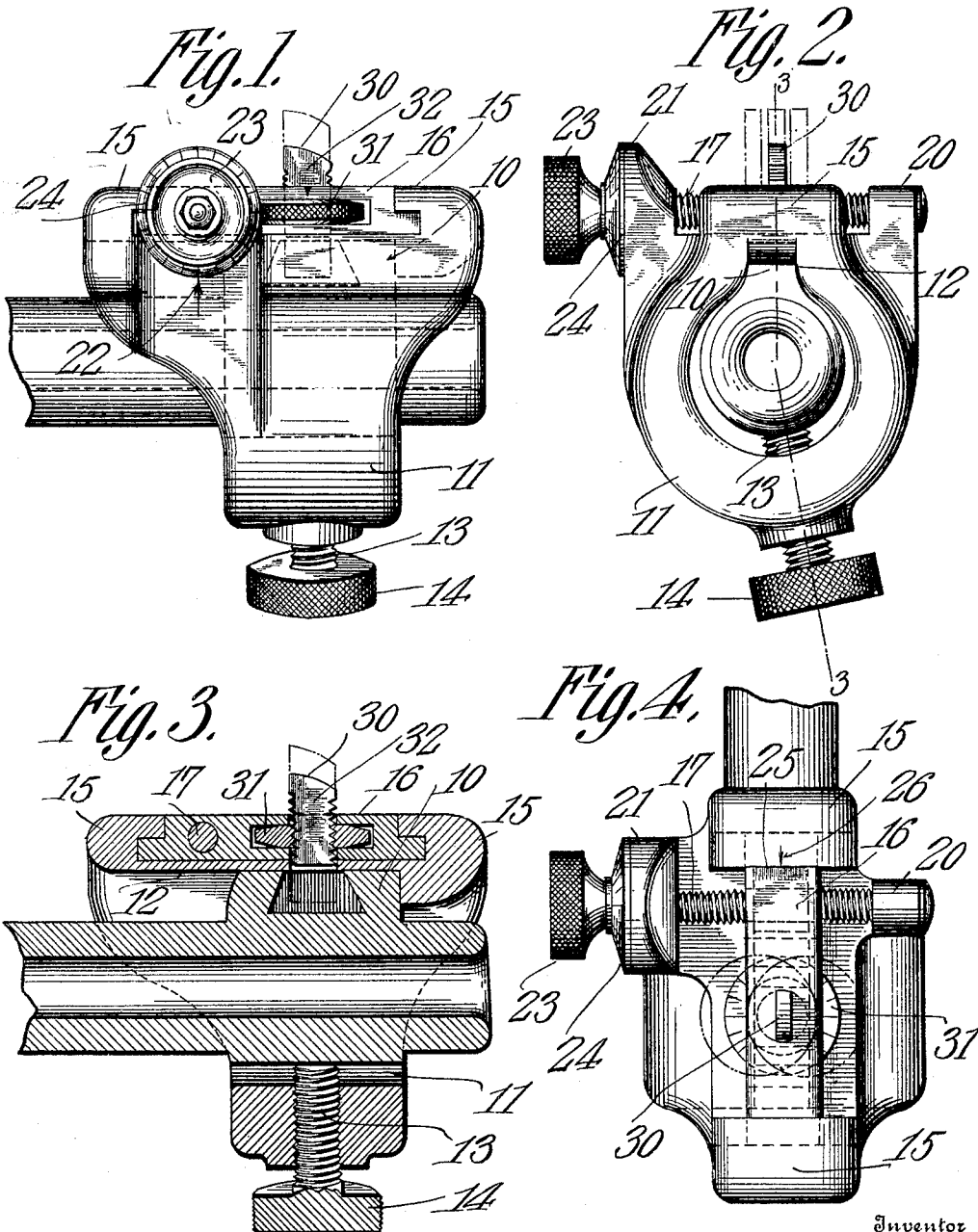


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J. P. SAXE.
SIGHT LOCATING DEVICE.
APPLICATION FILED AUG. 19, 1908.

936,570.

Patented Oct. 12, 1909.



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1416

Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH P. SAXE, OF WATERBURY, CONNECTICUT.

SIGHT-LOCATING DEVICE.

936,570.

Specification of Letters Patent.

Patented Oct. 12, 1909.

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To all whom it may concern:

Be it known that I, JOSEPH P. SAXE, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented a new and useful Sight-Locating Device, of which the following is a specification.

The principal object of the present invention is to provide a means for accurately locating the correct positions of sights on small arms and to provide a device of very simple construction by which the correct position of the sight may be found quickly and with the utmost accuracy.

A further object of the invention is to provide an indicating means which may be placed at the muzzle end of a rifle or other small arm and adjusted both laterally and vertically to the correct position which the front sight of the weapon is to occupy, the device being provided with graduations or other means for indicating such position after the adjustment, so that the sight may be readily placed in a proper position.

A still further object of the invention is to provide a device of this type which may be adjusted for the purpose of indicating a style or size of sight most appropriate for the particular weapon being gaged, or in other words to provide a number of standard sights of different height and provided with sight notches disposed at different points in their widths so that after gaging the weapon the operator will be informed from the indicating marks the particular style or size of sight best suited for the weapon.

With these and other objects in view as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size and minor details of the construction may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a side elevation of a sight gaging device constructed in accordance with the invention. Fig. 2 is an end elevation of the same.

