No. 847,643. PATENTED MAR. 19, 1907.

F. O. BROCKHAUS.

GUN SIGHT.

APPLICATION FILED JULY 18, 1906.

FIG. 9

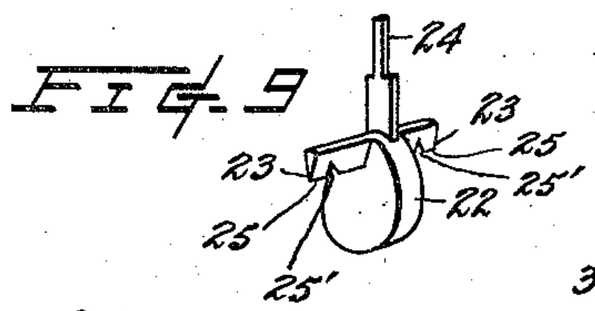
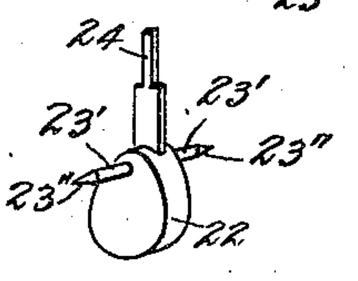


FIG. 10.



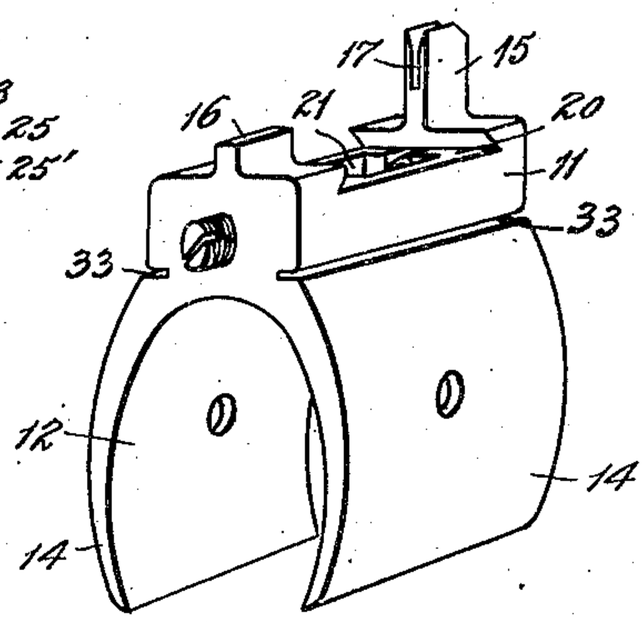


FIG. 6.

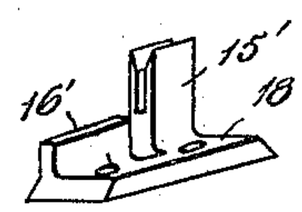


FIG. 7.

FIG. 8.

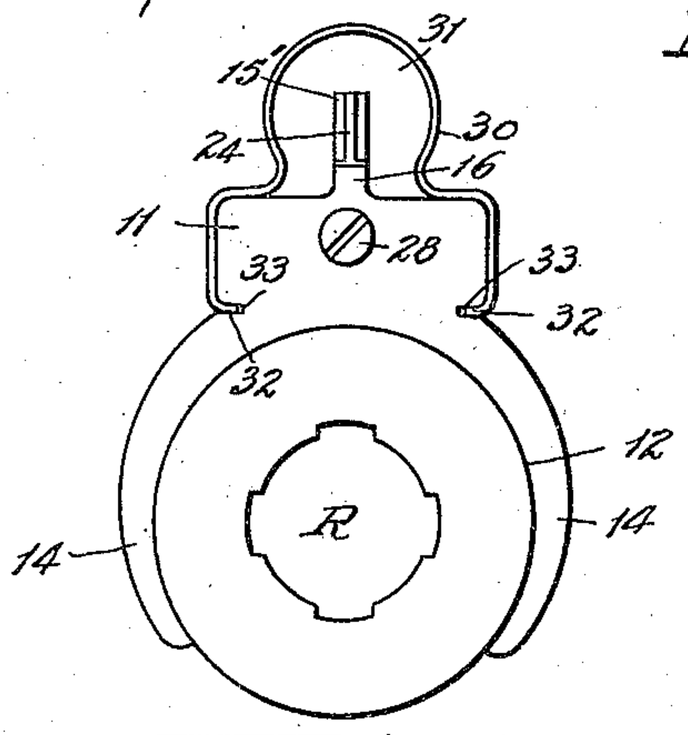


FIG. 1.

