Feb. 17, 1970 J. E. ULLMAN 3,495,338

DIAGONAL BLADE GUNSIGHT

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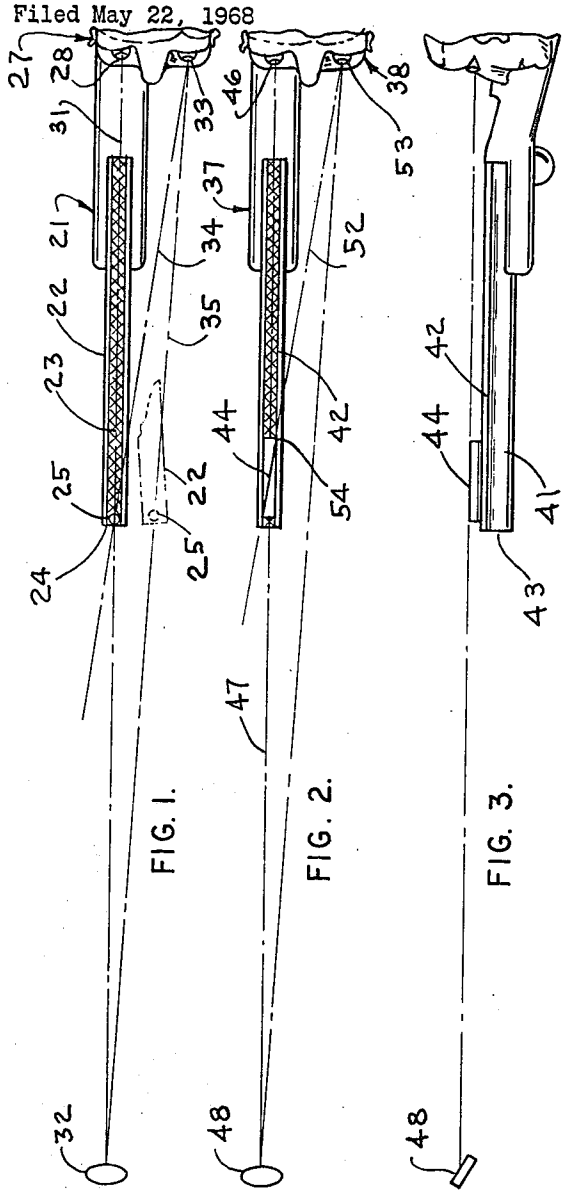


FIG. 1.

FIG. 2.

FIG. 3.

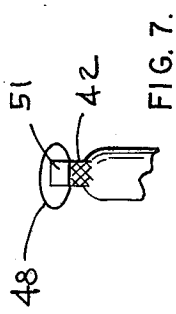


FIG. 7.

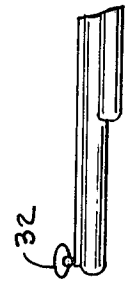


FIG. 6.

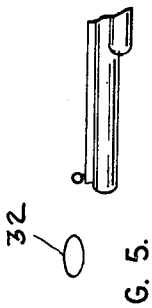


FIG. 5.

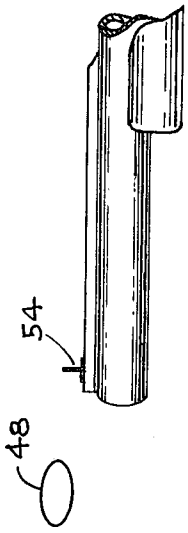


FIG. 8.

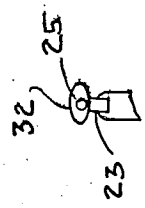


FIG. 4.

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DIAGONAL BLADE GUNSIGHT

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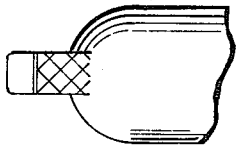


FIG. 13.

