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J. Y. BASSELL & F. C. BLENKNER.

GUN SIGHT.

APPLICATION FILED DEC. 11, 1906.

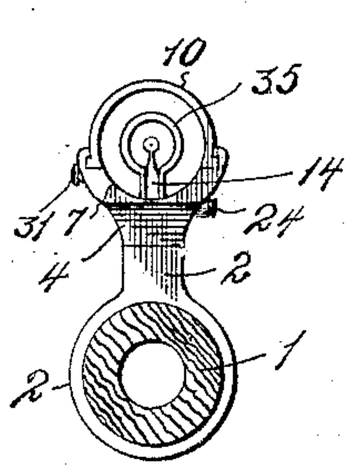

Fig. 1.

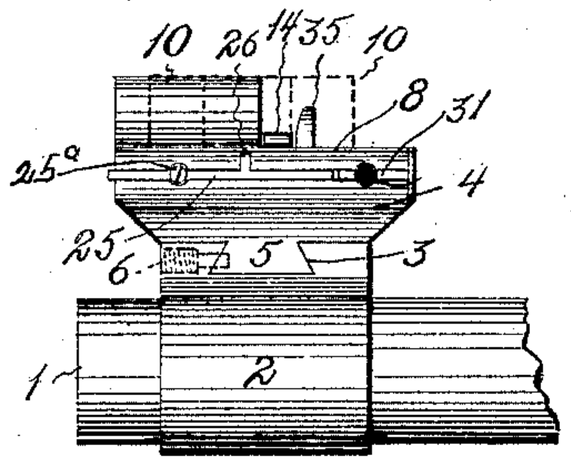

Fig. 2.

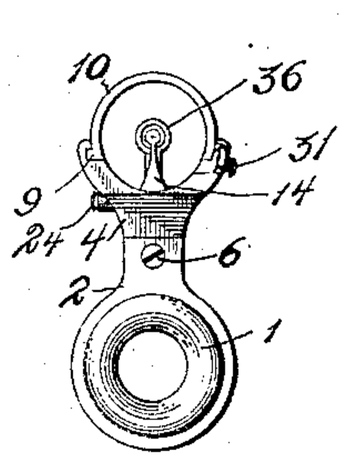

Fig. 3.

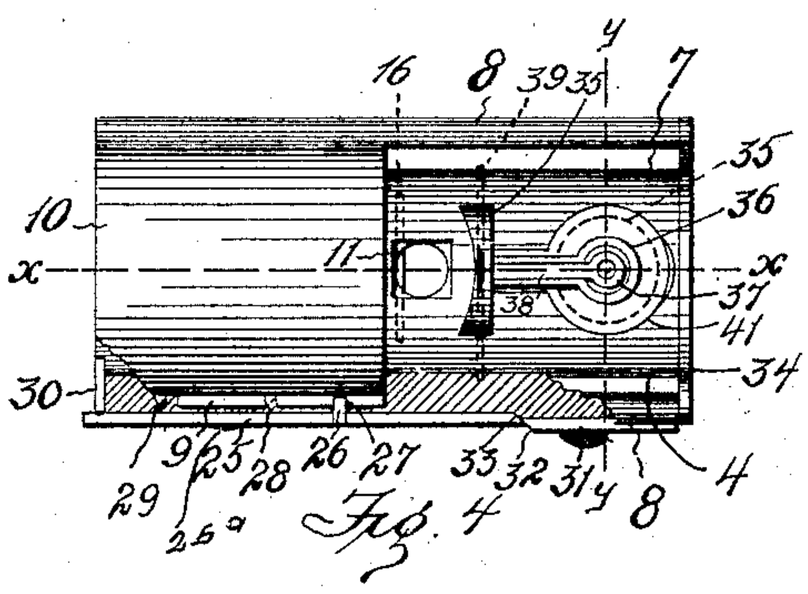

Fig. 4.

