

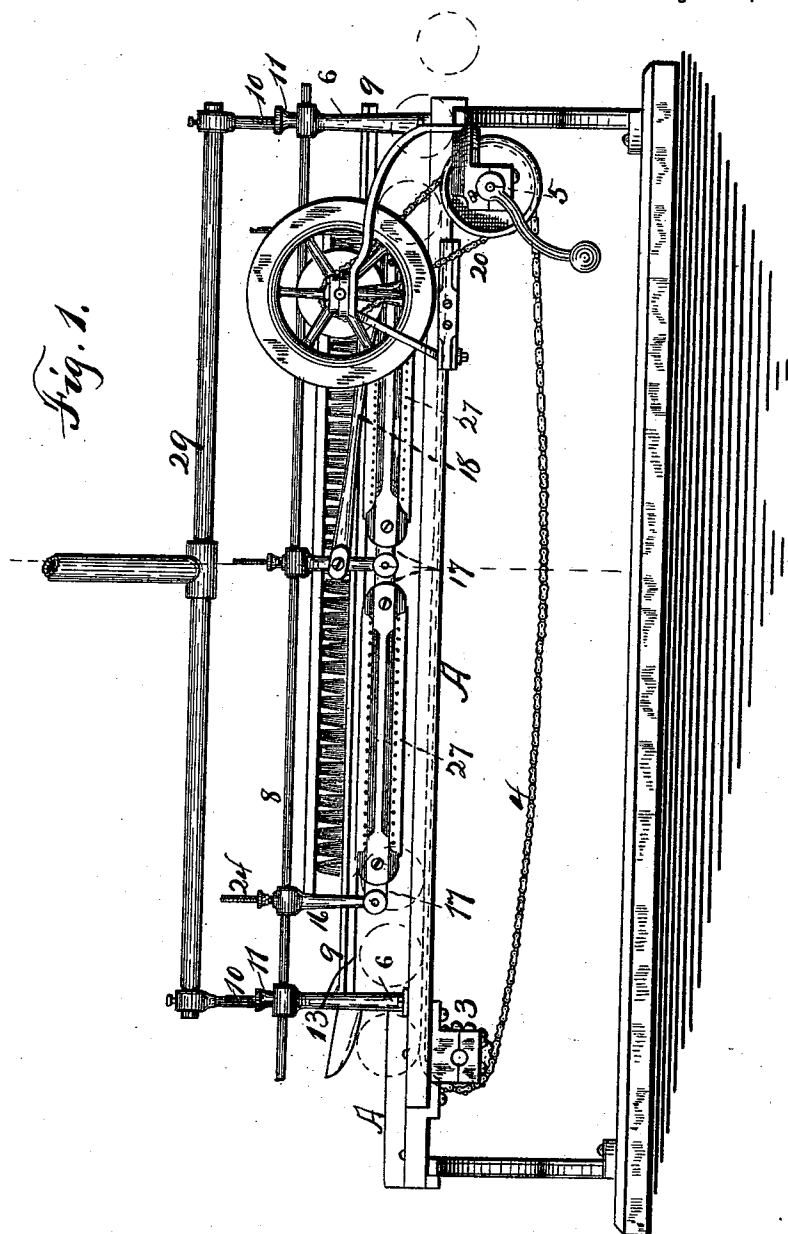
(No Model.)

3 Sheets—Sheet 1.

J. LONG.
CAN CLEANING MACHINE.

No. 539,523.

Patented May 21, 1895.



WITNESSES:
Chas. W. Marvin.
C. S. Borst.

INVENTOR
John Long.

BY
Smith & Wilson
ATTORNEYS

(No Model.)

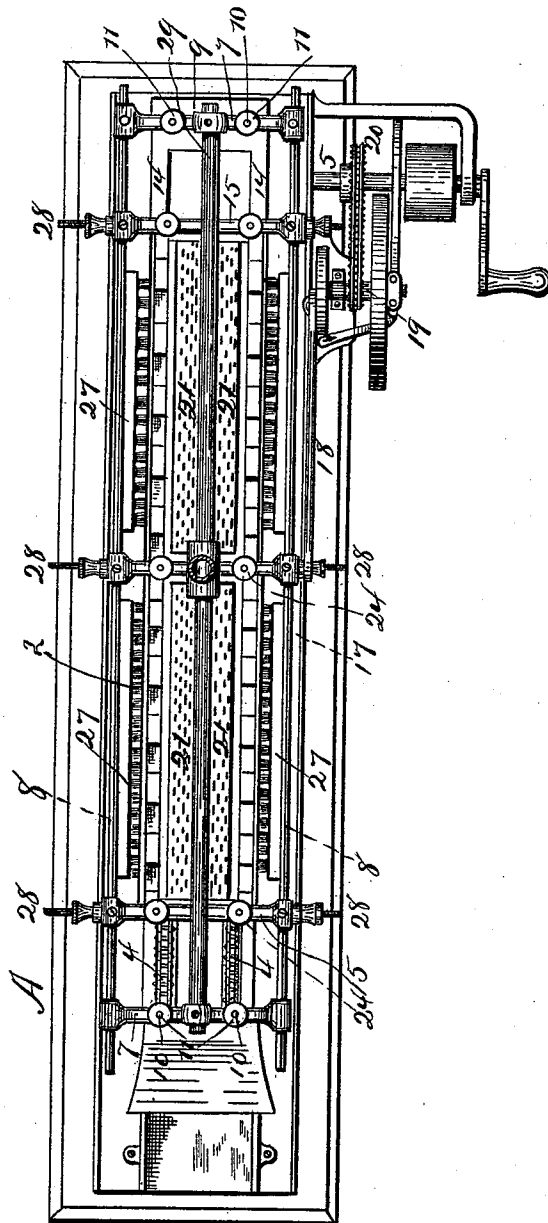
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Fig. 2.