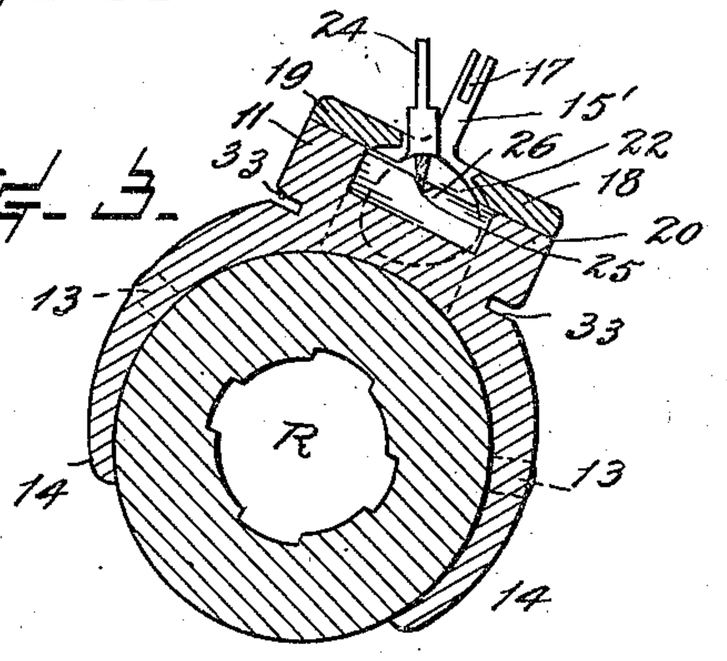


FIG. 3.

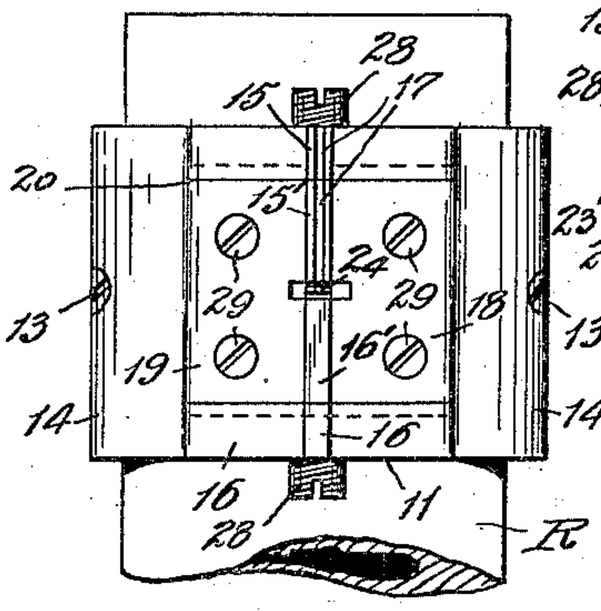


FIG. 2.

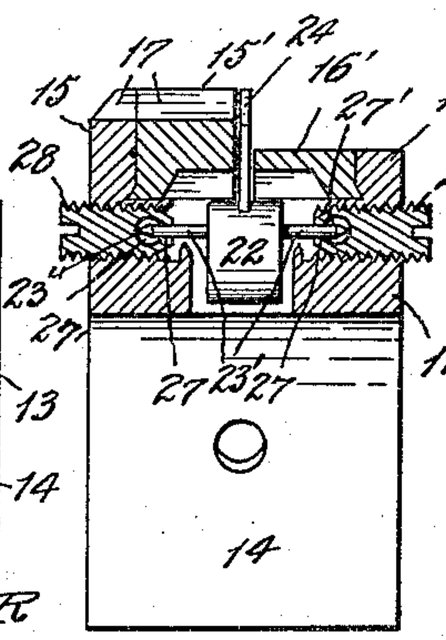


FIG. 5.

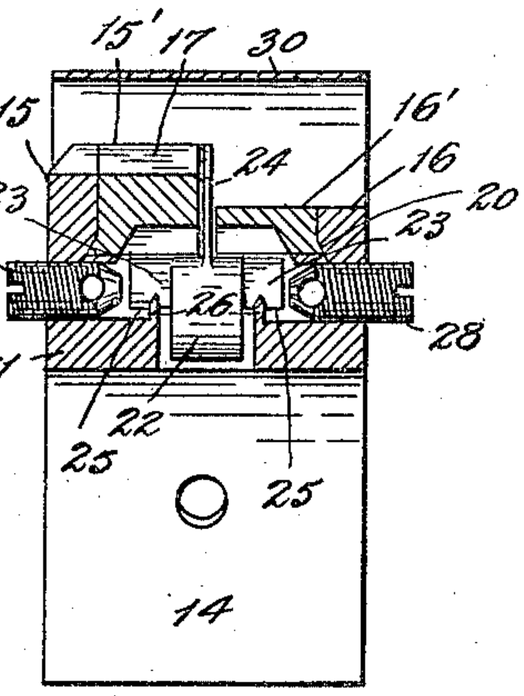


FIG. 4.

