

*A. T. Garretson,
Sight for Fire Arms.*

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X 450

No. 40,256

Patented Oct. 13, 1863.

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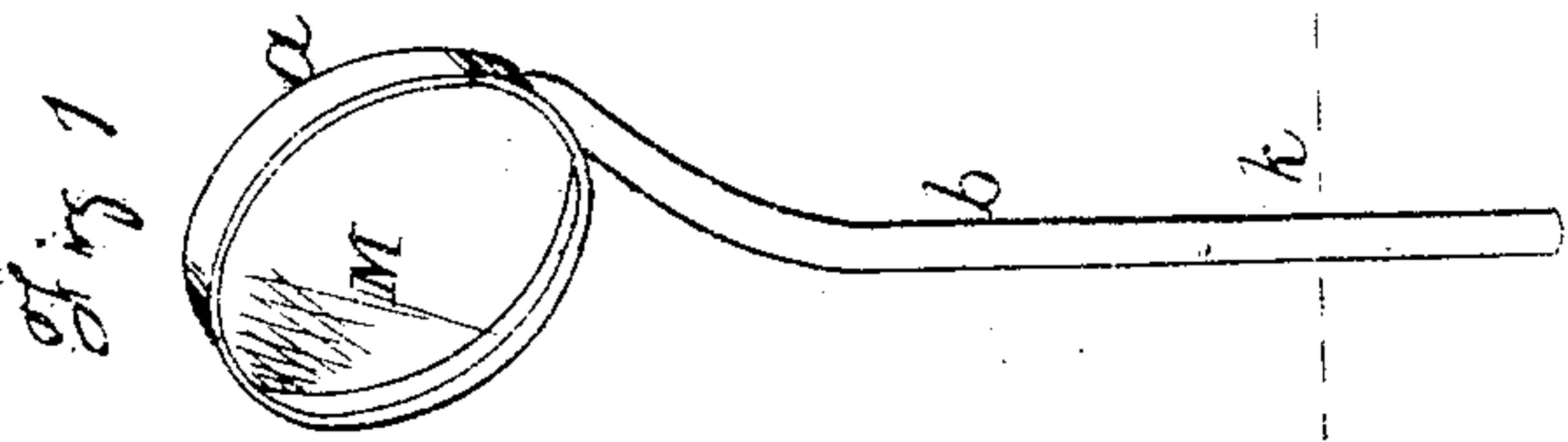
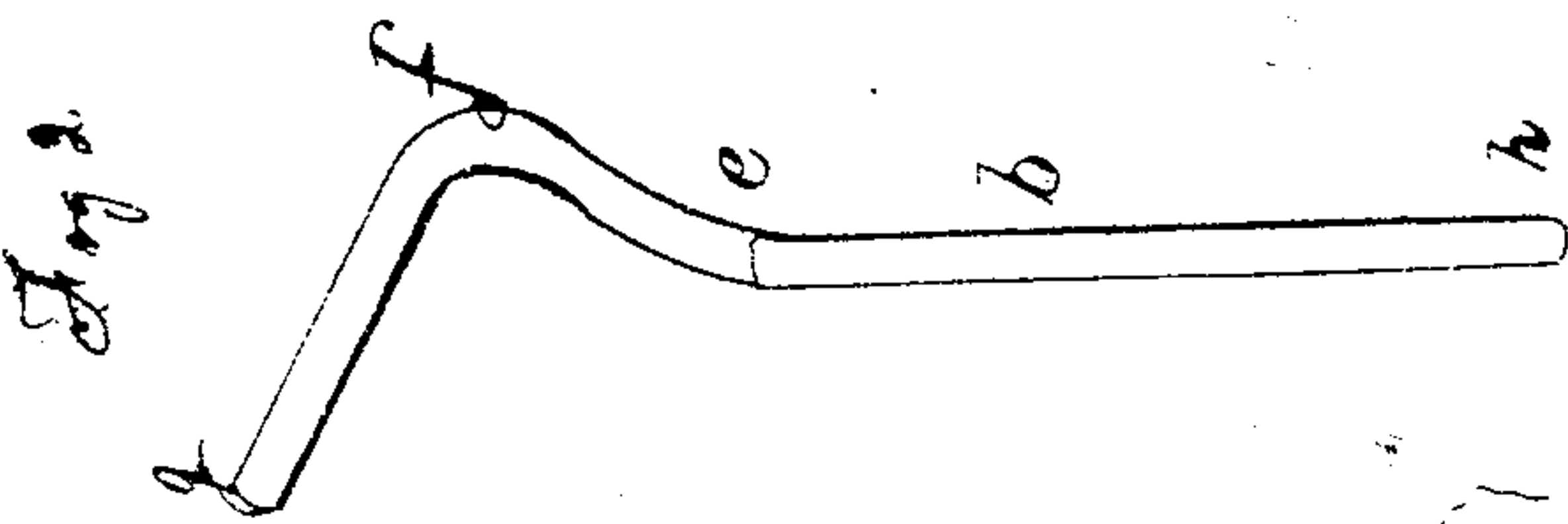
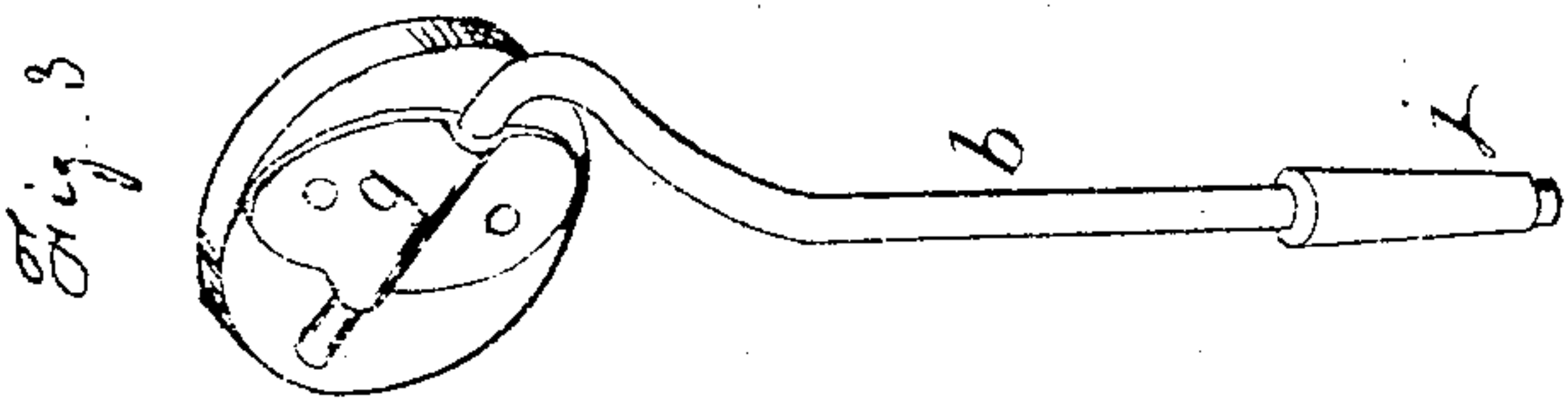
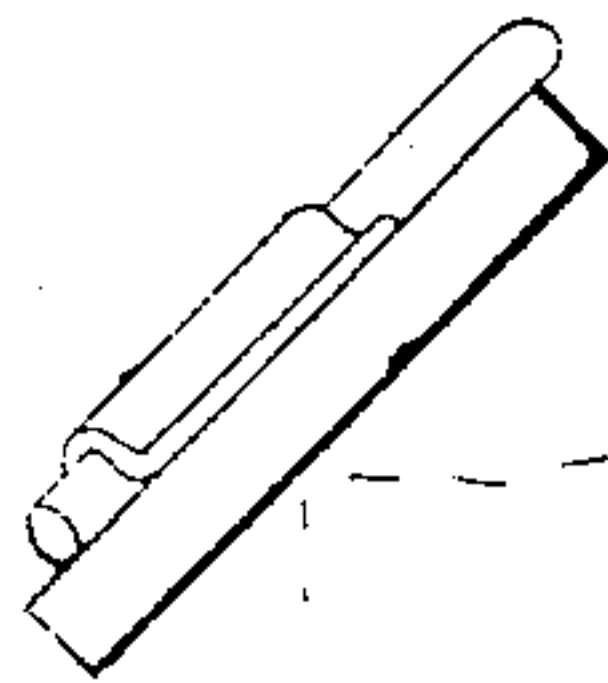


