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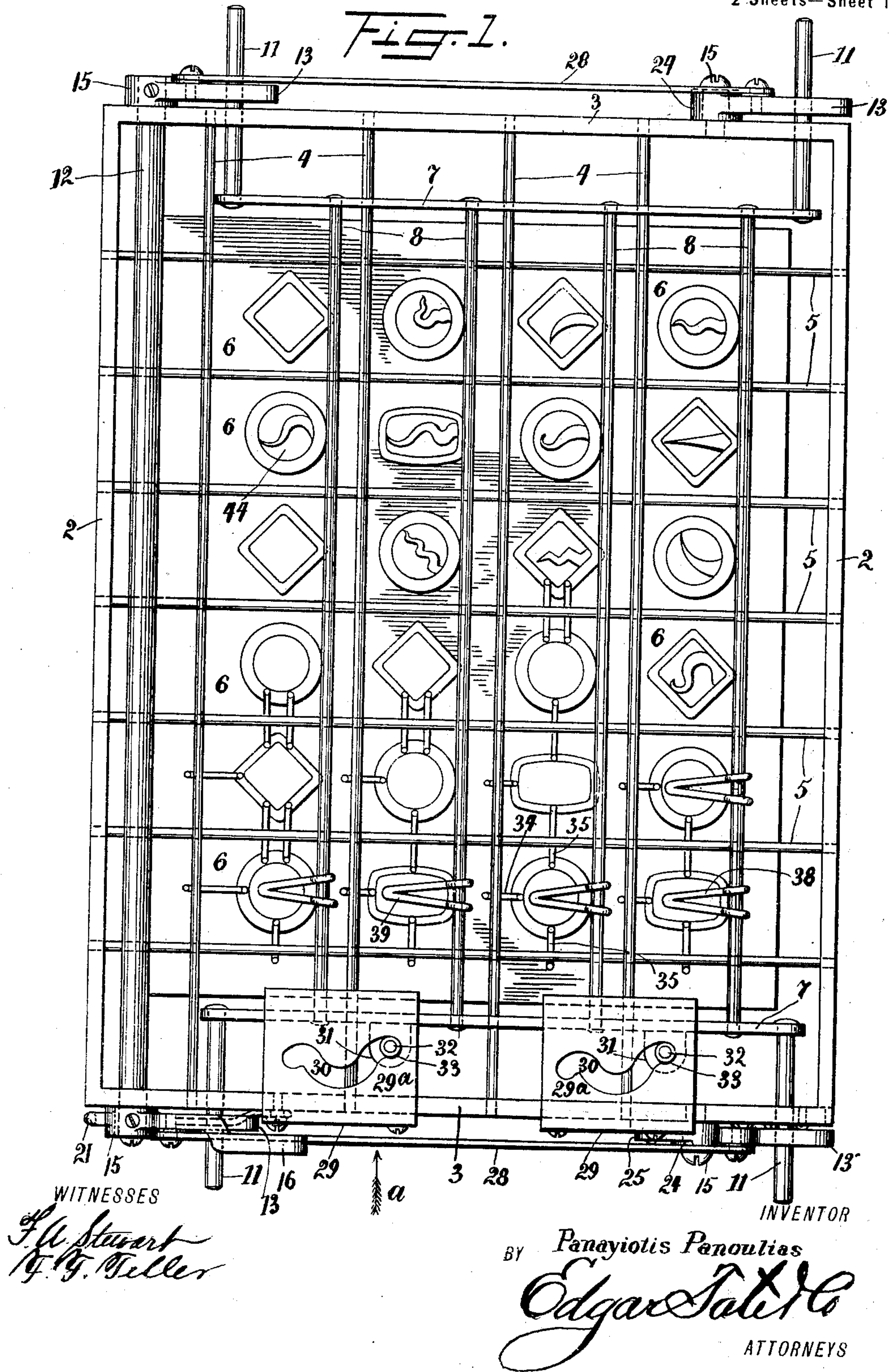
Patented Aug. 26, 1902.

