No. 796,528. PATENTED AUG. 8, 1905.

R. E. POLLOCK.

CANDY SPINNING MACHINE.

APPLICATION FILED APR. 10, 1905.

Fig. 1.

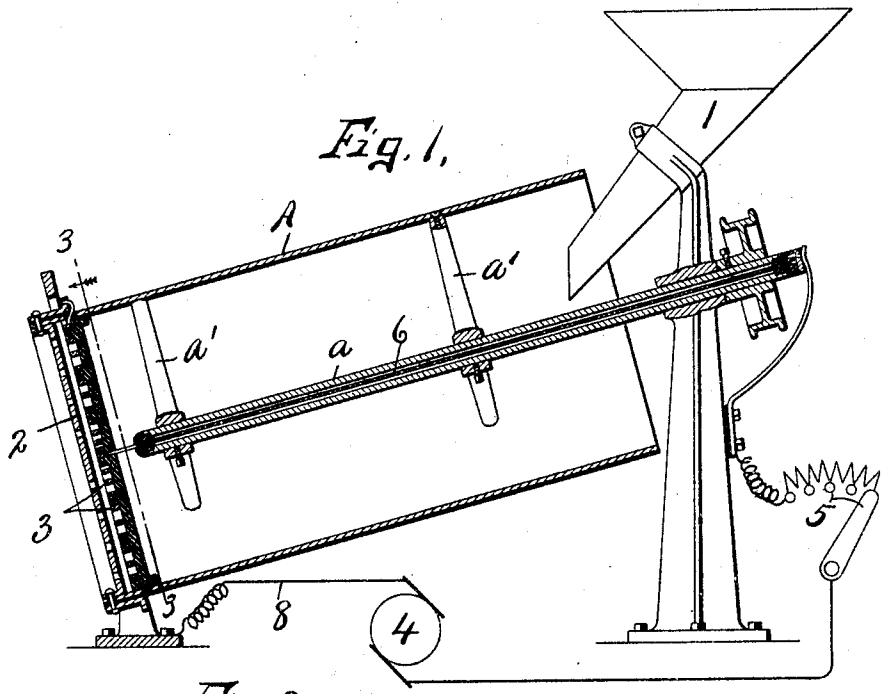


Fig. 3.

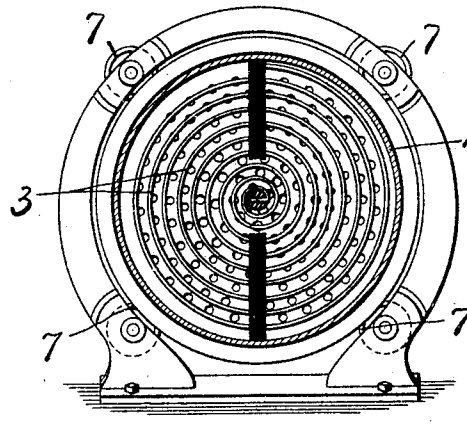
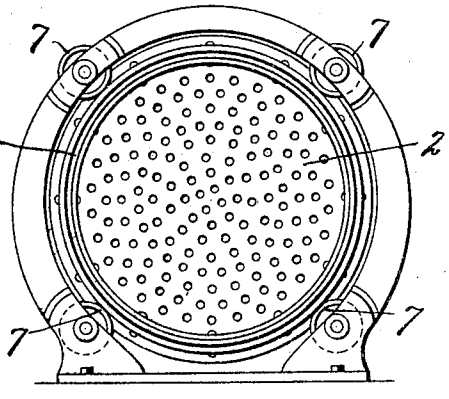


Fig. 2.



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RALPH E. POLLOCK, OF SYRACUSE, NEW YORK.

CANDY-SPINNING MACHINE.

No. 796,528. Specification of Letters Patent. Patented Aug. 8, 1905.

Application filed April 10, 1905. Serial No. 254,818.

To all whom it may concern:

Be it known that I, RALPH E. POLLOCK, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Candy-Spinning Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in candy-spinning machines of the class set forth in the patent to Morrison and Wharton, No. 717,756, in which the sugar is introduced into a revolving head or receptacle and is driven by centrifugal force through an electrical band or heater and thence through perforations in the periphery of the receptacle and emerges in a thread or gauze like feathery form.

My object is to obviate the disadvantage of being obliged to constantly attend the machine and to concentrate the spun candy within a comparatively small space without necessitating close watching or removal of the product as fast as it accumulates. This, briefly stated, is accomplished by providing an inclined cylinder open at its highest end and having its lowest end perforated and provided with an electric heater in the form of an electrically-resistive coil of suitable material lying flatwise against or close to the perforated end wall, so that the sugar or other candy-base which is introduced into the open end of the cylinder is caused to gravitate or to be forced by the revolution of the cylinder against and through the heating-coil and thence through the perforations in the adjacent end of the cylinder, where it emerges in the form of a light feathery product, which is the result sought.

