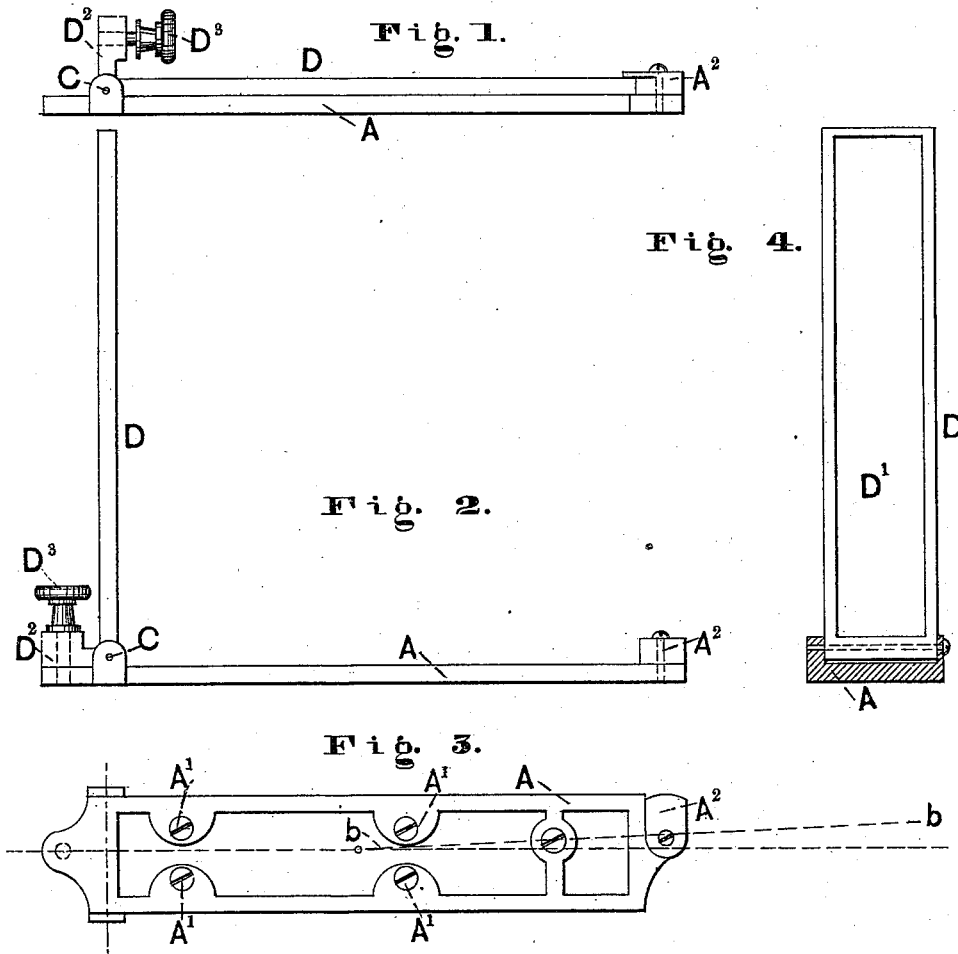


J. McGUIGAN.

Reflectors for Attachment to Fire-Arms.

No. 208,481.

Patented Oct. 1, 1878.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES MCGUIGAN, OF MELBOURNE, VICTORIA.

IMPROVEMENT IN REFLECTORS FOR ATTACHMENT TO FIRE-ARMS.

Specification forming part of Letters Patent No. **208,481**, dated October 1, 1878; application filed September 2, 1878.

*To all whom it may concern:*

Be it known that I, JAMES MCGUIGAN, of No. 46 Collins street, east, in the city of Melbourne and Colony of Victoria, engineer, have invented a new and useful Improvement in Small Fire-Arms, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

This improvement has been designed for the purpose of enabling troops and other persons carrying fire-arms to take accurate aim at objects which are behind them.

It consists of a plane mirror so fixed to the stock of the weapon that, when required, it can be almost instantly placed in position, and when so placed will give an accurate reflection of objects behind the bearer of the weapon.

The conditions of success in fixing this mirror are, first, that when in position it shall be at right angles to the top of the gun-stock; and, second, that its axis shall be at a slight angle with the line of the sight of the weapon to which it is affixed—say, about five degrees toward the right-hand side of the stock.

But in order that my invention may be clearly understood, I will proceed to describe the drawings hereto attached, where similar letters indicate similar parts whenever they occur.

Figure 1 shows side view of the apparatus I have invented as it appears when closed up and not in use. Fig. 2 shows side view of same when opened for use. Fig. 3 shows plan of the bed-plate; Fig. 4, front elevation of the plane mirror and section of bed-plate.

A is a metal bed-plate, which is affixed to the top of the gun-stock and near the heel by means of wood-screws A<sup>1</sup>, Fig. 3. Care must be taken that this is set exactly level transversely, and so that the dotted line *b b*, Fig. 3, indicates the line of the sight. To this bed-plate I hinge at C, Figs. 1 and 2, a metal framing, D, which carries a plane mirror, D<sup>1</sup>, Fig. 4, on its inner face. The heel D<sup>2</sup>, Figs. 1 and 2, of this framing I thicken, so as to

lessen the probabilities of the milled headed screw D<sup>3</sup> being overscrewed and lost. When this framing is fully open I preserve it in position by means of the screw D<sup>3</sup>, which screws into a tapped recess in the heel of the bed-plate, as shown in Fig. 2, and so holds it. When not in use said metal framing is kept closed on the bed-plate by a metal button, A<sup>2</sup>.

Whenever my apparatus requires to be used—that is to say, whenever the bearer of the weapon to which it is attached requires to fire at any object behind him, he has simply to place the weapon over his right shoulder, open the apparatus, as at Fig. 2, turn the weapon round, elevate or depress it until the reflected image of the object coincides with the reflection of the sights of the weapon, and the line of aim is then as true as if taken in the ordinary way. In fact, a steadier aim ought to be taken, by reason of the rest which the shoulder affords.

It seems obvious that this simple and inexpensive contrivance must be of the very greatest service, but more especially to retreating troops, inasmuch as it places them more nearly on an equality with their pursuers, enabling them to perceive the movements of their enemies, and to take aim at them without turning round.

Having thus described the nature of my invention and the manner of performing same, I would have it understood that I do not confine myself to the size, shape, or materials of which my invention may be made or manufactured, so long as the nature thereof be retained; but I claim as my invention—

1. In combination with the bed-plate A, the frame D, having the right-angled heel D<sup>2</sup>, as described.

2. In combination with the bed-plate A, the frame D, having the heel D<sup>2</sup> and set-screw D<sup>3</sup>, as described.

JAMES MCGUIGAN.

Witnesses:

EDWD. WATERS,  
W. F. MADDOX.