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V. E. ADLAND

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WASTE PREVENTING CHUTE FOR CENTRIFUGAL EXTRACTORS

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FIG. 1

FIG. 2

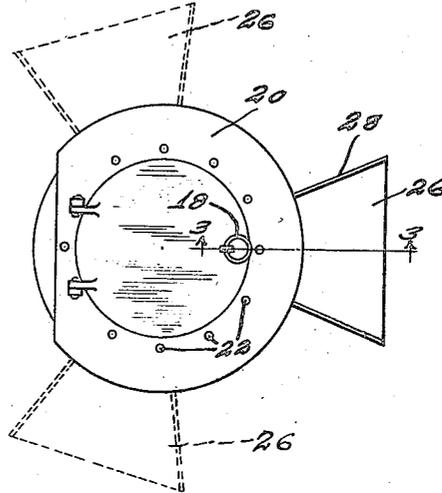
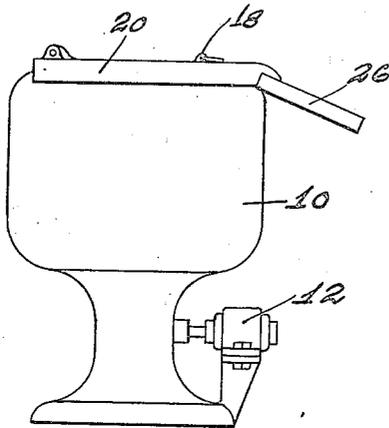
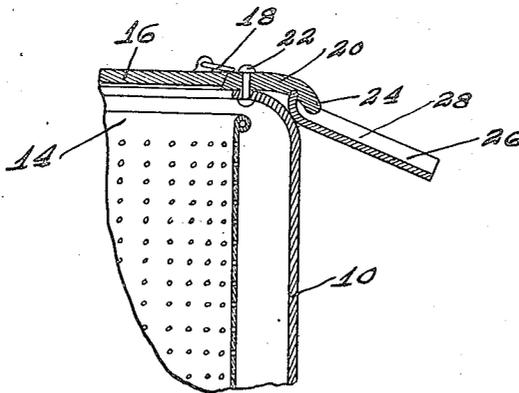


FIG. 3



Witnesses
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UNITED STATES PATENT OFFICE.

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WASTE-PREVENTING CHUTE FOR CENTRIFUGAL EXTRACTORS.

Application filed September 26, 1921. Serial No. 503,344.

To all whom it may concern:

Be it known that I, VICTOR E. ADLAND, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Waste-Preventing Chute for Centrifugal Extractors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

This invention relates to improvements for attachments for centrifugal driers or moisture extractors, especially those adapted for the drying of clothes in laundries or the like and has for one of its objects the provision of a removable chute to be attached to the top of such an extractor and to be used in the loading and unloading of same to prevent the loss of small articles which are being put into the extractor.

One of the principal objects of this invention is the provision of a chute for a centrifugal extractor which shall be adapted to allow of the positioning of a container or tank for wet clothes adjacent the extractor and so guard the transfer of clothes from the container to the extractor that there will be no possibility of any small articles being dropped from the batch being transferred, into the space between the container and the extractor.

Another object of this invention is the provision of such a chute for centrifugal driers or extractors which can be readily attached to the extractor and as readily detached therefrom and which moreover can be positioned thereon at any convenient spot thereby allowing of the loading and the unloading of the same from any preferred angle or position.

A further important object of this invention is the provision of a removable chute for loading and unloading centrifugal extractors which is adapted to catch any excess water or cleaning liquid from the clothes as they are being transferred and cause the water to drop back into the wet

clothes container and thereby eliminate its dripping into the space between the extractor and the clothes container which ordinarily results in a messy and sloppy condition of the floor around the extractor.

Another and further important object of this invention is the provision of such a chute for a centrifugal extractor which shall adapt the extractor to be used with a container for wet clothes whereby any container of any size or shape may be used efficiently and which need not be positioned so close to the extractor as would ordinarily be necessary in order to prevent the dripping of water into the space between the extractor and the container and also the frequent dropping of small articles of clothing into such spaces and onto the floor.

Other and further important objects of the invention will be apparent from the disclosures in the accompanying drawings and following specification.

The invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

On the drawings.

Figure 1 is a side elevation of a centrifugal extractor showing the improved chute of this invention applied thereto.

Figure 2 is a top plan view of an extractor with the chute applied, the dotted lines showing some of the different positions into which the chute may be placed.

Figure 3 is a detail sectional view taken on the line 3—3 of Figure 2.

