Jan. 29, 1929. 1,700,443

A. S. MORSA

CAN RAISING AND DISCHARGING MECHANISM FOR CAN BOILING DEVICES

Filed June 14, 1927 2 Sheets-Sheet 1

Fig. 1.

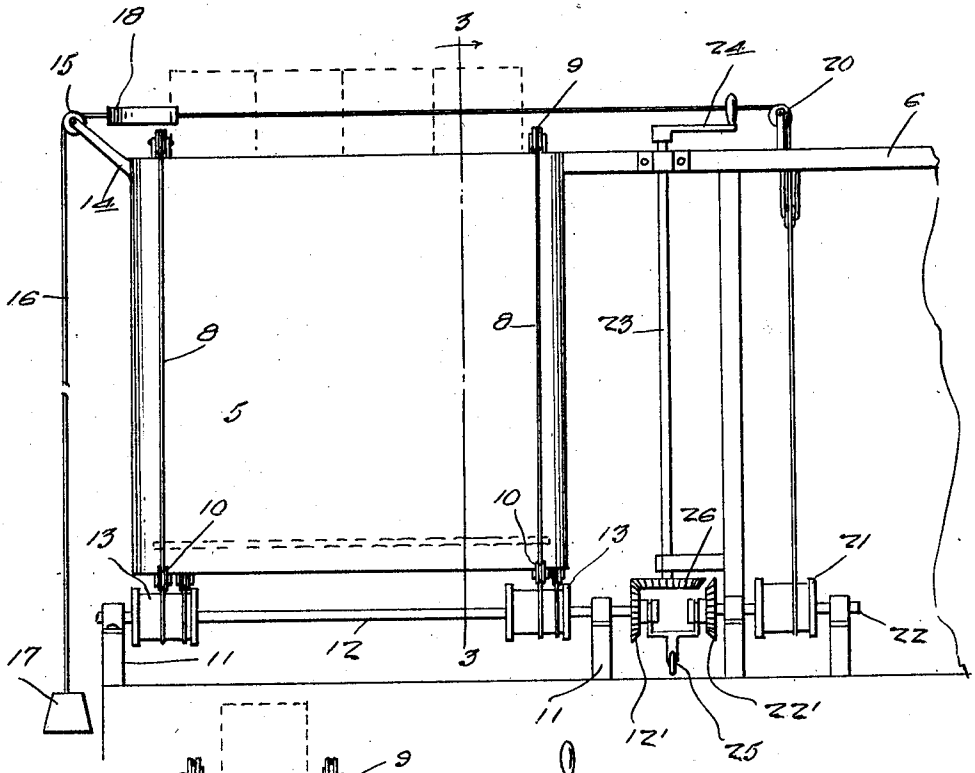
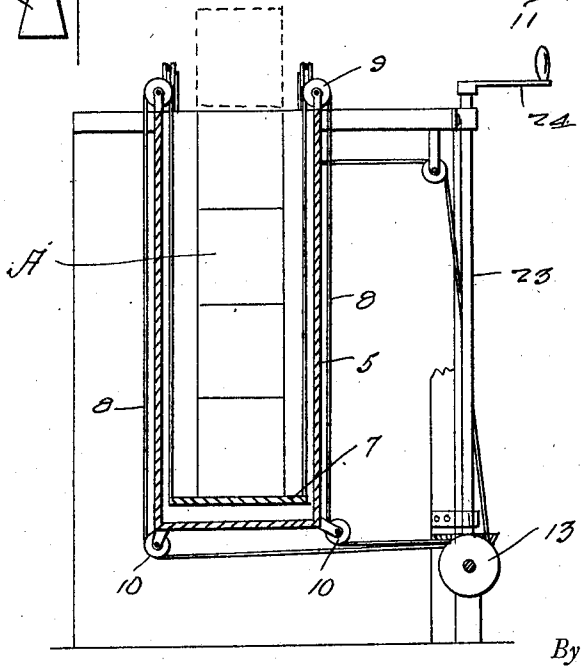


Fig. 3.



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Fig. 3.

