

Nov. 3, 1936.

O. W. JOHNSON

2,059,461

REMOVABLE CONTAINER FOR EXTRACTORS

Filed Sept. 8, 1934

2 Sheets-Sheet 1

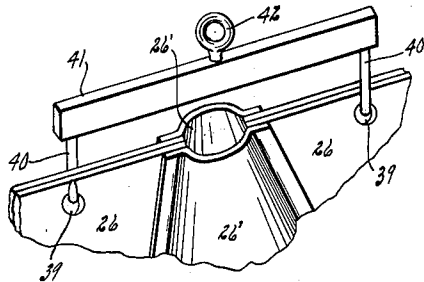


FIG-6

FIG-4

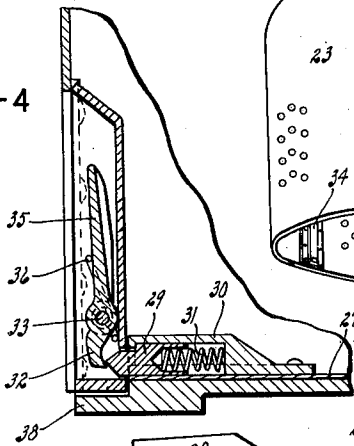


FIG-5

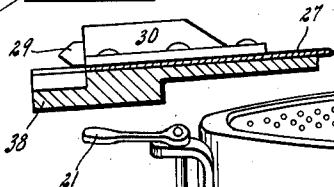
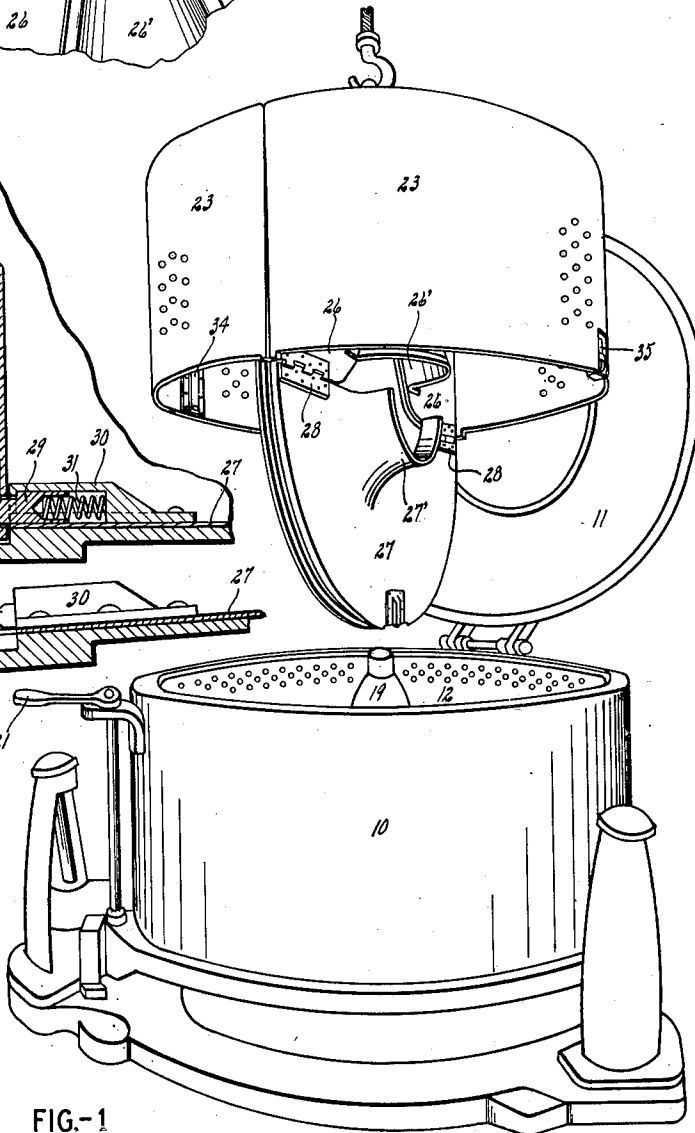


