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A. G. SUELFLOW
VEGETABLE ROOT WASHER

2,370,504

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Fig. 1.

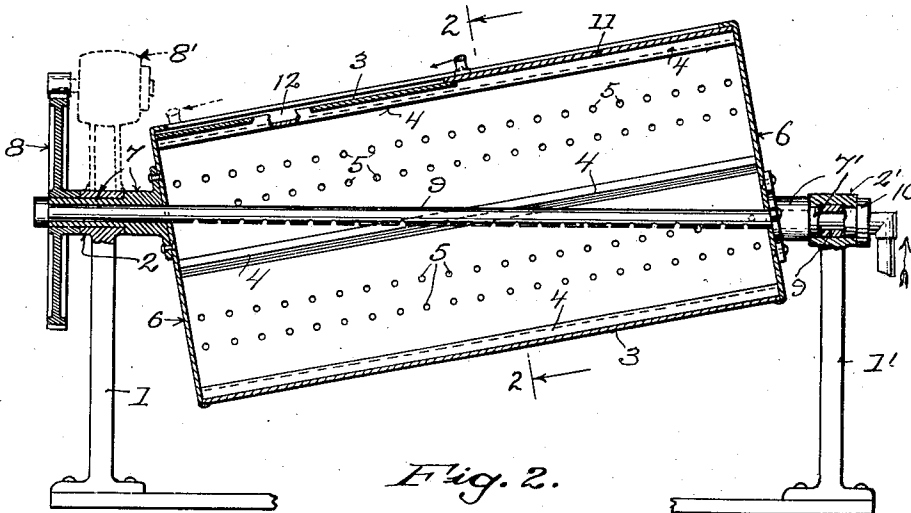
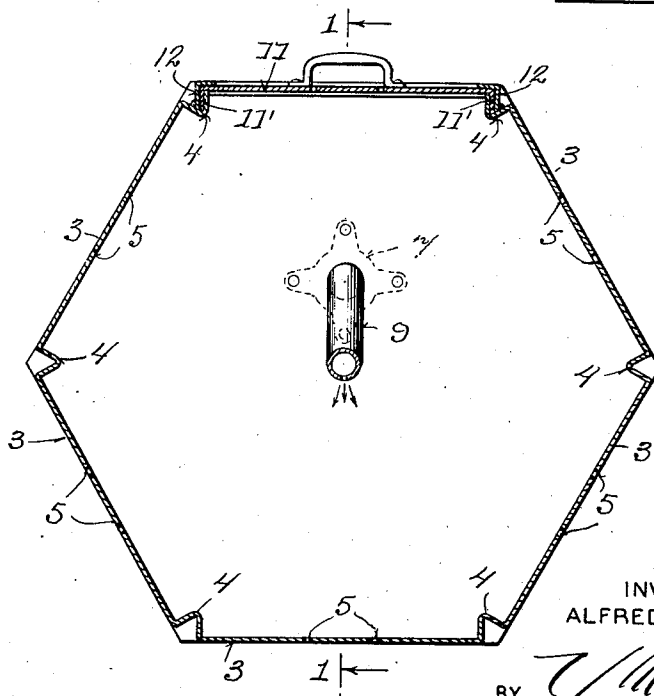


Fig. 2.



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VEGETABLE ROOT WASHER

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Application July 16, 1943, Serial No. 494,901

1 Claim. (Cl. 146—200)

This invention relates to improvements in vegetable root washers.

One of the objects of the present invention is the provision of an improved type of washer which is especially adapted for use for washing vegetable roots, such as radishes, turnips, onions, and similar root vegetables, which are used for marketing purposes, so that these vegetables can be sent to the market in a comparatively clean and neat condition which will add to the market value of the same and present a neat appearance at the retailers.

The specific object of my invention is to simplify the construction and improve the shape of the washer drum and substitute vents for the slots disclosed in the Suelflow and Wolford Patent #1,867,533.

A further object of my invention is to provide a drum with V-shaped ribs, whereby the same are strengthened and said ribs being inwardly extended serve as blades or baffles.

With the above objects in view, the invention consists in certain peculiarities of construction and combination of parts, as will be fully set forth hereinafter with reference to the accompanying drawing and subsequently claimed.

