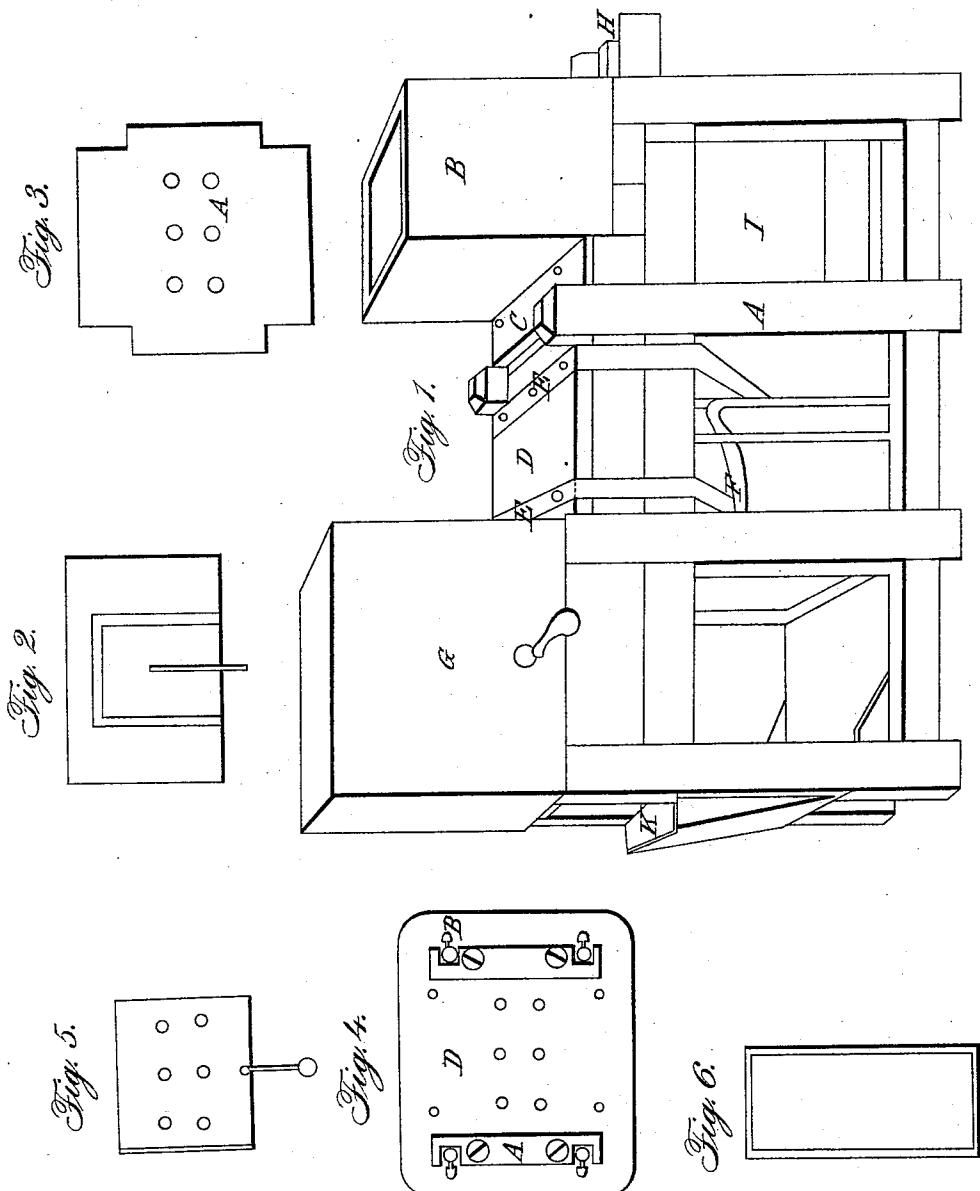


CAMPBELL & GOODWIN.

Making Confectionery.

No. 36,601.

Patented Oct. 7, 1862.



Witnesses:

George W. Chisholm
Frank Meade

Inventor:

Samuel Campbell
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UNITED STATES PATENT OFFICE.

SAMUEL S. CAMPBELL AND JOSIAH GOODWIN, OF PHILADELPHIA, PA.

IMPROVED MACHINE FOR MAKING CONFECTIONERY.

Specification forming part of Letters Patent No. 36,601, dated October 7, 1862.

To all whom it may concern:

Be it known that we, SAMUEL S. CAMPBELL and JOSIAH GOODWIN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Machine for Manufacturing Confectionery; 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.

The nature of our invention consists in making fine confectionery or candy by machinery in the place of hand.

Figure 1 is a perspective view of the entire machine.

Letter A represents the frame strongly and thoroughly fastened together.

Letter B is intended to represent a box or hopper which is to be filled with starch or any ingredient or material that can be used for making the impressions in the starch or other substance to pass out by means of an opening in the bottom, this opening to be opened and closed by a slide fastened to the outside of the bottom, (as seen in Fig. 2.)

Letter C is a strike or smoother intended to smooth or level any substance that may be on the boards as the boards move on the grooves or bed, in order that it may be level and smooth to receive the impressions of the molds.

