

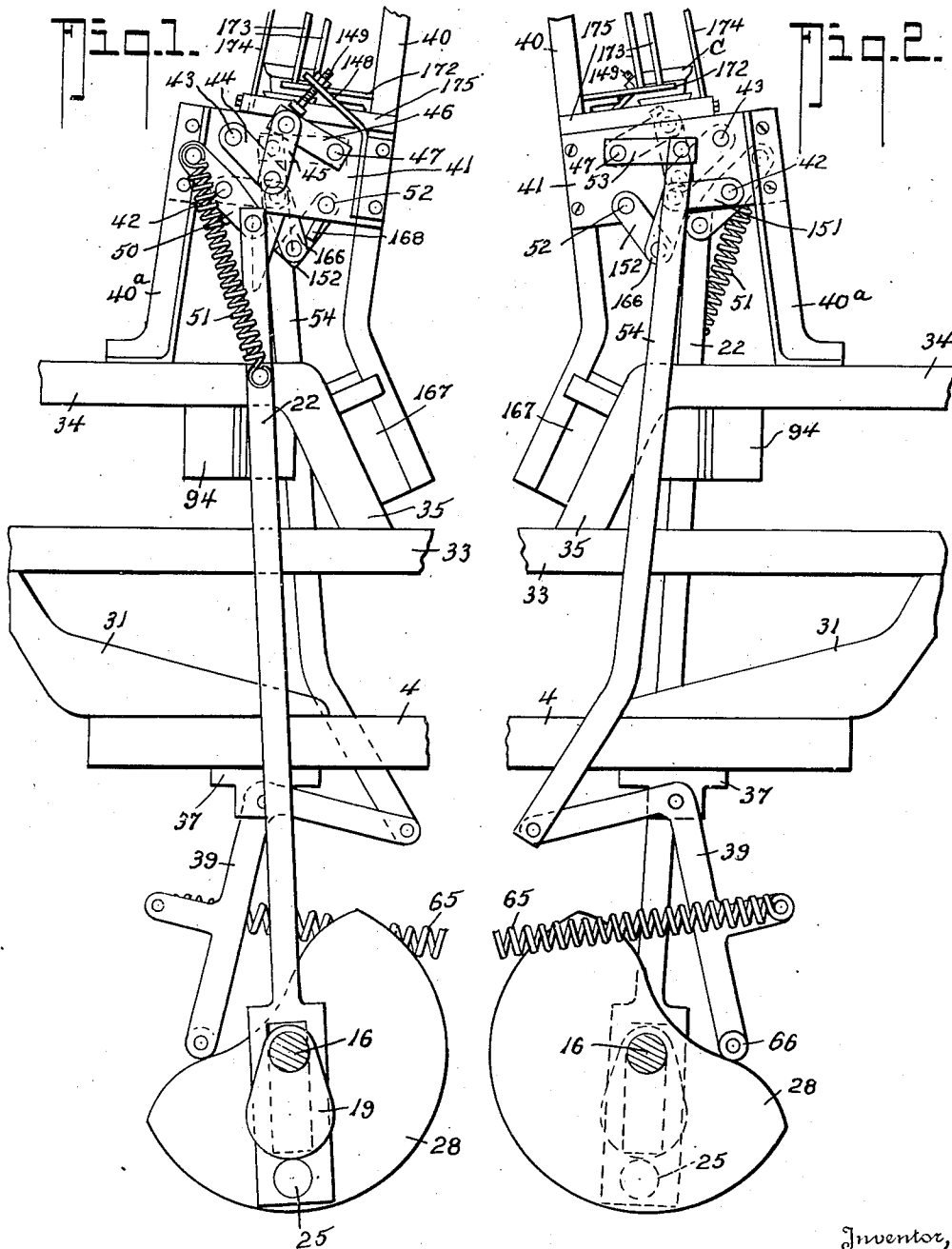
April 22, 1947.

M. GLASSNER

2,419,351

DISPENSING MECHANISM

Original Filed April 14, 1943 2 Sheets-Sheet 1



Inventor,
Mitchel Glassner,
By *Albert E. Dieterich,*
Attorney.

