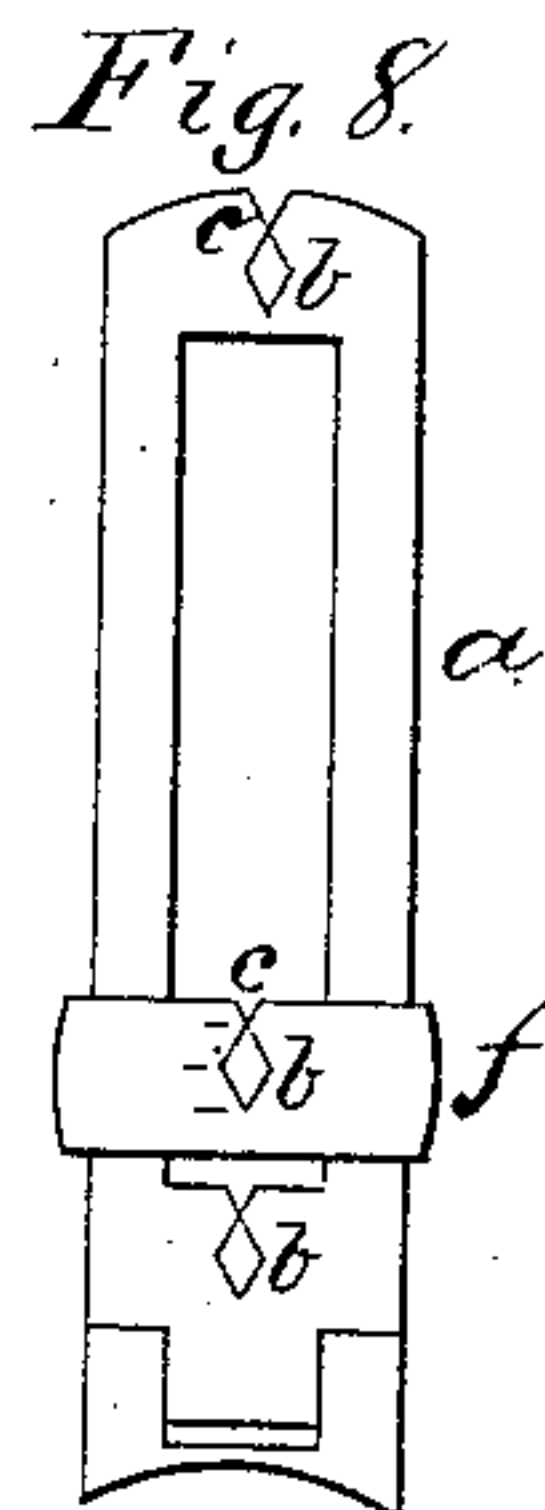
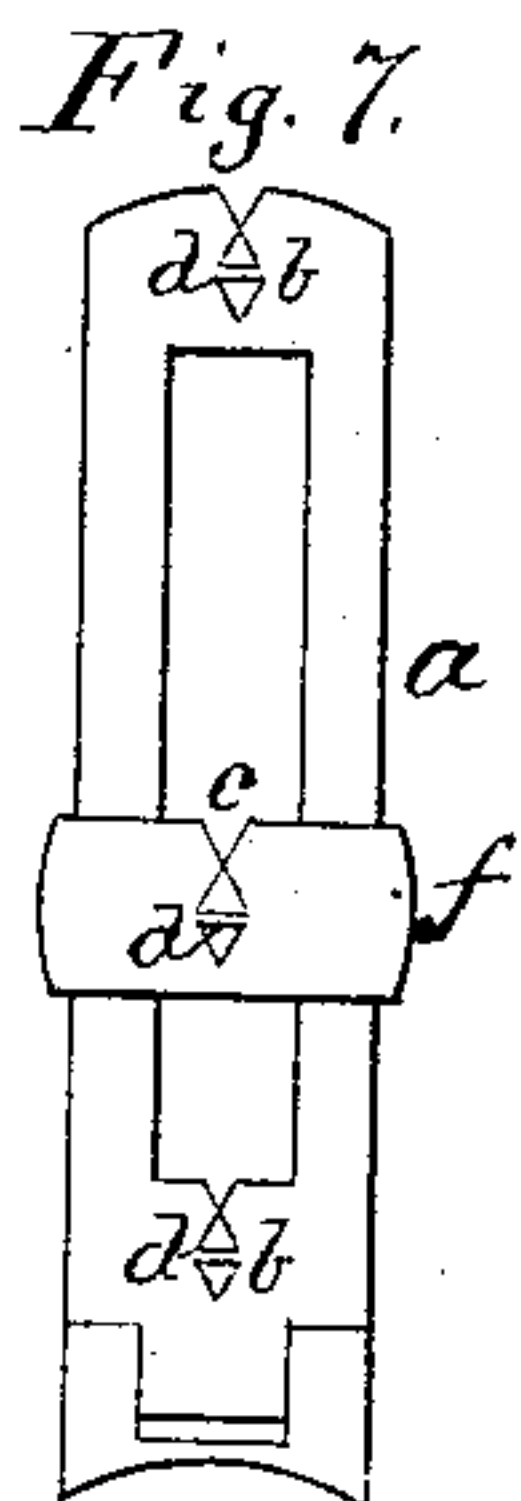
