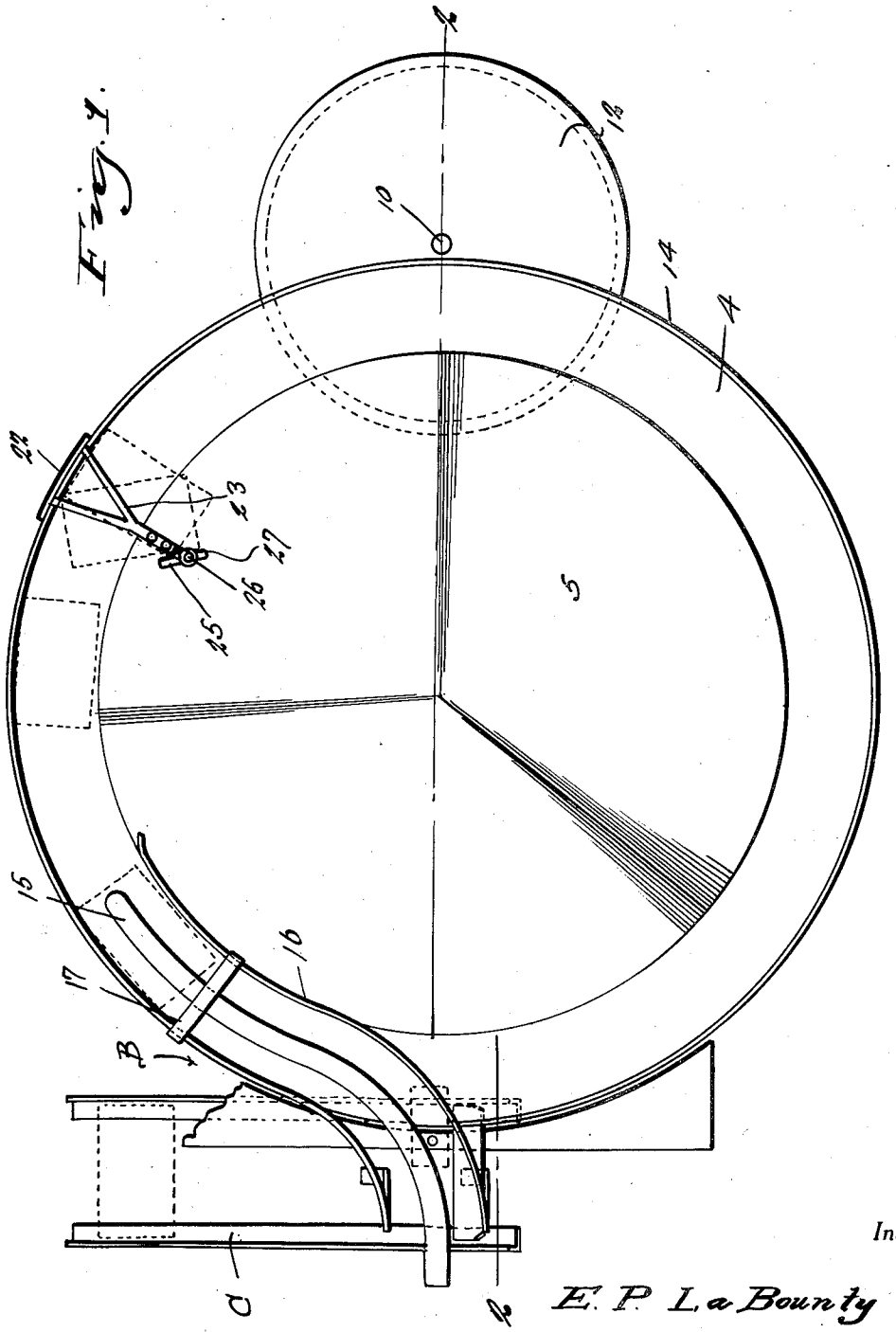
March 3, 1936. E. P. LA BOUNTY 2,032,619

CENTRIFUGAL CAN FEEDING MEANS

Filed Aug. 2, 1935 2 Sheets-Sheet 1

Fig. 1.



