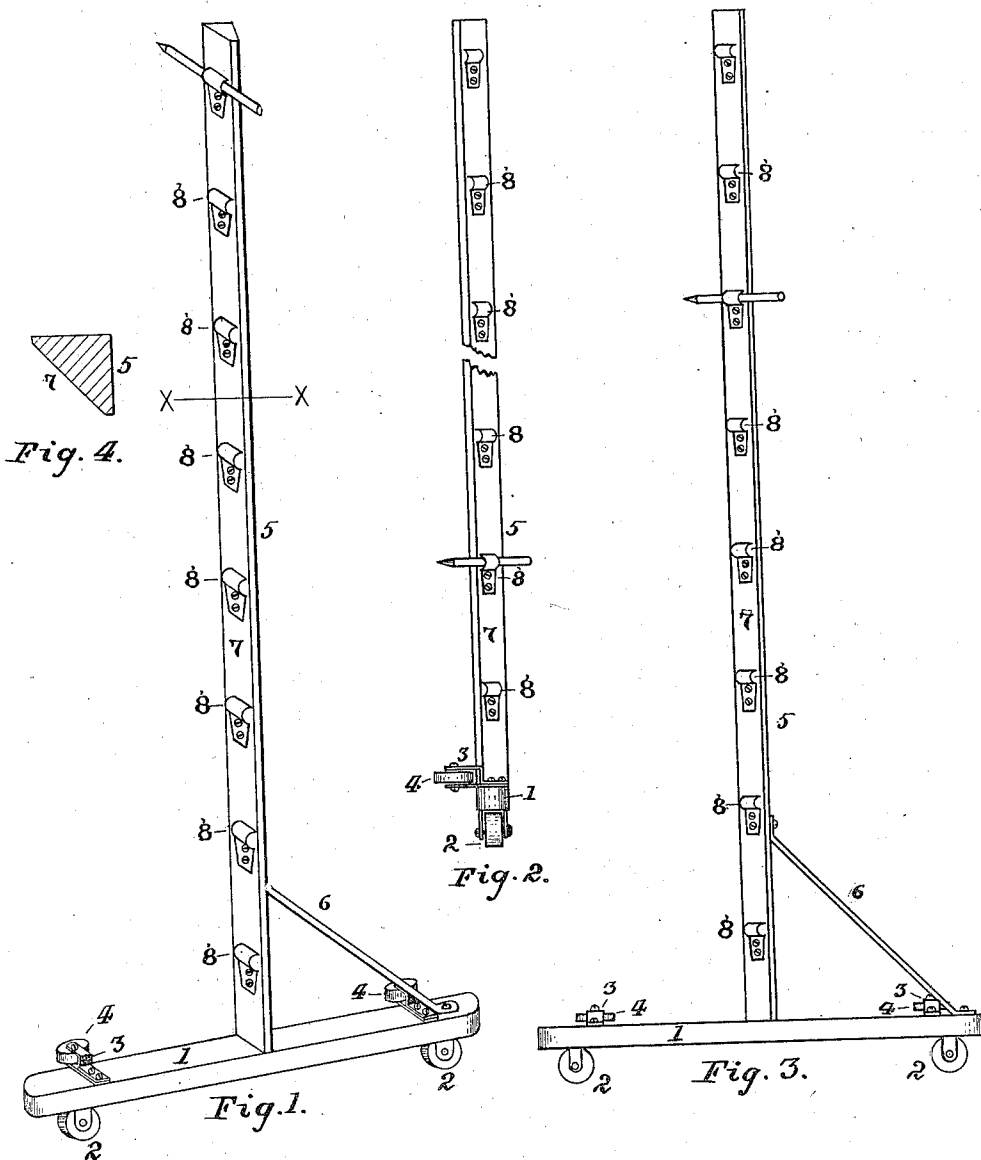


(No Model.)

M. A. HARRIS.
BLACKBOARD RULER.

No. 561,585.

Patented June 9, 1896.



Witnesses
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By
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UNITED STATES PATENT OFFICE.

MALANA A. HARRIS, OF AKRON, OHIO.

BLACKBOARD-RULER.

SPECIFICATION forming part of Letters Patent No. 561,585, dated June 9, 1896.

Application filed April 10, 1896. Serial No. 586,915. (No model.)

To all whom it may concern:

Be it known that I, MALANA A. HARRIS, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Improvement in Blackboard-Rulers, of which the following is a specification.

My invention has relation to improvements in devices for the ruling of blackboards and similar vertical surfaces; and it has for its object the production of such mechanism as will quickly, readily, and accurately draw a desired number of parallel lines across the face of a blackboard or similar surface at each and every operation of the machine.

To the aforesaid objects my invention consists in the peculiar and novel construction, combination, and arrangements of the various parts hereinafter described, and then specifically claimed, reference being had to the accompanying drawings, forming a part of this specification.

In the accompanying drawings, in which similar reference-numerals indicate like parts in the different views, Figure 1 is a perspective view showing my complete device; Fig. 2, an end elevation; Fig. 3, a side elevation; Fig. 4, a transverse section at the line X X of Fig. 1.

In the drawings, 1 represents a horizontal block, preferably of wood, forming the base or foot of the device. Mounted in suitable bearings on the under side of base-board 1 are rollers 2. Substantially above these rollers 2, on the upper surface of the board 1, are fastened two roller-brackets 3, and journaled in each of which is a horizontal roller 4, with its free edge pointed backward from the front of the ruler. (Shown in Fig. 3.)

Rising vertically from the center of base 1 is an upright standard 5, rendered firmer by the brace 6. The near left-hand edge of standard 5 is cut away so as to leave a wide plane surface 7, (see Fig. 4,) and is cut to such an extent as to nearly form a hypotenuse with the rear and right sides. On this side 7 are

a preferred number of pencil-holding clips 8, which consist of a curved upper portion to embrace the pencils and a flat portion to fit against the standard and be held there by tightening devices to readily clamp and release the pencils when desired.

The object of the cut-away portion 7 is to enable the pencils to encounter the blackboard at an angle rendering their position more nearly like that of a pencil when held by hand.

The operation of this device is as follows: Pencils, either slate or lead, being inserted in the desired clips and clamped there, the ruler is placed with its standard vertical and the rollers 2 on the chalk-trough of a blackboard and the ruler is pushed from left to right, and the rollers 4 hold it at a desired distance from the board while the pencils draw parallel lines on its surface.

Of course the clips may be made vertically adjustable without departing from my invention.

I do not broadly claim the horizontal bar and upright standard; but

What I do claim is—

1. The combination in a blackboard-ruler of a horizontal base, rollers attached to said base and upon which it runs, an upright standard rising from said base, and a series of pencil-holding clips fastened at desired intervals on said standard substantially as shown.

2. The combination in a blackboard-ruler, of a horizontal base, rollers attached thereto and on which said base travels, secondary rollers attached to said base on one side to guide said base, an upright standard rising from said base and a series of pencil-holding clips attached to said standard substantially as shown and described.

In testimony that I claim the above I hereunto set my hand.

MALANA A. HARRIS.

In presence of—

C. E. HUMPHREY,
C. P. HUMPHREY.