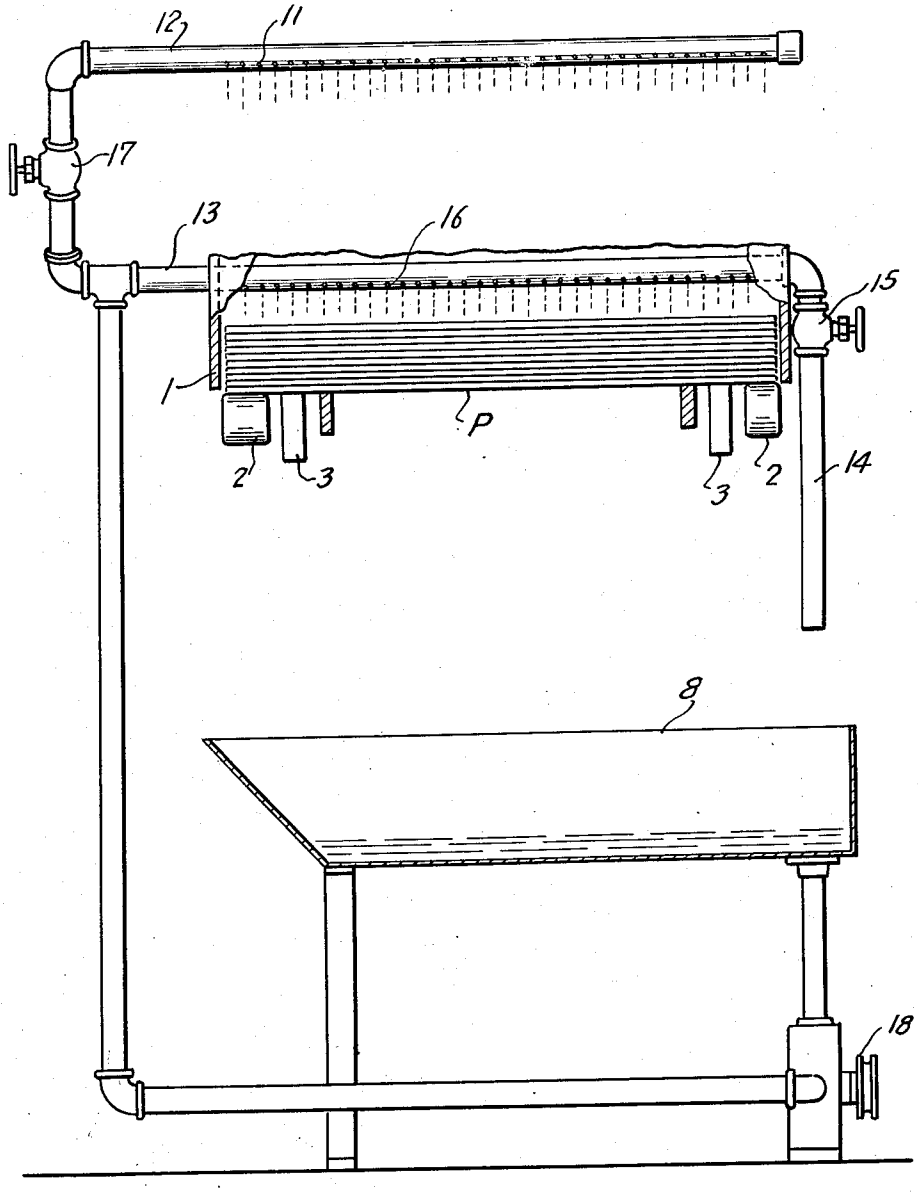
Oct. 21, 1952 R. O. DAVIS 2,614,525

APPARATUS FOR OILING AND CLEANING PALLETS

Filed April 26, 1947 2 SHEETS--SHEET 1

FIG. 1.



