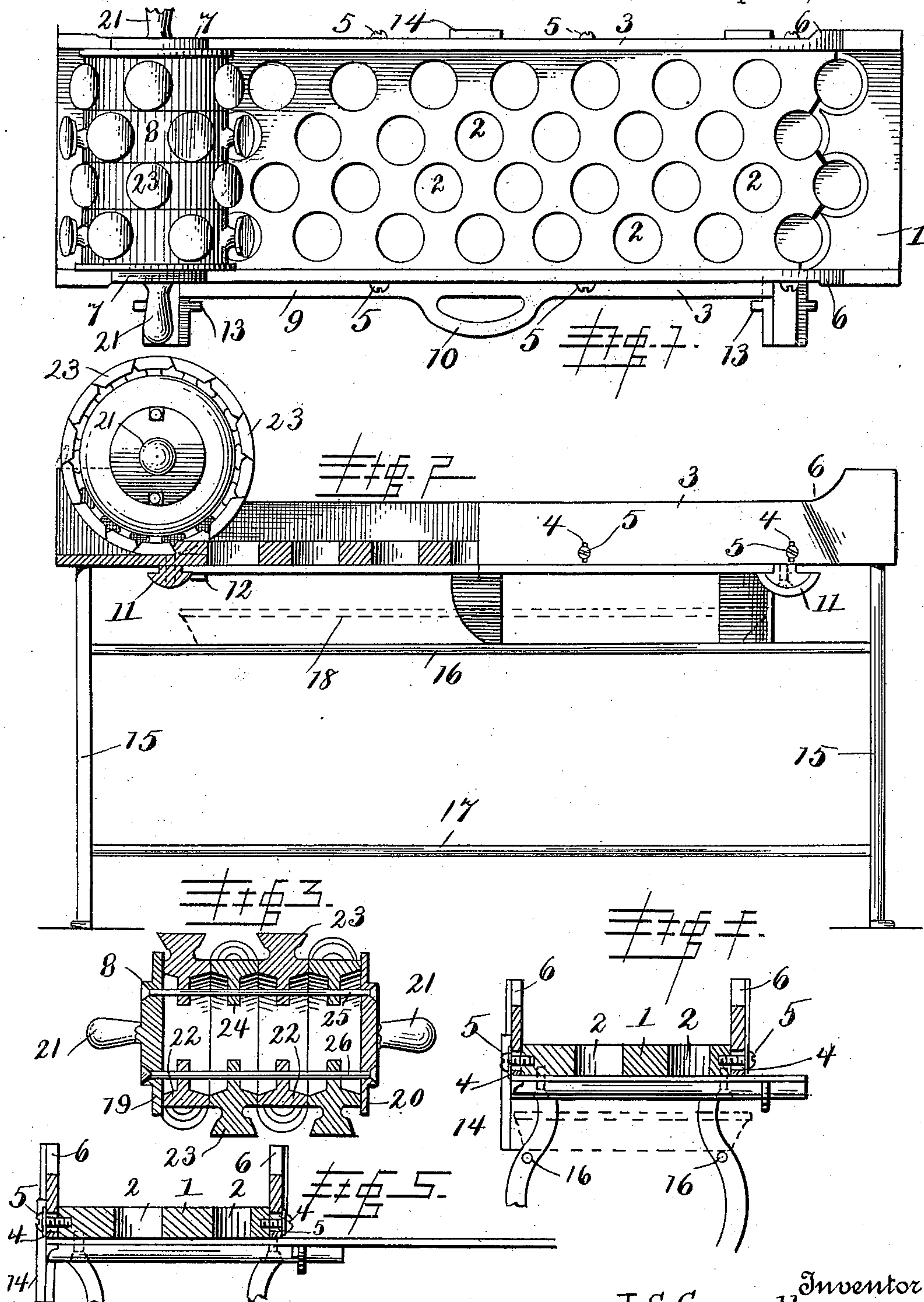


(No Model.)

J. S. CROWELL.  
MOLDING MACHINE FOR CONFECTIONERS' USE.

No. 601,886.

Patented Apr. 5, 1898.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN S. CROWELL, OF SPRINGFIELD, OHIO.

## MOLDING-MACHINE FOR CONFECTIONERS' USE.

SPECIFICATION forming part of Letters Patent No. 601,886, dated April 5, 1898.

