

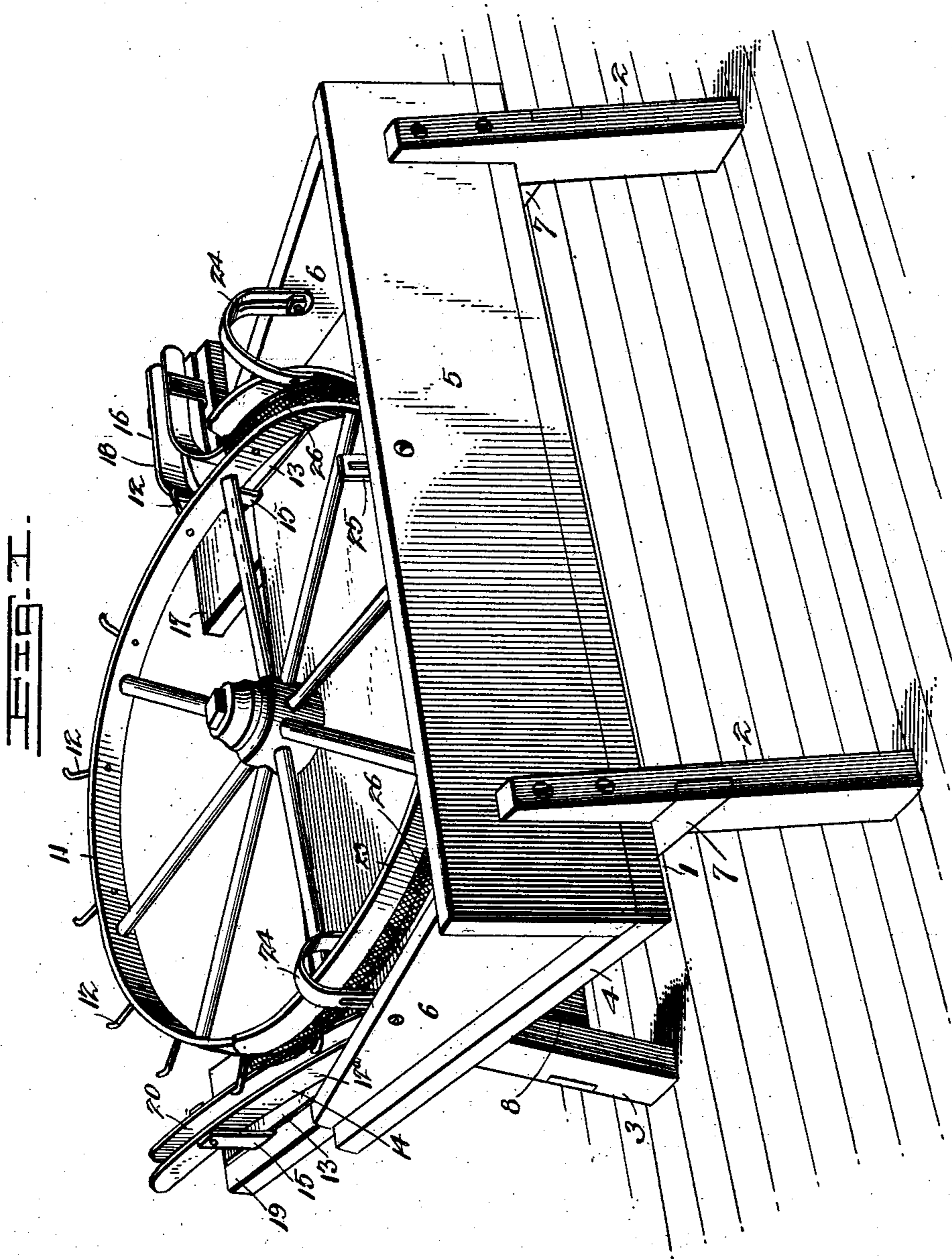
No. 707,969.

Patented Aug. 26, 1902.

