

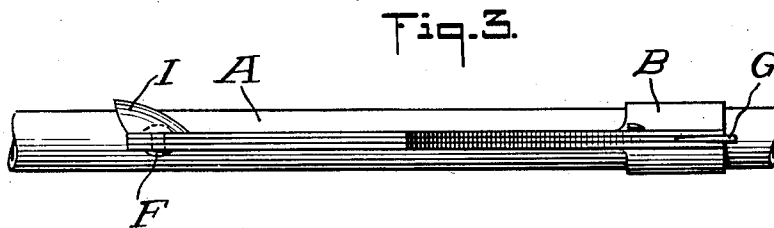
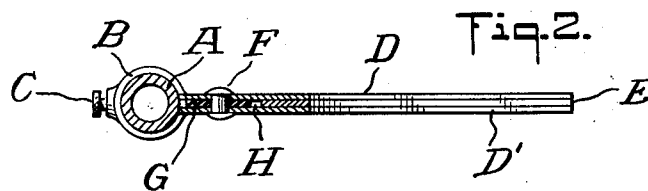
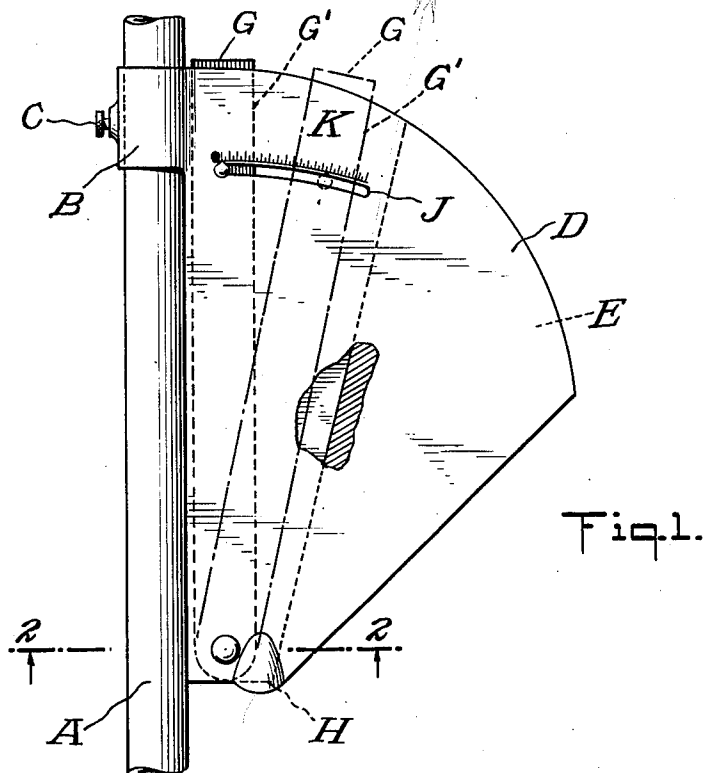
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GUN SIGHT

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GUN SIGHT

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2 Claims. (Cl. 33—51)

This invention relates to a device for sighting guns or other projectile propelling instrumentalities and has more particular reference to sighting devices for use with such instrumentalities on moving targets.

When employing the conventional type of gun sight, the gun is generally first trained on the target through the sights, the gun then moved to a position where it "leads" the target, the "lead" being proportioned to the estimated speed of the moving target and the gun fired not by sighting on the target but by sighting on an imaginary point in advance of the target. This entails moving the gun with the sights "off" the target in firing position with a consequent possibility of error.

With the present device the moving target is sighted through a relatively wide opening, the top and bottom limits of which define the plane of flight of the target so that once the object or target is sighted through this opening it is only necessary to locate the plane of the elongated opening so as to correspond approximately with the directional movement of the target. Because of the elongated opening the target may be continually viewed during a considerable portion of its flight. When the target, as viewed, is brought into coincidence with the limits of the opening nearest to and parallel with the gun barrel, the latter will be pointing at the target and the gun may be fired with accuracy at short range. The elongated opening may be adjusted so that the wall of the opening nearest the barrel may be angularly varied with respect to the axis of the gun barrel to increase the lead to compensate for the time of travel of the projectile from the firing position to the target and the relative speed of the target.

The invention comprehensively stated comprises a sight concurrently moving with the projectile propelling means and affording means for continuously sighting a moving target during a considerable portion of its flight along an extended plane without moving the sights.

More specifically stated the invention comprises one or more walls forming one or more extended sighting surfaces for continuously sighting a moving target during a considerable portion of its flight without moving the sights, with a pivoted sighting member movable at an angle to the gun barrel and relatively to the sighting surfaces to indicate the proper firing movement determined by the necessary "lead."

By the accompanying drawing one embodiment of the invention has been illustrated, but it is

to be understood that this embodiment is presented merely for the purpose of affording a clear understanding of the principles underlying the invention, so that those skilled in the art may readily understand it, and it is not to be regarded as limiting the invention to the specific details shown.

