No. 859,564. PATENTED JULY 9. 1907.

H. LAWRENCE.

WASHING MACHINE.

APPLICATION FILED MAY 4, 1906.

Fig. 1.

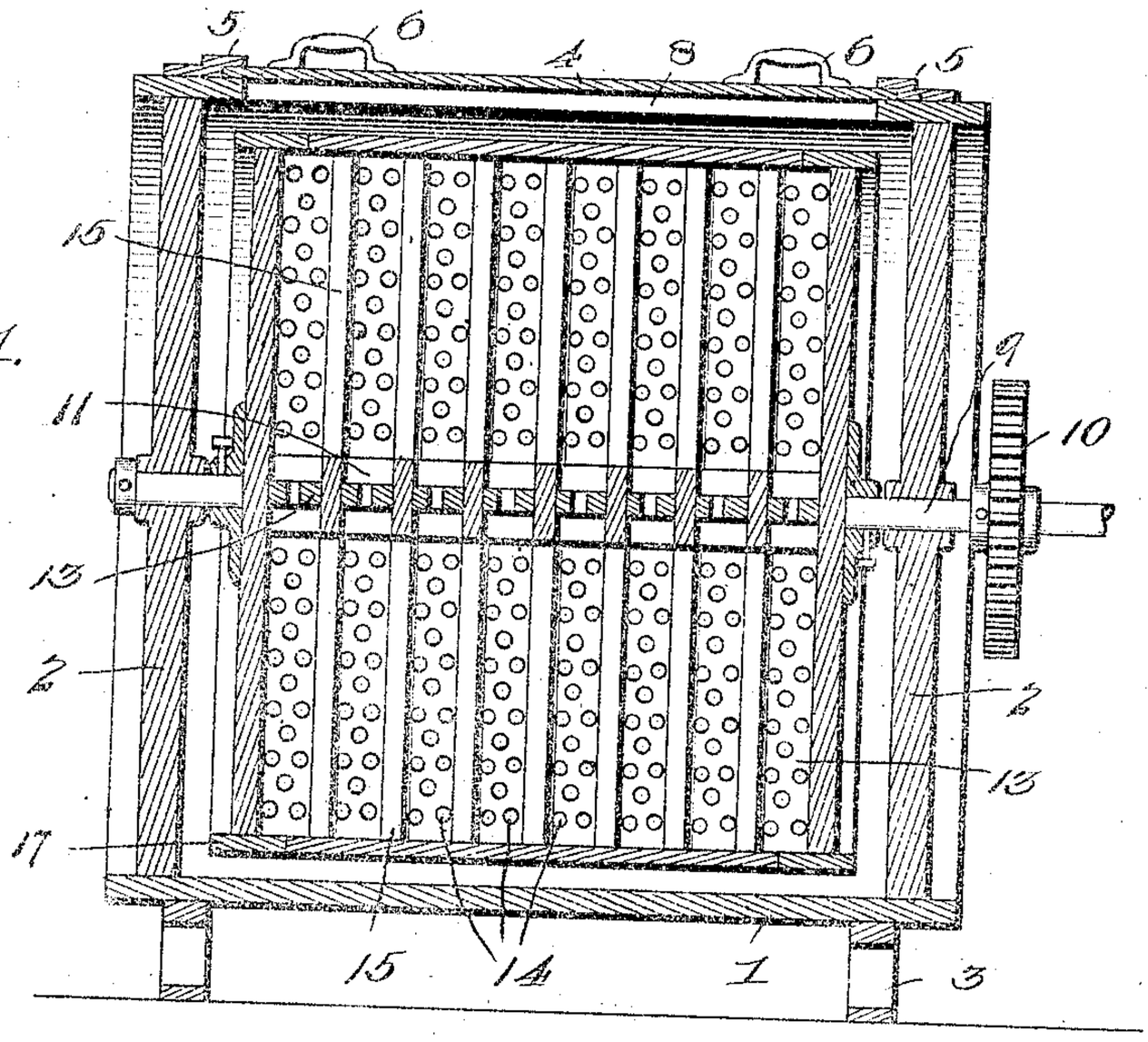
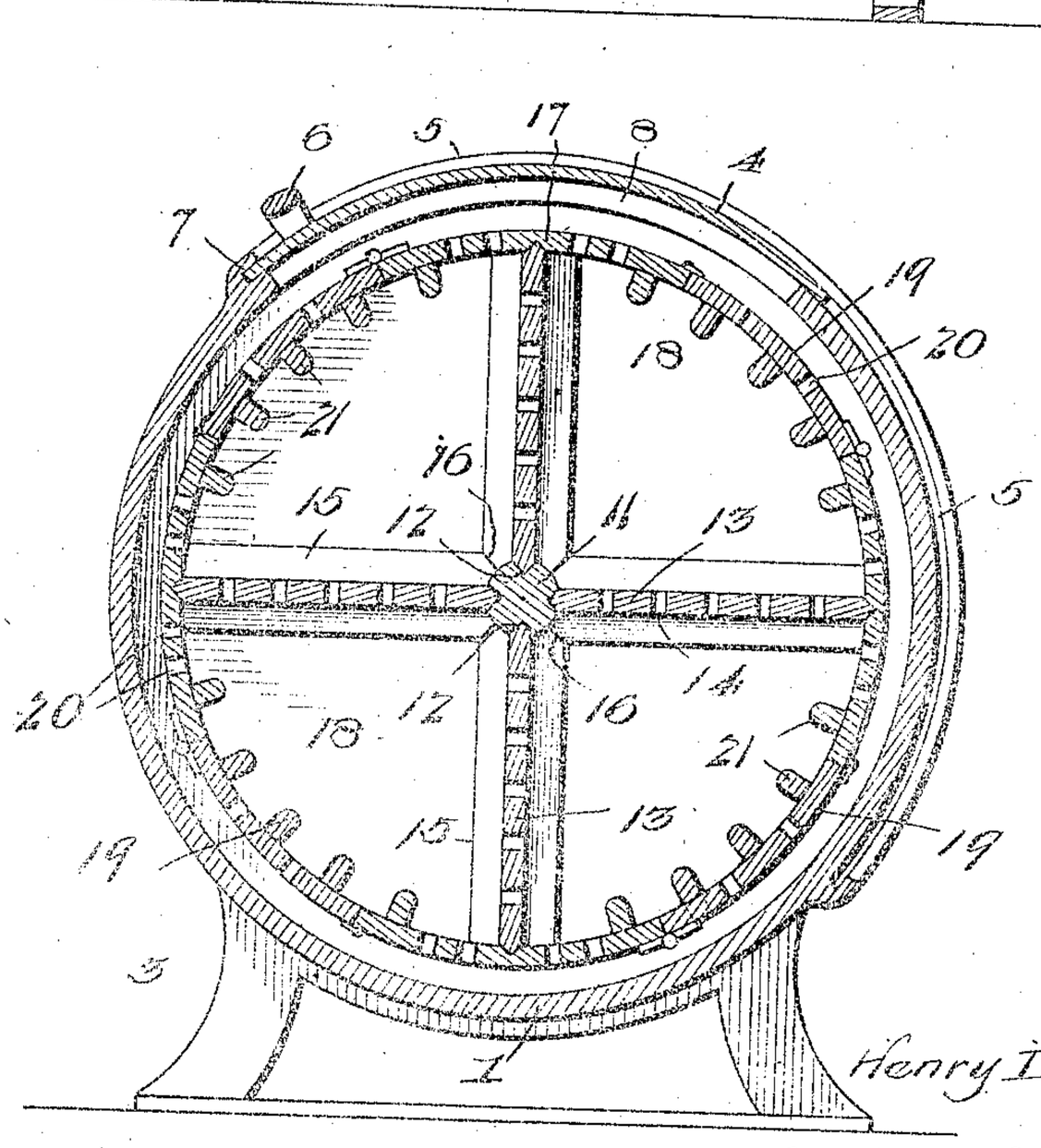