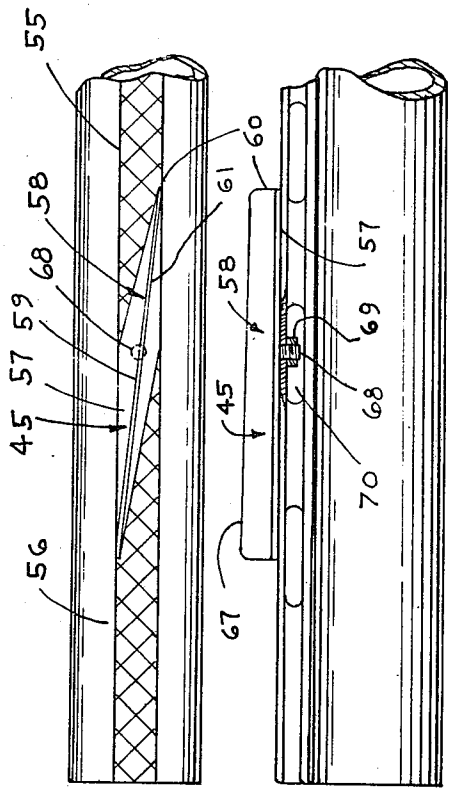


FIG. 9.

FIG. 10.

FIG. 11.

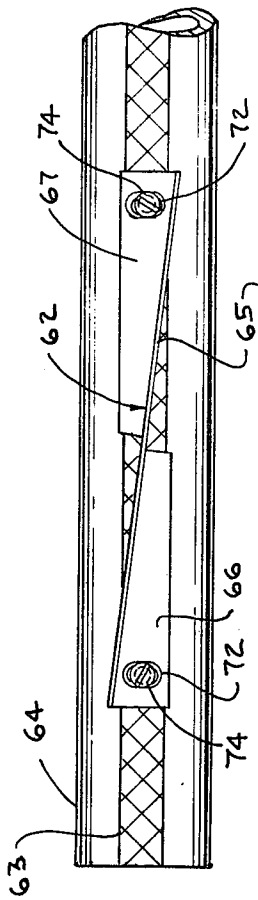
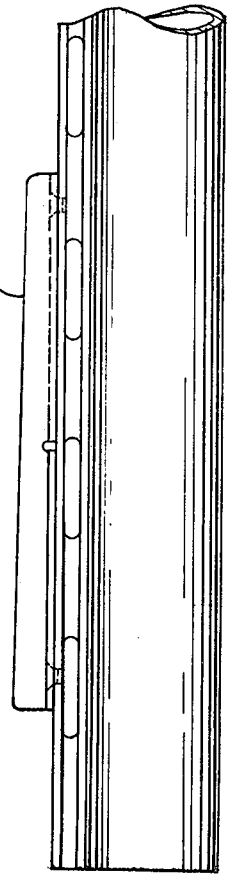


FIG. 12.



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DIAGONAL BLADE GUNSIGHT

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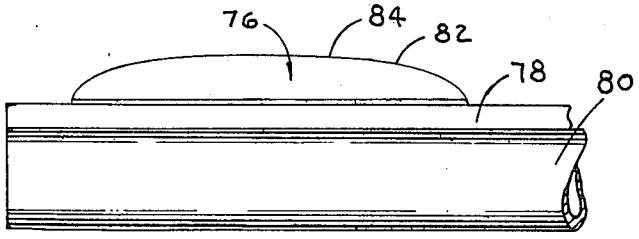


FIG. 14.

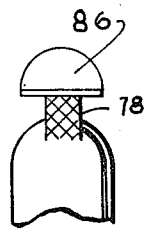


FIG. 15.

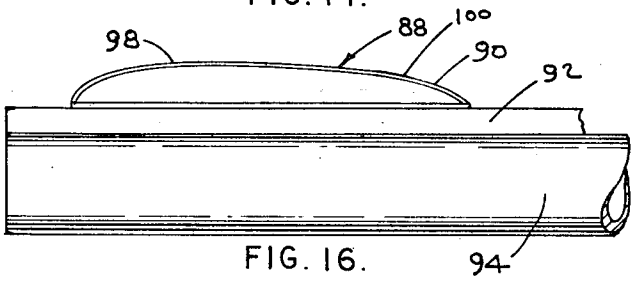


FIG. 16.

