

98615 *Murdoch and Haynes'*  
*Confectioners Tool.*

PATENTED JAN 4 1870  
Fig. 1.

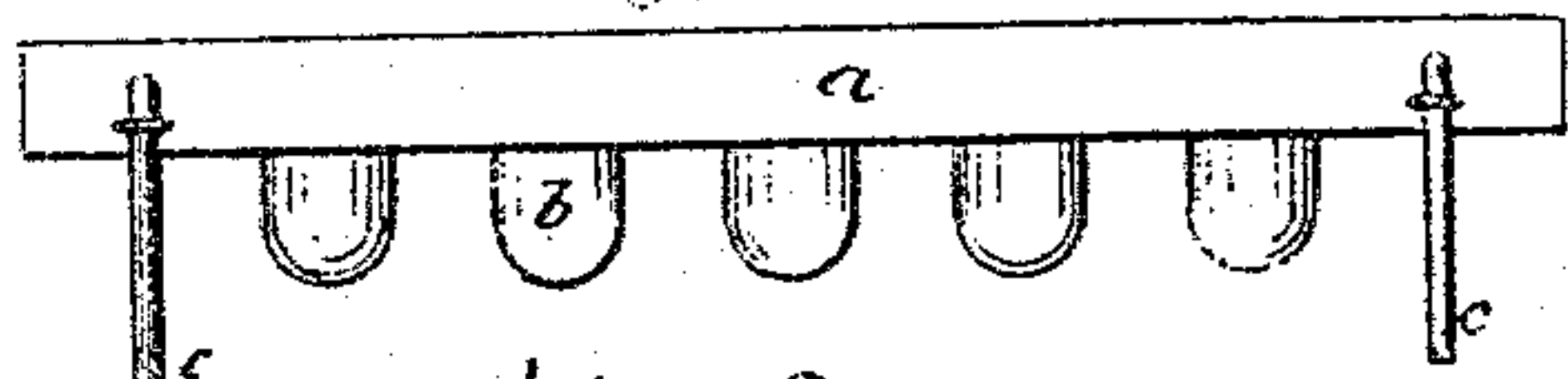


Fig. 2.

