(No Model.)

J. A. TYNAN.

WASHING MACHINE.

No. 330,858. Patented Nov. 17, 1885.

Fig. 1.

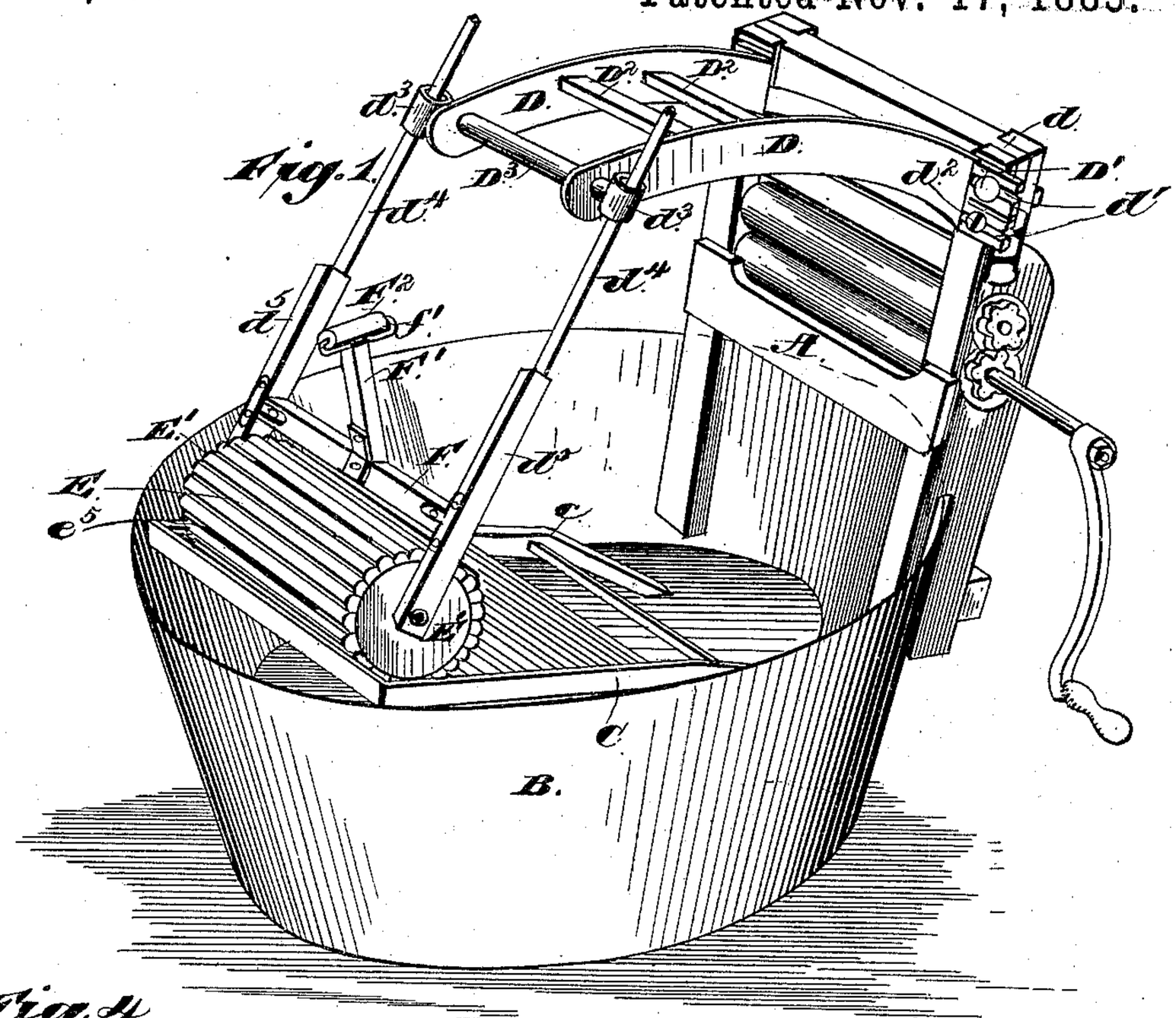


Fig. 4.

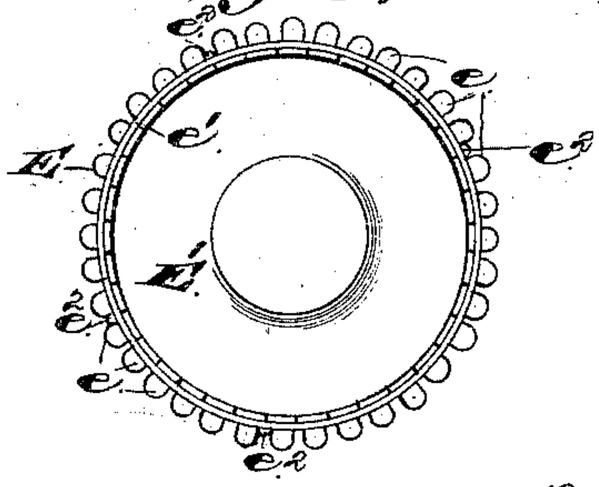


Fig. 5.

