

R. A. FESSENDEN.

GUN SIGHT.

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1,265,766.

Patented May 14, 1918.

FIG. 1.

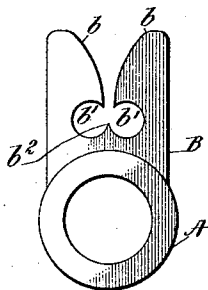


FIG. 2.

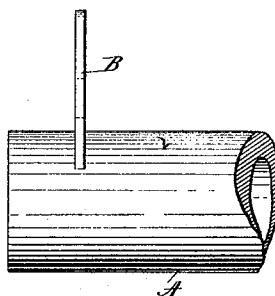
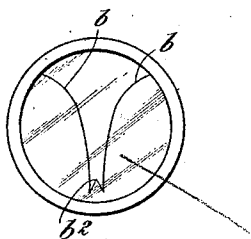


FIG. 3.



*glass
telescope*

15 11

1406

2P

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MECHANICAL INSTRUMENTS.

UNITED STATES PATENT OFFICE.

REGINALD A. FESSENDEN, OF BROOKLINE, MASSACHUSETTS.

GUN-SIGHT.

1,265,766.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, REGINALD A. FESSENDEN, a citizen of the United States, residing at Brookline, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Gun-Sights, of which the following is a specification.

For most ranges, for example from 0 to 1000 yards, I have devised and invented a sight which does away with the necessity of the adjustment of the sight with varying distance; a matter which is often forgotten during the excitement of action, and which adjustment may be incorrect if the range is given incorrectly. The apparatus invented is both sight and range finder. It consists of a V slot, with sides so curved that when used as a front sight and pointed at an advancing soldier, if the rifle is slid up so that the soldier's shoulders (or knapsack) come between the sides of the groove and the front end of the rifle is elevated till the shoulders just touch both sides of the groove, the rifle will be at the right elevation to hit the soldier. This has the advantage over the negative angle sight in that it is a natural movement and can be applied to men lying down in the trenches, and does not require the enemy to be standing up. The V groove may also be applied to telescopic sights, in which case, instead of using the V on the front sight it is engraved on glass in the eye-piece tube.

My invention will be understood by the drawing, in which—

Figure 1 is a front elevation of a gun barrel with my improved sight attached,

Fig. 2 being a side elevation thereof.

Fig. 3 is a front elevation of a telescopic eye-piece on which my sight is applied.

In Figs. 1 and 2, A is the gun barrel and B is the front sight. The sight B is of substantially the size of the standard peep sight now used by the United States Army. To form a sighting space there is cut down from its top a V-shaped groove the walls of which are curved and marked b , this groove terminating in two opposed openings or finders b^1 which as shown are substantially circular, though they may be differently shaped, their purpose being mostly to allow the user of the gun to find the object to be

sighted more easily. Between the openings b^1 is the direction point b^2 or sight proper.

In practice direction is determined by means of the point b^2 , then by raising or lowering the muzzle as occasion may require, until the side limits, *i. e.*, the shoulders or knapsack of the soldier, appear just to touch the walls of the groove, when the correct range will have been found.

In Fig. 3 the outline b , b^2 , of the sight is engraved or otherwise applied to the eye-piece of the telescope. As the eye-piece is glass, the finders are unnecessary.

It will be noted that in the sight shown in Fig. 1 the material of which the plate is formed is opaque, and consequently the material must be cut away as shown in Fig. 1 in order to provide both the sight proper and also the finders, *i. e.*, the openings b^1 on each side of the sight. Where, however, the sight is a telescopic sight such as is shown in Fig. 3, the cutting away is unnecessary because the glass itself of which the plate is made is transparent and hence the portions of the plate which are on each side of the sight will be usable as a finder.

In using either of these sights, if the rifle is slid up so that the enemy's shoulders or knapsack come between the edges of what may be termed the forks of the plate in the one case or the indications of the forks, viz: the lines marked b in Fig. 3 in the other case, where the plate is transparent, the rifle will be at the right range to hit the object.

What I claim is:—

1. In a device of the kind described a plate having a forked opening, the curvature of the sides of the fork being such that the horizontal distance between the sides of the fork is a function of the trajectory of the gun to which the device is attached.

2. In a device of the kind described a plate having a forked opening, the curvature of the sides of the fork being such that when the target is just completely seen between the sides of the fork the gun will have the correct elevation for the target.

3. In a device of the kind described, a plate having a forked sighting field, the edges of said forked sighting field approaching each other at their base to give an unobstructed vision between them, and having between

them at their base a sight member, and finding fields located on each side of the sight member adapted to offer an unobstructed vision of the object to be aimed at.

5 4. A device of the kind described comprising a forked plate, the forks of said plate being in the same plane, the opposing edges

of the lower parts of said forks being oppositely recessed to form openings through which the object to be aimed at may be found, said plate having a pointed projection located between the bases of said forks to serve as a sight. 10

REGINALD A. FESSENDEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."