(No Model.)

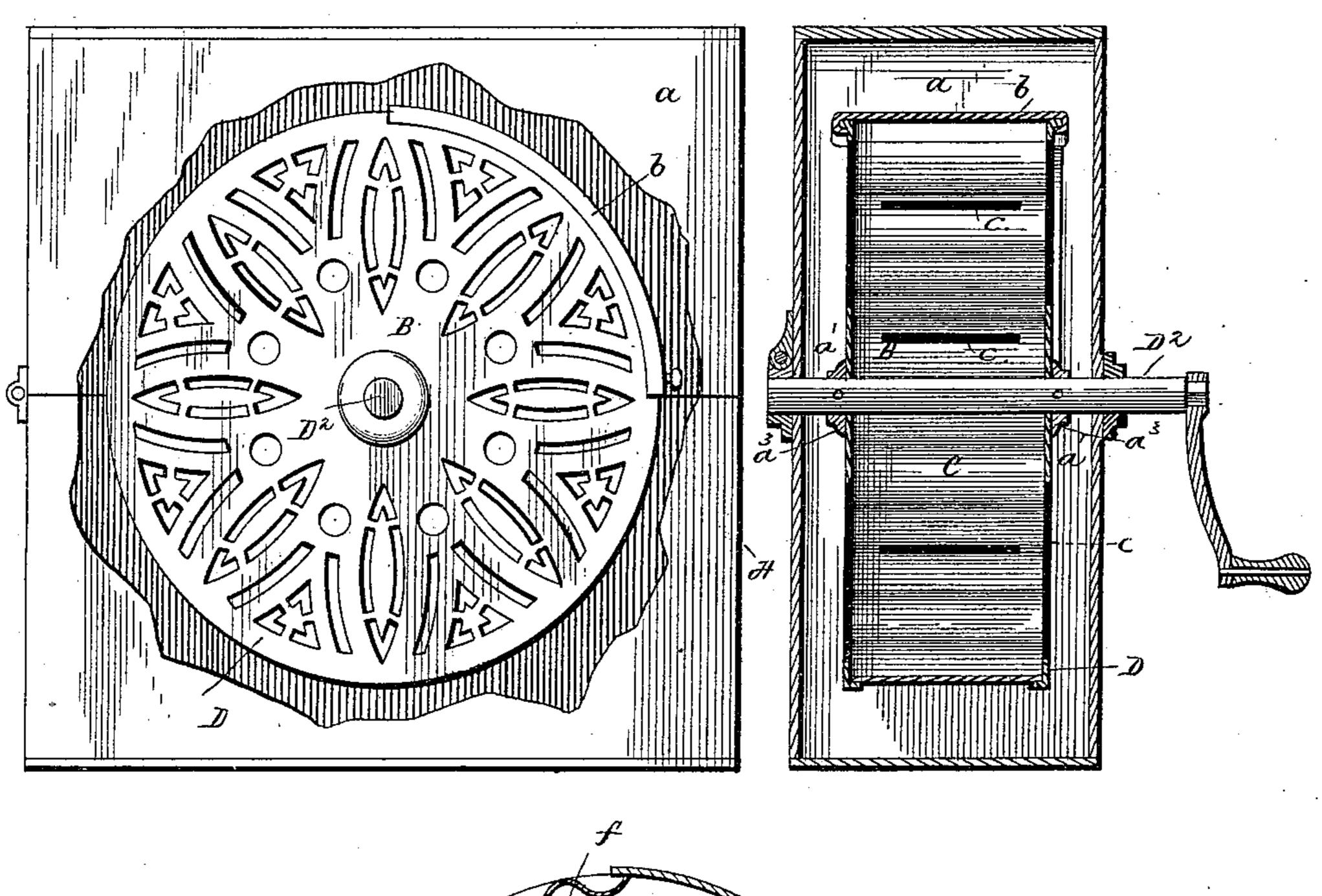
B. & J. A. RINGO.