INVENTOR.
Robert O. Davis

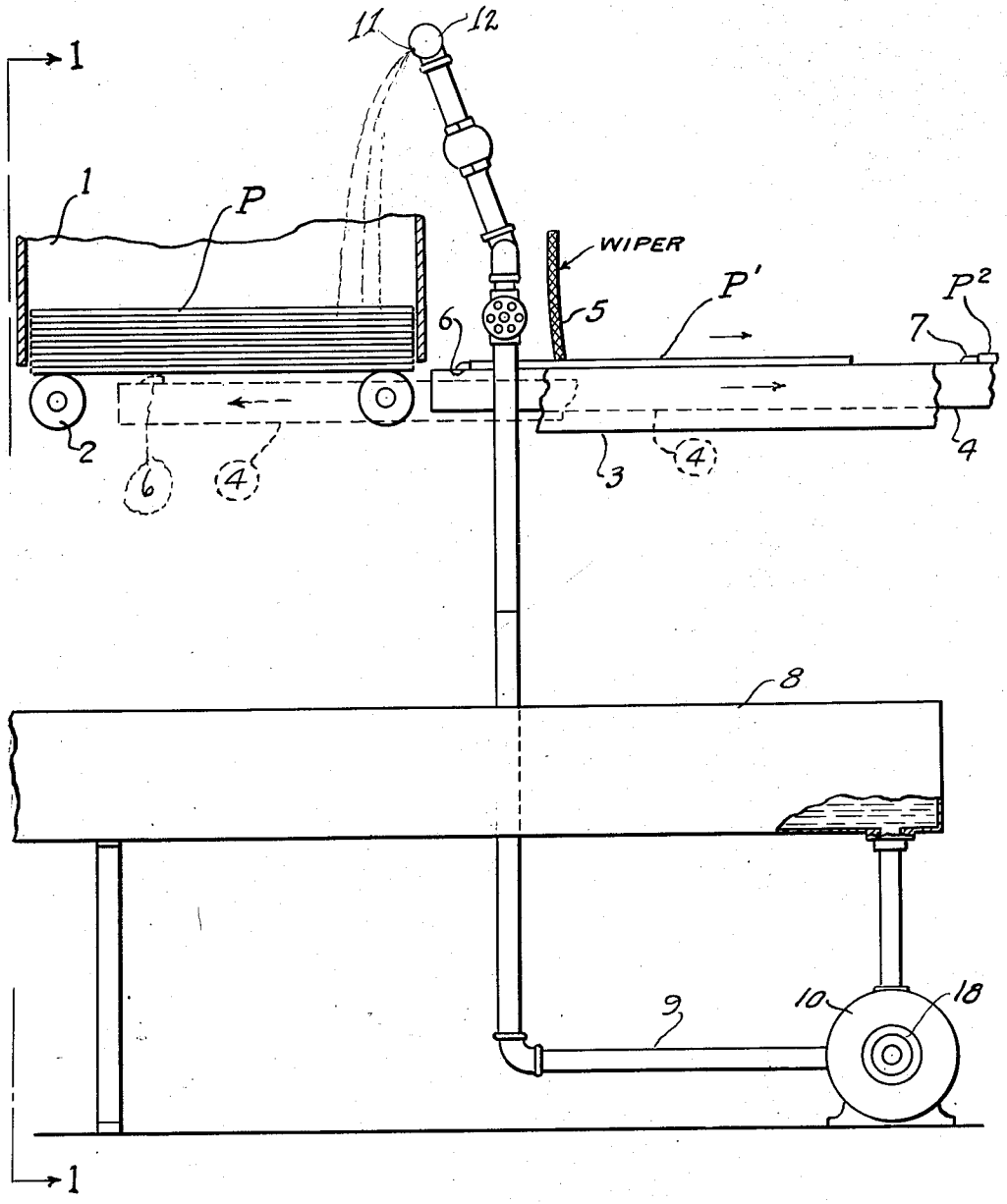
BY
Barnes, Kisselle, Laughlin & Raisch
ATTORNEYS

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FIG. 2.



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UNITED STATES PATENT OFFICE

2,614,525

APPARATUS FOR OILING AND CLEANING PALLETS

Robert O. Davis, Adrian, Mich., assignor to Stearns Manufacturing Company, Adrian, Mich., a corporation of Michigan

Application April 26, 1947, Serial No. 744,047

3 Claims. (Cl. 118—100)

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This invention relates to apparatus for automatically oiling pallets and wiping any excess oil and dirt from the pallet. It has usefulness particularly in connection with preparing pallets for use with molding concrete or cinder blocks. It is intended primarily for use with an automatic machine for molding such blocks, but it has, of course, usefulness in other connections.

Referring to the drawings:

Fig. 1 is an end diagrammatic view of the apparatus taken on the line 1—1 of Fig. 2.

Fig. 2 is a side diagrammatic view of the apparatus.

