

R. H. Champlin,

Washing Machine,

N^o 25,949.

Patented Nov. 1, 1859.

Fig. 1.

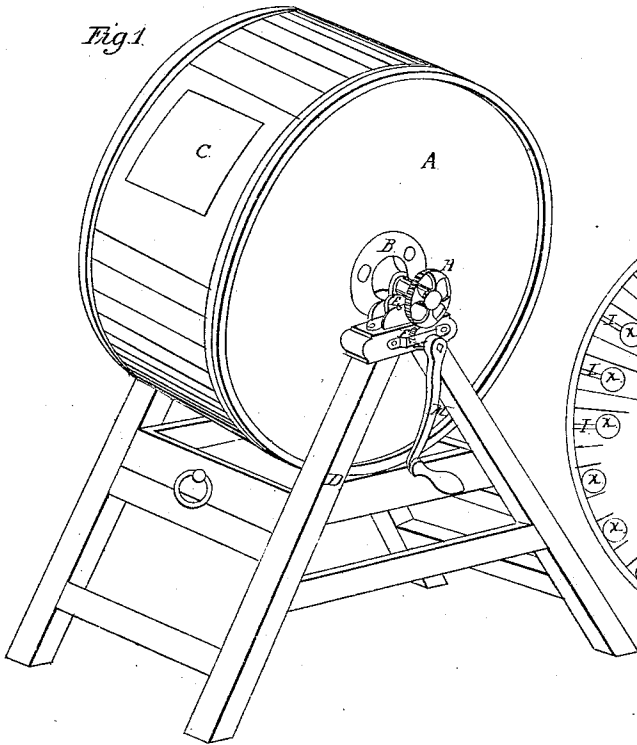


Fig. 2.

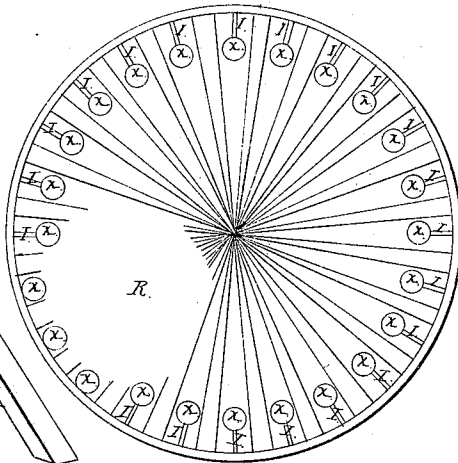


Fig. 3.

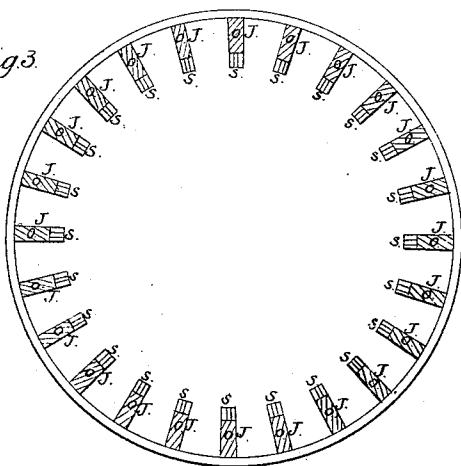


Fig. 5.



Fig. 6.

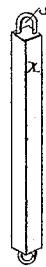
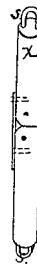


Fig. 4.



Witnesses:

Liles Weaver

Benjamin Arnold

Inventor:

R. H. Champlin

UNITED STATES PATENT OFFICE.

ROBERT H. CHAMPLIN, OF EAST GREENWICH, RHODE ISLAND.

WASHING-MACHINE.

Specification of Letters Patent No. 25,949, dated November 1, 1859.

To all whom it may concern:

Be it known that I, ROBERT H. CHAMPLIN, of East Greenwich, in the county of Kent, in the State of Rhode Island, have invented a new and Improved Washing-Machine; and I do hereby declare that the following is a full and correct description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Similar letters in the different figures denote the same parts.

In these drawings Figure 1 is a view in perspective of the machine. Fig. 2 is a section of the cylinder taken through its middle and across its axis. Fig. 3 is a vertical section of one of the heads of the cylinder taken through in the plane of its motion. Figs. 4, 5, 6, represent different shapes of the slats.

To construct my improved washing machine, make a hollow cylinder A, its length being about two thirds of its diameter, and to avoid the necessity of having the shaft run through the middle where it would be likely to interfere with the clothes in washing I secure the journals upon which it turns to the heads of the cylinder by means of the broad flanges B. On one side of the cylinder an opening C is made through which the clothes, water, etc., are put into the cylinder. The frame which supports this cylinder may be made as represented in Fig. 1 D, or in some other simple form as it is not material what the shape of it may be as regards the effects of the machine.

E E are friction rolls upon which the journal turns, and there is a small gear wheel F fastened upon the crank shaft G, which meshes into a larger one, H fast upon the journal of the cylinder; which causes the machine to run so easy that a child can operate it. But the most important part of the machine consists in the rounds or slats X (and springs O) which may be made of most any shape as seen in cross section, and which are placed a little inside of the covering of the cylinder and extend from one head to the other. In the ends of these slats X X are put staples or flat studs S (or the end of the slats may be flattened away so

as answer the same purpose) which project through the slots I into the cavities J in the heads. In these cavities are put the springs O, which rest upon the staples 55 (there may be placed between them a washer or cap to secure a fair bearing upon the spring) and press the slats toward the center of the cylinder.

It is important that the ends of the slats 60 should be so fixed as to prevent them from turning around on their centers, as the clothes pass over them, as that would prevent the rubbing effect which would otherwise take place, and if the slats turned freely 65 it would tend to keep the clothes near or at the bottom of the cylinder instead of carrying them up on the side.

The cavities containing the springs may be lined with metal tubing to prevent the 70 action of the water upon the wood from interfering with the working of the springs; the metal at the sides of the slots in the tubes would also help to prevent the staples from wearing away the wood. Upon the inside 75 of the heads are fastened the radial slats L which assist in rubbing the clothes as they pass by them.

The operation of the machine is as follows: The clothes, water, &c., are put into 80 the cylinder and the opening C closed and a rotatory motion given to the cylinder by means of the crank M; the clothes R resting on the slats depresses them, and they are carried up the side of the cylinder by its 85 motion until the pressure of the springs overcomes the weight of the clothes when they are thrown from the side toward the center and fall at the bottom of the cylinder; this suddenly depresses the slats at that 90 part which has the effect of driving the water that is between the slats through the clothes removing the dirt from them very effectually; the vacancy between the slats, (the number of which may be more or less) 95 has an effect analogous to the cavities and holes in a common clothes pounder that is used in a barrel, only requiring far less power to produce the same effect and with much less wear to the clothes. Underneath 100 the cylinder is placed a drawer to catch what water may be spilled in taking the

clothes out of the machine or that may leak out while it is in operation.

Having thus described the construction and operation of my machine, what I claim as my invention and desire to secure by Letters Patent, is—

I claim the combination of the rounds or

slats, and springs, with the cylinder, when constructed and operating substantially as herein described.

R. H. CHAMPLIN.

Witnesses:

SILAS WEAVER,
BENJAMIN ARNOLD.