Letter D represents the board, beneath which is fastened the molds, as shown in a reversed position by letter A in Fig. 3. The molds are made of a size and design corresponding with the proposed shape or size intended for the mixture to be run in from the boiler. This board is placed upon four spiral springs, which have power enough to raise the molds perpendicular out of the ingredient on the board that is used for making the impressions in sufficiently high to admit of the boards passing under them without the impressions being disturbed by the molds. These molds make the impressions in the substance on the boards by means of bands and a lever, as shown by letters E and F, forcing the board to which is attached the molds, to compress the springs sufficient to allow the molds to bury deep enough to leave the impressions.

Letter G represents the boiler that receives

the ingredient or mixture for making confectionery. This boiler is to be made or constructed of any metal or material answering the purpose. The bottom consists of two separate and distinct plates—one working on or over the other—the first or main plate, Fig. 4, to be of a thickness sufficient to prevent it from springing when the boiler is full of the mixture that is to be dropped or run in the impressions in the substance on the boards; D, the bottom plate, (see Fig. 4,) the top side or face of which is perfectly smooth and level. Through this plate are to be holes corresponding with the number of molds, (see letter A in Fig. 3,) the holes to be of any size or shape desired. On this plate is another or second plate, as seen in Fig. 5, which is to be faced smooth like the first or bottom plate. The two opposite edges of this plate are to be beveled and faced smooth. Two small plates, (see letter A, Fig. 4,) whose edges are beveled to the same angle as the top or second plate, Fig. 5, and fastened down by means of screws, so as to admit of this plate, Fig. 5, sliding back and forth without being raised from the bottom plate, these small plates, letter A, Fig. 4, to be set in case of wear by friction, by screws, (see letter B, Fig. 4,) placed at their back for this purpose. Fig. 5 is to be filled with holes every way corresponding with those in Fig. 4, and to be worked on the top of the bottom or main plate (see Fig. 4) by means of the rod D, Fig. 5, to close and unclose the holes. Round this bottom will be fastened two cases or double boiler, with spaces enough between them to admit a sufficient quantity of steam being infused to heat or keep the contents of the boiler hot. The rod D, Fig. 5, that works the second or upper plate, passes through these cases or double boiler by means of a stuffing-box fastened in and through them.

Fig. 6 represents a board termed a "starch-board," consisting of a plain board, the size corresponding with the space occupied by the molds that make the impressions. Around its edges are fastened strips or cleats of wood sufficiently high to protect the quantity of material used in taking the impressions of the molds. This board (see Fig. 6) will enter the machine at the right-hand end in a groove or bed constructed for the purpose, (see letter

H, Fig. 1,) passing directly under the bottom of the box containing the starch or substance used for making the impressions in under the strike or smoother, the molds, and the boiler, this bed or grooves being far enough below the bottom of these to admit of the board passing beneath them. As the board enters the space beneath the hopper, the slide being removed that closes the opening, a sufficient quantity of the contents falls directly on the board to fill it. The board being moved farther along its bed, the strike or smoother levels it, and at the same time removes all that is not needed in molding or taking the impressions. As the second board enters, it moves the first directly under the molds. Now, being ready to receive the molds, the operator, by means of the lever, (see letter F, Fig. 1,) forces the board to which is fastened the molds, so that the molds bury in the starch or substance on the board, which, when let go back by the power of the springs, leaves the impressions in the substance with which the board may be filled. The third board enters and removes the second under the molds; the second forces the first along until it is under the bottom of the boiler, each impression in the starch or substance the impressions may be in being directly under a corresponding opening or hole in the plates that forms the bottom of the boiler. The operator now moves the top plate (see Fig. 5) in the bottom of the boiler by means of the rod D, Fig. 5, until the holes in the top plate (see Fig. 5) are directly over the holes in the bottom plate, (see Fig. 4,) thereby allowing the required portion of the composition with the boiler is filled to run or pass through the holes of both plates, (see Figs. 4 and 5,) filling all the impressions in the substance on the boards at the same time. When enough has passed out he closes the holes by again moving the top plate (see Fig. 5) in the opposite direction

that he did to allow the composition to escape from the boiler. This first, being now completed, will be removed to give place to the second board, (see Fig. 6,) and so on.

Letter I is a box beneath the hopper and smoother to receive all material that may fall from the hopper or boards as they pass under the smoother.

Letter K is to receive the waste material that may casually be driven in front of the boards as they pass along the grooves to guide it back on the floor of the machine beneath the boiler, where it may be easily removed.

What we do claim, and desire to secure by Letters Patent, is—

The method herein described for filling the boards with starch or any substance that the impressions can be made in from a stationary box or hopper while the boards are passing under, and for smoothing or leveling the starch or any substance that the boards may be filled with by means of a stationary strike or smoother while the boards are in motion, and for molding or making the impressions in starch, sugar, flour, or any composition that can be used in the molding or making the impressions by means of a lever and springs, and for the running, dropping, or filling the impressions with any mixture or composition making or called confectionery or candy that requires to be run or dropped in the way described by means of two plates, one working on or over the other, each plate being perforated with holes, the top plate working by means of a piston or rod opening and closing the apertures, and for filling all the impressions at one and the same time.

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Witnesses:

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