Nov. 26, 1929. K. C. JONES 1,737,115

CLEANING MACHINE

Filed June 19, 1922

Fig. 1

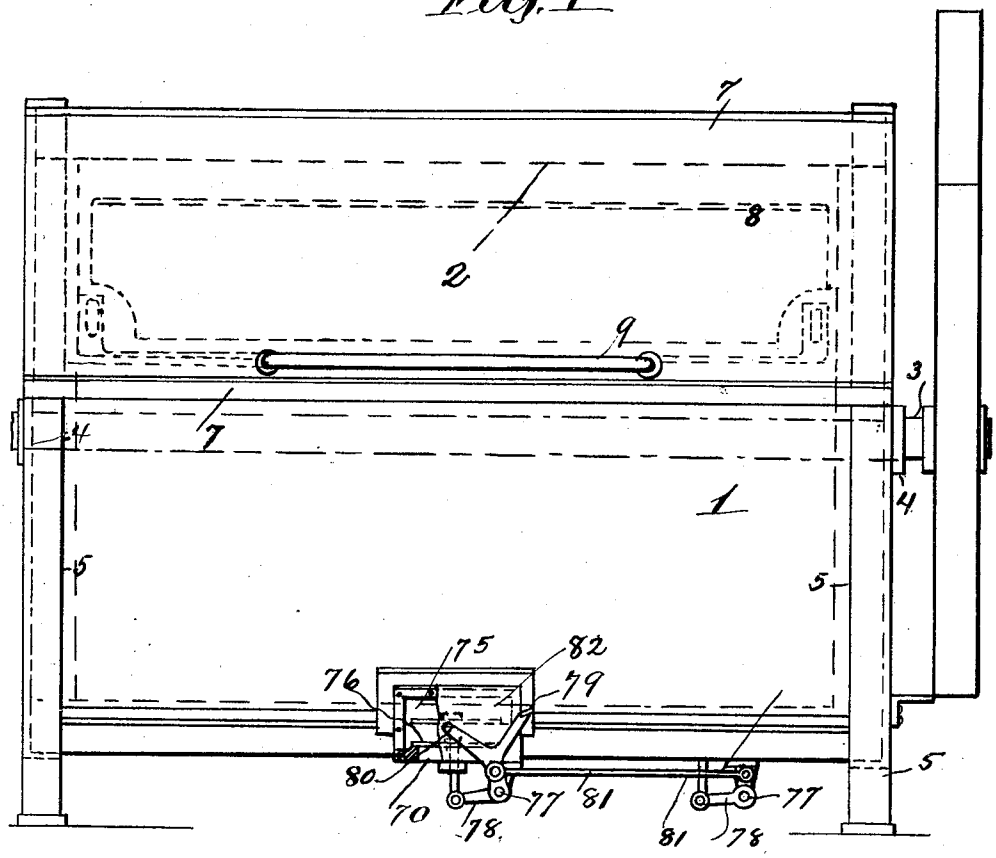
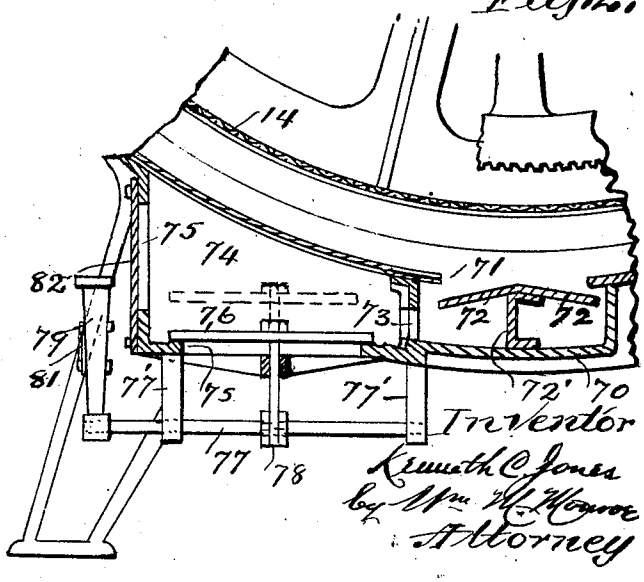


Fig. 2.



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UNITED STATES PATENT OFFICE

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CLEANING MACHINE

Application filed June 19, 1922. Serial No. 569,229.

The objects of the invention are to provide a machine for cleaning soiled fabrics, skins or other flexible materials in which a suitable container for the goods is employed, which is rotatably enclosed in an outer casing.

In this container the soiled goods are enclosed with a suitable amount of gasoline, if dry cleaning is desired, or otherwise with a suitable amount of other cleaning fluid.

Means are also provided for eliminating slime and sediment from the fluid circulating in the container as fast as it accumulates and in such a manner as to prevent it from returning into the body of cleaning fluid in the casing from which it was discharged while the container is in operation and from being carried back into the circulation of the fluid.