L. HARRINGTON.
CAN DIPPING MACHINE.
(Application filed Jan. 10, 1902.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses.
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J. F. Riley

Louder Harrington, Inventor.
by C. A. Snow & Co.
Attorneys

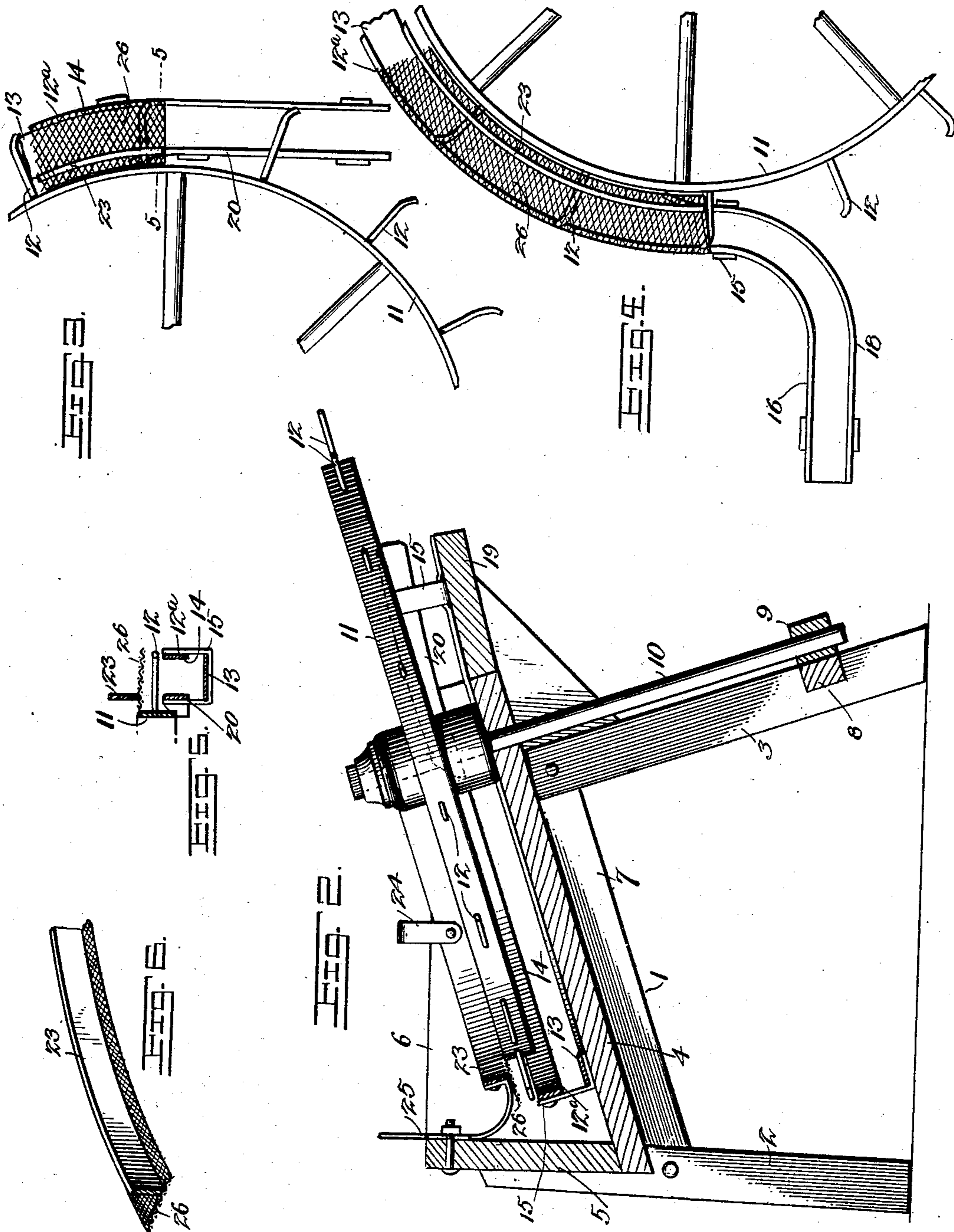
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UNITED STATES PATENT OFFICE.

