

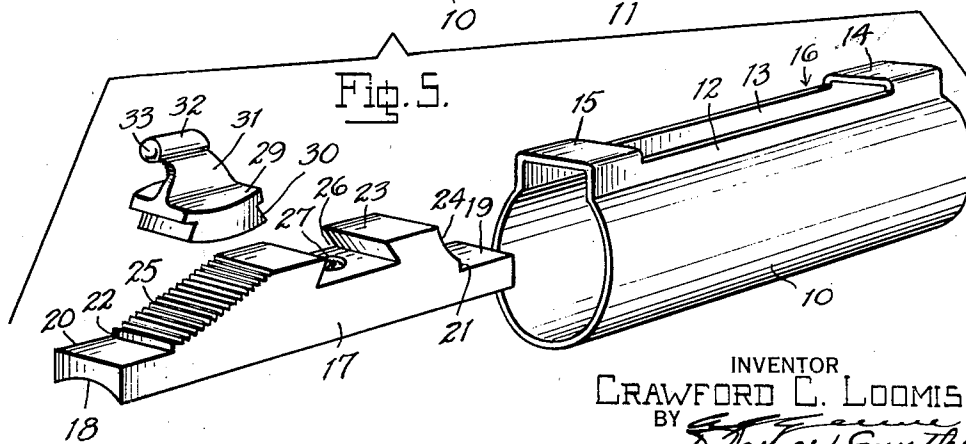
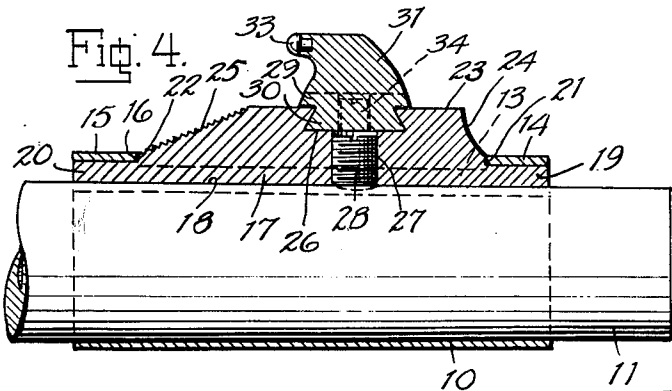
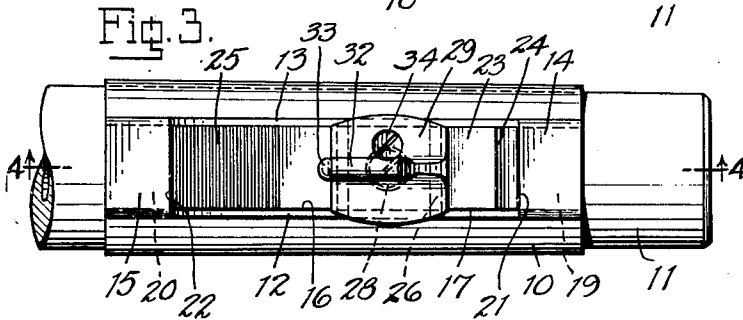
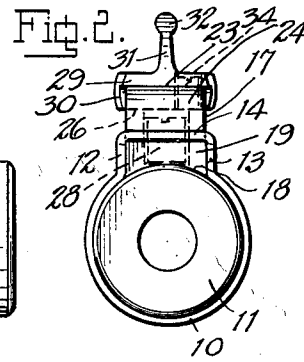
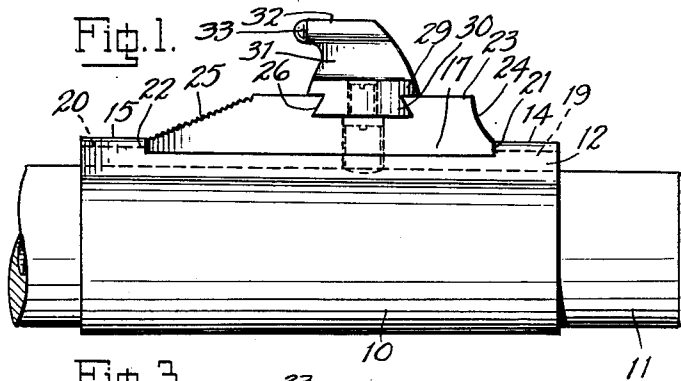
June 5, 1945.

C. C. LOOMIS

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GUN SIGHT

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# UNITED STATES PATENT OFFICE

2,377,704

## GUN SIGHT

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5 Claims. (Cl. 33-59)

The present invention relates to a gun sight, and particularly a front sight of the ramp type, wherein a rearwardly and downwardly inclined serrated ramp surface is disposed below the sight bead facing the rifleman. In front sight structures heretofore in use it has been the practice to form the ramp as an integral part of the rifle barrel, or as an integral part of a rifle barrel encircling mounting, both expensive structures in view of the precision requirements of such sights, requiring in the one case that the ramp sight be formed from the metal of the gun barrel, and in the other that the ramp sight and the mounting be formed from the same piece of metal.