Fig. 2.



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HENRY LAWRENCE, OF RICHMOND, VIRGINIA.

WASHING-MACHINE.

No. 859,564. Specification of Letters Patent. Patented July 9, 1907.

Application filed May 4, 1906. Serial No. 315,141.

To all whom it may concern:

Be it known that I, HENRY LAWRENCE, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to washing machines, and the primary object of the same is to provide a simple and effective organization of elements which will unitedly contribute to expedite the washing operation and at the same time thoroughly cleanse the clothes treated thereby.

The washing machine embodies essentially an outer stationary inclosing cylinder in which is rotatably mounted a clothes-receiving cylinder divided into a number of compartments having a particularly alternating arrangement of perforated partitions and intersecting ribs, the surrounding inclosure of the inner cylinder or washing drum being perforated to permit the free circulation of water into and outwardly therefrom.

The invention also consists in the details of construction and arrangement of the several parts which will be more fully hereinafter set forth.

In the drawing, Figure 1 is a longitudinal vertical section of a machine embodying the features of the invention. Fig. 2 is a transverse section of the same.

Similar numerals refer to like parts throughout the views.

The numeral 1 designates an outer cylinder or casing having opposite heads 2 and supporting feet or a base rest 3. The interior of the cylinder 1 is rendered accessible through the medium of a curved slide-door 4 which is movable in guides 5 circumferentially disposed on the outer surface of the said cylinder, the door 4 having suitable grips or handles 6 for convenience in operating the same. The one end of the door 4 is adapted to enter a recessed abutment 7 to form a tight joint over the opening 8 so as to prevent the water or suds disposed in the cylinder 1 from splashing out during the operation of the machine.

Shaft-extremities 9 are rotatably mounted in the centers of the heads 2, and as shown, has one extremity projected exteriorly of the machine to receive a suitable gear 10 which may be arranged to mesh with other gearing not shown. The shaft has an intermediate body 11 which is constructed of non-corrosive material, and it is preferred that the shaft be composite in its structure, the portions of the shaft bearing in the heads 2 being in some constructions secured to the body 11, or the body 11 may be integrally formed with the bearing portions thereof, all of which are obvious features of construction. The body 11 of the shaft is formed with diametrically disposed seats 12 and therein are fitted the inner edges of partitions 13 having perforations 14 spaced at regular intervals. Between the partitions strips 15 are snugly disposed in planes at right angles and projected beyond opposite sides of the said partitions to form ribs which are fitted in relation to each other at the center by miter joints 16 as shown. Surrounding the partitions and ribs as specified, is an inclosing shell or casing 17 which with the said partitions form a series of compartments 18, four of such compartments being shown in the present instance. These compartments may be varied in number in accordance with the dimensions of the machine, and each compartment is rendered accessible by a hinged door 19. The shell 17 is formed with perforations 20 at regular intervals to permit water to freely pass therethrough from the outer cylinder to the several compartments in order to establish a thorough circulation. Extending over the inner surface of the shell 17 are a plurality of longitudinally arranged ribs 21 which coact with the ribs 15 to set up a rubbing action on the clothes placed in the several compartments. The ribs 15 also prevent the clothes from packing close to the partitions 13 and thus provide for a free flow of water through the partitions with material advantages in the cleansing operation.

In preparing the machine for operation the articles or clothes to be washed are placed in the several compartments 18 and the doors 19 tightly closed. Hot water or suds is then placed in the cylinder or outer casing 1, the quantity of water disposed in the casing depending upon the quantity of clothes or articles to be washed in the compartments. The slide door 4 is then closed and the inner drum is rotated and the clothes caused to move from one position to another in the several compartments and contact with the ribs 15 and 21 and at the same time the water freely circulates through the clothing treated and results in an expeditious and thorough cleansing operation. When it is desired to remove the clothes, the door 4 is opened and the several compartments brought around in line with the opening 8, and the doors 19 also then opened and the clothes removed. In view of the comparatively shallow depth of the several compartments by reason of the partitions therein, the clothing may be easily reached when removed.

The improved machine will be found exceptionally useful and advantageous in its operation, and such materials will be used in the structure of the parts thereof as may be found best adapted for the purpose.

What I claim is:

In a washing machine, the combination with a shaft provided with a plurality of longitudinally disposed seats, of perforated partitions having their inner ends fitted in the seats, strips intersecting the partitions and disposed at right angles thereto to form ribs which are fitted in relation to each other at the center by miter joints, a shell with which the outer ends of the partitions are secured, the strips extending over the partitions from one end of the drum to the other, and longitudinal ribs disposed against the inner side of the shell.

In testimony whereof, I affix my signature in presence of two witnesses.

HENRY LAWRENCE.

Witnesses:
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