No. 668,365. Patented Feb. 19, 1901.

K. WIECHERS.

WASHING MACHINE.

(Application filed Apr. 9, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

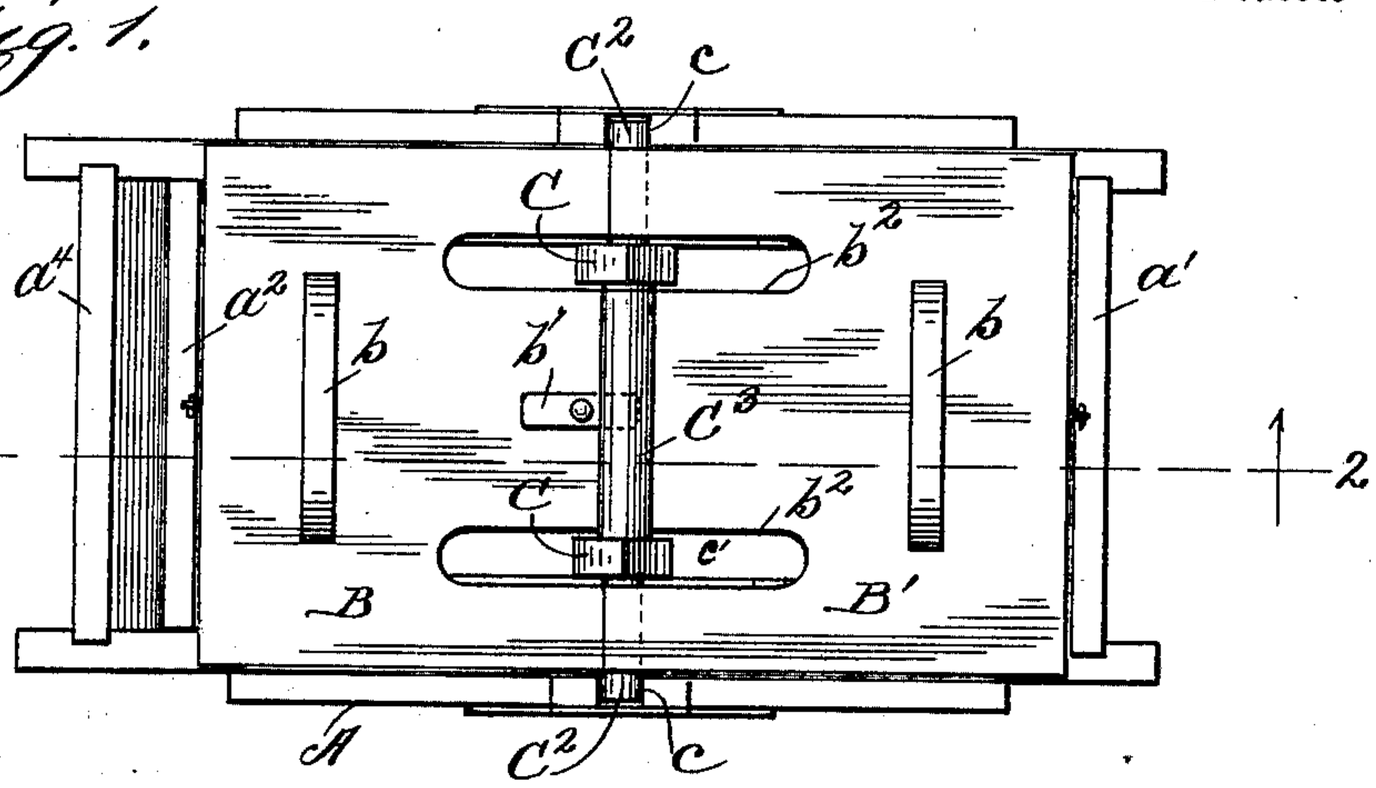

Fig. 2.