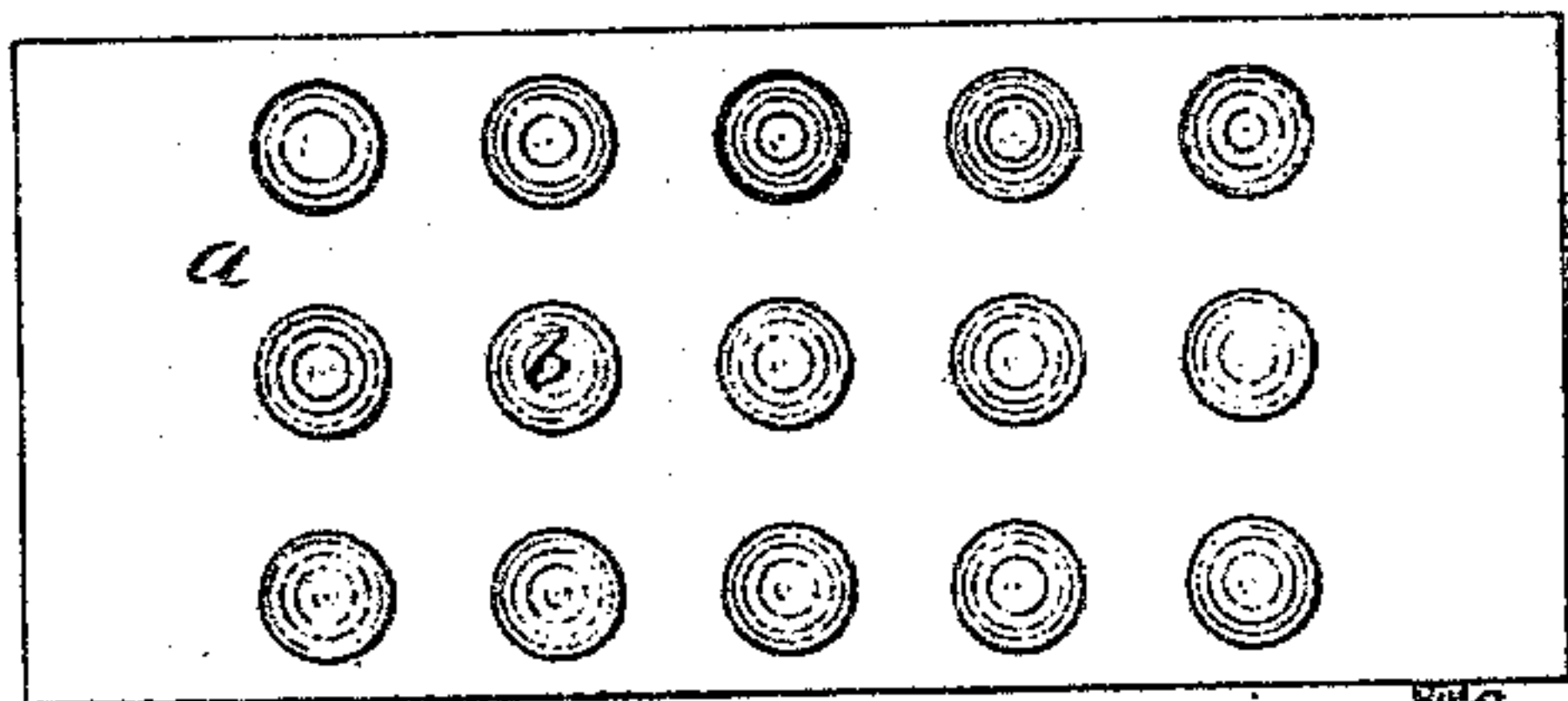


Fig. 3.

