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A. L. TERHAAR

2,479,277

GUN SIGHT

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Fig. 1

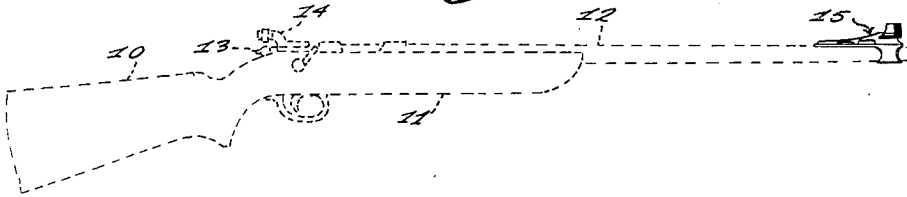


Fig. 2

Fig. 3 Fig. 4

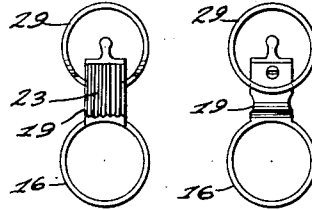
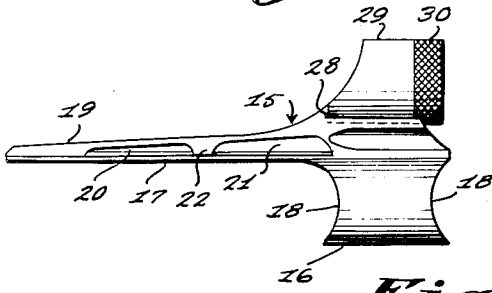


Fig. 5

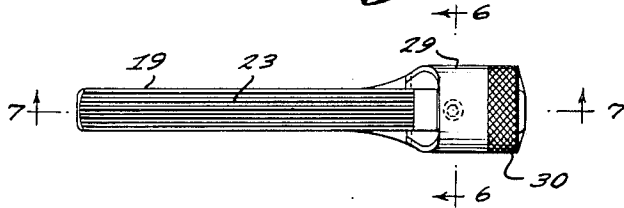


Fig. 6

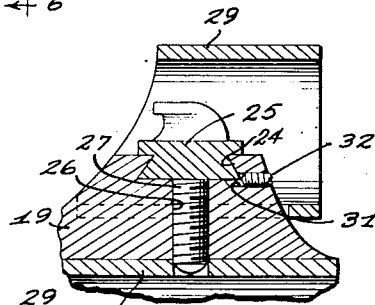
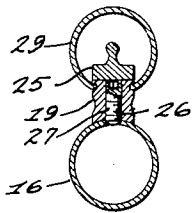


Fig. 8

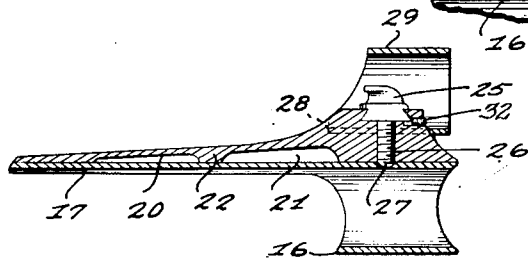


Fig. 7

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GUN SIGHT

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4 Claims. (Cl. 33—47)

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The present invention relates to gun sights, and more particularly to a front sight of the ramp type for a rifle, wherein a rearwardly and downwardly inclined ramp surface is disposed below the sight bead facing the rifleman.

It is among the objects of the present invention to provide an improved ramp-type gun sight which is fully ventilated to eliminate heat distortion of the sight and optical aberration produced by heat waves, and to provide a lightweight structure which does not materially affect the balance of the firearm to which it is applied, which can be easily attached to and removed from the barrel of a conventional rifle without modification of the rifle barrel, which is rigidly secured on the barrel against accidental movement and is fully adjustable for accuracy, and which is simple and durable in construction, economical to manufacture and neat and attractive in appearance.