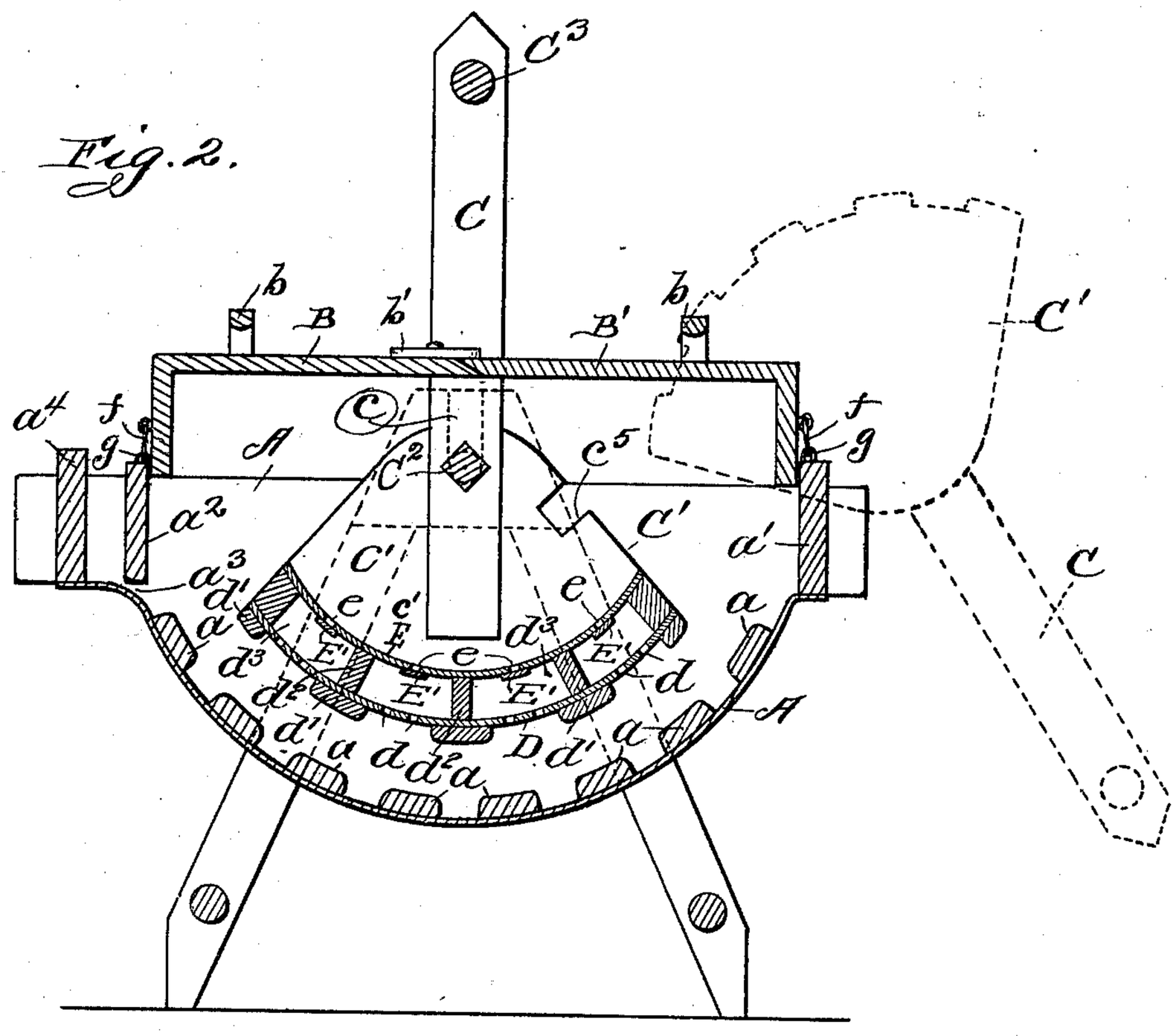

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Fig. 3.