Inventor

E. P. La Bounty

By Clarence A. O'Brien

Attorney

March 3, 1936. E. P. LA BOUNTY 2,032,619

CENTRIFUGAL CAN FEEDING MEANS

Filed Aug. 2, 1935 2 Sheets-Sheet 2

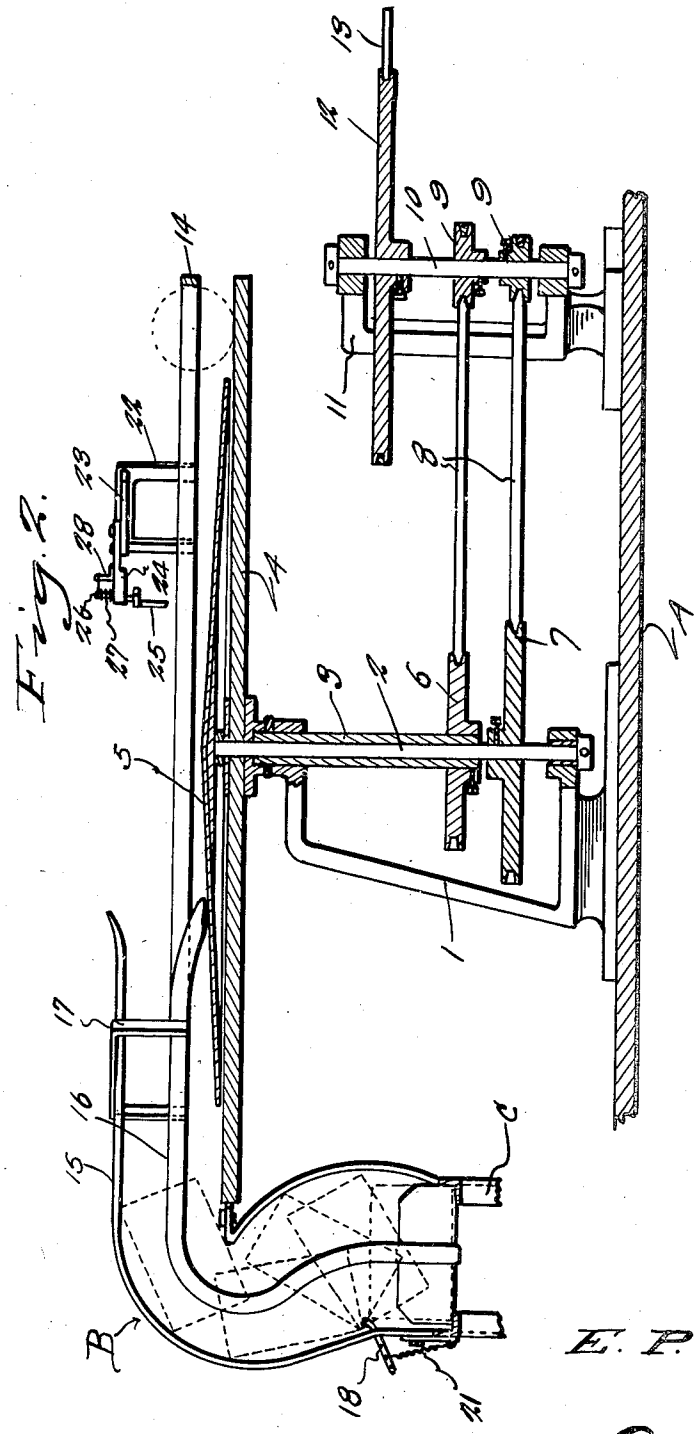


Fig. 2.



Fig. 4

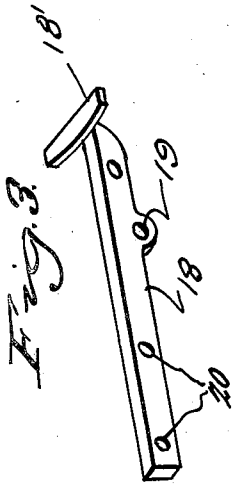


Fig. 3

Inventor

E. P. La Bounty

By Clarence A. O'Brien

Attorney

Patented Mar. 3, 1936 2,032,619

REISSUED

UNITED STATES PATENT OFFICE

2,032,619

CENTRIFUGAL CAN FEEDING MEANS

Eddie P. La Bounty, Hoopeston, Ill.

Application August 2, 1935, Serial No. 34,449

2 Claims. (Cl. 198—33)

This invention relates to a centrifugal can feeding means, the general object of the invention being to provide means whereby cans placed in a pile on a rotating member are moved by centrifugal force upon another rotary member which conveys the cans in lengthwise position through a chute which deposits the cans to a gravity chute, with means whereby any can moving on to the second rotary member in improper position will be turned to proper position on the second member.

This invention also consists in certain other features of construction and in the combination and arrangement of several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views and in which:—

Figure 1 is a top plan view of the device.

Figure 2 is a section on the line 2—2 of Figure 1.