FIG-1



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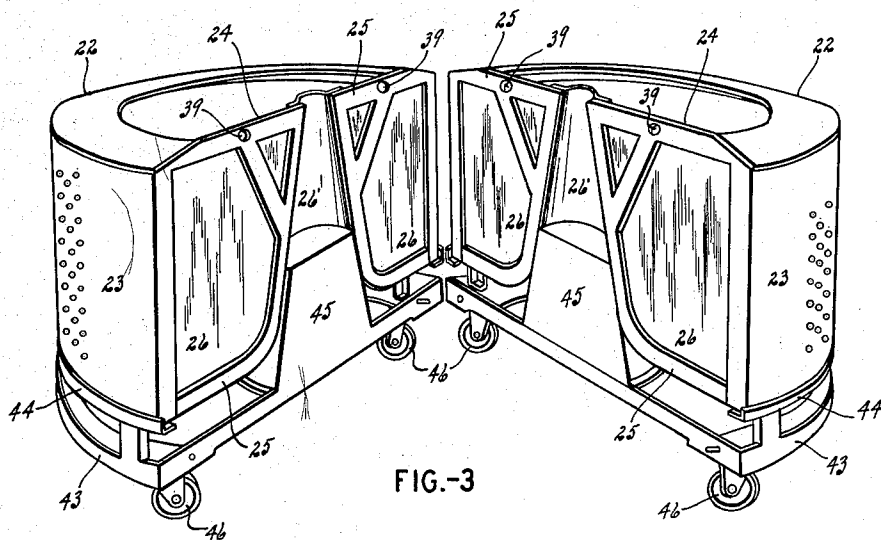
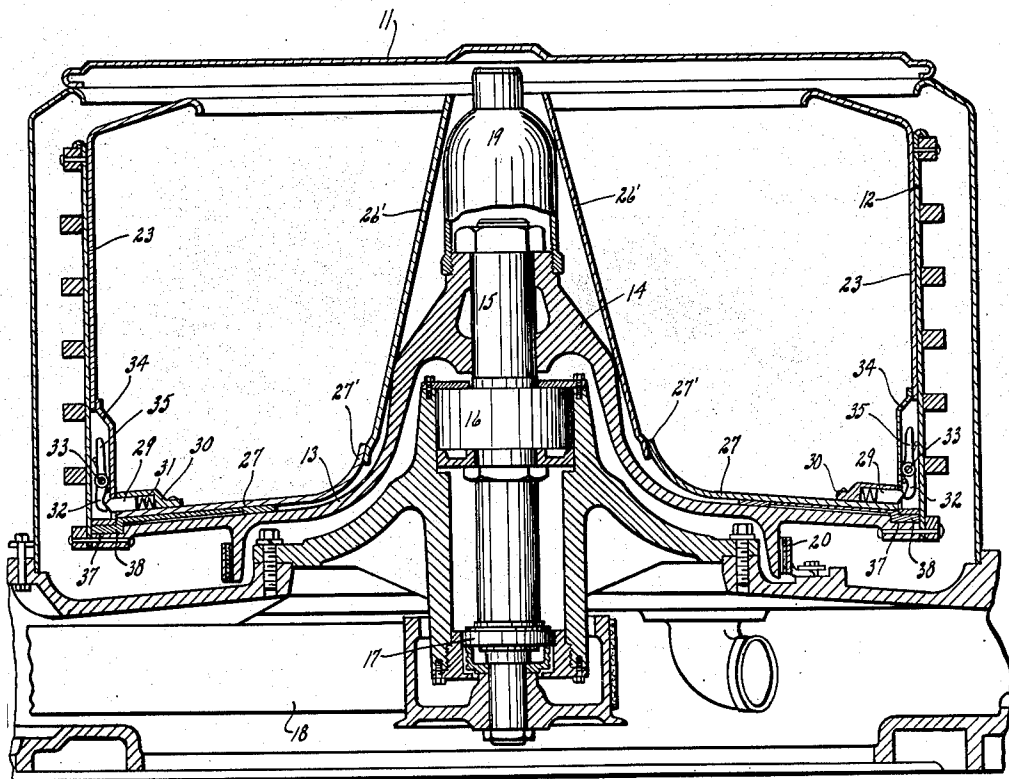
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REMOVABLE CONTAINER FOR EXTRACTORS

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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REMOVABLE CONTAINER FOR
EXTRACTORS

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Application September 8, 1934, Serial No. 743,213

4 Claims. (Cl. 210—76)

This invention relates to an improved extractor basket and conveying means therefor. It is especially intended for use in laundries but is adapted for use in other industries utilizing extractors in a similar manner.

