

UNITED STATES PATENT OFFICE.

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RIFLE-SIGHT.

1,032,899.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GLENN R. HATHAWAY, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Rifle-Sights, of which the following is a specification.

The invention relates to sights for fire arms, and more particularly to the class of adjustable sights for rifles.

The primary object of the invention is the provision of a sight of this character in which there is arranged a rotatable cylinder provided with a bar and V-shaped notch adapted to be alternately brought into proper position for the vision in aiming a rifle, the aforesaid bar taking advantage of the fact that the eye cannot focus on two objects at the same time that are not the same distance from the eye, the bead of the front sight being plainly visible therethrough, thus enabling a true and accurate aim upon an object at all times when desiring to bring the rifle into action.

Another object of the invention is the provision of a sight in which the V-shaped sight opening and the cross bar sight will be shielded, so as to destroy the dazzle and blur common when sighting a rifle, or other fire arms.

A further object of the invention is the provision of a sight in which the same may be vertically adjusted to the required height for firing relatively long distances.

A still further object of the invention is the provision of a sight of this character which is simple in construction, readily and easily adjusted, and that is thoroughly reliable and efficient in operation, and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claims hereunto appended.

In the drawings: Figure 1 is a fragmentary side elevation of a rifle barrel, showing the sight thereon constructed in accordance with the invention. Fig. 2 is a top plan

view thereof. Fig. 3 is a front elevation, showing the adjustable cylinder in one position. Fig. 4 is a rear elevation, showing the cylinder adjusted in another position. Fig. 5 is a fragmentary side elevation of the sight shown in raised position. Fig. 6 is a fragmentary bottom plan view of the sight removed from the rifle barrel. Fig. 7 is a perspective view of the locking dog removed from the sight. Fig. 8 is a vertical longitudinal sectional view through the sight and rifle barrel. Fig. 9 is a transverse sectional view on the line 9—9 of Fig. 1. Fig. 10 is a further fragmentary vertical sectional view through the rifle sight, showing in detail the manner of locking the cylinder.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, 5 designates generally a rifle barrel which may be of any ordinary well-known type, and upon which are mounted the front and rear sights designated by the numerals 6 and 7, respectively. The front sight is provided with the usual bead 8, which is visible through the rear sight, presently described. The rear sight is arranged at the breech end of the rifle barrel, as usual, and comprises a flat spring shank 9, the same being formed on the lower face of its forward end with a transverse undercut lug 10, which is inserted in a corresponding slot 11 in the top of the rifle barrel 5 for the mounting of the shank thereon. Formed at the rear end of the shank 9 is an upwardly extending cylindrical-shaped casing or housing 12, the same being elevated above the plane of the shank and formed with a medial cut away portion 13, the bottom thereof being rounded, as at 14, and which is designed for a vision gap in the casing or housing in alinement with the front sight.

Mounted within the casing or housing is a rotatable cylinder 15, the same being formed at opposite ends with heads 16 which frictionally engage the ends of the casing or housing 12 and prevent the lateral displacement of the said cylinder therein, when the same is being rotated. This cylinder 15 is medially cut away to form a V-shaped sight

notch 17 at one side thereof, and a cross sight bar 18 at the opposite side, diametrically opposed to the V-shaped sight notch, so that upon rotation of the cylinder 15 within the casing or housing 12, the V-shaped notch 17 may be brought into proper focus with the bead upon the forward sight, and on the turning of the cylinder in the reverse direction, the cross sight bar 18 may be brought into focus with respect to the said bead on the forward sight. The medial cut away portion in the cylinder 15 extends below the cross sight bar 18 to form a semi-circular shaped opening 19, so that the whole of the forward sight may be made visible at all times, as well as the object aimed at.