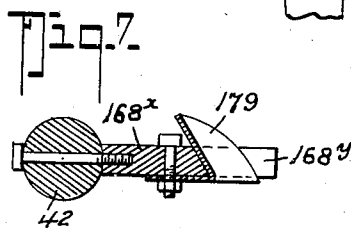
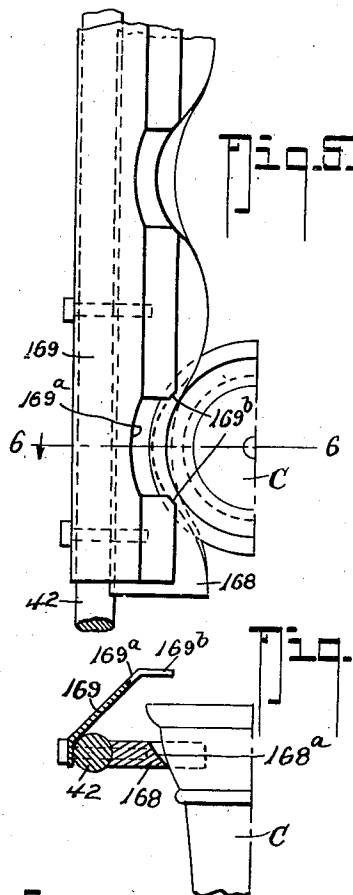
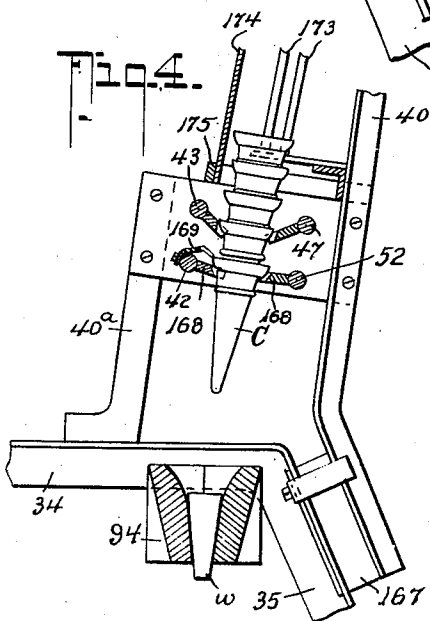
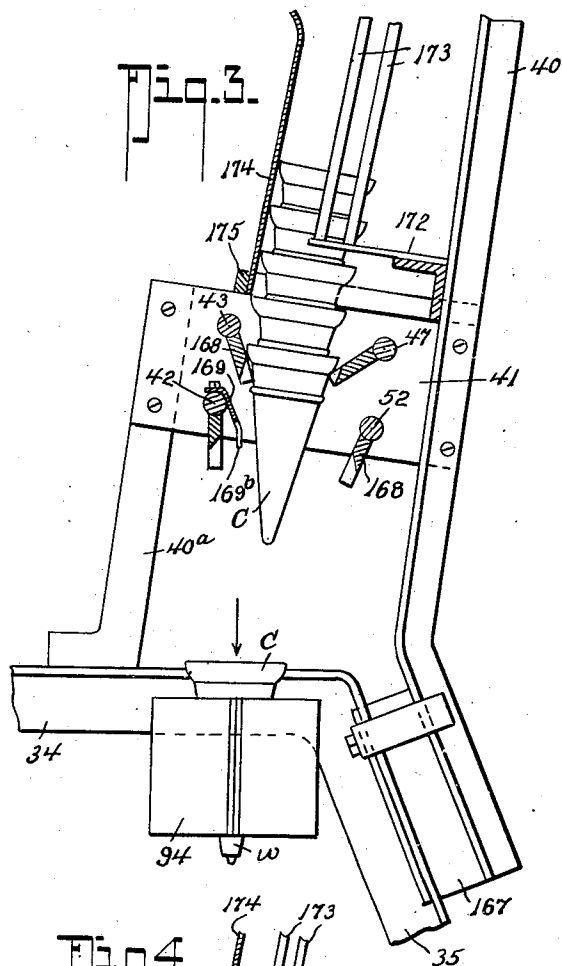
April 22, 1947.