P. PANOULIAS.  
CANDY COATING DEVICE.

(Application filed Dec. 30, 1901.)

(No Model.)

2 Sheets—Sheet 1.



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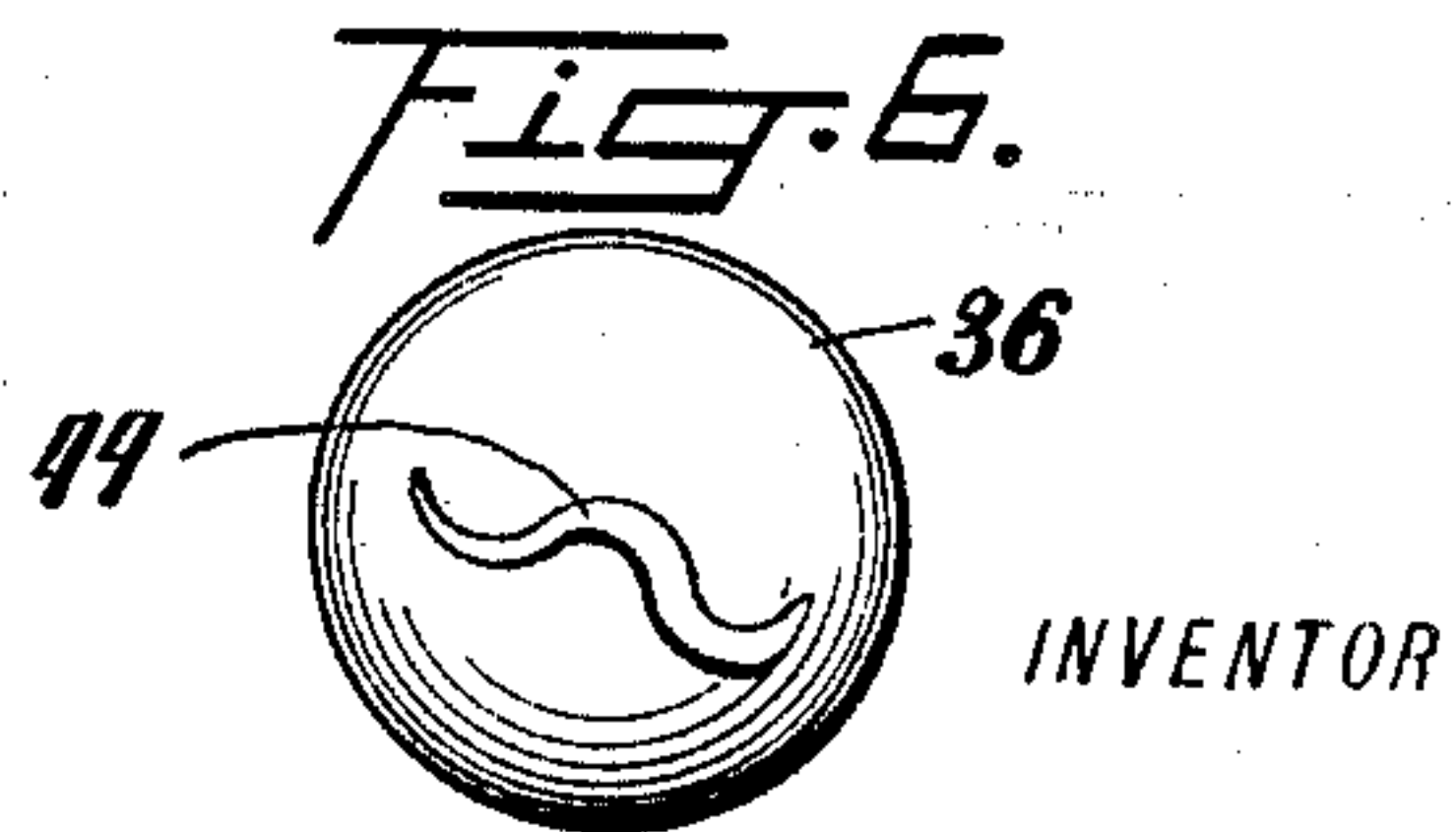
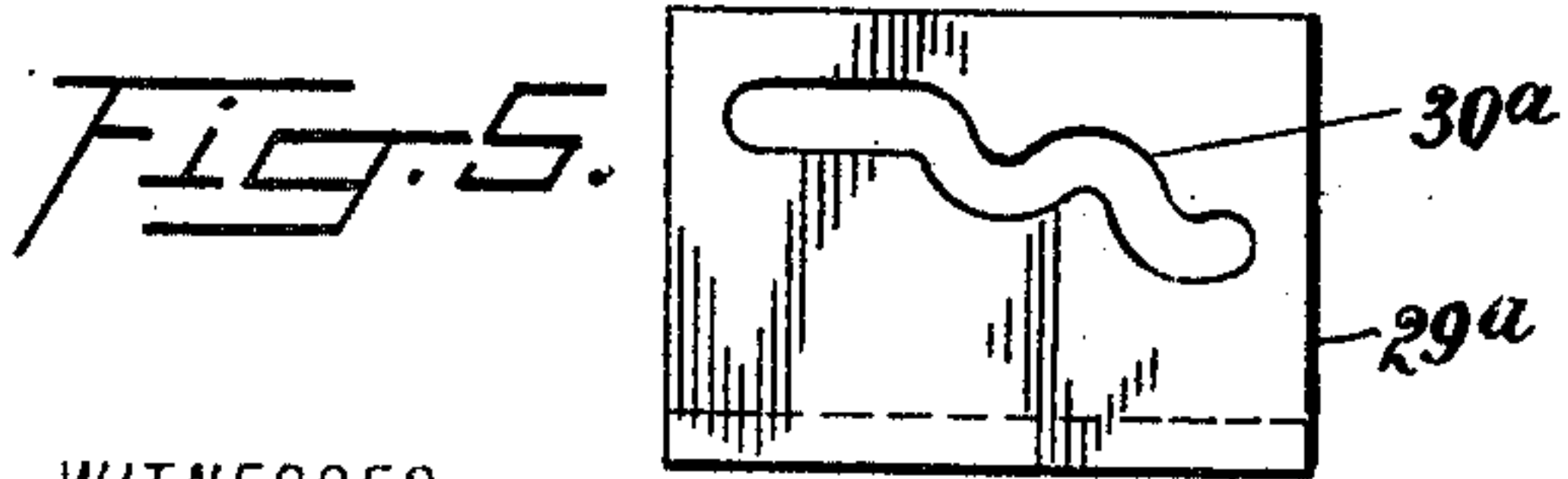
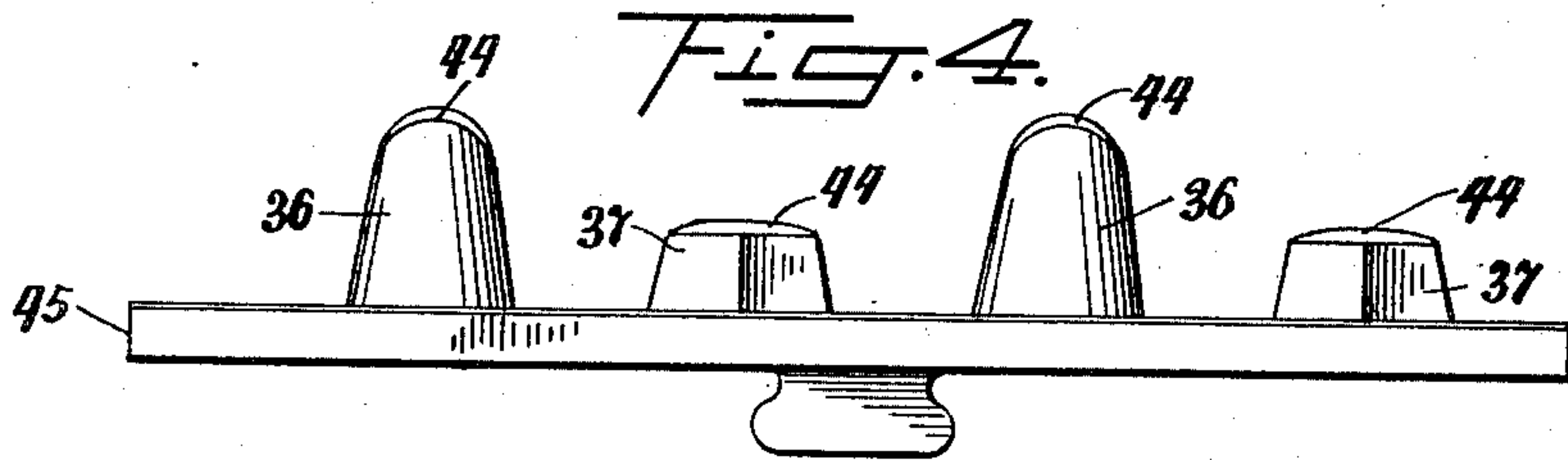
