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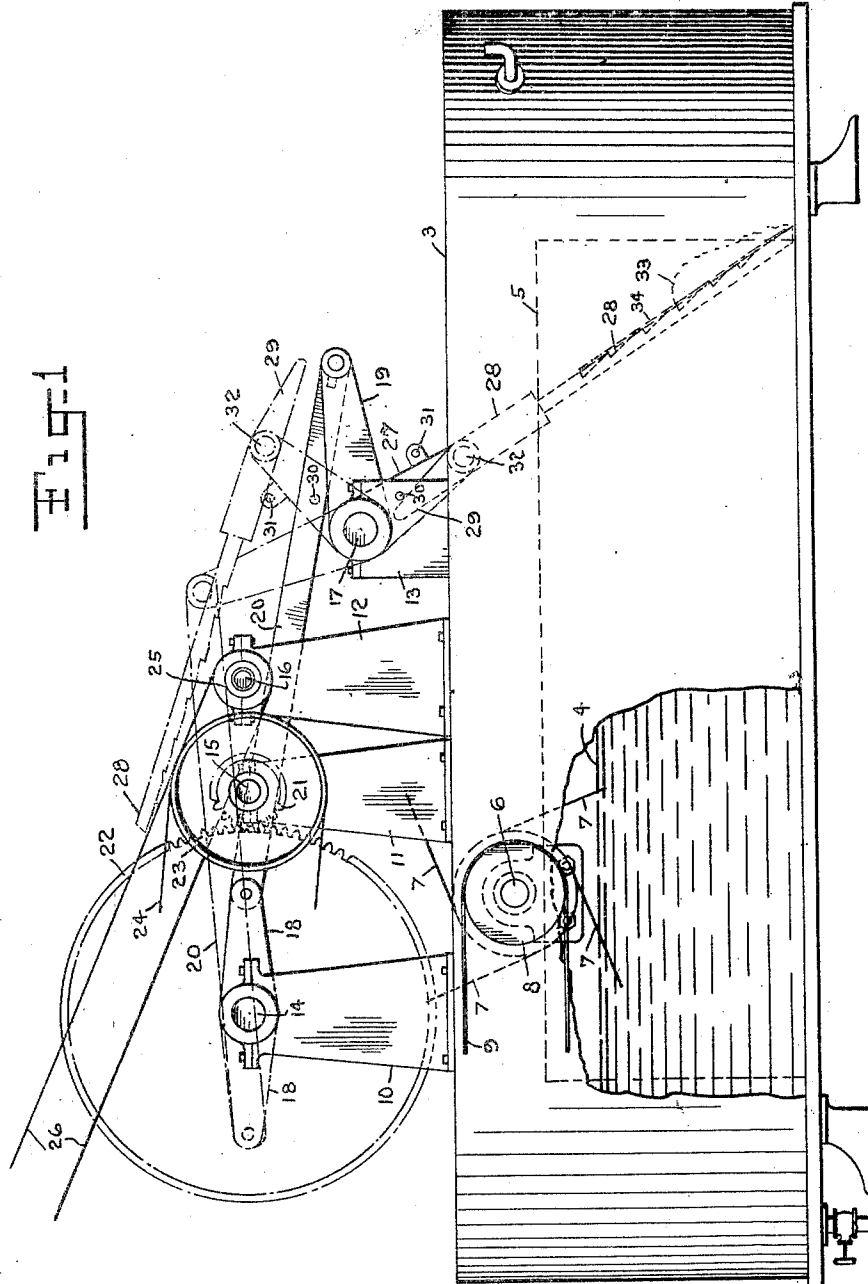
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APPARATUS FOR WASHING FIBROUS MATERIALS