LOUDER HARRINGTON, OF CHESTER, PENNSYLVANIA, ASSIGNOR TO JOHN F. WELLS AND ERNEST W. BONNETT, OF ABERDEEN, MARYLAND.

CAN-DIPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 707,969, dated August 26, 1902.

Application filed January 10, 1902. Serial No. 89,191. (No model.)

To all whom it may concern:

Be it known that I, LOUDER HARRINGTON, a citizen of the United States, residing at Chester, in the county of Delaware and State of Pennsylvania, have invented a new and useful Can-Dipping Machine, of which the following is a specification.

The invention relates to a can-dipping machine.

10 The object of the present invention is to provide a simple and comparatively inexpensive machine designed for use in canning goods and capable of enabling cans after they have received their contents to be rapidly
15 handled and immersed in a suitable liquid of a preservative nature without liability of spilling such contents.

A further object of the invention is to provide a machine of this character adapted to
20 be readily adjusted for operating on cans of different heights.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated
25 in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a can-dipping machine constructed in accordance with this invention. Fig. 2 is
30 a vertical sectional view of the same. Figs. 3 and 4 are detail plan views of portions of the curved way and the can-engaging wheel. Fig. 5 is a transverse sectional view on the line 5 5 of Fig. 3. Fig. 6 is a detail view of
35 a portion of the curved guard for engaging the tops of the cans.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

40 1 designates a frame provided at the top with a trough supported by legs 2 and 3 and consisting of an inclined bottom 4, a vertical side 5, and vertical ends 6. The side 5 extends upward from the lower edge of the inclined bottom 4, and the ends 6, which are
45 triangular in shape, are secured to the bottom and side and have horizontal upper edges, as shown. The legs are connected by suitable top bars 7, and the legs 3 are connected
50 by the bottom bar 8, having a bearing 9, re-

ceiving an inclined shaft 10, which is also journaled in a suitable bearing of the bottom of the trough. The shaft, which may be driven by any suitable power, carries a wheel 11, secured to the shaft in any suitable manner
55 and provided at its periphery with can-engaging fingers 12, adapted when the wheel is rotated to carry the cans through a liquid contained in the trough. The fingers, which are slightly curved at their outer portions to en-
60 gage the cans, are arranged at a sufficient interval to provide between them spaces for the accommodation of two cans; but the number and arrangement of the fingers may be varied as desired, as will be readily understood. The
65 cans are guided through the trough by means of a curved way 12^a, consisting of a bottom rail 13 and an inner or rear side wall or rail 14, supported at intervals by short bars or
70 arms 15 and arranged concentric with the can-engaging wheel. The curved way is provided at its entrance with a lateral extension 16, disposed longitudinally of the machine and arranged upon a bracket 17, which forms a continuation of the bottom of the trough. The
75 guide or way is provided at the extension 16 with an outer wall or rail 18, arranged parallel with the end portion of the rail 14 and adapted to receive the cans as they are fed to the machine. The rear end of the curved guide or
80 way is provided with a longitudinal extension, disposed transversely of the machine and supported by a bracket 19. The rear extension of the guide or way is provided with a rail or
85 wall 20, arranged parallel with the adjacent portion of the wall 14 and supported by arms extending upward from the bottom rail. The curved or slightly bent can-engaging fingers are arranged above the plane of the side rails or walls of the guide or way and are adapted
90 to engage the cans at points between the top and bottom thereof. The tops of the cans are engaged by a guard 23, located above the guide or way and consisting of a curved bar arranged concentric with the wheel and provided with
95 slotted arms 24 and 25, secured to the ends and side of the trough by bolts or other suitable fastening devices, whereby the guard is capable of vertical adjustment to arrange it to suit the size of the cans. The arms 24, 100