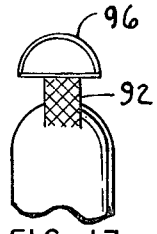


FIG. 17.

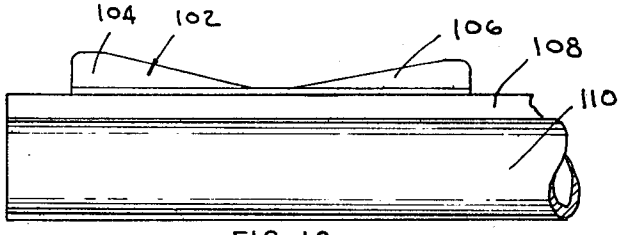


FIG. 18.

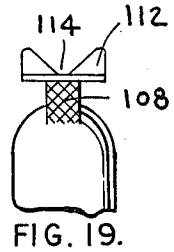


FIG. 19.

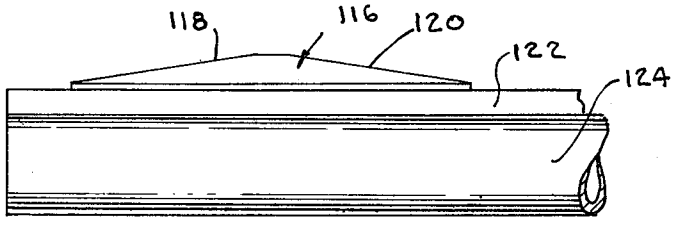


FIG. 20.

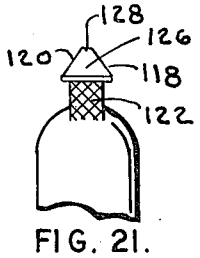


FIG. 21.

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DIAGONAL BLADE GUNSIGHT

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Filed May 22, 1968, Ser. No. 731,072
Int. Cl. F41g 1/42, 11/00
U.S. Cl. 33—47 9 Claims

ABSTRACT OF THE DISCLOSURE

A gunsight adapted to give a highly visible image to the sighting eye of a shooter and to give almost no image to the other eye so as to permit the shooter to keep both eyes open while shooting, comprising a thin blade having a front surface and a rear surface and an edge, a base plate supporting the blade and adapted to mount the blade on a gun barrel in such position that the sighting eye sees a projection of the front surface of the blade and the other eye sees the edge of the blade.

BACKGROUND OF THE INVENTION

This invention relates to gunsights, and more particularly concerns a gunsight which permits the shooter to keep both eyes open while shooting and prevents the sighting eye from being overpowered by the other eye.

When shooting at moving targets with a shotgun such as in skeet shooting, trap shooting, or in hunting game, it is desirable to keep both eyes open because it gives the shooter an increased field of vision, better distance perception through stereo-optical effect, and enables the shooter to locate the target more quickly, etc.

If the right eye of a right-handed shooter is the dominant or lead eye and is stronger than the other eye, the shooter may have little difficulty in keeping the other eye open and may not be troubled by seeing a double vision at the end of his gun. However, if the left eye of a right-handed shooter is the dominant or lead eye, the left eye may take over from the sighting right eye so that the shooter sees a double image of his gun barrel or may improperly sight down the barrel or the front gunsight bead with his left eye instead of the sighting eye and this will cause an error in shooting. Such dominant other eye shooters find it difficult to shoot with both eyes open and are forced to close the other eye in order to avoid confusion, thereby decreasing their field of vision, losing some distance perception, and picking up the target more slowly.

The situation is the same for a left-handed shooter. If the left eye of a left-handed shooter is the dominant or lead eye, he usually has little difficulty in sighting with his left eye. However, if the right eye of the left-handed shooter is the dominant eye, he also may have difficulty in shooting with both eyes open.

SUMMARY OF THE INVENTION

It is an object of this invention to provide a gunsight which overcomes the problems of the prior art and permits a right-handed shooter to shoot with both eyes open even though his left eye may be the dominant one, and permits a left-handed shooter to shoot with both eyes open even though his right eye may dominate.

