33-252. OR 1,350,153 SR

E. E. GREGORY.

GUN SIGHT.

APPLICATION FILED DEC. 14, 1917.

1,350,153. Patented Aug. 17, 1920.

Fig. 1.

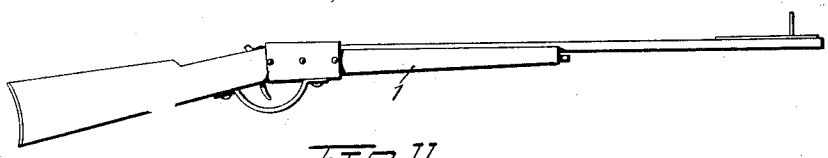


Fig. 11.

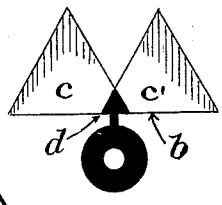


Fig. 2.

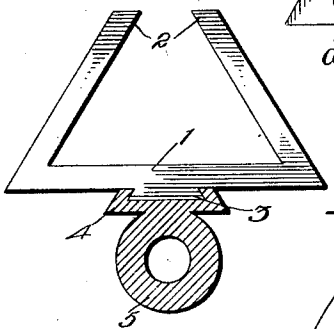


Fig. 3.

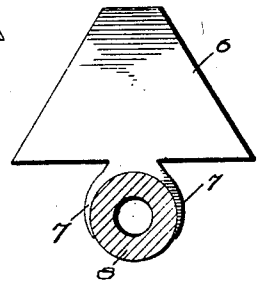


Fig. 10.

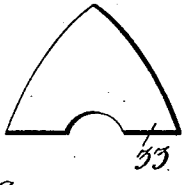


Fig. 5.

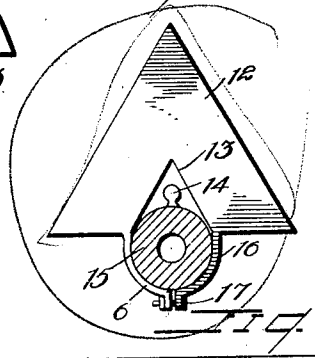


Fig. 4.

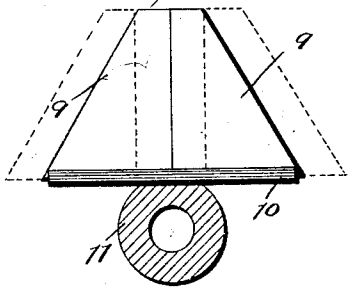


Fig. 7.

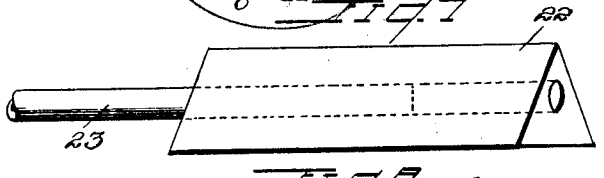


Fig. 6.

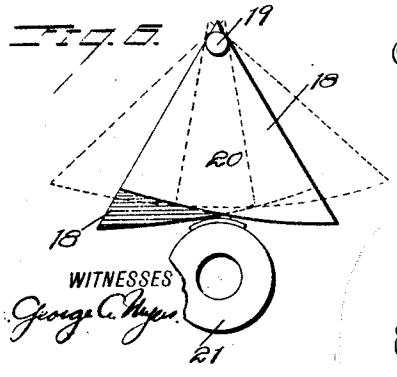


Fig. 8.

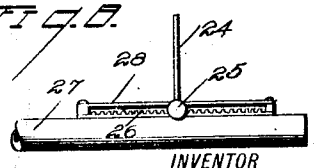
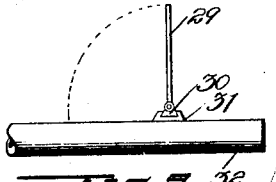


Fig. 9.



WITNESSES

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GUN-SIGHT.

1,350,153. Specification of Letters Patent. Patented Aug. 17, 1920.

Application filed December 14, 1917. Serial No. 207,142.

To all whom it may concern:

Be it known that I, ELI E. GREGORY, a citizen of the United States, and a resident of Lewisport, in the county of Hancock and State of Kentucky, have invented certain new and useful Improvements in Gun-Sights, of which the following is a specification.

My invention is an improvement in gun sights, and has for its object to provide a sight of the character specified adapted for any form of gun, and so arranged that by using the sight with both eyes open the range will be automatically found.

In the drawings:

Figure 1 is a side view of a gun provided with the improved sight;

Figs. 2 to 5, inclusive, are rear views of different embodiments of the invention;

Fig. 6 is a front view of another embodiment;

Fig. 7 is a side view of the sight embodied in a silencer;

Figs. 8 and 9 are side views of other embodiments of the invention, Fig. 8 showing an adjustable sight and Fig. 9 a folding sight;

Fig. 10 is a front view of another embodiment of the invention;

Fig. 11 is a detail view illustrating the optical effect of two overlapping images and the resultant triangular dark central image, when viewing the improved sight with both eyes open.