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GUN-SIGHT.

No. 847,643. Specification of Letters Patent. Patented March 19, 1907.

Application filed July 18, 1906. Serial No. 326,668.

To all whom it may concern:

Be it known that I, FRIEDRICH O. BROCKHAUS, a citizen of the United States, residing at Port Angeles, in the county of Clallam and State of Washington, have invented certain new and useful Improvements in Gun-Sights, of which the following is a specification, reference being had therein to the accompanying drawing, in which—

The object of this invention is the provision of simple and reliable means whereby the mark or object aimed at along the sights of the firearm may be accurately had as to the alinement of the rifle while the latter is in correct angular position relatively of its axis in order that the ejected bullet will be carried to the mark in accordance with the predetermined adjustment or allowance for range or distance and uninfluenced by any extraneous force other than that of currents of air traversing the path of the bullet.

With this end in view the invention consists in the novel construction, adaptation, and combination of parts, as will be hereinafter described and claimed.

Figure 1 is a front elevation, drawn to an enlarged scale, of a gun-sight embodying my invention; Fig. 2, a plan view of the same; Fig. 3, a cross-sectional view, illustrated, in an inclined position; Figs. 4 and 5, longitudinal vertical sections showing two ways of supporting the vibratile indicating device, and Figs. 6, 7, 8, 9, and 10 detached perspective views of the various parts.

Referring to said drawings, the numeral 11 represents a chambered block, which may be formed integrally with the barrel of a rifle or the like or it may be connected thereto, as by the provisions of a socket 12 therebeneath to receive the arm-barrel R, and is reliably held in such position by rivets or screws, such as 13, passing through the peripherally-disposed socket-wings 14. Extending upwardly from the front and back ends, respectively, of said block are standards 15 and 16, of which the former is the taller and is provided in its upper extremity with a longitudinally-disposed slot 17, which in a fore sight is desirably made of equal width throughout, as in Figs. 1 and 3, while in rear sights the slot is formed parallel at the bottom and at top is made V shape in cross-section, as in Fig. 6.

Cover-plates 18 and 19 are provided for the top of the block and are removably inserted from opposite sides in a registering dovetail-shaped channel 20, intermediate said block-standards. The cover-plate 18 is provided with standards 15′ and 16′, which respectively correspond as to height and formation with the juxtaposed aforesaid like parts of the block.

Positioned within the block-chamber 21 is a weight 22, suspended by longitudinally-protruding pivots 23 in journal-bearings provided, and projecting upwardly from this weight, and thereby maintained in a vertical direction, is a finger 24. This finger is of a length sufficient to reach the top of the standard part 15 or 15′ of a fore sight when the latter is in an erect position, and of a width equal to that of the slot 17, so that when the rifle is held correctly the finger will just mask the slot from the sighting-eye of the marksman, but a deviation or turning of the piece in either circular direction, however slight, will disclose the slot either partially or in its entirety. In the rear sight, however, the finger extends only to the height of the bottom of the V portion of the slot, which remains at all times open to view. The preferred manner of journaling said pivots is by forming the same with knife-like lower edges 25, which are indented, as at 25′, to be seated thereat in notched partitions 26, extending transversely across the block-chamber. This construction is under ordinary conditions well adapted to prevent the unseating or longitudinal displacement of the tiltable part, but where the gun is liable to be subjected to exceptionally severe usage such pivots are desirably held in a more positive manner. This alternative means consists in forming the pivots 23′ cylindrical with conical ends 23″, as illustrated in Figs. 5 and 10, to extend through axial bores 27 of adjustable screws 28, provided in the ends of the block, as shown in the drawings, and to minimize the frictional surface of the pivots a transverse hole or enlarged recess 27′ is provided at the inner end of each said bore, and the screws are regulated to cause the points at the ends of the pivots to bear lightly against the inner wall of the holes 27′. To meet either of the conditions above referred to, either of the tiltable indicators may be readily substituted for the other, and is accomplished by withdrawing the cover-plates and replacing the indicator already in position with the other and adjustably moving the screws into or out of operative position, as may be required. The cover-plates are then returned and secured

against dislodgment by fastening-screws 29 or their equivalent.

30 is a shield formed of a piece of spring sheet metal, having an eye 31 at its top and two inwardly-directed toes 32 at the bottom to engage in longitudinal slots 33 in the opposite sides of the block. The function of this shield is to protect the gun-sight from the direct rays of the sun, which if not intercepted would have a tendency to confuse the operator in taking aim.