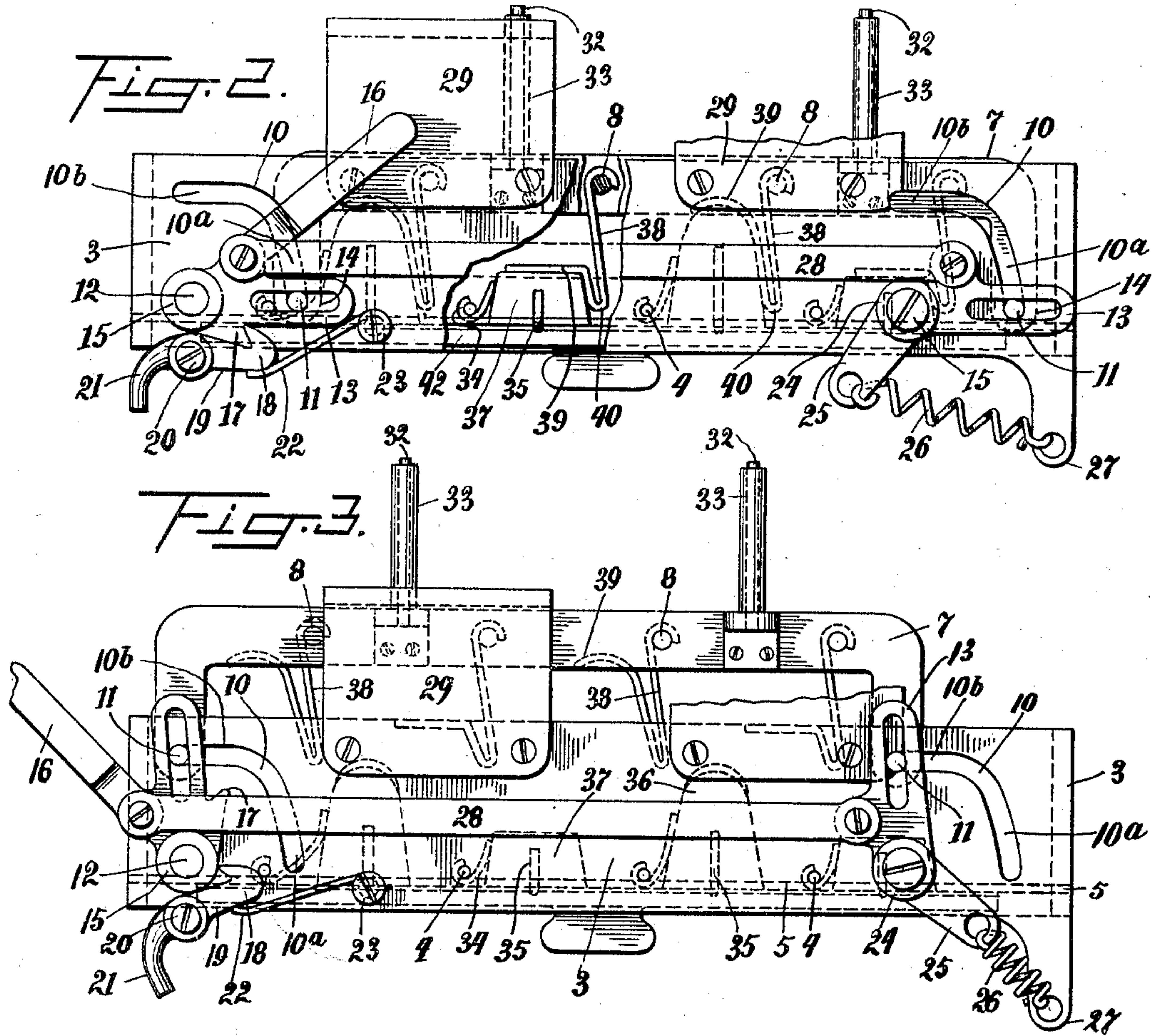
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2 Sheets—Sheet 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