Filed March 22, 1926

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

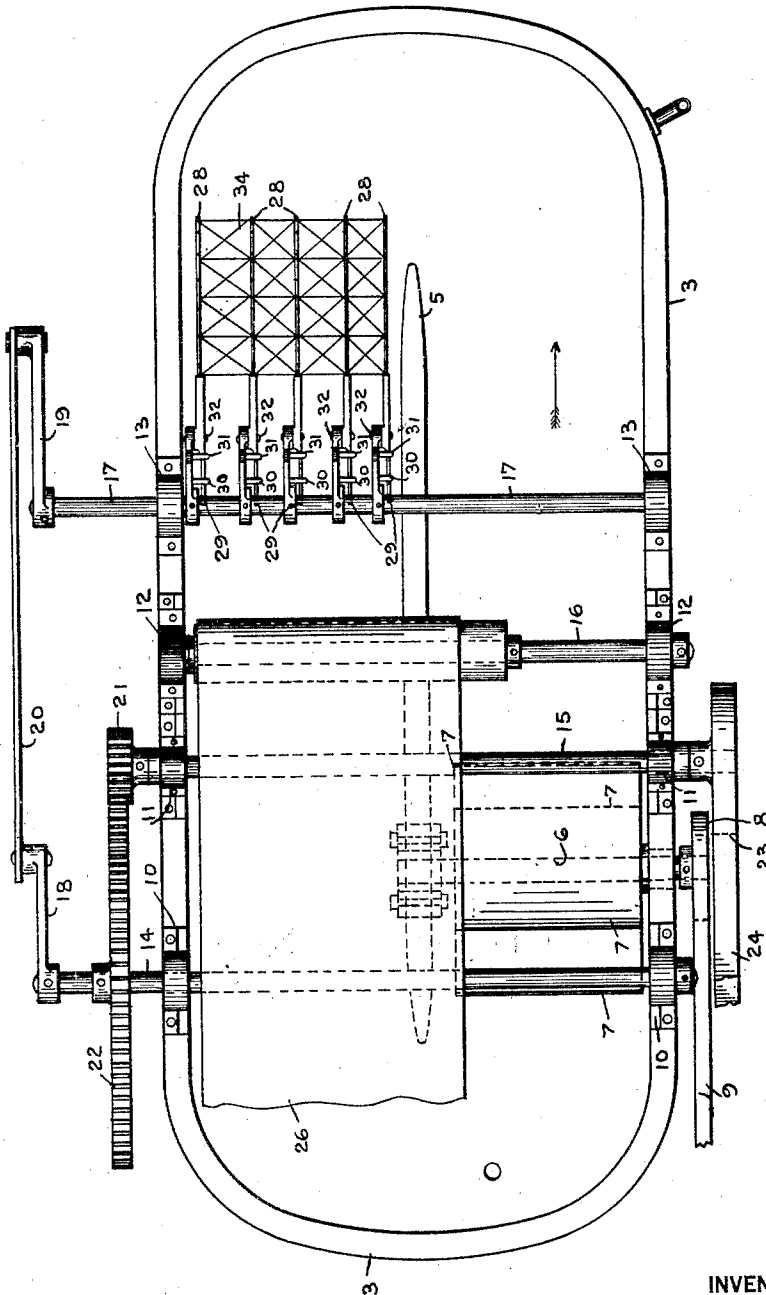


Fig. 2

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APPARATUS FOR WASHING FIBROUS MATERIALS.

Application filed March 22, 1926. Serial No. 96,436.

My invention relates to improvements in apparatus for the removal of material from a washing vat or tank, and more particularly has reference to means for circulating the washing fluid, and in combination therewith means for periodically removing the material from the vat while the same is in circulation, and is more especially adapted for the washing of rags and other fibrous materials. The invention also contemplates the method of first soaking the rags and other fibrous material without agitating it, preliminary to the washing of the same, so that the softened dirt is easily separated from the same while circulating, the material being taken out substantially clean from the tank.

In the accompanying drawings, I have illustrated in Fig. 1, in side elevation, a suitable form of tank and removing apparatus, embodying an application of my invention. Fig. 2 is a plan view looking down upon the same.

3 indicates the tank, and 4 the height of the water or other washing fluid used therein. 5 indicates a substantially central partition longitudinally through the inside of the tank, and 6 indicates a suitable shaft mounted as shown and provided with paddles 7, which dip into the washing fluid. 8

indicates a suitable pulley driven by the belt 9, or other suitable means. The paddles rotate anti-clockwise looking at Fig. 1, thereby setting up a circulation of washing fluid in the direction of the arrow shown in Fig.

2. Upon the top of the tank are suitable standards or bearings 10, 11, 12, and 13, carrying shafts 14, 15, 16, and 17 respectively. The shaft 14 carries the crank 18, and the shaft 17 carries a longer crank 19, said cranks being pivotally connected by the lever 20, and upon the shaft 15 is mounted the pinion 21, which meshes with the large pinion 22, said shaft 15 also carrying the pulley 23, which is driven by the belt 24, or other suitable means, and the shaft 16 also carries the pulley 25 driven by the belt 26.

From this it will be seen that as the crank 18 rotates with the shaft 14, the lever 19 is oscillated with the shaft 17 through the connecting crank 20. Also upon the shaft 17 is mounted the brackets 27, which carry the arms 28, the inner extremities of which, indi-

cated at 29, move in the path of the stop 30, upon the bracket 27 which is also provided with a stop 31, said arms 28 being pivotally mounted in the bracket 27, at 32. When in downward position in the tank, as shown in Fig. 1, the circulation of the water or washing fluid causes a deposit of rags or fibrous material upon the arms 28, as indicated at 33. This is then lifted upwardly by the arms 28, until the same pass beyond the vertical centre, thus pitching leftwardly as indicated in dotted outline in the upper part of Fig. 1, thereby depositing the accumulated rags or fibres upon the belt 26, and as the arms 27 now oscillate clockwise again, the arms 28 are again thrown down into the tank to receive another deposit which is again lifted as the arms oscillate anti-clockwise again, and so on periodically lifting charge after charge of the washed material from the tank, and feeding the same upon the belt 26, the circulation of the water serving to feed the material upon the arms as stated. Where finely divided fibrous material is used, it may be found desirable to apply a suitable screening, such as indicated at 34 in Fig. 2, the same being secured to the arms as shown.

Of course it will be understood that various modifications may be made in the construction and arrangement of parts, and in the mode of procedure, without departing from the spirit of the invention as claimed.

I claim:—

1. An apparatus of the class described having means for circulating the wash around the same, pivoted means at one side for collecting and lifting fibrous material periodically from the wash, and means for lifting the same, said lifting means being adapted when elevated to a predetermined point to fall over a dead center, and said means for collecting said fibrous material being adapted when in discharging position to release the same, and in combination therewith a conveyor for removing the discharged fibrous material.

2. An apparatus of the class described having means for circulating the wash around the same, pivoted means at one side for collecting and lifting fibrous material periodically from the wash, and means for lifting the same, said lifting means being

adapted when elevated to a predetermined point to fall over a dead center, and said means for collecting said fibrous material being adapted when in discharging position to release the same, and in combination therewith a conveyor for removing the discharged fibrous material, said means for collecting and discharging said fibrous material being substantially parallel when in discharging position to the plane of movement of the conveyor element. 10

In testimony whereof I hereunto affix my signature.

FRANK B. STRATFORD.