May 30, 1933. J. H. REDFIELD 1,911,770

GUN SIGHT

Filed Sept. 29, 1930

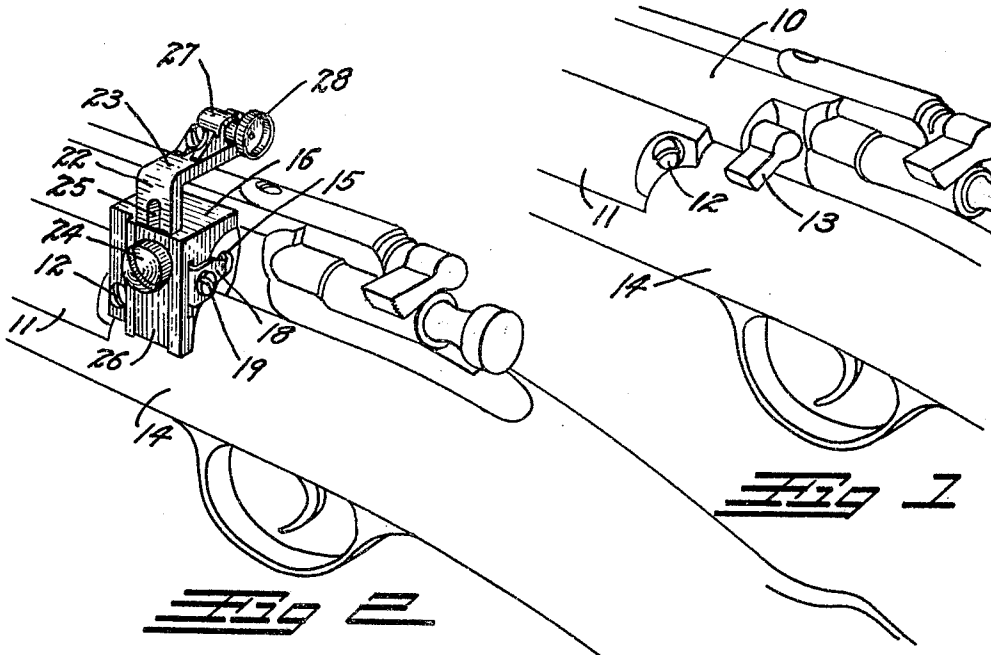

Fig 2

Fig 1

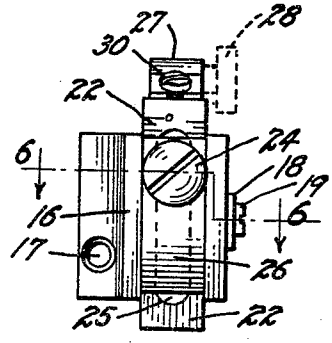

Fig 3

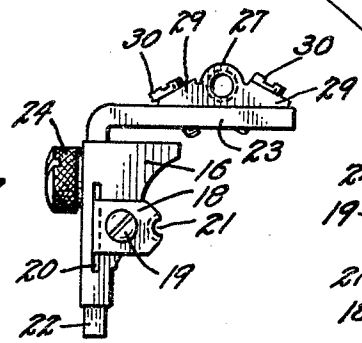

Fig 4

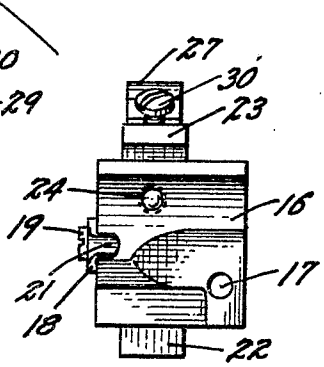

Fig 5

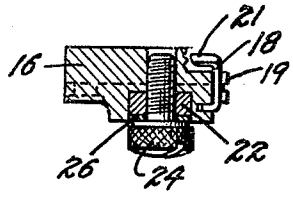

Fig 6

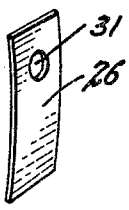

Fig 7

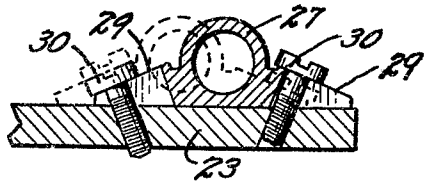

Fig 8

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UNITED STATES PATENT OFFICE

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GUN SIGHT

Application filed September 29, 1930. Serial No. 485,023.