PANAYIOTIS PANOULIAS, OF NEW YORK, N. Y.

## CANDY-COATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 707,864, dated August 26, 1902.

Application filed December 30, 1901. Serial No. 87,715. (No model.)

*To all whom it may concern:*

Be it known that I, PANAYIOTIS PANOULIAS, a subject of the King of Greece, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Candy-Coating Devices, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to machines for coating candies with chocolate or other material, and particularly to what is known as "candy-coating frames or baskets;" and the object thereof is to provide an improved device of this class such as is shown and described in United States Letters Patent granted to me on December 4, 1900, No. 663,359, which may be used in the manner described in said patent and be operated by hand, if desired, or which may form a part of a candy-coating machine and be provided with supports and means for inserting candies therein, as shown and described in United States Letters Patent granted to me November 5, 1901, No. 685,790; and with these and other objects in view the invention consists in a device or devices of the class specified constructed as hereinafter described and claimed.

My present improvement is particularly adapted for use in coating candies with chocolate or other material, said candies consisting either of rectangular blocks or conically-formed blocks or drops, although said candies may be of any desired form, and the same is intended for either manual or mechanical operation.

In the drawings forming part of this specification, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, Figure 1 is a plan view of my improved candy-coating frame or basket; Fig. 2, an end view thereof looking in the direction of the arrow *a* in Fig. 1, part of the construction being broken away; Fig. 3, a view similar to Fig. 2, showing the parts in a different position; Fig. 4, a side or end view of a plate on which the candies are dropped or dumped after they are coated; Fig. 5, a plan view of a detail of the construction, and Fig. 6 a plan view of one of the candies coated.

In the practice of my invention as shown in the drawings I provide an oblong rectangular frame comprising two similar parallel sides 2 and two similar parallel end pieces 3, and said frame is provided with a plurality of longitudinally-arranged and equally-spaced wires 4, four of which are shown, and a plurality of transversely-arranged and equally-spaced wires 5, seven of which are shown, and the wires 5 are preferably placed over the wires 4 or in a slightly-higher plane, and by means of this arrangement the interior of the main frame is divided into a number of rectangular spaces 6, twenty-four of which are shown in Fig. 1. Within the main frame is placed a supplemental frame comprising end pieces 7, connected by horizontal rods or wires 8, four of which are shown, and this supplemental frame is provided at each corner with a pin 11, which passes outwardly through a corresponding end piece of the main frame, said pins being passed through each end piece. The end pieces 3 of the main frame are also each provided near each end with a slot 10, and these slots comprise a substantially vertical portion 10<sup>a</sup> and a horizontal portion 10<sup>b</sup> in communication therewith, the connection between said portions of said slot being segmental or curved, as clearly shown in Figs. 2 and 3. The end pieces 7 of the interior supplemental frame are each provided near each end thereof with an outwardly-directed pin 11, and these pins pass through the slots 10 and are movable therein, and in the position of the main and supplemental frames shown in Fig. 2 the said pins rest in the bottom of said slots.

