AUTOMATIC WASHER FOR SMALL MACHINE PARTS

FIG. 1

FIG. 2
AUTOMATIC WASHER FOR SMALL MACHINE PARTS

FIG. 3

FIG. 4

FIG. 5

FIG. 6

FIG. 7

FIG. 8

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ABSTRACT OF THE DISCLOSURE

A washer for small machine parts having a rotatable hollow cage which is adapted to receive one or more baskets in which said parts are placed. A tank containing a washing liquid wherein said cage is supported in an inclined position by a pin and hub arrangement at its lower or bottom end and by rollers mounted in the lateral walls of said tank at its upper or front end. A drive chain, connected between a sprocket on the outward lower end of said cage and a sprocket connected through a gear box to an electric motor supported on the upper end of said tank, serves to rotate said cage.

This invention consists of a rectangular horizontally disposed base supported by four wheels. A rectangular open top tank, in which washing liquid is placed, is secured to the aforesaid base at a predetermined angle and supported by a pair of parallel and spaced vertically disposed supports that extend upward from the top of the base. The just mentioned tank contains two rollers, one on each side in the forward portion thereof on which rotatably rests a rectangular cage in which is removably placed on or more baskets containing the small machine parts that are to be washed. The rear end of the cage is provided with a supporting socket adapted to encompass a fixed pin that projects inward from the inside of one end of the aforesaid tank. The aforesaid socket is also provided with a sprocket which is encompassed by a chain that also encompasses in part a second or drive sprocket. The drive sprocket is mounted on the end of the outwardly extending shaft of a gear box which in turn is mounted on the upper end of one end of the aforesaid tank. The gear box is mounted beside an electric motor to which the gear box is connected by a shaft.

It is the principal object of this invention to provide an automatic washer for small machine parts that will, as its name implies, automatically wash a number of small machine parts in a minimum of time and without further attention once the parts have been placed in the basket in the cage of the machine and its electric motor is activated.

Another object of this invention is to provide an automatic washer for small machine parts is to provide a washer that can readily be cleaned.

Another object of this invention is to provide an automatic washer for small machine parts that is so constructed that the small machine parts to be washed will not be damaged by the action of the rotating parts of the machine nor by its washing liquid.

Still another object of this invention is to provide an automatic washer for small machine parts that can be adapted to contain two or more baskets in which small parts are placed for washing, and still be so constructed as to take up a minimum of space.

The above objects together with other which will become apparent from examination of the accompanying drawings, and from the reading of the following detailed description of this invention, or which may be later referred to, may be obtained by constructing this invention in the manner illustrated in the accompanying drawings, in which:
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URE 1, and the desired cleaning liquid placed therein. The basket 32 has the small machine parts that one desires to clean, placed therein and its lid 33 is placed thereon. The basket is now placed in the aforesaid cage 21, as clearly shown in FIGURE 1 of the drawings. The handle 34 is now pushed down to the position shown in FIGURE 3, thereby firmly locking the lid 33 on the basket 32. The electric motor 27 is now turned on in the usual manner, whereby causing the small sprocket 30 of the gear box 29 to rotate. The rotation of the small sprocket 30 turns the drive chain 31 which will now rotate the cage 21 and the basket 32 containing the small machine parts that are to be washed by the action of the washing liquid that is in the tank 13 which will flow in and out of the plurality of openings in the sides and lid of the basket 32. The aforesaid crossed angle irons 22 of the lower end of the cage 21 are so configured as to dip into and pick up the washing liquid and then spill it into the upper half of the basket 32, thereby adding to the washing action of the washing liquid that is in the aforesaid tank 13 which is provided with a suitable drain plug 37. It is to be realized that the length of the aforesaid cage 21 is such that two or more of the baskets 32 can be placed therein, thereby both doubling and tripling the capacity of the small machine parts basket as well as reducing the cleaning time for a given number of machine parts. It will be noted on examination of FIGURE 3 of the accompanying drawings that the small parts basket 32 is held in the position shown in phantom lines by means of the handle 34, above the liquid that is located in the aforesaid tank 13. This position of the parts basket 32 will permit any liquid that is in the basket to drain down from the same back into the tank 13. The cage 21 and the basket 32 can be rotated while the basket is above the liquid, thereby speeding up the liquid drainage from the basket.

This novel invention can be particularly useful around the disassembly and/or assembly line of internal combustion engines that are being repaired or reconditioned since the washer can be pushed up next to the engine being worked on.

It is to be understood that detailed changes in the construction of this invention can be made as well as modifications in its overall design.

What I now claim as new is:

1. An automatic washer for small machine parts consisting of a horizontally disposed base on which is mounted and secured a tank containing a washing liquid rotatable structure mounted in the said tank, said structure comprising a hollow cage that has its front end supported by two rollers that are mounted one on the inside of each lateral side wall of the said tank, the said structure being adapted to receive one or more baskets in which small machine parts that are to be washed are placed; the lower and outward end of said cage being provided with a sprocket that has a hollow tub which rests on a pin that extends inside the tank from the end wall of said tank; and means for rotating the said structure and its baskets.

2. The invention of claim 1, wherein an electric motor is mounted on an L-shaped bracket on one upper end of the said tank, the said electric motor being adapted to rotate a small sprocket that is mounted on the power output shaft of a gear box; and a drive chain encompassing in part both the said small sprocket and the first mentioned sprocket that is on the lower end of the said cage, thereby providing a means of rotating the said cage and its small parts basket or baskets when the said electric motor is activated.

3. The invention of claim 2, wherein the said base is rectangular in shape as is the said tank that is mounted thereon when the said tank is viewed from the top, the said tank being mounted on the said base at a predetermined angle and supported in part by two spaced vertically disposed supports that are also mounted on the said base.

4. The invention of claim 3, wherein the baskets have sides in which are located a plurality of openings in order that the washing liquid may flow through the same, the said baskets each being provided with a lid having a handle so constructed as to lock the said lid onto each basket after the basket has been placed in the said cage, the locking of the said lid being accomplished by pushing the said handle in a downward position.

5. The invention of claim 4, wherein the sprocket end of the said cage embodies two crossed iron angles, or their equivalent, so configured as to dip into the washing liquid when the said washer is in operation and to pour the washing liquid over the top of and into the basket in which are located the small machine parts that are being washed.

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U.S. Cl. X.R.