

(Model.)

F. J. GARDNER.
SIGHT FOR FIRE ARMS.

No. 259,844.

Patented June 20, 1882.

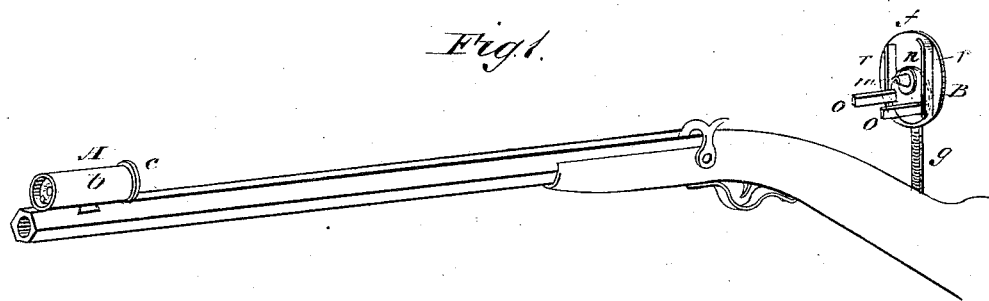


Fig. 2.

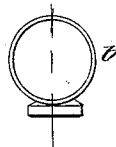


Fig. 3.

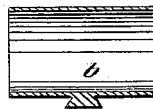


Fig. 4.

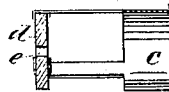


Fig. 5.

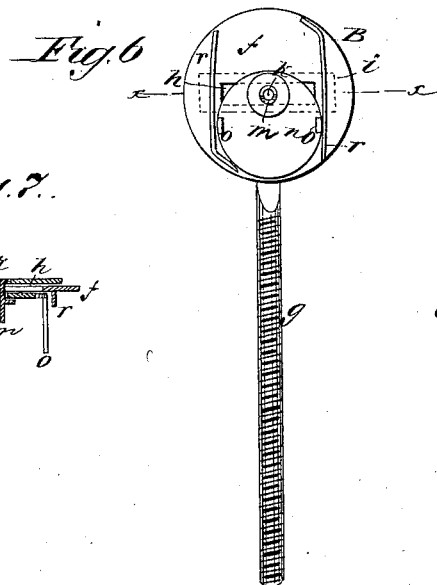
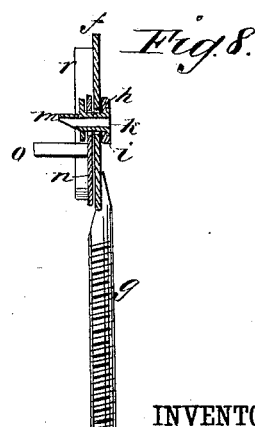
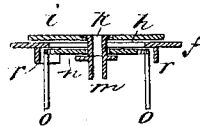


Fig. 7.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FREDERIC J. GARDNER, OF CINCINNATI, OHIO.

SIGHT FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 259,844, dated June 20, 1882.

Application filed March 7, 1882. (Model.)

To all whom it may concern:

Be it known that I, FREDERIC J. GARDNER, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Rifle-Sights, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a view in perspective of a rifle, in part, with my improved front and rear sights applied. Fig. 2 is an end view of an outer tube used in the front sight, and Fig. 3 is a longitudinal section thereof. Fig. 4 is a longitudinal section of an inner tube used in the construction of the front sight, and Fig. 5 is a rear end view of the same. Fig. 6 is a face view of the rear sight; Fig. 7, a transverse section of said sight on the line *xx* in Fig. 6, and Fig. 8 a longitudinal vertical section thereof.

The several figures from 2 to 8, inclusive, are all upon a larger scale than Fig. 1.

This improved rifle-sight is more particularly intended to be used for target-practice; and it consists of both a front sight and rear sight of peculiar and advantageous construction, the fore or front sight being opaque, of tubular construction, with a transparent cross plate or disk of glass having a sight-hole in it, and the rear sight comprising a transversely-slotted body and a transversely-adjustable cross-slide provided with a sight-hole within range of the slot in the body of the rear sight, substantially as hereinafter described.

The front sight, A, (represented in the drawings,) comprises a fixed outer tube, *b*, of metal or other suitable opaque material, arranged in longitudinal direction with the barrel of the rifle, and an inner tube, *c*, fitted to slide within the outer tube, and removable therefrom when required. Both of these tubes are open at their ends, and the inner one, *c*, is provided with a cross disk or piece, *d*, of plain glass, having a central sight-hole, *e*, in it. This glazed front sight does not obstruct any part of the target, and, when properly held, admits of the bull's-eye being very distinctly seen through

the hole *e* in the glass. Said glass neither increases nor diminishes the size of the bull's-eye, and therefore does not affect the eyes; neither does it make an object appear to be farther away than it really is, which is a distinguishing feature of it as compared with other sights; nor yet does it cause that gloom about the bull's-eye which is so common to other sights when held directly on said mark.

The hole *e* in the glass may be of any size or diameter desired, or, in other words, can be made to suit any focus at any range.

By setting the glass *d* in the inner tube, *c*, which may be slid or drawn out from the outer tube, *b*, every facility is afforded for cleaning the glass, and such inner tube may be readily reset or replaced. Said inner tube, *c*, also acts as a gage for shading the face of the glass, and can be adjusted longitudinally or drawn back and forth at pleasure of the operator.

The rear sight, B, which may be used to advantage in connection with the improved front sight just described, is composed in part of a disk or plate of metal, *f*, mounted on a screw, *g*, for regulating the height of the sight. This plate *f* forms what may be termed the "body" of the sight, and has an oblong horizontal slot, *h*, through it, which slot is covered on the back side of the plate *f* with a sighting-slide, *i*, having a sight-hole, *k*, in it, and fitted to slide in direction of the length of said slot to adapt the sight to variations in wind or weather. The sight-hole *k* is made in or through a forwardly-projecting shank, which is fast to the slide *i* and forms the bearing for the slide in the slot *h*. This shank is of tubular construction where it projects in front of the sight, and such front projection is cut away underneath, so as to form a half or partial tube, *m*, which acts as a shade for the sight-hole *k*, or opening in the back of the rear sight. Fitted to turn freely on this shank or part tube *m*, between a collar thereon and the face side of the plate *f*, is an adjusting or second plate, *n*, of eccentric construction. This eccentric plate *n* is provided with two projections or finger-pieces, *o o*, on its face, which projections serve for turning the eccentric by the thumb and forefinger, in order to adjust the slide *i* across the plate *f*, said eccentric being held in posi-

tion by or working against guards or springs *r r* upon the plate *f*. This forms an easy and effective means of adjusting the sighting-slide.

Having thus described my invention, I claim
5 as new and desire to secure by Letters Patent—

1. A tubular front sight of opaque material, fitted with a transparent cross plate or disk of glass having a central sight-hole, substantially as specified.
- 10 2. A front sight for rifles and other guns, of opaque tubular construction, composed of an outer fixed tube and an inner slide or tube provided with a transparent cross plate or disk of

glass having a central sight-hole in it, essentially as shown and described.

3. The combination of the eccentric *n*, the slotted plate or sight-body *f*, the adjustable cross-slide *i*, having a sight-hole, *k*, the partial tube *m*, the projections or finger-pieces *o o*, and the guards or springs *r r*, essentially as
15
20 herein described.

FREDERIC JOHN GARDNER.

Witnesses:

JOHN R. SMITH,
JOHN A. KEY.