No. 792,710. PATENTED JUNE 20, 1905.

A. KOCHS.

MACHINE FOR MAKING SILK CANDY.

APPLICATION FILED DEC. 5, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

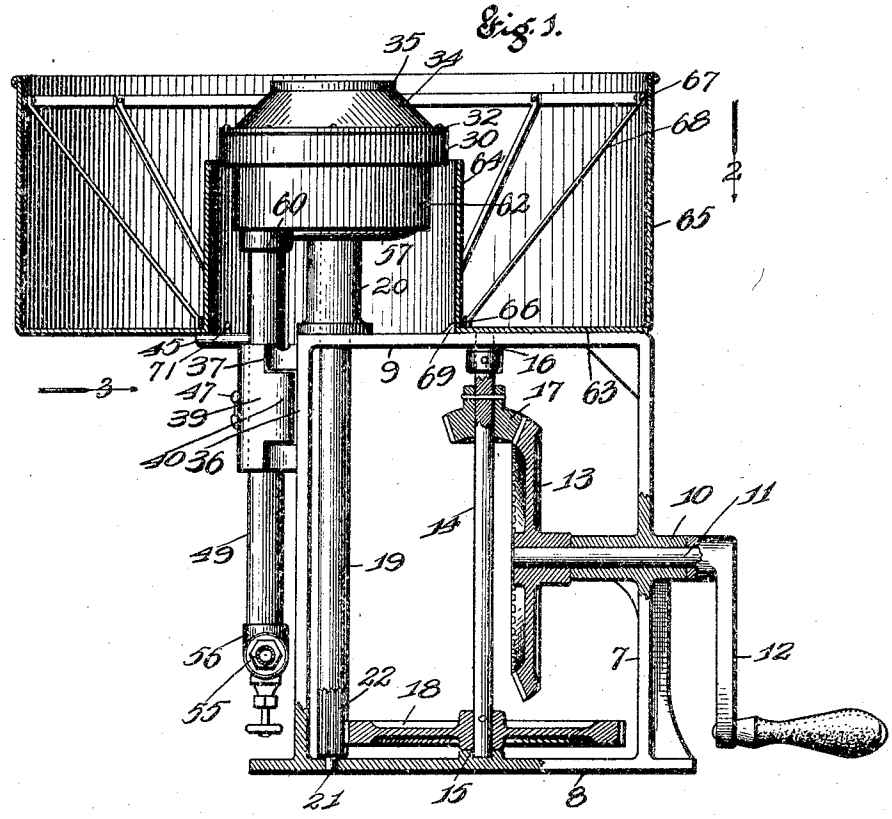
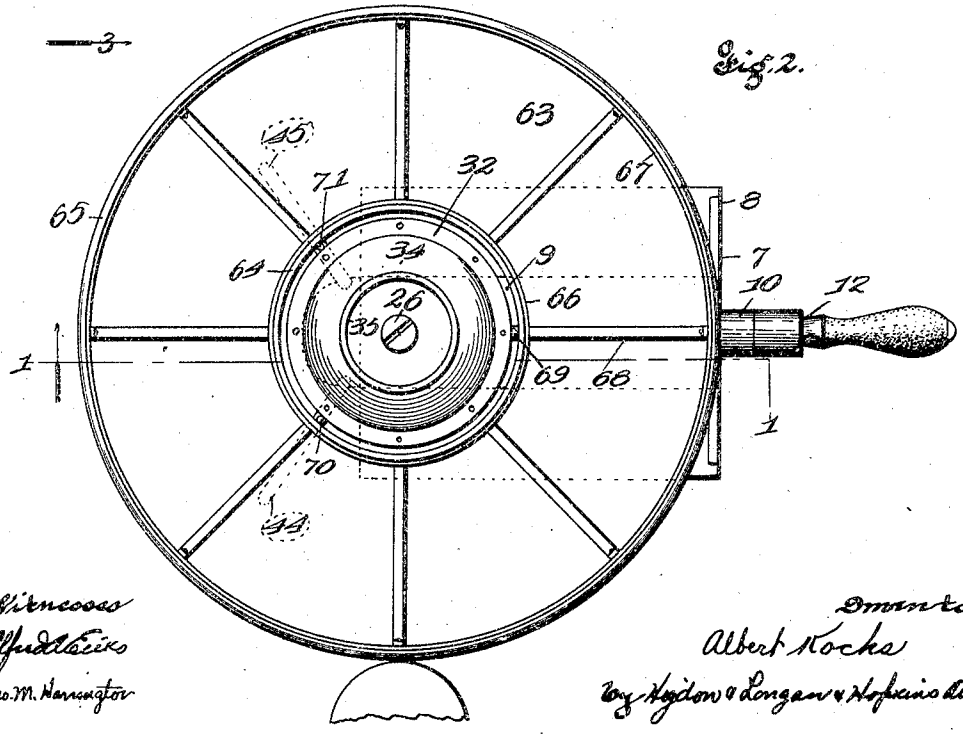


