No. 655,545. Patented Aug. 7, 1900.

W. S. BRISTOL.

CAN TOPPER AND WIPER.

(Application filed Mar. 19, 1900.)

(No Model.)

Fig. 1.

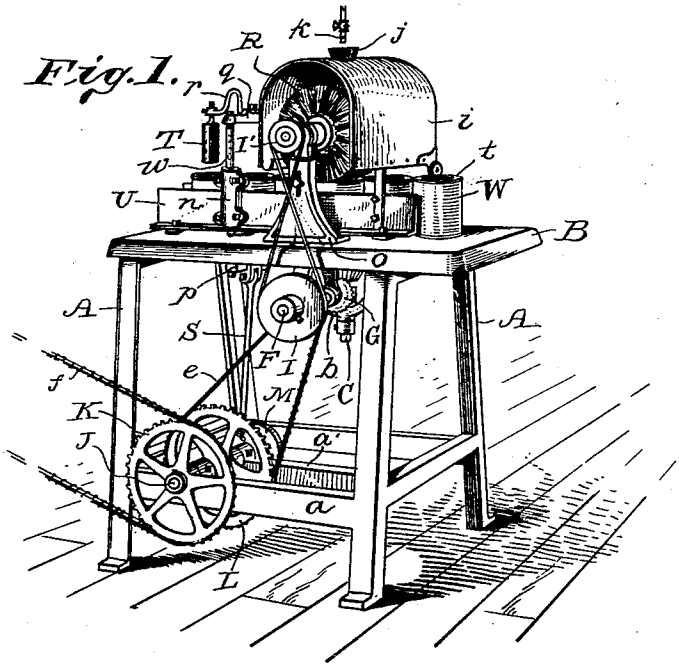


Fig. 2.

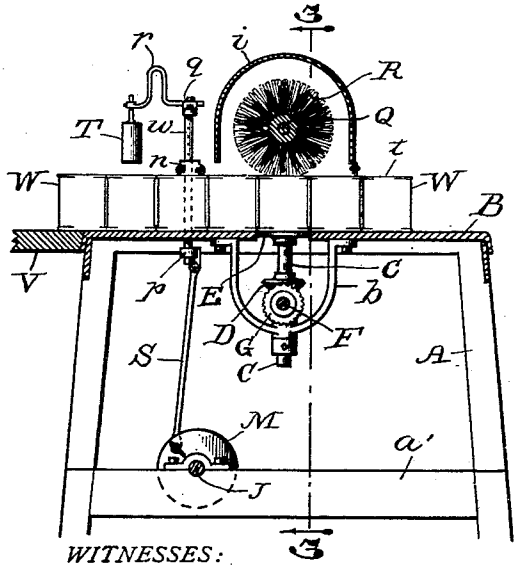
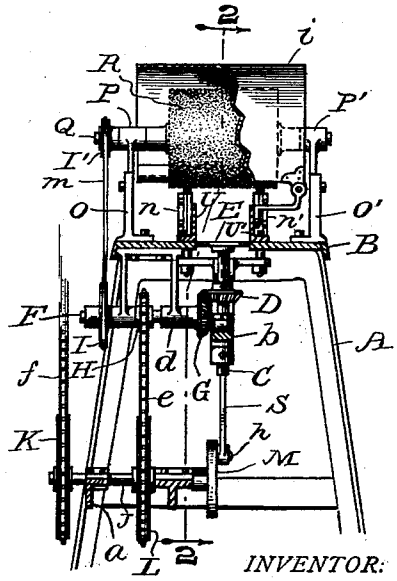


Fig. 3.



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CAN TOPPER AND WIPER.

SPECIFICATION forming part of Letters Patent No. 655,545, dated August 7, 1900.

Application filed March 19, 1900. Serial No. 9,204. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. BRISTOL, a citizen of the United States, residing at Flat Rock, in the county of Shelby and State of Indiana, have invented certain new and useful Improvements in Can Toppers and Wipers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to a machine that is designed to be made use of in establishments where fruits or vegetables or other articles are canned, and is usually employed in connection with a filling-machine for "topping" or pushing down portions of the contents of the cans that may protrude above the top of the can after it has been filled and for "wiping" or brushing the tops of the cans preparatory to applying the caps.