Pivoted to each of the end pieces 3 of the main frame and near the corners of said main frame, as shown at 12, is an arm 13, provided with longitudinal slots 14, and the pins 11 pass through these slots, and said arms are each provided with a hub 15, and the arm 13 nearer the front side of the main frame is provided with an upwardly-directed supplemental arm 16, which serves as a handle, and the lower side of said arm 13 is provided with a downwardly and backwardly directed tooth 17, adapted to receive the head 18 of a pawl 19, which is pivoted at 20 and provided with a handle 21, and said pawl or head thereof is forced upwardly, so as to engage the tooth 17,



by a spring 22, secured at 23. The arm 13, near the rear edge of the main frame, is provided with a hub 24, having a downwardly and forwardly directed arm 25, to which is secured a spiral spring 26, one end of which is secured to a hanger 27, connected with the main frame. The arm 16 of the forward arm 13 is pivotally connected with the upper side portion of the rear arm 13 by a link or bar 28, and all of this construction, as will be seen, is the same at both ends of the main frame. Secured to the right-hand end of the main frame are vertically-arranged plates 29, each of which is provided with an angular inwardly-directed member 29<sup>a</sup>, and in each of the inwardly-directed plate members 29<sup>a</sup> of the vertically-arranged plates 29 is formed an irregular slot 30, these slots being the same in each plate member. It will be observed that the plate members 29<sup>a</sup> project inwardly over the corresponding end of the supplemental frame, and said corresponding end of the supplemental frame is provided with two outwardly-directed lugs or projections 31, each of which is provided with a vertically-arranged pin 32, and these pins pass upwardly through the corresponding slots 30 and are each preferably provided with a sleeve 33. As thus constructed it will be seen that when the handle-arm 16 of the arms 13 near the front side of the main frame be pulled forwardly the supplemental frame will be raised and moved forwardly into the position shown in Fig. 3, this movement of the supplemental frame being at first a substantially vertical movement and then a forward movement, the direction of these movements being occasioned by the form of the slots 30, and at the same time the supplemental frame will be given a horizontal oscillating movement in the direction of the ends of the main frame, this movement being occasioned by the form of the slots 30 in the plate members 29<sup>a</sup> as the said supplemental frame moves forwardly.

In practice I secure to the wires or rods 4 and 5 of the main frame, by which the rectangular spaces 6 are formed, spring-holders 34 and 35, which project upwardly and inwardly and which are designed to hold the candies to be coated, and these candies may be conical in form, as shown at 36, or may be flat and substantially rectangular in form, as shown at 37, and the height of the holders 34 and 35 will depend upon the height of the said candies. I also connect with the top horizontal rods or wires 8, which form a part of the supplemental frame, supplemental holders or fingers 38, which are of the form shown in Figs. 1, 2, and 3, and these supplemental holders or fingers are in the construction shown composed of a spring-wire bent centrally to form a pointed loop-shaped portion 39, which overlaps the top of the candy, and the sides thereof are separated and curved downwardly to form downwardly-directed members or projections 40. That portion 39 of the supplemental spring-holders 38 which

overlaps the candies, if conical candies are to be coated, is curved and higher than it is if flat or block candies are to be coated, both forms of the construction being shown in the drawings.

