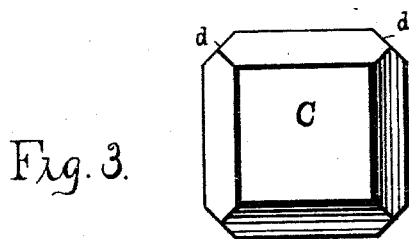
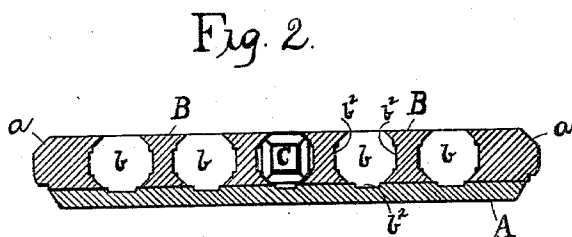
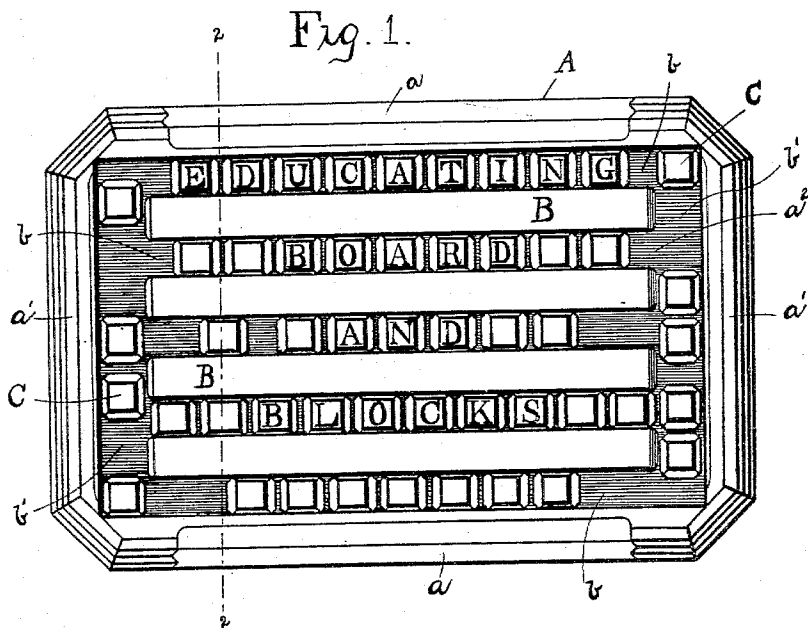


(No Model.)

W. E. MUNSON.
EDUCATIONAL APPLIANCE.

No. 563,872.

Patented July 14, 1896.



WITNESSES:

F. Philip Farnsworth.
Charles K. Bush

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UNITED STATES PATENT OFFICE.

WALSTIEN E. MUNSON, OF NEW HAVEN, CONNECTICUT.

EDUCATIONAL APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 563,872, dated July 14, 1896.

Application filed April 10, 1896. Serial No. 587,025. (No model.)

To all whom it may concern:

Be it known that I, WALSTIEN E. MUNSON, a citizen of the United States, and a resident of the city and county of New Haven, in the State of Connecticut, have invented a new and useful Improvement in Educational Boards and Blocks, as set forth and described in the following specification, taken in connection with the drawings which form a part thereof, and in which—

Figure 1 is a top view of the device. Fig. 2 is a transverse section of the board on the lines 2 2 of Fig. 1, showing a block in one of the grooves. Fig. 3 is a detail view of one of the blocks.

This invention relates to educational appliances; and it consists more particularly in a board having horizontal grooves for cubes, the edges of which are beveled, having on their faces letters, numerals, words, or other devices. The cubes are easily removable from the board, and all the six sides may be utilized for the letters, numerals, &c., so that the whole construction makes a neat, compact device capable of being used in a great variety of ways.

Referring to the drawings, in which like letters of reference represent like parts in all figures, A represents a rectangular board, of wood or other suitable material, with ends *a* and sides *a'*, forming an interior space *a*². Extending across this interior space are ribs or partitions B, forming grooves or channels *b* between each other and the ends *a* of the board.

The ribs B do not extend entirely across the space *a*², but terminate a short distance from either side, thus leaving a vertical groove *b'* on each side of the board. The ribs or partitions B are flanged above and below, as shown in Fig. 2, and the ends *a* of the board are likewise flanged on their inner surfaces.

The blocks are formed in the shape of cubes C, Figs. 2 and 3, the edges of which are chamfered, as shown at *d*. On the six faces of the cubes are printed or otherwise arranged letters, (small or capitals, script or printed,) numerals, words, pictures, as may be desired in applying the device to any particular line of instruction. The cubes or blocks C are adapted to fit in the grooves or channels *b*,

and are held therein (except from longitudinal movement) by the upper flanges on the ribs and ends.

The cubes bear on the lower flanges of the ribs and ends with their beveled surfaces, and, as the side portions of the ribs B and ends *a* of the board are provided with longitudinal slots *b*³, and the portions of the board forming the bottom of the horizontal grooves are likewise slotted, the flat surfaces of the cubes are relieved from rubbing against the sides and bottoms of the grooves *b*. (See Fig. 2.)

The sides *a'* of the board and ends of the ribs are not flanged, so that when the cube is in one of the vertical grooves *b'* it may be removed entirely from the board, so that in the formation of a word or sentence in any horizontal groove it is unnecessary to push the cubes about the board, as the correct ones may be merely placed in a vertical groove *b'*, opposite the horizontal groove, and pushed into position. In this way the cubes may be removed to place any desired face uppermost, as all the faces are utilized. In packing the board and blocks away, the vertical grooves are adapted to receive extra cubes.

On the faces of the cubes may be capital letters, as shown, letters in script, words, or pictures, as may be desired. In operation the cubes are placed in the vertical groove *b'*, with the desired letter uppermost, opposite a horizontal groove *b*, and are then pushed into said groove. Other blocks may be placed in the groove in the same manner to form words, as shown.

The board and blocks may also be used, to teach simple arithmetic, as a numerical frame, as ten or twelve cubes may be placed in a single groove. As the blocks or cubes are held in the horizontal grooves from falling out, the board may be held vertically against a wall or blackboard, as well as laid flat upon a table, &c.

The words "horizontal" and "vertical" are herein used in reference to the position of the board as shown in the drawings.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with cubes having any number of the surfaces of each cube orna-

mented; of an educational board having its
sides or ends forming a rectangular space;
and ribs extending across said space forming
with each other and the ends of said board
5 horizontal grooves, and with the sides of said
board vertical grooves, capable of receiving
said cubes, the parts forming the horizontal
grooves being flanged to limit said cubes when
in said grooves to movement longitudinal
10 thereto, and the parts forming said vertical
grooves being unflanged to allow said cubes
to be moved transversely therefrom, substan-
tially as described.

2. The combination with an educational
15 board having its sides and ends forming a
rectangular space; of ribs extending across
said space forming horizontal grooves with

each other and with the ends of said board,
said ribs and ends being flanged at the bot-
tom and slotted on the sides, the portions of 20
said board forming the bottom of said grooves
being likewise slotted; and cubes having
their edges beveled and their surfaces orna-
mented, said cubes being adapted to slide in
said grooves, substantially as described. 25

In witness whereof I have hereunto set my
hand, at New Haven, in the county of New
Haven, State of Connecticut, this 7th day of
April, A. D. 1896.

WALSTIEN E. MUNSON.

Witnesses:

GEORGE W. ROBINSON,
F. PHILIP FARNSWORTH.