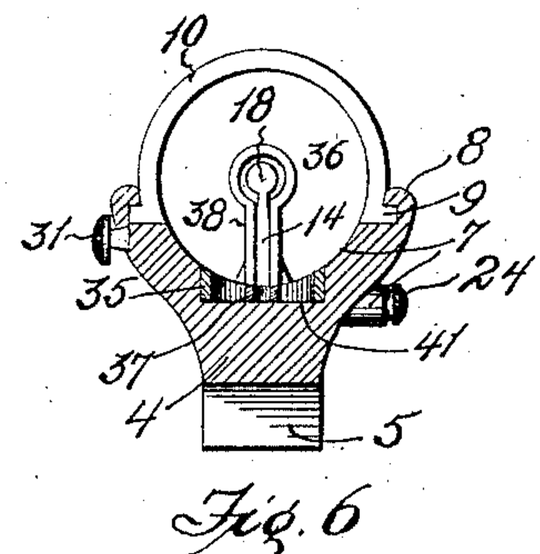

Fig. 6.

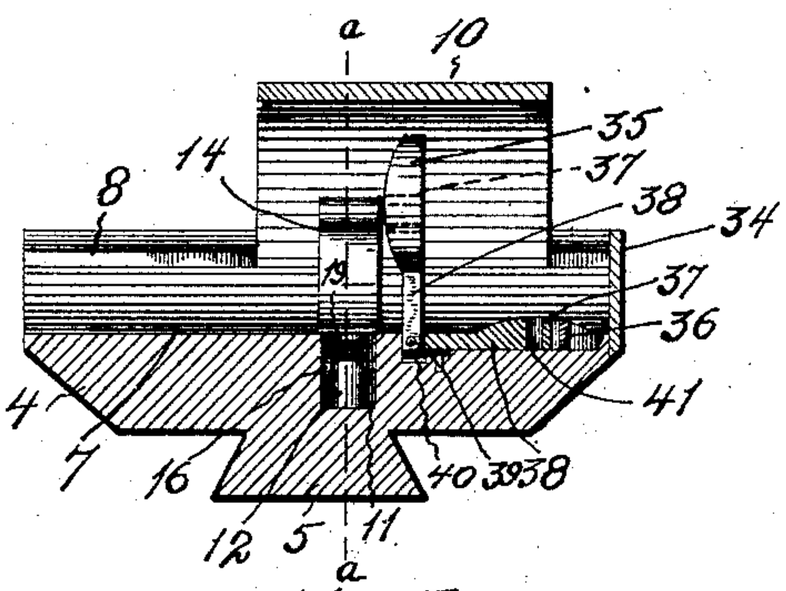

Fig. 5.

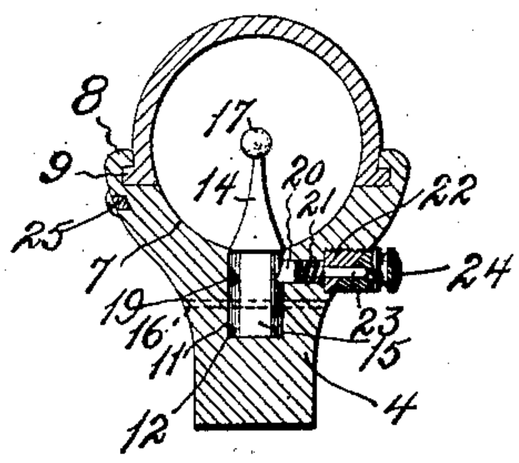

Fig. 7.

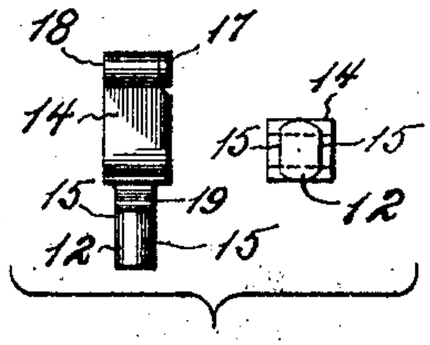

Fig. 8.

