H. HAMMOND.

GUN-SIGHTS.

No. 183,560. Patented Oct. 24, 1876.

Fig. 1.

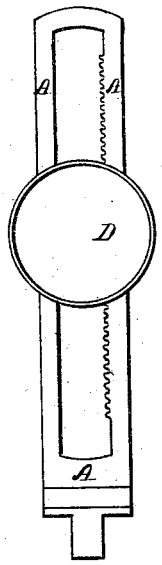


Fig. 2.

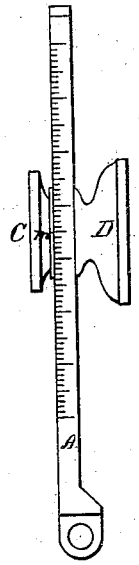


Fig. 3.

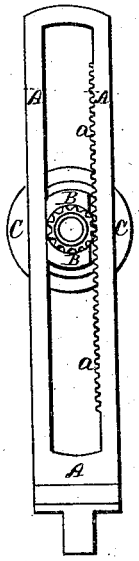


Fig. 4

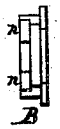


Fig. 5.

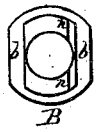


Fig. 6.

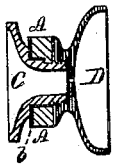


Fig. 7.

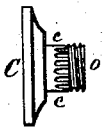
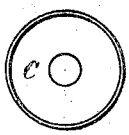


Fig. 8.



Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY HAMMOND, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN GUN-SIGHTS.

Specification forming part of Letters Patent No. **183,560**, dated October 24, 1876; application filed January 19, 1876.

To all whom it may concern:

Be it known that I, HENRY HAMMOND, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Gun-Sights; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

The object of my invention is to provide a rear sight, to be used upon rifles at different ranges, which can be readily and rapidly adjusted for the different distances, and yet possess the required delicacy and ease of motion for setting it to very fine divisions or graduations of a scale, and which can be firmly clamped in its position when set, so that there may be no fear of displacement while handling the arm.

In the accompanying drawing, Figure 1 is a front view of the sight. Fig. 2 is a side view of the same. Fig. 3 is a front view, with the disk containing the sight-hole removed. Figs. 4, 5, 6, 7, and 8 are views of details that will be hereinafter explained.

A is the frame of the sight, forming the slide upon which the disk containing the sight-hole moves up and down. On one side of the interior open space is the rack *a*, extending through about half its thickness. B is a slide fitting the vertical groove in the frame A, so that it can slide up and down without turning. It has a flat flange, *b*, on the back, which rests against the back of the frame A. The rack *a* runs in a slot, *n*, so that the teeth project into the open circular center of the slide B. These parts are shown more particularly in Figs. 4 and 5, which are a side and front view of the part B. C is a hollow centered disk, carrying the pinion *c*, and furnished with the screw *o*. The pinion *c* just fits in the open circular center of the slide B, so that the leaves enter the projecting teeth of the rack *a*, as shown in Fig. 3. The part C is shown detached in Figs. 7 and 8. D is the disk, with the small sight-hole in its center, as is usual with rear sights. It also serves the purpose of a clamp by being furnished with a nut on its under side, which fits upon the screw *o* of the part C. It is shown in position in Fig. 6, which is a horizontal section through the centers of the parts C and D.

The operation of my improved gun-sight is as follows: When it is desired to raise or lower the line of sight, so as to shoot higher or lower, the disk D is turned slightly, so as to loosen the slide. The disk C is then turned to move the slide up or down by means of the pinion *c* working in the rack *a*. This gives it a fine motion, so that the height can be accurately set by means of the usual scale upon A, and an index or vernier upon the flange of the slide B, as shown at *m* in Fig. 2. When the proper position is attained the disk D is turned back to its former position, which firmly clamps the parts by embracing the sides of the frame A between D and the flanges *b* of the slide B.

It will be observed that the slide B covers and conceals the pinion and the working part of the rack, only having a sufficient opening to allow the teeth of the latter to pass through the slide. This effectually excludes any foreign substance that could interfere with the action of the pinion.

What I claim as my invention is—

The combination of the rack *a*, the pinion and bevel C, the slide B, and the clamping-nut D, substantially as described.

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Witnesses:

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