(No Model.) 2 Sheets—Sheet 1.

M. BRADLEY.

KINDERGARTEN TABLE.

No. 418,437. Patented Dec. 31, 1889.

Fig. 1.

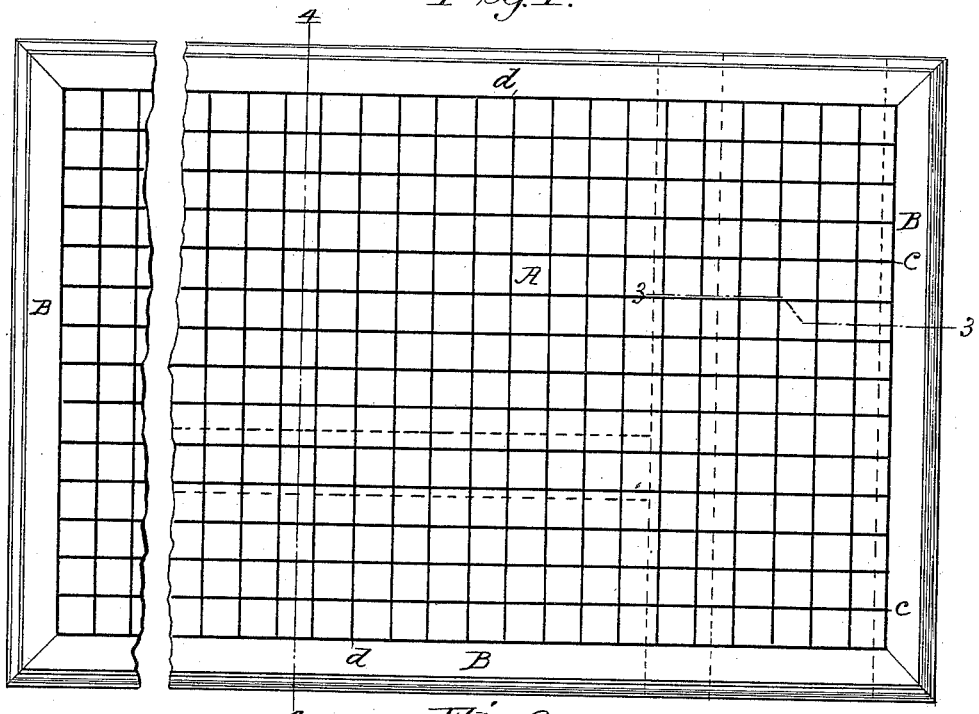

Fig. 2.

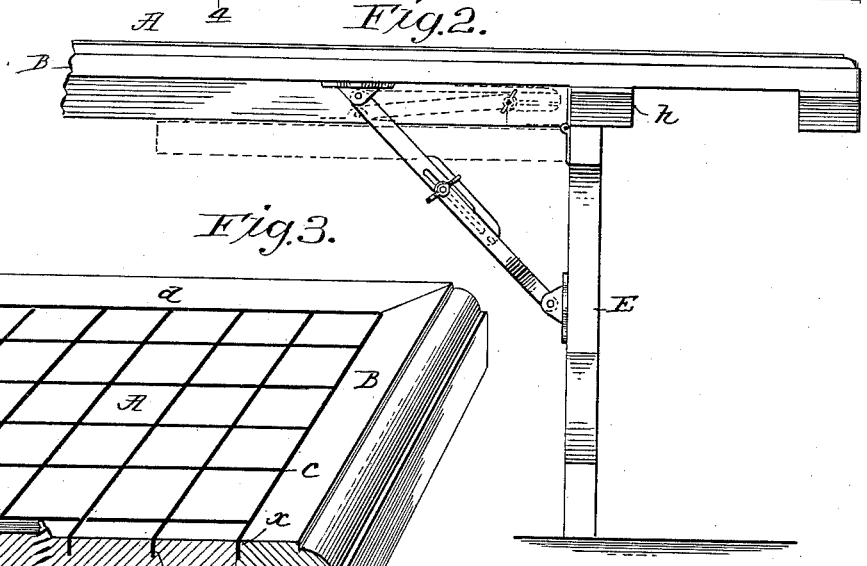

Fig. 3.

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(No Model.) 2 Sheets—Sheet 2.