Fig. 4



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B. E. Hillier
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Inventor
A. T. Garretson

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UNITED STATES PATENT OFFICE.

A. T. GARRETSON, OF MOUNT PLEASANT, IOWA.

IMPROVEMENT IN SIGHTING SMALL-ARMS.

Specification forming part of Letters Patent No. 40,256, dated October 13, 1863.

To all whom it may concern:

Be it known that I, A. T. GARRETSON, of Mount Pleasant, in the county of Henry, in the State of Iowa, have invented a new and improved mode of sighting guns without exposing the body of the person sighting to the fire of other fire-arms in the direction in which the sight is taken; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and the letters marked thereon, and will enable others to make and use my invention.

Figure 1 shows the mirror M on the standard *b*, which is inserted in the socket *j*, Fig. 3, which is driven firmly into the gun-stock at right angles to the line of the sights, and so as to be vertical when the gun is in a position for firing or sighting horizontally, one and one-half inch to the rear of the lowest part of the small of the stock. Fig. 2 shows the shape of the standard *b*, it being bent at an angle of thirty degrees at *e*, and at an angle of forty-five degrees in the opposite direction at *f*. Said standard may be of the following dimensions: a rod three-sixteenths of an inch in diameter; the upper arm from *g* to *f*, one and one-half inch; from *f* to *e*, one inch; from *e* to *h*, three inches, or long enough to support the mirror in such a position that two-thirds of its surface will be above the line of the sights. Fig. 3 shows the back of the frame or case which holds the mirror, with the standard passing under the sleeve I, which holds the frame to the standard. The metallic socket *j* is also seen on the standard *b*, which is to be set in the gun-stock at *k*, Fig. 1. Fig. 4 is a top view of a section of a rifle with the mirror "in position" for sighting from behind an upright cover, such as trees or corners of walls.

The dotted line represents a ray of light passing from the object over the sights *e' b'* to the face of the mirror, and thence reflected in the direction of *m*.

Fig. 1 shows the mirror in the proper position for sighting from behind an upright cover, care being taken to have the mirror so adjusted that when the sight or aim of the gun is horizontal the beam of light which passes over sights will be reflected horizontally from the mirror. The gun may now be grasped with the right hand at the small of the stock; the first finger on the trigger; the breech pressed into the angle of the elbow, which should be raised as high as the shoulder; the barrel supported by the left hand near the lowest band, the barrel about six inches from the face, which will bring the mirror on a level with and almost directly in front of the right eye. Sight may now be taken by looking into the mirror, which will enable the person holding the gun to sight with accuracy on an object to his left, while his body is protected from a fire in that direction by an upright cover. Should it be necessary to sight over the top of a horizontal cover—such as parapets, breastworks, or logs—the mirror may be turned one-sixth of a revolution on its axis, (the upper arm of the standard *b*,) or so far that the beam of light will be reflected as nearly in a vertical direction as is desired, or the gun-stock will permit.

The posture of the person sighting will be varied to suit the height of the cover—standing erect if the cover is higher than the head, and lying on the back, if the cover is not more than two feet high.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination and arrangement of the adjustable mirror M with the front and back sights, *a' b'*, substantially as described, and for the purposes set forth.

A. T. GARRETSON.

Witnesses:

B. F. GILBERT,
F. A. STIER.