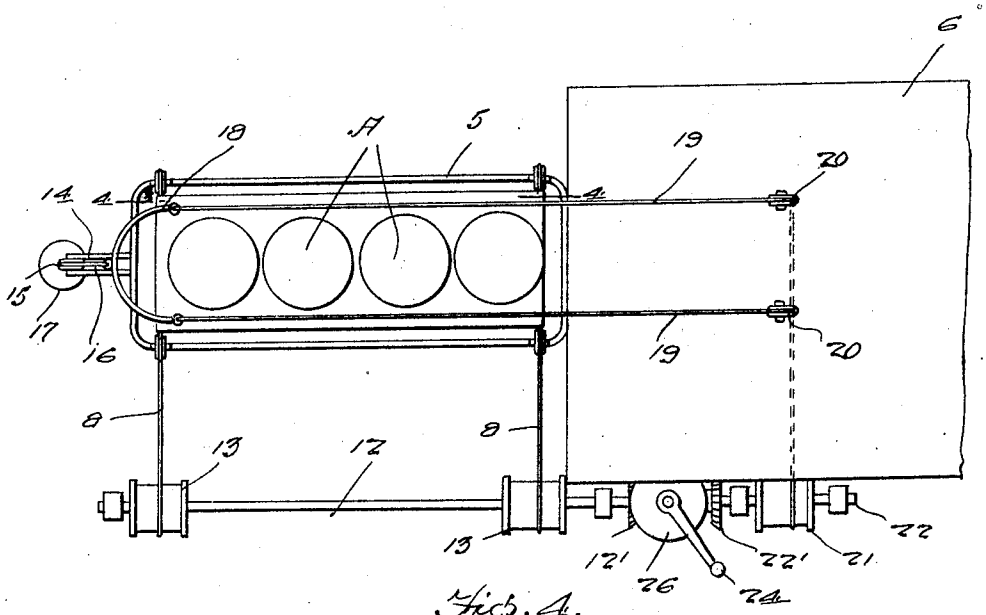
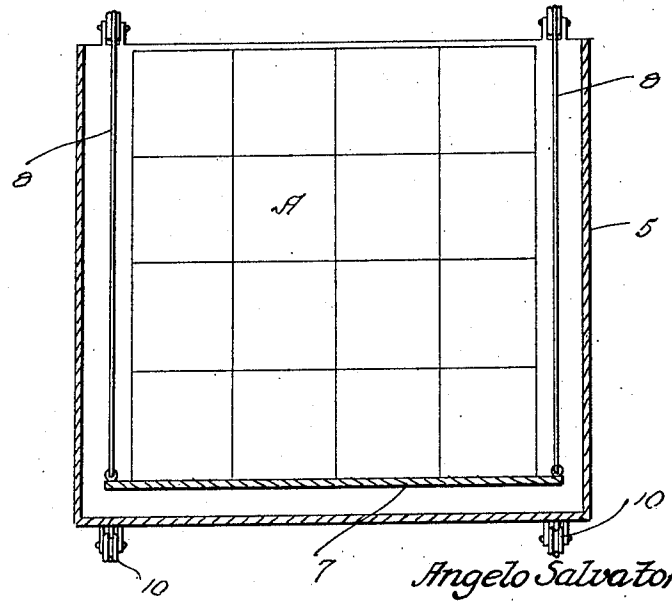


Fig. 4.



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UNITED STATES PATENT OFFICE.

ANGELO SALVATORE MORSA, OF CAMDEN, NEW JERSEY.

CAN RAISING AND DISCHARGING MECHANISM FOR CAN-BOILING DEVICES.

Application filed June 14, 1927. Serial No. 198,861.

This invention relates generally to devices for use in the boiling of food stuffs after having been canned, and has more particular reference to means for raising the cans within the boiler and thence discharging the same therefrom onto a table or support adjacent the top of the boiler, and this without requiring the direct touching of the can.

In carrying out my invention, there is provided generally a platform for arrangement within a boiler and upon which the cans are to be disposed, while within the boiler, means are provided for raising the platform to the top of the boiler, other means being provided for moving the upper row of cans from the boiler onto a table or supporting shelf directly adjacent the top of the boiler.

The most pertinent object of the present invention is a mechanism of this character, that is of relatively simple construction, and of such a nature to permit the device to be operated without requiring unusually skilled labor, and without necessitating more than one operator for the proper manipulation of the device.

