May 29, 1945. G. O. THAXTON 2,377,192

RINSING AND DRYING APPARATUS

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Fig. 1.

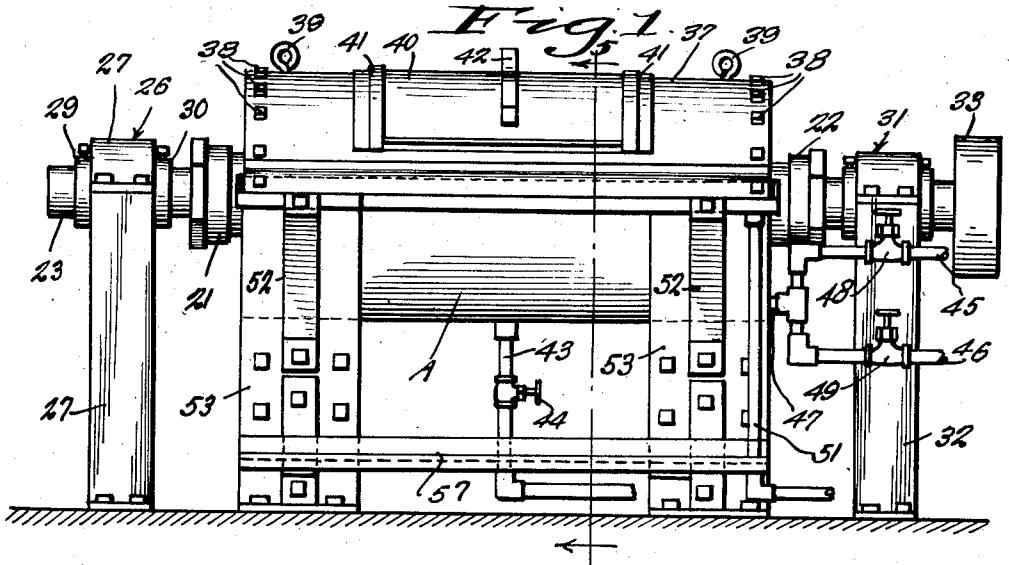


Fig. 2.

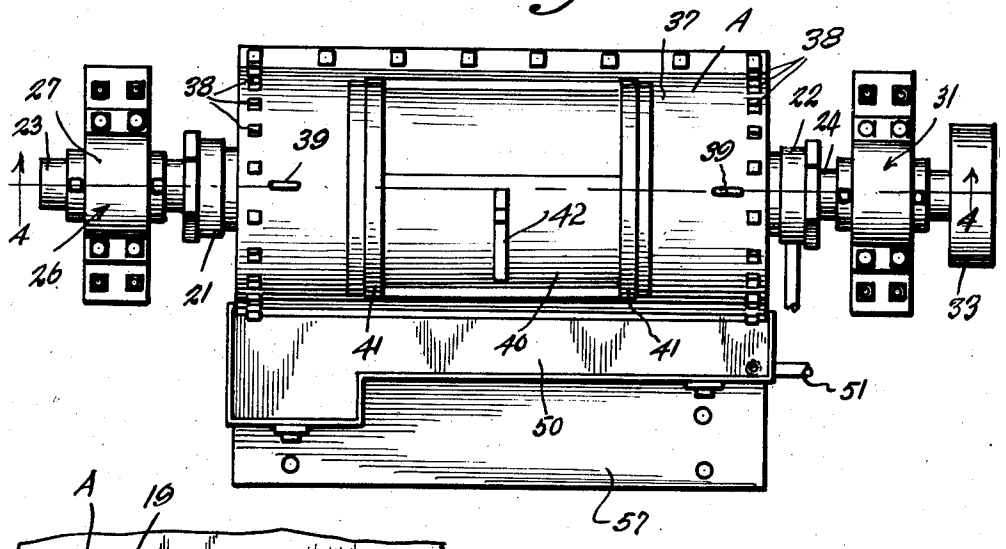
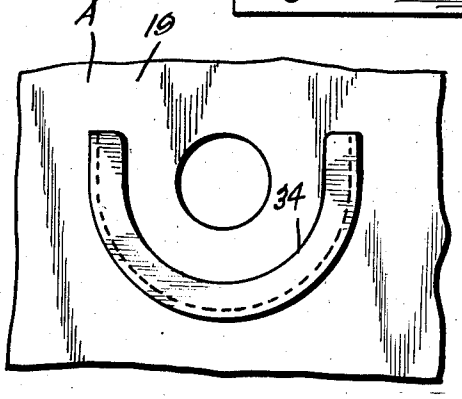


Fig. 3.