It is also an object of this invention to provide a vivid, easily seen sight which can be used without causing confusion to normal shooters whose eyes and hands match, being either both right sided or both left sided.

The objects of this invention are accomplished by providing a diagonal blade gunsight which is easily discernible and highly visible to the sighting or aiming eye, but is practically invisible to the other eye. The gunsight

blade is mounted on a diagonal to the gun barrel so that a projection of the inside surface, which may be brightly colored, is visible to the sighting eye, but is invisible to the other eye which sees only the darkened, dull edge of the blade or perhaps a small portion of the blackened, dull rear surface of the blade. The width of the projection of the front surface of the blade seen by the sighting eye may be varied by controlling the position and the length of the blade.

BRIEF DESCRIPTION OF THE DRAWINGS

Other objects and advantages of the invention, including its simplicity and economy, will further become apparent hereinafter and in the drawings, in which:

FIG. 1 is a view in top plan of a shotgun and shows a right-handed shooter sighting with his right eye over a conventional bead sight towards the target;

FIG. 2 is a view in top plan of a shotgun equipped with a diagonal blade gunsight constructed in accordance with this invention and shows a right-handed shooter sighting with his right eye over the inventive diagonal blade gunsight towards the target;

FIG. 3 is a view in side elevation of the gun and gunsight shown in FIG. 2;

FIG. 4 shows the line of sight as seen from the right eye of the shooter in FIG. 1;

FIG. 5 shows the line of sight as seen from the left eye of the shooter in FIG. 1 when the right eye is sighting properly as shown in FIG. 4;

FIG. 6 shows the left eye view and line of sight when the left eye improperly takes over from the right sighting eye;

FIG. 7 is the line of sight from the right eye in FIG. 2 when the gun is being aimed properly at the target;

FIG. 8 is the line of sight from the left eye in FIG. 2 when the gun is being sighted properly as shown in FIG. 7;

FIG. 9 is an enlarged view in top plan of another embodiment of the inventive gunsight;

FIG. 10 is a view in side elevation of the gunsight of FIG. 9;

FIG. 11 is a view in top plan of an alternative embodiment of gunsight constructed in accordance with this invention;

FIG. 12 is a view in side elevation of the gunsight of FIG. 11;

FIG. 13 is a view of the line of sight of the sighting eye of the shooter looking down the barrel to the gunsight of FIG. 10;

FIG. 14 is a view in side elevation of another embodiment of a gunsight constructed in accordance with the invention;

FIG. 15 is a view of the line of sight of the sighting eye of the shooter looking down the gun barrel to the gunsight of FIG. 14;

FIG. 16 is a view in side elevation of another embodiment of the inventive gunsight;

FIG. 17 is a view of the line of sight of the sighting eye of the shooter looking down the gun barrel to the gunsight of FIG. 16;

FIG. 18 is a view in side elevation of another embodiment of the inventive gunsight;

FIG. 19 is a view of the line of sight of the sighting eye of the shooter looking down the gun barrel to the gunsight of FIG. 18;

FIG. 20 is a view in side elevation of another embodiment of the inventive gunsight; and

FIG. 21 is a view of the line of sight of the sighting eye of the shooter looking down the gun barrel to the gunsight of FIG. 20.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Turning now to the specific embodiments of the invention selected for illustration in the drawings, there is shown in FIG. 1 a shotgun **21** having a barrel **22**, a ventilated sighting rib **23**, a muzzle **24**, and a front sighting bead **25**.

A shooter **27** has a right eye **28** that sights along a line of sight **31** which passes along the sighting rib **23** and front bead **25** towards a target **32**. This is the proper line of sight for aiming at the target that is moving directly away from the shooter, and this movement of the target has been chosen to simplify the explanation of the invention. Line of sight **31** is shown looking from the rear in FIG. 4 to illustrate the bead **25** and rib **23** in line with the target **32**.