Application filed July 1, 1897. Serial No. 643,152. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN S. CROWELL, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Molding-Machines for Confectioners' Use; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a novel form of molding-machines for confectioners' use; and the object is to provide a simple, durable, and efficient machine of this character.

To this end the invention consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a top plan view of my improved molding-machine. Fig. 2 is a side elevation, partly in section. Fig. 3 is a longitudinal section of the pressure-roller. Fig. 4 is a transverse section of the molding-press proper. Fig. 5 is a similar view with the platen withdrawn.

1 represents the horizontal rectangular bed-plate provided with arbitrarily-arranged series of circular orifices 2 2.

3 3 are the side rails, provided with slots 4 4, through which machine-screws 5 5 pass into the bed-plate to adjustably secure said rails thereto. The outer ends of these rails are formed with shoulders 6 6, and the upper horizontal edge of each rail between said shoulders forms a track for the flanges 7 7 of the roller 8 to travel on, while the shoulders 6 6 prevent the roller from accidentally leaving the rails.

A sliding platen 9 is formed with a hand-grip 10, and it has a transverse movement under the bed-plate in the guides 11 11, secured to the bottom face of said bed-plate. This platen is provided with an integral depending lug 12 at each end thereof, which engages a shoulder 13 on the outer ends of the guides 11 11 to prevent it being entirely withdrawn from the machine. A depending arm 14 is

fixed to the back rail 3 to act as a limit-stop on the platen and prevent it being pushed too far in.

The bed-plate is supported upon vertical legs 15 15, which are connected by parallel longitudinal braces 16 and 17, horizontally secured between said legs. The upper braces 16 16 are in the same horizontal plane and form a support for a removable pan 18, which is adapted to receive the molded articles as they are discharged from the press.

The roller 8 comprises two end disks 19 and 20, which are provided with the flanges 7 7 and integral handles 21 21, by means of which it is manipulated.

A series of annular rings 22 are provided on their peripheries with an uneven number of disk-plungers 23 and on their inner sides with an annular flange 24, through which the rods 25 and 26 extend to clamp the rings 22 between the disks 20. The plungers 23 correspond to the circular orifices 2 in the bed-plate, and in operation the material to be molded is placed in the orifices in the bed-plate, of which the platen 9 forms the bottom. The roller 8 is then passed from one end of the mold to the other, which compresses the material in the orifices between the plungers and the platen. After the roller 8 has completed its journey from one end of the frame to the other the platen is then withdrawn, as shown in Fig. 5, and the roller returned to the point of starting. In its return movement the plungers press or force the compressed material through the orifices, so as to drop the material into the pan 18.

When the orifices 2 2 are charged or filled and the roller 8 passed over the bed-plate, the entire weight of the roller is transmitted to the material through the medium of the plungers, which rest on the material, causing the roller to rise above the face of the side rails, and when the platen 9 is withdrawn and the roller started on its return journey, there being no resistance to the plungers, the roller rides on the rails, and thus causes the plungers to extend downward sufficiently far to force the material through the orifices and discharge it in the pan.

The amount of compression and the thickness of the manufactured articles may be increased or diminished by raising or lowering



the side rails 3, which are adjustably secured to the bed-plate, as heretofore described.

The machine, as above described, is primarily formed for molding pop-corn cakes; but it is adapted to mold any variety of other articles as well, and while I have described the orifices 2 2 as being circular they may be square, hexagonal, or any other suitable fanciful form to produce an attractive article.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

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

1. A mold for the use of confectioners and others, comprising a horizontal bed-plate provided with a series of orifices, the side rails 3 3 fixed thereto and provided with the shoulders 6 6, and the plane platen 9 removably secured contiguous to the lower face of said bed-

plate, in combination with the roller 8, provided with flanges 7 7, and the radial plungers 23 23, substantially as shown and described.

2. The bed-plate 1, provided with a series of orifices 2 2, the side rails 3 3, adjustably secured thereto, and the transverse guides 11 11 secured to the lower face of said bed-plate, in combination with the laterally-sliding platen 9, having a transverse movement in said guides, and the roller 8 provided with plungers 23 23 and the flanges 7 7, substantially as shown and described.

3. The combination with the orificed bed-plate, the side rails and the movable platen 9, of the roller 8, formed of the sectional rings 22 22, provided with radial plungers 23, and the disks 19 and 20 and stay-rods 25, connecting said disks and rings, substantially as shown and described.

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

JOHN S. CROWELL.

Witnesses:

S. B. DE LONG,  
L. M. PETTICREW.