

C. H. JONES.
MECHANISM FOR GUIDING AND SPACING CANDY.
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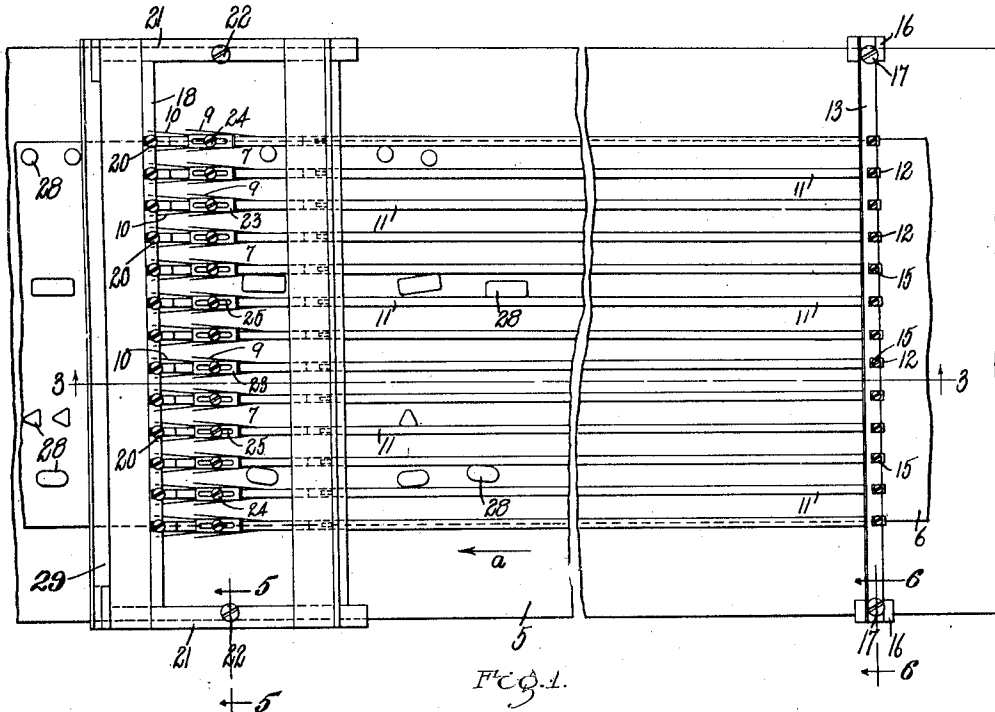
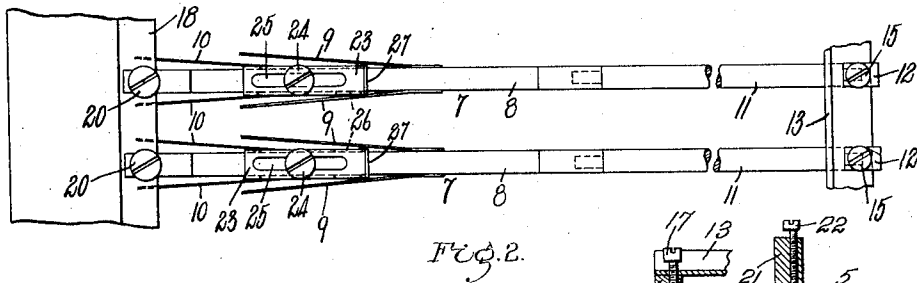
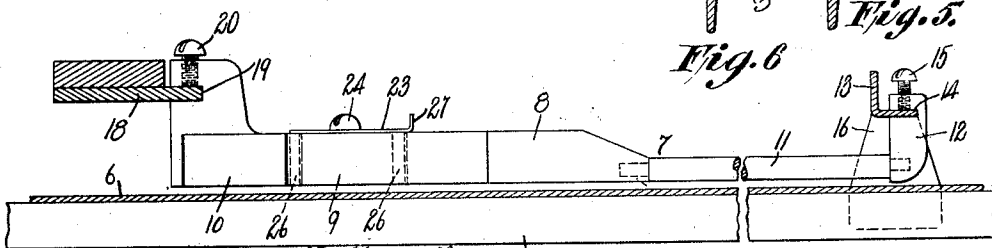
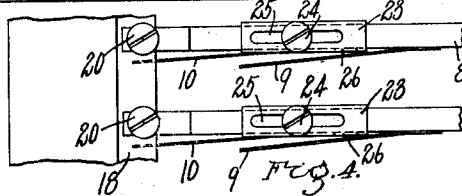
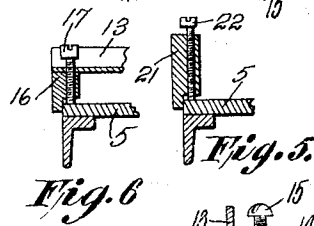


Fig. 6

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MECHANISM FOR GUIDING AND SPACING CANDY.