The proper view from left eye **33** may be along the line of sight **35** to the target and this is illustrated from the rear in FIG. 5. It is to be noted that the proper left eye view shows the target along line-of-sight **35** and front bead along line-of-sight **34** with these elements not being in line. It also should be noted that no conscious attention should be paid to the bead by the left eye, but rather the left eye should focus on the target **32**.

However, if the left eye **33** is the dominant eye, the view from left eye **33** is along line-of-sight **35** to front bead **25**. The left eye lines up the front bead **25** with the target **32** along line-of-sight **35** as shown in FIG. 1 in phantom lines. It will be noted that the shotgun when lined-up or aimed in this manner will shoot to the left of the target. This improper view of the line-of-sight **35** is also shown from the rear in FIG. 6 which shows that the front bead **25** is in line with target **32** for the left eye line-of-sight.

FIGS. 2 and 3 disclose a shotgun **37** being aimed by a right-handed shooter **38** and having a barrel **41**, sighting rib **42**, a muzzle **43**, and a diagonal blade gunsight **44** mounted on rib **42**. Gunsight **44** may be mounted on rib **42** by an adhesive or by one or more small screws.

Right eye **46** of shooter **38** is the sighting eye and it looks down a line-of-sight **47** to see a projection of the front surface of gunsight **44** in line with a target **48**. This line-of-sight view is shown from the rear in FIG. 7 which illustrates the rectangular projection **51** of the front surface of the gunsight.

The line-of-sight **52** from the other or left eye **53** is along the edge **54** of the blade of the gunsight and this appears from the rear as shown in FIG. 8.

Accordingly, the other or left eye **53** of shooter **38** is not distracted or attracted to a gunsight because it does not see the brightly colored front surface of the blade gunsight or any projection thereof.

Referring now to FIGS. 9 and 10, there is shown a diagonal blade gunsight **45** mounted on rib **55** of gun barrel **56** and comprising a base plate **57** which supports and is attached to an upright blade **58** having a front surface **59**, a rear edge **60**, and a rear surface **61**. It is to be noted that blade **58** is higher on the muzzle end and that the top edge slopes downwardly toward the stock end of the gun in order to project a true rectangle to the sighting eye of the shooter when viewed in perspective.

Front surface **59** may be colored with a bright color paint or with a fluorescent paint, whereas rear edge **60**, top edge **67**, surface **61** and all other visible surfaces are colored a dull black or some other equally unattractive shade.

Gunsight **45** may be adjusted so that the other eye of the shooter has a line-of-sight along blade **58** by providing a pivotal clamping screw **68** with a nut **69** having its centerline in the plane of the front surface **59** of blade **58**. To adjust the position of gunsight **45** for shooters having their eyes spaced apart as various distances, the gunsight **45** may be turned about the axis of the screw **68** until the blade **58** is properly positioned with respect to the other eye of the shooter. Typical means to accomplish this arrangement would be to have the screw portion as a threaded stud integral with the base **57** of the sight **45** and to have this stud project through the rib at a place where there is a ventilating space **70**. A thin nut **69** is then used to tighten on the screw and clamp the sight to the rib at the proper angle.

FIGS. 11 and 12 show a gunsight **62** mounted on a rib **63** of a gun barrel **64**. Gunsight **62** is a simple stamped one-piece unit having a blade **65** and a pair of base plates **66** and **67** which are turned at right angles from blade **65** and are adapted to be mounted on the rib of the gun through adjusting slots **72** by means of clamping screws **74**.

In operation, the shooter sights along the projection from the blade of the gunsight and the other eye cannot see the gunsight except for thin edge **60** and is attracted therefore only to the target so that shooters heretofore unable to use both eyes can now do so.

If desired, the blade may be provided with an aiming notch or an aiming point or semicircle. A blade may be provided which simulates the top half of the outline of the shot pattern of the gun at a given distance, such as at 35 yards, which may be considered a typical distance at which clay birds are broken when shooting trap from 16 yards.

FIG. 14 is a view in side elevation of a gunsight **76** mounted on a sighting rib **78** of a gun barrel **80** and includes a blade **82** having a curved upper edge **84** so that its projection **86** appears as the upper half of a circle in the line-of-sight view of FIG. 15. Projection **86** accordingly simulates the top portion of a pellet pattern from a shot gun indicating the width of the pattern and thereby helping the shooter to lead the target.

