

April 22, 1924.

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S. C. ANSCHELL

APPARATUS FOR PACKAGING CONFECTIONS

Filed Sept. 10, 1923

2 Sheets-Sheet 1

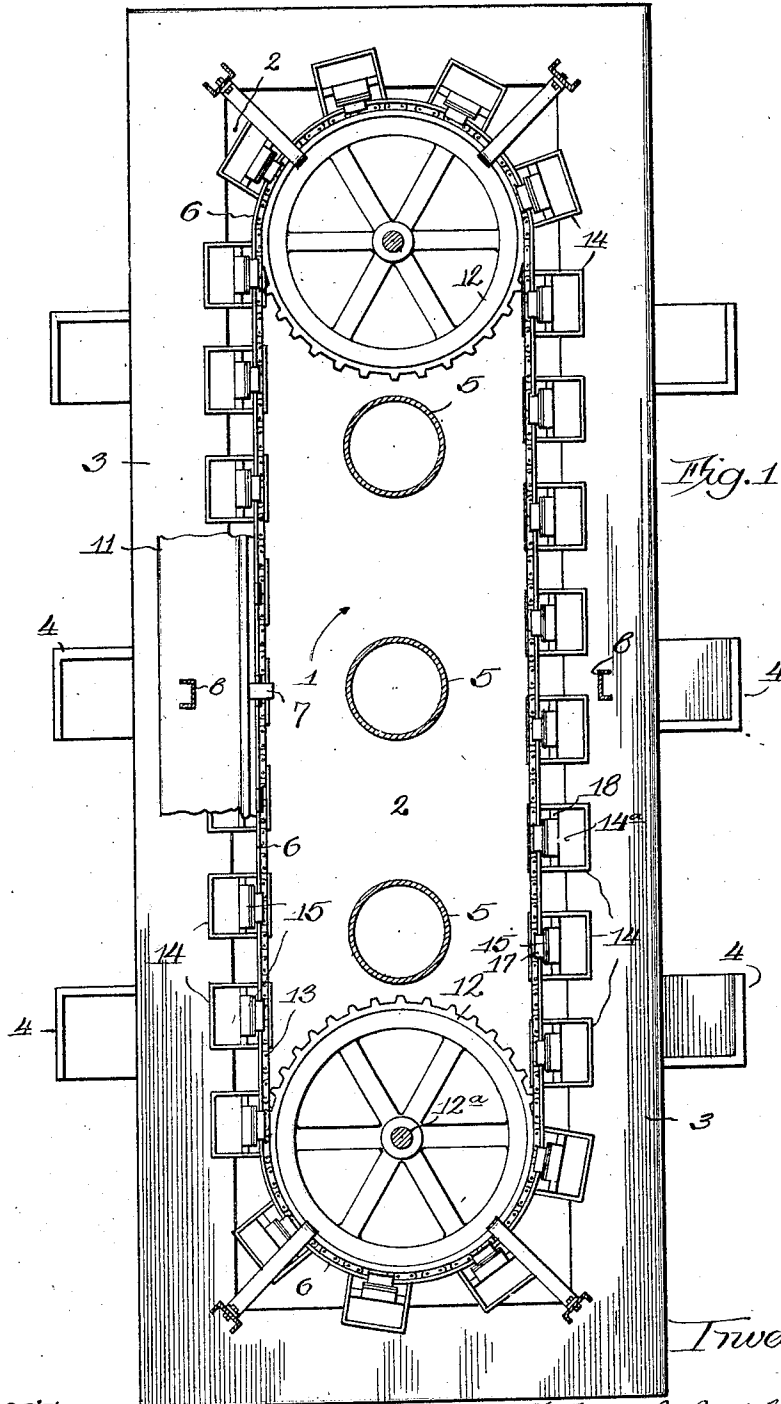


Fig. 1

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Witness:
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2 Sheets-Sheet 2

