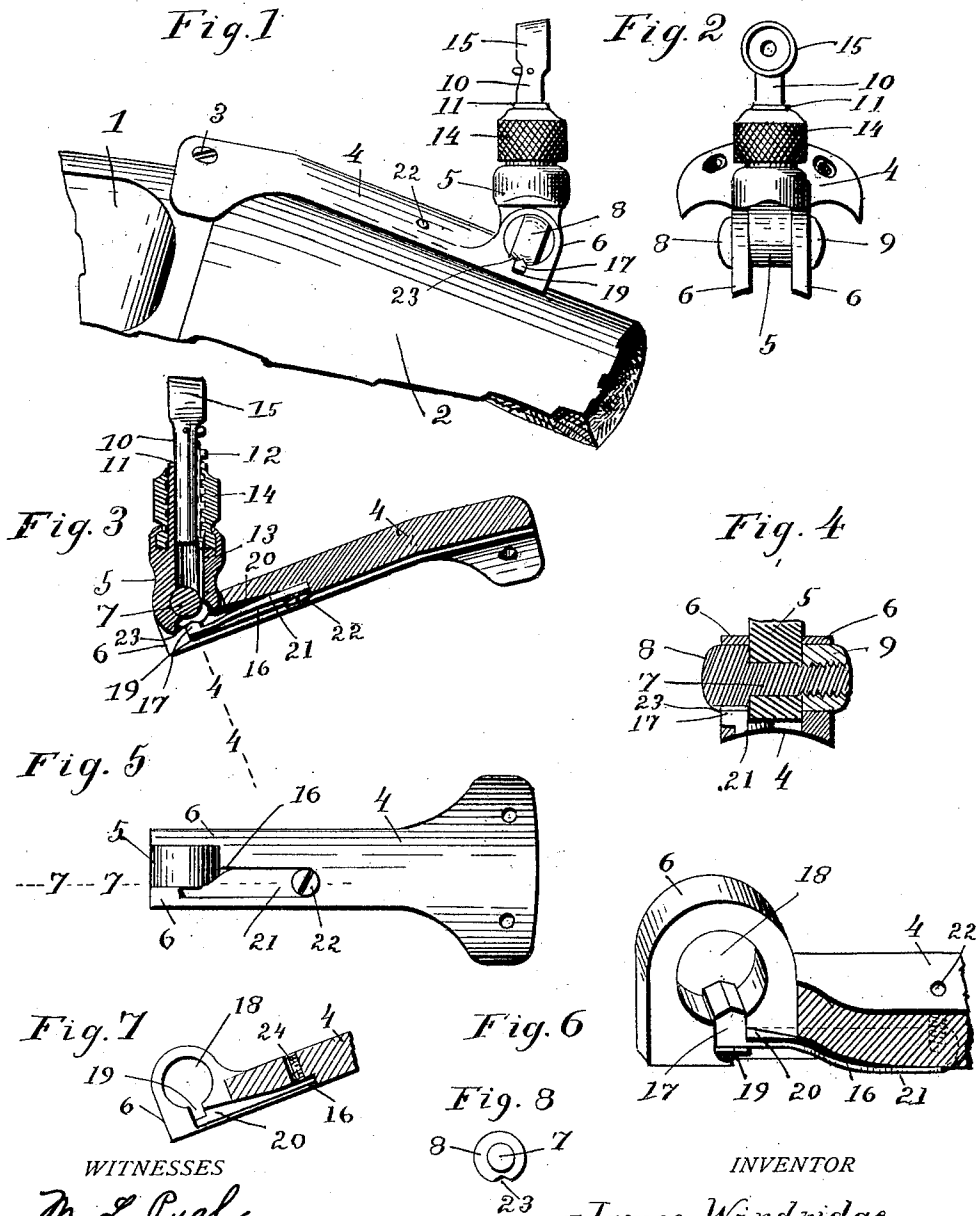


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SIGHT FOR FIREARMS.  
APPLICATION FILED FEB. 19, 1910.

1,138,708.