The pallets P are stored in the elevated magazine 1 which has an open lower end below which are the four rollers 2. The stack of pallets in the magazine 1 rest on these rollers. Rails 3 are adapted to support the pallets as they are pushed out of the magazine one by one. The pallets are slid along the rails 3 by means of some feeding apparatus which is adapted to engage the edge of the lowest pallet in the stack and push the pallet P^1 forward onto the rail. This pushing apparatus may take various forms and I have shown in the drawings only one form, namely, a reciprocating bar 4 which is shown in two positions. The full-line position shows the bar pushing one pallet under the wiper 5 and an advance pallet P^2 forwardly along the rails 3. This bar has a lug 6 which is engaging behind the pallet P^1 immediately under the wiper and a lug 7 which is pushing the pallet P^2 to the forward point along the rails. After the pushing stroke is completed, the reciprocating bar 4 drops to a lower level, as shown in the dotted lines, and then retreats under the stack of pallets and then is again raised to engage behind the edge of the lowermost pallet in the magazine. This operation is repeated continuously when the apparatus is in operation and the pallets are fed forwardly in the step-by-step movement. The mehanism for making the reciprocating bar take this "sewing machine feed movement" is not here shown or described as it might be varied and is well known.

Oil is contained in the oil pan or sump 8 and is pumped up through pipe 9 by the pump 10. The oil is distributed through the orifices 11 by the upper distributing pipe 12 and small streams are distributed over the top of the stack of pallets in the magazine 1. These pallets are placed or fed into the magazine one or two at a time and, consequently, there is some distribution of oil over each pallet in this stack of pallets. A further supply of oil is distributed by the lower distributing pipe 13 onto each pallet as it is fed forward on the rails. The pallet then passes under the wiper 5 where the excess oil is wiped off as well as any other dirt that has accumulated on the pallet. This is a "swiping" or "sweeping" action. Hence, when the pallets go forward on the rails they are both oiled and properly cleaned to go into the molding machine or for whatever other use they are to have.

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The lower distributing pipe 13 has an extension or bypass 14 controlled by a valve 15. The amount of oil distributed to the pallets may be regulated by the adjustment of this valve 15. If the valve is fully open very little oil will obviously be forced out the orifices in either the upper or lower distributing pipes. By altering the adjustment of this valve 15 it is possible to regulate the amount of oil distributed on the pallets by cutting down the oil that is bypassed to the oil pan or sump 8. It is also possible to completely shut off the upper distributing pipe by the valve 17 or the amount of oil distributed by the upper pipe may be altered with respect to the distribution of oil in the lower pipe by altering the adjustment of valve 17. The pump 10 may be operated by a pulley wheel 18 or any other source of power.

It is possible to operate the apparatus successfully without any distribution of oil on the stack of pallets in the magazine and, hence, the upper distributing pipe can be done away with or shut off by the valve 17, but I find it advantageous to use the upper distributing pipe.

What I claim is:

1. Apparatus for oiling and cleaning pallets, comprising an elevated magazine with an open bottom, means for supporting a stack of pallets above said open bottom, an oil distributor for flowing oil over the pallets in the magazine, a second oil distributor for flowing oil over a pallet detached from said stack and traveling along a supporting surface, a pallet-supporting surface along which the pallets travel, and means for detaching individual pallets from the underside of said stack and pushing them along said surface and said oil distributing area.

2. Apparatus for oiling and cleaning pallets, comprising an elevated magazine with an open bottom, means for supporting a stack of pallets above said open bottom, an oil distributor for flowing oil over the pallets in the magazine, a second oil distributing pipe with drip orifices for flowing oil over a pallet detached from said stack and traveling along a supporting surface, a pallet-supporting surface along which the pallets travel,

means for detaching individual pallets from the underside of said stack and pushing them along said surface and said oil distributing area, and a flexible wiping member adapted to bear against a pallet after oil has been distributed over it as it travels along its path on said supporting surface.

3. Apparatus for oiling and cleaning pallets having in combination a magazine with an open lower end, means for supporting a stack of pallets in the magazine above the open end, means for separating a pallet off the bottom of the stack and causing it to travel along a definite path, an oil distributor for distributing oil on each pallet as it is caused to enter the magazine and comes to rest on the top of the stack of pallets, and a wiper arranged along the said path for wiping the excess oil and dirt from the pallet.

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