An object of the invention is to provide the combination with a rotatable extractor having side walls and a bottom, of an extractor basket comprising a plurality of compartment members each having substantially vertical walls and a bottom, the compartment members being formed in such a manner that when grouped with their vertical walls abutting they fit within said extractor side walls and the outer face of the bottoms of the compartment members drivingly engage the extractor bottom.

Another feature of the invention is the provision of an extractor basket compartment member having its central portion arranged to embrace the upwardly extending central bearing pedestal of a well-known type of extractor.

Another object of the invention is to provide in an extractor basket compartment member as above set forth, a bottom coextensive with the side walls and having a hinge connection with one of the side walls adapting the bottom to swing outwardly so as to expeditiously dump the entire contents of the compartment.

Another object of the invention is to provide in combination with the inner extractor basket compartment member above described a supporting frame and means for conveying the frame from place to place.

Other objects and advantages and novel features will be apparent from the accompanying description when taken with the drawings in which Fig. 1 is a perspective view of an extractor with its cover in open position and the containers suspended above the extractor with their bottoms swung to dumping position; Fig. 2 is a central section through the extractor, basket and compartment members; Fig. 3 is a perspective view showing the compartment members removed from the extractor and resting upon their supporting frames; Fig. 4 is an enlarged fragmental sectional view showing the latch retaining the bottom in closed position; Fig. 5 is a fragmental view partly in section showing the position of the compartment bottom just after the latch has been released; while Fig. 6 is a partial perspective view showing hoisting means for the compartment members.

My device is particularly applicable in laundries for transferring washed articles from the washing wheel to an extractor in which con-

tained water is driven out by centrifugal action. The compartment members are adapted to be placed alongside the wash wheel where the clothes are lifted into the compartment members which are then conveyed by any suitable means and placed within an extractor where the articles are whirled to remove the moisture. At the completion of this operation the compartment members may be lifted out of the extractor and the bottoms moved to dumping position so as to discharge the contents. This requires but one handling of the articles from the time they are removed from the wash wheel until they are ready to be carried away from the extractor.

My invention is illustrated in connection with a well-known type of extractor having a curb 10 and a cover member 11 within which the extractor proper is mounted and which comprises side walls 12 and a bottom 13 rotatably mounted by means of an upstanding central bearing pedestal 14 on shaft 15 which is provided with bearings 16 and 17 and shaft rotating means represented at 18. A center bearing cap member is shown at 19 and brake means 20 operable by lever 21 for stopping rotation of the basket. Such extractors are well known in the art and further description is thought unnecessary.

I provide a plurality of compartment members which may have various shapes but are preferably so constructed that when grouped in a continuous series their outer walls will be slightly less in extent than, and adapted to fit within the side walls 12 of the extractor. Preferably these compartment members are sector shaped and in the form illustrated comprise members 22 semi-circular in plan, each having a semi-circular vertically extending perforated side wall 23 and a diametrically extending wall 24. A suitable construction of these side walls comprises a frame to which sheet members are suitably secured. The construction of the diametrically extending walls is best seen in Fig. 3 and comprises frame members 25 to which the plane vertically extending sheets 26 are secured. The central portions of the diametrically extending walls are so formed that when the compartment members are placed with these walls contiguous, that is, in position within the extractor, the central portions of these walls surround and enclose the central bearing pedestal 14. As shown, these central portions are recesses 26' substantially conical in shape. The bottoms 27 of the compartment members are coextensive therewith, being substantially semi-circular in plan and having the central portion of their diametrical edges

converging upwardly as shown at 27' to form conical sleeve portions adapted to embrace the conical recess portions 26'. In order that the entire contents of the compartment member may be dumped, these bottom members have their diametrical side edges hingedly connected at 28 with the diametrically extending side walls of the compartment members so that the bottoms swing downwardly and outwardly as shown in Fig. 1.