Other objects and advantages will become apparent from a consideration of the following description and the appended claims in conjunction with the accompanying drawing, wherein:

Figure 1 is a diagrammatic side elevation of a conventional rifle showing a front sight illustrative of the invention operatively applied thereto;

Figure 2 is a side elevation of an enlarged scale of a front sight illustrative of the invention;

Figure 3 is a rear-end elevation of the sight;

Figure 4 is a front-end elevation of the sight;

Figure 5 is a top plan view of the sight;

Figure 6 is a transverse cross-section taken substantially on the line 6—6 of Figure 5;

Figure 7 is a longitudinal, medial cross-section taken substantially on the line 7—7 of Figure 5; and

Figure 8 is a longitudinal cross-section on an enlarged scale of a fragmentary front portion of the sight ramp and of the hood and sight bead.

With continued reference to the drawing, the rifle illustrated has the conventional stock 10, forearm 11, barrel 12, breech mechanism 13, and rear sight 14. The ramp-type front sight operatively mounted on the muzzle end of the barrel is generally indicated at 15 and is illustrated in detail in Figures 2 to 6 inclusive.

This front sight 15 comprises an attaching element which includes a cylindrical sleeve 16 of an internal diameter to closely embrace the muzzle end of the rifle barrel for which the sight is designed, and an elongated, narrow tang 17 extending longitudinally from one end of the sleeve to overlie the top of the rifle barrel and

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extend from the sleeve in a direction opposite the muzzle end of the barrel. The sleeve 16 and tang 17 are preferably integral and formed from a single piece of seamless, thin-walled metal tubing. The ends of the sleeve are preferably transversely concave, as indicated at 18, to improve the appearance of the device and facilitate the application of the device to a rifle barrel. This sleeve has an aperture therein which is centered substantially on the longitudinal center-line of the tang 17 and disposed substantially at the mid-length position of the sleeve 16. A ramp 19 overlies and is secured to the tang 17 and sleeve 16 of the attaching element. This ramp comprises a narrow, elongated body of generally rectangular cross-section and is preferably formed from a piece of mild steel soldered or otherwise permanently attached to the attaching element. The outer surface of the ramp is inclined outwardly of the attaching element from the outer end of the tang remote from the sleeve 16 toward the sleeve on a curve of gradually increasing curvature from the outer end of the tang toward the sleeve and the outer surface of that portion of the ramp overlying the sleeve is substantially straight and parallel to the adjacent surface of the sleeve.

The portion of the ramp overlying the tang 17 is provided with two elongated, ventilating recesses 20 and 21 which permit free passage of air through the ramp adjacent the barrel to prevent over-heating of the portion of the barrel to which the sight is attached, the ramp being secured to the attaching element at its ends and at an intermediate portion 22 disposed between the two recesses 20 and 21.

The inclined outer surface of the ramp is preferably longitudinally corrugated, as indicated at 23, and particularly illustrated in Figure 5, and may be given a dull or non-reflective finish so that reflection of light from the inclined surface of the ramp will not interfere with sighting the rifle.

A transverse groove 24 of dove-tail cross-section is provided in the outer edge of the portion of the ramp overlying sleeve 16 to receive the conventional bead block 25 and a screw-threaded aperture 26 extends from the bottom of this groove and registers with the aperture provided in the sleeve 16. A set screw 27 having in its upper end a non-circular socket is threaded through the aperture 26 and extends through the aperture in the sleeve to bear upon a rifle barrel received in the sleeve 16 to rigidly secure the sight on the muzzle end of a rifle barrel. This screw is of such a length that when threaded

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home, its upper end is below the bottom of the groove 24 and it thus, does not interfere with the bead block 25.

A pair of longitudinal grooves 28 is provided one in each side of the portion of the ramp overlying the sleeve 16 substantially midway between the sleeve and the outer edge of the ramp, and a cylindrical hood 29 is provided with a longitudinally-extending, elongated notch of substantially rectangular shape which receives the portion of the ramp overlying the sleeve, the edges of the hood along the notch provided therein engaging in the grooves 28 to secure the hood to the ramp surrounding the bead block 25. The front end portion of the hood may be externally roughened or knurled, as indicated at 30, to provide a finger-grip for removing and applying the hood and the inner or rear end of the hood is transversely concave on a curve which constitutes a continuation of the curved taper of the upper surface of that portion of the ramp overlying the tang 17 of the attaching element.

A screw-threaded screw hole 31 is provided in the ramp 19 leading from the front face of the ramp into the bead-block-receiving notch 24, and a small set screw 32 is threaded into this hole to bear at its inner end against the bead block and hold the bead block in adjusted position in the slot.

