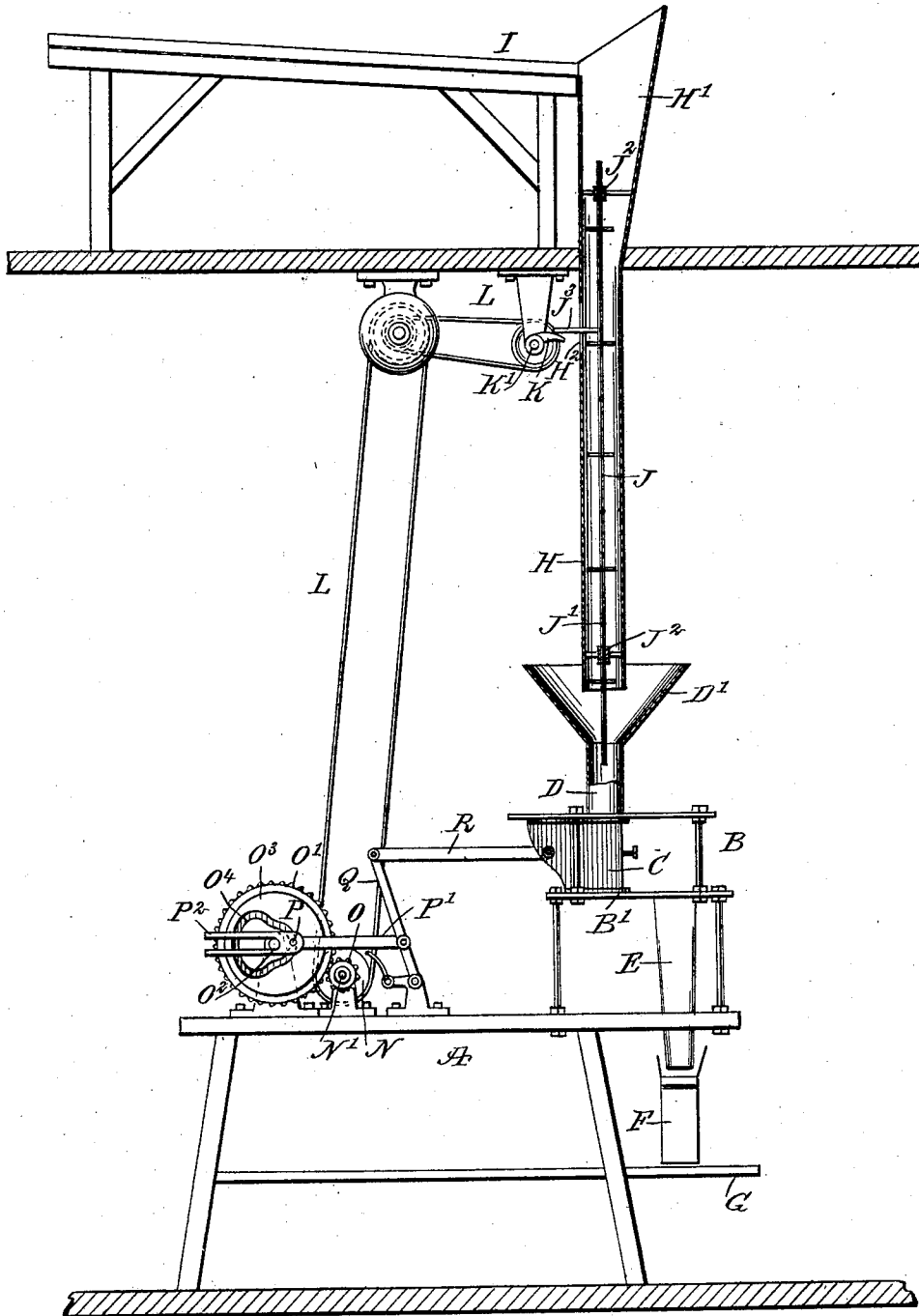


No. 880,374.

PATENTED FEB. 25, 1908.

