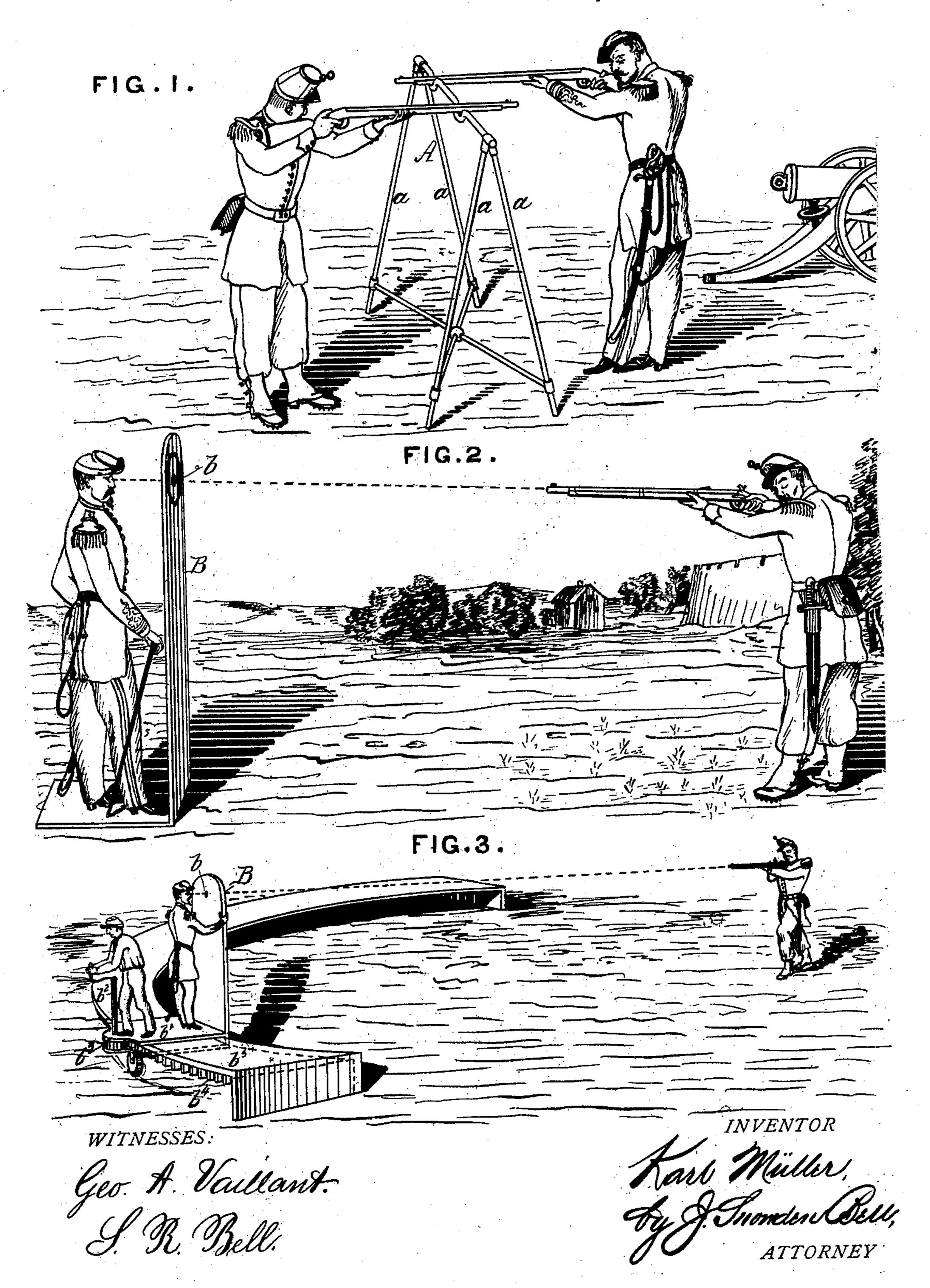
## K. MÜLLER Gun-Rest.

No. 203,184.

Patented April 30, 1878.



## UNITED STATES PATENT OFFICE.

KARL MÜLLER, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN GUN-RESTS.

Specification forming part of Letters Patent No. 203,184, dated April 30, 1878; application filed February 6, 1878.

To all whom it may concern:

Be it known that I, KARL MÜLLER, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Instruction in Aiming Fire-Arms, of which

the following is a specification:

My invention is specially designed for the instruction of recruits for military service, these persons being, as a rule, unaccustomed to the proper handling or accurate aiming of fire-arms, but is also equally applicable in the education of those in civil life who are, either from interest or inclination, desirous of properly acquainting themselves with such manipulation.

The object of my invention is to provide means for enabling the instructor to accurately observe while conveniently directing the movements of the pupil, so that the relative positions and duties of instructor and pupil may be such as to afford facilities for mutual attention without entailing therefor, on the part of the pupil, undue distraction from the management of his piece, or, on the part of the instructor, any impediment to a full observation and ready direction of the actions of the pupil.

