16 having upon its exterior milled or roughened portions 17 to facilitate the rotation thereof and upon its inner wall at diametrically opposite sides the longitudinally disposed substantially V-shaped grooves 18, as seen clearly in Figs. 2 and 3. The upper end of the tubular member 16 terminates in the eye piece 19 having therein the sight opening 20, this eye piece being rigid or integral with the tubular member so as to be revoluble therewith. The stem 6 is provided with a lateral recess 21 between its threaded portion and the

lower end, as seen best in Fig. 2. In this recess is mounted a pin or bolt 22 having a tapered or V-shaped end 23, the said bolt being hollow, and a spring 24 being employed having one end arranged within the said bolt and its other end bearing against the inner wall of the recess, as seen clearly in Figs. 2 and 3. This pin is movable in the recess and its pointed end adapted to engage in one or the other of the grooves 18 of the revoluble member 16, as seen best in Fig. 3.

The operation will be readily understood. When the sight is applied to the gun, the stem and the parts carried thereby may be held fixedly in the proper position by the engagement of the bolt 12 with the notch 5 of the member 3 on the base 1, as shown in Fig. 2. Pressure applied, however, upon the stem or the tubular member 16 will disengage the pin 12 from its notch, movement in either direction accomplishing this, and the stem and its tubular member may be moved into any desired inclined position, the same being there held by engagement of the pointed end of the pin 12 with the periphery of the member 3 and by the clamping of the two ears 7 about the central member 3. When it is desired to adjust the eye piece, all that it is necessary to do is to turn the tubular member 16 in either direction, according to whether the eye piece is to be raised or lowered, and by application of sufficient force upon the said tubular member, the pin or bolt 22 will be disengaged from the groove 18 in the inner wall of the tubular member and the said tubular member may be revolved until it has made a half revolution, when the pin will by means of the spring be thrown into engagement with the opposite groove 18. If further adjustment is necessary, another half revolution brings about the same result. At each half revolution, the eye piece is brought into proper position with its opening 20 in alinement with the base, as will be readily understood upon reference to Fig. 2. It will thus be seen that not only can the eye piece be revolved and adjusted to the desired height, but by arranging the screw threads at a certain known pitch the proper trajectory for different cartridges may be readily determined by the number of revolutions of the tubular member.

The device as a whole can be made of minimum size, is attractive in appearance and can be readily manipulated by any one even though he be unskilled in the art.

In Figs. 6, 7, 8 and 9 I have shown another form of joint which accomplishes substantially the same purpose as the one just described. In this form, however, the two outside ears are integral with the base and the inner one which is to be pinched between the outside ears is separate from the

base, being what might be termed a reversal of the construction shown in Figs. 1 to 5. In this form the base 25 with its openings 26 is provided with the integral ears 27 having the lateral openings 28, and the base between said ears is slit, as shown at 29, for a purpose which will soon be made apparent. The central member comprises a disk 30 having an opening 31 and a V-shaped notch 32, as seen best in Fig. 6, in which the parts of this joint are shown separated. 33 is a stem having a longitudinal recess 34 in which is received a spring 35 bearing on the upper end of the pawl or pin 36 having a V-shaped lower end 37 for coöperation with the notch 32. This stem 33 has the ears 38 with the openings 39 therethrough. When the parts are assembled, the member 30 is placed between the ears 27 and the ears 38 straddle the said ears 27 and then the pin 40 is passed through the coincident openings in the ears 38, the ears 27 and the member 30. This pin has a milled head 41 and a shoulder 42, the said shoulder bearing against the adjacent ear 27 and the portion of the pin between said shoulder and the head 41 passing loosely through the enlarged opening of the adjacent ear 38. The portion of this pin which passes through the outer ear 27 and the member 30 is smooth or unthreaded while the portion which engages in the opening 28 in the other ear 27 is screw-threaded, as shown at 43, the portion beyond that being smooth and unthreaded, as seen at 44. The effect of this construction is that when the parts are assembled, as seen in Fig. 7 and the rod 41 is screwed up, the member 30 will be pinched and clamped between the ears 27 so as to form a joint by which the stem is held against accidental movement but allowing the same to turn on its bearings on the smooth portions of the pin in the outer ears 38, the spring pin 36 yielding as in the construction shown in Figs. 1 to 5, when sufficient pressure is applied to the stem. The slit 29 in the base permits of the drawing of the ears 27 together as the pin is screwed up. With this form of base I may use the form of adjustable eye piece shown in Figs. 1 and 2, or the well-known form, such as is shown in Fig. 7, no claim being made to this latter.