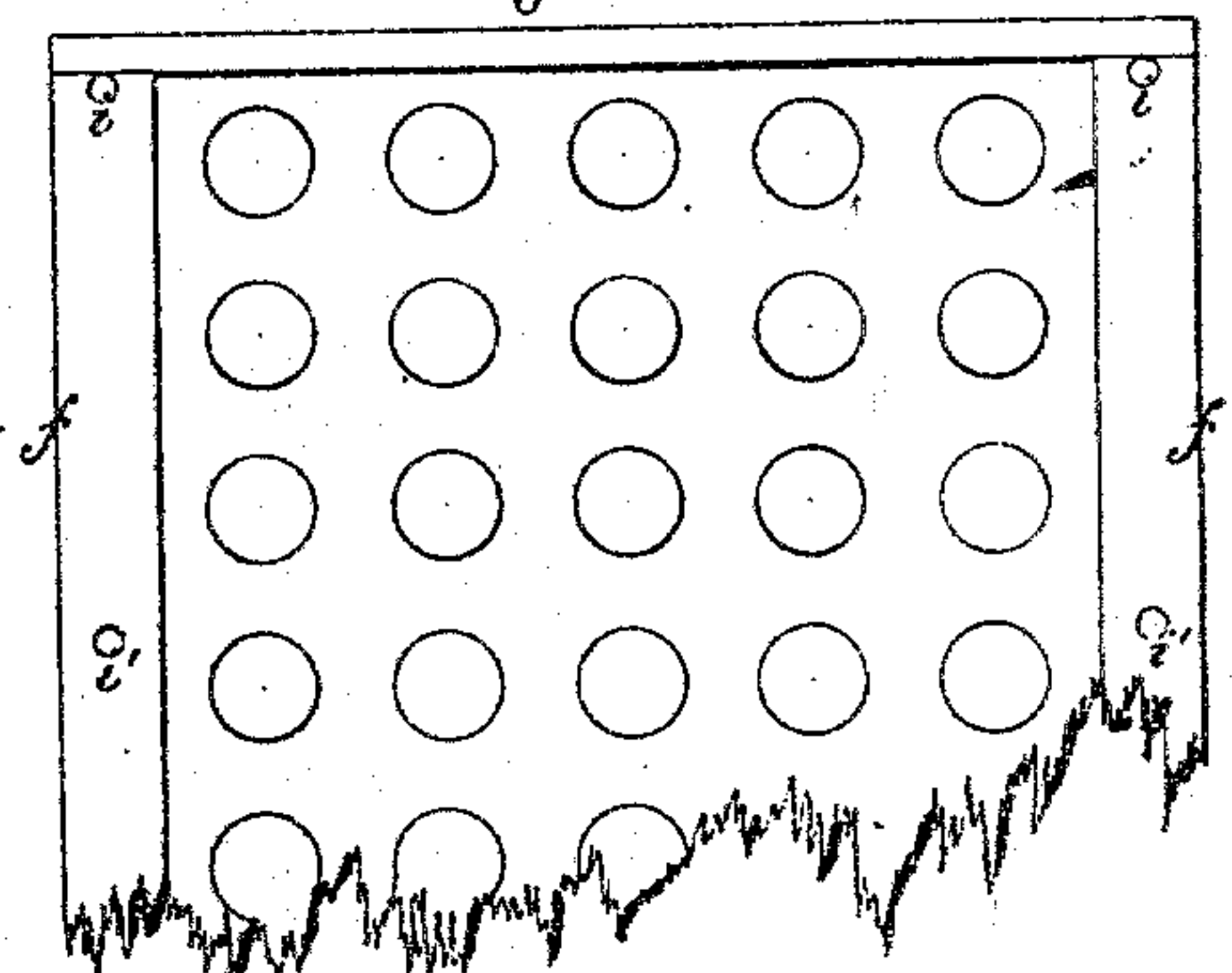


Fig. 4.



Fig. 5.