Patented May 11, 1915.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## SIGHT FOR FIREARMS.

1,138,708.

Specification of Letters Patent.

Patented May 11, 1915.

Application filed February 19, 1910. Serial No. 544,851.

*To all whom it may concern:*

Be it known that I, JAMES WINDRIDGE, of Middlefield, in the county of Middlesex, and in the State of Connecticut, have invented  
5 a certain new and useful Improvement in Sights for Firearms, and do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to an improvement in  
10 sights for firearms, of the class known as "tang" sights from their application to the part of the gun frame or receiver called the tang which projects rearwardly therefrom and is let into and fastened to the wood of  
15 the stock.

The object of the invention is to provide a sight of the class referred to for use upon tangless rifles, or those which do not have the said part extending from the receiver  
20 rearwardly into the stock and therefore lack the ordinary support for a tang sight.

The improvement contemplates the use in connection therewith of a false tang which is secured to the receiver in lieu of the tang  
25 proper, but not let into the wood of the stock, and which furnishes the required support for attachment of the sight, but is necessarily more elevated than the regular tang, as it is superimposed upon the stock.

One of the important features of the invention consists in the novel application of the holding spring, whereby provision is made for a larger range of elevation, and it is of value and importance in connection  
35 with various other classes of sights in which it is desirable to reduce the height of the joint.

My invention, therefore, consists in the arrangement, combination and construction  
40 of parts as hereinafter more fully described and claimed.

In the accompanying drawings forming a part of this specification, Figure 1 is a side elevation of sight embodying my invention  
45 shown applied to the receiver of a tangless rifle; Fig. 2 is an end view of the sight and false tang. Fig. 3 is a central vertical longitudinal section through the sight and false tang, but viewed from the direction opposite from that of the view of Fig. 1, and having a part of the joint broken away on its lower side to show certain of the parts to better advantage. Fig. 4 is a cross section verticalwise on a plane at right angles  
50 to the base, on the line 4-4 of Fig. 3. Fig.

5 is a plan view of the sight and false tang viewed upwardly, or from the lower side. Fig. 6 is a perspective view enlarged without particular reference to proportion of the ear of the false tang in which the detent  
60 spring is received, with the body of the false tang cut sectionally on the longitudinal line of the inner curved outline of the leaf of the spring, showing the arrangement of the spring partly in full lines and partly in  
65 dotted lines. Fig. 7 is a longitudinal section of the base on the line 7-7 of Fig. 5, or the central line of the detent spring holding screw, showing the ear of the base in which the detent is seated. Fig. 8 is an end view  
70 of the hinge bolt.

In illustrating an embodiment of my invention in the drawings, I show it as embodied in a sight applied to a Remington model #12 tangless rifle, but it is to be understood that by selecting such rifle for illustration, I do not restrict myself to a form of my invention suited only to said rifle, nor to any particular type of rifle. In the drawings, the receiver or frame 1 being of the  
75 tangless class, neatly abuts against the wood 2 of the stock on substantially a cross plane of the arm. Mounted upon the extreme rear end of the receiver, secured thereto by the screws 3, and extending rearwardly along  
85 the top surface of the wood of the stock just over the position of the ordinary tang, is the false or removable tang 4, which forms the base or support of the sight. The sight here shown is the well known, so  
90 called, rear combination sight, which comprises essentially, the joint 5, hinged to the ears 6 of the base, by the pivotal bolt 7 having its head 8 and nut 9 journaled in the ears 6; the sight post 10 mounted in the  
95 tubular sleeve 11 which forms the upper part of the joint, and having a toothed rack 12 projecting through a slot 13 in the sleeve and engaged by the threads of the adjusting nut 14, which is mounted to turn on the  
100 sleeve 11, rotatably socketed in the joint as shown, for elevating the sight post and its sight proper 15. Thus constructed, the sight is adapted for being folded down rearwardly from its vertical sighting position  
105 shown in the drawings, and in which it is normally held by means of improved detent spring mechanism.

