No. 752,464. PATENTED FEB. 16, 1904.

F. MURPHY.

BUTTER PRESS.

APPLICATION FILED MAY 26, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1

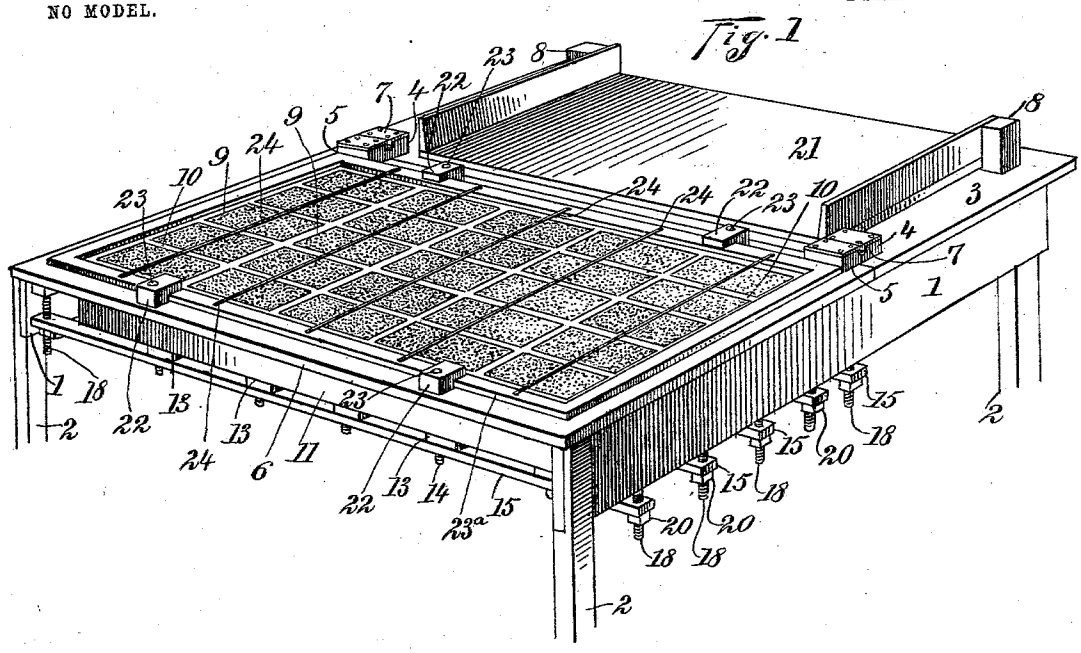
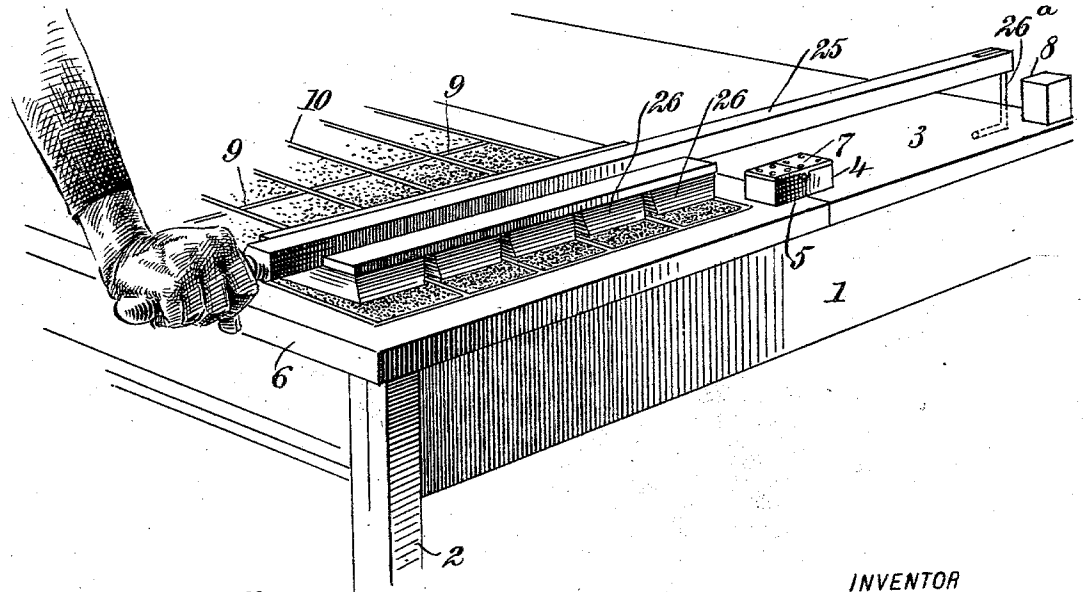


