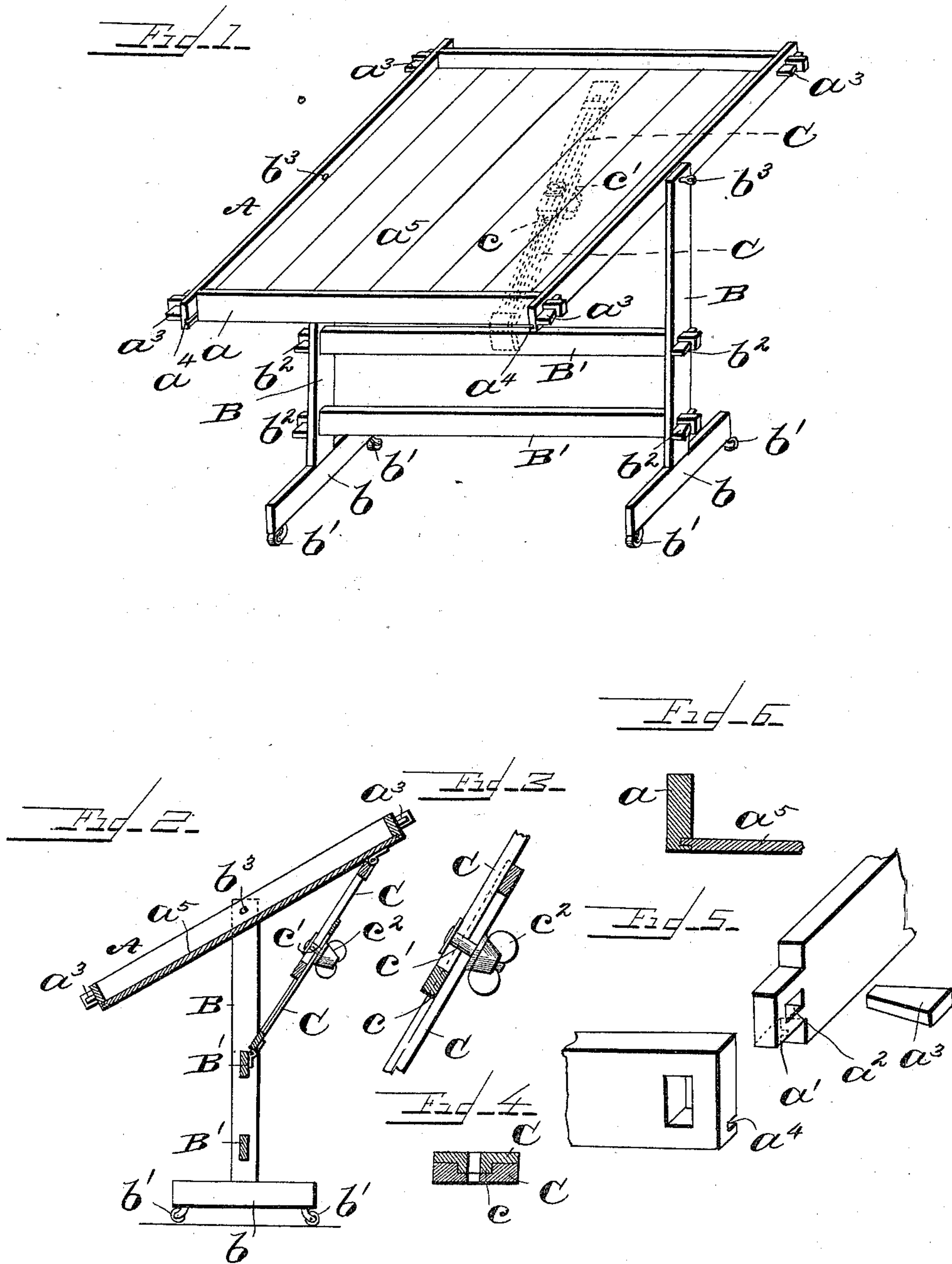


(No Model.)

A. E. MALTBY.
MODELING BOARD.

No. 542,528.

Patented July 9, 1895.