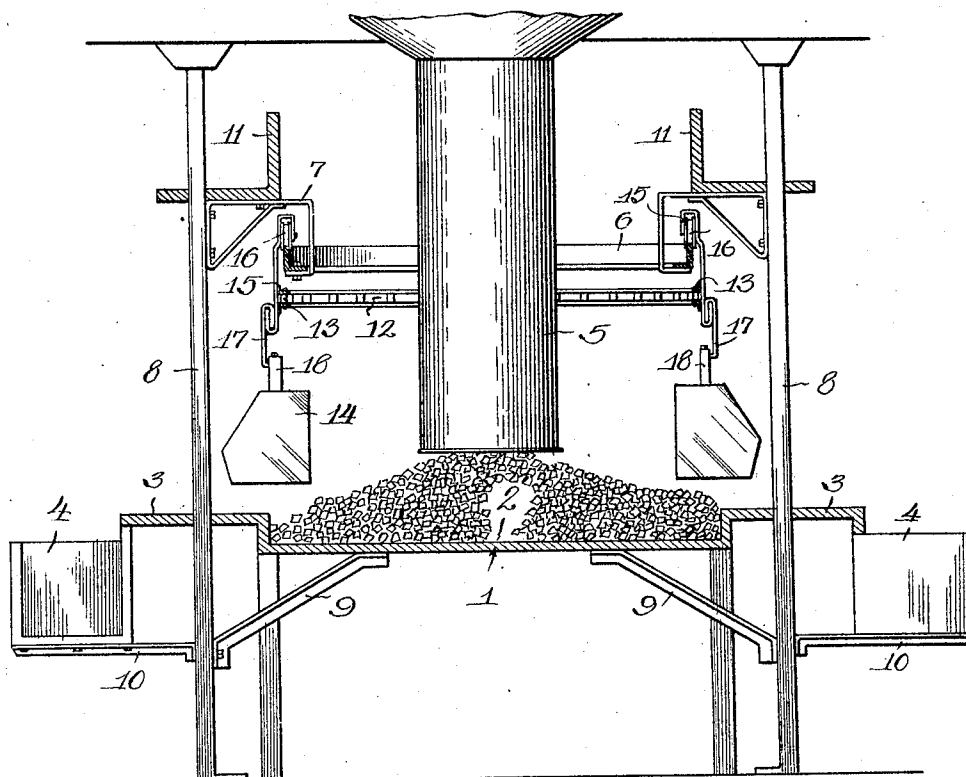


Fig. 2

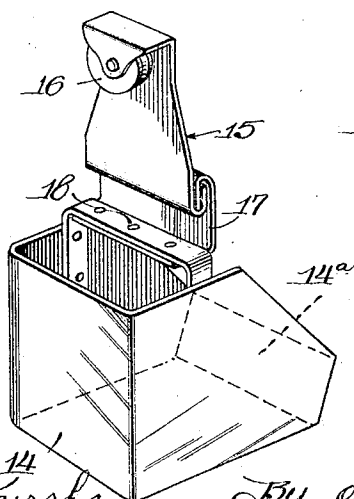


Fig. 3

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UNITED STATES PATENT OFFICE.

SIDNEY C. ANSHELL, OF CHICAGO, ILLINOIS.

APPARATUS FOR PACKAGING CONFECTIONS.

Application filed September 10, 1923. Serial No. 661,957.

To all whom it may concern:

Be it known that I, SIDNEY C. ANSHELL, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Apparatus for Packaging Confections, of which the following is a specification.

This invention relates to improvements in confection packaging device and more particularly to the method and means for filling packages with candy or confection together with a suitable novelty or prize.

The idea of including small articles of a novel character in packages of confections is not a novel one, although the degree of success attending the idea has been largely dependent, not only upon the creation, but the sustaining of an element of speculation in the mind of the prospective purchaser. As a result it is conceived that the greater variety of novelties included in the packages, the greater will be the incentive to buy. To this end, it is to the interest of the retailer that the packages contain not only a large variety of novelties, but that duplicates shall be as infrequent as possible, thus decreasing the probability that similar novelties will be found in successive purchases, thereby removing the otherwise attractive speculative feature of the purchase. It is with this end in view that the herein described apparatus has been devised, as well as the method of packing to insure a wide distribution or scattering of novelties throughout a given number of packages.

A preferred embodiment of the invention is disclosed in the accompanying drawings.

Figure 1 is a top plan view of the apparatus showing the manner in which the method is carried out.

Figure 2 is a detail view in vertical section of the apparatus, and,

Figure 3 is a perspective view of a single basket or container of the traveling conveyor.

The actual filling of the packages of confections is accomplished by hand, the operators sitting along the sides of a large table 1 of rectangular shape. The number of operators may be varied according to the length of the table. Each operator is assigned to a position at the table although they work quite independently of each other. The central portion of the table has a depressed portion 2, forming a trough into

which the confections, such as a wrapped form of candy, is piled, and from which the operators obtain their supply. Between the trough and the edge of the table is an elevated portion 3 on which the filling and sealing of the packages is carried on. At intervals along the sides of the table, and below the top thereof, are mounted a plurality of racks 4, in which the filled packages are stacked, each rack holds a certain number of packages so that as they are filled the contents can be inserted bodily into a carton or shipping container. These racks are located at the left of each operator's position and packages stacked therein as they are sealed.

The confection supply is preferably delivered into the trough 2, through chutes 5—5, placed at intervals along the trough and extending downwardly from the floor above.

The apparatus thus far described takes care of the filling and sealing of the packages with confections. The selecting and inserting of the novelties into the packages is accomplished with the aid of the following parts:

Mounted above the elevated portion or working surface 3 of the table, is an endless track 6, consisting of sections of angle iron joined together to form straight portions extending lengthwise of the two sides of the table and semi-circular end portions as shown in Figure 1. The track is supported at intervals by means of brackets 7, fastened to vertical uprights 8, extending from floor to ceiling, and also serving as legs for the table. Braces 9 and 10, extend from the lower portions of the uprights for supporting the central portion of the table and the racks 4. Moreover, a high shelf 11 is mounted on the brackets 7, which may be conveniently used for holding a supply of empty packages.