In practice the person aiming the gun would direct the same so that the mark is discernible through the slot of the standard, whereupon the gun is rotated until the indicator-finger comes immediately in line with the slot, and when the mark is thereby completely shut off from view the gun is fired. This will, it is thought, be best understood from an inspection of Fig. 3, where the firearm barrel is represented as being turned out of the correct position to an extent indicated by the angle of inclination of the standard and with the standard-slot unobstructed, and it is obvious that should the gun be fired while thus held that the provision made for distance or range cannot be followed without affecting the miscarriage of the bullet, and to a greater extent than if such a provision had not been utilized, as range-adjustments can only be employed with but a rough approximation to accuracy under the conditions for which they are intended to be used—that is to say, with the gun-sights and axis of the bore in the same vertical plane, and which is clearly shown with the aforedescribed invention and coincidently with the sighting.

The invention as before alluded to can be used at either end of a gun, is of neat appearance, is not easily deranged, and may be employed with any character of gun or ordnance where extreme accuracy in firing is important.

What I claim is—

1. A gun-sight comprising a chambered block adapted to be secured to a firearm, a standard extending upwardly from each end of the block, the front one of which extends to a greater height than the rear one and is provided in its upper edge with a longitudinal slot, a finger tiltably mounted in said block and extending to a height equal to that of the higher of said standards and of a width equal to the slot therein, a weight formed integral with said finger and tending to maintain the latter in a vertical position, and pivotal supports for the finger.

2. A gun-sight comprising a chamber-block adapted to be secured to a firearm, a standard at the front end of the block and provided with a longitudinal slot in its upper end, a standard at the rear of the block and of less height than the aforesaid one, a two-part cover for the chamber of said block, one of said parts being provided with standards corresponding respectively with the aforesaid ones, and a vibratory finger adapted to mask said slot when the sight is held in a vertical position.

3. In a gun-sight, the combination with a chambered block, a longitudinally-slotted standard integral with said block, a weighted indicator extending from within the block-chamber to some distance above the top surface of the block, pivotal pins for said indicator which terminate in conical ends, and adjustable bearings for said pins consisting of two screws each provided with an axial bore extending thereinto for a short distance from their inner ends and terminating in enlarged recesses.

4. In a gun-sight, the combination of a block provided with means for securing the same to the barrel of a gun, said block being provided with a chamber with two notched partitions extending thereacross and in proximity of its ends, two standards of unequal height projecting upwardly from the block, the longer of which is at the forward end and the other at the opposite end, said longer standard being provided in its top with a longitudinal slot, an indicator provided with a finger projecting upwardly, pivotal supports for the finger, adjustable bearings for said supports, and a weight tending to maintain said finger in a vertical position.

5. In a gun-sight, the combination of a block provided with means for securing the same to the barrel of a gun, said block being provided with a chamber, two standards of unequal height projecting upwardly from the block, the longer of which is at the forward end and the other at the opposite end, said longer standard being provided in its top with a longitudinal slot, an indicator provided with a finger projecting upwardly, pivotal supports for the finger, and a weight tending to maintain said finger in a vertical position.

6. In a gun-sight, the combination of a block provided with means for securing the same to the barrel of a gun, said block being provided with a chamber, two standards of unequal height projecting upwardly from the block, the longer of which is at the forward end and the other at the opposite end, said longer standard being provided in its top with a longitudinal slot, a two-part detachable cover for the chamber of said block and provided with two standards corresponding with the respective aforesaid ones of the block, an indicator provided with a finger projecting upwardly through an aperture in said cover, pivotal supports for the finger and a weight tending to maintain said finger in a vertical position.

7. In a gun-sight, the combination of a block provided with means for securing the same to the barrel of a gun, said block being

provided with a chamber with two notched partitions extending thereacross and in proximity of its ends, two standards of unequal height projecting upwardly from the block, the longer of which is at the forward end and the other at the opposite end, said longer standard being provided in its top with a longitudinal slot, a two-part detachable cover for the chamber of said block and provided with two standards corresponding with the respective aforesaid ones of the block, an indicator provided with a finger projecting upwardly through an aperture in said cover, pivotal supports for the finger, and a weight tending to maintain said finger in a vertical position.

8. In a gun-sight, the combination of a block provided with means for securing the same to the barrel of a gun, said block being provided with a chamber with two notched partitions extending thereacross and in proximity of its ends, two standards of unequal height projecting upwardly from the block, the longer of which is at the forward end and the other at the opposite end, said longer standard being provided in its top with a longitudinal slot, a two-part detachable cover for the chamber of said block and provided with two standards corresponding with the respective aforesaid ones of the block, an indicator provided with a finger projecting upwardly through an aperture in said cover, pivotal supports for the finger, adjustable bearings for said supports, and a weight tending to maintain said finger in a vertical position.

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

FRIEDRICH O. BROCKHAUS.

Witnesses:

PIERRE BARNES,

JOHN DEADY.