FIG. 16 shows a gunsight **88** including a wire **90** mounted on a sighting rib **92** of a shot gun barrel **94**. Projection **96** of gunsight **88** is shown in FIG. 17 and assumes the shape of a see-through semicircle which also simulates the top half of a pellet pattern. It is to be noted that forward portion **98** of wire **90** is higher than rear portion **100** so that the perspective projection **96** appears as a true semicircle.

FIG. 18 shows a gunsight **102** having a front blade **104** and a rear blade **106** and being mounted on a sighting rib **108** of a shot gun barrel **110**. Projection **112** of gunsight **102** is shown in FIG. 19 and includes a "V" notch **114** which aids in aiming the shot gun.

FIG. 20 shows a gunsight **116** having a sloping front edge **118** and a sloping rear edge **120** and is mounted on a sighting rib **122** of gun barrel **124**. FIG. 21 shows the projection **126** of gunsight **116** with edges **118** and **120** converging upwardly toward an apex **128**.

When positioned correctly, the blade of the gunsight should line-up so as to present only its rear edge to the non-sighting eye and present a shaped projection of the blade to the sighting eye. Thus the gunsight can only be seen by the proper aiming eye, and the other eye, even if stronger than the aiming eye, will not take over the act of aiming the gun.

The diagonal blade gunsight of the present invention may be made of metal or it may also be made of a colored molded plastic which is fluorescent or translucent in nature to provide excellent luminousity, or a combination of both materials.

It is to be understood that the form of the invention herewith shown and described is to be taken as a presently preferred embodiment. Various changes may be made in the shape, size and arrangement of parts. For example, equivalent elements may be substituted for those illustrated and described herein, parts may be reversed, and certain features of the invention may be utilized independently of the use of other features.

What is claimed is:

1. A gunsight adapted to give a highly visible image to the sighting eye of a shooter and to give almost no image to the other eye so as to permit the shooter to

keep both eyes open while shooting without confusion, comprising a thin blade member having a front surface and a substantially parallel rear surface and an edge connecting said front and rear surfaces and facing the shooter, means for supporting the blade member and for mounting the blade member on a gun barrel in such position that the front and rear surfaces, if extended in their respective planes, would both intersect the other eye so that the sighting eye sees the front surface of the blade member and the other eye sees the edge of the blade member.

2. The gunsight of claim 1 wherein said supporting and mounting means comprises a base plate connected to the bottom of the blade member.

3. The gunsight of claim 1 wherein the blade has a muzzle end and a stock end, and the front surface of the blade member is colored brightly, and the rear surface and edge are colored dully.

4. The gunsight of claim 1 wherein the muzzle end of the blade member is higher than the stock end of the blade member with the top edge of the blade member sloping downwardly towards the stock end, whereby the sighting eye of the shooter sees the blade as a rectangular area.

5. The gunsight of claim 1 wherein the blade member is made of a translucent material.

6. The gunsight of claim 1 wherein the blade member has a curved upper edge so that the sighting eye sees the blade as the upper half of a circle and thereby simulates the top portion of a shotgun pellet pattern.

7. The gunsight of claim 1 wherein the blade member comprises a front and rear blade having upper edges which slope downwardly toward each other so that the sighting eye see a "V" notch.

8. The gunsight of claim 1 wherein the blade member comprises front and rear edges which slope downwardly away from each other so that the sighting eye sees edges which converge upwardly toward an apex.

9. A gunsight adapted to give a highly visible image to the sighting eye of a shooter and gives almost no image to the other eye so as to permit the shooter to keep both eyes open while shooting without confusion, comprising an arcuately bent wire, means mounting said wire on a gun barrel substantially in a plane which includes the other eye of the shooter, said wire being bent so that it appears to the sighting eye in the shape of a semicircle and appears to the other eye as a thin elongated member.

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STEVEN L. STEPHAN, Assistant Examiner

U.S. Cl. X.R.

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