

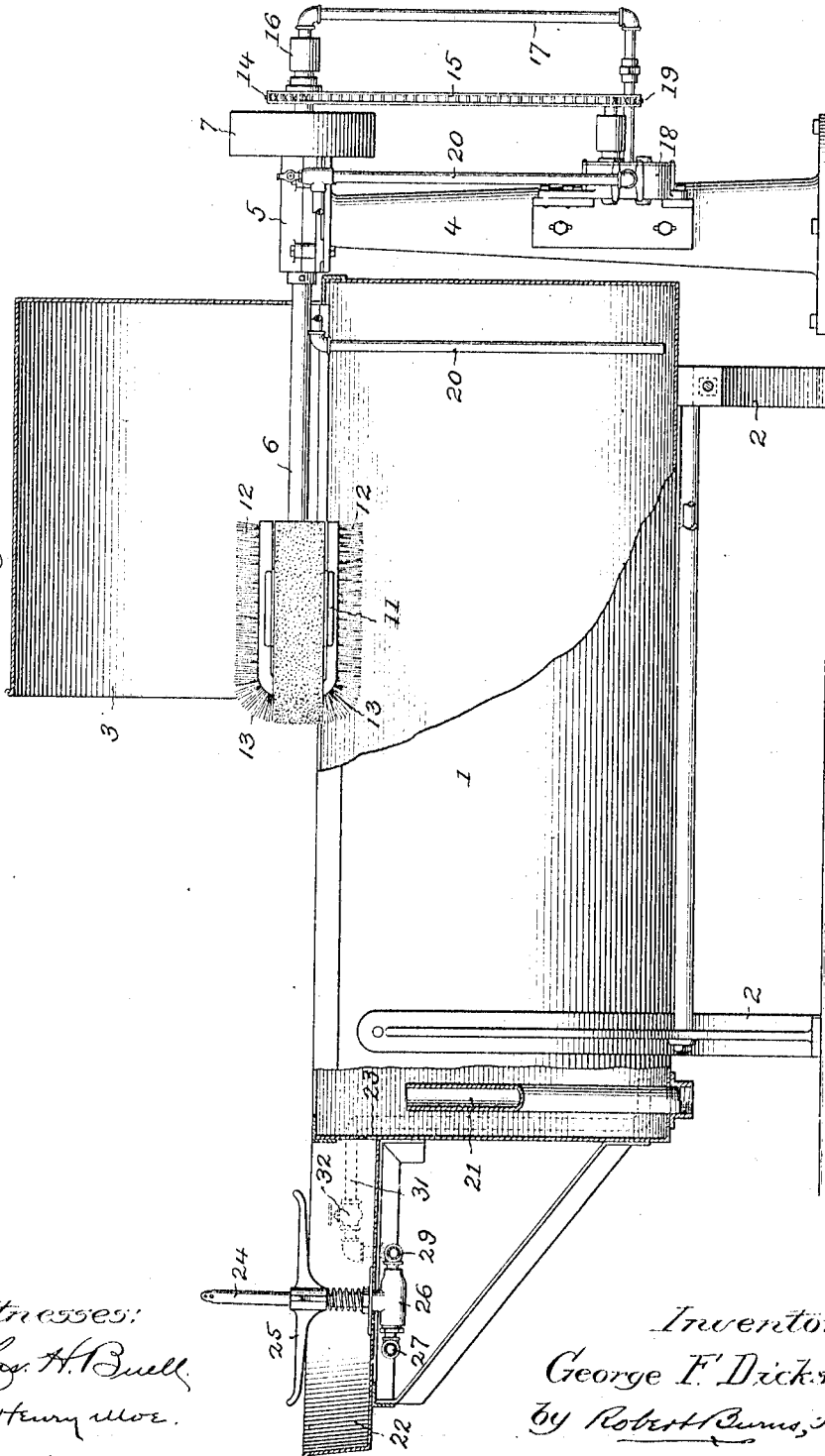
G. F. DICKSON.
CAN WASHING MACHINE.
APPLICATION FILED APR. 17, 1911.

1,040,248.

Patented Oct. 1, 1912.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
Chas. H. Bull.
Henry Moore.