Fig. 2.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 4

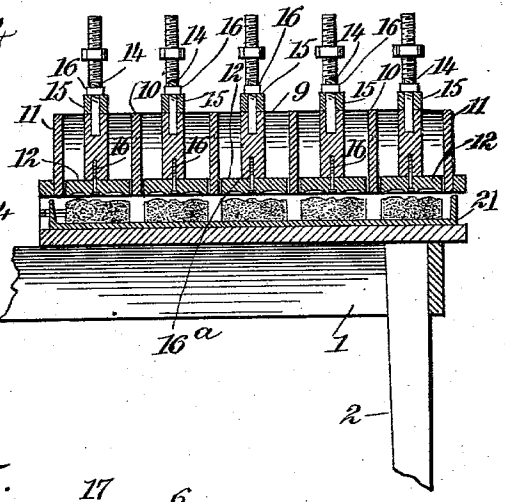


Fig. 3.

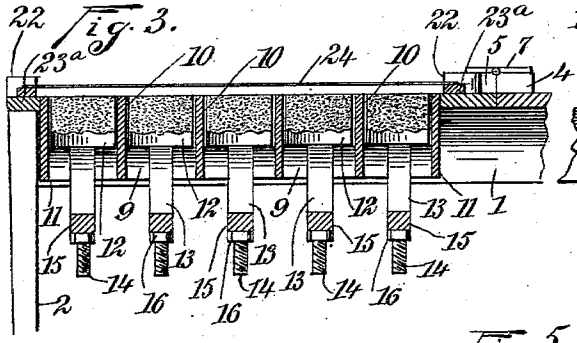


Fig. 5.