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Fig. 3.

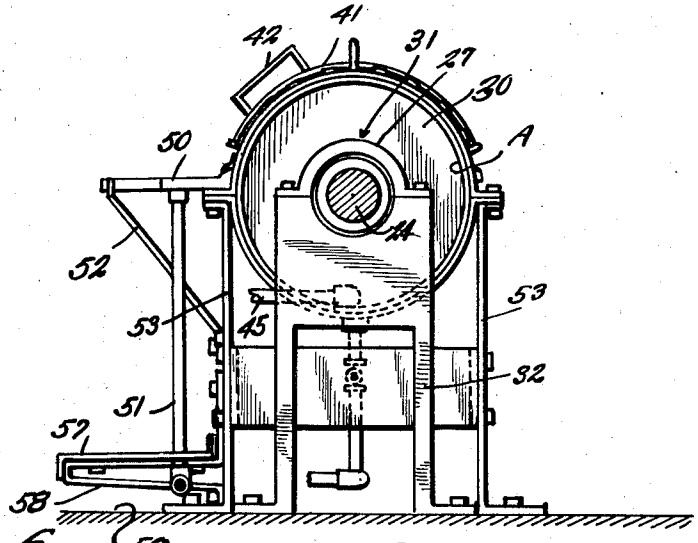
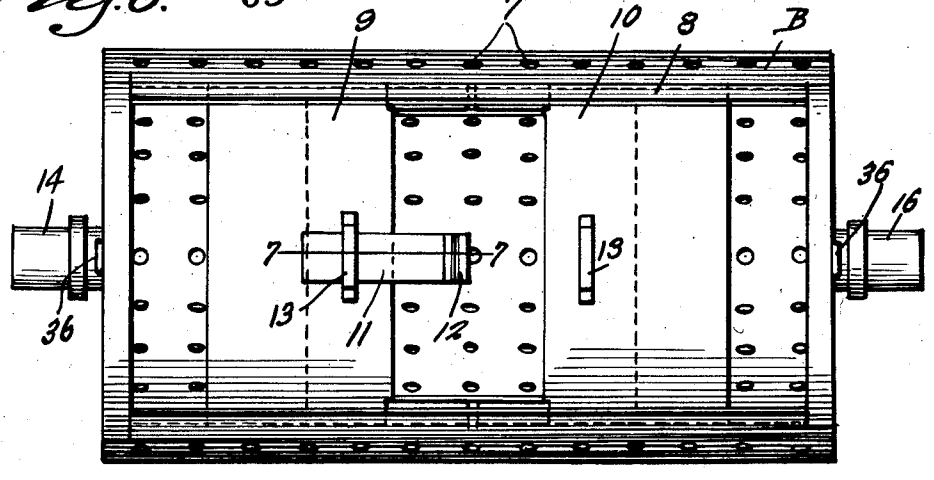


Fig. 6.



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RINSING AND DRYING APPARATUS