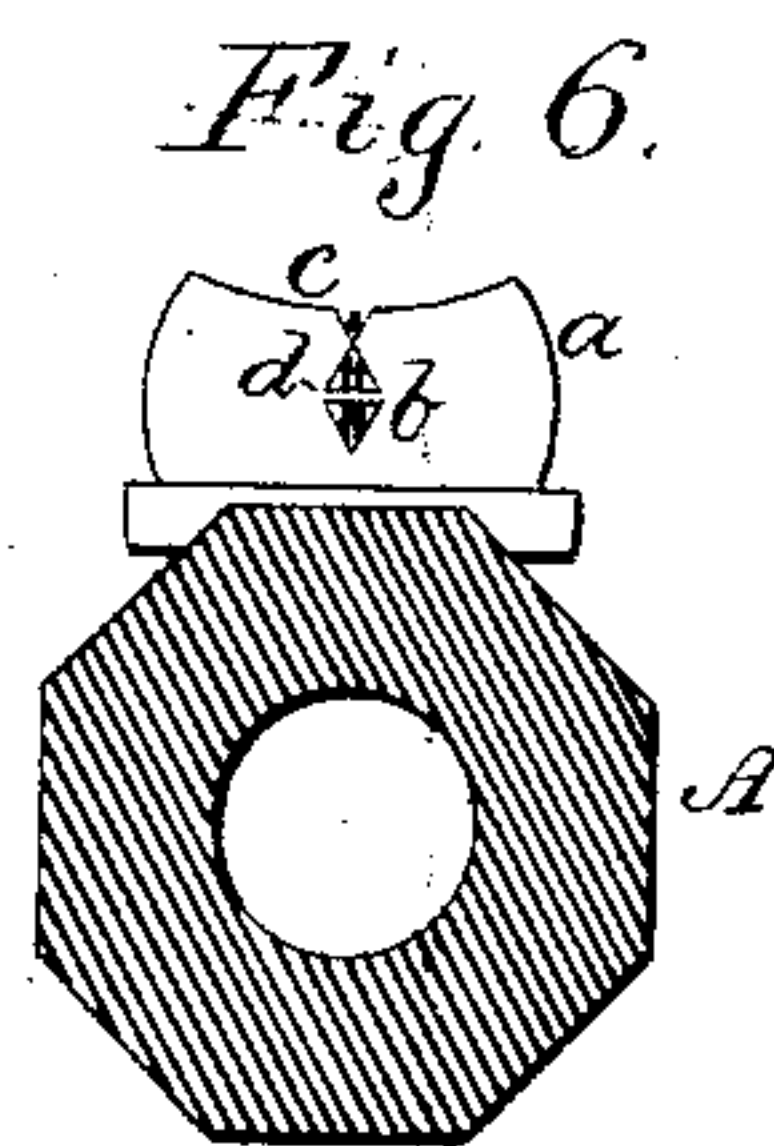