Figure 3 is a view of the bumper member.

Figure 4 is a view of the tripper.

In these drawings the letter A indicates a base to which is secured an upright bracket 1 which rotatably supports a shaft 2 which is vertically arranged and which is surrounded by a hollow shaft 3 which is also rotatably supported by the bracket 1. A disk 4 is connected to the upper end of the hollow shaft 3 and a convex disk 5 is connected to the upper end of the shaft 2, this disk 5 being arranged above the disk 4 and being much less in diameter than the disk 4 and concentrically arranged in relation thereto. A pulley 6 is connected to the lower end of the hollow shaft 3 and a pulley 7 to the shaft 2, belts 8 passing over these pulleys and over the pulleys 9 on a shaft 10 supported by an upright bracket 11 from the base A, the shaft being driven from any suitable source of power through means of the pulley 12 and the belt 13. These parts are so arranged that the flat disk 4 revolves faster than the convex disk 5.

A substantially circular guide rail 14 is spaced above the two disks and acts to guide the cans to the chute B which is composed of the top rail 15 and the side rails 16 which are connected together as shown at 17. The inlet end of the chute B flares as shown in Figures 1 and 2 so that the cans can readily enter the same and said chute is provided with a substantially horizontal inlet portion and with a depending exhaust portion which discharges the cans upon a gravity chute C. The depending portion of the chute B is wider as shown in Figure 2 so that the cans entering the chute in endwise position can turn to fall upon the gravity chute C upon their sides as shown in dotted lines in Figure 2. In order to facilitate this turning of the cans in the depending portion of the chute B, I provide a bumper member 18, as shown in detail in Figure 3 and including a shank and a cross head 18' which engages the corners of the descending cans as shown in dotted lines in Figure 2. The shank is pivoted intermediate its ends to a part of the chute by a pivot pin passing through the hole 19 in the shank and said shank is provided with a plurality of holes 20 for receiving a hook on a spring 21 which normally holds the head 18' in raised position and permits the head to move downwardly when struck by a can so that this member acts as a bumper to take the jar off cans and also acts to cause the tilting action of the cans as shown in dotted lines in Figure 2.

A bracket 22 is attached to the guide rail 14 and carries an inwardly extending V-shaped member 23 to the inner end of which is adjustably connected a bar 24 to which is pivoted a substantially L-shaped tripper finger 25, the pivot pin of which is shown at 26. A spring 27 surrounds and is connected with the pivot pin and has one end connected to a bracket 28 on the arm 24, the spring acting to hold the finger in the position shown in Figure 1.

The cans are dumped on the convexed disk 5 from a belt or by any other means and the rotating disk 5 causes the cans to move outwardly under centrifugal force upon the exposed portions of the disk 4. Most of the cans will pass upon the disk 4 against the rail 14 in lengthwise position with their side portions engaging the rail. However, some of the cans will have their ends strike the rail as shown to the right in Figure 1 and as soon as they strike the tripper finger 25 they will be caused to turn to endwise position as shown to the left in Figure 1. Cans after passing the tripper finger are moved by the disk 4 into the chute B through which they travel and drop upon the gravity chute C, the cans being turned by the bumper member 18 in the lower part of the chute B so that they fall upon the member C on the sides and will thus roll down the same.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What is claimed is:—

1. A device of the class described comprising a rotary disk, a convex disk of smaller diameter than the first-mentioned disk and located above the same, means for rotating the two disks, said means rotating the first-mentioned disk at a greater speed than the convex disk, a guide rail located above the periphery of the first-mentioned disk, tripping means for turning any cans that have their ends strike the guide rail, a chute for receiving the cans from the first-mentioned disk, said chute having a depending part, a gravity chute receiving the cans from the first-mentioned chute and means for causing the cans to turn and drop sidewise upon the gravity chute.

2. In a can handling device of the class described, a horizontally arranged disk, means for rotating the same, a smaller concentrically arranged convex disk above the first-mentioned disk, means for rotating the same at a lower speed than the first-mentioned disk, a concentric guide rail located above the periphery of the first-mentioned disk, an adjustable spring actuated tripper finger carried by the guide rail for turning cans that strike the guide rail on their ends, a chute for receiving the cans from the first-mentioned disk, said chute having a depending portion which is enlarged, a spring-pressed bumper member pivoted to the depending part and having a head against which the cans strike and which causes the cans to tilt sidewise in the enlarged part of the chute, and a gravity chute for receiving the cans from the first-mentioned chute.

EDDIE P. LA BOUNTY.