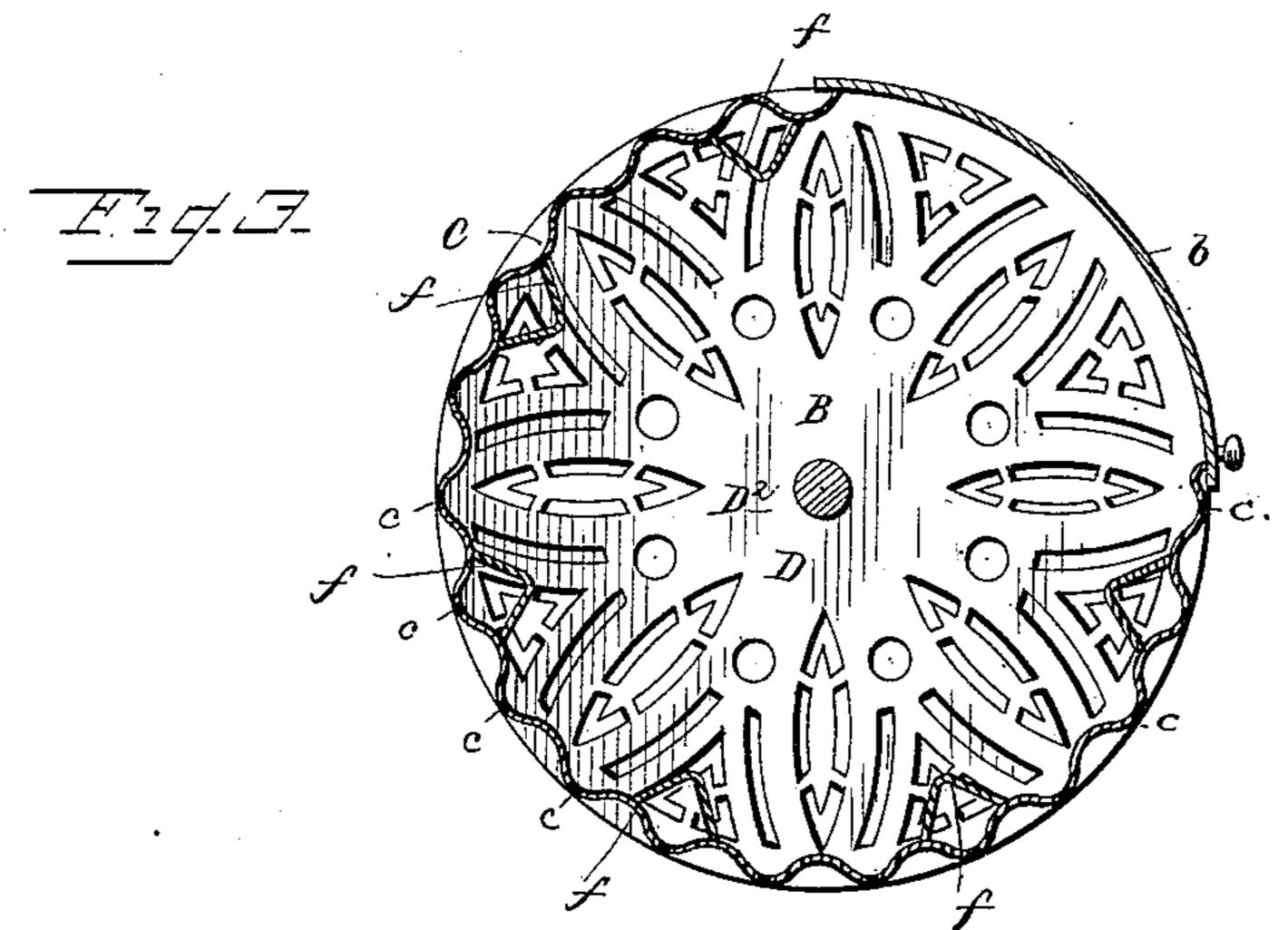
WASHING MACHINE.

No. 350,561.

Patented Oct. 12, 1886.

F24.I.





WITNESSES F. L. Ourand Daniel Breed

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United States Patent Office.

BIRT RINGO AND JOSEPH A. RINGO, OF MEXICO, MISSOURI.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 350,561, dated October 12, 1886.

Application filed July 9, 1885. Serial No. 171,097. (No model.)

To all whom it may concern:

Beitknown that we, BIRTRINGO and JOSEPH A. RINGO, citizens of the United States, residing at Mexico, in the county of Audrain and 5 State of Missouri, have invented certain new and useful Improvements in Washing-Machines; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in to the art to which it appertains to make and use the same.