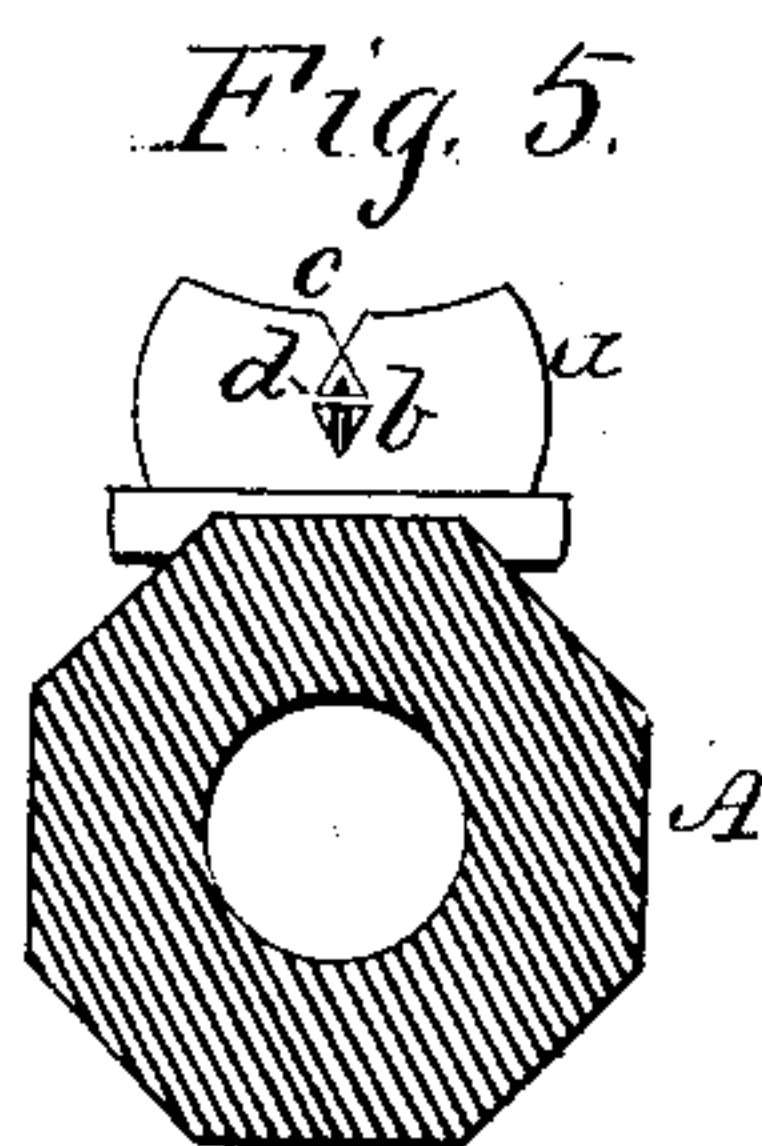
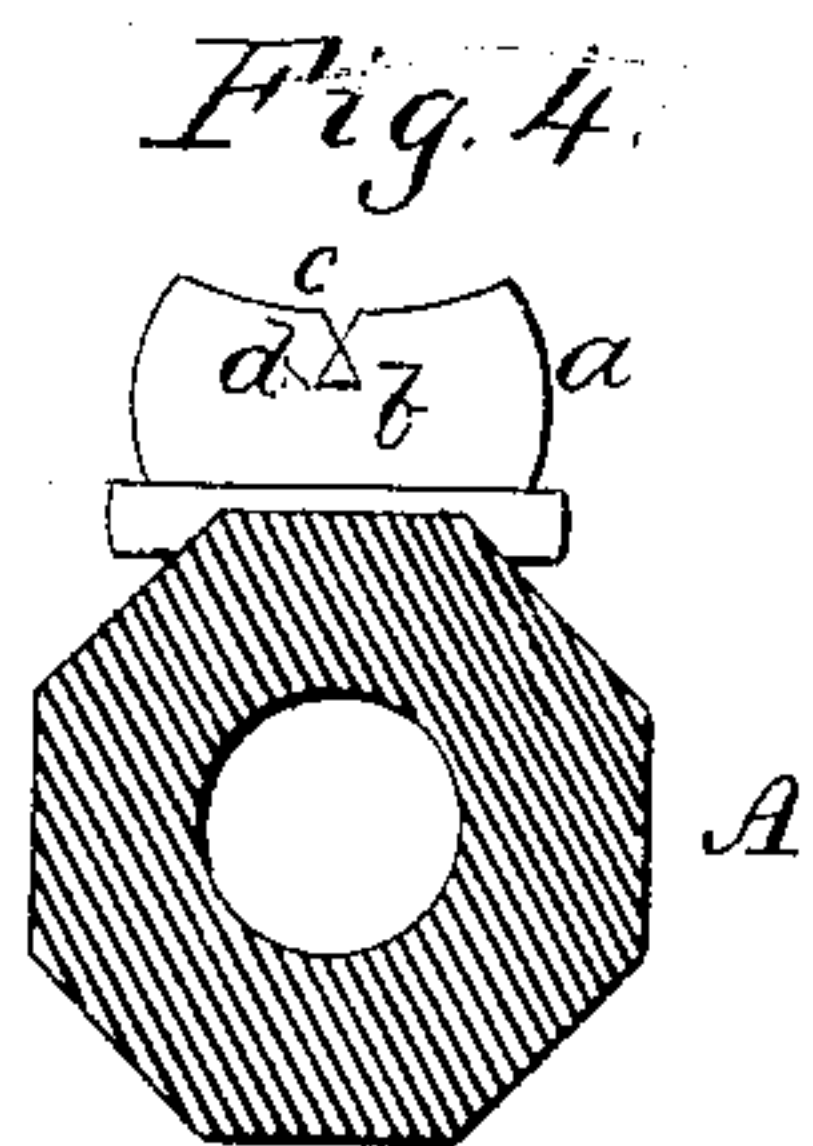