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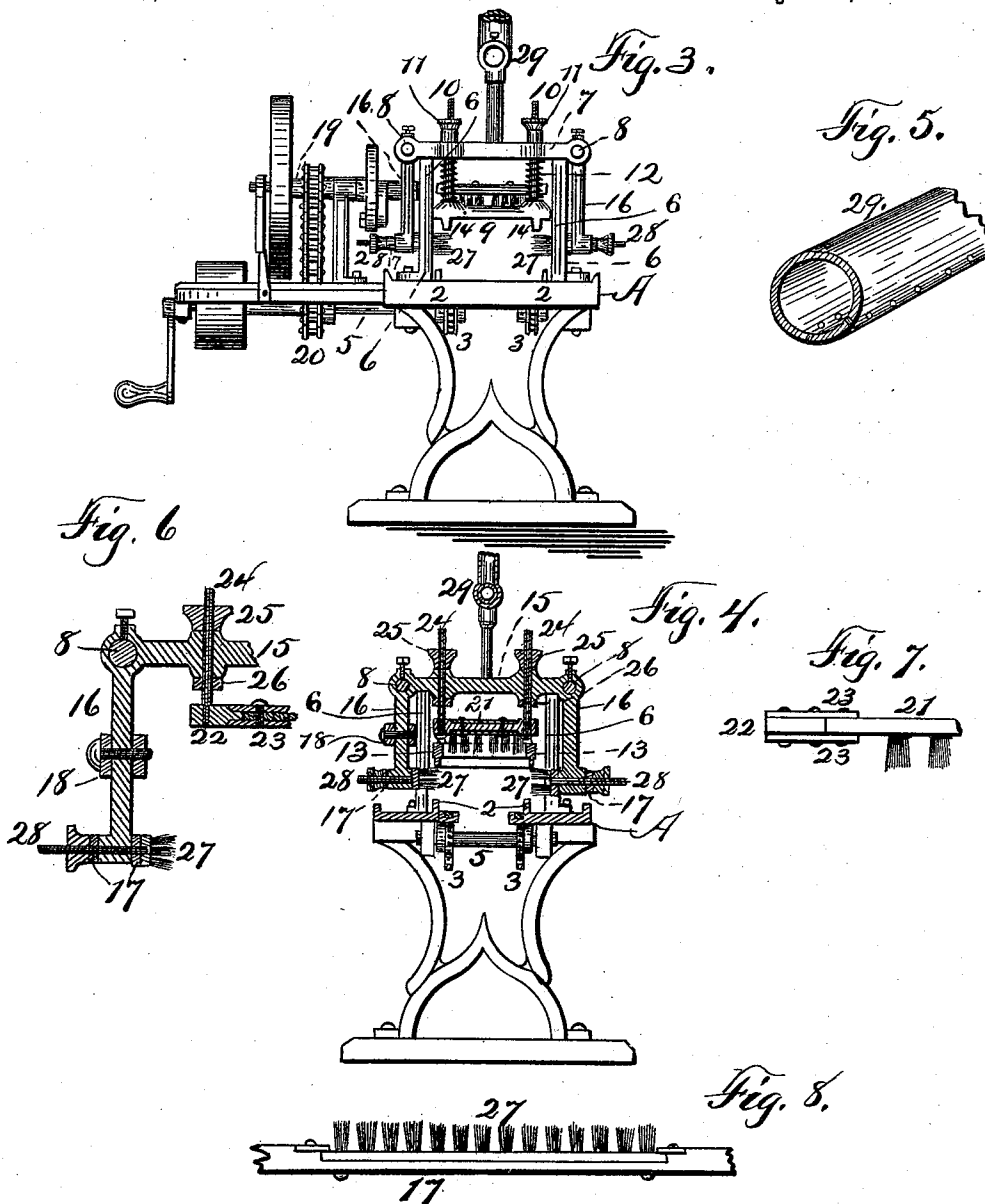
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CAN CLEANING MACHINE.

No. 539,523.

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WITNESSES:
Charles W. Marvin
C. S. Borch

INVENTOR
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UNITED STATES PATENT OFFICE.

