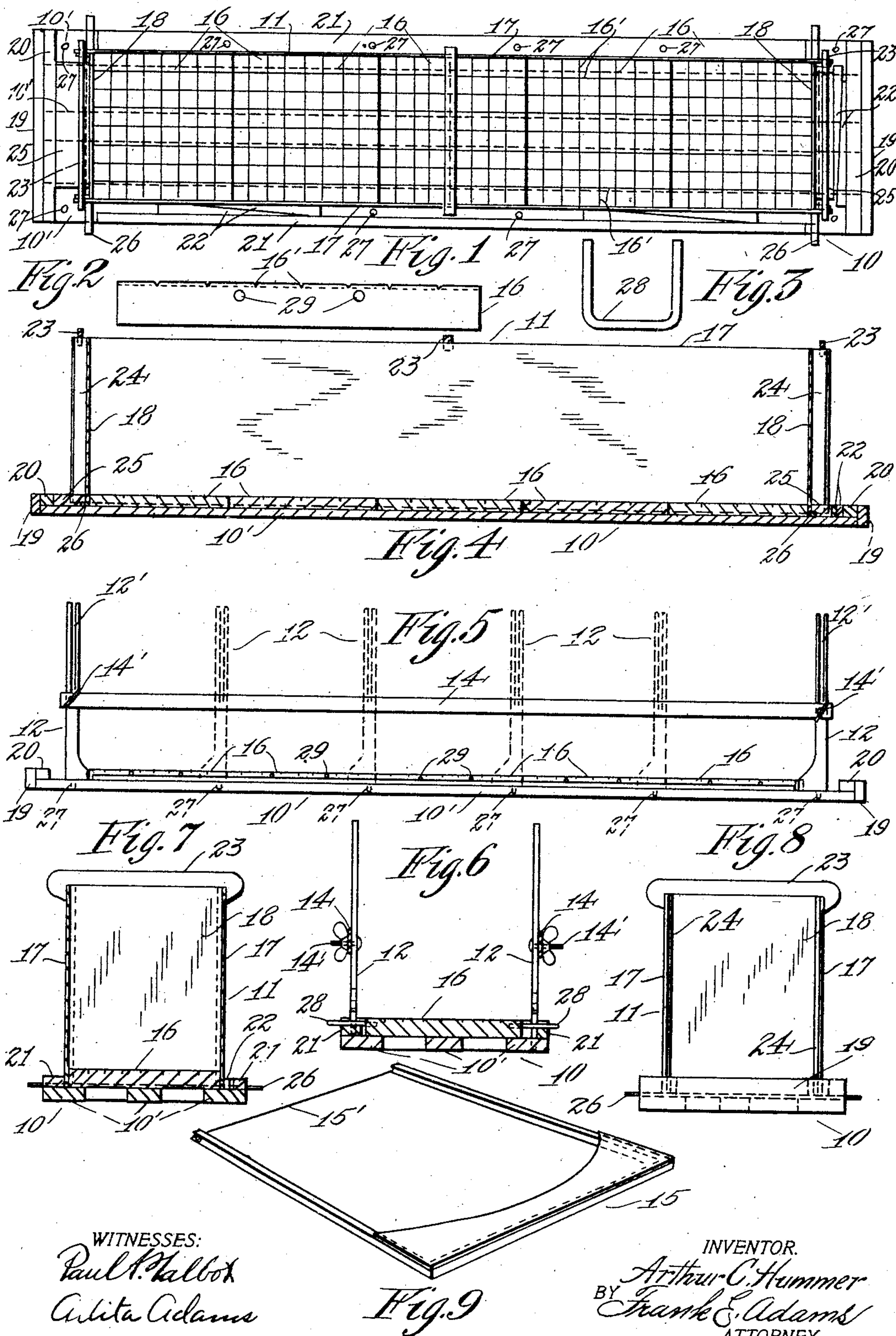


No. 785,952.

PATENTED MAR. 28, 1905.

A. C. HUMMER.
BUTTER TRAY.

APPLICATION FILED MAR. 30, 1904.



UNITED STATES PATENT OFFICE.

ARTHUR CLENNING HUMMER, OF SEATTLE, WASHINGTON.