Now having particular reference to the drawings, and in the drawings:—

Figure 1 is a side elevation of a can boiling device equipped with my improved raising and discharging mechanism.

Fig. 2 is a top plan view thereof.

Fig. 3 is a detail vertical section taken substantially upon the line 3—3 of Fig. 1, and

Fig. 4 is a detail horizontal section taken substantially on the line 4—4 of Fig. 2.

Now having particular reference to the drawings, 5 indicates the boiler of any conventional canning mechanism at the top open side of which is a can receiving horizontal table 6. In carrying out my invention, there is provided a platform 7 for disposition within the boiler 5 and upon which the cans A are to be arranged.

Secured to the four corners of this platform 7 are certain ends of cables 8, those at opposite sides of the boiler extending upwardly and being trained over pulleys 9 upon the upper edge of the boiler. The cables then extend downwardly and are trained over pulleys 10 upon the bottom of the boiler as clearly indicated in Figs. 1, 3 and 4.

Suitably journaled within bearings 11 at the front side of the boiler 5 and beneath the bottom thereof is a shaft 12, equipped at opposite ends of the boiler with cable drums 13—13 to which the outer ends of all four cables 8 are attached, so that when the drums are rotated in one direction, the cables will be wound thereon for moving the platform 7 upwardly, for obviously raising the cans within the boiler.

At the top of the boiler 5 and at the end remote from the table 6 is an upwardly and outwardly extending pulley supporting arm 14 equipped with a pulley 15, over which is arranged a cable 16 that extends downwardly alongside of the boiler 5, that is equipped with a weight 17. The inner end of this cable is attached to a relatively C-shaped arm 18 while attached to the ends thereof are spaced parallel cables 19—19 extended to a point over the table 6 at which point they are trained over pulleys 20—20 arranged upon the table, from whence they extend downwardly and are attached to a common cable drum 21, fixed to a horizontal shaft 22 in alinement with the shaft 12 previously described.

The adjacent ends of the shaft 12 and 22 are equipped with sliding bevel gears 12′ and 22′ respectively, while suitably journaled between these shafts is a vertical shaft 23, the upper end of which extends beyond the table 6 and that is equipped at said upper end with a crank handle 24. The sliding gears 12′ and 22′ are associated with a common shifting yoke 25, while the lower end of the shaft 23 is equipped with a beveled gear 26 for mesh with either the gear 12′ or the gear 22′, dependent upon the position of the shifting yoke 25.

Obviously, when the platform 7 is at its lowermost position within the boiler 5, and the yoke 25 shifted to cause the engagement of the gear 12′, with the vertical shaft gear 26, a turning of the handle 24 will cause the winding of the cables 8 upon the drums 13 for raising the platform to the desired extent.

As soon as one row of cans has been raised above the top of the boiler 5, the yoke 25 is shifted to the opposite position to cause the engagement of the gear 22′ with the gear 26, whereupon a turning of the handle 24 will cause the winding of the cables 19—19 upon the drums 21, whereupon the arm 18 will engage the adjacent-most can and causing the said row of cans to move horizontally from the boiler on to the table 5, from whence they may be removed.

As soon as the yoke is shifted to again engage the gear 12′ with the gear 26, the weight 17 will automatically return the arm 18 to its initial position, so that the next row of cans may be moved onto the table 6.

The operation and advantages of a device of this character will be readily appreciated by those skilled in the art, and even though I have herein shown and described the invention as consisting of certain detail structural elements, it is nevertheless to be understood that some changes may be made therein without affecting the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new is:—

1. In combination with the container of an article cooking mechanism, a platform arranged horizontally within the container and upon which the articles are to be disposed, cables connected at their inner ends to the corners of the platform, drums mounted externally of the containers, and upon which the outer ends of the cables are attached, and means operable adjacent the container for causing the operation of said drums.

2. In combination with the container of an article cooking mechanism, a platform arranged horizontally within the container and upon which the articles are to be disposed, cables connected at their inner ends to the corners of the platform, drums mounted externally of the container and upon which the outer ends of the cables are attached, means operable adjacent the container for causing the operation of said drums, means disposed horizontally above the container for engaging the uppermost row of articles as the same are elevated above the container, and said means being operable by the same mechanism provided for operating said drums.

In testimony whereof I affix my signature.

ANGELO SALVATORE MORSA.