(No Model.)

S. A. FIELD.

CHILD'S TRAY.

No. 368,389. Patented Aug. 16, 1887.

FIG. 1

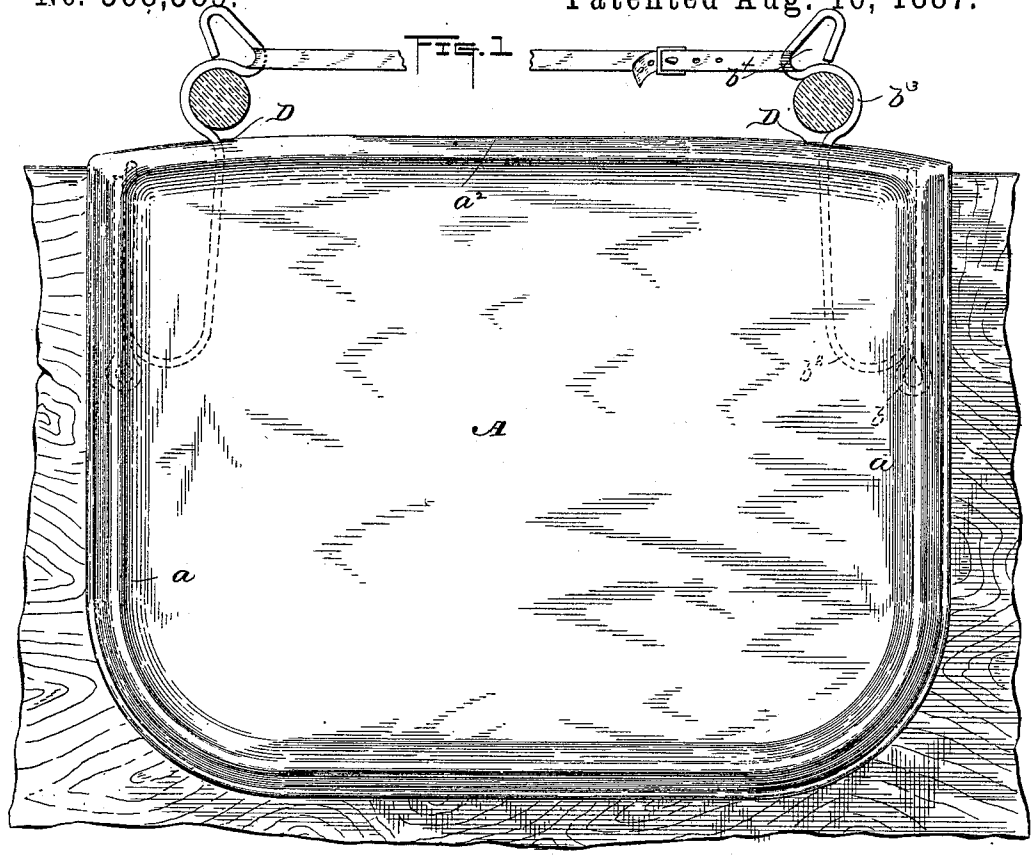


FIG. 2.

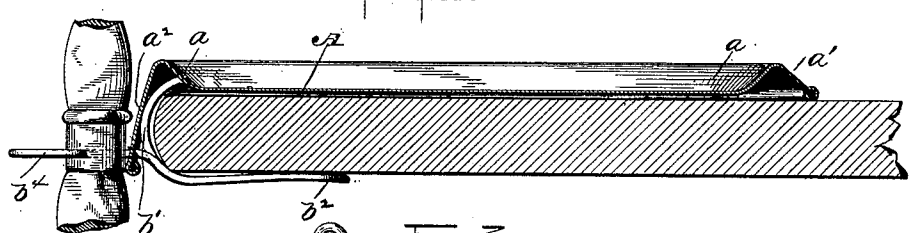
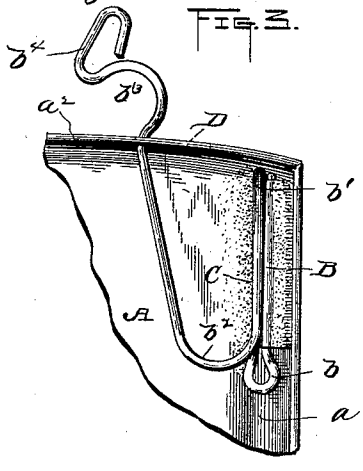


FIG. 3.



Witnesses:-
L. G. Connery, Jr.
R. B. Seward.

Inventor:-
S. A. Field
By E. C. Seward.
Attorney.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

SAMUEL ALBERT FIELD, OF PUTNAM, CONNECTICUT.

CHILD'S TRAY.

SPECIFICATION forming part of Letters Patent No. 368,389, dated August 16, 1887.

Application filed May 3, 1887. Serial No. 236,977. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL ALBERT FIELD, of Putnam, in the county of Windham and State of Connecticut, have invented certain new and useful Improvements in Children's Trays; 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 relates to an improvement in children's trays.