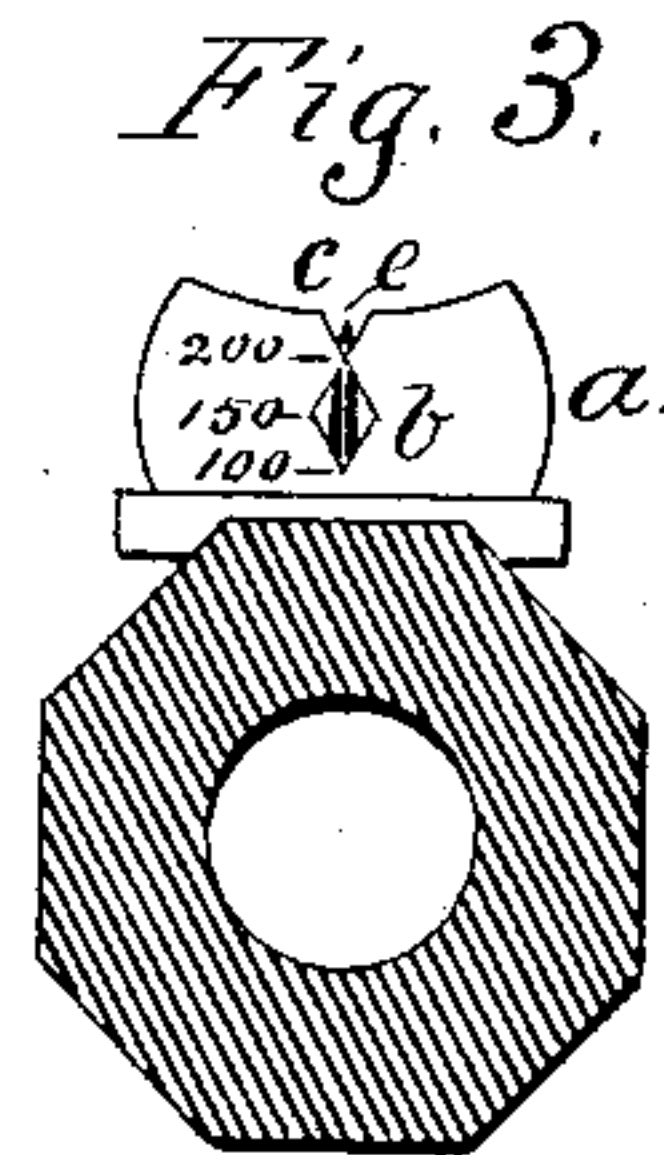