Fig. 2.



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Fig. 3

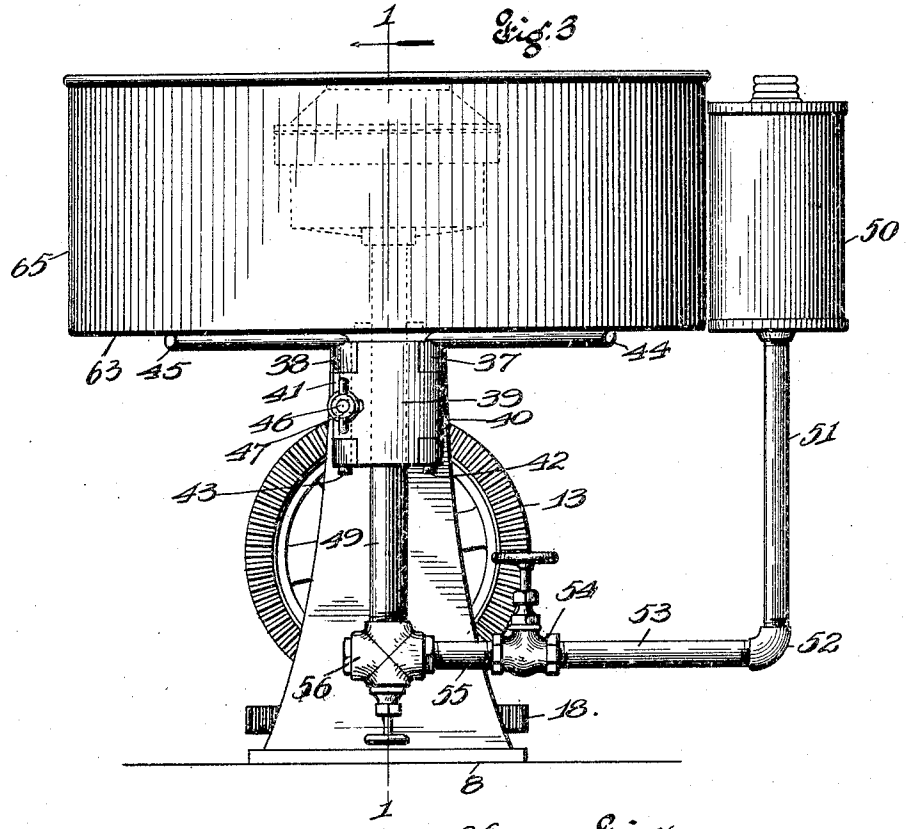


Fig. 4

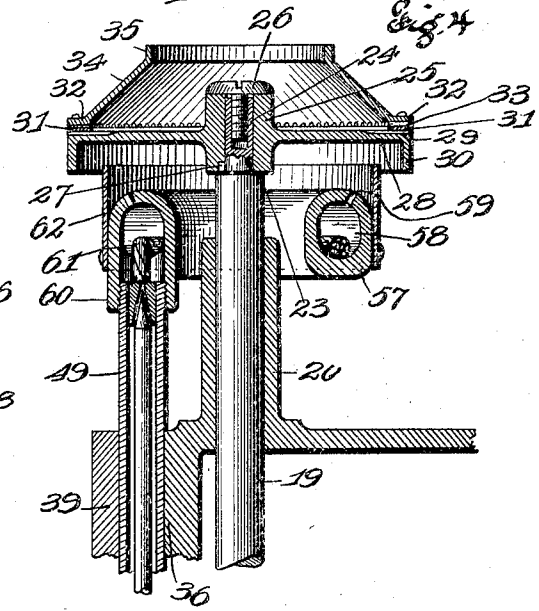


Fig. 5

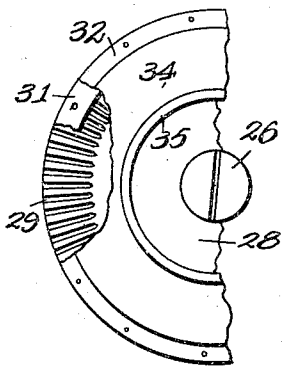
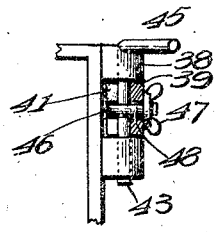


Fig. 6



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UNITED STATES PATENT OFFICE.

ALBERT KOCHS, OF ST. LOUIS, MISSOURI.

MACHINE FOR MAKING SILK-CANDY.

SPECIFICATION forming part of Letters Patent No. 792,710, dated June 20, 1905.

Application filed December 5, 1904. Serial No. 235,620.

To all whom it may concern:

Be it known that I, ALBERT KOCHS, a citizen of the United States, and a resident of St. Louis, Missouri, have invented certain new and useful Improvements in Machines for Making Silk-Candy, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in machines for making silk-candy; and it consists of the novel features herein shown, described, and claimed.

In the drawings, Figure 1 is a vertical central section on the lines 1 1 of Figs. 2 and 3 and looking in the direction indicated by the arrows. Fig. 2 is a top plan view as seen looking in the direction indicated by the arrow 2 in Fig. 1. Fig. 3 is a side elevation as seen looking in the direction indicated by the arrows 3 in Figs. 1 and 2. Fig. 4 is an enlarged sectional detail of the burner and spinner on the same plane as Fig. 1, the other parts being broken away in the middle to economize space. Fig. 5 is a top plan view of the spinner shown in Fig. 4, parts being broken away to show the construction and other parts being broken away to economize space. Fig. 6 is a detail of the clamping mechanism.

