

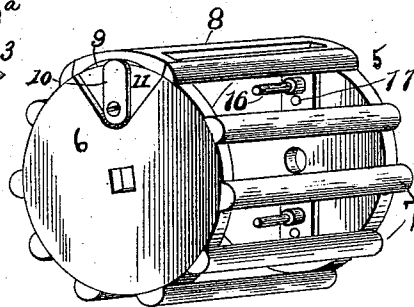
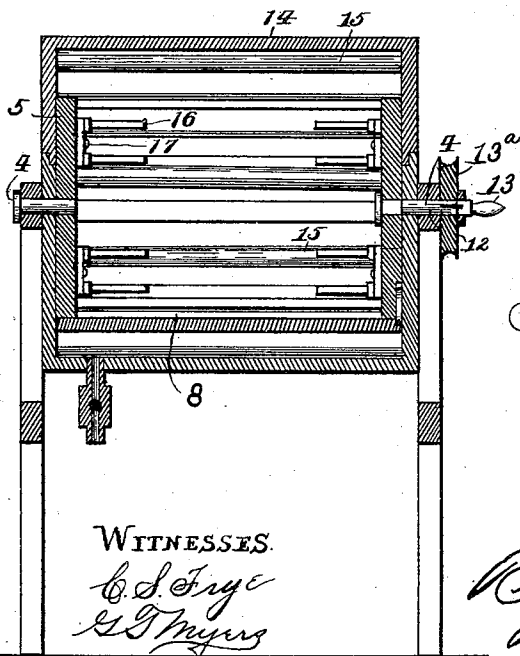
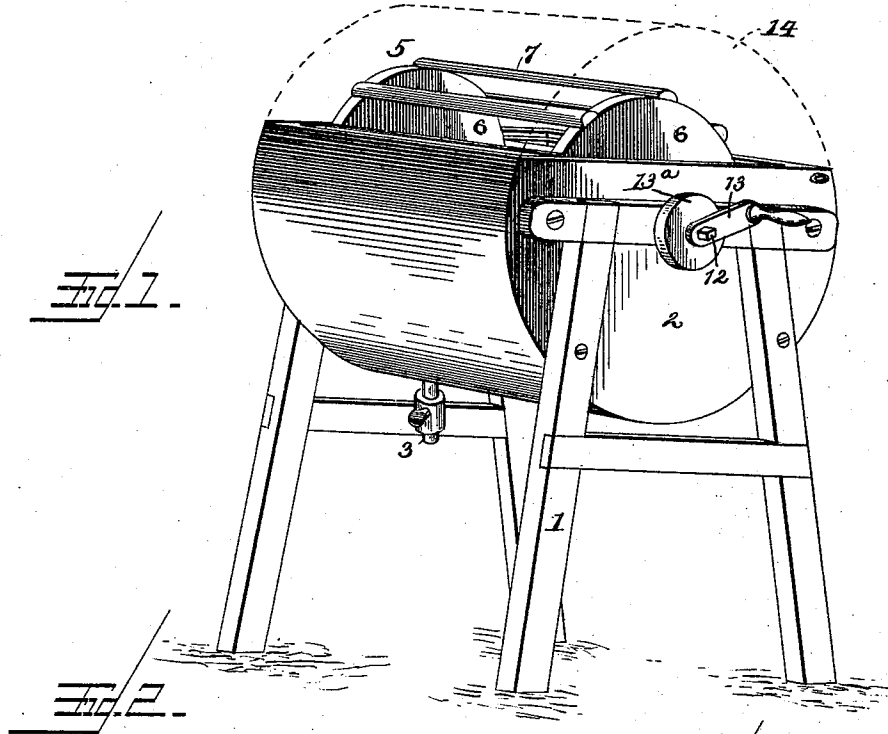
(No Model.)

2 Sheets—Sheet 1.

J. McL. CAMPBELL.
WASHING MACHINE.

No. 486,763.

Patented Nov. 22, 1892.



J. McL. Campbell

INVENTOR.

By *Napkins & Atkins*
Attorneys.

WITNESSES.

