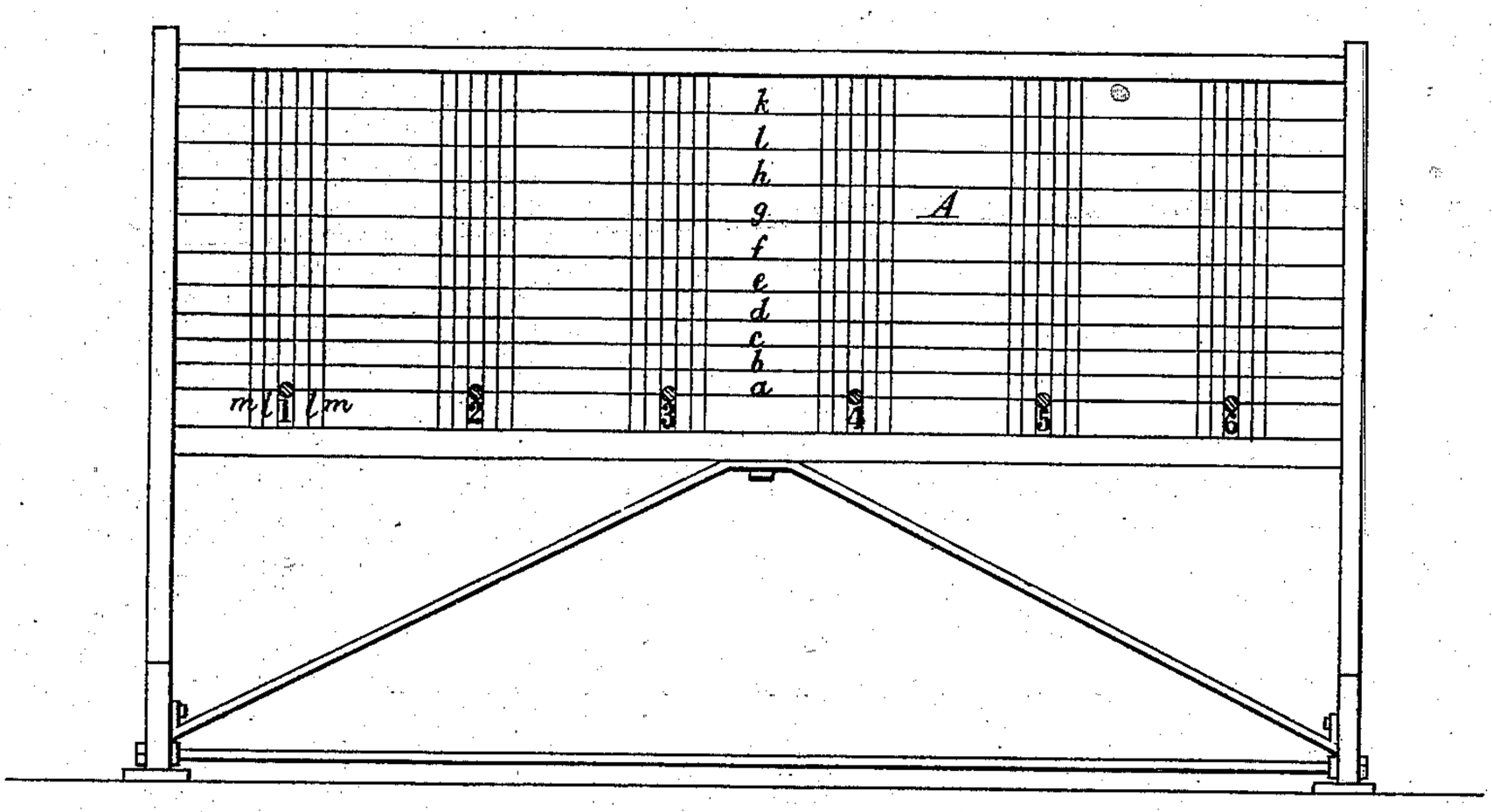
(No Model.)

R. MORRIS.

TARGET.

No. 252,240. Patented Jan. 10, 1882.



Witnesses.
J. A. Rutherford
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Inventor:
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Atty.

UNITED STATES PATENT OFFICE.