BUTTER-TRAY.

SPECIFICATION forming part of Letters Patent No. 785,952, dated March 28, 1905.

Application filed March 30, 1904. Serial No. 200,769.

To all whom it may concern:

Be it known that I, ARTHUR CLENNING HUMMER, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Butter-Trays, of which the following is a specification.

My invention relates to improvements in trays for molding butter, and has for its objects to provide a simple and inexpensive device in which a comparatively large quantity of butter can be quickly molded and divided into blocks of convenient size for shipment or for division into bricks of predetermined weight without waste and embodying essential features of adaptability, utility, and general efficiency which facilitates the division of the body of butter molded and the removal of the divisions from the tray.

The above-mentioned and other desirable objects are attained by the construction, combination, and arrangement of parts, as disclosed on the accompanying drawings, set forth in this specification, and succinctly pointed out in the appended claims.

With reference to the drawings filed herewith and bearing like reference characters for corresponding parts throughout, Figure 1 is a plan view of the tray with the parts assembled for molding butter. Fig. 2 is an edge view of one of the sections of the platform of the tray. Fig. 3 is a view of one of the handles for said sections. Fig. 4 is a longitudinal section of the tray with parts assembled as shown in Fig. 1. Fig. 5 is a side view of the tray with the parts assembled for dividing the body of butter. Fig. 6 is a transverse section of the tray with the parts assembled as shown in Fig. 5. Fig. 7 is a transverse section of the tray with the parts assembled for molding butter. Fig. 8 is an end view of the tray with the parts assembled for molding butter, and Fig. 9 is a perspective view of the cutter employed to divide the body of butter.

This invention includes a suitable rectangular base 10 of extended length, a separable box 11, in which the butter is molded, removably seated on the base, and vertical guides

12 and horizontal guides 14 for the cutter, as 15, which are arranged in position for cutting after the side and end walls of said box have been removed. In the present instance the box 11 is of suitable size and form to mold the butter for division into a number of blocks of hexahedral shape and measuring substantially twelve by twelve by thirteen inches each, as a convenient size for shipment and for division into bricks of predetermined weight for the retail trade without waste, and this box comprises a platform composed of a suitable number of removable sections 16, equal in size to the end surfaces of said blocks, and an adjustable casing fitting about said platform and comprising removable side and end walls, (marked, respectively, 17 and 18,) which fit against the side and end surfaces of said platform and extend thereabove a distance equal to the length of said blocks. The base is somewhat greater in length and width than the aforesaid box and conveniently consists of three parallel sills 10', spaced apart, and cross-ties, as 19, secured to said sills at the ends. Upon the upper surface of this base, adjacent the ends and along the side edges, are secured transverse cleats 20 and longitudinally-disposed cleats 21, between which the box 11 fits freely, and wedges, as 22, are arranged in pairs between the cleats and one side wall and one end wall of the box, and removable bearing-blocks 25 are placed between one end cleat and the adjacent end wall of the box and between the opposite end wall and adjacent pair of wedges. These bearing-blocks are provided with rabbets at the inner lower corner to receive freely the side edges of shims, consisting of strips 26 of suitable thickness, which are placed transversely on the base beneath the end walls and extend across the lower edges of the side walls, so as to increase the depth of the box in case the specific gravity of the butter is below standard, as is sometimes the case. When the pairs of wedges 22 are "set up," they serve to clamp the end walls of the box between the bearing-blocks and end sections 16 of the platform and one of the side walls between said platform and the side wedges and the opposite side wall between the platform and adjacent side cleat, thereby securing

the walls in place and the box on the base. To keep the side walls of the box from spreading apart at the upper edges when packing butter in the box, removable ties, as 23, are
 5 provided and consist of bars formed with opposite laterally-projecting hooks arranged at suitable separation to embrace the said walls snugly, and to keep the end walls from spreading apart vertical cleats 24 are secured to said
 10 side walls adjacent the ends for the side edges of the end walls to bear against.