1,352,607.

Specification of Letters Patent. Patented Sept. 14, 1920.

Application filed June 9, 1919. Serial No. 302,729.

To all whom it may concern:

Be it known that I, CHARLES H. JONES, a citizen of the United States, residing at Medford, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Mechanism for Guiding and Spacing Candy, of which the following is a specification.

This invention relates to a mechanism for guiding and spacing candy.

The object of the invention is to provide a device for automatically guiding and spacing centers for candies which eventually receive liquid coverings to the end that said centers may be properly positioned and delivered to the instrumentalities where they receive their liquid covering.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings:

Figure 1 is a plan view of my improved mechanism for guiding and spacing candy.

Fig. 2 is an enlarged plan view illustrating two adjacent guide members.

Fig. 3 is an enlarged longitudinal sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a detail plan view similar to Fig. 2 illustrating a modified construction embodying my invention.

Fig. 5 is a detail section taken on the line 5—5 of Fig. 1. Fig. 6 is a detail section taken on the line 6—6 of Fig. 1.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 5 represents a bench over which an endless conveyer apron 6 is adapted to slide. A plurality of guide members 7 are arranged above the conveyer-apron 6 and extend longitudinally thereof, each of said guide members constituting a separate unit. Each of the guide members 7 includes a bracket 8, resilient wings 9 and 10 constituting spacing members fastened thereto, guide rods 11 and a bracket 12. The guide rods 11 extend for a considerable length longitudinally of the conveyer-apron and in close proximity thereto, the ends of said guide rods being supported in the brackets 8 and 12. The guide members 7 are supported at their forward ends by an angle iron 13, a slot 14 being provided in each of the brackets 12 and engaging the angle iron. A

screw 15 is provided to fasten the bracket 12 to the angle iron 13. The angle iron 13 extends transversely of the bench 5 above the conveyer-apron 6 and in turn is supported by side frames 16. The side frames 16 may be adjusted vertically relatively to the bench 5 by screws 17. At their rear ends the guide members are supported upon a plate 18, a slot 19 being provided in each of the brackets 8 which is adapted to fit said plate. Screws 20 are provided in the brackets 8 whereby said brackets may be fastened to the plate 18. The plate 18 extends transversely of the bench 5 above the conveyer-apron 6 and in turn is supported by side frames 21, said side frames being adjustable vertically relatively to the bench 5 by screws 22.

It is evident, therefore, that the guide members 7, as a unit may be adjusted both transversely of and longitudinally of the conveyer-apron 6 upon the plate 18 and angle iron 13 and said guide members are furthermore always maintained in parallel relation to the conveyer-apron by means of the adjusting screws 17 and 22.

The resilient wings 9 and 10 are fastened to each side of the brackets 8 by any desired method and said wings constitute resilient spacing members. The wings are arranged in sets, the corresponding wings of each set converging toward each other in the direction of travel of the conveyer-apron 6 which is in the direction designated by the arrow *a*. The wings 9 and 10 are constructed of very thin resilient spring metal and are adapted to engage and properly space centers 28 which are subsequently intended to be covered with a coating of chocolate or any other desired material in liquid form.

A slide 23 is adjustably mounted upon each of the brackets 8 and is fastened thereto by means of a screw 24 which passes through a slot 25 provided in said slide. The slide 23 is provided with a plurality of downwardly projecting extensions 26 which are adapted to simultaneously engage the surface of each of the resilient wings which is adjacent to the bracket 8 and thereby spread each of said wings relatively to the guide members. The slide 23 may be moved longitudinally of the brackets 8 beneath the head of the screw 24 by means of the upwardly extending lip 27.

A hinged cover 29, illustrated in its raised position in Fig. 1, is adapted to normally cover the mechanism when lowered.

The operation of my improved mechanism for guiding and spacing candy is as follows:

The centers 28, which may be of any desired shape or size and may be composed of any desired material ready to receive preferably a chocolate covering, are placed upon the conveyer-apron 6 between the guide rods 11 by operatives who are stationed at each side of the bench 5. The conveyer-apron 6 traveling in the direction of the arrow *a* Fig. 1 conveys the centers 28 in a more or less scattered and uneven manner until the said centers engage the front set of resilient wings 9. The wings 9 gently engage the sides of the centers and cooperate to position and space said centers as they pass therebetween. As they pass out of engagement with the resilient wings 9, they next come in contact with the rear set of wings 10 which act upon the centers in a similar manner as do the wings 9 and further tend to position and space said centers in such a manner that when they emerge from beneath the cover 29 and are conveyed to the instrumentalities where they are to receive their coating they are spaced in such a manner that said coating may be evenly applied thereto without interference caused by said fillings being too nearly spaced together.