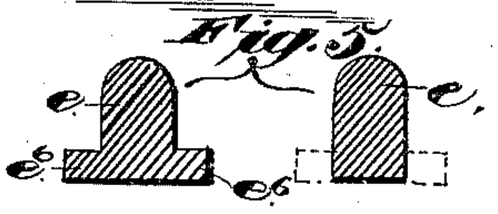


Fig. 2.

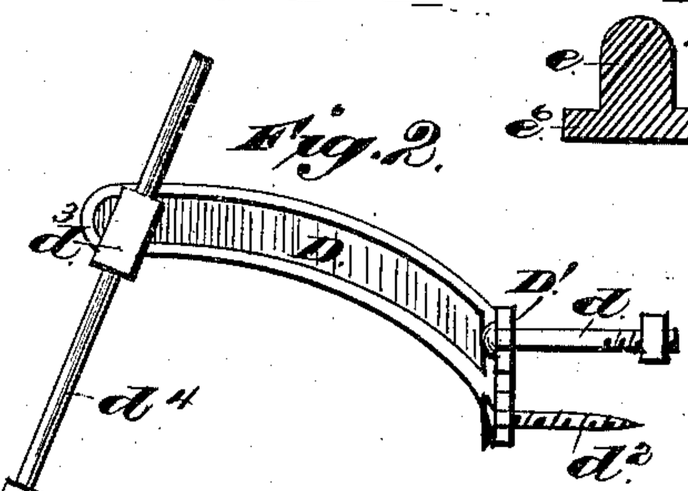
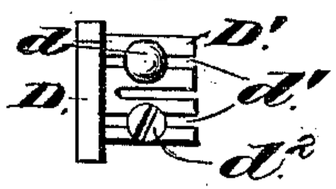
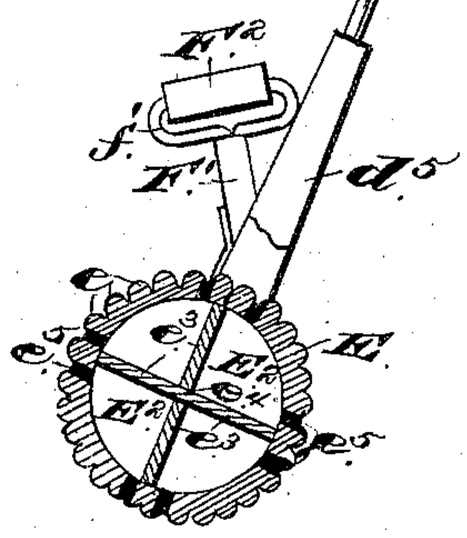


Fig. 3.





Witnesses
Charles S. Hyer.
George Cardell.

Inventor:
John A. Tynan.
By Munn & Co
Attys.

UNITED STATES PATENT OFFICE.

JOHN A. TYNAN, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO ALEXANDER DELERAC, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 330,858, dated November 17, 1885.

Application filed June 27, 1885. Serial No. 169,993. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. TYNAN, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Washing-Machine Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to washing-machines; and it consists in the construction and arrangement of the parts, which will be more fully hereinafter described, and pointed out in the claims.

In my application filed April 29, 1885, Serial No. 163,813, I have illustrated and described a washing-machine in which a wringer has arms cast integral therewith, said arms having an oscillating frame movably mounted in the ends thereof, which carry a fluted roller or rubber acting in connection with a wash-board.

One object of my present invention is to provide a washing-machine attachment which may be readily secured to any well-known form of clothes-wringer, and, when so attached, may be used, in connection with a tub or other water-receptacle and a wash-board, as a washing-machine complete in all its parts.

A further object of my invention is to provide a rubber or roller to be used in connection with said attachment, having compartments or buckets with suitable ports for the ingress and egress of the water, whereby the garment or other article may be kept continually wet while being washed.

I attain these objects by the mechanism illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a perspective view of my improved washing-machine attached to a wringer as it sets upon the tub and in a position to be operated. Fig. 2 is a side elevation, partly in section, of the washing-machine detached from the wringer, and showing the buckets and ports in the hollow rubber. Fig. 3 is a front elevation of one of the arms, showing the adjustable ear thereof. Fig. 4 is an end elevation of the rubber or roller, illustrating the manner of applying the strips thereto. Fig. 5 is a cross-sectional view of the rubber-strips, showing the manner of constructing the same.