which are secured to the ends of the trough, are curved downward and are connected with the upper edge of the bar, and the arm 25 is reversely curved and extends from the bar at the lower edge thereof. The guard is provided with a strip 26, of wire-gauze or other suitable material, forming a top wall and adapted to cover the cans as they pass through the liquid and provided with interstitial openings. The wire-gauze strip, which forms a strainer, is adapted to prevent any of the contents of the cans from spilling therefrom while the cans are carried through the trough by the wheel, and the cans may be immersed in a suitable preserving liquid without loss of their contents. The wire-gauze serves as a perforated cover or strainer for covering the open caps of the cans to retain their solid contents in them while they are submerged in the liquid of the trough. The combined cover and strainer will permit a liquid to readily enter the cans as the latter are submerged, and it will prevent any of the solid contents of the cans from floating off during the dipping operation.

It will be seen that the can-dipping machine is exceedingly simple and inexpensive in construction, and that the can-engaging wheel is adapted as cans are fed into the entrance branch of the guide or way to engage the cans automatically and carry them through the contents of the trough, and that the said cans are also adapted to be readily removed from the guard or way as they are fed forward by the wheel; also, it will be apparent that the guard prevents any loss of material while the cans are passing through the trough and that it is capable of vertical adjustment to adapt and arrange it for cans of different sizes. Furthermore, it will be apparent that the lower portion of the inclined can-engaging wheel extends from the inner end of the front wall of lateral extension of the way to the inner end of the short wall of the other extension of the said way and that the periphery of the wheel will engage the cans and prevent any upward movement of the same laterally of the guide or way.

What I claim is—

1. In a can-dipping machine, the combination of a trough, designed to contain a liquid, a can-engaging wheel set at an inclination and extending into the trough, and a curved guide or way also set at an inclination and arranged concentric with the wheel and extending into the liquid to submerge the cans, substantially as described.

2. In a can-dipping machine, the combination of a trough, designed to contain a liquid, a can-engaging wheel set at an inclination and extending into the trough and provided with means for engaging cans, and an inclined way or guide extending into the trough below the surface of the liquid to submerge the cans

and arranged adjacent to the wheel, substantially as described.

3. In a can-dipping machine, the combination of a liquid-receiving trough, an inclined can-engaging wheel, a guide or way arranged at an inclination and located adjacent to the wheel and extending beneath the surface of the liquid and adapted to receive, support and submerge the cans, and an adjustable guard arranged at the top of the guide or way and adapted to hold the cans in position, substantially as described.

4. In a can-dipping machine, the combination of a liquid-receiving trough, an inclined can-engaging wheel provided at intervals with fingers, an inclined guide or way extending into the trough below the surface of the liquid and adapted to receive and submerge the cans and located beneath the fingers, and a guard located above the fingers, substantially as described.

5. In a can-dipping machine, the combination of a trough having an inclined bottom, a can-engaging wheel arranged at an inclination and extending into the trough, and a curved guide or way arranged concentric with the lower portion of the wheel and extending into the trough, substantially as described.

6. In a can-dipping machine, the combination of a trough, a can-engaging wheel, a guide or way arranged adjacent to the wheel, and an adjustable guard arranged at the top of the guide or way and provided with a strainer for covering the top of the cans to retain the solid contents in the latter, substantially as described.

7. In a can-dipping machine, the combination of a trough, a can-engaging wheel, a guide or way arranged adjacent to the wheel, and a guard arranged at the top of the guide or way and provided with a strainer-strip having openings and forming a top wall for covering the cans to prevent the solid contents of the latter from escaping, substantially as described.

8. In a can-dipping machine, the combination of a frame having a trough provided with an inclined bottom, a can-engaging wheel arranged at an inclination and extending into the trough, the curved guide or way mounted upon the inclined bottom of the trough and having end extensions and composed of a bottom rail, a rear side or wall, and the short front walls arranged at the extensions of the guide or way and located at opposite sides of the wheel, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LOUDER HARRINGTON.

Witnesses:

W. HOLLAND ANDREW,
J. M. ALLEN.