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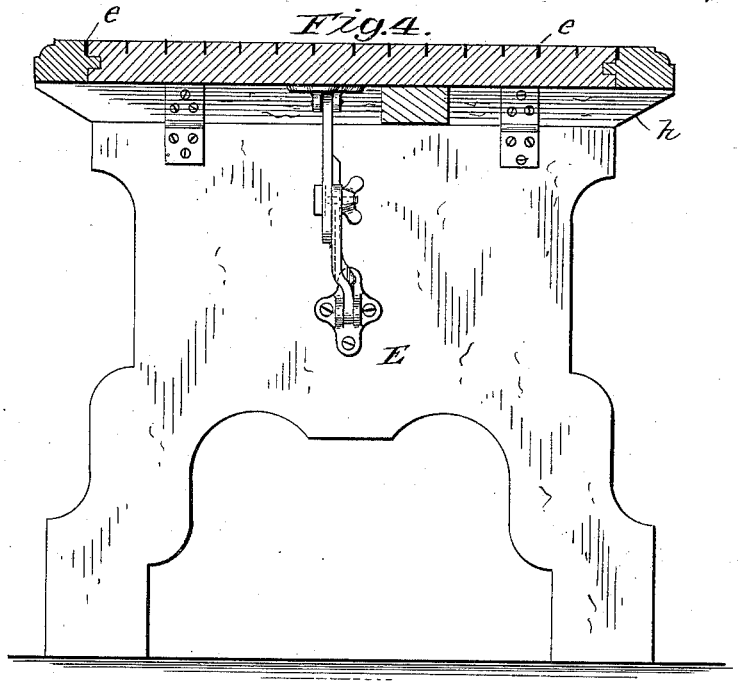
No. 418,437. Patented Dec. 31, 1889.

Fig. 4.



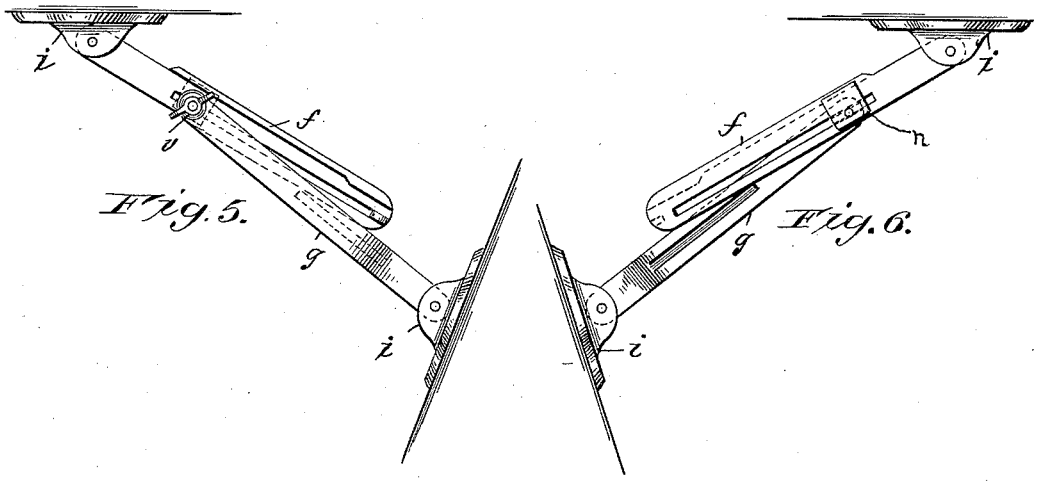
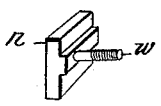


Fig. 5.

Fig. 6.

Fig. 7.



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UNITED STATES PATENT OFFICE.

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KINDERGARTEN-TABLE.

SPECIFICATION forming part of Letters Patent No. 418,437, dated December 31, 1889.

Application filed May 22, 1889. Serial No. 311,752. (No model.)

To all whom it may concern:

Be it known that I, MILTON BRADLEY, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Kindergarten-Tables, of which the following is a specification.

This invention relates to tables for kindergarten instruction, the object being to provide an improved table for said purpose; and the invention consists in the details of the construction of said table, all as hereinafter fully described, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a plan, and Fig. 4 a sectional view on line 4 4, Fig. 1, of a kindergarten-table constructed according to my invention. Fig. 2 is a partial side elevation. Fig. 3 is a section of the table-top on line 3 3, Fig. 1. Figs. 5, 6, and 7 illustrate details of construction hereinafter fully described.

In the drawings, A indicates the table-top; B, the border thereof; *c d*, respectively, the longitudinal and transverse or intersecting lines on the top A, and E are the table-legs. The table-top A is constructed from wood of suitable width and thickness, having formed or cut therein a series of grooves or channels running at right angles to each other, said channels having walls with parallel opposite sides, and being ordinarily so spaced as to form one-inch squares on the table. Provision is also made in the table herein described for the formation around the extreme outside edge of the table-top A adjoining the inner edge of the border B, by rabbeting the edge of the border, as shown at *x*, Fig. 3, or the edge of the table-top, or both, as may be preferred, to obtain a suitable channel at the border. It is obvious that to cut said channels in top A with facility, and economically, it must be done before the border B is applied, since it is essential to the durability of the lined surface of said top that the depth of said channels be as great at the borders as at the center of the table-top, in order that the colored cement or like material *e*, (see Figs. 3 and 4,) with which the said channels *c* and *d* are filled, may be of a uniform depth from the surface of the top A inward, this being requisite and necessary to the proper durability of the table, in order that the top thereof may from time to time have its surface dressed or planed down to remove indentations and scratches therefrom that it may receive in the use to which it is put.