Our invention is an improvement in that class of washing-machines in which the articles to be cleaned are subjected to the influ-15 ence of hot water and steam while they are being agitated and changed in position to present the different soiled portions to the active

influence of the cleansing elements.

Our machine consists of a box or receptacle 20 for water at a high temperature, provided with a cover and a rotary receptacle or basket of cylindrical form, having its bands corrugated and heads reticulated. The said basket is formed of galvanized iron, preferably, and it 25 may be opened and closed by means of a sliding door, which moves on suitable ways fixed upon the body of the said basket. While the articles are being cleansed, during the rotation of the cylinder, it is of importance to provide 3° within the inclosure a surface as large as possible, against which they may fall, and in our machine we preferably corrugate the band of the cylinder in curved or angular lines, (seen in vertical section,) so that the effect upon 35 said articles may be the same as that produced by the knuckles of a person rubbing them by hand.

In our drawings, Figure 1 is a side elevation of our machine, with the side of the box 40 broken away to expose one of the vertical disks of the cylindrical receptacle. Fig. 2 is a vertical central section of the machine. Fig. 3 is a sectional view showing the shelves or offsets arranged upon the inner corrugated sur-45 face of the receptacle.

Similar reference-letters indicate like parts

in all of the figures.

Referring to the drawings, A is a box of rectangular form, adapted to set upon a heater, 50 and provided with a hinged cover, a, and suitable journal-bearings to receive the shaft of the rotary receptacle. A spigot may be pro-

vided in the box A at some convenient point to discharge the water after the same has served its purpose within the basket or receptacle.

Within the box A is a cylindrical receptacle, B, provided with a sliding door, b, secured upon ways fixed upon the periphery of said receptacle. The band C of the cylinder is corrugated, and at intervals in said corrugations 60 are slots c, provided for the entrance of the water and steam within said cylinder.

D D are disks forming the vertical walls of the cylinder or basket, and these are pierced with openings which extend from near the jour- 65 nal-bearing a' to within a very narrow space of the circumference of the said disks.

As in our machine we have in view to offer the greatest opportunity for the entrance of steam and hot water to the articles, we use 70 heavy galvanized iron in its construction, so that it is practicable to pierce the disks of our receptacle or basket with numerous and long slots, presenting to the eye either curved or straight lines, or a combination of both. This 75 arrangement of reticulation we consider of great importance in the clothes-receptacles of this class of machine, as during the rotation of the basket the steam and hot water may enter and escape rapidly upon and from the 80 clothing as it is tossed rapidly about.

The cylinder or basket B is provided in the center of its disks with collars a^3 , through which is run and to which is secured a shaft, D2, which, when the said cylinder or receptacle B is in 85 position, bears in the journal-bearings provided in the sides of the box A. The shaft D² is provided with a crank, if operated by hand, or a pulley, if operated by other power.

cc are the openings formed in the corrugated 90 band of the receptacle B, and at intervals of sixths or eighths of the perimeter of said cylinder may be formed or provided offsets or shelves f, which serve to assist in turning, positively, the articles with reference to each other, 95 so that new points may be constantly presented to the action of steam and water during the rotation of the cylinder.

In view of the state of the art we do not claim, broadly, a washing-machine cylinder 100 corrugated in its band and provided upon the inner surface of same with rubbing-offsets. Neither do we broadly claim a cylinder having perforated disks, as we are aware that cylinders have been used with small disk-openings for the entrance and exit of the water and steam.

What we claim as new, and desire to secure

5 by Letters Patent, is—

1. In a washing-machine, the receptacle for clothes, cylindrical in form, having its band corrugated and pierced with long slots parallel with said cylinder's axis, and having on the inner surface of said band offsets f, in combination with disks forming heads to said cylinder, reticulated with radial openings, extending between the edging of said band and the collars of the journal of said receptacle, and a suitable opening and door for same, substantially as set forth.

2. The combination, with the cylindrical rotary clothes-receptacle, corrugated and formed with long rectangular slots in its band, and having its disks pierced with radial openings, 20 as set forth, of the box A a, as and for the purpose specified.

In testimony whereof we affix our signatures

in presence of two witnesses.

BIRT RINGO.
JOSEPH A. RINGO.

Witnesses:

D. D. WOODWARD, HARRY C. SMITH.