JOHN LONG, OF PARISH, NEW YORK.

CAN-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 539,523, dated May 21, 1895.

Application filed July 5, 1894. Serial No. 516,567. (No model.)

To all whom it may concern:

Be it known that I, JOHN LONG, of Parish, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Can-Cleaning Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to machines for cleaning or washing cans after they have been filled and before the labels are put on.

My object is to provide a machine for washing and scrubbing cans upon the body and heads or ends, simultaneously, by means of reciprocating brushes and means to supply water to them, the cans being carried along in engagement with the brushes by means of an endless belt, or belts, and being at the same time rotated by said belt and the engagement of the upper brushes upon the cans; said brushes being carried by a reciprocating frame, and being adjustable vertically or laterally.

My invention consists in the several new and novel features of construction and operation hereinafter described and which are specifically set forth in the claims hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the machine. Fig. 2 is a top plan thereof. Fig. 3 is an end elevation thereof. Fig. 4 is a vertical transverse section on a line through the vertical water-supply pipe. Fig. 5 is a perspective view of part of the water-pipe. Fig. 6 is an enlarged detail of part of the reciprocating or brush frame and the adjusting devices for varying the projection of the brushes. Fig. 7 is a detail of the mounting of an end of an upper brush-bar. Fig. 8 is a detail illustrating the mounting of a side brush-bar.

A is the stationary bed, erected upon suitable standards and provided with the vertical parallel ribs —2— upon its upper face; and 3, 3— are sprocket wheels journaled below the bed, and carrying the endless sprocket chains —4— which slide along over the top of the bed, said wheels being rotated by a shaft —5— driven in any ordinary manner by hand or power.

Standards —6— erected upon the bed carry

the cross-bars —7— and the cross bars carry the guides —8—, said guides being parallel. A presser bar —9— is suspended from the cross-bars by means of the threaded rods —10— and is adjustable vertically by means of the thumb nuts —11— and is yielding vertically through the springs —12— around said suspension rods. This presser-bar consists of the interiorly rabbeted side rails —13— (Fig. 4) and ends connecting them, said rabbets extending across said ends or ribs as shown in Fig. 3 at 14; and this bar bears downward upon the can, the rabbets in the side rails engaging with the corners, and together grip the can onto the chains, so that the movement of the chains rotate the can and roll it along through the machine.

Angular pieces consisting of a horizontal beam —15— and pendent arms 16, are mounted slidingly upon the guides —8—; and —17—, are side rails connecting said arms, all together constituting the reciprocating brush frame, to which the pitman rod —18— is connected at one end and actuated by a shaft —19—, provided with an ordinary crank to which said pitman is connected; said shaft being suitably journaled and driven by a belt —20— around pulleys upon it and upon the drive shaft —5—.

The upper brush —21— consists of a body provided with tufts of suitable bristles, or wires, in the usual manner, the ends of the body being mounted in or secured to cross pieces —22— in any ordinary manner, as between the clips —23—. Said brush-holder and brushes being supported by rods —24— through the cross-bars of the reciprocating frame, are adjustable vertically by means of the thumb-nuts —25— and the jam nuts —26— (Fig. 6) said upper brush lying between the side rails of the presser bar, so as to engage with the cylindrical body of a can upon its side while it is being rolled through the machine.

The siderails —17— carry the side brushes —27— which are mounted thereon in any ordinary manner and are adjustable laterally by means of the rods —28— and the thumb and jam nuts thereon.

A water-pipe —29—, perforated as shown, and connected to a suitable source of supply, showers water down onto the brushes and

cans and carries off all the dirt, &c., loosened by the brushes. It will then be seen that the combined action of the continuous forward rotations of the cans, and the reciprocating
5 movements of the brushes will thoroughly clean and scour and polish the bodies and heads of the cans and leave them ready for labeling, when they are discharged from the machine.

10 The adjustment of the presser-bar and of the upper and side brushes adapts the machine to clean cans of different diameters and lengths.

What I claim as my invention, and desire to
15 secure by Letters Patent, is—

20 1. In a can washing machine, a bed, an endless carrier mounted therein, and means for operating the carrier, combined with standards upon the bed, rods mounted to reciprocate within said standards parallel to the carrier, a U-shaped frame attached to said rods and provided with vertical and horizontal

brushes adapted to clean the sides and ends of the cans at the same time, and means for reciprocating the rods, substantially as shown. 25

2. In a can washing machine, a bed, an endless carrier mounted therein, and means for operating the carrier, combined with standards upon the bed, a presser bar mounted on said standards above the carrier, rods mounted to reciprocate within said standards parallel to the carrier, a U-shaped frame attached to said rods, and provided with vertical and horizontal brushes adapted to clean the sides and ends of the cans at the same
30 time, and means for reciprocating the rods, substantially as set forth. 35

In witness whereof I have hereunto set my hand this 15th day of June, 1894.

JOHN LONG.

In presence of—

C. W. SMITH,

HOWARD P. DENISON.