The object of the invention is to provide an inexpensive automatically-operating machine of the above-described character which shall effectually wipe the tops of the cans completely at one operation, so that the caps may be properly attached thereto.

The invention consists in a table provided with a rotating section, whereby each can may be be rotated, so that all parts of the top may be accessible, a rotating brush, a topper for preparing a filled can for wiping, and means whereby the several parts may be operated; and it consists also in the parts and combination and arrangement of parts hereinafter particularly described and claimed.

Referring to the drawings, Figure 1 represents my invention complete in a perspective view; Fig. 2, a vertical longitudinal sectional view approximately on a line 2 2 in Fig. 3, and Fig. 3 a vertical transverse sectional view approximately on a line 3 3 in Fig. 2.

Similar letters of reference in the several figures of the drawings designate similar parts.

In construction I provide suitable legs A and frame-beams *a a'*, the legs supporting an oblong table B at a proper height to serve as a continuance of the table V of a filler, so that cans from the filler may be pushed therefrom onto the table B and under the topper device and the wiping-brush. At about the center of the table B is a hanger *b*, depending therefrom, in which is journaled and supported a vertically-disposed shaft C, to which a miter gear-wheel D is attached. At the upper end of the shaft C a circular plate or disk E is secured thereto, which is fitted into a suitable aperture in the table B and forms a rotative section thereof, the upper faces of which are in the same plane, horizontally disposed. Hangers *d* also depend from the table B, at one side thereof, and support a rotative journaled horizontal shaft F, to which a miter gear-wheel G is secured and meshing with the wheel D. A sprocket-wheel H is secured to the shaft F under the table B, and at the outer end of the same shaft a belt-pulley is secured thereto. A shaft J is journaled upon the beams *a a'* in a line parallel to the shaft F and has a sprocket-wheel K secured to the outer end thereof, over which runs a chain *f*, which may be operated by suitable connections in unison with a can-filling machine. A sprocket-wheel L is also attached to the shaft J, and a chain *e* runs over this and the wheel H to operate the shaft F and the disk E. At the inner end of the shaft J is a disk M, having a crank-pin *h*.

Upon the top of the table B is secured a pair of standards O O', to which are attached vertically-adjustable journal-boxes P P', in which a revoluble shaft Q, having a belt-pulley I' at one end, is journaled. A belt *m* runs over the pulleys I and I', by which the latter are driven. A circular brush R is attached to the shaft Q centrally above the disk E, so that it may have contact with the top *t* of a can W, which may be placed upon the disk. A hood *i* is suitably supported, preferably on hinges, so as to extend over the brush and prevent splashing, and it has a funnel *j* and inlet at its upper portion, over which a pipe *k* is arranged, which may be connected with any suitable reservoir for supplying water to the brush for preventing clogging of the same with the liquids and solids removed from the cans.

Upon the top of the table B, extending longitudinally thereof, are a pair of vertically-disposed plates U U' at either side of the disk E, forming together a "trough" or chan-

nel, in which the cans are guided to and across the rotative section of the table and under the wiping-brush as well as centrally under the plunger-like topper T, which is mounted in advance of the brush R and adjustably attached to an arm r, which is adjustably attached to a cross-head q, the latter being attached to a pair of rods w, working in vertically-secured guides n n' and attached to a cross-head p at the under side of the table B, the latter cross-head being connected by a pitman S to the crank-pin h.

In practical use the machine is suitably set in motion, preferably by the can-filler machine, and as the cans are pushed from the filler onto the table B into the channel thereon they pass first under the topper T, the arrangement being such that when a can shall have reached this position it, together with the train of cans, stops momentarily while a can is being filled, and at the same time the topper T descends a suitable distance to push down any protruding substance, such as a tomato, and then ascends, the train then advancing until a can has reached the circular section E, and, stopping there momentarily while other cans are being filled and topped, is rotated, while the brush R is wiping the top. Then the train of cans moves on, as before, intermittently.

It will be observed that while the train of cans moves intermittently upon the machine, this motion being given by the filler-machine, the wiper mechanism moves continuously, the topper proper being geared to operate in accordance with the intermittent motion of the cans.