In considering the above-mentioned refinishing or dressing the top of the table, and in view of the fact that in so repairing it the depth of the cement lines in the channels *c* and *d* is reduced, and that it is desirable that the same width of the lines at the surface of the top A be preserved after each dressing or refinishing as aforesaid, it is easily understood why the opposite walls of the channels containing said cement substance are made, as aforesaid, parallel with each other.

The above-mentioned cement with which the channels *c* and *d* are filled may consist of what is known as "painters' lead," having mixed therewith lamp-black or other coloring substance to produce lines of a desirable color, said lead having also mixed therewith any suitable hardening-drier which will render the cement hard and durable after it shall have been put into the said channels and allowed to dry.

Any other suitable plastic material capable of fulfilling the above-named requirements may be used, the principal ones being adhesive strength and the capability of taking a smooth finish on the outer surface of the lines on a plane with the top A of the table.

The construction of kindergarten-tables as heretofore practiced, in which the above-described lines on the top thereof are painted or formed by scratching indented lines thereon, have not embodied in their construction the surrounding border B, which provides a surface beyond the borders of the table-top proper, in a plane with the surface of said top, and hence tables so made without such a border do not possess the means for bringing distinctly under the eye of the pupil a determinate outer line, such as is shown in Figs. 1 and 3 surrounding the extremities of the lines *c* and *d*, and the absence of such determinate outer line in this class of tables is a source of inconvenience to the teacher, for the reason that, as is well known by those

skilled in the art of kindergarten teaching, the pupils follow their exercises—which in part consist in placing tablets on the herein-described table at certain points on the lines thereof to form geometrical figures—by dictation from the teacher, the latter indicating the places upon which said tablets are to be placed, by saying that the pupil shall commence at the junction of such and such lines from the border of the table, and without a plane surface beyond the border-line, which enables the pupil to distinctly determine the first line to be counted from, mistakes often arise and occasion the said inconvenience. The said border B is attached around the edge of the table-top A in any suitable manner, that shown in the drawings being by means of a tongue and groove, which is the preferable one, because the border, particularly across the end of the table, tends to keep the top level by preventing warping, said border being secured by gluing it to the top, or other suitable means, the said top and border being "faced off," so to speak, and finished after the cemented lines shall have been made and the border applied, as aforesaid.

The kindergarten-tables made as heretofore, as above described, having painted lines thereon, possess the inconvenience of having such lines necessarily too wide when made with a brush, and when the table is re dressed or finished after a certain amount of wear the lines must be newly formed; and so with the said scratched lines—they must also be newly made under like conditions of wear, and are at best indistinct and generally have uneven edges.

For convenience in removing and stowing away a kindergarten-table after the said exercises of the pupils thereon are terminated, it is desirable that they should be constructed as "knockdown tables," so to speak, in order that room may be made for other exercises in the school-room; and to that end a suitable cleat *h* is secured under the table near each end thereof, and to the edge of each of said cleats is hinged, as shown in Figs. 2 and 4, a table-leg E, said figures showing said legs in vertical positions under the table, and Fig. 2 showing in dotted lines the folded position of one of said legs and the brace devices. The said brace devices consist of two arms *f* and *g*, each hung by one end to a pivot-plate *i*, said pivot-plates being secured one on the under side of the table and the other on one side of said legs, and being united by a sliding connection consisting of a block *n*, Fig. 7, having a screw-bolt *w* passing through a slot in one of said arms, on which is placed a thumb-nut *v*, by which the brace-arms are locked rigidly in the position shown in Fig. 2, when the leg is in a supporting position, and by which they are so freed that the leg may be folded up, as aforesaid.

The above-described brace-connections between the leg and the table constitute devices which form a rigid brace when tightly screwed together, and thus serve to prevent the table from being shaken when several pupils are sitting around it and performing their exercises thereon.

What I claim as my invention is—

1. A kindergarten-table the top of which is provided with a series of channels intersecting each other, forming geometrical figures, and a filling of plastic material in said channels, and having a plain surrounding border the surface of which is level with the portions of the top within said border, substantially as described.

2. A kindergarten-table comprising the top, substantially as described, having a surrounding border secured at the edges thereof, the top of which is level with said top proper, and a series of intersecting channels in said so-formed top, having a filling of contrasting colored plastic material therein, whereby geometrical figures are formed, certain of which filled channels are between said border and the top proper, whereby a determinate figure-surrounding line is formed within said border, substantially as and for the purpose set forth.

3. A kindergarten-table consisting of a top, substantially as described, having a series of intersecting channels therein filled with plastic material, whereby geometrical figures are formed, and legs hinged to the under side of said top, and hinged and sliding braces secured to said top and to said legs, and means, substantially as described, for rigidly locking said braces, for the purpose set forth.

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