M. GLASSNER

2,419,351

DISPENSING MECHANISM

Original Filed April 14, 1943 2 Sheets-Sheet 2



Inventor,
Mitchel Glassner,
 By *Albert E. Dieterich,*
 Attorney.

UNITED STATES PATENT OFFICE

2,419,351

DISPENSING MECHANISM

Mitchel Glassner, Baltimore, Md., assignor to
Maryland Baking Company, Inc., Baltimore,
Md., a corporation of Maryland

Original application April 14, 1943, Serial No.
483,075. Divided and this application August
22, 1944, Serial No. 550,650

2 Claims. (Cl. 312-44)

1

My invention relates to dispensing mechanisms and it particularly has for an object to provide such a mechanism as is especially useful in the cone jacket applying machine, disclosed in full in my application, Serial No. 483,075, filed April 14, 1943, of which application the present application is a division.

Other objects will in part be obvious and in part be pointed out hereinafter.

To the attainment of the aforesaid objects and ends the invention still further resides in novel details of construction, combination and arrangement of parts, all of which will be first fully described in the following detailed description, and then be particularly pointed out in the appended claims, reference being had to the accompanying drawings, in which:

Fig. 1 is a side elevation of so much of a cone jacket applying machine as is necessary to illustrate the present invention.

Fig. 2 is a side elevation of the other side of the same.

Fig. 3 is an enlarged vertical section showing a cone as having just been released and dropped into the mold or receiver and the remainder of the stack held back.

Fig. 4 is a view similar to Fig. 3, but on a smaller scale, showing a cone loosened from the stack and held from discharging, the parts being in the position corresponding to that of Figs. 1 and 2.

Fig. 5 is an enlarged detail plan view of one of the lower cone-releasing rockers.

Fig. 6 is a cross section on the line 6-6 of Fig. 5.

Fig. 7 is an enlarged detail cross section of a modification hereinafter specifically referred to.

In the accompanying drawings in which like numerals and letters of reference indicate like parts in all the figures the same reference numerals and letters have been used as for the same parts in my application Serial Number 483,075 aforesaid.

A horizontal bar at each side of the main frame of the machine is indicated by the numeral 4.

16 indicates the main shaft of the machine on which is secured two cams 19 and 28 respectively. A connecting rod 22 cooperates with the cam 19 via a roller 25 while a bell-crank lever 39, that is pivoted on a bearing number 37, carried by the bar 4, cooperates with the cam 28. A spring 65 keeps the roller 66 of the bell-crank lever 39 in constant contact with the cam 28.

Supported in part on the bars 4, via brackets 31, are horizontal side bars 33 on which are

2

mounted the side bars 34 of a subframe having curved-down extensions 35 to which extensions spacing blocks 167 and the lower ends of uprights 40 are secured in any desired way. Other uprights 40^a are mounted on bars 34 parallel to the bars 40. Side plates 41 are secured to the bars 40, 40^a, in which plates the shafts 43, 47 and 42, 52 are journaled.

The shafts 43, 47, between the side plates carry plates 168, while the shafts 42, 52 also carry plates 168, the shaft 42 carrying also a safety cone-release plate 169.

The construction of the plates 168, 169 is best shown in Figs. 5 and 6 to which reference is now made. The plate 169 has recesses 169^a that leave corners 169^b to overlie the rims of the cones C caught by the lower pair of plates 168 and push the cones free should they not drop by gravity when the lower plates move to release or drop a cone into the jacket-and-cone receiver 94. The plates 168 have recesses 168^a.

Brackets 172, secured to the bars 40, support the rods 173 which are arranged to hold the stack of nested cones, a guard plate 174 being provided and supported on a yoke 175.