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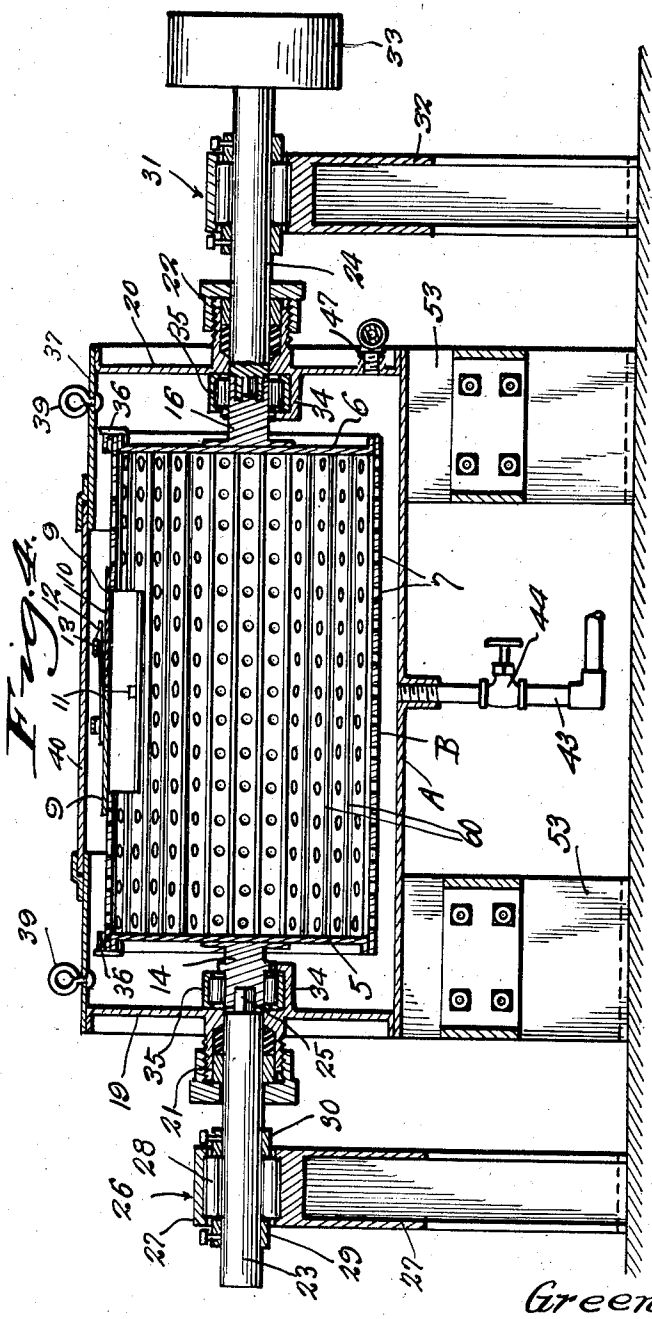


Fig. 4.

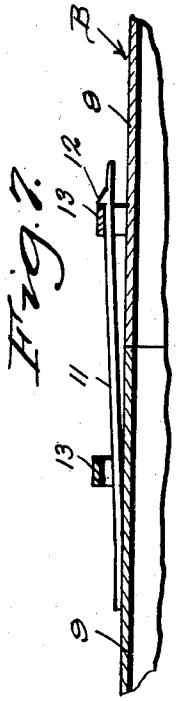


Fig. 7.

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RINSING AND DRYING APPARATUS

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Fig. 5.

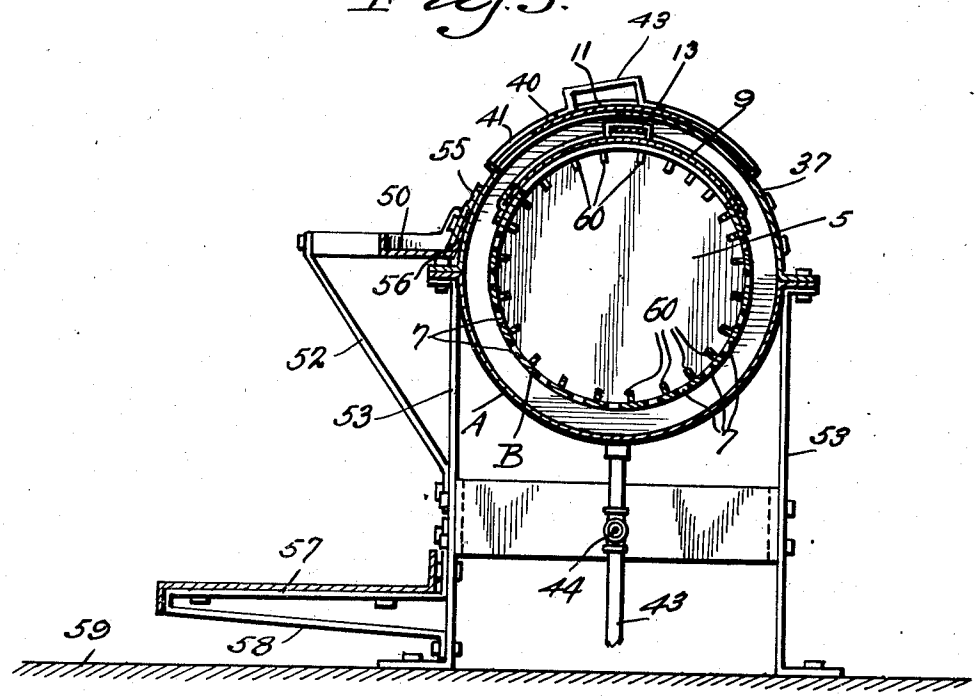


Fig. 9.