Referring to the drawings in detail, the vertical posts 6 and 7 extend upwardly from the ends of the base 8, the upper ends of said posts being connected by the brace 9, said parts 6, 7, 8, and 9 being cast integral. The bearing-block 10 is formed integral with the post 7 near its center, and the driving-shaft 11 is mounted in the bearing-block, there being a handle 12 upon the outer end of the driving-shaft and a beveled gear 13 upon the inner end of the driving-shaft. A counter-shaft 14 is mounted vertically in the bearing 15 in the base 8 and the bearing 16 in the brace 9, there being a beveled pinion 17 upon the upper end of the counter-shaft in mesh with the driving-gear 13 and there being a large spur-gear 18 upon the lower end of the counter-shaft. The spinner-shaft 19 extends through the bearing-block 20, said bearing-block 20 extending upwardly from the brace 9, and the lower end of the shaft is reduced in size to form an end-thrust bearing upon the base 8, the pintle 21 extending from the end of the shaft through an opening in the base and a shoulder between the pintle and the shaft resting upon the base. Gear-teeth 22 are formed upon the lower end of the shaft 19 to mesh with the large spur-gear 18, so as to drive the shaft at a high rate of speed. The upper end of the spinner-shaft 19 is reduced in size to form the shoulder 23 and the pintle 24. The spinner-head 25 is mounted upon the pintle against the shoulder, and the cap-screw 26 is screw-seated in the upper end of the pintle to hold the spinner-head firmly in position, there being a key 27 to hold the spinner-head against rotation relative to the shaft. The spinner-head web 28 extends outwardly from the head, there being radial grooves 29 in the upper face of the web near its periphery. A heat-retaining flange 30 extends downwardly from the periphery of the web 28. A parting-ring 31 is mounted upon the upper face of the web 28 over the grooves 29.