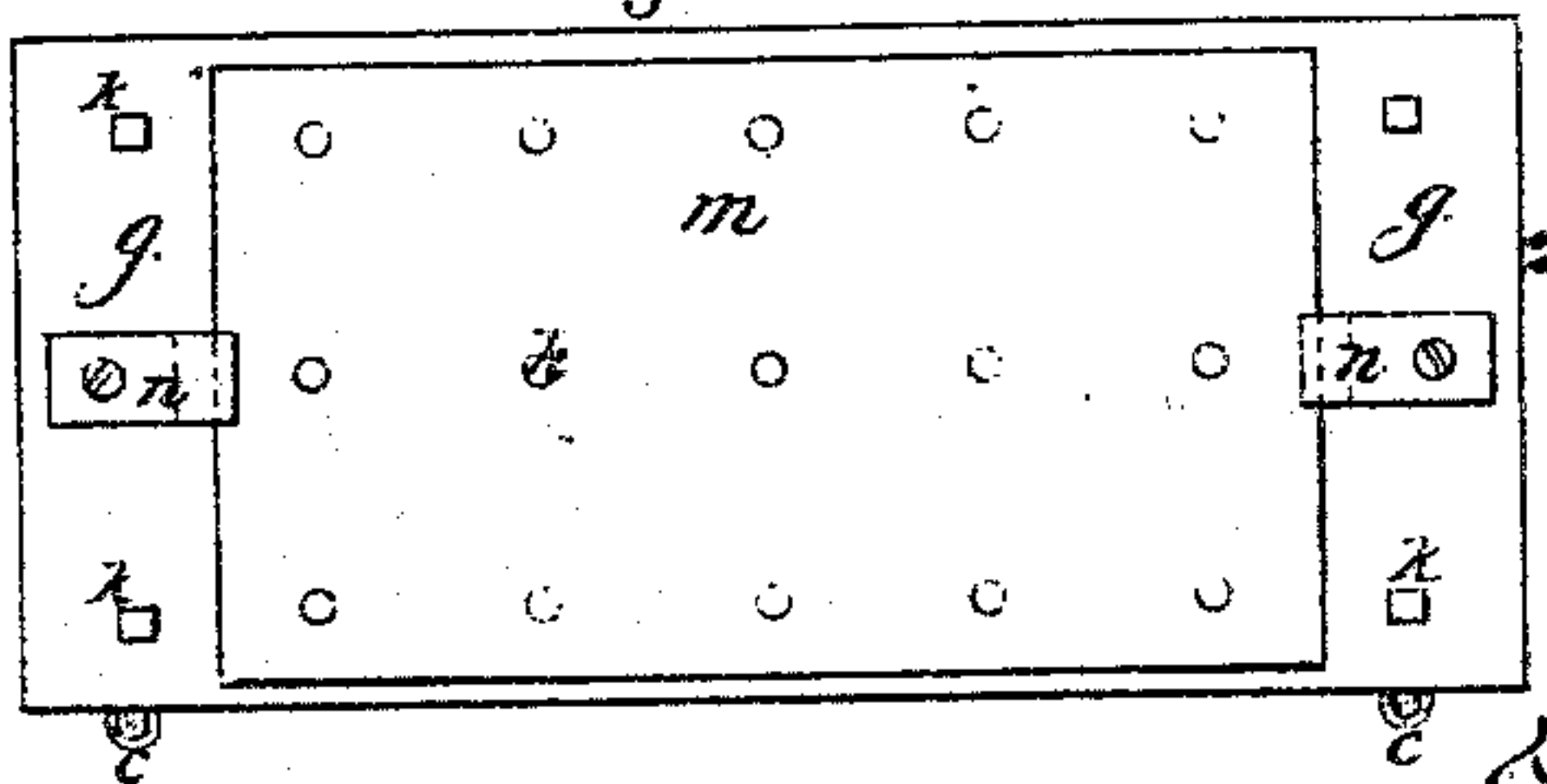
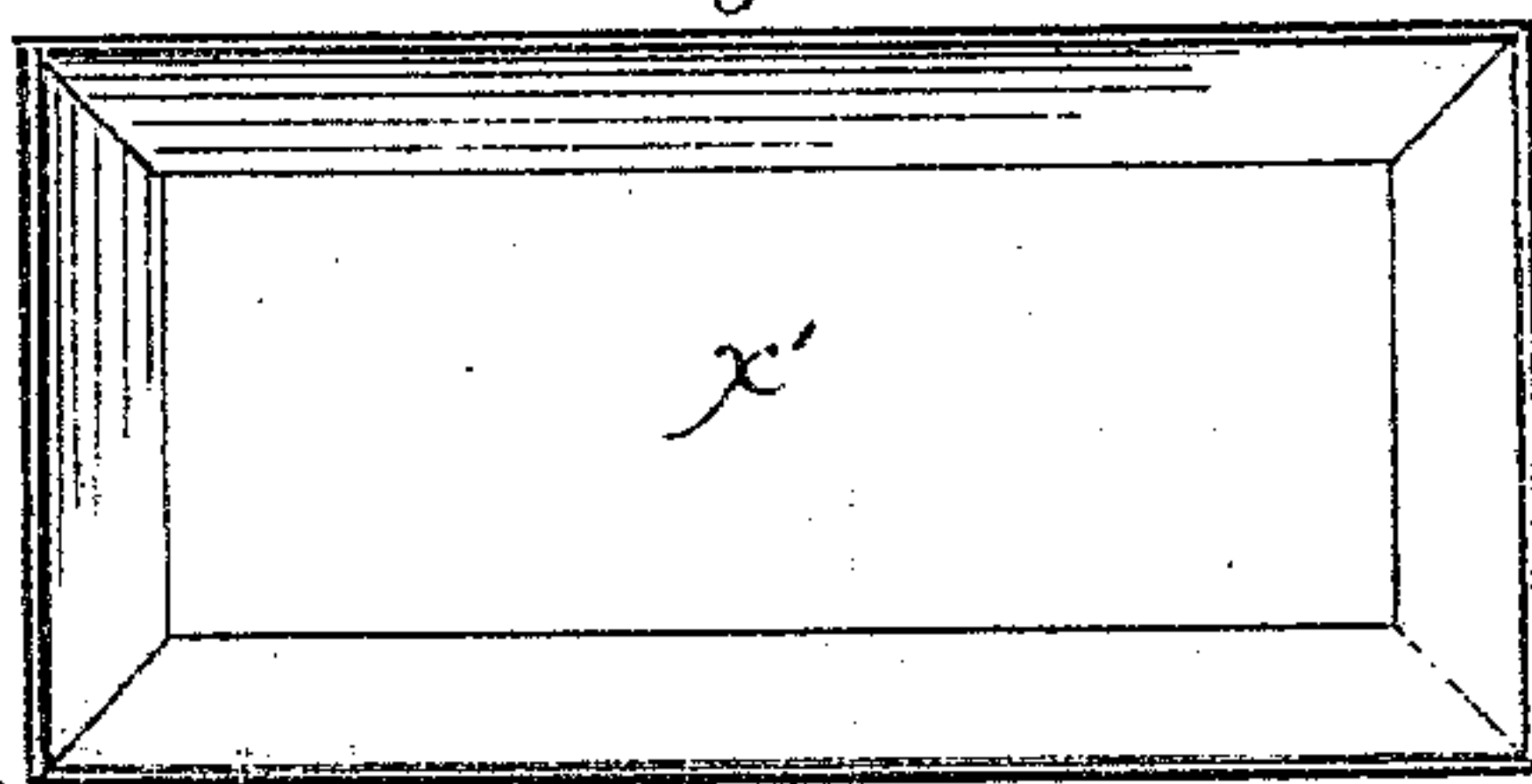


Fig. 6.