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

1. A can-wiper including a table having a circular aperture in the top thereof, a rotative disk mounted in the aperture, a wiper, and guides leading to the rotative disk.

2. A can-wiper including a table having a circular aperture in the top thereof, a circular rotative disk or plate mounted in the aperture, a rotative brush, and a guide-plate at two opposite sides of the rotative disk.

3. A can topper and wiper comprising a table having a circular aperture in the top thereof, a circular rotative disk or plate mounted in the aperture, a wiper, a channel leading to the rotative disk, and a topper mounted above the channel.

4. A can topper and wiper comprising a table having a circular aperture in the top thereof, a circular rotative disk or plate mounted in the aperture, a vertical shaft supporting and operating the circular disk, a wiper, guides leading to the rotative disk, and a topper mounted in proximity to the rotative disk.

5. In a can topper and wiper, the combination with the table of the filler, of a table continuing from the table of the filler and provided with a rotating section, a channel leading from the filler to the rotating section, a rotating brush mounted above the rotating section, and a topper operatively mounted above the channel between the filler and the rotating section.

6. In a topper and wiper, the combination of the table, the channel at the top of the table, a rotating plate in the channel and in the plane with the table whereby a can may be rotated, a rotating brush mounted above the rotating plate, and the topper mounted operatively in advance of the rotating plate above the channel.

7. In a topper and wiper, the combination of the table, the channel, the rotating plate in the channel, the rotating brush above the rotating plate, the topper mounted and working above the channel in advance of the rotating plate, the hood covering the rotating brush, the water-jet pipe mounted over the brush, the vertical shaft carrying the rotating plate and having the miter-wheel secured thereto, the hanger supporting the vertical shaft, the horizontal shaft having the miter-wheel engaging the miter-wheel on the vertical shaft, the sprocket-wheel on the horizontal shaft, the chain whereby said sprocket-wheel may be driven, the pulley on the horizontal shaft, the pulley on the brush-shaft, the belt connecting said pulleys, and means whereby the topper may be operated in unison with the rotating plate, substantially as set forth.

8. In a can topper and wiper, the combination with the table of a can-filler, of a table continuing from the table of the filler and having a circular aperture in the top thereof, a rotative disk or plate mounted in the aperture, a guide-channel leading from the filler to the rotative disk, a rotative brush mounted above the rotative disk, and a topper operatively mounted above the guide-channel between the filler-table and the rotative disk.

9. In a can-wiper, the combination with the table of a can-filler, of a table continuing from the table of the filler and provided with a rotative disk or plate mounted with its upper face in the plane with the plane of the upper face of the table, a wiper mounted above the rotative disk, and guides leading from the filler-table to the rotative disk.

10. In a can-wiper, the combination of the table, the guides, a rotating plate mounted between the guides, a wiper mounted above the rotative plate, the hood, the vertical shaft attached to the rotative plate, means for actuating the vertical shaft, and means for actuating the wiper.

11. In a can topper and wiper, the combination of the table, the channel on the table, a rotative plate mounted in the channel with its top surface in the plane with the top surface of the table, the rotative brush mounted above the rotative plate, the topper mounted operatively above the channel, the hood, the vertical shaft attached to the rotative plate and having the miter-wheel secured thereto,

the hanger supporting the vertical shaft, the horizontal shaft having the miter-wheel engaging the miter-wheel on the vertical shaft, the sprocket-wheel on the horizontal shaft, the chain whereby said sprocket-wheel may be driven, the pulley on the horizontal shaft, the pulley on the brush-shaft, the belt connecting said pulleys, and means whereby the topper may be operated.

12. In a can topper and wiper, the combination of the frame, the table, the channel, the rotative plate, the rotative brush, the topper-plunger, the cross-heads, the rods connecting the cross-heads, guides for the rods, the pitman connected to a cross-head, the shaft mounted on the frame-beams and having a sprocket-wheel thereon, the driving-chain, the crank connected to the pitman, and the means whereby said shaft may transmit motion to said rotative plate and said rotative brush, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM S. BRISTOL.

Witnesses:
WM. C. THOMPSON,
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