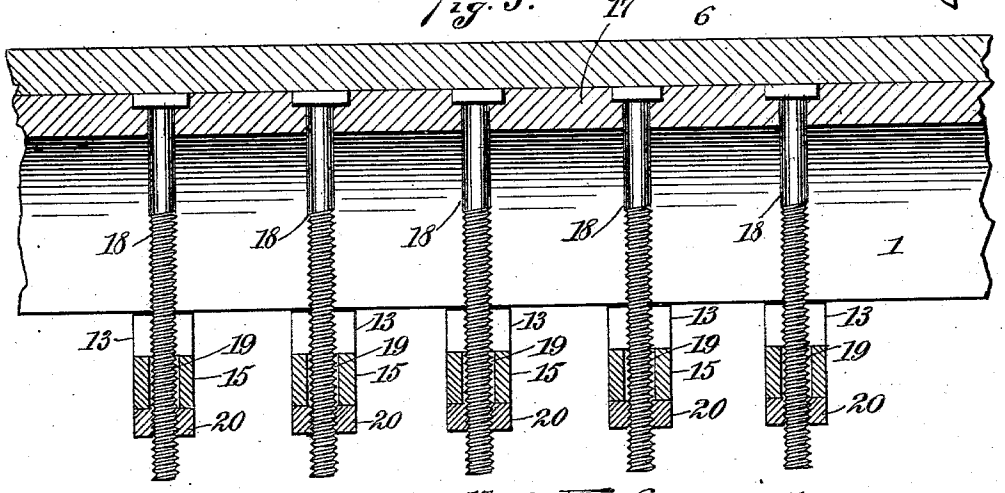
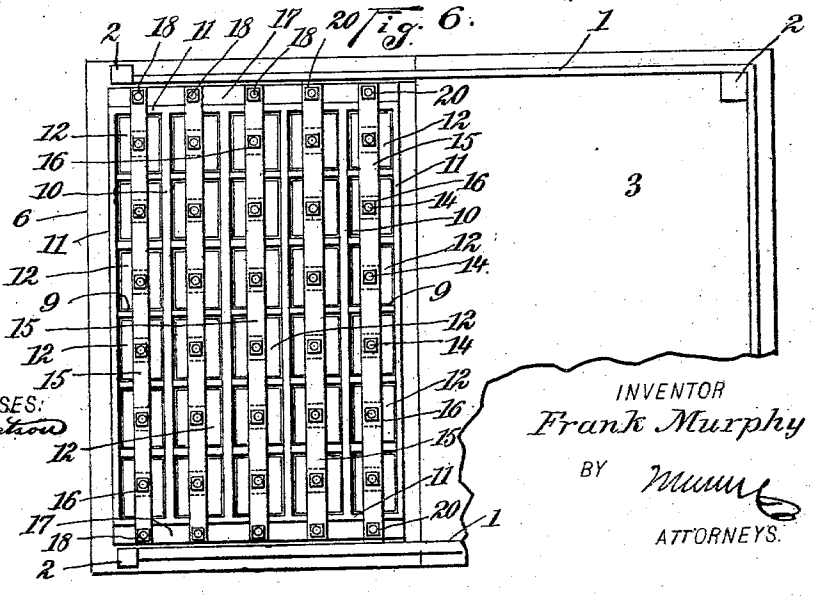


Fig. 6.



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No. 752,464. Patented February 16, 1904.

UNITED STATES PATENT OFFICE.

FRANK MURPHY, OF LISBON CENTER, NEW YORK.

BUTTER-PRESS.

SPECIFICATION forming part of Letters Patent No. 752,464, dated February 16, 1904.

Application filed May 26, 1903. Serial No. 158,808. (No model.)

To all whom it may concern:

Be it known that I, FRANK MURPHY, a citizen of the United States, and a resident of Lisbon Center, in the county of St. Lawrence and State of New York, have invented a new and Improved Butter-Press, of which the following is a full, clear, and exact description.

This invention relates to presses for butter and similar substances; and it consists, substantially, in the construction, organization, and combinations of parts hereinafter particularly described and claimed.

One of the principal objects of the invention is to provide devices or means by which a plurality of prints of butter or like substance may be molded at one and the same time, each possessing any desired shape, dimensions, and weight, as well as having thereon an impress of any suitable design as may be desired.

A further object is to provide devices or means for the purpose named which are simple in the construction and organization of the elements or parts constituting the same, not liable to get out of order, and also comparatively inexpensive to manufacture.

A further object of the invention is to overcome numerous disadvantages attending the use of many devices hitherto devised for similar purposes and to provide devices of the character referred to which are both effective and reliable in use, besides being easily handled or manipulated and possessing the capacity for long and repeated service.

The above and additional objects are attained by means substantially as are illustrated in the accompanying drawings, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved press for butter and similar substances, said view showing the cells as filled and the cutting devices for the prints in position to effect the division of the latter when the cells and their supporting-frame are turned over to an inverted position upon the receiving-tray for the prints. Fig. 2 is a similar view showing the manner in which the butter or similar substance may be packed within the cells therefor by the use of a specially-devised packing device for the purpose. Fig. 3 is a longitudinal sectional view of a part of my improved press, showing more clearly the means by which the movable bottoms for the cells are secured in position with respect to the vertically-movable operating members therefor. Fig. 4 is a view similar to Fig. 3, showing the cells and their supporting-frame as turned over or inverted upon the tray supported by the stationary bed of the press. Fig. 5 is an enlarged longitudinal sectional view showing more clearly the means by which the movable operating member for each row of cells is adjusted to different vertical positions for varying the height of the movable bottoms of the cells within the latter; and Fig. 6 is a bottom plan view of the press, partly broken out at one corner of the stationary bed thereof.