To this end my improvements consist in a fixed rest for the support, in opposite directions, of the fire-arms of the instructor and pupil, so that the movements of each shall be clearly visible to the other, while relieving both from the fatigue of the weight of the

arms during instruction.

The use of the rest constitutes a part of a complete system of instruction in aiming firearms, which system is perfected by the employment of a target of peculiar construction, which, though herein shown and described for the better understanding of the functions of my improved rest, forms no part of my present invention, but may constitute the subject-matter of a separate application.

The said auxiliary to my invention consists in a target having a perforated bull's eye or center, to enable the instructor to observe and direct the movements of the pupil while taking aim, said target being either fixed or movable on a fixed bed relatively to the position of the pupil or pupils, as hereinafter more

fully set forth.

In the accompanying drawing, Figure 1 is a view in perspective, showing my invention and the mode of its application. Figs. 2 and 3 are views in perspective, showing, respectively, a fixed and a movable target and their mode of use.

As instruction to recruits in handling firearms or making ready to fire is ordinarily practiced, the instructing officer occupies a position relative to the recruit or squad which precludes him, while giving verbal directions and illustrating them by proper movements, from observing and correcting the movements of the recruit, while both officer and recruit are subjected to the fatigue of the weight of the piece during the lesson, and in directing the aiming of the recruit the officer has no facility for observing, with any degree of accuracy, the correctness of the aim, or of properly ascertaining and indicating the requisite changes of alignment of the piece.

To obviate these objections, and thereby to correspondingly expedite and facilitate instruction, I provide a fixed rest, A, of wood or metal, consisting of a horizontal traverse or cross-piece, the height of which above the ground is equal to the average distance from the ground of the lower side of the barrel of a fire-arm when held in position for taking aim, and which is supported by legs or posts a. The rest is provided with two or more recesses to receive the barrels of the muskets or other fire-arms of the instructing officer and the recruit, who, in the use of the rest, station themselves on each side thereof, facing and each on the left side of the other, with their pieces resting, toward the muzzle ends, upon the top of the rest or in the recesses thereof.

By the use of this device the instructive and imitative motions on the part of the officer and recruit respectively are made so as to be clearly visible on the part of the recruit and the officer each to the other, and the efficiency of the movements of instruction of the officer is not impaired by the necessity of a change of position for purposes of observation. Correspondingly, the relative position of the recruit is such as to enable him to observe and imitate the movements of his instructor without undue distraction from the regulation of his own to conform thereto; and, as both in-

structor and recruit are relieved from the fatigue of the weight of their pieces, more perfect attention and freer assumption and main-

tenance of position result.

Condemned or otherwise useless fire-arms, or dummies made specially for the purpose, may be used in connection with the rest A with equal advantage as if serviceable pieces

were employed.

After the recruit has been by the use of the rest sufficiently instructed in the proper manner and position of holding and aiming his piece, I employ, for the purpose of testing and improving the accuracy of his aim, a target, B, having a central orifice or perforated bull'seye, b, and mounted upon or secured to a vertical stand or support, so that its central orifice shall be at about the average height of a man's eye from the ground. The recruit being placed at a proper distance in front of the target, the officer takes his station behind it, and observes, through the perforated bull's eye b, the aim which the recruit takes thereat, being enabled from his position to accurately observe any deficiencies in the position and movements of the recruit and in his alignment of his piece, and more effectually to instruct and direct him in properly correcting them. The rest A may, in this instance, be used by the recruit in aiming, or may be dispensed with, according to his relative degree of proficiency, and I consider it important that the fire-arms employed in connection with the target B should have some operative member of their firing mechanism removed, or be otherwise rendered, for the time being, incapable of being fired, to effectually guard against accident to the instructing officer.

For ordinary use the stand of the target B rests directly upon the ground, or is fixed to a

stationary base or platform thereon; but for a more advanced degree of instruction, as for that of skirmishers or sharpshooters, I mount the base  $b^{1}$  of the target so that it may be traversed at pleasure, by the assistance of an attendant, over a stationary curved track, in order to be moved at pleasure into different positions, and relatively, as desired, to recruits stationed in different positions on a field or drill-ground.

In Fig. 3 the base or platform  $b^1$  of the target B is shown as carrying a vertical shaft,  $b^2$ , on which is secured a pinion,  $b^3$ , meshing into a curved rack,  $b^4$ , on a stationary curved track,  $b^5$ , the shaft  $b^2$  being rotated, at the command of the officer, by an attendant standing behind

him on the platform.

The use of my improved rest as an aid in military drill will be found to greatly expedite and perfect the work of instruction in aiming fire-arms, and to enable recruits to become expert marksmen with less training than has heretofore been bestowed upon such persons in conducting this branch of military instruction.

I claim as my invention and wish to secure

by Letters Patent—

A rest for the purpose specified, consisting of a horizontal traverse or cross-piece supported by legs or frame-work at a height equal to the average distance from the ground of the piece when aimed, and provided with two or more depressions to receive the barrels of the pieces of the instructor and recruit or recruits, substantially as shown and described.

KARL MÜLLER.

Witnesses:

J. SNOWDEN BELL, GEO. A. VAILLANT