Fixed to one end of the cylinder 15 is an outwardly bowed compressible leaf spring catch 20, one end of which is left free, and is formed with an upturned locking lip 21 adapted to engage in either of a pair of spaced notches 22 formed in one side wall of the cut away portion in the housing or casing 12 for locking the said cylinder in adjusted position therein, so that the V-shaped sight notch 17 or the cross sight bar 18 will be held in locked adjusted position for presentation to the eye of the user of the rifle for the sighting thereof. Thus, it will be seen that the user of the rifle will have the benefit and advantages of two independent sights, namely, the horizontal cross sight bar 18, and the V-shaped sight notch 17 formed in the cylinder on the adjustment thereof.

Formed in the shank 9, forwardly of the housing or casing 12, in opposite side edges thereof, are notches 23, and also formed medially of the said shank between the notches is an elongated slot 24, into which projects the leg 25 of a locking member which is formed with upturned locking dogs 26, the same extending through the notches 23 and adapted to engage in cross cuts forming corrugations 27 in one side of the housing or casing 12 for elevating the sighting cylinder the required distance from the rifle barrel, the leg being forwardly inclined and contacting with the top of the rifle barrel, when the cylinder has been elevated, and the sight in this instance is used for visually focusing objects at different distances. It will thus be seen that the sight may be vertically adjusted and locked in such position by the locking member. This locking member is formed with forwardly extending finger grips 28, the latter being formed on and projecting at right angles from the locking dogs 26, so that by manually gripping the same, the locking member may be engaged with the corrugations or disengaged therefrom, thus permitting the sight cylinder to be raised and locked in such position as shown in Figs. 5, 8 and 10 of the drawings, by reason of said dog 26 locking with the corrugations in the housing and the leg

resting on the barrel, or brought to lowered position upon the rifle barrel. It will be noted that the sight notches 17 and 18 will be shielded by the heads 16 on the ends of the cylinder 15, and also the casing or housing 12, so as to avoid the blurring of the notch common in sights.

The housing 12 is cut into at its under side to provide a spring finger 29 formed with an inturned nib 30 which is adapted to engage any one of a series of notches 31 formed in the cylinder 15, so as to hold the said cylinder rigidly in place for using the sight in shooting. The corrugations 31 are arranged in close relation to each other, so as to enable a very accurate height adjustment to be had. When the nib of the spring finger 29 engages in one of the notches, it will be apparent that the cylinder will be held locked, so that there will be no possibility of the turning of the cylinder in the housing to alter the adjustment of the sight.

From the foregoing, taken in connection with the accompanying drawings, it is thought that the construction and operation of the invention will be readily understood, without requiring a more extended explanation.

What is claimed is:

1. In a sight for guns, the combination with a spring shank adapted, at its forward end, to be attached to a gun barrel and formed at its rear end with an upturned transversely disposed housing provided with a medial vision gap, of a locking member adapted to engage the housing so as to support the said shank at predetermined elevations above said gun barrel, and a cylinder rotatably mounted in the housing and having V-shaped notch and horizontal sight bar.

2. In a sight for guns, the combination with a spring shank adapted, at its forward end, to be attached to a gun barrel and formed at its rear end with an upturned transversely disposed housing provided with a medial vision gap, of a locking member adapted to engage the housing so as to support the said shank at predetermined elevations above said gun barrel, a cylinder rotatably mounted in the housing and having V-shaped notch and horizontal sight bar, and means on the cylinder engageable with the housing to lock it in adjusted position.

3. In a sight for guns, the combination with a spring shank adapted, at its forward end, to be attached to a gun barrel and formed at its rear end with an upturned transversely disposed housing provided with a medial vision gap, of a locking member adapted to engage the housing so as to support the said shank at predetermined elevations above said gun barrel, a cylinder rotatably mounted in the housing and having

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V-shaped notch and horizontal sight bar,
means on the cylinder engageable with the
housing to lock it in adjusted position, and
finger grips projecting forwardly from op-
posite sides of the elevator dog for manually
manipulating the same to raise and lower the
spring shank.

In testimony whereof I affix my signature
in presence of two witnesses.

GLENN R. HATHAWAY.

Witnesses:

WALTER F. GAGE,
PEARL HUFFMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."