From the foregoing, it will be seen that I have devised a novel form of gun sight, the constructions herein shown being what I at the present time consider preferably, but it is evident that the same is subject to changes, variations and modifications in detail without departing from the spirit of the invention or sacrificing any of its advantages. I, therefore, do not wish to restrict myself to the exact details hereinbefore disclosed but reserve the right to make such changes, variations and modifications

in details, proportion of parts, etc., as come properly within the scope of the following claims.

What is claimed as new is:—

1. In a gun sight, a base member, a screw-threaded stem carried thereby and a tubular member revoluble upon said stem and provided with an eye sight at the outer end thereof, and means within the tubular member for locking the latter in adjusted positions.

2. In a gun sight, a base member, a screw-threaded stem carried thereby and a tubular member revoluble upon said stem and provided with an eye sight at the outer end thereof in alinement with said stem, and means within the tubular member for locking the latter in adjusted positions.

3. In a gun sight, a base member, a non-revoluble screw-threaded stem pivotally mounted on said base and a tubular member revoluble upon said stem and having at its outer end an eye piece disposed within the confines of said tubular member, and means within the tubular member for locking the latter in adjusted positions.

4. In a gun sight, a base member, a non-revoluble screw-threaded stem mounted on said base member, a tubular member revoluble on said stem, and means confined within said tubular member and stem for locking the tubular member in adjusted positions.

5. In a gun sight, a base member, a non-revoluble exteriorly threaded stem pivotally mounted on said base, spring means within the stem coacting with means on the base, a tubular member revoluble on the stem and carrying a fixed eye piece at its outer end, and spring means within the stem coöperatively arranged with relation to the tubular member to hold the latter and the sight in adjusted positions.

6. In a gun sight, a base, a non-revoluble stem on the base, a tubular member revolubly mounted on the stem and provided with an eye piece and coöperating grooves, and a spring actuated member confined within said stem and tubular member for holding the latter in adjusted positions.

7. In a gun sight, a base, a stem movably mounted thereon, a tubular member provided with an eye piece and having threaded engagement with the stem and provided with interior longitudinal grooves, and a member movably mounted in the stem for coöperation with said grooves.

8. In a gun sight, a base having ears, a member disposed between said ears and having a notch, a stem having portions embracing said ears and a pin passed loosely through the ears of the stem and through one of the ears of the base member and loosely through said member between said

ears and having threaded engagement with the other ear of the base.

9. In a gun sight, a base having ears, a member disposed between said ears and having a notch, a stem having portions embracing said ears and a pin passed loosely through the ears of the stem and through one of the ears of the base member and loosely through said member between said ears and having threaded engagement with the other ear of the base, said base being slotted longitudinally between its ears.

10. In a gun sight, a base having ears, a member disposed between said ears and having a notch, a stem having portions embracing said ears and a pin passed loosely through the ears of the stem and through one of the ears of the base member and loosely through said member between said ears and having threaded engagement with the other ear of the base, said pin having a shoulder adjacent its outer end for engagement with the adjacent ear of the base, said outer end having means for turning said pin.

11. In a gun sight, a base having integral members with perforations, said base being longitudinally slitted adjacent and between said members, a member having a notch in its periphery interposed between said members and adapted to be firmly clamped therebetween, a stem, a spring-actuated pin carried thereby for coöperation with said notch, and a pin passed loosely through one of said base members and having threaded engagement with another for clamping and pinching said members together.

12. In a gun sight, a base, a non-rotatable stem pivotally mounted thereon, a tubular member rotatably mounted on said stem, an eye piece rigid with said rotatable member and adjustable by rotation of said member, and automatic means within and movable with the stem coöperating with said revoluble member for holding the eye piece in adjusted position.

13. In a gun sight, an eye piece, a revoluble member carrying the same and mounted for vertical adjustment, a non-rotatable stem on which said revoluble member is rotatable, said eye piece being rigid with the revoluble member and disposed at the outer end thereof, means carried by the stem for holding the latter in different inclined positions, and spring means carried by the stem and engaging said revoluble member to lock the same against rotation.

Signed by me at Washington, D. C., this 1st day of April 1912.

WILLARD M. FARROW.

Witnesses:

M. A. BOND,
E. H. BOND.