In the drawing:

Figure 1 represents a longitudinal, sectional, elevational view of a washer embodying the features of my invention, the section being indicated by line 1—1 of Figure 2.

Figure 2 is a cross section of the same, the section being indicated by line 2—2 of Figure 1.

Referring by characters to the drawing, a base member is provided having spaced standards 1—1' terminating with aligned bearings 2—2'; 3—3 indicates side walls of a polygonally shaped drum and at the intersections of the flat drum wall surfaces the same are bowed inwardly to form blades 4—4, which blades are in V-shape formation and not only serve as strengthening ribs, but they also serve as baffles for agitating the vegetables in a rinsing and washing operation. The various flat planes of the drum are provided with rows of fluid discharge apertures 5 extending from end to end of said obliquely disposed drum. The heads 6—6 of the drum have secured thereto eccentrically aligned hollow trunnions 7—7'. These trunnions are mounted in the bearing 2—2', the same being axially aligned. The trunnion 7 has secured to its outer end a drive wheel 8 and this drive wheel, as shown, may be in gear connection with any standard motor 8', shown by dotted line in Figure 1. This drive mechanism forms no part of my invention and as

a matter of fact, in some instances the gear wheel 8 may serve as a hand crank.

The trunnions have fitted therein a fixed vented fluid feed pipe 9 which extends through the drum at an angle to its normal axis. The pipe is closed at the driven end of the machine and has fitted thereto at the opposite end, a locking collar 10, whereby said pipe is held against rotation with reference to the bearing 7'.

One of the plane walls 3 is partly cut away to form a feed opening, as best shown in Figure 2 and said opening is controlled by a sliding cover 11, which cover is formed with depending lips 11, that snugly fit the juxtaposed inner walls of the V-shaped blades 4. The cover is further confined by angle iron strips 12 which form runways a groove in conjunction with the V-shaped walls just mentioned. The cover and said strips are suitably connected to the end walls 6 of the drum. As indicated in Figure 1 of the drawing, the cover 11 is in its closed position with reference to the drum opening.

While the eccentric drum and associated parts are particularly designed for washing or scrubbing vegetables of the root variety, it is understood that any other articles may be tumbled, scrubbed and cleaned in said drum without departing from the spirit of the invention.

From the foregoing description, it is understood that in the operation, the vegetables of the solid variety are loaded into the drum through the feed opening and thereafter the same is closed by the cover 11. Water or other cleansing fluid is then introduced through the pipe 9 and the drum is thereafter rotated, whereby the articles washed, scrubbed and cleaned are engaged and tumbled by the blades 4 incidental to rotation of the drum and said articles will also travel back and forth throughout the length of the drum, due to its eccentric axis, whereby a longitudinal and rotary tumbling movement is imparted thereto while said particles are sprayed downwardly from the water pipe in an ample flow of water to thoroughly rinse, scrub and wash the articles of dirt or foreign matter adhering thereto, whereby the articles, when completely clean are ready for market in a sanitary condition, which also materially improves the appearance of the articles for sales purposes. Owing to the fact that the flat octagonal planes connect the V-shaped blades, when roots slide off the V blades, they will travel down the flat inclined plane throughout its length and are scrubbed the entire length of said surface, aided in scrubbing by the interrupted surfaces of the

plurality of drain openings. It is understood that the drainage through the vent holes of the drums is properly taken care of by any suitable pan or trap positioned under the drum with relation to its base.

While I have shown and described one exemplification of my invention minutely as to detail, it is understood that I may vary the features within the scope of the claim.

I claim:

A cleaning cylinder, the surface of which comprises polygonal flat walls, V shaped inwardly inclined strengthening ribs forming grooves in-

tersecting the corners of the walls to form tumbling blades, one of the flat walls being provided with a filling opening, angle iron strips extending into the V shaped grooves adjacent the
5 filling opening forming companion slots in conjunction with faces of the V shaped grooves, the other surface of said angle iron being spaced above the slot developed by the V shaped walls to form a right angle slot in conjunction with the first
10 mentioned grooves, a cover for the opening having downturned lips forming corners engaging the right angle slots.

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