The sugar-receptacle consists of the spinner-head, the web 28, having the grooves 29, the parting-ring 31, the flange 32, mounted upon the ring 31, having grooves 33 in its lower face, the inverted-funnel-shaped wall 34, extending upwardly and inwardly from the flange 32, and the vertical wall 35, extending upwardly from the funnel-shaped wall 34. By using the parting-ring 31 and grooving the upper face of the web 28 and the lower face of the flange 32 I secure a double series of discharge-openings.

The upper outer face of the post 6 is designed to form a rigid clamping-plate 36. Ears 37 extend from one side of the clamping-plate and ears 38 extend from the other side of the clamping-plate. The swinging clamping-plate 39 has an ear 40, mounted between the ears 37, and a latch member 41, mounted between the ears 38. The hinge-pin 42 extends through the ears 37 and 40, and the hinge-pin 43 extends through the ears 38. The supporting-arms 44 and 45 extend radially from the upper ends of the hinge-pins 42 and 43, there being notches in the upper ears 37 and 38 to hold said supporting-arms in their radial

positions. A screw-eye 46 is mounted upon the hinge-pin 43, and a thumb-nut 47 is screw-seated upon the end of the screw-eye, there being a notch 48 in the latch member 41 to receive the screw-eye, so that the thumb-nut 47 is swung out of position, the latch member 41 swung into position, then the screw-eye swung backwardly into the notch 48, and the thumb-nut tightened to hold the swinging clamping member rigidly in position. The burner-supporting pipe 49 is mounted between the clamping-plates 39 and 36, so that the burner may be adjusted up and down by loosening the thumb-nut 47 and moving the pipe 49 up and down. The fuel-tank 50 is mounted in any convenient position. The supply-pipe 51 extends downwardly from the tank to the elbow 52. The pipe 53 extends from the elbow 52 to the cut-off valve 54. A nipple 55 connects the cut-off valve 54 to the angle-valve 56, said angle-valve being connected to the lower end of the pipe 49. The burner 57 is in the form of an annular ring mounted horizontally around the bearing-block 20 under the web 28, said ring being cored to form the vaporizing-chamber 58 and there being gas-holes 59 leading upwardly from the chamber. A nipple 60 forms a connection between the burner and the pipe 49. A wick 61 is inserted through the nipple 60 into the chamber 58 and downwardly into the pipe 49. A shield 62 extends from the burner 57 upwardly outside of the openings 59 and inside of the flange 30 to prevent the flame from blowing out. As before suggested, the burner may be adjusted up and down. In this form of burner I prefer to use alcohol. The flame will beat against the lower side of the web 28 and heat the sugar in the sugar-receptacle.

The candy-receptacle comprises the bottom 63, having a central opening large enough to allow the bottom to pass downwardly around the sugar-receptacle, the shield 64 extending upwardly from the central opening of the bottom to a point above the lower edge of the flange 30, so as to protect the candy from the fire, the outer wall 65 extending upwardly from the outer edge of the bottom 63 to a point above the top of the sugar-receptacle, and a removable frame comprising the ring 66 fitting loosely around the shield 64, the ring 67 fitting loosely inside of the outer wall 65, and the inclined bars 68 connecting the ring 66 to the ring 67. As the machine is operated and the candy spun out into the receiver it will be caught by the bars 68, and when desired the whole mass of silken candy may be removed from the receiver by removing this framework.

The operation is obvious.

A lug 69 extends upwardly from the brace 9, and lugs 70 and 71 extend upwardly from the supporting-arms 44 and 45, said lugs engaging inside of the shield 64 to hold the candy-receptacle in its central position relative to the sugar-receptacle.

I claim—

1. In a machine for making silk-candy: a spinner-shaft mounted vertically; a spinner-head fixed upon the upper end of the shaft; a web extending outwardly from the head and having grooves in its upper face; a parting-ring mounted upon said web over said grooves; a flange having grooves in its lower face mounted upon the parting-ring; and a wall extending upwardly from the flange to complete the sugar-receptacle; substantially as specified.

2. In a machine for making silk-candy: a suitable sugar-receptacle adapted to spin candy; a candy-receptacle in position to receive the candy from the sugar-receptacle; and a removable frame in the candy-receptacle adapted to catch the candy, so that the candy may be removed from the receptacle by removing the frame; substantially as specified.

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

ALBERT KOCHS.

Witnesses:
EDWARD E. LONGAN,
CALVIN S. MORRIS.