The normal position of the supplemental frame is that shown in Figs. 1 and 2, in which it is locked by the pawl 19, and in practice the candies may be inserted into position, as shown in Figs. 1 and 2, by hand, where they are held by the spring-holders 34, 35, and 38, or they may be placed on a board prepared to hold the same and all be inserted at one time by raising said board so as to force the candies into the holders when the board is moved into position, and in this operation after inserting the candies into position in the basket or holder they are held by three of the spring-holders 34 and 35, secured to the wires or rods 4 and 5, two of the holders 35 being employed, and by the supplemental holders 38, which are secured to the wires or rods 8 of the supplemental frame and one of which operates in connection with each candy.

As hereinbefore stated, this device may be manually operated or it may be used in connection with a candy-coating machine such as is shown and described in United States Letters Patent No. 685,790, granted to me November 5, 1901, and if the device is operated by hand the candies may be inserted into position or they may be placed on a suitable plate or board, which may be similar in general form to the plate or board shown at 42 in Fig. 2, in which event said plate would be provided with receptacles which receive said candies, and after the candies have been inserted into the frame or holders, as shown in Fig. 2, the chocolate coating may be applied thereto by pouring said coating over the candies or by dipping the frame into a vat or tank filled or partially filled with said chocolate, or the said frame may be operated as shown and described in the United States Patent last above referred to, it being understood that when the chocolate coating is applied in any way the main frame can be agitated so as to thoroughly distribute the chocolate coating over the candies. After the chocolate has been thoroughly distributed over the candies the pawl 19 is released and the handle-arms 16 are grasped and pulled forwardly, and this operation raises the supplemental frame vertically and also moves it horizontally and forwardly, and in this operation the downwardly-directed portions 40 of the spring holders or fingers 38 move upwardly and pass forwardly over the candies and leave a mark thereon, as shown at 44 in Fig. 1, this mark being occasioned by the dripping of the chocolate from the downwardly-directed portions 40 of the spring fingers or holders 38. The shape of the mark 44 will depend upon the shape of the slots 30 in the plate members 29<sup>a</sup>, and in Fig. 1 I have shown ten different modifications of the mark 44, the only object in showing these modifi-



cations being to indicate that the mark 44 made on the candies, which is the result of the drip formation from the downwardly-directed portions 40 of the spring fingers or holders 38, may be of any desired form, the shape or form of said mark depending on the shape or form of the slots 30 in the plate members 29<sup>a</sup>, as before described.

In Fig. 5 I have shown one modification of the plate members 29<sup>a</sup>, and in this modification the slot therein is of the form shown at 30<sup>a</sup>, and when this form of slot is used the mark 44 on the candy or candies will be similar to that shown in Fig. 6.

In the operation of coating the candies as hereinbefore described and before the supplemental frame is raised and moved forwardly the main frame, and with it the supplemental frame, is held in an inverted position, and after the chocolate coating has been thoroughly distributed over the candies a plate 45, one end of which is shown in Fig. 4, is placed over said candies in the position of the plate 42 in Fig. 2 and the said frames are turned into the position shown in Figs. 2 and 3. The pawl 19 is then released, and the handle-arms 16 are pulled forwardly, and this operation raises the supplemental frame and moves it forwardly, and the downwardly-directed portions 40 of the spring fingers or holders 38 pass over the tops of the candies and mark them, as described, and the candies may all be then removed from the frame by removing the plate 45, and said candies will rest on said plate 45, as shown in Fig. 4, and the said plate, with the candies thereon, is then placed in a cooler in the usual manner.

In the construction herein shown and described the spring fingers or holders 38 are all shown of substantially the same vertical height or length; but this will not materially interfere with the operation of the device even when the candies are not all of the same height, as the drip from said fingers or holders onto the candies of less height will be practically the same when the said fingers or holders are at a material distance above said candies as the said fingers or holders pass over the tops thereof.

It will be understood that the mark 44 on the candies consists of the formation caused by the drip of chocolate from the downwardly-directed members 40 of the spring fingers or holders 38 when the supplemental frame is raised and moved forwardly and oscillated or vibrated horizontally, as hereinbefore described, and this marking of the candies in this manner constitutes the chief feature of this invention and is much more effective than stamping or other processes employed for this purpose.