Hitherto it has been customary to provide a tray of this character at its ends and along the side farthest from the child with an upright or undercut edge. Such construction has enabled babies and young children, when reaching forward to grasp anything that is within reach—a habit quite general—to secure a finger-hold on or under the edge of the tray, and thereby to tilt the tray over toward their body, spilling the milk or other liquid or food into their lap.

The object of my present invention is to provide a tray with an edge of such form as to prevent the securing of a finger-hold by a child.

A further object is to provide simple and effective means for locking the tray to the edge of the table, and also to the child's chair in proximity to the edge of the table.

A further object is to provide a child's tray which shall be simple and convenient, and capable of being manufactured at a small initial cost.

With these ends in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan view of the tray as adjusted for use. Fig. 2 is a vertical section from front to rear, and Fig. 3 is a partial bottom plan view showing the construction of the spring clamp and hook.

A represents the depressed body portion of the tray, from which the rim *a* rises in flaring form, as is common. Instead, however, of terminating the rim *a* at or near its line of greatest elevation, I project it outwardly and downwardly, as shown at *a'*, to the plane of the bottom of the tray, so that when the tray rests on a level surface—as, for example, a table—the border or edge of the rim *a a'* will rest on or be in close proximity to the said surface. The obliquity of the rim portion *a'* is such as to afford no possible hold for the child's fingers, and the result of any attempt to lift the edge of the tray by pulling it toward the body will be to press it more tightly against the table. The front a^2 of the tray is projected downwardly, as shown, for the purpose of engagement with the edge of the table.

The spring for clamping the tray to the table and also hooking it to the front of the child's chair is constructed as follows: A piece of spring-wire is secured at one end along the under side of the tray in the groove formed by the rim portions *a a'*, as shown at B, the extreme end of the wire being toward the front of the tray. After leaving the end of its connection farthest from the front, the wire makes a turn, as shown at *b*, and is then led back toward the front in a groove, C, preferably alongside of its connection with the tray. As it approaches the depending front a^2 of the tray the said wire makes a turn in a vertical plane, as shown at *b'*, and thence extends back from the front at a sufficient distance from the bottom of the tray to admit of the introduction between its parts of a table-bed of ordinary thickness by springing the parts open. The wire then makes a turn, as shown at b^2, in a horizontal plane, and extends toward and through the front a^2. After passing through the front the said wire is bent into hook shape, as shown at b^3, calculated to engage one of the round standards at the front of the child's chair, and finally terminates in a loop, as b^4, suitable for use as a handle in manipulating the hook or for the attachment of a strap, if deemed necessary, to hold the hooks in engagement with the chair.

The slot D in the front a^2, through which the wire extends, is elongated horizontally to admit of the swing of the hook b^3 outwardly in order to engage the outer portions of the chair-standard, and as the hook normally springs toward the inner end of the slot its own tension will tend to hold it in engagement with the standard.

There are two hooks employed, one at each front corner, and, being arranged symmetrical

with respect to each other, serve to grasp the outer sides of each front standard and assist each other in retaining their hold.

The form of the combined clamp and hook is such as to prevent liability of its becoming detached from the tray, as the strain on the clamp portion is taken by the part lying in the groove C. Its construction, as is readily seen, is very simple, while it does its work effectually.

The tray is preferably constructed of a single piece of sheet metal having its rim pressed into the desired form. It may, however, be constructed of various other materials—such, for example, as hard rubber, celluloid, or wood—and be molded or carved into the desired form, or its rim-sections, one or both, may be formed separate from the body portion and attached thereto.

It is evident, also, that many slight changes in the form and arrangement of the parts might be resorted to without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the construction herein set forth; but,

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

1. A child's tray having its outer rim constructed slanting outwardly and downwardly into proximity to the surrounding surface on which the tray stands, substantially as set forth.

2. A child's tray constructed of a single piece of material having its outer rim extending outwardly and downwardly from its line of highest elevation to the surface on which it stands, substantially as set forth.

3. The combination, with the body portion of a tray, of a combined clamping and hook spring adapted to simultaneously lock the tray to the table and to a chair at the edge of the table, substantially as set forth.

4. The combination, with the body portion of a tray, of a pair of clamping-springs secured to the tray at one end and provided with hook portions at their opposite ends, adapted to engage the chair at the front of the tray, substantially as set forth.

5. The combination, with the body portion of a tray provided with a depending front, of a pair of wire springs secured to the bottom of the tray, and projecting through elongated slots in the said depending front, the wire springs having hook bends formed therein outside of the front, and loops at their extreme ends for manipulating the hooks, substantially as set forth.

6. The combination, with a child's tray, of a securing-spring secured thereto, the said securing-spring having an extended seat in a groove alongside of its connection with the tray, a double turn, as shown, to form a clamp, and a free end extending through a slot in the front of the tray, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

SAMUEL ALBERT FIELD.

Witnesses:
F. W. PERRY,
THOMAS L. TAYLOR.