A indicates a wringer, which is mounted upon a tub, B. C is a wash-board, which has bent legs *c*, which support the wash-board in the bottom of the tub, the other end of said board resting against the upright portion of said tub B.

The wringer A is constructed in any well-known manner, and to the topmost portion thereof a frame having curved arms D D is detachably secured to the bolt *d*. These arms D have ears D′ cast integral therewith, as best illustrated in Fig. 3, which have slots *d′ d′* cut therein, through the upper slot *d′* of which the top bolt, *d*, of the wringer passes and secures it to the said wringer. Through the lower slot *d′* of the ear D′ a wood-screw, d^2, is passed and enters the wringer, which secures the ear D′ at this point and avoids the strain or purchase which would otherwise be upon the top bolt, *d*, if it were used alone. These arms D are rendered adjustable to any size of wringer A by the length of the slots *d′ d′*, which allow the bolt *d* to pass through them at any desired distance from the arms D. The ears D′ may be constructed of such a length that the slots *d′ d′* therein may be cut deep enough to permit the bolts *d* of wringers of different sizes to adjust themselves to the same. The arms D D have suitable braces, D^2 D^2, and at their ends are united by a gas-pipe bearing, D^3, which has T-joints d^3 mounted on its ends, through which sliding rods d^4 pass and have free movement. These rods d^4 have wooden extensions d^5 connected thereto, which have suitable bearings in their lower ends which embrace a rubber or roller, E. This roller E is constructed with two heads, E′, which are constructed of suitable material, and are bound together by strips *e*, which are slotted at each end, in which a ring, *e′*, of non-corrosive metal, is situated, and unites the parts together. These rings *e′*, holding the strips *e*, are then fastened to heads E′ of the roller E by suitable non-corrosive metal pins or small nails, e^2. This roller E is hollow, cylindrical in form, and is divided into four compartments or buckets, E^2, by divisional strips e^3. These strips e^3 are slotted so that

the one will fit into the other and form a tight and neat joint, as at e^4. The compartments E^2 each have ports e^5—one at the upper and the other at the lower portion of each compartment or bucket—said ports being situated adjacent to the point where the divisional strips e^3 meet the outer surface of the roller. The outside fluted covering-strips *e* are constructed as illustrated in Fig. 5. The said strips have two flanges, e^6, on each of the lower sides, which fit against each other and form a tight joint. When the ports e^5 are constructed, the strips *e* have their flanges e^6 cut away in their central portions, as shown in Fig. 1, and form a strip which will have the cross-sectional contour represented in Fig. 5. A brace, F, is mounted above the roller E, which has an upright post, F′. A wire, *f*′, is swiveled, which embraces a handle, F^2, said handle being adapted to turn in any plane to suit the operator. When a garment is being washed, the roller E, mounted in the oscillating frame, traverses the said garment on the wash-board, the frame allowing an easy motion when the said roller is at its lowermost or highest point. When the roller E is down in the water in the tub, the water enters the ports e^5 and fills the buckets or compartments E^2, and when the roller is drawn up on the garment the water flows out of the said ports e^5 onto the garment and keeps it in a moistened condition continually, as the ports reach the lowest or flowing point, so that each revolution of the roller E throws more or less water on the garment washed.

It is obvious that many minor details of construction could be made and substituted for those shown and described without in the least departing from the nature and principle of my invention.

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

1. In a washing-machine attachment, the combination of a frame having curved sides, and means, substantially as described, whereby the same may be secured and adjusted to any clothes-wringer, a rubber having compartments therein, provided with ports for the ingress and egress of the water, and an oscillating device connected with the frame and the rubber, whereby the rubber may have free movement and be supported by the frame, as set forth.

2. In a washing-machine attachment, the combination of the curved arms D D, ears D′, having slots *d*′ *d*′ cast integral with said curved arms and engaging the bolts *d* of the wringer, the oscillating device carrying a hollow roller, E, having ports e^5 entering compartments E^2, and a swivel-handle, F′, secured to the oscillating device, whereby the roller may be used in connection with the board C with an oscillating movement, substantially as described.

3. A rubber or roller for washing-machines, having compartments or buckets, divisional strips forming said buckets, ports or openings in said compartments for the ingress and egress of the water, strips for covering the roller, and a non-corrosive metal ring securing the ends of these strips to the heads of the rubber or roller, substantially as described.

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

JOHN A. TYNAN.

Witnesses:
CHARLES S. HYER,
EMMA M. GILLETT.