The entire device is simple in construction and operation and perfectly adapted to accomplish the result for which it is intended, and changes in and modifications of the construction herein shown and described may be

made without departing from the spirit of my invention or sacrificing its advantages.

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

1. In a device of the class described, a main frame, a supplemental frame mounted therein and vertically and horizontally movable therein, and means for giving said supplemental frame an oscillating or vibratory movement in a horizontal plane, substantially as shown and described.

2. In a device of the class described a main frame, wires or rods supported therein longitudinally and transversely thereof whereby said frame is divided into separate spaces, each of which is provided with upwardly-directed spring fingers or holders, a supplemental frame mounted in the main frame and vertically and horizontally movable therein, said supplemental frame being also provided over each of said spaces with a spring finger or holder and means for giving the supplemental frame an oscillating movement in a horizontal plane, substantially as shown and described.

3. A device of the class described comprising a main rectangular frame divided into rectangular spaces, devices for holding the candies in said spaces, a supplemental frame mounted in the main frame and vertically and horizontally movable, supplemental candy-holding devices connected with the supplemental frame and provided with downwardly-directed members and laterally-directed members adapted to overlap the candies, means for raising the supplemental frame and moving it in a horizontal plane and devices for giving the supplemental frame an oscillating or vibratory movement in a horizontal plane, substantially as shown and described.

4. A device of the class described comprising a main frame, a supplemental frame mounted therein and movable vertically and in a horizontal plane, candy-holding devices secured in the main frame, supplemental candy-holding devices connected with the supplemental frame, means for raising the supplemental frame, and moving it in a horizontal plane, and devices for giving the supplemental frame an oscillating or vibratory movement in a horizontal plane, substantially as shown and described.

5. A device of the class described comprising a main rectangular frame provided in the bottom thereof with wires or rods arranged longitudinally therein and transversely thereof, whereby said frame is divided into separate spaces, candy-holding devices connected with said wires or rods at three sides of said spaces, a supplemental frame mounted in the main frame over said wires or rods and movable vertically and in a horizontal plane, supplemental candy-holding devices connected with the supplemental frame and comprising members adapted to overlap the candies and



downwardly-directed portions or projections adapted to bear on one side thereof opposite one of said holders, means for raising and moving the supplemental frame horizontally and devices for giving said supplemental frame an oscillating or vibratory movement, horizontally, substantially as shown and described.

6. In a device of the class described, a main frame, a supplemental frame mounted therein, and vertically and horizontally movable, means for locking the supplemental frame within the main frame, devices for raising the supplemental frame and moving it horizontally and other devices for giving said supplemental frame an oscillating or vibratory movement, in a horizontal plane, substantially as shown and described.

7. In a device of the class described, a main frame provided with candy-holding devices, a supplemental frame mounted therein and vertically and horizontally movable and devices connected with the supplemental frame and movable irregularly over the candies, whereby said candies are provided with an irregular drip-mark or formation, substantially as shown and described.

8. In a device for coating candy with chocolate or other material, a frame provided with candy-holding devices, a supplemental frame

mounted in said first-named frame and movable vertically and horizontally therein, and devices connected with the supplemental frame and operating in connection with said candy-holding devices for holding the candies in position when the supplemental frame is in its lowermost position, said last-named devices being adapted to disarrange the chocolate covering of the candies and make a mark thereon when the supplemental frame is raised and moved horizontally, substantially as shown and described.

9. In a device for coating candy with chocolate or other material, a frame provided with candy-holding devices and a member mounted in said frame and movable vertically and horizontally therein, said member being provided with devices which operate when said member is moved horizontally to disarrange the chocolate coating of the candies and to form a drip-mark thereon, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 23d day of December, 1901.

PANAYIOTIS PANOULIAS.

Witnesses:

F. A. STEWART,  
F. F. TELLER.