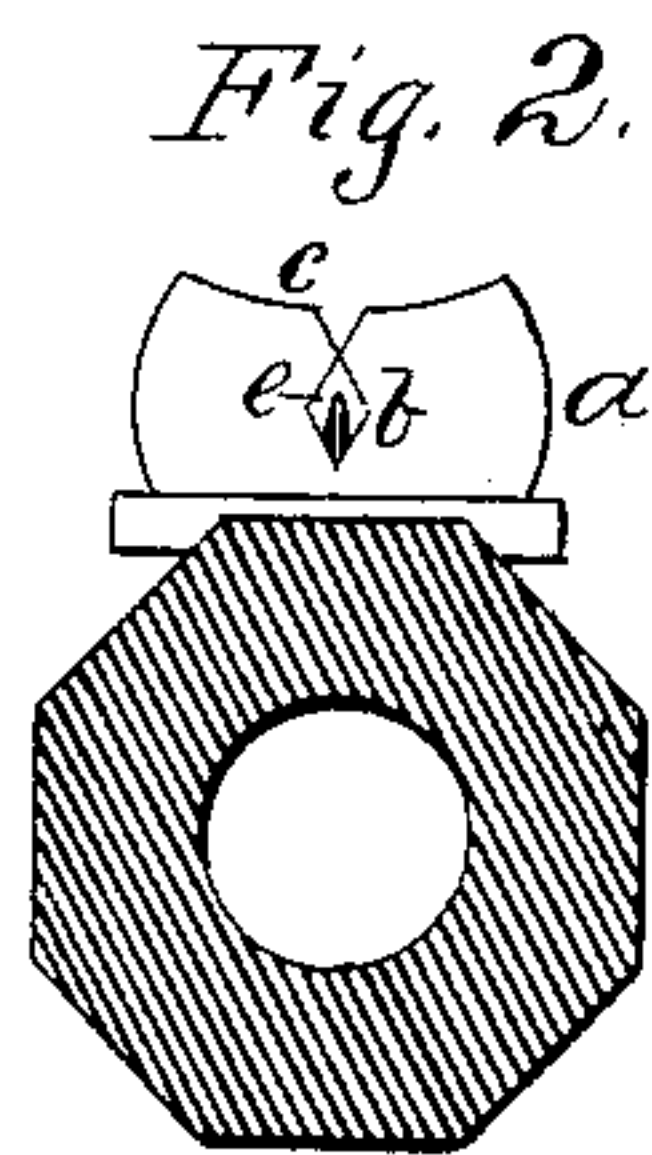
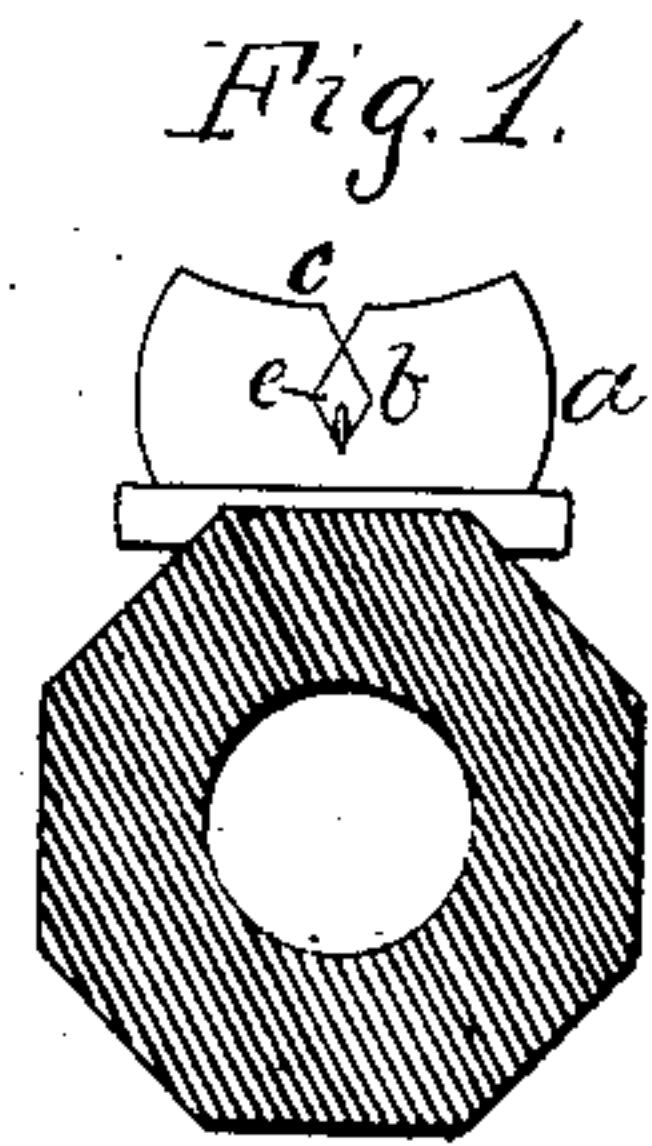