Before proceeding with a more detailed description it may be stated that in the form of my improvements herein shown I preferably employ a supporting-frame for the press, across substantially one-half of which is secured a stationary bed, upon which a receiving-tray for the molded butter prints is preferably placed, and I also employ an independent frame for a plurality of cells, said independent frame having foldable connection with an edge of the table and said cells being of special construction, as will hereinafter appear, and while I have herein represented my improvements in a certain preferred embodiment it will be understood, of course, that I am not limited to the precise details thereof in practice, since immaterial changes therein may be resorted to coming within the scope of my invention.

Specific reference being had to the drawings by the designating characters marked thereon, 1 1 represent parallel side portions of a supporting-frame for the press, said frame portions being mounted upon suitable legs 2 and having secured across the upper edges thereof for substantially one-half their length a rigid or stationary bed or table 3, said latter element having at the inner edge thereof near each end a block 4, said blocks corresponding to similar adjacent blocks 5, located on the upper surface of the frame 6, also at its inner edge, and each pair of these blocks being mov-

ably joined together by a hinge 7 or in any other suitable way, so as to enable said frame 6 to be folded over the bed, as shown in Fig. 4. Near the opposite or outer edge of the bed on the upper surface thereof are blocks 8 8, preferably disposed in line with the pairs of blocks 4 and 5 above referred to, each of said blocks 8 being practically equal in height to the combined height of said blocks 4 and 5 of each pair when the frame 6 is in its folded position, thereby constituting a support for holding said frame in a truly horizontal position and at the desired height from the surface of the bed to enable the butter or other prints to be ejected or dislodged from the molds therefor, as will presently appear. The said frame 6 is constructed with strips 9 and 10, herein shown as crossing each other substantially at right angles, said strips combining with the surrounding pendent sides 11 of the frame in the formation of a plurality of cells in which butter or other like substance may be placed to be molded into prints or cakes of the desired shape, size, and weight, as is apparent. Each cell is provided with a vertically-movable bottom 12, provided on the normally under side thereof with a projection 13, rigid with which is preferably a threaded pin 14, the said pins of each longitudinal row passing through openings (not shown) therefor in a member 15, each pin being provided on the under side of said member with a nut 16 for maintaining the corresponding movable bottom in place relatively to said member when the frame 6 and the plurality of cells are inverted to enable the molded prints to be ejected from the cells, substantially as indicated in Fig. 4. The normally upper surface of each cell-bottom 12 may be formed with any suitable design to be impressed upon the butter or other prints, and said bottom and its projection 13 may be secured together in any suitable way, as by means of a pin or screw fastening, (indicated at 16 in Fig. 4.) Secured to the under side of the foldable frame 6 at each end thereof is a strip 17, in which is fitted a series of screws 18, equal in number to that of said members 15 and to the number of rows of cells, the said members each having an opening 19 therein near each end, (see Fig. 5,) through which the threaded portion of said screws passes, as shown, the screws being provided with nuts 20 thereon, normally beneath the members 15, also as shown in Fig. 5. By properly adjusting said nuts 20 at the ends of each of said members 15 it is apparent that these members will exert a lifting pressure upon the projections 13 from the movable bottoms of the cells, and then when the frame 6 is turned or folded over to invert the cells the prints of butter may be ejected from the latter by simply pressing downwardly on said members 15, while they and the parts with which they coöperate are in the position indicated at Fig. 4.