RICHARD MORRIS, OF LEWISHAM, COUNTY OF KENT, ENGLAND.

TARGET.

SPECIFICATION forming part of Letters Patent No. 252,240, dated January 10, 1882.

Application filed October 5, 1881. (No model.) Patented in England April 25, 1881, and in Italy June 30, 1881.

To all whom it may concern:

Be it known that I, RICHARD MORRIS, a citizen of England, residing at Lewisham, in the county of Kent, England, have invented an Improved Method of and Apparatus for Controlling the Accuracy of Sighting and Aim in Rifle Drill or Practice, (for which I have obtained a patent in Great Britain, No. 1,773, bearing date April 25, 1881, and in Italy, bearing date June 30, 1881,) of which the following is a specification.

My invention relates to an improved target, by means of which men under aiming and sighting drill for rifle practice can have the accuracy of their sighting and aim effectually tested by actually firing, without requiring for this purpose ordinary targets at long range, so that such drill can be carried on in the barrack-yard or other confined spaces, as in ordinary aiming and sighting drill. For this purpose, first, the ordinary rifle is provided with an inner barrel for taking a very small ball-cartridge, for which purpose I employ, by preference, the construction of inner barrel that forms the subject of another application for Letters Patent filed by me on the same day herewith; secondly, there is placed at a short distance from the men a screen or target consisting, by preference, of paper or other cheap penetrable material, on the front of which one or more bull's-eyes or aiming-centers are marked, while on the rear side are marked horizontal lines, one of which corresponds with the bull's-eyes, while the others are at distances above this corresponding with the points at which the bullet should pass through the target if the sight has been set for a certain range and correct aim at the bull's-eye has been taken on firing. In addition to these horizontal lines there are also, by preference, vertical lines through and on each side of the bull's-eyes to show any deviations from these in aiming. Thus, if, for example, orders have been given to sight for five hundred yards, then, if the sighting and aim be accurate, the bullet should pass through the vertical center line of the target and one of the horizontal lines above the center drawn at a height corresponding to the point at which the correct trajectory for five hundred yards would pass through the target when this is placed at a certain distance from the men. Consequently, after firing, the officer in charge can at once ascertain whether the sighting and aim have been correct by inspecting the back of the target.

Although I prefer to use in combination with this target very small projectiles, as before described, yet ordinary-sized ball-cartridges may also be used, in which case there should be situated behind the target a sufficiently strong screen or bank to intercept the passage of the bullet when it is used in a confined space.

The accompanying drawing shows the back elevation of a target constructed as above described, to be used for a squad of six men. It may, however, be arranged for a greater or less number of men. It consists of a light frame, to which is attached the paper or other screen, A, on which are marked, on the back face, the horizontal divisions *a b c d*, &c., of which the lowest line, *a*, serves for indicating point-blank range at, say, one hundred yards, and is marked with the bull's-eyes 1 2 3 4, &c., these bull's-eyes being plainly marked on the front face for the men to aim at. The other division-lines, *b c d*, &c., serve to indicate the height above the bull's-eye at which the bullet would pass through the screen when placed at a certain distance—say twelve paces—in front of the men, if the rifle is correctly sighted, respectively for two hundred, three hundred, four hundred, &c., yards' range, so that on inspecting the target after firing the officer can at once ascertain whether the men have correctly set their sight and aimed accurately for the range commanded. In addition to the horizontal division-lines, there may be marked any desired number of vertical division-lines *l m* on each side of the bull's-eye, in order to ascertain the extent of any lateral deviation of fire, as well as the vertical deviation.

It will be readily understood that the distances apart of the division-lines *a b c d*, &c., will have to be determined from the trajectories for the different ranges for a given distance of the target from the firing position.

Having thus described the nature of my invention and in what manner the same is to be performed, I claim—

1. The herein-described target for rifle practice, provided upon its front face with a bull's-eye, and having upon its rear side a graduated scale formed by a series of horizontal lines, substantially as described.

2. The herein-described target for rifle practice, having a bull's-eye upon its front face, and upon its rear side the series of horizontal and vertical lines, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 16th day of September, A. D. 1881.

RICHARD MORRIS.

Witnesses:
CHAS. D. ABEL,
OLIVER IMRAY.