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Fig. 7.

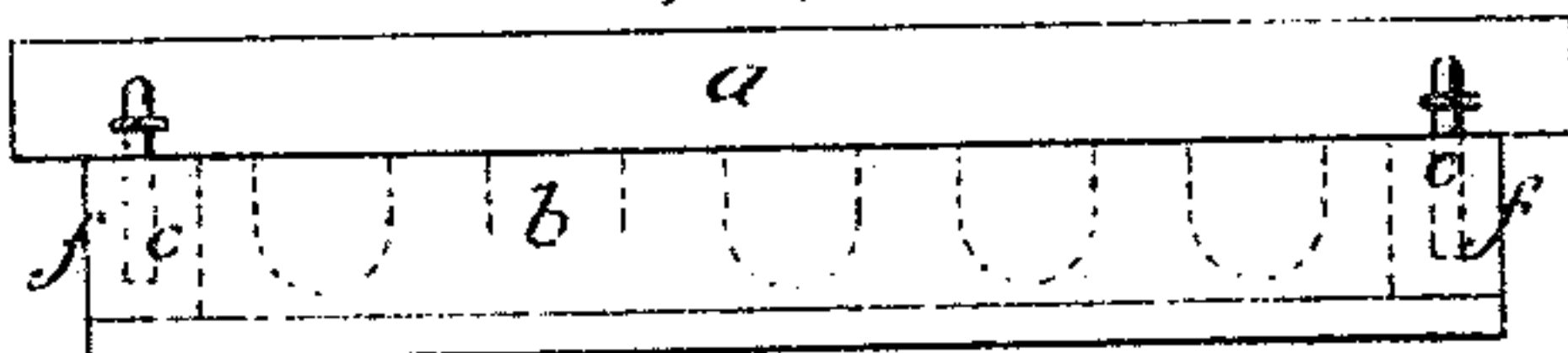


Fig. 8.

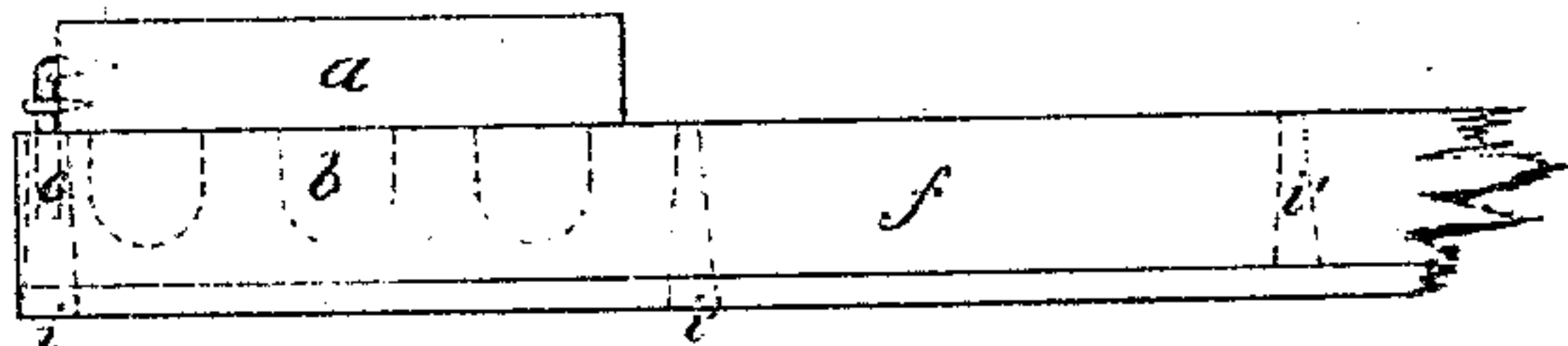


Fig. 9.