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UNITED STATES PATENT OFFICE.

JOHN Y. BASSELL AND FRED C. BLENKNER, OF COLUMBUS, OHIO.

GUN-SIGHT.

No. 870,610. Specification of Letters Patent. Patented Nov. 12, 1907.

Application filed December 11, 1906. Serial No. 347,247.

To all whom it may concern:

Be it known that we, JOHN Y. BASSELL and FRED C. BLENKNER, citizens of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Gun-Sights, of which the following is a specification.

Our invention relates to new and useful improvements in gun sights.

The object of the invention is to provide an improved front sight constructed and arranged to meet the many requirements necessitated by the varying visual needs or desires of different gunners.

The more essential object of the invention lies in the provision of a sight possessing the features above set forth constructed to withstand the hard usage of the military service.

Another feature lies in the combination with a movable hood of a plurality of rings arranged to be swung into position in front of the sight piece to reduce or increase the field according to the range and also to afford a more varied use of the peep sight.

A still further object is the provision of an interchangeable and reversible sight piece and simple means for locking the same in place. Also means for locking the hood in its different positions or instantaneously releasing the same to permit free adjustment.

Finally the object of the invention is to provide a device of the character described that will be strong, durable, efficient and simple and comparatively inexpensive to make, also one in which the several parts will not be liable to get out of working order.

With the above and other objects in view, the invention consists of the novel details of construction and operation, a preferable embodiment of which is described in the specification and illustrated in the accompanying drawings, wherein:

Figure 1 is a rear elevation of our improved gun sight, Fig. 2 is a side elevation, showing a portion of a rifle barrel and the block for receiving the sight, Fig. 3 is a front elevation, Fig. 4 is a plan view with portions broken away of the hood locking and releasing means and the sight piece removed, Fig. 5 is a longitudinal sectional view taken on the line *x—x* of Fig. 4 with the hood moved to the globe positon, Fig. 6 is a transverse vertical sectional view taken on the line *y—y* of Fig. 4, Fig. 7 is a transverse vertical sectional view taken on the line *a—a* of Fig. 5, and Fig. 8 shows a side elevation and a bottom view of the sight piece.

In the drawings the numeral 1, designates the muzzle portion of a rifle barrel and 2 the sight block. It is the practice and especially on military rifles to permanently secure this block on the barrel. In the present instance the block is provided with a transverse dovetail groove 3. This form of block is "standard" and therefore we provide the base 4 of our sight with a dovetail lug 5 adapted to fit snugly in the groove 3, while the usual longitudinal screw 6 is employed to fasten the sight to the block. It is to be understood however, that our sight may be attached to various forms of blocks and in any suitable manner. The base is slightly longer than the block and is formed with a central longitudinal concaved recess 7 extending from end to end thereof. The recess 7 terminates along each side in guide ways 8 which run longitudinally of the base and receive the guide flanges 9 of a movable hood 10. The inner periphery of the hood conforms to the contour of the recess 7 so as to form therewith a perfect circle. The hood can be moved longitudinally on the base to produce either a ring or a globe or the hood can be entirely removed from the base when an open sight is desired.

