33-254. OR 2,777,203 SR

SEARCH ROOM

Jan. 15, 1957 F. R. CLIFT 2,777,203

REAR GUN SIGHT

Filed June 3, 1953

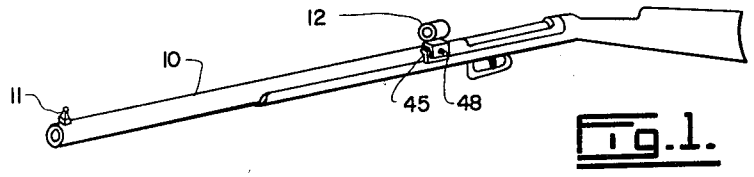


Fig. 1.

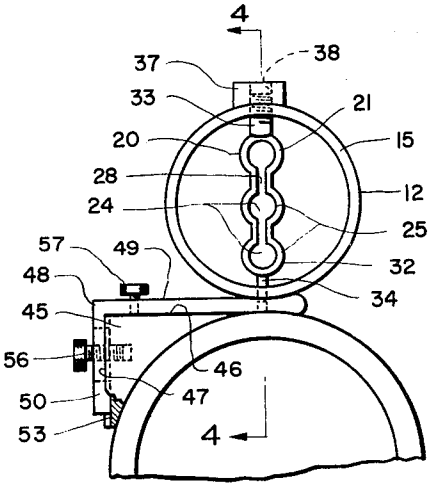


Fig. 2.

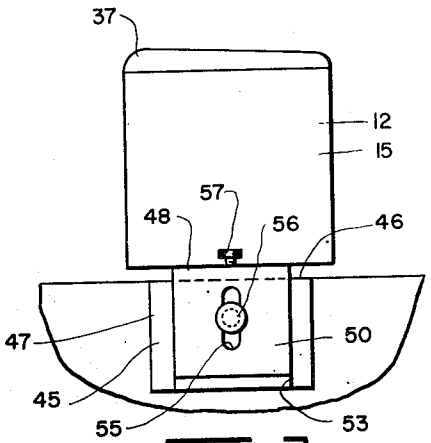


Fig. 3.

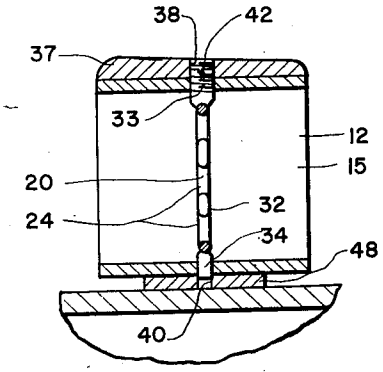


Fig. 4.

1418

INVENTOR
FREDERICK R. CLIFT
BY
Fetherstonhaugh & Co.
ATTORNEYS

2P

United States Patent Office 2,777,203 Patented Jan. 15, 1957

2,777,203

REAR GUN SIGHT

Frederick R. Clift, North Vancouver, British Columbia, Canada

Application June 3, 1953, Serial No. 359,382

6 Claims. (Cl. 33—58)

This invention relates to improvements in gun sights, and particularly to rear sights.

An object of the present invention is the provision of a rear gun sight for different ranges which does not need to be moved or set when changing from one range to another.

Another object is the provision of a sight for different ranges which does not materially interfere with the vision of a person using the gun.

A further object is the provision of a rear sight which may be quickly and accurately aligned with the front sight of a target.

Still another object is the provision of a rear gun sight which cuts down glare and concentrates the user's vision on the target.

Yet another object is the provision of a rear gun sight which enables the gun to be properly sighted once the target is picked up within the sight without the user of the gun losing track of the target during this time.

This invention consists of a frame adapted to be mounted on a gun barrel to act as a rear sight therefor. This frame is preferably, although not absolutely necessarily, in the form of a tube. A pair of spaced thin sight members extend from the top to the bottom of the frame, said members being bent outwardly from each other at a plurality of points throughout their length to form a plurality of spaced open sight indicators located one above the other. In the preferred form of the invention, these members curve from and opposite each other outwardly and back in substantially semi-circles at a plurality of points throughout their length, and said members are close and parallel to each other between the sight indicators to form thin slots extending between the open indicators. The sight is further improved by connecting the sight members together at their opposite ends to form a sight unit, and by removably mounting this unit in the frame or tube. A special mounting plate has been provided by means of which the sight may be quickly and easily mounted on or removed from a gun without the necessity of any special skill for doing this.