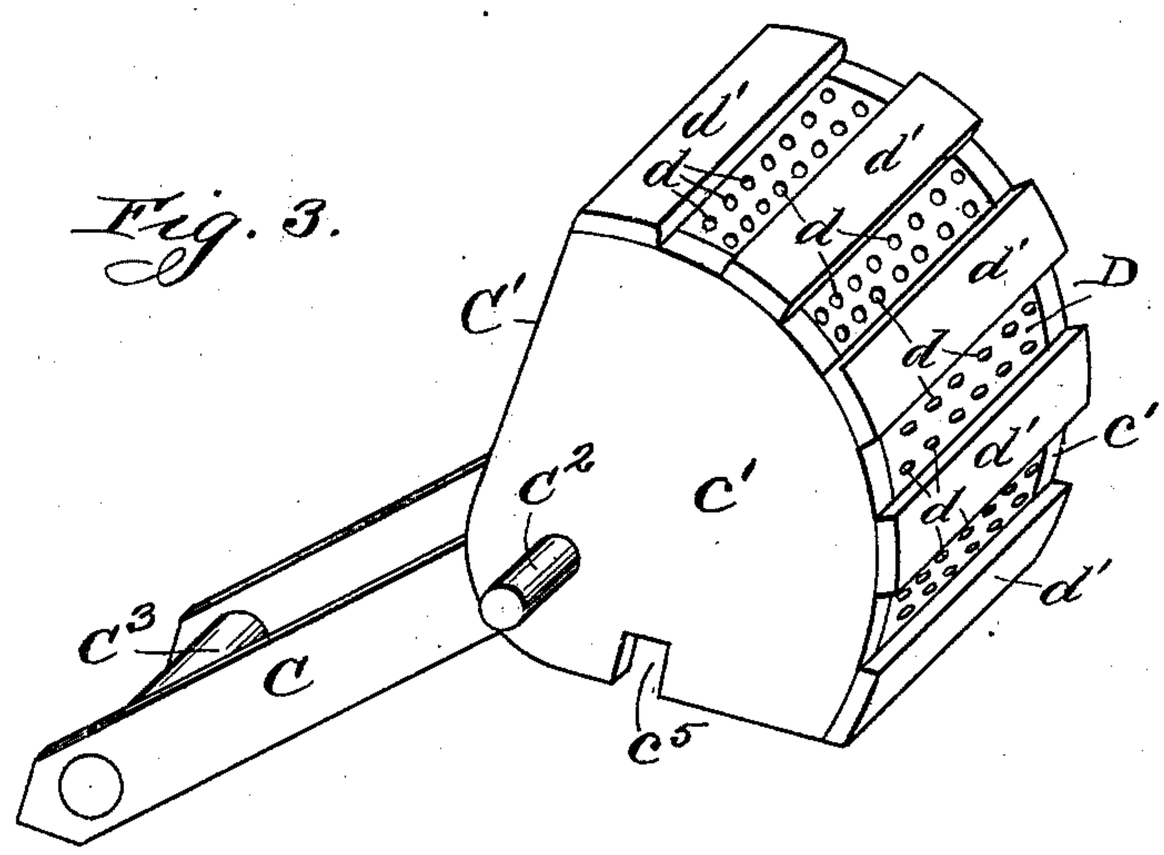


Fig. 4.