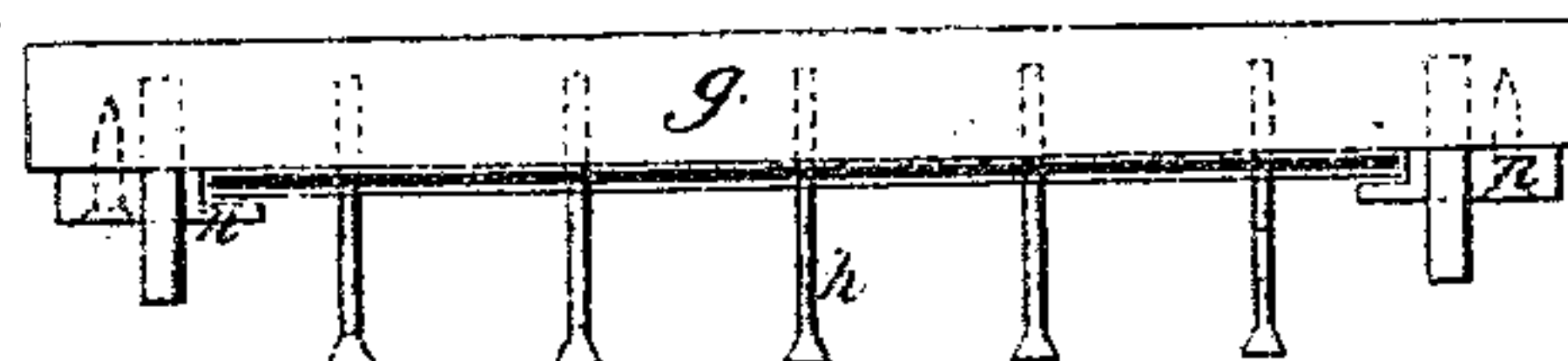


Fig. 10.

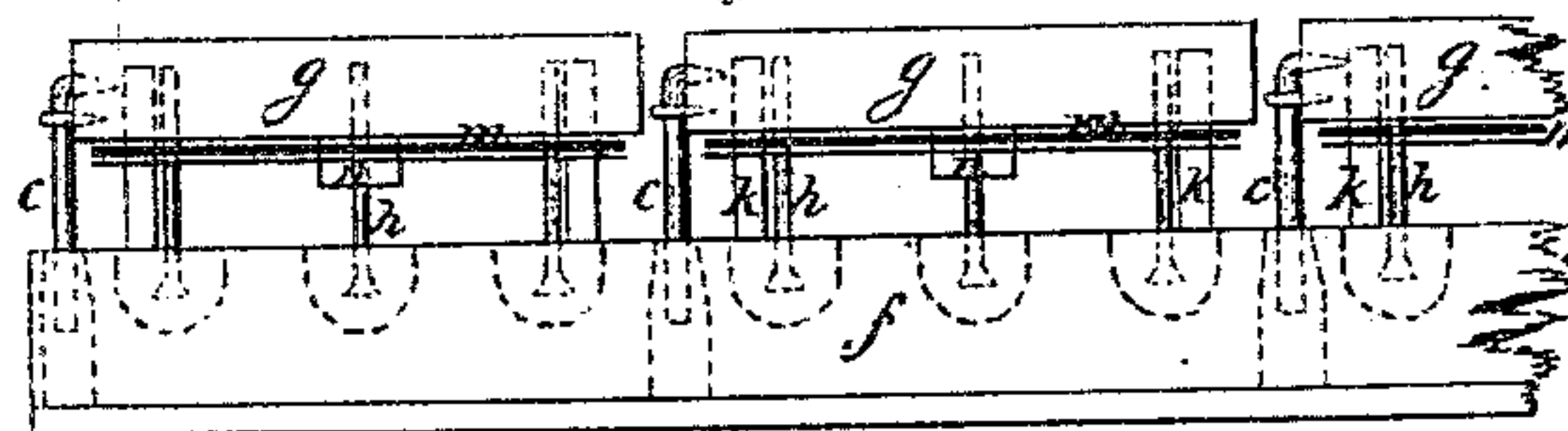


Fig. 11.