This invention relates to a gun sight, more particularly to the type of sight known as a "receiver sight", that is, one arranged to be attached to the receiver of a rifle. The principal object of this invention is to provide a receiver sight which can be easily and securely attached to a rifle without the necessity of drilling or tapping new holes or notching or defacing the rifle or stock.

Another object of the invention is to so construct the sight that it cannot become misplaced or loosened by the recoil of the rifle.

A further object of the invention is to provide means which will allow the sight to be manually moved to any desired vertical adjustment without danger of its slipping from this adjustment while being locked in place.

A still further object of the invention is to provide a novel windage or lateral adjustment by means of which a minutely accurate windage adjustment can be easily made and permanently maintained.

Other objects and advantages reside in the detail construction of the invention which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 illustrates the receiver portion of a typical rifle before the improved sight is applied thereto.

Fig. 2 illustrates the rifle with the improved sight in place thereon.

Fig. 3 is an outside elevation of the improved sight.

Fig. 4 is a rear elevation thereof.

Fig. 5 is an inside elevation thereof.

Fig. 6 is a horizontal section taken on the line 6—6, Fig. 3.

Fig. 7 is a detail view of the vertical, adjustment-retaining spring.

Fig. 8 is an enlarged detail section through the sight sleeve illustrating the action of the windage adjustment.

Typical parts of a rifle are indicated by numeral in the drawing as follows: receiver 10; magazine side plate 11; side plate attachment screw 12; magazine cut off lever 13; and stock 14. The invention is applicable to any type of rifle having a receiver. The rifle illustrated is of the type known as a "Krag." The "Krag" rifle is provided with an injector locking lever positioned as shown at 13. This lever is to convert the rifle from a repeater into a single shot gun. It is seldom if ever that a hunter desires to dispense with the repeating feature of his rifle. Therefore, the lever 13 is rarely if ever used. To apply this improved sight to a gun of this type the magazine cut off lever 13 with its stem is removed leaving the stem hole exposed, as shown at 15. The magazine plate screw 12 is also removed.

The invention comprises a base block 16, the inside face of which is contoured as shown in Figs. 4 and 5 to fit over and around the receiver 10, the magazine plate 11, and the stock 14. The block 16 is drilled, as shown at 17 to provide an opening for the plate attachment screw 12.

A recoil shoulder or clip 18 is secured to the rear face of the block 16 by means of a suitable screw 19, one edge of this clip is turned inwardly to fit into a vertical groove 20 milled in the block 16. The extremity of the clip 18 carries an inwardly projecting tongue 21 which, when the device is in place, fits into the stem hole 15 of the rifle.

The tongue 21 is preferably formed by turning the extremity of the clip 18 inwardly and forming it on a slight arc as shown in Fig. 4 to conform to the diameter of the stem hole 15.

The sight is positioned on the rifle, such as the one shown in Fig. 2, by first engaging the tongue 21 into the stem hole 15 then swinging the block 16 against the receiver 10 and stock 14 and securing it in place thereon by means of the magazine plate screw 12 or by a similar screw replacing the usual plate screw 12.

A vertical groove is milled in the outside face of the block 16 to slidably receive a leg 22 depending from a bridge member 23. The leg 22 fits snugly in its slot so as to avoid any rocking motion and is maintained therein by means of a set screw 24, the stem of which passes through a vertical slot 25 in the leg 22.