As shown on the drawings:

The reference numeral 10 indicates an extractor or drier of the centrifugal type having a motor 12 positioned thereon for driving the rotatable container 14 therein and this extractor 10 is provided with the ordinary top or lid 16 having a handle or ring 18 thereon for proper manipulation thereof. A water ring 20 is positioned around the top of the extractor 10 and is held in place thereon by means of bolts or rivets 22. This water ring 20 is of almost the same type as is ordinarily supplied with these extractors, their usual purpose being to form a hinge plate and contact cover member for the lid

16, its inner edges being beveled as shown in Figure 3. However, the water ring 20 of this invention is made slightly wider than the ordinary ring and is provided with an overhanging edge or lip 24 having a groove or dot extending around the under side thereof.

Adapted to fit under this projecting lip and into the groove 24, is the curved inner end of a chute or loading tray 26. The inner portion of this chute is so curved that it will correspond nicely with the groove in the under side of the water ring 20 and as this water ring extends substantially completely around the top of the centrifugal extractor it is evident that the chute 26 may be positioned to extend in any desirable angle outwardly from the extractor, as shown in Figure 2. The chute 26 is provided with upstanding sides or edges 28 which are adapted to act as guards to prevent the running of water or liquid over the side edges thereof.

The operation is as follows:

In laundries the ordinary process of loading a centrifugal extractor of this type is to bring into position adjacent thereto a container having the wet washed clothes therein. The clothes are then transferred into the extractor by hand and it is found in practice that excess water is liable to drip from them and this excess water falls into the space between the extractor and the container, the container being ordinarily of rectangular form and having straight sides which therefore do not correspond very closely to the circular sides of the extractor thereby always leaving a space between the extractor and the container holding the wet clothes. This results in the accumulation of a good deal of water on the floor around the base of the extractor resulting in a very sloppy and messy condition of the plant. Moreover, it oftens occurs that handkerchiefs and other small articles of clothing become detached from the batch of clothes which are being transferred from the container into the extractor and fall upon the floor, which being dirty and wet soils the article thus dropped which must necessarily be washed over again thereby resulting in a good deal of delay and extra expense, especially when a single batch of clothes is being handled as a unit throughout the washing process.

It will be seen that this removable chute will act to prevent such dripping of water onto the floor, as on account of its inclined position it will immediately drain all excess water back into the container for the wet clothes, and moreover will catch any articles of clothing which may be dropped while transferring the batch from the container to the extractor. This is equally true when the clothes are removed from the ex-

tractor after having been dried, the liability to drop, being much greater as the moisture has almost all been removed therefrom leaving them in such a condition that small articles become more readily detached from the main mass.

The fact that this chute is detachable and movable, results in an appliance which is very convenient as it may be readily shifted from one position to another on the extractor thereby allowing of its loading and unloading from any desired position of the wet clothes container. No bolts or attaching devices of any sort are necessary. Moreover, it can be readily applied to any form of extractor now on the market, the only change necessary being that the water ring which is ordinarily used in connection with these extractors be substituted by one which is slightly wider and provided with an overhanging lip and under cut groove as shown in these drawings.

I am aware that many changes may be made and various details of construction varied through a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted hereon otherwise than necessitated by the prior art.

I claim as my invention:

1. In combination with a centrifugal extractor, a water ring upon the upper side thereof, said water ring having an outwardly extending downwardly curved lip provided with an undercut annular groove, said groove being adapted to receive the curved inner retaining end of a chute for the purpose set forth therefor.

2. In combination with a centrifugal extractor, a water ring upon the upper side thereof, said water ring having an outwardly extending downwardly curved lip provided with an undercut annular groove, said groove being adapted to receive the curved inner retaining end of a chute, said chute being provided with an inclined bottom and upwardly extending sides and adapted to drain excess water from materials being transferred into and from the extractor and to catch and retain such materials as may be dropped in transit.

3. In combination, a centrifugal extractor having an inwardly turned upper edge to its outer side wall, a flange projecting from the top of the extractor over said inturned edge, said flange being turned downward at its outer edge and provided with a groove on the under side within said edge, a chute having an upturned edge on its upper end adapted to fit said groove and forming a corner where said upturned edge joins the body of said chute, said corner meeting said inturned edge of the extractor wall when the said upturned edge is in said groove, whereby said chute is supported in a posi-

tion sloping downward and away from the extractor.

5 4. In a centrifugal extractor having a portion and a top overhanging the body portion, a chute having an end confined between said top and body portion and circumferentially adjustable of said extractor for the purpose set forth.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses. 10

VICTOR E. ADLAND.

Witnesses:

ALBERT J. FINE,
JAMES M. O'BRIEN.