Fig. 3 is a longitudinal sectional view on the line 3—3 of Fig. 2. Fig. 4 is a plan view.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

At the top of the muzzle end of rifles and other small arms is arranged a transversely grooved boss 10 having a flat upper face and the groove being disposed transversely and arranged for the reception of the front sight. As a rule the sight is notched and the adjustment laterally of the barrel brings the notch to correct position so that the barrel may be properly sighted. At the present time, however, the adjustment of the sight is largely a matter of guess work, the weapon being first placed in the rests in the range house and the shot fired at the target after which the sight is adjusted in one direction or the other as may be determined by the amount of error indicated on the target. It is practically impossible, however, to accurately adjust all the sights, except by the firing of numerous cartridges and adjusting the sight after each firing, such an operation entailing considerable expense.

In carrying out the present invention a number of sight tips are employed, the tips being of different height and having their notches located at different points in the widths of the tips each tip being known by a separate number or other designating mark, and the device which forms the subject of the present invention indicating the particular number or style of tip which should be applied to the weapon to secure the best results.

The frame 11 of the device is arranged to encircle the muzzle end of the barrel and the sight carrying boss 10. The general contour of the opening corresponds to that of the muzzle band as shown in Fig. 2, and at the top of said opening is a flat wall 12 that is arranged to fit down tightly on the upper face of the boss 10. The bosses are all of the same length and in securing initial adjustment of the device care is taken that one of the sides of the boss shall be jammed closely at the end of the flat wall 12. For this purpose the ring like frame is provided with an opening for the reception of a clamping

screw 13 having a milled or knurled head 14. The longitudinal axis of the screw is arranged to be on a line radiating from the axis of the gun barrel and at a point diametrically opposite the end of the wall 12 or the point where the wall 12 forms an abrupt shoulder with the curved wall of the opening so that when the screw is tightened in order to clamp the frame down firmly on the boss there will also be a slight lateral adjustment sufficient to jam the end of the boss into the corner at the end of the wall 12. This will permit the placing of the sighting device on all standard weapons with the utmost accuracy.

The upper face of the frame is provided with a pair of oppositely disposed projections 15 having grooves for the reception of the opposite ends of a slide 16 and said slide is threaded for the passage of a micrometer screw 17.

The opposite unthreaded ends of the screw are mounted in bearings formed in a pair of lugs 20, 21, the latter lug projecting outward a slight distance and bearing a zero indicating mark 22, and that end of the screw which passes through the lug 21 is provided with a milled or knurled knob 23 and also carries a graduated dial 24 which in connection with the zero mark 22 will indicate the extent to which the screw is turned and therefore the extent of lateral movement of the slide 16. On top of the rear end of the slide is a row of graduations 25 which in connection with a central zero mark 26 on the projection 15 will indicate the extent of lateral movement of the slide to the right or left of the center, while the graduations 24 of the dial will indicate the finer adjustment.

The slide carries a sight tip 30 which, of course, moves with the slide and said sight tip passes through a vertical opening formed in the slide, the opposite sides of the tip being threaded for the reception of a milled nut 31 which may be turned for the purpose of raising or lowering the tip as required. The tip carries graduations 32 running in opposite directions from a central or zero position and these will indicate the extent to which the sight is raised or lowered and thus determine the height of the permanent tip to be subsequently attached to the boss 10, while the graduations 25 will indicate the position of the sighting notch in the permanent tip so that, given these two micrometer readings, the operator is enabled to determine the style of tip best suited to the weapon.

The method of using the device consists in placing the same on the muzzle band of the weapon with the adjusting devices both set to the normal or zero position. The rifle with the device securely attached to it

is then placed in the rests in the range house where it is being targeted and a shot is fired at the target, after the rifle has been properly sighted. As a result of the shot the sighting device is moved to the right or left, or up or down to obtain better results with the next shot. Continuing in this manner the sighting device may in the course of a few shots be so adjusted that the rifle will be properly targeted and it will indicate the proper place for fixing the front sight.

What is claimed is:—

1. A small arm sight locating device comprising a frame arranged to be attached to the barrel of the arm, a laterally adjustable slide carried by said frame, there being markings upon the slide and the frame to indicate the extent of the lateral adjustment of the slide, and a vertically movable temporary sight tip carried by the slide, the sight tip being provided with markings to indicate the extent of the vertical adjustment thereof.

2. A sight locating device for small arms comprising a frame arranged to be attached to the barrel of the arm, a temporary sight tip carried by the frame, means for adjusting the tip vertically, means for adjusting the tip laterally, the tip being graduated to indicate the extent of its vertical adjustment, and the means for the lateral adjustment of the tip being graduated to indicate the extent of the lateral adjustment.

3. A sight locating device for small arms, comprising a frame arranged to encircle the barrel of the arm, a clamp screw for holding said frame in position, a temporary sight tip carried by the frame, means for adjusting the tip laterally, means for adjusting the tip vertically, the tip being graduated to indicate the extent of its vertical adjustment, and the means for the lateral adjustment of the tip being graduated to indicate the extent of the lateral adjustment.

4. A sight locating device for small arms comprising a frame having an opening and arranged to encircle the muzzle band, there being a square shoulder forming a part of the wall of the opening and arranged to jam against one end of the sight carrying boss of the band, a clamping screw carried by the frame and arranged at a point opposite such shoulder, a temporary sight tip supported by the frame, means for adjusting the sight tip, said adjusting means being provided with graduations for indicating the extent of such adjustment.

5. In a device of the class described, a frame having a pair of opposing grooves, a slide mounted in said grooves, a micrometer screw engaging the slide, the ends of the screw having bearings in the frame, there being graduations for indicating the extent of movement of the slide, a temporary

sight tip passing through an opening in the
slide and provided with threads at its op-
posite edges, and a micrometer nut engaging
such threads, the sight tip having gradua-
5 tions to indicate the extent of its vertical
adjustment.

In testimony that I claim the foregoing

as my own, I have hereto affixed my signa-
ture in the presence of two witnesses.

JOSEPH P. SAXE.

Witnesses:

JOHN SAXE,
SAMSON HOLZER.