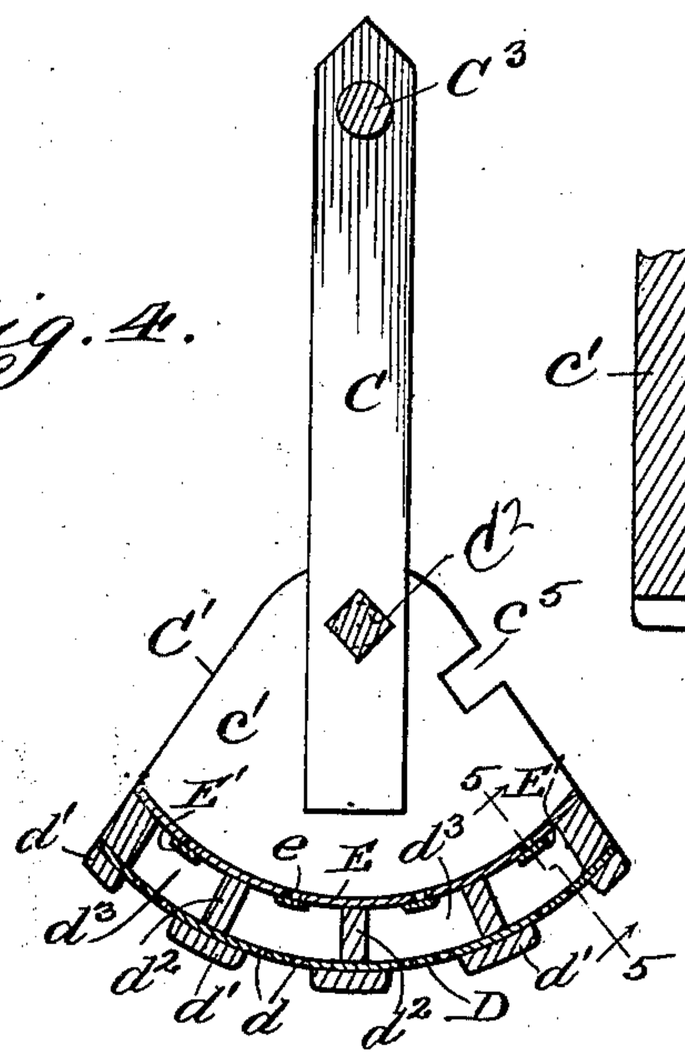
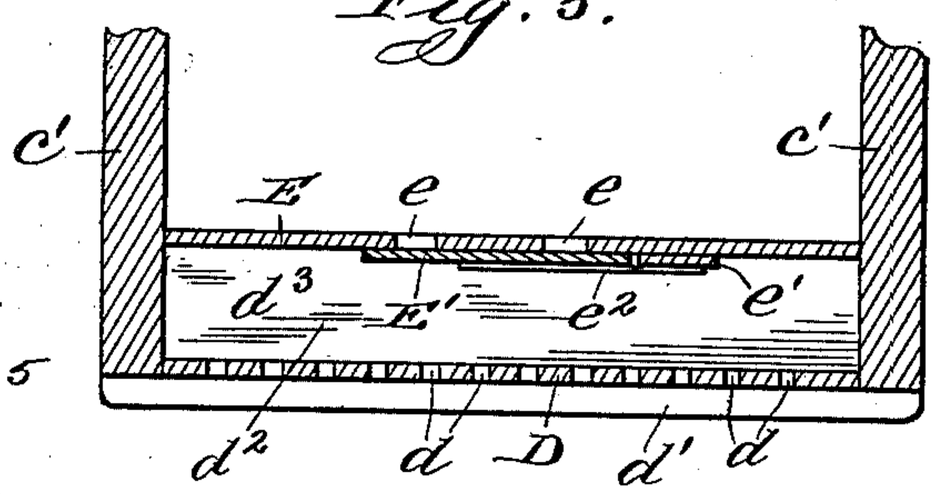


Fig. 5.



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UNITED STATES PATENT OFFICE.

KASPAR WIECHERS, OF CHICAGO, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 668,365, dated February 19, 1901.

Application filed April 9, 1900. Serial No. 12,209. (No model.)

To all whom it may concern:

Be it known that I, KASPAR WIECHERS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to improvements in that class of washing-machines having an oscillating segmental rubber operating in a concave fixed portion or suds-box, each having coacting corrugations or ribbed surfaces; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The object of my invention is to provide a washing-machine which shall be simple and inexpensive in construction, easy to operate, and one that will remove from the garments the dirt and stains without wearing, tearing, or otherwise injuring the fabrics.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a plan view of a washing-machine embodying my invention. Fig. 2 is a vertical sectional view taken on line 2 2 of Fig. 1, showing by dotted lines the position in which the rubber may be placed when it is not in use and when it is desired that the same may be drained or dried. Fig. 3 is a perspective view of the rubber removed from the box or receptacle. Fig. 4 is a cross-sectional view thereof, and Fig. 5 is a longitudinal sectional view taken on line 5 5 of Fig. 4.

Similar letters refer to like parts throughout the different views of the drawings.