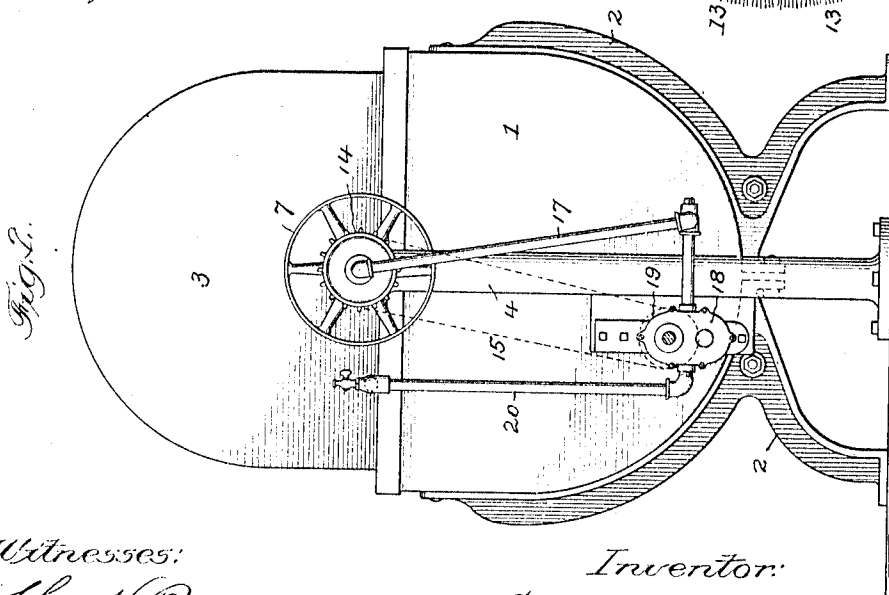
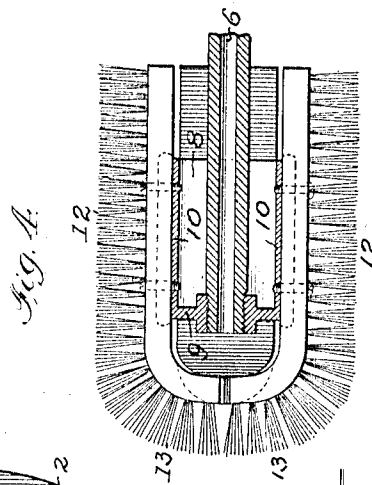
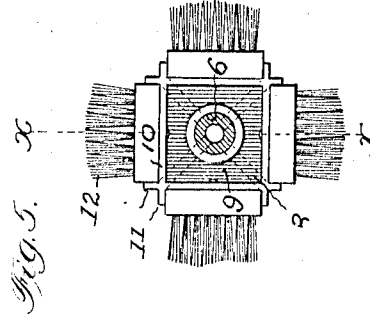
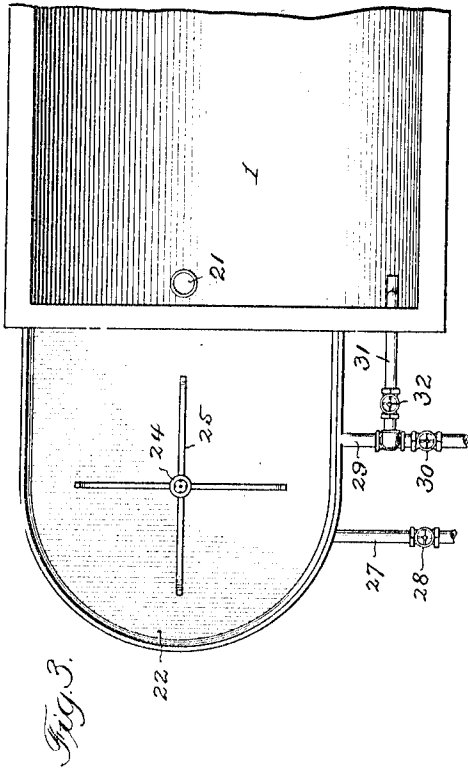
Inventor:
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by Robert Burns, Atty.

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

GEORGE F. DICKSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO CONFECTIONERS AND BAKERS SUPPLY CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

CAN-WASHING MACHINE.

1,040,248.

Specification of Letters Patent.

Patented Oct. 1, 1912.

Application filed April 17, 1911. Serial No. 621,438.

To all whom it may concern:

Be it known that I, GEORGE F. DICKSON, a citizen of the United States of America, and a resident of Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Can-Washing Machines, of which the following is a specification.

This invention relates to that type of apparatus for washing milk cans and the like, in which a revolving brush is mounted horizontally above the water tank and having provisions whereby a supply of water is continually fed to the brush in the practical use of the apparatus. And the present improvement has for its object to provide a simple and efficient structural formation and combination of parts in a combined can washing, rinsing and sterilizing apparatus, whereby the wash water is constantly and uniformly supplied to the revolving brush during the operation of the apparatus, and with which the desired temperature during the different stages of the operation is readily and efficiently controlled and regulated, all as will hereinafter more fully appear.

In the accompanying drawings:—Figure 1, is a side elevation, with parts in section, of an apparatus embodying the present invention. Fig. 2, is an end elevation. Fig. 3, is a detail plan view of an end of the apparatus. Fig. 4, is an enlarged detail section, on line *x—x*, Fig. 1, of the revoluble brush head. Fig. 5, is an end elevation of the same, with the tubular carrying shaft in section.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 represents a horizontal water trough or tub, of the usual open top construction, provided with legs 2 by which it is supported above the floor.

3 is a hood arranged above an end portion of the tub 1, and formed with a closed end head having adjacent relation to an end head of the tub 1, and constituting a vertical extension of the same. Said hood is adapted to encompass the hereinafter described revolving brush and its forward end is open to permit the ready introduction of the milk can or vessel into position for washing.

