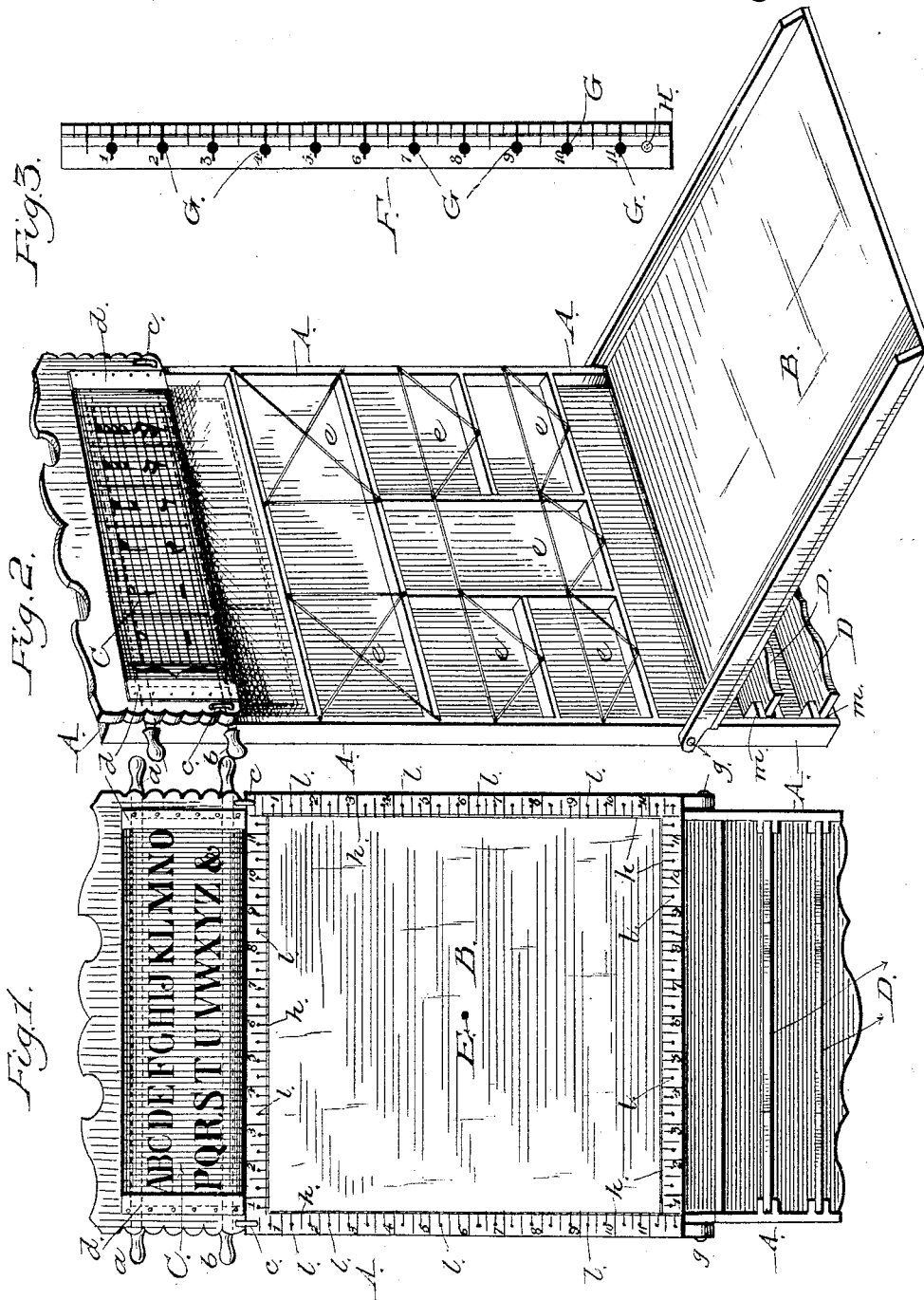


(No Model.)

H. E. BUTLER & M. HARRIS.
COMBINED BLACKBOARD AND WRITING DESK.

No. 346,838.

Patented Aug. 3, 1886.



WITNESSES
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COMBINED BLACKBOARD AND WRITING-DESK.