Referring now particularly to Figs. 1 and 2, it will be seen that the shafts 43 and 47 are connected together by arms 44, 46 and a link 45 (Fig. 1), on the outer ends of the shafts at one side of the machine. At the other side of the machine a rocker arm 53 is secured to the shaft 47. The arm 53 is connected with the lever 39 by means of a connecting rod 54. The shafts 52, 42 are also operatively connected together by means of rocker arms 152, 151 and a link 166 at one side of the machine (Fig. 2) while shaft 42 has a lever 50 to which the connecting rod 22 is joined and to which and to said rod a spring 51 is connected so as to hold the roller 25 in constant engagement with the cam 19.

A rod 143 is fixed to the bar 40 and carries an adjustable stop screw 149 for engagement by the arm 46 so that the normal position of the upper pair of plates 168 may be established. As shown in Fig. 3, the shafts 43 and 47 are not equidistant from the axis of the stack of cones. Due to this fact and by reason of the linkage 44, 45 and 46 the plates 168 of the upper pair lie at different angles to such axis. This difference is most prominent at the moment the lowest cone in the stack is about to be released to be caught by the lower pair of plates (see Fig. 3). The timing of the cams is such that the lower pair of plates come to their cone-catching position before a cone released by the upper pair of plates can drop

through the lower pair of plates. The upper pair of plates are quickly moved to their cone-catching position immediately after they release the lowest cone from the stack and before the mouth-ring of the next cone in the stack can pass between the upper pair of plates. In Fig. 3 the lowest cone in the stack is ready to be released and a very slight downward movement of the upper pair of plates will be sufficient to release the lowest cone of the stack. The instant the mouth-ring of that lowest cone passes the lower edges of the plates 168 they immediately start to rise and reach their cone-catching position before the mouth-ring of the next cone has dropped from the position where it is shown in Fig. 3 to the position of the lowest cone in the stack in that figure. It will thus be seen that the cam timing for the upper set of plates 168 in cooperation with their linkage and differential position constitute means to operate the upper set of plates to release a cone to the lower set of plates and retard the balance of the stack.

In Fig. 7 is shown a modification of the plate 168. In this form a relatively thin plate 168^x is used and the required thickness for engaging and holding the cones is built up by means of sheet metal members 179 secured in each cut-out portion 168^y of the plates 168^x.

Operation

Assume that a jacket has been deposited in receiver 94 (Fig. 4). As the parts pass from the position of Fig. 4 toward that of Fig. 3, the lower plates 168 turn to drop a cone into the jacket that has been deposited in the "mold" 94. The lower plates, as soon as the cone is released, start to rise again toward the position of Fig. 4 and catch the next cone about to be released (Fig. 3) by the upper pair of plates, which as soon as they release the said next cone are quickly raised to prevent the third cone from falling and to hold the balance of the stack while the lower plates hold the second of the cones.

From the foregoing description taken in connection with the accompanying drawings it is thought the construction, operation and advan-

tages of the invention will be clear to those skilled in the art.

What I claim is:

1. In a machine of the class described: a magazine for stacked cones; means for releasing the cones from the magazine one at a time, said means including an upper set of cone engaging pivoted plates and a lower set of cone engaging pivoted plates; means connecting the plates of a set to work in unison; means to operate the upper set of plates to release a cone to the lower set of plates and then retard the balance of the stack; means to operate the lower set of plates to discharge the cone held thereby and return to the position to receive the next cone from the upper set of plates, and means carried by the lower set of plates to push the cone free of those plates should the cone fail to drop therefrom freely.

2. In a machine of the class described: a magazine for stacked cones; means for releasing the cones from the magazine one at a time, said means including an upper set of cone-engaging pivoted plates and a lower set of cone-engaging pivoted plates; means connecting the plates of a set to work in unison; means to operate the upper set of plates to release a cone to the lower set of plates and then retard the balance of the stack; and means to operate the lower set of plates to discharge the cone held thereby and return to the position to receive the next cone from the upper set of plates, the lower set of plates being provided with recesses in the free edges of the plates; and sheet metal plates attached to the aforesaid plates in said recesses.

MITCHEL GLASSNER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,158,045	Graham	Oct. 26, 1915
1,855,441	Crouse	Apr. 26, 1932