4 is a standard arranged centrally at one end of the tub 1, and provided with a lon-

gitudinal bearing box 5, at top for the tubular shaft of the revoluble brush hereinafter described.

6 is the longitudinal brush carrying shaft above referred to. Said shaft is journaled in the box 5 aforesaid, with its forward brush carrying end extending into the inclosure formed by the hood 3 aforesaid and the adjacent portion of the tub 1. At its rear end said shaft projects beyond the box 5 for the attachment of the driving pulley 7 and other connections hereinafter described.

8 is a brush carrying head secured to the forward end of the shaft 6, and comprising an end attaching hub 9, and a rectangular closed skirt portion 10 provided with miter-flanges 11 at its corners that form channels for holding by their backs the series of brush sections now to be described.

12 are a series of counterpart brush sections, each one of which comprises an elongated straight portion the back of which fits one of the channels aforesaid and is secured therein by screws or other usual fastening means, and a curved portion 13 formed as an extension of said straight portion and which projects toward a similar curved portion of an opposed brush section, to provide the brush as a whole with a rounded front end as illustrated in Figs. 1 and 4. With the described construction, with a can in place over the brush, and the wash water flowing through the tubular shaft 6, the water passes out of the open end of the same, through the rounded forward end of the brush and against the bottom of the can being washed. The water then passes backward between the sides of the can and the brush bristles, as well as through the longitudinal channels between the brush sections, to carry the impurities detached by the brush in its revolution out of the can and into the trough or tub 1.

14 is a chain wheel carried by the shaft 6, and connected by a chain belt 15 with a similar wheel on the operating shaft of the rotary circulating pump hereinafter described.

16 is a non-rotary gland in which one end of the shaft 6 turns in a water tight manner, and said gland in turn is connected by pipe connection 17 with the outlet end of the before mentioned circulating pump.

18 is the circulating pump above referred to, and which is attached to the above de-

scribed standard 4. Said circulating pump is preferably of the rotary type, with its operating shaft carrying a chain wheel 19 operatively engaged by the chain belt 15, aforesaid.

20 is the supply pipe of the pump 18. In the present construction said pipe is of an inverted U shape and spans an end wall of the tub or trough 1, with one leg extending into the tub 1, to near the bottom of the same, while the other leg is connected to the inlet end of the pump 18, as shown in Figs. 1 and 2.

21 is a vertical drain pipe arranged in the interior of the tub 1 for maintaining a predetermined height of the wash water within said tub.

22 is an open top horizontal tray attached to the end of the tub 1, opposite the hood 3, and having drainage connection with the interior of said tub by a drain opening 23 in an end wall of said tub.

24 is a vertical nozzle, provided with the usual supporting spider 25, and arranged centrally in the tray 22. Said nozzle and spider are adapted to receive an inverted milk can or the like in the final rinsing and steaming operation on the same.

26 is a hollow supply head arranged beneath the tray 22 and having communication with the nozzle 24 aforesaid.

27 is a water supply pipe connected to the head 26, and provided with a controlling valve 28. 29 is a steam supply pipe connection to the other end of the head 26, aforesaid, and provided with a controlling valve 30.

31 is a branch pipe extending from the steam supply pipe 29 to the lower portion of the tub 1 and adapted to introduce a supply of water or of steam into said tub in the regulation of the temperature of the contents of the tub. Said branch pipe is provided with a controlling valve 32.

With the above described arrangement of steam and water supply connections the fol-

lowing operations or functions can be conveniently attained:—By closing the valves 30 and 32, and opening the valve 28, water alone is delivered to and discharged from the nozzle 24. By opening the valves 28 and 30, and closing the valve 32, water and steam are delivered to and discharged from the nozzle 24. By closing the valves 28 and 32, and opening the valve 30, steam alone is delivered to and discharged through the nozzle 24. By opening the valves 28 and 32 and closing the valve 30, water is supplied through the branch pipe 31 to the tub or trough 1, as well as to the nozzle 24. By closing the valve 28, and opening the valve 30 and 32, steam alone is supplied to the wash water in the tub 1 to heat the same, and also to the nozzle.

Having thus fully described my said invention what I claim as new and desire to secure by Letters Patent, is:—

A can washing machine comprising in combination, an open top trough, a revoluble fountain brush disposed horizontally above said trough, a hollow shaft carrying said brush, a fixed supporting standard disposed at one end of said trough, a bearing box on the upper end of the standard providing a journal support for the hollow shaft aforesaid, a pump mounted on said standard and having an operating shaft disposed in parallel relation to the aforesaid hollow shaft, operative connections between said shafts, a pipe connecting the inlet end of said pump with the interior of the trough, a pipe connecting the outlet end of said pump to the hollow shaft at the rear of the operative connections aforesaid, and means for imparting rotation to the hollow shaft, substantially as set forth.

Signed at Chicago, Illinois, this 12th day of April 1911.

GEORGE F. DICKSON.

Witnesses:

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