It is desired to call attention to the fact that a leaf spring, herein designated the "vertical adjustment retaining spring" 26, see Fig. 7, is placed under the head of the screw 24 and against the vertical leg 22. This spring is provided with a hole 31 for the screw 24 and has a width substantially equal to the slot for the leg 22. The edges of this slot therefore maintain it in a vertical position.

The retaining spring 26 is formed with a slight bow so that its extremities will resiliently engage the leg 22 when the set screw 24 is slightly loosened. This allows the leg to be raised or lowered by hand and accurately adjusted to the desired position and maintains it in this position until the set screw 24 is tightened to permanently fix it. The face of the leg 22 may carry a series of graduations as illustrated to show the extent of the vertical adjustment.

The bridge member 23 supports a sight sleeve 27 which is internally threaded to receive any desired sight such as the disk sight illustrated at 28. The sight sleeve 27 is provided with two outwardly extending inclined shoulders 29, each of which is bifurcated to pass around an adjustment screw 30. The adjustment screws 30 are threaded into the bridge member 23 at an angle corresponding to the face angle or incline of the shoulders 29 so that the heads of the screws 30 will rest flat against these faces.

Let us assume the sighting sleeve is in the solid line position of Fig. 8 and that it is desired to move it to the left or broken line position. This can be accomplished by loosening the left hand screw 30 to the broken line position and then tightening the right hand screw 30 so that its head will slide down the inclined plane of the right hand shoulder 29 and gradually wedge or squeeze the sight sleeve 27 to the left until the left hand shoulder has contacted with the underside of the head of the left hand screw 30. Further tightening of the left hand screw 30 securely clamps the sleeve 27 in place.

Thus it can be seen that the screws 30 serve a double purpose. First, they act as an adjustment and stop to move the sighting sleeve to the right or left any desired distance. Second, they act as clamp screws to firmly clamp the sighting sleeve in any desired position.

It is desired to call attention to the recoil clip 18. This also serves a double purpose. First, its hook 21 maintains the base block 16 against the receiver. Second, it extends across the rear face of the receiver so as to transmit the rearward recoil shock of the rifle directly to the base block 16 and relieve the attachment screw 12 of any lateral strains. Thus, the recoil clip 18 serves to prevent shearing or loosening of the screw 12 by the continual recoil shocks to which any sight is subjected.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:—

1. A gun sight comprising: a base block adapted to be secured against the receiver of a rifle; sighting means supported by said base block; a hooked member carried by said base block so as to extend inwardly behind said receiver and forwardly into a rearwardly opening hole in said receiver; and means for securing said base block in place when said hooked member is in engagement with said hole.

2. Means for securing a sight upon a rifle receiver of the type having a rearwardly opening hole and a sidewardly opening hole, comprising: a base block; a clip secured to the rear face of said block; inwardly turned extremities on said clip, one of said extremities fitting into a groove in said block, the other extremity fitting into said rearwardly opening hole and a screw passing through said block and adapted to engage the sidewardly opening hole.

3. In a gun sight, means for holding a vertically slidable member in any desired vertical position comprising: a base block provided with a vertical groove for receiving said slidable member; a set screw threaded into said base block through a vertical slot in said slidable member; and a longitudinally extending leaf spring adapted to be clamped against the outer face of said slidable member by said set screw, the groove in said base block being sufficiently deep so that the sides thereof will extend beyond said slidable member and maintain said spring in alignment with said slidable member.

4. In a gun sight, means for holding a vertically slidable member in any desired vertical position comprising: a base block provided with a vertical groove for receiving said slidable member; a set screw threaded into said base block through a vertical slot in said slidable member; and a longitudinally extending leaf spring adapted to be clamped against the outer face of said slidable member by said set screw, the groove in said base block being sufficiently deep so

that the sides thereof will extend beyond said slidable member and maintain said spring in alignment with said slidable member, said spring extending the full width of said slidable member; and a laterally extending extremity of said spring adapted to cooperate with a scale on said slidable member to indicate positions thereon.

In testimony whereof, I affix my signature.

JOHN H. REDFIELD.