An example of this invention is illustrated in the accompanying drawings, in which,

Figure 1 is a reduced perspective of a gun with the improved rear sight mounted thereon,

Figure 2 is an end elevation of the rear gun sight including the improved mounting,

Figure 3 is a side elevation of the sight, and

Figure 4 is a vertical section taken on the line 4—4 of Figure 2.

Figure 1 is a perspective view of a gun having a barrel 10 with any suitable type of foresight, such as a bead sight 11, mounted thereon. An improved rear sight 12 is mounted on the barrel in the proper position for a sight of this type. The sight may be mounted on the barrel in any desired way, but it is preferably mounted thereon in a manner hereinafter described.

Referring particularly to Figures 2 to 4, the sight 12 includes a frame 15 which may be in the form of a circular piece of metal or other suitable material, but it is preferably in the form of a tube, as clearly shown in Figures 3 and 4. This tube is longer than its diameter in order to cut down the glare within the sight. If the length of the tube is approximately equal to or less than the diameter thereof, it will not materially reduce the glare. On the other hand if the tube is too long, it will cut down the light on the sighting unit within it too much. In addition to this, if a tube is considerably longer than its diameter, too much of the inside thereof may be seen during sighting, thus causing an obstruction to the vision. It has been found that the best results are obtained by making the tube approximately one to one and one-quarter inches in length, and from seven-eighths to eleven-sixteenths inches in diameter.

A pair of spaced thin side members 20 and 21 extend from the top to the bottom of the frame or tube 15. If the tube is used, these members are located substantially midway between its ends. The members are bent outwardly from each other at a plurality of points throughout their length to form a plurality of spaced, open sight indicators 24 located one above the other. It is preferable that the members be bent outwardly in curves so that each sight indicator is substantially in the form of a circle. In other words, the members curve from and opposite each other outwardly and back in substantially semi-circles 25 at a plurality of points throughout their lengths to form the sight indicators. The members are close and parallel to each other between the sight indicators to form thin slots 28 extending between said indicators. These slots open into the indicators or communicate with interiors thereof at their opposite ends.

The sight members 20 and 21 may be formed from wire, or they may be shaped out of heavier metal in order to be sure that they do not lose their shape. The metal, of course, would be kept very thin.

The sight members may be permanently mounted in the tube, but they are preferably adjustably mounted therein, as shown. In this case, the members are connected together at their opposite ends to form a sight unit 32 having a threaded portion 33 at its upper end and a pin 34 projecting downwardly from its lower end. A block 37 is mounted on top of the tube and has an internally-threaded vertical hole 38 therein into which the portion 33 of the sight unit is threaded. The pin 34 fits into a hole 40 which is in line and concentric with the block hole 38. The threaded portion 33 may be formed with a slot 42 in the outer end thereof for receiving a screw driver.

The sight unit 32 may be adjusted vertically in the tube 15 by turning the threaded portion 33 in the block hole 38. This arrangement also makes it possible quickly and easily to change a sight unit for one with sight indicators of a different size. These sight indicators may be equally spaced, or the spaces therebetween may progressively increase in size upwardly from the lowermost indicator, as desired.

The tube 15 may be mounted on a gun barrel in any desired manner, or it may have a mounting such as disclosed in Figures 2 to 4. In this example, the gun barrel 10 is provided with a mounting pad 45 extending from one side to the top thereof. This pad has a flat horizontal top 46 and a flat vertical side 47. An L-shaped base plate 48 is connected to the bottom of the tube, said plate extending laterally therefrom as at 49, and the outer portion 50 of the latter being bent downwardly. This plate fits over the mounting block which may have a vertical slot 53 in its vertical side 47 in which the portion 50 of the plate slidably fits. It is preferable to be able to adjust the base plate vertically relative to the mounting pad, and this may be accomplished in any desired manner. For example, a vertical slot 55 may be formed in the bent portion 50 of the plate, through which a set screw 56 extends

and is threaded into the side of the pad. A fine adjusting screw **57** is threaded through the laterally extending portion **49** of the plate and bears against the top **46** of the mounting pad.

An advantage of this sight lies in the fact that the sight unit **32** may be quickly and easily changed without removing the sight from the gun. On the other hand, if it is necessary to take the sight off the gun, this may be easily done by removing the set screw **56**, and yet this does not disturb the mounting pad so that the sight may be replaced without any special tools or having to have it fitted on to the barrel by a skilled workman.