Witnesses
G. A. Tauberschmitt.
J. D. Kugsberg

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UNITED STATES PATENT OFFICE

ALBERT E. MALTBY, OF SLIPPERY ROCK, PENNSYLVANIA.

MODELING-BOARD.

SPECIFICATION forming part of Letters Patent No. 542,528, dated July 9, 1895.

Application filed January 23, 1895. Serial No. 535,881. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. MALTBY, a citizen of the United States, residing at Slippery Rock, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Modeling-Boards; and I 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.

My invention consists in the novel features of construction and combination of parts hereinafter fully described with reference to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claim.

Referring to the said drawings, Figure 1 is a perspective view of my improved modeling-board. Fig. 2 is a vertical sectional view of the same. Figs. 3, 4, 5, and 6 are detail views of parts of the device.

The object of my invention is to provide an adjustable knockdown modeling-board for use in schools, where modeling in sand or other suitable material is used for educational purposes. In using such boards it is very desirable to have the board supported in a horizontal position while the modeling is being effected, and to have means provided for supporting it afterward in an inclined position, so as to enable the model to be seen by the pupils. It is also desirable to have the device so constructed that it may be readily taken apart for packing or storing and for moving it about. I obtain all of these advantages by my improved device.

In the drawings, I represents what I term the "modeling-board" proper, which consists of a shallow tray having a bottom and narrow edges. In constructing this board or tray the four side pieces a are made separate and are connected by a mortise-and-tenon construction, as shown in Fig. 5, the tenons a' being of greater length than the thickness of the side pieces a and provided with apertures a^2 beyond the side pieces to receive wedges a^3 , which are forced in far enough to clamp the parts firmly together, as shown in the drawings. The side pieces a are each provided

on their inner sides, near their bottom edges, with a groove a^4 , (see Figs. 5 and 6,) and in these grooves the rabbeted edges of the bottom boards a^5 are placed. The bottom is preferably composed of several boards or slats, so as to enable the device to be packed or stored in very small compass when desired.

B B represent a pair of uprights or standards each provided with a foot portion b furnished preferably with casters b' , as shown, to enable the device to be readily moved about. The standards B B are connected preferably by a pair of cross-bars $B' B'$, each having tenons engaging mortises in the standards and provided with wedges b^2 engaging apertures in the said tenons.

The upper ends of the standards B B are provided with pins or screws b^3 , which engage suitable apertures adjacent to the center of two opposite sides of the modeling-board or tray A, as shown, and thus pivotally support the same.

In order to adjust and support the tray A positively in any desired position, I provide the adjusting-bar C C, which is hinged or pivotally connected to the under side of the tray at one end and to one of the cross-bars B' at the other. This adjusting-bar consists of two parts C C, the one having preferably a tongue c engaging a longitudinal groove in the other and connected adjustably by means of a bolt c' engaging a longitudinal slot in one or both of said parts, the said bolt being provided with a wing-nut c^2 or other suitable clamping device. The two parts slide one upon the other and can be held rigidly in any desired position by means of the bolt and wing-nut.

In use the tray will be first adjusted to a horizontal position. The bottom may then be covered with paper or cardboard if desired, and the modeling material, which may be sand, meal, clay, or other suitable substance, will be placed in the tray. The operator then forms the desired model in the modeling material, and when it is completed the tray will be adjusted to an inclined position, as indicated in Fig. 1 of the drawings, so as to allow the model to be seen by the pupils without jarring it or causing the modeling material to run or disintegrate, as would occur if the tray were carelessly handled.

When not in use the device may be taken

entirely apart and packed or stored in very small compass or transported from one place to another in a very convenient manner.

What I claim, and desire to secure by Letters Patent, is—

5 A knock down modeling board comprising among its members the knock down tray, the knock down supporting frame having vertical standards and cross bars, the pivotal pins
10 engaging said standards and tray, the adjusting bar pivotally connected to said tray and one of said cross bars, said bar consisting of

two parts, the one having a guiding rib engaging a groove in the other and an adjusting bolt and nut engaging said parts for adjustably securing the same together, substantially as described. 15

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT E. MALTBY.

Witnesses:

D. C. MURPHY,
LOUELLA KERR.