W. A. FANNING.
PACKAGING MACHINE.
APPLICATION FILED APR. 27, 1907.

2 SHEETS—SHEET 1.



WITNESSES

John A. Beckett
Rev. J. H. Foster

Fig. 1

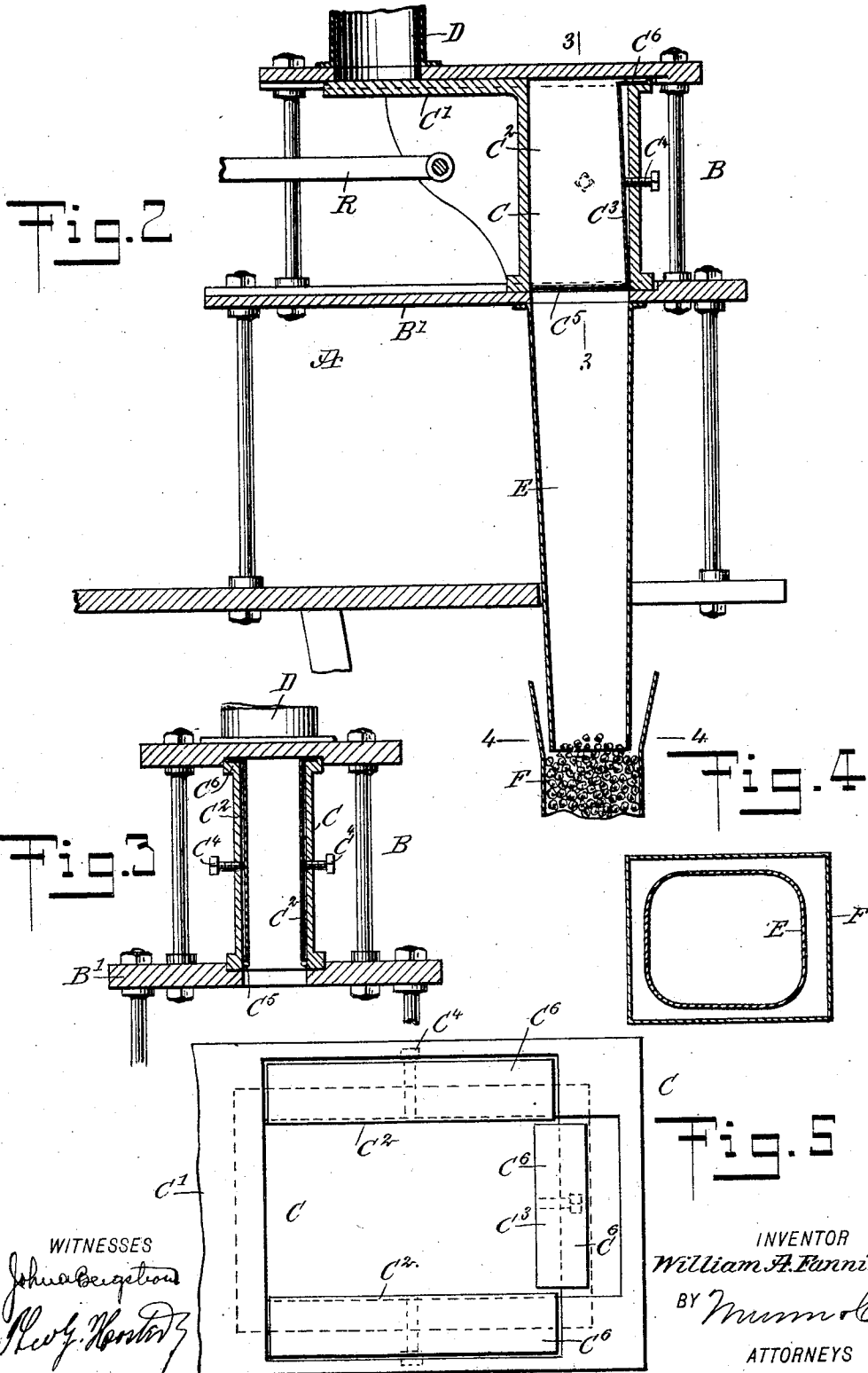
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UNITED STATES PATENT OFFICE.

WILLIAM A. FANNING, OF EAST ORANGE, NEW JERSEY.

PACKAGING-MACHINE.

No. 880,374.

Specification of Letters Patent.

Patented Feb. 25, 1908.

Application filed April 27, 1907. Serial No. 370,638.

To all whom it may concern:

Be it known that I, WILLIAM A. FANNING, a citizen of the United States, and a resident of East Orange, in the county of Essex and State of New Jersey, have invented a new and Improved Packaging-Machine, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved packaging machine, which is simple and durable in construction, and more especially designed for accurately and quickly packaging raisins, currants and like fruits and products in predetermined quantities, and without danger of injury to the fruits or products.

The invention consists of novel features and parts and combinations of the same, which will be more fully described herein-after and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement, parts being in section; Fig. 2 is an enlarged sectional side elevation of the improvement; Fig. 3 is a transverse section of the same on the line 3—3 of Fig. 2; Fig. 4 is an enlarged sectional plan view of the same on the line 4—4 of Fig. 2, and Fig. 5 is an enlarged plan view of the intermittently reciprocating measuring receptacle.

