

(No Model.)

J. DUSHANE.
EDUCATIONAL DEVICE.

No. 383,389.

Patented May 22, 1888.

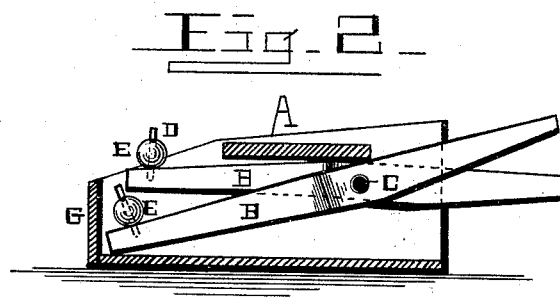
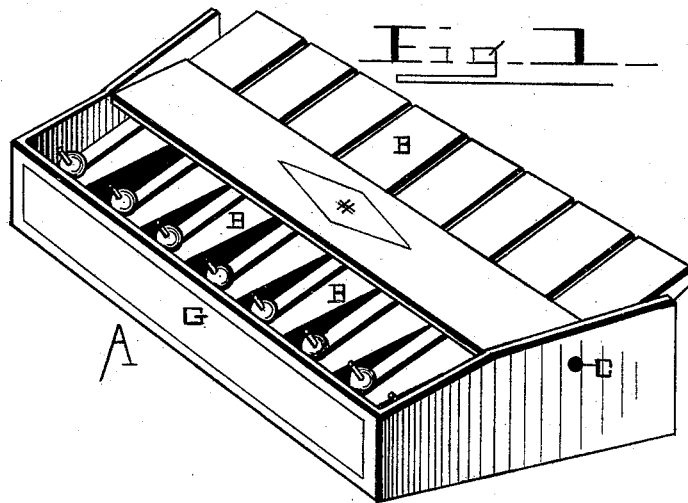
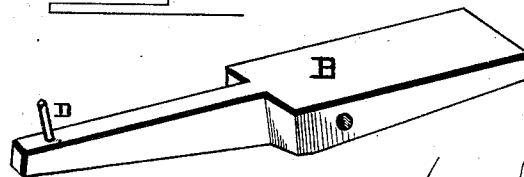


Fig. 3



Witnesses,

A. E. Sowell.
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Jas. DuShane, Inventor,

By his Attorney J. H. Alexander

UNITED STATES PATENT OFFICE.

JAMES DUSHANE, OF SOUTH BEND, INDIANA.

EDUCATIONAL DEVICE.

SPECIFICATION forming part of Letters Patent No. 383,389, dated May 22, 1888.

Application filed October 25, 1887. Serial No. 253,333. (No model.)

To all whom it may concern:

Be it known that I, JAMES DUSHANE, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Educational Devices; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to an improved educational device for teaching young children; and it has for its objects to provide for exposing one or more balls, blocks, or other devices to a class of children at will, so as to form combinations by means of which the elementary branches of various studies may be lucidly explained to the children in such manner that the lessons may be firmly impressed upon their minds, as more fully hereinafter explained.

To this end my invention consists of a box or frame to be placed upon the teacher's desk, and having a series of key-levers suitably fulcrumed therein, the said keys being provided at their ends facing the pupils to be taught with upwardly-projecting pins, over which are loosely and removably secured the balls, the keys being so arranged that the balls are normally out of sight of the pupils until exposed by the teacher, who manipulates the keys, as more fully hereinafter set forth.

In the accompanying drawings, Figure 1 represents a perspective view showing my improved device complete. Fig. 2 represents a vertical sectional view of the same, and Fig. 3 represents a perspective view of one of the keys detached.

Referring to the drawings by letter, A indicates a box or frame, which is substantially rectangular in configuration and which may be constructed of any suitable material. Within the box are arranged a series of parallel key-levers, B, of any desirable number—usually eight or more—the said levers being fulcrumed upon a common shaft, C, extending horizontally through the box from side to side of the same. At one end the levers are provided with vertical pins D for the reception of the perforated balls, blocks, or other devices, E,

and the other or rear end of the levers form the keys B, by means of which the levers are manipulated by the teacher to elevate or depress the balls at will. A board or strip is secured longitudinally in frame A above and in front of the pivots of levers B, which forms a stop to limit the upward movement of said levers, as shown in Fig. 2. The upper forward part of the box is cut away at an angle, so that the balls will be normally behind the front board, G, of said box, but will be elevated and exposed to the view of the pupils when the rear ends of the levers are depressed by the teacher. The balls or blocks E set loosely upon the pins, so as to be readily placed and adjusted thereon or removed from the same, as required, and one or more may be employed on each pin, as may be seen fit.

The box or frame may be ornamented in any desired manner to enhance its appearance, and its shape may be varied at will, without departing from my invention.

The methods of using the device are various. For instance, as an arithmetical aid it may be employed to teach addition, in which case the teacher raises a group of balls at the right—say two—and another at the left—say three—and the pupil or pupils required to tell the sum of the balls elevated. To teach subtraction the balls are similarly raised and the pupils required to tell the difference between the groups. By obvious changes in the relative arrangement of the balls and manipulation thereof by the teacher it is evident that all the elementary branches of arithmetic may be rendered perfectly plain by a series of object-lessons, which will become readily and ineradicably impressed upon the minds of the pupils. By having the balls or the objects mounted on the levers of various colors the device may be used to teach the identification or separation of colors. Different-shaped objects on the levers can be employed to illustrate form, and, if characters be placed upon the balls, phonics may be taught.

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

1. The herein-described educational device, consisting of a rectangular frame having its

front upper portion cut away, a series of parallel levers pivotally mounted in said frame, having upstanding pins in their front ends, and the removable object-blocks loosely mounted
5 on said pins, all substantially as and for the purpose specified.

2. The within-described educational device, consisting of a rectangular frame cut away at its front portion and open in rear, the series of
10 keyed pivoted levers mounted on a longitudinal rod in said frame, the stop-board above said levers, the upstanding pins on the front ends thereof, and the series of removable ob-

ject-blocks loosely mounted on said pins, the whole so arranged that the blocks will be normally out of sight of the pupil, but exposed
15 upon the depression of the keys, all substantially as specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.
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JAMES DUSHANE.

Witnesses:

JEANIE ANDERSON,
CHAS. W. WILEY.