The invention also includes a protected trough or depression at the bottom of the outer casing, and a lateral outlet passage leading therefrom and an outlet valve, so positioned in the lateral passage that the sediment deposited in the trough and all the cleaning fluid in the container, can be drawn from the aforesaid passage, also the valve is accessible for adjustment and repair without disturbing the goods in the container or opening the closing doors thereof.

It includes an inner drum, having solid heads, composed each, of a hub and radial arms, and marginal rim, which is covered with sheet metal to form a disc, and the sides are formed of longitudinal metal bars connecting the heads, and spaced metal hoops connecting the bars. The frame is enclosed by means of metal netting through which the cleaning fluid passes readily and longitudinal openings are formed upon opposite sides of the frame, in which doors are hinged to provide means for introducing and removing the goods.

The invention is exemplified in the accompanying drawings, hereinafter more fully described and specifically pointed out in the claims.

In the accompanying drawings, Fig. 1 is a front elevation of the machine; Fig. 2 is an enlarged transverse section of the drain trough and adjacent settling chamber.

In these views, 1, represents the outer casing in which the cleaning fluid is poured. 2, is the inner drum which is revolvable upon trunnions 3, 3, in bearings 4, 4, upon the standards 5, 5.

These standards comprise the heads of the casing which are connected together by means of the sheet metal cylinder, 1.

Longitudinal bars 7, 7, form the margins of the door opening which is closed by means of the hinged door 8, having a handle 9, with which to raise the same.

The inner drum 2, is pivoted eccentrically in the casing and is composed of a head, 10, at each end connected together by means of longitudinal bars, 11, and 12, spaced apart to form door openings, 13, and the bars are connected together over other portions of the periphery of the drum by means of metal netting, 14.

A drain trough 70 is shown passing longitudinally underneath the casing which receives the grease and sediment precipitated by the cleaning fluid through an opening 71 in the bottom of the casing, and means are employed to prevent such deposits and sediment from being again drawn into the casing by the revolution of the drum, such means being also constructed to permit the fluids to flow freely from the casing into the drain trough.

This is accomplished by means of reversely inclined guard plates 72, 72, forming an angular barrier in the opening, with the peak of the angle in the center of the opening, and the sides inclined therefrom and passing underneath the sides of the opening, but spaced therefrom.

It will readily be seen that the liquids will pass down the inclined surfaces into the trough, but will not be swept back again by the movements of the drum.

For convenience the reversely inclined plates are mounted upon a common support 72′ in the bottom of the trough.

To keep the trough as much as possible clear of sediment at all times a lateral passage 73 in the side wall of the trough permits the contents of the trough to flow into an adjoin-

ing chamber or passage 74 where it will settle and can be drawn off at any time through the outlet opening 75 normally closed by means of the vertically movable valve 76.

This valve is preferably operated from in front of the machine, in the natural position the operator would assume when operating the machine, and the mechanism for operating the same may comprise a transverse shaft 77 mounted underneath the valve on standards 77′ and a rock arm 78 operatively connected with the valve stem, and right and left pedals 79 and 80. Two of these rock arms may be connected by a rod 81. (See Fig. 1.)

82 is a hand hole cover permitting cleaning out the chamber 74 when necessary.

Having described the invention what I claim as new and desire to secure by Letters Patent is:

1. In a cleaning machine, a casing, a rotatable perforate drum therein, a drain trough positioned in the bottom of said casing and a guard plate in the drain opening in said casing, said guard plate inclined downwardly from each side of a raised portion.

2. In a cleaning machine, a casing provided with a drainage trough below its bottom wall, a chamber at one side of said trough, a lateral passage connecting said trough and chamber for transferring sediment from said trough to said chamber, said casing being provided with an outlet opening leading to said trough, and reversely inclined plates mounted upon a common support in said trough.

3. In a cleaning machine, a casing provided with a drainage opening in its bottom, a trough underneath said opening, an adjoining chamber for receiving and carrying away deposits formed in said trough, a lateral passage, connecting said trough and chamber, and an outlet passage and valve therefor in said chamber, means for operating said valve accessible from the front of the machine to the operator, and reversely inclined plates in the outlet opening leading from said casing, said plates extending underneath the edge of said opening and spaced therefrom to permit the entrance of liquid underneath said edges, and preventing the return thereof into said casing.

4. In a cleaning machine, a casing having an opening in its bottom wall, a drain trough thereunder, and a guard means for said opening, said guard means comprising a standard and reversely inclined members attached to said standard, the outer edges of said members extending underneath the edges of said opening and spaced therefrom.

In testimony whereof, I hereunto set my hand this 27″ day of December, 1921.

KENNETH C. JONES.