(Model.)

F. W. & G. FREUND.  
Sight for Fire Arms.

No. 229,245.

Patented June 29, 1880.



Witnesses.

H. E. Beechner.  
Geo. Wilford.

Inventors.

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# UNITED STATES PATENT OFFICE.

FRANK W. FREUND AND GEORGE FREUND, OF CHEYENNE, WYOMING TERRITORY.

## SIGHT FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 229,245, dated June 29, 1880.

Application filed March 9, 1880. (Model.)

*To all whom it may concern:*

Be it known that we, FRANK W. FREUND and GEORGE FREUND, both of Cheyenne, in the county of Laramie and Territory of Wyoming, have invented a new and useful Improvement in Sights for Fire-Arms, of which the following, in connection with the accompanying drawings, is a full and clear description.

The object of our invention is to provide a rear sight for rifles, which will enable the marksman to level the piece when aiming without the use of spirit-levels or pendulums, and also to aim at different elevations without raising or lowering the sight with respect to the barrel; and to these ends the invention consists in forming an angular diamond-shaped opening directly below the ordinary sight-notch.

Figures 1, 2, and 3 of the drawings represent one form of our invention, showing the front sight as it appears when aiming at different elevations. Figs. 4, 5, and 6 are similar views of a modified form of sight, and Figs. 7 and 8 show the invention applied to a hinged-leaf sight.

As shown in the drawings, the opening is arranged in the leaf of the sight vertically below the notch and in such relation thereto as to leave only a slight space between its upper angle and the bottom of the notch; or, if desired, the upper angle may extend into the bottom of the notch, thus leaving an open passage between the notch and opening. The latter arrangement may for some reasons be preferred.

The opening is of regular form, so that when the barrel is level the side angles shall be on the same horizontal plane and the upper and lower angle on the same vertical plane.

It is well known to persons accustomed to rifle-shooting that in order to get the best results it is essential that the gun be held perfectly level, or so as to bring the sights accurately into a true vertical line coinciding with or parallel to a line passing through the axis of the bore of the barrel, and various means have been devised to enable the marksman to determine when such position has been attained, most of which, so far as we are aware, involve a separate attachment to the sight.

By the use of our sight this end may be attained by holding the gun so as to bring the side angles into the same horizontal plane, which can be readily determined by the eye with sufficient accuracy for ordinary purposes. The angular opening also serves to graduate the elevation at which it is desired to sight for different distances. For instance, the sights are so adjusted that a "fine sight" through the bottom of the opening will give the proper elevation for point-blank range. When the top of the front sight is brought on a level with the side angles, as in Fig. 1, it will give the proper elevation for a longer distance, and so on, the distances corresponding to the size of the opening and to the distance between the sights.

Figs. 5, 6, and 7 show a bar connecting the side angles and extending across the opening. This serves the double purpose of allowing the elevation for different distances to be more readily adjusted, and at the same time it serves as an additional guide in leveling the gun. This sight has the additional advantage of enabling the marksman to take a quicker aim, especially at long ranges, and to follow a moving object by giving him a view of the entire object through the opening. This is of particular advantage to hunters in shooting game at long range.

Referring to the letters of reference on the drawings, *a* denotes the sight; *b*, the opening vertically below the ordinary sight-notch; *c*, the sight-notch; *d*, a transverse bar extending across the opening *b* and connecting the two side angles. *e* denotes the front sight (shown in Figs. 1 to 6) as it appears when aiming at different elevations, and *f* denotes the slide on the ordinary hinged-leaf sight. Fig. 3 shows graduation-marks for different distances. Fig. 4 represents a triangular-shaped opening below the ordinary sight-notch.

We would not confine ourselves to the diamond-shaped opening below the ordinary sight-notch, as a triangular form, as shown in Fig. 4, would be an obvious equivalent. Some sights are very low, and it would be impossible to make the diamond-shaped opening, as there would be an obstruction in front when the sight is down. As the triangle is half of the diamond shape

we consider this a modification of the full diamond-shaped opening. A horizontal line in the triangle-shaped opening may also have a sight-notch indicating the center when it is intended to take aim over that line.

5 Having thus described our invention, what we claim is—

1. A sight for fire-arms having the usual sight-notch and an angular diamond-shaped opening vertically below the same, the side angles of said opening being on the plane of a line at right angles to a line passing through the sight-notch and the lower angle of the opening, as and for the purpose set forth.

2. A sight for fire-arms having the usual sight-notch and an angular diamond-shaped opening vertically below the same, the side angles of said opening being on the plane of a line at right angles to a line passing through the sight-notch and the lower angle of the opening, and said side angles connected by a bar extending across said opening.

FRANK W. FREUND.  
GEORGE FREUND.

Witnesses:

GEO. WILFORD,  
J. W. FISHER.