The improved sight is designed to be used with both eyes open, and fixed upon the target. The base of the sight being as wide as or wider than the interpupilary distance of an average man, two images of the sight are formed when the marksman looking along the top of the gun barrel focuses his eyes on the target. These images appear transparent and in overlapping form an opaque central pyramidal or triangular image, the apex of which determines the point which should be rested upon the target when the trigger is pulled. The farther away the target is the smaller appears the triangular opaque image, and the nearer the target is the larger will be the image. The result is that in aiming at the distant object the gun will have to be raised in order to bring the apex of the image on the target, and, of course, when nearer targets are to be fired at the size of the image will necessitate a relative lowering movement of the gun barrel, in order to bring the apex of the image on the target. The method of using all the modifications which I have shown in the drawing is exactly the same, and is as described above.

In the embodiment of the invention shown in Fig. 2, the improved sight consists of a substantially triangular member composed of a base 1 having at each end an upwardly and inwardly extending arm 2, the said arms converging toward each other as shown. The base has an undercut lug 3, which is adapted to engage a similarly shaped guide 4 on the top of the gun barrel 5.

In Fig. 3 the sight is composed of a plate 6 which is substantially triangular in outline, having the apex, however, removed, and this plate has curved depending arms 7 at its base which are adapted to engage around the barrel 8 of the gun to hold the sight in proper position.

In Fig. 4 the sight consists of similar sections 9, which are mounted to slide upon each other in a guide 10 arranged transversely of the barrel 11, and the sections 9 together form a body very closely resembling that of Fig. 3. These sections may be moved with respect to each other, as indicated in dotted lines in Fig. 4, to provide a wider or narrower sight. With this construction the angle of the sight may be changed to suit the eyes of the user or the power of the gun.

In Fig. 5 the sight is a triangular plate 12, having a triangular portion 13 cut away at the center of its base to permit the usual sight 14 of the gun 15 to be visible. At each side of the cut away portion the plate has curved depending arms 16 which embrace the barrel, and the said arms are connected by a nut 17 to clamp them on the gun. Each arm has a radial lug and the bolt is passed through the lugs and engaged by the nut.

In Fig. 6 an adjustable sight is provided, the sight consisting of similar sections 18 which are pivotally connected at their top as indicated at 19 to a suitable support 20 which is secured to the gun 21. The sections or wings 18 may be moved with respect to each other as indicated in dotted lines for the same purpose as those shown in Fig. 4.

In Fig. 7 the sight 22 is in the form of a silencer, the said silencer being triangular in cross section, and the silencer is connected with the gun 23 in the usual manner.

In Fig. 8 the sight 24 has a cross pin 25 which engages between the teeth of a rack bar 26 secured to the gun barrel 27. A plate spring 28 has its ends connected to the rack bar, and this spring normally holds the pin 25 in engagement with the teeth. However, the sight may be adjusted by springing it from tooth to tooth, and may be folded down upon the gun.

In Fig. 9 the sight 29 is hinged to an undercut bar 30 which is mounted in a similarly shaped guide 31 on the barrel 32. This sight may be folded down as indicated in doted lines in the said figure, and both this sight and the sight 24 are similar in shape to those above described, that is, having the converging side walls.

In Fig. 10 it will be noticed that the sight 33, while substantially triangular, has convex edges instead of straight edges. The edges are converging, however, as in the other arrangements.

It is desired to illustrate the optical effect mentioned in the following claims, and to this end, attention is directed to Fig. 11. The reader should consider that a triangular sight is mounted on the front end of the gun, for the purpose of the illustration, this sight being neither truncated as in Fig. 3, nor of any of the peculiar shapes illustrated.

The base b of any of the sights is wider than the interpupilary distance of the person aiming. The object aimed at, for example a bird, should be viewed by the gunner with both eyes open, practically disregarding the triangular sight at the front.

A peculiar optical effect now takes place. Two virtual images c and c' in Fig. 11, impress themselves on the senses of the gunner, these images appearing transparent toward the center but shading off slightly darker toward the edges, somewhat as illustrated. These virtual images will be found to overlap in the center and form a dark resultant pyramidal or triangular image d, the point directly above this triangular image being the place where the bird should appear before the trigger is pulled. This resultant image varies in size with the range of the object and has its apex in the line of sight. In other words, if the object is near, the resultant image will appear large and on the contrary, when the object is farther away, the resultant image b will appear smaller.

I claim:

1. The combination with an implement which is to be aimed, of a sight mounted on the forward portion of said implement and presenting transversely to the line of sight an outline having upwardly converging sides and a base wider than the interpupilary distance of the person aiming, said sight, when the object aimed at is viewed by the person with both eyes, producing the optical effect of two images corresponding to the sight outline and spaced laterally of the line of sight, said images overlapping and thus forming a resultant triangular image varying in size with the range of the object, and having its apex in the line of sight.

2. The combination with an implement which is to be aimed, of a sight mounted on the forward portion of said implement and presenting transversely to the line of sight, an outline having upwardly converging sides, said sight, when the object aimed at is viewed by the person with both eyes, producing the optical effect of two images corresponding to the sight outline and spaced laterally of the line of sight, said images overlapping and thus forming a resultant triangular image varying in size with the range of the object, and having its apex in the line of sight.

3. A sight for an implement to be aimed, comprising a supporting member arranged to be secured upon said implement, and a pair of plates carried by said supporting member, disposed transversely to the line of sight in overlapping relation and together presenting an outline having upwardly converging sides, said plates being adjustable to vary the width of said outline.

4. A sight for an implement to be aimed, comprising supporting means securable on said implement, and a pair of plates disposed transversely to the line of sight in overlapping arrangement and together presenting an outline having upwardly converging sides, so mounted for relative adjustment to vary the angle of said converging sides.

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