In the form of sight referred to the height and adjustment of the sight mech- 110

anism is necessarily confined to the space between the line of aim and the gun stock, and this space is further reduced by the employment of a false tang superimposed above the stock. The usual form of detent spring for engaging the joint on its lower side between the ears 6 also reduces the height of said space, and I have therefore provided a novel form of spring detent, which permits the joint to be placed close to the surface of the stock. Its construction and arrangement is as follows: On the lower side of the false tang 4, on one side of its central plane, a longitudinal seat 16 is milled, extending from the space between the ears 6 a sufficient distance forwardly to enable it to receive a leaf spring of the required length to insure the proper tension and flexibility for the purpose to which it is put. On the lower side of the bearing 18 in the ear 6 corresponding to the side of the false tang on which the spring is placed, a radial parallel sided groove 19 is provided, and the ear is cut away on the inside to provide a chamber 20 extending between and connecting said groove and seat 16, said chamber being formed by milling its seat 16 deeper on a plane beveled upwardly from the said part of the seat, as shown. In the seat is received the leaf spring 21 having its rear end narrowed to the width required to fit in the chamber 20 without overhanging the inner face of the ear, and extending to the groove 19. On the rear end of the spring is a detent 17, filling and freely fitting the groove and projecting laterally outwardly from the body of the spring to the outer face of the ear. The upper surface of the detent is pointed or ridged as shown, for the purpose herein-after set forth, and the forward end of the spring is rigidly secured to the base of the false tang by a screw 22 inserted in the threaded hole 24 therein. The detent is adapted, through the flexibility of the spring to move vertically in the groove 19 and its upper surface or pointed part is adapted to engage a corresponding detent notch 23 in the head 8 of the bolt 7 which is journaled in the ears. The bolt head is clamped rigidly against the joint by the nut 9 which is journaled in the opposite ear, and as the bolt therefore moves integrally with the joint, the engagement of the detent and notch 23 results in securely locking the sight in sighting position, if the bolt is clamped in the joint in such position as represented in the figures. The ridged upper interlocking part of the detent, which comprises a beveled surface each side of its central plane, enables the detent to be cammed down out of the notch by the corresponding sides of the notch when a cer-

tain amount of pressure is exerted to turn the sight either way in its bearing, hence this construction in operation provides for the sight being folded down rearwardly out of sighting position, flat upon the stock of the arm. As the detent fits and is guided in the groove 19 in the base, the sides of the groove sustain the lateral strain of the bolt head 8 as it exerts camming action on the detent, thus entirely relieving the spring or elastic portion of the device from strain or buckling force. The detent 17 exactly corresponds in length to the width of the bearing of the ear of the base, and its spring leaf is also contained within the vertical plane of the ear; therefore the spring is entirely out of the way of the joint, and as that portion of it which is attached to the base is let into the base so that no part of it protrudes below the surface thereof, this construction permits the joint to be placed in the lowest possible position, clear down to the wood of the stock. It will be seen that a spring of any form or design placed under the central part of the joint and engaging the circular body thereof would necessarily involve the raising of the position of the joint by just the thickness and amount of movement of the spring, correspondingly reducing the range of adjustment of the sight for elevation, which feature is of the highest importance in this class of sight.

The utilization of the false tang 4 as the base of the sight is an important factor in the reduction of the height of the line of aim. Accidental displacement of the spring is impossible even when its holding screw is removed, as it is then held by the joint, and it is necessary to take the bolt from its seat and dislodge the joint before the spring can be removed.

What I claim is—

In a sight for firearms, the combination of a base provided with pivoting ears, a sight having a portion extending between said ears, a hinge pivot extending into openings in the ears, the portion of the pivot in one of said openings having a detent notch, and a leaf spring attached to the underside of the base and having fixed at one end a detent playing through a groove in the ear in which the portion of the hinge pivot having the detent notch is located and supported on opposite sides by the walls of said groove, whereby strain is prevented from falling on the spring.

In testimony that I claim the foregoing, I have hereunto set my hand.

JAMES WINDRIDGE.

Witnesses:

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ALFRED H. AUGUR.