The guides 12 are preferably four in number and are adapted to guide the cutter 15 in making vertical cuts and are also used as
 15 standards to support the horizontal guides 14, and they are transferable, so that they can be set relatively to the abutting edges of the platform-sections 16 at opposite sides of the body of butter. Each guide 12 conveniently
 20 consists of a flat bar of suitable length having one edge true and even for guiding the cutter and provided with a downwardly-projecting stem or tongue at the base end and a longitudinal slot 12', extending downwardly from the
 25 upper end past the center. This slot is adapted to receive freely a clamp-bolt 14', by means of which the respective horizontal guide 14 is conveniently fastened at one end in adjusted positions, and the stems or tongues are of suitable size to fit snugly in socket-holes, as 27,
 30 provided on the base 10 along each side margin at suitable points to receive said stems or tongues when the guides are set relatively to the abutting edges of the platform-sections 16
 35 or when set adjacent the corners of the base to act as standards.

The guides 14 are adapted to guide the cutter 15 in making horizontal cuts, and they consist of flat bars of somewhat greater length
 40 than the box 11 and having the upper edge true and even for guiding the cutter, and these bars are provided with an aperture adjacent each end to receive the clamp-bolts 14', which pass through said apertures and the slots 12'
 45 of the guide 12 when they are arranged as standards and carry thumb-nuts by means of which the horizontal guides are secured in adjusted positions.

The cutter 15 consists of a substantially U-shaped frame of greater width between the
 50 stems than the distance between the outer side surfaces of the horizontal guides when set in position for guiding the cutter and a cutter-wire 15', secured to the free ends of said
 55 stems.

To facilitate lifting the platform-sections 16, suitable handles, as 28, are provided therefor, and these handles consist of sections of round bars bent to substantially U shape and
 60 removably fitting at the ends of the stems in suitable holes 29, which are formed in each of said sections at opposite sides, so as to lie above the top surfaces of the cleats 21 when the sections are resting on the base. Furthermore, the platform-sections are provided with

grooves, as 16', in the top surfaces which are suitably arranged to receive the cutters employed to divide the blocks into bricks, thus adapting the sections for use as platforms in a butter-cutter, and thereby avoiding the necessity of transferring the blocks from the
 70 platform-sections for cutting, as the sections can be lifted from the base with the blocks in place and set in position in the butter-cutter for division into bricks.

To arrange the tray for molding butter, the platform-sections 16 are placed side by side on base 10, the side and end walls of the casing are set in position, the wedges arranged and set up as heretofore set forth, and the
 80 ties 23 engaged with the side walls. If, however, the quantity of butter to be packed is not sufficient to fill the box to its normal capacity, one end wall of the box is shifted inwardly and set with the lower edge between
 85 contiguous platform-sections, so as to reduce the box to the desired capacity, and the wedges are then set up. Furthermore, if desired to increase the depth of the box inside, shims, as 26, of suitable thickness are placed beneath
 90 the side and end walls thereof. After the box is filled with the butter the ties 23 are removed, and the cutter 15 can then be used, if desired, to trim the top surface of the body of butter by dragging the cutter-wire thereof
 95 along the top edges of the side walls of the box. The walls of the casing of the box are now removed, leaving the body clear for removal or for division into blocks and sections. In proceeding to divide the body of butter the guides 12 are arranged as standards adjacent each corner of the base by engaging the
 100 stems thereon in the socket-holes 27, provided in the base for this purpose, the horizontal guides 14 are now secured to said standards at the opposite sides of the body of butter by means of the clamp-bolts 14' and are set with the upper edges midway the depth of the body or at any point it is desired to make the cut,
 105 and the cutter is then used to divide the body longitudinally by dragging the cutter-wire along the upper edges of the guides. These guides are then removed and the vertical guides 12 transposed from the ends of the base to the socket-holes adjacent the inner edges
 110 of the end platform-sections and set in position for guiding the cutter, which is then used as before to make vertical cuts through the body at these points. The vertical guides are then again moved to the next sets of
 115 socket-holes and the cutter again used, thus dividing the butter into blocks corresponding in number to the platform-section and each of which blocks are divided midway their height and can be readily lifted from the base
 120 for division into bricks or for shipment or storage by engaging the handles 28 in the holes 29 in the platform-sections.

