

C. A. ADAMS.
 TRAY.
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1,066,359.

Patented July 1, 1913.

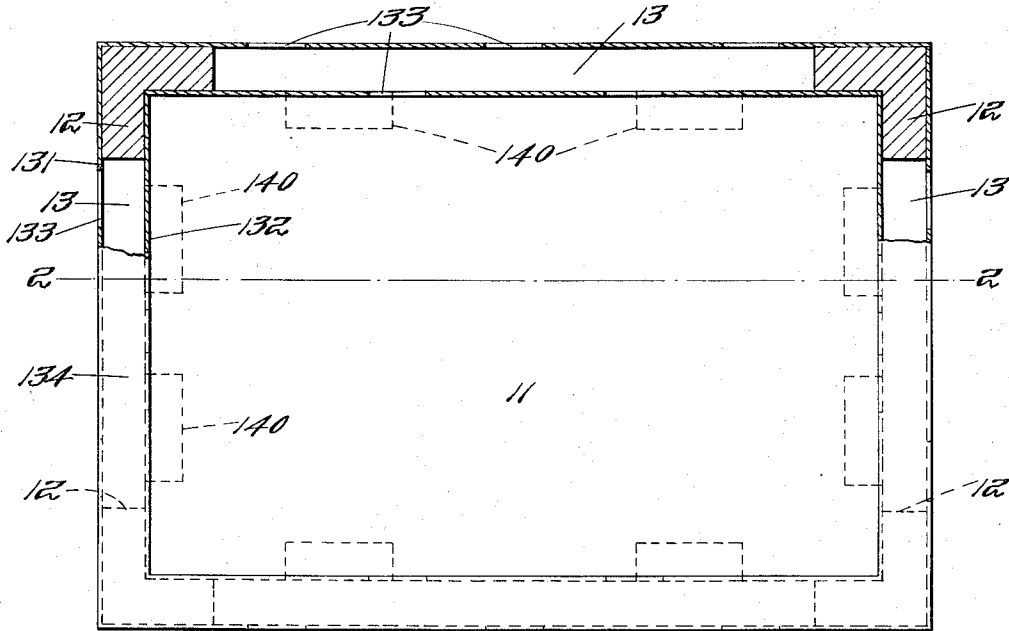


Fig. 1.

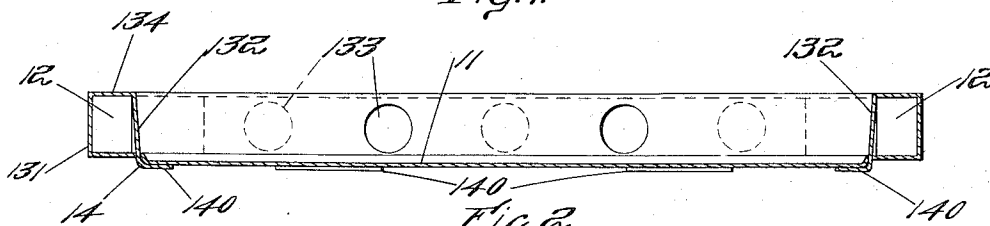


Fig. 2.

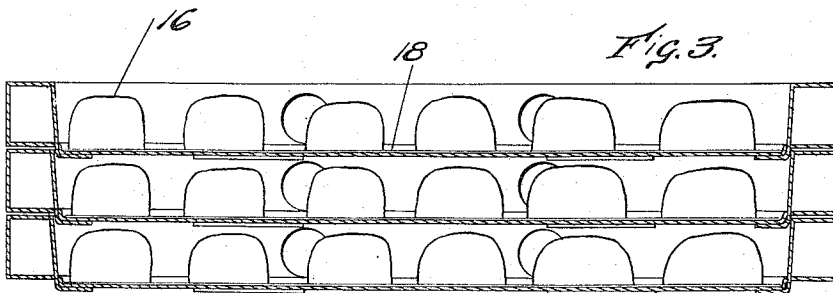


Fig. 3.

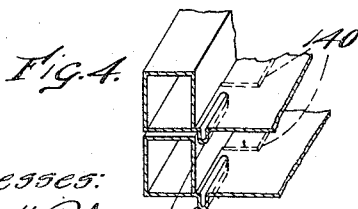


Fig. 4.

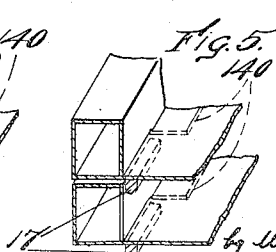


Fig. 5.

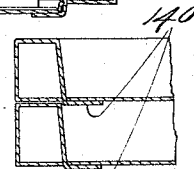


Fig. 6.

Witnesses:

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UNITED STATES PATENT OFFICE.

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TRAY.

1,066,359.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES A. ADAMS, a citizen of the United States, residing at Boston, county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Trays, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to a tray to be used especially in connection with the manufacture of confectionery and particularly chocolates which are dipped in melted chocolate to coat them.

Heretofore it has been customary for the person who dips the chocolates to place them on a sheet of paper in a dipping tray which is open on two opposite sides. After the chocolates have hardened enough to permit it the sheets of paper with the freshly dipped chocolates thereon are transferred to what are known as "stock" boxes, one sheet being laid on the chocolates on the sheet below until there are four or five layers in each stock box. The packers take the chocolates from the stock boxes as they require them to fill the boxes in which the goods are shipped. In the course of this process some of the pieces are scratched or marred, either by falling off the sheets or by contact with the sheet above and must be sold as seconds.