A represents the suds-box or a stationary receptacle, which holds the clothes and water in which the same are washed and is preferably of substantially the shape shown in Figs. 1 and 2 of the drawings—that is, with its upper portion rectangular and its lower part curved or concave. Located transversely on the inner surface of the curved portion of the receptacle A are a number of ribs a, which are a slight distance apart, as shown in Fig. 2 of the drawings. Extending across one end of the upper portion of the box A is a piece a', which closes said end, and extending across the opposite end is another piece A^2, between the lower edge of which and the curved bottom is an opening a^3 to allow the water to pass from the wringer into the box or receptacle.

The wringer, which is not shown, may be secured to the transverse piece a^4, which extends from one side of the box to the other at a slight distance from the piece a^2 and closes said end of the receptacle. Located on the top of the receptacle A is a cover, which is composed of two pieces B and B′, each having a handle b for the convenience of removing the same. Pivotally secured to the upper surface of one of the sections of the cover is a button b', which overlaps the meeting edges of the said sections and secures them together. Each of these sections is provided, near its sides, with longitudinal slots b^2 for the reception and operation of the standards or uprights C of the rubber C′, which is located within the suds box or receptacle.

Each side of the receptacle or box A is formed or provided at about its middle with a bearing c for the ends of the shaft C^2, on which the rubber C′ is mounted.

In Figs. 3, 4, and 5 of the drawings I have illustrated in detail the construction of the rubber, which consists in providing the end pieces c' thereof, on or about their bottom or curved edges, with a piece of sheet metal D or other suitable material having a series of openings d, preferably arranged in parallel rows, as shown in Figs. 3 and 4 of the drawings. Secured to the lower surface of the piece D are a number of ribs or cleats d', which extend from one of the end pieces of the rubber to the other and are each so located or spaced as to expose between each of them the perforations or openings d in the bottom of the rubber. Located on the upper surface of the perforated piece D and extending transversely thereto and from one of the end pieces c' to the other are a number of pieces d^2, which are also located some distance apart, as is clearly shown in Fig. 4 of the drawings. Located on the upper surface of the pieces d^2 and extending from one of the end pieces c' to the other is a piece E, which closes the upper ends of the openings between the said pieces, thus forming air-

boxes d^3 or chambers. The piece E is provided with a number of openings *e* and on its lower surface with valves E′ to open and close said openings, so as to control the passage of air therethrough. Each of the valves E′ is preferably hinged to a block *e′* on the lower surface of the piece E by means of a piece of leather e^2 or otherwise.

To form a convenient means for retaining the rubber in an inverted position when it is desired to dry or drain the same, I may provide the end pieces with recesses c^5 to engage one of the end pieces of the box or receptacle, as shown in Fig. 2 of the drawings.

The operation is as follows: The clothes and a sufficient quantity of water are first placed within the suds box or receptacle A, when the rubber may be placed thereon, after which the sectional cover may be placed in position so as to close the top of the receptacle and be securely held in place by means of hooks *f* and eyes *g*, as is shown in Fig. 2 of the drawings. By rocking the rubber back and forth it is apparent that the garments will undergo a rubbing process and will thereby be thoroughly cleansed.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a washing-machine, the combination with a receptacle having a curved bottom provided with transverse ribs or corrugations on its inner or upper surface, of a segmental rubber having its bearings on the sides of the receptacle, a perforated piece secured to the bottom of the end pieces of the rubber, a perforated piece secured to said end pieces a slight distance above the bottom piece, partitions located between said pieces so as to form air-chambers, and valves to close the openings in the upper piece, substantially as described.

2. The combination in a washing-machine, of a receptacle having a curved bottom provided with transverse ribs or corrugations on its inner or upper surface, with a segmental rubber having its bearings on the sides of the receptacle, a perforated piece secured to bottom of the end pieces of the rubber, a perforated piece secured to said end pieces a slight distance above the bottom piece, partitions located between said pieces, so as to form air-chambers, valves to close the openings in the upper piece, and transverse pieces secured to the lower surface of the perforated bottom, substantially as described.

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Witnesses:
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