SPECIFICATION forming part of Letters Patent No. 346,838, dated August 3, 1886.

Application filed February 1, 1886. Serial No. 190,399. (No model.)

To all whom it may concern:

Be it known that we, HIRAM E. BUTLER and MILO HARRIS, citizens of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in a Combined Blackboard and Writing-Desk; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of our invention is to improve portable blackboards and writing-desks; and it consists, first, in protecting the copy-sheets; second, in the use of movable shelves; third, in providing the blackboard with a ruled border, showing feet and inches, with holes on line of same, in combination with a rule having new features, all of which will be fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a front elevation. Fig. 2 is a perspective view. Fig. 3 is a rule to be used with the blackboard.

In the drawings, A represents the main frame of our writing-desk, having a back made, preferably, of thin material, with strips of narrow board running around the edge, the main surface between being divided into sections *e e e* by other strips running at right angles, these receptacles being used for paper, pens, envelopes, &c. Near the top of this frame we place the movable rolls *a b*, around which we roll the copy-sheet C, attaching the ends to either roll. This copy-sheet has a large number of copies in letters, figures, writing, music-scales, drawings, &c. These may be rolled from *a* to *b*, when desired. To prevent the edges of this copy-sheet from being torn or injured, we secure the narrow strips *d d* to the frame-head, as shown in drawings, which come over and above the edge of the sheet enough to protect them. Near the bottom of the main frame we place movable book-shelves D D, which may be held in place by cleats *m m*, or by gains cut into the frame.

B is a cover, hinged at its bottom, and when down, as shown in Fig. 2, is used as a writ-

ing-table, and when turned up is used as a blackboard, as shown in Fig. 1. This blackboard has a ruled or graduated border, *h h*, having holes *l l l* on the lines, as shown. We sometimes bore these holes at the inner edge of the border.

Fig. 3 shows a common rule, in one end of which we securely fasten the pin or peg H, which extends below the surface of the rule far enough to enter the holes *l l l* on the border of the board to a sufficient depth to hold one end of the rule on the board, while the other end is brought to the desired point with the left hand, leaving the right hand to use the crayon or pencil.

G G are holes through the rule, placed in line of peg H, and are for receiving the end of crayon or pencil. The board has a hole, E, in the center large enough to receive the peg H.

Instead of the holes G G in the rule, indentations into one edge of the rule may be cut to receive the crayon, in which case it will be better to remove the peg H to the same line.

In operating this rule and board the peg H is put into any desired hole on the border, and held while the other end of the rule is brought to any desired point on the board, and the right hand is free to draw a straight line by the rule, and by placing the crayon or pencil in any of the holes G G the rule may be turned on the pin and the line given the desired curve. By placing the peg H in the hole E any desired circle may be correctly drawn, and by placing the peg H in holes *l l* at top or bottom this circle is readily divided into lines of latitude, and lines of longitude are made by swinging from the sides, all this being designed to teach pupils exact distance, to help them readily to make straight lines, perfect curves, and angles, to amuse and instruct in correct principles, and that they will readily understand just what they do without the aid of an instructor in the various uses to which the same may be applied.

What we claim as new, and desire to secure by Letters Patent, is—

1. A combined blackboard and writing-desk, consisting of the main frame A, copy-sheet C, mounted on rollers *a b*, compartments *e e e*,

hinged blackboard *b*, movable shelves *D D*, and copy-protectors *d d*, arranged as and for the purpose set forth.

2. A blackboard or drawing-surface having
5 holes or indentations on surface or border, substantially as shown, in combination with a ruler having a center on which it may be turned, and provided with holes or indentations to receive a crayon or pencil, as and for the purpose set forth.
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3. A blackboard or drawing surface having a graduated border, substantially as shown, and provided with holes around said border, in combination with a ruler having peg *H*
15 and holes *G G*, as and for the purpose set forth.

4. A blackboard or drawing-surface having a graduated border and provided with holes or indentations on surface or border, substantially as shown, in combination with a ruler having a center on which it may be turned, 20 and provided with holes or indentations to receive a crayon or pencil, as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

HIRAM E. BUTLER.
MILO HARRIS.

Witnesses:

FRED E. HATCH,
H. A. HEALY.