C. S. Frye
E. J. Myers

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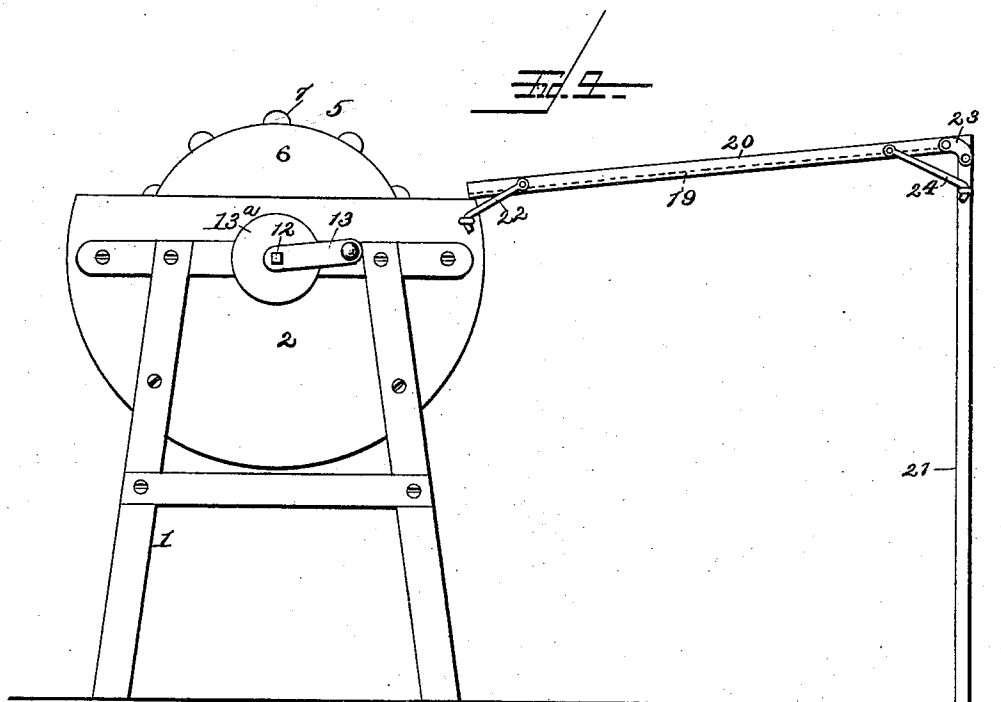
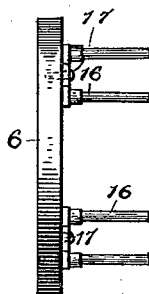


Fig. 5



WITNESSES.

C. S. Frye
E. T. Myers

J. McL. Campbell
INVENTOR

R. Hopkins & Atkins

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES McLENNAN CAMPBELL, OF MONTAGUE, MICHIGAN.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 486,763, dated November 22, 1892.

Application filed July 21, 1892. Serial No. 440,793. (No model.)

To all whom it may concern:

Be it known that I, JAMES McLENNAN CAMPBELL, of Montague, county of Muskegon, State of Michigan, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce a washing-machine of an improved construction, that may be manufactured at comparatively-low cost, that is economical in use, and that requires no careful attention to keep it in order and is not liable to become injured by ordinary use in a laundry.

In the accompanying drawings, Figure 1 is a perspective view of my machine; Fig. 2, a central vertical section of the same, and Fig. 3 a view of the revolving cage detached. Fig. 4 is a side elevation of my machine with table attached. Fig. 5 shows the spreaders in side elevation.

Referring to the figures on the drawings, 1 indicates the legs or supports of my machine, which may be made in any suitable manner and secured to the body 2 of the machine in the usual manner. The body is preferably nearly semicylindrical in shape and is provided in its lowest part with a discharge-cock 3. In bearings 4 in the side of the body is mounted on suitable journals a cage 5, which preferably consists of solid ends 6 and slats or rounds 7 secured thereto.

8 indicates a sliding gate, which preferably consists of a frame resembling in shape two or more of the rounds of the cage detached and formed into a frame. A suitable space is provided for the reception of the gate in the cage, as illustrated, the opposite sides of the adjacent rounds and the outer edges of the gate being correspondingly beveled, so as to afford a way or track for the reception of the gate, adapted to hold it in place when slid into position, as indicated in Fig. 3. The gate is provided on one end with a recess 9, into which a button or latch 10 fastens to hold the gate in a fixed position in place upon the cage. The button 10 is preferably pivoted in a recess 11 in one side of the cage, so that its top is flush with that side, and it may turn freely without striking against the adjacent side of the body of the machine. One journal 12 of the cage is extended through the side of the body and terminates preferably

in a squared end, upon which is mounted a crank 13 for imparting rotary motion to the cage, or a wheel 13^a for applying power.

14 indicates a cover or separable part of the body, closely fitted to the top of the body of the machine, so that it may be set in place and complete, in combination with the body proper, a practically water-tight receptacle. The inside of the body and cover are provided with transverse half-round strips, ribs, or slats 15, located suitable distances apart and separated from the periphery of the cage by a small space.

16 indicates expanders consisting, preferably, of a hinged hand 17, pivoted to the inner sides of the ends of the cage and adapted to keep the clothes within the cage from rolling together.

19 indicates the bottom of a wringer-table adapted to be used with my machine. It is provided with sides 20 for keeping the clothes in place and with legs 21 for supporting its outer end. The inner end is adapted to be fastened directly to the machine by hooks 22.

23 indicates a hinge by which the legs are carried upon the table and is adapted to permit the legs to be folded against the bottom of the table to be set away when not in use.

24 indicates hooks for holding the table steady when the ring is in use, the wringer being secured to the table by any suitable means.

In practice the gate is opened and the cage properly filled with clothes. Afterward the gate is closed, the cover put on, and the cage rotated for a short time, when the clothes will be found perfectly cleansed without unnecessary wear, their surfaces having been exposed through the slats in the cage to the rubbing process against the ribs in the body.

What I claim is—

In a washing-machine, the combination, with the revoluble cage adapted to contain clothes to be cleaned, of the expanders provided with projecting fingers and pivoted to the inner sides of the heads of the cage, substantially as and for the purposes specified.

In testimony of all which I have hereunto subscribed my name.

JAMES McLENNAN CAMPBELL.

Witnesses:

SAMUEL RABY,
C. J. PETERSON.