Near the central portion of the recess 7 and the base 4 a vertical cylindrical sight piece opening or socket 11 is formed. This opening is adapted to receive the stem or shank 12 of the sight piece 14, which stem is round and provided with opposed flat sides 15. A pin 16 is inserted transversely in the base so as to pass through one side of the opening 11 as shown in Fig. 5. This pin is engaged by one of the flat sides 15 of the stem and prevents the sight piece from turning. The sight piece is reversible so that either flat side may engage the pin and either of the sight centers 17 and 18 exposed to the eye of the shooter. This reversible feature is important as it provides for two distinct sight pieces in a single structure, for instance the center 17 may be white or colored, and the center 18, plain black. The stem 12 is also provided on its opposite round sides with notches 19 adapted to be engaged by the beveled end of a transversely movable locking plunger 20 mounted in the base. The stem 23 of this plunger which has an enlarged head, is encircled by a small coiled spring 21 bearing against a collar 22 threaded into the side of the base and provided with a square opening. In cross section, the stem is square and passes through the square opening of the collar and thus prevented from turning. The outer end of the stem is extended beyond the collar and the side of the base and has fixed thereon a cap 24. The coiled spring 21 forces the plunger head into the notches 19 of the sight piece, while when it is desired to reverse or remove the sight piece, the plunger may be drawn outward by the cap 24.

It is to be understood that the sight piece is removable as well as reversible, so that various styles may be used. It is also to be noted that the sight piece may be reversed or removed without removing the hood 10 from the base, it is only necessary to slide the hood forward on the base to the position shown in Fig. 4, when access to the sight piece may be readily had.

For locking the hood in position a flat spring 25 is embedded and secured in the upper portion of one side

of the base 4 by a screw 25ª. This spring is provided with an upwardly and inwardly projecting tongue 26 adapted to engage the notches 27, 28 and 29 formed in the adjacent flange 9 of the hood. These notches are positioned so as to be engaged by the tongue 26 when the hood is in the partially open, ring and globe positions respectively as illustrated in full and dotted lines in Figs. 2, 4 and 5. By this construction the hood is securely locked in the desired position so as not to be affected by the recoil or handling of the rifle. At its front end the spring 25 is provided with a lateral projection 30, the free or inner end of which extends across the guide way 8 and prevents the removal of the hood except when the projection is withdrawn by forcing the spring outward.

For throwing the tongue 26 out of engagement with the hood so that the latter may be freely moved along the base, a release slide 31 is mounted in the side of the base. This slide is dove-tail in cross section and works in a similar shaped groove, while its forward end is beveled as indicated at 32. The adjacent end 33 of the spring 25 is also beveled and rests against the end 32. The parts are held in contact by a stop plate 34 set into the rear of the base, which limits the rearward movement of both the release slide and the hood. By moving the slide forward the beveled ends 32 and 33 pass across each other, the slide traveling under the spring 25 and forcing the same outward, thus withdrawing the tongue 26 and so holding the same until the slide is moved rearward.

Under ordinary conditions the hood 10 meets every requirement in the production of either a globe or ring, but where a peep sight is used and the range long it is some times found that the hood encircles too large a field and in other cases where a fine peep opening is employed, the hood is too large to be seen. With a view to overcoming these difficulties and meeting every requirement of the shooter, a plurality of rings 35, 36 and 37 respectively are mounted on the base in the rear of the sight piece 14 so as to stand between the same and the eye of the shooter when swung into position. These rings are of different sizes varying from large to small in the order given, and each mounted on a stem 38 so as to coincide with the sight center and the center of the circle formed by the hood 10 and the recess 7 when up into sighting position. The stems fit within each other and have their ends connected on a common pivot pin 39 so as to bear against a holding spring 40 secured over a recessed portion of the base as shown in Fig. 5. The concaved recess portion 7 of the base is cut out as indicated at 41 to receive the rings and their stems which are cut to conform to the contour of the recess so as to form no obstruction to the vision of the shooter or mar the uniformity of the said recess.

Should the hood 10 be found to be too large or to inclose too large a field, the shooter has merely to swing up one of the rings which will stand concentric to the sight center and reduce the field to the proper size. By providing a plurality of rings the shooter is given a variety of sizes and may select the one best suited to his eye and the range. The hood still retains its value as it acts as a shade and affords in connection with the rings, globe and ring sights of various sizes. The central and smallest ring 37 may be employed as an aperture sight, the sight piece 14 being removed.