My invention affords a device which may be used both for a dipping tray and for a stock box and obviates entirely the necessity of transferring the sheets of chocolates from the dipping tray to the stock box and the resulting loss from marring.

The tray embodying my invention is so constructed that the trays may be piled one on top of the other but without the upper tray resting on or touching the pieces in the tray below, and the air has at all times free circulation about the pieces so that the coating of chocolate retains its bright surface and does not grow dull or gray.

I prefer to make the trays embodying my invention of paper board having some suitable non-absorbent finish, as the trays made from this material are cheap and light and sufficiently durable, but it will be understood that other sheet material such for instance as tin may be employed if desired. It will also be understood that the usual sheet of paper on which is embossed at suitable intervals the name of the maker of the chocolate may be laid in the bottom of each

tray but it is wholly unnecessary to move the chocolates by means of this sheet of paper.

The invention will be readily understood from the following specification taken in connection with the accompanying drawings, and the particular features thereof are pointed out and clearly defined in the claims at the end of this specification.

Referring to the drawings—Figure 1 is a plan view, partly in section, of a tray embodying my preferred construction. Fig. 2 is a section on line 2—2 Fig. 1. Fig. 3 is a similar section showing three trays placed one above the other with the goods in place. Fig. 4 is a section of the rims of two superposed trays of a slightly modified form. Fig. 5 is a section of two other trays also of slightly modified construction. Fig. 6 is similar section showing still another modification.

In the drawings, and more particularly in Figs. 1 and 2 the bottom is designated 11. This is of sheet material preferably of paper or card-board, coated or finished upon the surface to render it as impervious as possible to moisture and grease. As has already been stated, sheet metal or other sheet material may be used if preferred, but paper is light and cheap and capable of satisfactory use. At the corners as shown in Fig. 1, are located corner pieces 12 of wood or other similar material, the sheet material of which the bottom 11 is made being turned up over the arms of the corner pieces to form a hollow rim or border to the tray. This hollow rim is designated 13 in the drawings and is sufficiently strong to form a rigid support for the whole structure. The inner vertical wall 132 is provided at intervals with tongues 140 which are passed through slots formed in the bottom 11 and are turned inwardly on the bottom as shown Fig. 2. This serves to strengthen the construction and also to prevent the sheet of paper 18 embossed with the name of the maker on which the chocolates rest from slipping sideways under the edge of the vertical walls 132 as might result if said tongues 140 were not provided. The two vertical walls 131 and 132 of the hollow rim 13 are pierced by a series of holes 133 which are preferably not opposite each other and therefore do not weaken the rim seriously. These holes allow free passage of air into

the interior of the tray when the trays are piled up and the free circulation of air prevents the goods contained therein becoming dull or gray. The top 134 of the hollow rim of the tray is flat so as to form a firm support for the tray above when the trays are piled upon each other.

In Fig. 3 are shown three trays placed one upon the other, the chocolates in the tray being designated 16. It will be seen that the pieces in the lower tray are not touched by the one above. The bottom 11 of the tray is provided with some kind of a rib running completely or partially around the edge of the tray just inside the inner line of the hollow rim so that when the trays are superposed the top tray will not slide laterally. In Fig. 2 this rib is shown as formed by depressing the bottom of the tray as shown at 14. This may be easily done in a press, as is well known to those skilled in the art. This is a satisfactory method of preventing accidental displacement but other forms may be employed. For instance in Fig. 4 is shown a U-shaped rib 15 extending between the tongues 140 and formed by embossing in a press the material of which the bottom is formed.

In Fig. 5 is shown two trays in which the rib is formed by means of strips of wood 17 extending between the tongues and secured to the bottom 11 in any suitable way, as by glue.

In Fig. 6 is shown two trays in which the rib to prevent lateral displacement of the piled-up trays is formed by the inwardly turned ends of the tongues 140. These are ordinarily sufficient for the purpose when the usual heavy cardboard is employed in which case the tongue affords a rib of sufficient thickness to prevent lateral displacement of the superposed trays.

The trays embodying my invention are used by the persons who dip the chocolates to receive the pieces as they are dipped, and as fast as one tray is filled another is placed on top, but this does not interfere with the drying of the chocolates as the air circulates freely through the holes in the hollow rim. The trays may then be used

to contain the goods until they are packed in the boxes for the market, it being unnecessary to transfer the goods to the usual stock boxes. The trays with their contents may be piled up quite high with perfect security and are not likely to be upset as the depending rib serves to hold them securely in proper position.

While I have described my improved tray as intended for use in the manufacture of confectionery, it is obvious that it may be employed whenever a tray permitting free circulation of air about the contents is required.

What I claim is:

1. The tray having a bottom surface with a hollow rim thereon which has holes therein to permit the free passage of air, said bottom having a downward extension to fit inside the hollow rim of another tray when the trays are superposed.

2. The tray formed from pasteboard and having a hollow rim formed by bending up portions of the material from which the tray is made, said hollow rim having holes through the outer and inner walls thereof to permit the free passage of the air to the contents of the tray.

3. The tray formed from pasteboard and provided with wooden corner pieces said tray having a hollow rim formed by bending portions of the material from which the tray is formed about the arms of the corner pieces, said hollow rim having holes through the walls thereof to permit the free passage of the air.

4. In a tray formed from pasteboard and having a bottom with slots therein a hollow rim with holes through the outer and inner walls thereof to permit the free passage of air, the said inner walls of said rim having tongues thereon which project through said slots in the bottom of the tray and are folded over against said bottom.

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

CHARLES A. ADAMS.

Witnesses:

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WILLIAM A. MACLEOD.