For retaining the compartment bottoms in closed position, coacting latching members are provided on the side wall of the container and the bottom thereof as best seen in Fig. 4. This mechanism comprises a latch 29 within a housing 30 which is secured to the compartment bottom and the latch is biased toward locked position by a spring 31. A latch release lever 32 is pivoted at 33 within a housing 34 which forms part of the semi-circular wall of the compartment. This lever has an upwardly extending handle 35 for manipulation thereof and a spring 36 maintains the handle in its vertical position.

The bottoms of the compartment members are arranged for driving engagement with the extractor bottom and to this end the extractor bottom is provided with recesses into which complementary projections of the compartment bottoms enter. In the form shown, an annular recess 37 is provided in the extractor bottom and driving ring portions 38 which are rigidly connected with the compartment bottoms 27, fit within the recess 37 so as to provide a driving connection between the extractor and the various compartment members when they are in the position of Fig. 2.

Means is provided for lifting the compartment members out of the extractor, that shown comprising openings 39 in the upper portion of the diametrically extending walls of the compartment members and which may be engaged by hooks 40 on a yoke 41 which in turn has an eye 42 which is engageable by suitable hoisting means. However, it will be understood that other means for lifting the compartment members is within the scope of my invention.

For moving the compartment members from place to place, other transportation means is provided comprising frames 43 semi-circular in plan and each adapted to support a compartment member. As shown in Fig. 3, the supporting means comprises a semi-circular angle member 44 conforming to the semi-circular edge of the compartment member and an upstanding centrally located conical portion 45 which is adapted to engage the conical recess 26' of the compartment member. This frame is provided with conveying means, that illustrated comprising the truck wheels 46.

I have thus provided separable extractor basket compartment members which are of light but strong construction and which utilize all of the available article-handling space within the type of extractor illustrated and which provide for swinging the entire bottom portion to dumping position for discharging the contents of each compartment. At the same time, the compartment members have no obstructing portions on their outer walls but on the contrary the side walls and bottoms thereof conform closely to the

walls of the extractor and the bottom members of the extractor compartment are provided with means forming an efficient driving connection therebetween.

What I claim is:

1. The combination with an extractor having side walls and a bottom and means for rotating the same of an extractor basket comprising a plurality of compartment members, each having substantially vertical walls and a bottom, said compartment members being formed in such a manner that when grouped with their vertical walls abutting they fit within said extractor side walls, there being a continuous annular recess in said extractor bottom and complementary projections on the bottoms of said compartment members adapted when said members are grouped to form a substantially continuous annular ring adapted to engage said recesses in driving relation.

2. The combination with an extractor having side walls, a bottom, an upstanding central bearing pedestal and means for rotating said extractor of an extractor basket comprising two substantially semi-circular compartment members adapted to fit within said extractor side walls when their diametrically extending walls are placed together, and the central portions of said contiguous diametrically extending walls being recessed to form substantially a cone adapted to embrace said central pedestal.

3. The combination with an extractor having side walls, a bottom, an upstanding central bearing pedestal and means for rotating said extractor of an extractor basket comprising two substantially semi-circular compartment members adapted to fit within said extractor side walls when their diametrically extending walls are placed together, the central portion of each of said contiguous diametrically extending walls being recessed to form substantially half a cone adapted together to embrace said central pedestal, each of said compartment members having a bottom substantially semi-circular in plan and conforming to the side walls of said member and converging upwardly at the center of its diametrical edge to form a portion cooperative with a portion of said cone to define the compartment cavity, and each of said bottoms having its diametrical edge hingedly connected with the diametrically extending side wall of its associated compartment member so as to swing outwardly.

4. In combination, an extractor basket compartment member having a side wall substantially semi-circular in plan and a diametrically extending wall, there being a recess portion positioned centrally of said diametrically extending wall corresponding to a vertically split cone, said member having a bottom coextensive with said walls, said bottom converging upwardly at the center of its diametrical edge to form a conical sleeve portion adapted to embrace said recess portion, and a frame substantially semi-circular in plan adapted to support said member, said frame having an upstanding conical portion adapted to enter the conical sleeve portion of said bottom, and said frame being provided with conveying means.

OSCAR W. JOHNSON.