On a suitably constructed frame A is mounted a guideway B, in which intermittently reciprocates a measuring receptacle C, adapted to register when at rest at one end of its stroke with an inlet D, and adapted to register with an outlet E at the time the receptacle C is at rest at the other end of its stroke. The outlet E is arranged to deliver the measured quantity of raisins, currants or the like to a bag F held below the outlet E and preferably supported on a table G, as indicated in Fig. 1. The measuring receptacle is open at the top and bottom, and when the receptacle C is in the position shown in Fig. 1, then the open top is in register with the inlet D and at the same time the bottom of the receptacle is closed by the bottom B' of the guideway B. When the measuring receptacle C is in the position shown in Fig. 2, then the open bottom of the receptacle registers with the outlet E, to allow the raisins, currants and the like, to

pass out of the receptacle C down into the outlet E and into the bag F. The upper end of the receptacle C is provided with a cut-off plate C' adapted to pass under the inlet D at the time the open top C of the receptacle moves out of register with the inlet D, so that the raisins, currants or the like are retained in the inlet D until the measuring receptacle C returns to its former position, as shown in Fig. 1, for receiving the receptacle C with the raisins, currants or the like.

In order to provide for accurate measurement the sides C² and one end C³ of the interior of the receptacle C are made adjustable by the use of set screws C⁴, to permit of increasing or decreasing the size of the receptacle C, that is, to increase the amount of the raisins, currants or the like filling the receptacle at the time. As shown, the sides C² and the end C³ are hinged at their lower ends at C⁵, and the upper ends are provided with outwardly extending flanges C⁶ projecting into corresponding recesses formed on the top of the receptacle C. Thus by the arrangement described, the cubic contents of the receptacle C can be increased or diminished to produce a predetermined measurement for filling the bag F with the desired quantity of raisins, currants or the like.

The upper end of the inlet D is provided with a hopper D' into which extends the lower end of a feed pipe H provided at its upper end with a hopper H', into which pass the raisins, currants or the like from an assorting and cleaning table I, the latter being perforated and slightly inclined and preferably located a story above the one in which the machine proper is located, as plainly indicated in Fig. 1. Within the feed pipe H is arranged an agitator which also projects down into the inlet D, and the said agitator consists of a vertically disposed rod J having radiating agitating arms J', and mounted to slide in bearings J² arranged in the lower and upper ends of the feed pipe H. The rod J is provided with an arm J³ extending through an elongated slot H² in the feed pipe H to the outside thereof, and this arm J³ is adapted to be engaged by a cam arm K held on a shaft K', so that when the latter is rotated the cam arm K raises the arm J³ and consequently the rod J and its agitating arms J', and when the cam K finally leaves the arm J³ then the latter is released and the rod J with its agitating arms J' drops. Thus an intermittent up and down motion is given to the rod J and

its agitating arms J' , to prevent the raisins, currants or the like from clogging in the inlet D and the feed pipe H.

The shaft K' is continually rotated by a suitable transmission L, such as belts and pulleys, from a motor N of any approved construction, and which also imparts an intermittently reciprocating motion to the measuring receptacle C by the following mechanism: On the shaft N' of the motor N is secured a pinion O in mesh with a gear wheel O' having its shaft O^2 journaled on the main frame A, and on the said shaft is secured a cam wheel O^3 provided in its face with a cam groove O^4 into which projects a pin or friction roller P arranged on a link P' having one end P^2 in the form of a fork sliding loosely on the shaft O^2 , the other end of the link P' being connected with a lever Q connected by a link R with the measuring receptacle C. Now when the motor N is running the agitator in the feed pipe H is actuated and a reciprocating motion is given to the measuring receptacle C by the mechanism just described, so that the measuring receptacle C is alternately moved into register with the inlet D and the outlet E, as above explained.

By reference to Fig. 1, it will be seen that the cam groove o^4 is so arranged that the measuring receptacle C remains at rest when at the end of its stroke, and the period of rest of the measuring receptacle C when over the outlet E is longer than the period of rest when the measuring receptacle C is in register with the inlet D.

It is understood that owing to the column of raisins, currants or the like in the feed pipe H and inlet D, the receptacle C quickly fills with raisins, currants or the like at the time the receptacle C is in register with the inlet D, but when the receptacle C is in register with the outlet E then the raisins, currants or the like require a longer time to pass out

of the receptacle into the outlet E, and consequently the period of rest of the receptacle C at the outlet E is longer than when the receptacle C is in register with the inlet D.

The machine shown and described is very simple and durable in construction and composed of comparatively few parts, not liable to easily get out of order.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a packaging machine the combination with the frame, of a guideway on the frame, a hopper provided with a chute above the guideway at one end thereof, a chute below the guideway at the other end thereof, a measuring receptacle having an open top and an open bottom resting on the guideway, means for reciprocating the receptacle between the chute of the hopper and the chute below the guideway, a feed pipe provided at its upper end with a hopper, delivering into the hopper above the guideway, a longitudinally movable agitating device in the chute, and means for moving said agitator.

2. In a packaging machine, a guideway provided at one end with a chute thereabove, and at the other end with a chute therebelow, a measuring receptacle having an open top and an open bottom resting upon the guideway, said receptacle having sides and one end hinged at their lower ends and provided with outwardly projecting flanges and set-screws engaging the sides and the end to retain them in adjusted position, and means for reciprocating the receptacle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM A. FANNING.

Witnesses:

THEO. G. HOSTER,
JOHN P. DAVIS.