When the frame is turned back to the position indicated in Fig. 3, the said members 15 drop to the first position thereof by their own weight, carrying the bottoms of the cells therewith, as is apparent. Other means may be employed for operating the movable bottoms of the cells, if desired. Preferably I place a removable tray 21 on the bed 3 to receive the molded prints ejected or dislodged from the cells, and in addition to the means herein shown for varying the depth and thickness of the molded prints I also preferably employ in connection with my improved press suitable means whereby the print formed or molded by each cell may be subdivided into prints of smaller size, the operation of the parts being such that said subdivisions are performed by the act of forcing or pushing the prints outwardly from the cells after the latter and their supporting-frame have been folded or turned over to the position shown in Fig. 4. Thus I provide at opposite parts of the foldable frame 6, preferably on the upper surface thereof, suitable buttons 22, which are pivoted at 23 and adapted to be turned around to engage the opposite side portions of a supplemental frame 23^a, which is laid flatwise on said frame 6, so as to inclose all the cells of the latter, said side portions of this supplemental frame 23^a being connected across by wires or other suitable cutting devices 24, (see Figs. 1 and 3,) and thus it will be seen that when the cells have been filled with butter and the prints ejected in the manner already described the said wires will serve to cut or divide the prints in an obvious manner. By adjusting the supplemental frame 23^a the wires may be brought to any desired position across the cells, and in this way may the subdivisions of the prints be varied in size or dimensions.

In order to pack the cells nicely and completely, I preferably employ a packing device (see Fig. 2) comprising a handle or bar 25, having attached thereto a plurality of blocks 26, preferably corresponding in number to the number of cells in a row, each block being of any suitable dimensions and said handle or bar being preferably provided with a hook 26^a for attaching the same to an edge of the bed or table 3. If desired, I may employ an individual packing device of the same character for each cell.

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

1. A butter-press, comprising a supporting-frame having a cover for a portion of its top, forming a bed or table, a movable frame fitting in the uncovered portion of the supporting-frame and constructed with a plurality of cells, each having a movable bottom, said table and frame being provided with corresponding blocks at their adjacent edges, hinges secured to said blocks and movably connecting the frame with the bed, and upstanding blocks near the other edge of the bed, these blocks

being substantially equal in height to the combined height of each pair of the blocks first named, when the frame is turned over the top of the table.

2. A butter-press, comprising a stationary bed or table, a frame movably connected thereto and adapted to be folded over the top of the same, said frame being constructed with a plurality of cells, vertically-movable bottoms for the cells, each having a projection and a screw-pin, a member to which the pins of the bottoms of each row are adjustably connected, and rods upon which said members have slidable movement, these members having means for adjusting the same vertically.

3. A butter-press comprising a stationary bed or table, and a frame movably connected thereto, and adapted to be folded over the top of the same, said frame being constructed with cells having vertically-movable bottoms, and a supplementary frame laid upon the first and provided with devices for severing the butter prints as they are forced from the cells.

4. A butter-press comprising a stationary bed or table, and a frame movably connected thereto, and adapted to be folded over the top of the same, said frame being constructed with cells having vertically-movable bottoms, and a supplementary frame laid upon the first, having wires extending across the cells, and connecting opposite portions of this frame, and means for detachably connecting said supplementary frame to the cell-frame.

5. In a butter-press, a frame provided with a series of cells arranged in rows, bars, one for each row of cells, said bars being loosely connected at their ends with the frame so as to slide toward and from said frame, and adjustable bottoms for the cells, carried by the said bars.

6. In a butter-press a frame provided with a series of cells arranged in rows, bars, one for each row of cells, screws depending from the frame and provided with nuts, said screws passing loosely through the ends of the bars, whereby said bars can slide toward and from the frame, movable bottoms for the cells, and means for adjustably securing the bottoms to the said bars.

7. A butter-press, comprising a table having an opening in its top, a frame provided with rows of cells and hinged to the table to lie within the opening thereof or to fold over on the table, movable bottoms for the cells, bars one for each row of cells, screws depending from the frame and provided with nuts, said screws passing loosely through the ends of the bars, whereby said bars can slide toward and from the frame, and an adjustable connection for each bottom of a row of cells with a bar.

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

FRANK MURPHY.

Witnesses:
MILTON G. HALL,
O. E. MESERVEY.