It is an object of the present invention to provide a gun sight and mounting wherein a sight base member is interlocked with a separate mounting sleeve member, the assembly adapted to be engaged upon and secured to the gun barrel in a manner to rigidly secure the base and sleeve members in interlocking relation.

Another object is to provide a gun sight assembly including a laterally adjustable sight piece, and further to provide such structure in which the sight piece normally conceals the fastening means of the assembly.

A further object is to provide a mounting which may be accurately secured in any desired position longitudinally of the tapered gun barrel, and to this end it is proposed to provide a mounting sleeve capable of adaptation to its fitting relation with the gun barrel within a limited range of adjustment thereon.

A further object is to provide a gun sight assembly wherein the mounting sleeve member may be conveniently and economically formed from tubular stock, and a ramp sight base member which may be conveniently and economically formed from straight bar stock, and whereby the sleeve and the base may have their respective required metallurgic characteristics, as for instance, elasticity, hardness, and the like, imparted thereto by suitable heat treatment or other methods independently of each other.

With the above and other objects in view, an embodiment of the invention is shown in the accompanying drawing, and this embodiment will be hereinafter more fully described with reference thereto, and the invention will be finally pointed out in the claims.

In the drawing—

Fig. 1 is a side elevation of the gun sight, according to the illustrated exemplary embodi-

ment of the invention, shown mounted upon the front end of a gun barrel.

Fig. 2 is a front elevation.

Fig. 3 is a top plan view.

Fig. 4 is a longitudinal vertical sectional view, taken along the line 4-4 of Fig. 3.

Fig. 5 is a perspective view, showing the parts of the gun sight removed from the barrel and in separated relation relative to each other.

Similar reference characters indicate corresponding parts throughout the several figures of the drawing.

Referring to the drawing, the gun sight and mounting, according to the illustrated exemplary embodiment of the invention, comprises a retaining sleeve member 10, preferably formed from a length of seamless tubular metal stock of substantially cylindrical form and capable of conforming to the slight taper of the gun barrel 11, upon which it is adapted to be fitted, this taper being for instance of the order of about .008" per inch. At its upper side the sleeve member is extended into an upwardly projecting longitudinally extending inverted trough-like portion, including spaced parallel vertically disposed side walls 12 and 13, bridged at their ends by horizontally extending flat band portions 14 and 15, adapted to constitute retaining means for the sight mounting base member, as will presently more fully appear, their inwardly disposed spaced parallel edges defining the ends of a rectangular aperture 16 in which the sight mounting base member is positioned and retained. The upper longitudinal edges of the wall portions, between the band portions 14 and 15, are preferably disposed slightly below the horizontal plane of the under surfaces of the band portions.

The sight mounting base member 17 is preferably formed from a block of straight bar stock having parallel vertical sides, and of a width to engage in fitting relation between the side walls 12 and 13 of the retaining sleeve member, the under surface having a substantially cylindrical concave groove 18 extending longitudinally thereof, and which has a corresponding radius to the radius of the internal surface of the sleeve member so that it forms a continuation of this internal surface in the engaged position on the gun barrel to substantially fit the gun barrel surface.

At its forward and rearward ends the base member is provided with retaining portions 19 and 20 of rectangular form at their upper sides and adapted to fit in interlocking relation be-

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neath the band portions 14 and 15 of the sleeve member, the overall length of the base member corresponding to the overall length of the sleeve member. The retaining portions 19 and 20 terminate at their respective inner ends in vertically disposed abutment shoulders 21 and 22, extending transversely of the base member and adapted to abut the inner edge surfaces of the band portions 14 and 15. Between these abutment shoulders 21 and 22 the base member projects upwardly to provide a sight mounting portion 23, provided at its forward end with a concavely curved end wall surface 24 and at its rearward end facing the rifleman with an inclined ramp surface 25 provided with transversely extending serrations, preferably in the form of a series of right angle ridges and grooves, for the purpose of providing below the sight a non-glinting area to facilitate sighting of the rifle. The upper surface of the base member, between the forward wall 24 and the ramp surface 25, is in a horizontal plane, and is provided with a transversely extending dovetail slideway recess 26 for receiving the transversely adjustable sight piece, as will presently more fully appear, there being provided vertically through the base member centrally of the recess 26 an internally threaded bore 27 in which is engaged a fastening set screw 28, adapted to bear upon the gun barrel to exert tightening force as between the barrel, the base member and the sleeve member. The upper slotted end of the set screw is normally disposed below the surface of the recess 26, so as not to interfere with the adjustment movement of the sight piece engaged therein.