At each end of the track are large sprocket wheels 12—12, keyed to vertical shafts 12^a, journaled at their ends in bearings (not shown) mounted on the table and ceiling. The sprocket wheels have a diameter approximating the distance between the straight portions of the track 6, and rotate in a horizontal plane. The sprocket wheels carry an endless chain or link belt 13, which travels just below the track 6.

Mounted on the track are a plurality of conveyor units or basket-like containers 14,

suspended from the lower ends of hangers 15, equipped with rollers 16, riding on the top edge of the track 6.

As clearly shown in Figure 3, each hanger 15, consists of a plate bent in U-shape at its upper end to form a journal support for the track roller 16. At its lower edge the plate is bent upwardly in U-shape forming a groove, having interlocking connection with an inverted U-shaped edge of a vertical plate 17, forming what might be termed the handle of the basket 14. The basket or container is open at its top and on one side, the latter facing outwardly toward the operators. To make the basket more accessible, the front side is partially closed by a shallow inclined wall 14^a with the side walls thereabove cut back on oblique lines. A U-strap 18 is secured to the sides of the basket and overlaps a flange along the lower edge of the plate 17. The interlocking connection between the hanger 15 and plate 17 allows the basket to be readily removed.

As already suggested there are a plurality of baskets and hangers which are spaced at given distances apart, each hanger being secured to the link chain 13 just above its lower end portion. Suitable driving means such as a motor is connected with one of the sprocket shafts 12^a for driving the conveyor system, the speed of travel of the chain and therefore of the baskets, being regulated with regard to the speed of the operators in filling and sealing of the packages.

As shown clearly in Figure 2, the path of the baskets is just above the rear edge of the elevated portion 3, of the table with its open side toward the operator's position. Thus, as the baskets pass each operator's position, the operator can reach into the basket and remove an article therein.

To illustrate the operation of an average sized system, it may be assumed that there are twenty-five (25) novelties to be inserted in the packages. Therefore, there will be twenty-five baskets arranged at equal distances apart along the track, each containing one kind of novelty. As each operator fills a package with the confection from the center trough of the table, and is ready to insert an article, one is removed from the basket that is passing immediately in front of the operator. Several baskets may pass an operator during the interval between the filling and sealing of the packages, but the system is so timed that during one complete circuit of the baskets, around the track, one series of baskets will be drawn from and on the next circuit another series, and so on. Thus, if the baskets were to be numbered, the 1st, 5th, 10th, etc., would be drawn from on one circuit; the 2nd, 6th, 11th, etc., on the next circuit; the 3rd, 7th, 12th, etc., on the next, and so on. In other words the

operator does not draw from successive baskets, but a different series during each circuit. Thus in five circuits of the conveyor, each basket has been drawn from, it follows, therefore, if the packages are shipped in cartons of twenty-five or less, there will be a different article in each package.

Inasmuch as the human element enters into the equation it is not contemplated that the system will operate with the mathematical precision indicated above, although a fair approximating can be realized, having once determined a rate of travel of the conveyor proportional to the average speed at which the operator can fill and seal the packages.

The advantages of the method of packing herein disclosed are therefore the systematic distribution of the novelties, and the convenient arrangement of conveyor which delivers the articles to the operator at a rate calculated to insure a varied selection throughout any given number of packages.

I claim as my invention:

1. In an apparatus for packaging confections, including the enclosure of an article in each package, the combination of a confection support and means for continuously conveying a supply of articles past said support and above the same.

2. In an apparatus for packaging confections, the combination of a confection support, a conveyor mounted above said confection support, and adapted to convey a supply of different articles continuously past a given point of said support, whereby a different article may be packed in each package of confections.

3. In an apparatus for packaging confections, the combination of a packing table, a source of confection supply accessible for packing from a position at said table, a travelling conveyor above said table, comprising a plurality of receptacles containing supplies of different articles and adapted to travel continuously past said packing position.

4. In an apparatus for packaging confections, a combination of an elongated confection support and means for conveying supplies of different articles continuously past several stations along the sides of and above said support.

5. In an apparatus for packaging confections, the combination of a confection support having a number of packing points, a conveyor supported above the support and adapted to continuously convey supplies of different articles past said packing points, at a rate of speed calculated to effect the maximum distribution of the articles packed with the confections.

6. In an apparatus for packaging confections, the combination of a table having a common confection supply accessible from positions along the sides thereof and an end-

less conveyor comprising a plurality of receptacles adapted to travel continuously past the said positions and containing different articles to be packed with the confections.

7. In a system for packing confections and inserting different articles in the packages, the combination of a table about which a plurality of operators are seated, the central portion thereof forming the confection supply space, and an endless conveyor supported above the table and comprising a plurality of receptacles each containing a supply of each article, and opening toward each operator.

8. In a system for packing confections the combination of a table divided into packing positions about its sides, and having a depressed central portion for the confection supply, an endless conveyor erected above the table and adjacent the packing positions, said conveyor comprising a plurality of suspended receptacles spaced apart at predetermined intervals and means for operating said conveyor.

In witness whereof, I hereunto subscribe my name this 6th day of September, A. D. 1923.

SIDNEY C. ANSHELL.