It will be seen that the invention provides for wide variation in the form of sighting member. By means of the removable and adjustable hood an open, partially open, ring or globe sight may be secured. The provision for removable, interchangeable and reversible sight pieces renders possible unlimited variation of the sight piece, and the rings 35, 36, and 37 meet varying conditions and aid the shooter in many instances.

What we claim is:

1. In a gun sight, the combination of a base for attachment to a rifle barrel, a sight piece detachably mounted on the base, a hood detachably mounted on the base, and a ring mounted on the base and movable into and out of position adjacent the sight piece.

2. In a gun sight, the combination of a base for attachment to a rifle barrel, a sight piece detachably mounted on the base, a hood mounted on the base and adjustable longitudinally of the barrel, and a ring mounted on the base and movable into and out of position adjacent the sight piece.

3. In a gun sight, the combination of a base for attachment to a rifle barrel, a sight piece detachably mounted on the base, a hood detachably mounted on the base and adjustable longitudinally of the barrel, and a ring mounted on the base and movable into and out of position adjacent the sight piece.

4. In a gun sight, the combination of a base for attachment to a gun barrel, a sight piece detachably mounted in said base, a sighting ring mounted on said base independently of the sight piece, and a hood detachably secured to the base independently of the sight piece and movable longitudinally of the barrel.

5. The combination with a fixed front sight block and its sight receiving groove, of a sight base having a projection adapted to fit in said groove, a sight piece mounted on the base, and a hood movable on the base.

6. In a gun sight, the combination of a base piece for attachment to a gun barrel, a sight piece mounted on the base piece, and a hood for the sight piece mounted on the base piece to slide longitudinally of the barrel.

7. In a gun sight, the combination of a base piece for attachment to the barrel, a detachable sight piece mounted in the base piece, and a hood for the sight piece mounted on the base piece to slide longitudinally of the barrel.

8. In a gun sight, a base, a sight piece mounted on the base, a hood adjustable on the base, and a ring mounted independently of the sight piece and the hood.

9. In a gun sight, a base, a sight piece, a hood movable on said base, means for locking the hood in place, and means for releasing the hood and throwing the locking means out of operation.

10. In a gun sight, a base, a sight piece, a hood movable on said base, locking means adapted to engage the hood to hold the same in place, and means for throwing the locking means out of engagement with the hood.

11. In a gun sight, a base, a sight piece removably mounted on the base, a hood carried by the base, a ring movably mounted on the base independently of the sight piece and the hood, and means for locking the sight piece in position.

12. In a gun sight, the combination with a sight piece, of a base, a hood shorter than the base and adapted to be moved thereon to cover and uncover the sight piece, and a ring adapted to be moved into concentric relation with the sight piece.

13. In a gun sight, the combination with a sight piece, of a base having a concaved recess, a hood shorter than the base movable thereon and conforming to the contour of the recess to form therewith a globe, and a ring adapted to stand concentric with the center of the sight piece.

14. In a gun sight, a base having a longitudinal concaved recessed portion formed with a ring receiving depression, and a ring adapted to lie snugly in said depression having its upper portion shaped to conform to the contour of the recess.

15. In a gun sight, a base having a longitudinally concaved recessed portion formed with a ring receiving de-

pression, a ring adapted to lie snugly in said depression having its upper portion shaped to conform to the contour of the recess, and a hood carried by the base.

16. In a gun sight, the combination of a base piece for attachment to the barrel, a sight piece mounted on the base piece, a hood for the sight piece mounted on the base piece and adjustable longitudinally of the barrel, and means for latching the hood in adjusted positions.

17. In a gun sight, the combination of a base piece for attachment to a barrel, a sight piece mounted on the base piece, and a detachable hood for the sight piece mounted on the base piece and adjustable longitudinally of the barrel.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN Y. BASSELL.
FRED C. BLENKNER.

Witnesses:
JAMES O. JOHNSON,
M. B. SCHLEY.