The guide members 7 may be removed as a unit from their supports if necessary in order that one or more of said guide members may be eliminated and thereby a greater distance provided therebetween. At such times the guide members may be moved transversely of the conveyer-apron 6 upon the plate 18 and angle iron 13 until said guide members have been properly spaced.

The resilient wings 9 and 10 may be simultaneously adjusted to any desired angle by moving the slide 23 longitudinally upon the bracket 8.

The mechanism may be easily adapted to any size or shape of article to which it is intended to apply a liquid coating.

In Fig. 4 I have illustrated a modified construction embodying my invention wherein the resilient wings 9 and 10 are omitted upon one side of each guide member. At such times the remaining wings 9 and 10 cooperate with the opposite sides of the brackets 8 to properly space the centers 28. This method of spacing the centers is effective in certain cases.

Having thus specifically described my invention what I claim and desire to secure by Letters Patent is:

1. A device of the character described having, in combination, a conveyer-apron, a plurality of guide members extending longitudinally of said conveyer-apron, and

resilient spacing members mounted upon said guide members and having a continuous flat contacting surface adapted to guide and position articles passing therebetween.

2. A device of the character described having, in combination, a conveyer-apron, a plurality of parallel guide members extending longitudinally of said conveyer-apron and a plurality of resilient spacing members mounted upon said guide members each having a continuous flat contacting surface adapted to engage and automatically guide and position articles passing therebetween.

3. A device of the character described having, in combination, a conveyer-apron, a plurality of parallel guide members extending longitudinally of said conveyer-apron and flat resilient springs mounted upon said guide members adapted to yieldingly engage opposite sides of articles passing therebetween whereby said articles may be positioned relatively to each other.

4. A device of the character described having, in combination, an endless conveyer-apron, and a plurality of guide members extending longitudinally of said conveyer-apron, each of said guide members being independently adjustable transversely of said conveyer-apron, and all of said guide members being adjustable in unison vertically relatively to said conveyer apron.

5. A device of the character described having, in combination, an endless conveyer-apron and a plurality of guide members extending longitudinally of said conveyer-apron, each of said guide members being independently adjustable transversely of and longitudinally of said conveyer-apron, and all of said guide members being adjustable in unison vertically relatively to said conveyer apron.

6. A device of the character described having, in combination, an endless conveyer-apron and a plurality of guide members extending longitudinally of said conveyer-apron, each of said guide members including a plurality of flat springs constituting resilient wings constructed and arranged to engage opposite sides of articles passing therebetween whereby said articles may be positioned relatively to each other.

7. A device of the character described having, in combination, a conveyer-apron, a plurality of guide members extending longitudinally of said conveyer-apron and parallel thereto, a plurality of flat springs constituting resilient wings mounted upon said guide members and means to maintain said guide members in said parallel relation to said conveyer-apron.

8. A device of the character described having, in combination a conveyer-apron, a plurality of guide members extending longitudinally of said conveyer-apron out of

engagement therewith and parallel thereto, means whereby said guide members individually may be moved transversely of and longitudinally of said conveyer-apron and means to maintain said guide members in parallel relation to said conveyer-apron.

9. A device of the character described having, in combination, a conveyer-apron, a plurality of guide members extending longitudinally of said conveyer-apron and a plurality of flat springs constituting resilient wings mounted upon said guide members, said wings being constructed and arranged to successively engage and thereby position articles passing therebetween.

10. A device of the character described having, in combination, a conveyer-apron, a plurality of guide members extending longitudinally of said conveyer-apron, a plurality of resilient wings mounted upon said guide members and means to simultaneously spread said resilient wings relatively to said guide members.

11. A device of the character described having, in combination, a conveyer-apron, a plurality of parallel guide members extending longitudinally of said conveyer-apron, a plurality of resilient wings mounted upon each of said guide members, and a slide adjustably mounted upon each of said guide members, said slide being provided with means adapted to simultaneously engage each of said resilient wings whereby

said wings may be spread relatively to said guide members.

12. A device of the character described having, in combination, a plurality of parallel guide members, a plurality of flat springs constituting resilient wings mounted upon said guide members and means adapted to move articles between said guide members and into contact with said wings whereby said articles may be positioned.

13. A device of the character described having, in combination, a pair of oppositely disposed resilient flat springs constituting guide members converging toward each other and means to move articles between said guide members whereby said articles may be positioned.

14. A device of the character described having, in combination, a plurality of parallel guide members, a flat spring constituting a resilient spacing member fast to the side of one of said guide members and oppositely disposed to the other of said guide members and means to move articles between said resilient spacing member and the opposite guide member whereby said articles may be positioned.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES H. JONES.

Witnesses:

FRANKLIN E. LOW,
HERMAN R. HOFFMAN.