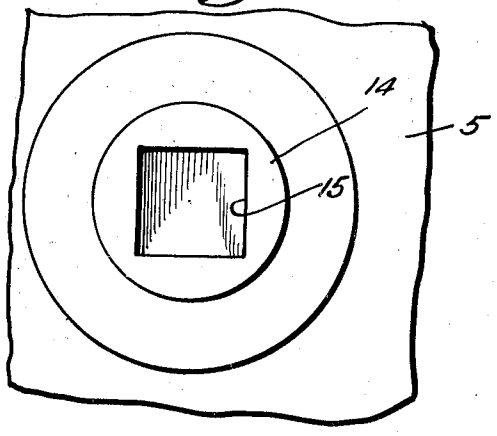
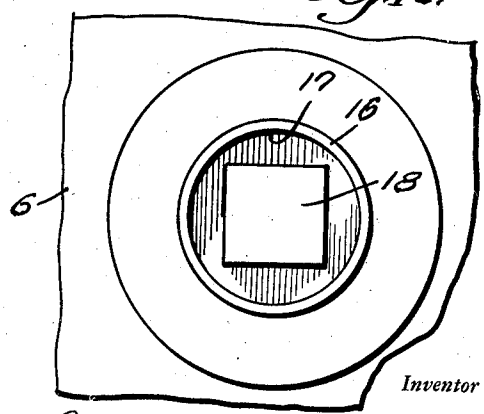


Fig. 10.



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Patented May 29, 1945 2,377,192

UNITED STATES PATENT OFFICE

2,377,192

RINSING AND DRYING APPARATUS

Green O. Thaxton, Washington, D. C.

Application August 24, 1942, Serial No. 455,907

3 Claims. (Cl. 68—139)

This invention relates to new and useful improvements in laundry apparatus and more particularly to a machine for rinsing and drying clothes.

The principal object of the present invention is to provide a rinsing and drying machine which will not only rinse clothes after they have been washed, but without removal from the machine will also serve to dry clothes.

Another important object of the invention is to provide a machine of the character stated wherein the parts are readily removable for the purpose of quick repair and replacement.

Another important object of the invention is to provide a machine wherein the various moving parts which have heretofore become defective more frequently than others have been sturdified and otherwise strengthened or made quickly replaceable, to the end that in the event any repairs are necessary the machine will not be thrown out of use but for a very short period of time.

Other objects and advantages of the invention will become apparent to the reader of the following description.

In the drawings—

Figure 1 represents a side elevational view of the machine.

Figure 2 is a top plan view.

Figure 3 is an end elevational view.

Figure 4 is a longitudinal sectional view taken substantially on the line 4—4 of Figure 2.

Figure 5 is a cross sectional view taken substantially on the line 5—5 of Figure 1.

Figure 6 is a top plan view of the drum.

Figure 7 is a fragmentary detailed sectional view taken substantially on the line 7—7 of Figure 6.

Figure 8 is a fragmentary inside elevational view showing one of the saddles.

Figure 9 is a fragmentary elevational view of one end of the drum.

Figure 10 is a fragmentary end elevational view showing the other end of the drum.

Referring to the drawings wherein like numerals designate like parts, it can be seen that reference character A denotes a shell, inside of which is a rotary drum B. The drum B has end walls 5, 6 and is formed with a multiplicity of rows of openings 7. Further, the drum B has an opening into which and out of which clothes can be handled and at each end of this opening is a guide 8. A pair of doors 9, 10 are slidable in these guides 8, the door 9 being provided with a spring latch arm 11 having a beveled head 12 which can be slipped under and sprung into fastened position shown in Figure 7 with respect to an elevated keeper strap 13 on the door 10. Obviously, the doors 9, 10 are prevented from flying open with the provision of such a fastener.

The end wall 5 of the drum B has a stub shaft 14 formed with a squared socket 15 therein, while the other end wall 6 has a stub shaft 16 protruding therefrom, this shaft having a socket 17 and a square stud 18 therein.

The shell A has end walls 19, 20 provided with packing glands or boxes 21, 22, respectively, through which shaft sections 23, 24 are disposed.