The sight piece comprises a horizontal base portion 29 provided at its under side with a dovetail sliding key portion 30, for slidably fitting within the recess 26, and at its upper side with a longitudinally extending sight blade 31 having at its upper end a longitudinally extending cylindrical rib 32. The sight bead member 33 is set in the rearwardly disposed end of the rib 32. The sight piece is adapted to be transversely adjusted in the slideway 26 and secured in its adjusted position by means of a set screw 34, provided at one side of the blade portion 31 and adapted to bear upon the surface of the recess 26.

In assembling the sight upon the gun barrel the base member 17 is first inserted upwardly through the aperture 16 of the trough portion of the sleeve member, with its retaining end portions 19 and 20 interlockingly engaged beneath the band portions 14 and 15, this assembly being thereupon engaged upon the gun barrel by forcing it inwardly thereon to the desired point of adjustment where the slight taper of the barrel frictionally retains it. The assembly is thereupon secured by tightening the set screw 28 against the gun barrel. In the case of fitting the mounting upon a gun barrel, without the binding action of the taper of the barrel, the assembly will be effectually secured in rigid relation through the tightening of the set screw alone. It will be observed that the trough formation at the upper side of the seamless sleeve member permits it to be snugly engaged upon the slightly tapered surface of the gun barrel over a substantial range of adjustment, through the fact that the sides of the sleeve member are permitted to expand in varying degree between its ends, without however appreciably affecting the fitting relation of the assembled base and sleeve members thereon. It will be understood that the passage through the sleeve member, as well as the

recessed under surface of the base member may if desired be formed with a predetermined taper.

The form of the invention illustrated in the drawing and described herein is typical and illustrative only, and it is evident that the invention is capable of embodiments in other forms, all falling within the scope of the appended claims, which are to be broadly construed.

What is claimed is:

1. In a gun sight for attachment to a gun barrel, a sight base member adapted to be engaged upon the barrel longitudinally of its axis, and including a retaining portion with a top wall extending transversely of said longitudinal axis, and a retaining sleeve member engageable about said barrel and including a longitudinal projection slotted to receive said base member and having retaining band portions extending transversely of said longitudinal axis at opposite ends of said aperture, at least one of said bands constructed and arranged to engage in abutting relation with said top wall of said sight base member to lock said base member in the slot of said sleeve member.

2. In a gun sight for attachment to a gun barrel, a sight base member having a longitudinally extending concavely recessed under surface adapted to be engaged upon and fit the barrel longitudinally of its axis and shoulders at opposite ends of said member extending transversely to said longitudinal axis, and a retaining sleeve member engageable about said barrel, said sleeve having retaining band portions extending transversely of said longitudinal axis and constructed and arranged to abut the respective shoulders of said sight base member to lock said base member against longitudinal movement with respect to said sleeve member.

3. In a gun sight for attachment to a gun barrel, a sight base member adapted to be engaged upon the barrel longitudinally of its axis, a retaining sleeve member engageable about the barrel including a projecting retaining band portion engaged over a portion of said sight base member, and a fastening set screw carried by said base member engageable with said gun barrel to exert outward force on said base member against the resistance of said band portion.

4. In a gun sight for attachment to a gun barrel, a sight base member adapted to be engaged with the barrel longitudinally of its axis and having retaining portions at its ends and an intermediate sight mounting portion projected upwardly from said end portions, a retaining sleeve member engageable with said barrel including a longitudinal projection slotted to receive said sight base and having transversely extending retaining band portions at its ends adapted to extend over and abut the retaining end portions of said sight base member, the slot in said projection being adapted to receive said upwardly projecting sight mounting portion of said sight base member.

5. In a gun sight for attachment to a gun barrel, a sight base member adapted to be engaged with the barrel longitudinally of its axis having retaining portions at its ends and an intermediate sight mounting portion projecting upwardly from said end portions, said upwardly projecting portion having a transverse sight piece receiving recess in its upper surface, a sight piece in said recess, a set screw in said sight piece to fasten the latter in said recess, a retaining sleeve member engageable with said barrel including an outwardly projecting sight base receiving formation

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extending longitudinally thereof at one side having transversely extending retaining band portions at its ends adapted to extend over the retaining end portions of said sight base member, and to abut opposite ends of said sight mounting portion, said longitudinally extending receiving formation defining an aperture between said band portions adapted to receive said upwardly

projecting sight mounting portion of said sight base member, and a fastening set screw carried by said base member disposed in said sight piece receiving recess and engageable with said gun barrel to exert outward force on said base member against the resistance of said band portions.

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