By forming the platform of movable sections the casing of the box can be readily ar-
 130

5 ranged to mold a body of butter conforming
 in size to one or more blocks up to the nor-
 mal capacity of the casing, and the molded
 blocks can be readily removed without dan-
 10 ger of destroying the shape of the blocks by
 simply lifting the platform-sections. Fur-
 thermore, by embodying the vertical cutter-
 guides with the tray the body of butter can
 be quickly and accurately divided at abutting
 15 edges of said lifting-sections, and by using
 the horizontal cutter-guides the body can be
 readily divided longitudinally.

This device is simple and inexpensive of
 construction and the parts thereof can be
 20 readily assembled and adjusted for molding or
 dividing the butter.

Having thus described my invention, what
 I claim as new, and desire to secure by Letters
 Patent of the United States of America, is—

25 1. In a butter-tray, the combination with a
 base, and a platform, of vertical cutter-guides
 transferable on the base, horizontal cutter-
 guides, and means to removably attach said
 horizontal guides to the vertical guides.

30 2. In a butter-tray, the combination with a
 base, of a platform comprising a plurality of
 removable lifting-sections, vertical cutter-
 guides transferable on the base, horizontal
 cutter-guides, and means to adjustably secure
 the horizontal guides to said vertical guides.

35 3. In a butter-tray, the combination with a
 base, of a platform comprising a plurality of
 removable lifting-sections, vertical cutter-
 guides transferable on the base and acting as
 standards adjacent the ends thereof, horizontal
 cutter-guides, and means to adjustably secure
 the horizontal guides to said vertical guides for
 vertical adjustment.

40 4. In a butter-tray, the combination with a
 base, of a platform comprising a plurality of
 removable lifting-sections, horizontal cutter-
 guides comprising opposite bars, and means
 to removably mount said guides on the base.

45 5. In a butter-tray, the combination with an
 elongated, rectangular base having opposite
 socket-holes adjacent the corners thereof and
 at suitable intervals along the side edges, of a
 platform comprising a plurality of removable
 square lifting-sections, vertically-disposed
 50 transferable cutter-guides having stems fit-
 ting in said holes, and horizontal cutter-guides
 mounted on the transferable guides when they
 are engaged with the holes adjacent said cor-
 ners.

55 6. In a butter-tray, the combination with a
 rectangular base having opposite socket-holes
 arranged at suitable intervals along the edges,
 of a platform comprising a plurality of re-
 movable lifting-sections arranged on said base
 with the abutting edges adjacent said holes, 60
 and transferable cutter-guides having stems
 fitting in said holes.

7. In a butter-tray, the combination with an
 elongated base, having opposite cleats along
 the edges, of a platform comprising a plurality 65
 of removable lifting-sections, a casing fitting
 about said platform and comprising remov-
 able side and end walls, wedges arranged in
 pairs between said cleats and casing at one
 end and one side of the casing, and cutter- 70
 guides arranged on said base in position for
 cutting at the abutting edges of said sections
 when said casing is removed.

8. In a butter-tray, the combination with an
 elongated base, of a platform comprising a 75
 plurality of removable lifting-sections, a sep-
 arable casing removably fitting about said
 platform, vertical cutter-guides transferable
 on the base, horizontal cutter-guides, and
 means to secure the horizontal guides to said 80
 vertical guides.

9. In a butter-tray, the combination with a
 base, a platform, and a removable casing, of
 vertical cutter-guides transferable on said
 base, horizontal cutter-guides, and means to 85
 removably mount said horizontal guides on
 the vertical guides.

10. In a butter-tray, a base, vertical cutter-
 guides on the base, removable horizontal cut-
 ter-guides connected to the same, and means 90
 whereby the vertical cutter-guides can be ad-
 justed along the base when the horizontal cut-
 ter-guides are removed.

11. In a butter-tray, a base, vertical cutter-
 guides mounted at each end thereof, and lon- 95
 gitudinal horizontal cutter-guides disposed
 between the same.

12. In a butter-tray, in combination with a
 base, and vertical cutter-guides mounted there-
 on, a plurality of adjustable horizontal dis- 100
 posed cutter-guides.

Signed at Seattle, Washington, this 18th
 day of March, 1904.

ARTHUR CLENNING HUMMER.

Witnesses:

L. FRANK BROWN,
 THAD R. PERRY.