The shaft section 23 has a squared stud 25 at one end for disposition into the socket 15 of the stub shaft 14 on the drum B. This shaft 23 is disposed through a readily demountable bearing 26 mounted on the upper end of a standard 27. The bearing 26 comprises a semi-circular shell 27 flanged at its ends for attachment to the standard 27 and this shell or cap member 27 is flanged at its side portion overlapping the ends of roller bearings 28 located around the shaft 23. Removable collars 29, 30 are provided on the shaft 23 to prevent longitudinal shifting of the the shaft.

Obviously by loosening the packing gland 21 and the collars 29, 30, the shaft 23 can be readily pulled outwardly when it is desired to remove the drum B.

A similar bearing structure 31 is provided on a second standard 32 at the opposite end of the machine, and as shown in Figure 4, the shaft 24 can be construed as a drive shaft and be provided with a drive pulley 33.

At the inner sides of the end walls 19, 20 of the shell A are arcuate-shaped saddles 34, 34 for the reception of bearing units 35 into which the stub shafts 14, 16 of the drum B extend. Obviously, when the shafts 23, 24 have been pulled outwardly and the shell A opened, the drum B can be readily lifted from the shell along with the bearings 35. The drum B has eyes 36 thereon with which the usual hoisting means can be engaged.

The shell A has a cover section 37 bolted to the end walls 19, 20 by bolts 38 and this cover section has hoist line engageable eyes 39.

The cover 37 has a slide door 40 operating in guides 41, 41 and a suitable handle 42 is provided for this door.

A drain pipe 43 depends from the bottom of the shell A and has a drain valve 44 therein.

Hot and cold water pipes 45, 46 extend to an inlet 47 and these pipes 45, 46 have valves 48,

49 therein for controlling the mixture of hot and cold water.

At the front of the machine is a tray 50 from which extends a drain pipe 51, the tray slightly tilting toward this drain pipe. The tray is supported by suitable brackets 52 attached to corner legs 53 which serve to support the shell. As shown in Figure 5, the forward portion of the shell top 37 has a lip 55 attached thereto and under this lip engages an upstanding flange 56 on the inner edge of the tray 50.

Numeral 57 denotes a platform upon which an attendant can stand and this platform is supported by suitable bracket means 58 and can be any desired distance above the floor level 59.

Obviously, the machine as described above depicts an apparatus wherein the various parts are quickly accessible and replaceable or repairable as the occasion demands.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:

1. A rinsing and drying machine comprising a shell having a door, a rotatable drum disposed in the shell, said shell having end walls formed with openings therein, said end walls at the inner sides thereof being provided with saddle-like structures adjacent the openings, annular bearing assemblies supported by said saddle-like structures, said drum being provided with stub shafts at its outer ends disposed into said bearing assemblies, supplemental shafts each having means at one end for detachable connection with the corresponding stub shaft, said supplemental shafts being disposed through the openings in the end walls and supporting means for the said supplemental shafts.

2. A rinsing and drying machine comprising a shell having a door, a rotatable drum disposed in the shell, said shell having end walls formed with openings therein, said end walls at the inner sides thereof being provided with saddle-like structures adjacent the openings, annular bearing assemblies supported by said saddle-like structures, said drum being provided with stub shafts at its outer ends disposed into said bearing assemblies, supplemental shafts each having means at one end for detachable connection with the corresponding stub shaft, said supplemental shafts being disposed through the openings in the end walls and supporting means for the said supplemental shafts, said means for connecting the supplemental shafts to the stub shafts consisting in providing the stub shafts with polygonal shaped sockets and forming the supplemental shafts with polygonal ends for disposition into said sockets.

3. A rinsing and drying machine comprising a shell having a door, a rotatable drum disposed in the shell, said shell having end walls formed with openings therein, said end walls at the inner sides thereof being provided with saddle-like structures adjacent the openings, annular bearing assemblies supported by said saddle-like structures, said drum being provided with stub shafts at its outer ends disposed into said bearing assemblies, supplemental shafts each having means at one end for detachable connection with the corresponding stub shaft, said supplemental shafts being disposed through the openings in the end walls and supporting means for the said supplemental shafts, said end walls being provided at their other sides with packing glands circumscribing the openings in said end walls and through which the supplemental shafts are disposed.

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