In said drawing:

Fig. 1 is a top plan view showing a section of a gun barrel upon which is operatively mounted the gun sighting device embodying my invention;

Fig. 2 is a cross-sectional view taken along the lines 2—2 of Fig. 1 and looking in the direction of the arrows, and

Fig. 3 is a view showing in side elevation a section of a gun barrel having applied thereto the sighting device, and showing also an eye shielding device.

Continuing now by way of a detailed description, a rifle or shot gun barrel A has a rotatable sleeve B mounted thereon. The sleeve B has a sighting device secured thereto and is also conveniently secured by a set screw C.

In the drawing, the sighting device is shown in a position where the movement of the target is from right to left. When the movement of the target is from left to right, the sleeve B is turned so that the sighting device is on the opposite side of the gun barrel. The sighting device comprises two plates or surfaces D and D', primarily intended for use with a rifle or shot gun barrel as shown in the drawing. The purpose of the spaced plates is to afford a wide range or vision between the parallel plates in a plane corresponding to their plane.

Between the spaced surfaces D and D' at their end extremities as viewed at the right in Figs. 1 and 2 there is interposed a filler plate E, the two said leaves at their end extremities, with the filler plate therebetween being secured together by any suitable means (not shown).

The filler plate E spaces apart the leaves D and D' and provides a fan shaped or tapering slit or slot between it.

Within this fan shaped slit or slot so formed between the leaves D and D' there is shown mounted for pivotal movement as at F a sighting strip or wall designated by the reference character G shown in Fig. 1 as being disposed in two selective positions for a purpose which will hereinafter appear.

Between the leaves D and D' at the breech end of the gun and adjacent the sighting strip where there is a peep hole designated by the ref-

erence character H through which the operator sights and through which he is able, by virtue of the opposite and outflared end of the slit, to visualize the target through a field narrowed in one direction but nevertheless extensive in a direction at a right angle to the first named direction.

For this vision field there are provided means whereby the longitudinal area of the opening at the end of the slot may be adjustably foreshortened, such means comprising the pivotally mounted sighting strip G. As clearly appears from Fig. 1 of the drawing, when this strip G is positioned as indicated in full lines at the upper part of Fig. 1, the edge of the strip adjacent the peep hole is parallel to the gun barrel axis and when the sighting strip is in dotted line position indicated at the top of Fig. 1 the barrel axis will be disposed at an angle to the sighting edge of the sighting strip G.

In use the operator sights a moving object through the peep hole H, rotates his sight so that the longitudinal area of the opening is brought into coincidence with the path of travel of the object, keeps the object in view until it is just disappearing from sight along the firing edge of the sighting strip G and then fires his gun, the angle between the axis of the gun barrel and the sighting or firing edge G enabling the operator to direct his fire sufficiently in advance or in "lead" of the moving object to properly intercept it.

From this description it will be apparent that the sight is determined by the point of intersection of two planes; to wit, by the plane of the leaf D and the intersecting plane of the right hand edge G' of the member G, the sight along the line of intersection so determined as from the peep hole H to the point Y indicating the critical point at which the gun should be discharged.

The operator of the gun generally confines himself to a certain type of game which is generally shot at predetermined distances with the target moving at a predeterminable speed. The angular adjustment of the strip G with respect to the barrel can be set so as to take into account the nature of the flight of the target.

The movable mounting of the gun sight upon the gun barrel makes it possible for the operator, after sighting a moving object, to rotate the sight to a position where its path of travel will coincide with the longitudinal area of the aperture in the outer end of the sight.

In Figs. 1 and 3 there is shown as at I a tapering shield so constructed and positioned not only to protect the eye of the operator from glare but to facilitate alignment of the eye with the peep hole.

The leaf D as indicated by Fig. 1 has a slot therein as designated by the reference J through which projects a knob K which is attached to the member G and by means of which said member G may be moved, and upon the top of the leaf D opposite said slot there are placed certain desirable calibrations for the guidance of the operator.

What is claimed is:

1. A gun sight including a sleeve for rotatable attachment on a barrel of spaced parallel plates to afford a sight between the plates and a movable strip pivoted at the end between the plates at a point remote from the muzzle end of the barrel and having its free end projecting toward the muzzle end of the barrel, and angularly movable with respect to the barrel, the edge of the angularly movable strip providing a sighting edge to determine the necessary lead.

2. A gun sight including a sleeve for rotatable attachment on a barrel; of plates secured to the sleeve with means to maintain the plates in permanently spaced parallel relation to afford a sight between the plates and a movable strip pivoted between the plates at a point remote from the muzzle end of the barrel and having its free end projecting toward the muzzle end of the barrel and angularly movable with respect to the barrel between the spaced plates, one edge of the angularly movable strip providing a sight edge for determining the necessary lead; and means for holding the strip at a predetermined angle with respect to the barrel.

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