Other objects and uses relating to the specific construction and arrangement of the component parts of this invention will be brought out in the following description.

In the drawings, Figure 1 is a longitudinal vertical sectional view of my improved candy-spinning machine, showing the resistive coil or heater as electrically connected in a dynamo-circuit and also showing the hopper through which the candy-base is fed into the open or elevated end of the cylinder. Fig. 2 is an end view of the perforated or low end of the cylinder. Fig. 3 is a sectional view through the cylinder looking toward the electric coil and perforated end of the cylinder.

A represents an elongated cylinder of sheet metal or other suitable material, said cylinder being disposed in an inclined position—that is, inclined from a horizontal position at a suitable angle to cause the material which is fed into its higher end to gravitate or to be readily forced by the rotation of the cylinder toward its low end. This cylinder is preferably mounted upon a hollow shaft *a*, having radial spokes *a'*, which unite the cylinder to the shaft. The higher end of the cylinder is left open for receiving one end of a suitable hopper or feed-conduit 1. The low end of the cylinder is provided with a perforated end wall 2, in proximity to which is arranged flatwise an electric resistive coil 3, which is electrically connected in circuit with a source of electric energy, as a dynamo 4 and a rheostat 5, one end of the coil being connected to a wire 6, which passes through the tubular shaft *a*, and the other end of the coil is electrically connected to the interior of the cylinder, which is in electrical connection with the dynamo through the medium of a suitable brush or roller-bearing 7 and a wire 8.

The cylinder A is rotated at a suitable speed by any available driving means, not necessary to herein illustrate or describe, but which is connected to the shaft *a*. The inner end of this shaft preferably terminates some distance from the perforated end wall 2 and also from the electric heater-coil 3, which coil is therefore arranged flatwise with reference to the perforated head or end 2 and between said perforated head and the adjacent end of the shaft *a*. The object of leaving this space at the inner end of the shaft *a* is to permit an even distribution of the sugar which is fed into the cylinder through the hopper 1 across the entire area of the heater-coil and perforated end of the cylinder with as little obstruction as possible.

In the operation of my invention the cylinder and electric heating-coil are caused to revolve at a comparatively high rate of speed, during which the sugar or other candy-base is fed into the open high end of the cylinder through the conduit 1 and falls upon the lower side of the cylinder, where it is carried up and distributed along the sides of the cylinder and at the same time is being carried downwardly toward the heater by gravity. This sugar or other candy-base is thus forced by the revolution of the cylinder and by its own gravity against and through the electric heating-coil, where it is converted into a semiliquid or syrup form and then expelled through the fine perfo-

rations in the end wall 2, where it emerges in a finely-divided state into the open air, which is more or less heated in the immediate vicinity of the heating-coil, thereby causing the dehydration of the finely-divided syrup particles and immediately converts such particles into an adhesive, or rather cohesive, feathery or gauze-like product possessing substantially all the properties of the original sugar-crystals with the greater part of the moisture removed.

It will be observed that by treating the sugar or other candy-base in the manner just described—that is, in a revolving inclined cylinder having the heater at the lowest end of the cylinder and in proximity to the perforated end wall, which is also at the low end of the cylinder—the spun candy is concentrated within the limits of the perforated end wall, where it emerges and gravitates into a suitable receptacle. (Not shown, but which might be located just beneath the low end of the cylinder.) It is therefore clearly apparent that this machine carries out the essential objects of my invention—namely, to concentrate the product within certain limits at the low end of the machine, thereby avoiding the necessity for careful watchfulness in order to remove the spun candy as fast as it collects, as in the machine of the patent referred to.

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

1. In a candy-spinning machine, the combination of a revolving cylinder disposed in an inclined position with reference to a horizontal plane and having its higher end open and its lower end perforated, means to feed the candy-base into the open high end of the cylinder and an electric resistive coil disposed flatwise with reference to and in proximity to the perforated end wall, and means to rotate the cylinder.

2. In a candy-spinning machine, a cylinder revoluble about an inclined axis, said cylinder being provided with a perforated wall at or near its low end, and a heater arranged in proximity to the perforated end wall and within the cylinder.

In witness whereof I have hereunto set my hand this 1st day of April, 1905.

RALPH E. POLLOCK.

Witnesses:
H. E. CHASE,
MILDRED M. NOTT.