The ramp and the attaching element constitute a unitary structure which is of extremely light weight, easy to apply to a rifle barrel and which will remain in attached position on the barrel against accidental displacement. The device also provides a long, inclined ramp which greatly facilitates the proper sighting of the rifle and provides a hood which, while protecting the bead from direct light, does not cut off the light to an extent sufficient to obscure the bead or render it difficult to see.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiment is, therefore, to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are, therefore, intended to be embraced therein.

What is claimed is:

1. A ramp-type front sight for a rifle comprising an attaching element including a thin-walled, cylindrical sleeve of a diameter to closely embrace a rifle barrel, and an elongated tang extending longitudinally from one end of said sleeve, said sleeve having an aperture there-through substantially centered on the longitudinal center-line of said tang, an elongated, narrow ramp secured to and extending longitudinally of said tang and said sleeve and outwardly inclined from the end of said tang remote from said sleeve to said sleeve, said ramp having ventilating recesses in the portion thereof overlying said tang and a transverse groove of dove-tailed cross-section in the portion thereof overlying said sleeve, said ramp also having a screw-threaded aperture extending from the bottom of said groove and registering with the aperture in said sleeve and longitudinal grooves provided one in each side of the portion thereof overlying said sleeve, a set screw threaded through said apertures to bear against a rifle barrel received in said sleeve, a bead block received in said dove-tailed groove, and a cylindrical hood having an elongated notch therein receiving the portion of said ramp overlying said sleeve and engaged along the sides of said elongated notch in said longitudinal grooves.

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2. A ramp-type front sight for a rifle comprising an attaching element and a ramp secured to said attaching element, said attaching element comprising a cylindrical sleeve for receiving the muzzle end of a rifle barrel and an elongated, narrow tang extending from one end of said sleeve to overlie the upper side of the rifle barrel and extend from said sleeve in a direction away from the muzzle end of the barrel, and said ramp comprising an elongated, narrow body of generally rectangular cross-section overlying and secured to said sleeve and said tang and having elongated, ventilating recesses therein adjacent said tang, and an outer surface inclined outwardly from the outer end of said tang to said sleeve on a curve of gradually increasing curvature, the portion of the outer surface of said ramp overlying said sleeve being substantially parallel to the latter and having a bead-block-receiving, transverse notch therein.

3. A ramp-type front sight for a rifle comprising an attaching element and a ramp secured to said attaching element, said attaching element comprising a cylindrical sleeve for receiving the muzzle end of a rifle barrel and an elongated, narrow tang extending from one end of said sleeve to overlie the upper side of the rifle barrel and extend from said sleeve in a direction away from the muzzle end of the barrel, and said ramp comprising an elongated, narrow body of generally rectangular cross-section overlying and secured to said sleeve and said tang and having elongated, ventilating recesses therein adjacent said tang, and an outer surface inclined outwardly from the outer end of said tang to said sleeve on a curve of gradually increasing curvature, the portion of the outer surface of said ramp overlying said sleeve being substantially parallel to the latter and having a bead-block-receiving, transverse notch therein, said ramp having longitudinally-extending corrugations in the inclined outer surface thereof.

4. A ramp-type front sight for a rifle comprising an attaching element and a ramp secured to said attaching element, said attaching element comprising a cylindrical sleeve for receiving the muzzle end of a rifle barrel and an elongated, narrow tang extending from one end of said sleeve to overlie the upper side of the rifle barrel and extend from said sleeve in a direction away from the muzzle end of the barrel, and said ramp comprising an elongated, narrow body of generally rectangular cross-section overlying and secured to said sleeve and said tang and having elongated, ventilating recesses therein adjacent said tang, and an outer surface inclined outwardly from the outer end of said tang to said sleeve on a curve of gradually increasing curvature, the portion of the outer surface of said ramp overlying said sleeve being substantially parallel to the latter and having a bead-block-receiving, transverse notch therein, and a cylindrical hood removably mounted on the portion of said ramp overlying said sleeve, said hood having its end adjacent the inclined portion of said ramp transversely concave in continuation of the curved inclination of said ramp.

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No references cited.