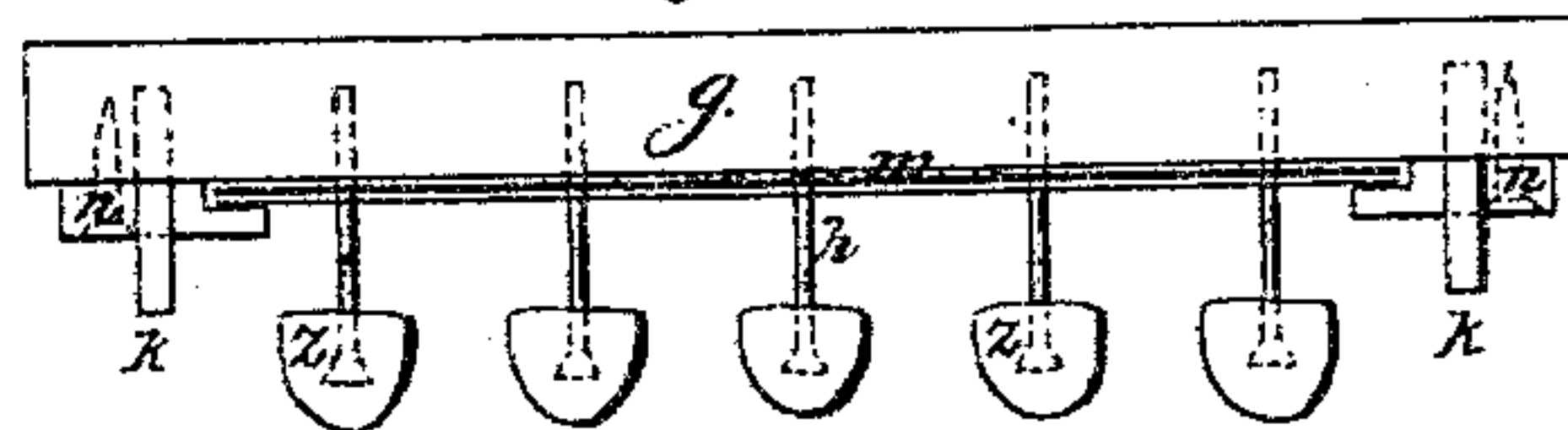


Fig. 12.



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# United States Patent Office.

WILLIAM C. MURDOCH, AND EDGAR K. HAYNES, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 98,615, dated January 4, 1870.

## IMPROVED APPARATUS FOR THE MANUFACTURE OF CHOCOLATE-DROPS AND OTHER CONFECTIONS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, WILLIAM C. MURDOCH and EDGAR K. HAYNES, both of Boston, in the county of Suffolk, State of Massachusetts, have invented a new and useful Tool for Dipping or Covering Drops or other Articles of Confection with Chocolate; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a side view of the mould-board, showing the guide-pins *c* and moulds *b*.

Figure 2 is the under side of the mould-board, showing the position of the moulds *b* and guide-pins *c*.

Figure 3 is a top view of part of a tray of starch, after having been moulded, showing the position of the holes *i* in the sides of the tray *f*, for the guide-pins *c* to be placed in.

Figure 4 is a side view of the pin-board, showing the pins *h* and stops *k*.

Figure 5 is the under side of the pin-board, showing the position of pins *h*, stops *k*, guide-pins *c*; also, the false bottom *m*, with holes to correspond with the position of the pins *h* in the pin-board; it also shows the position of the buttons *n*, to prevent the false bottom from falling off when inverted.

Figure 6 is a top view of a pan for holding chocolate to dip in.

Figures 7, 8, 9, 10, 11, and 12, show the different stages and positions that the boards go through in the operation of moulding and dipping.

There is but one method practised among confectioners for dipping or covering confection with chocolate, at the present day, and that is, to mould the work in starch, as we do, (without the guide-pins,) then brush it, then place a handful in a wire dipper and dip it in the liquor-chocolate; then turn them out upon a wire gauze, placed over the chocolate-dish, and allow them to drain a few moments; then they take their fingers or a pair of small tongs, and pick them up, one by one, and place them right side up on a piece of paper, or a board; then set them away to cool. The expense and tediousness of this operation are obvious. We avoid nearly the whole of both, by the use of our tool, which is both cheap in cost, and simple in operation.

To enable those skilled in the art to make and use our tool, we will describe its construction and operation.

In the accompanying drawings, like letters refer to like parts.

We first provide ourselves with a starch-tray, the same as commonly used, part of one shown at *f*, fig.

3. In the sides of this, we make holes, *i i'*, for the guide-pins *c*; then a mould-board, same as commonly used, except that the moulds must be placed at equal distances apart, and we add two guide-pins, *c*, shown in figs. 1 and 3; then, a pin-board, or a number of them, of sufficient capacity to hold the work of one batch. The size of each board is limited only by the convenience of handling it.