When using this sight, a person may very quickly sight through the tube **15** since the shaped sight members **20** and **21** offer very little obstruction to the vision, and therefore it is easy to line up the front sight of the gun. As soon as the target and the front sight of the gun are observed between the sight members, the muzzle may be raised or lowered to bring them into sight within the desired open sight indicator. The target is not lost during this time since it can be seen through the slots **28** between the sight indicators. In other words, if a target is picked up in the uppermost indicator, the gun may be raised to bring it into a lower indicator without any material obstructing the line of vision. If the target is kept in the slot or slots **28** during this time, it is bound to be centered with respect to the sighting members when it arrives in the following sight indicator. In addition to this, it is possible to sight through the slots **28** for ranges between those of the sight indicators.

The tube **15** itself may be used for quick sighting at short ranges, such as fifty yards or less. The tube must be aligned with the bore of the gun for this purpose. In such case, the sight unit **32** is ignored and the front gun sight and target positioned on the centre of the tube, said sight unit offering very little obstruction to the vision when this is done.

When this sight is used, a certain optical illusion effect is obtained which is extremely helpful for fine sighting. The openings of the sight indicators and the slots therebetween seem to be much larger than they actually are. In order to obtain this illusion, however, it is necessary for the outside contour of each sighting member to correspond with or be the same as the inside contour of said member. This tends to keep the over-all sight compact, and to reduce the amount of material which may interfere with the vision.

Another advantage of the tube of this sight lies in the fact that it protects the sight unit from rain or snow. If water or snow gets into the openings of the sight unit, the vision is blurred or totally obstructed.

What I claim as my invention is:

1. A rear gun sight comprising an elongated tube adapted to be mounted on a gun in a substantially horizontal position through which a target may be seen, and a pair of spaced thin sight members extending from the top to the bottom of the tube spaced from the sides thereof and substantially midway between the ends thereof, said members being shaped outwardly from each other at a plurality of points throughout their lengths to form a plurality of spaced open sight indicators located one above the other, and said members being close and parallel to each other between the sight indicators to form thin unobstructed slots extending between and opening into the open indicators.

2. A rear sight as claimed in claim 1 in which the sight members are connected together at their opposite ends to form a sight unit, and said sight unit is removably mounted in the tube.

3. A rear gun sight comprising an elongated tube adapted to be mounted on a gun in a substantially horizontal position through which a target may be seen, and a pair of spaced thin sight members extending from the top to the bottom of the tube spaced from the sides thereof and substantially midway between the ends thereof, said members curving from and opposite each other outwardly and back in substantially semi-circles at a plurality of points throughout their lengths to form a plurality of spaced open sight indicators located one above the other, and said members being close and parallel to each other between the sight indicators to form unobstructed thin slots extending between and opening into the open indicators.

4. A rear sight as claimed in claim 3 in which the sight members are connected together at their opposite ends to form a sight unit, and including means for shifting the sight unit vertically within the tube.

5. A rear gun sight comprising an elongated tube adapted to be mounted on a gun barrel through which a target may be seen, a block mounted on top of the tube having an internally-threaded vertical hole therein substantially midway between the ends of the tube, a hole in the bottom of the tube aligned and concentric with the block hole, and a sight unit having a threaded portion at its upper end screwed into the block hole and a pin on its lower end fitting in the tube hole, said sight unit comprising a pair of spaced thin members extending between the pin and the threaded portion and spaced from the tube sides, and said members being shaped outwardly from each other at a plurality of points throughout their lengths to form a plurality of spaced sight indicators located one above the other, and said members being close and parallel to each other between the sight indicators to form thin unobstructed slots extending between and opening into the open indicators.

6. A rear gun sight comprising an elongated tube adapted to be mounted on a gun barrel through which a target may be seen, a block mounted on top of the tube having an internally-threaded vertical hole therein substantially midway between the ends of the tube, a hole in the bottom of the tube aligned and concentric with the block hole, and a sight unit having a threaded portion at its upper end screwed into the block hole and a pin on its lower end fitting in the tube hole, said sight unit comprising a pair of spaced thin sight members extending between the pin and the threaded portion and spaced from the tube sides, said members curving from and opposite to each other outwardly and back in substantially semi-circles at a plurality of points throughout their lengths to form a plurality of spaced open sight indicators located one above the other, and said members being close and parallel to each other between the sight indicators to form thin unobstructed slots extending between and opening into the open indicators.

References Cited in the file of this patent

UNITED STATES PATENTS

766,658	Beal	Aug. 2, 1904
847,630	Windridge et al.	Mar. 19, 1907
1,082,355	Nash	Dec. 23, 1913
2,103,189	Shepard	Dec. 21, 1937
2,161,303	Loomis	June 6, 1939
2,333,514	Beresky	Nov. 2, 1943

FOREIGN PATENTS

171	Great Britain	Oct. 2, 1852
3,399	Great Britain	Dec. 19, 1862
26,635	Great Britain	Dec. 2, 1907