Figs. 4, 5, and 10, are boards, the same size as the mould-board, fig. 1, provided with guide-pins *c*, the same as the mould-board, only longer, as seen in fig. 10. In this, we drive wires *h*, the same distance apart as the centres of the moulds on the mould-board *a*, fig. 2, and the same distance from the guide-pins *c*, so that when the mould-board is taken off and the confection run in the moulds, the guide-pins of the pin-board can be placed in the same holes, and bring the pins *h* in the centre of each confection while it is yet hot. The wires *h* have a flat end, to produce a small knob, so that the confection may not drop off, and not large enough to split it. These wires should project about one inch and a quarter from the face of the board.

In this board we also have four stop-pins, *k*, figs. 4, 5, and 8, about seven-eighths of an inch long, placed so as to rest on the top edge of the starch-tray, fig. 10, in line with the guide-pins *c*, to prevent the pins *h* from going too deep in the confection; also, to give space between the confection *z* and pin-board *g*, fig. 11, for dipping, so as not to get the chocolate on the board.

With this pin-board, we have a piece of thick tin or other suitable material, for a false bottom, *m*, shown in figs. 5, 10, and 11, large enough to go on over all the pins, or a part of them, as the convenience may be for stripping them off. This bottom (or bottoms) is to have holes in it (or them) to match the pins in the pin-board, figs. 4 and 5, and slipped down on them, and held to the under side of the pin-board *g* by buttons *n*. After placing the false bottom on, we then punch holes in a piece of paper the same size as the false bottom, or place them on the wires and force the wires through them, and press the paper down upon the bottom. Then turn the buttons *n* over both bottom and paper. This operation completed with each pin-board, and we have the tool ready for use. Fig. 9, red line *m*, represents the paper. Then we get a pan, fig. 6, of suitable size, filled nearly full of a liquor-chocolate. Having everything complete, we will describe its operation:

We first fix our starch, as usual; then take the mould-board *a*, place the guide-pins *c* in the holes *i* in the edges of the starch-board, and press it down,



fig. 3, remove it, and place the pins in the next set of holes, *i*, press it down, and so on, until all is moulded. Then cast the confection, as usual, and immediately, or before it gets cool, place the pin-boards *g* on, placing the guide-pins *c* in the same holes as we did the mould-board, which will bring a pin in the centre of each confection, as represented in fig. 10, *g g g*. After standing a sufficient time to harden, we lift the pin-board up, and we have a confection on each wire, fig. 11. Then brush them; then dip them in the liquid chocolate *x*, fig. 12, until the chocolate covers them. Or if the requisite quantity is in the pan, and the pan the right size, we lower the pin-board until it rests on the top of the pan, remove it immediately, place the boards on a rack or other suitable place, with the confection down, to drain. If on a rack, we lay a sheet of tin on the top of each board, for the next above to drip on. When thoroughly drained, and before getting cool, we take them down and turn them over, confection up, turn the buttons *n*, lift the false bottom *m*, which strips all the confection off within its bigness. Then, there being paper between the confection and the false bottom, we slip the paper off on to the proper boards, with the confection all on it, right side up, to cool, as in the usual way, and our tool is at liberty for the next batch, by having plenty of papers.

Having now described our invention, and the manner in which the same is, or may be carried into effect, What we claim as our invention, and desire to secure by Letters Patent, is—

1. The use of the wire pin or pins *h*, or other suitable material, for the purpose of casting confection on to dip or cover with chocolate.

2. The combination of the false bottom *m* with the wire pins *h* and board *g*, for the purpose of stripping the confection off from the pins.

3. The combination of the stop-pins *k*, for giving space between the confection and the false bottom, for the purpose of preventing the chocolate from getting on the paper or false bottom, when dipping, with the pins *h*, false bottom *m*, and board *g*.

4. The combination of the pins *h*, the board *g*, false bottom *m*, stop-pins *k*, paper for relieving the false bottom to cool on, and buttons *n*, for holding the false bottom and paper in place, for the purposes set forth and described.

In testimony whereof, we have signed our names to this specification, before two subscribing witnesses.

WM. C. MURDOCH.

EDGAR K. HAYNES.

Witnesses:

JAMES F. WARD,

HARRY A. CROSBY.