(No Model.)

C. E. TOPPING & C. H. SCUTT.

WASHING MACHINE.

No. 418,595. Patented Dec. 31, 1889.

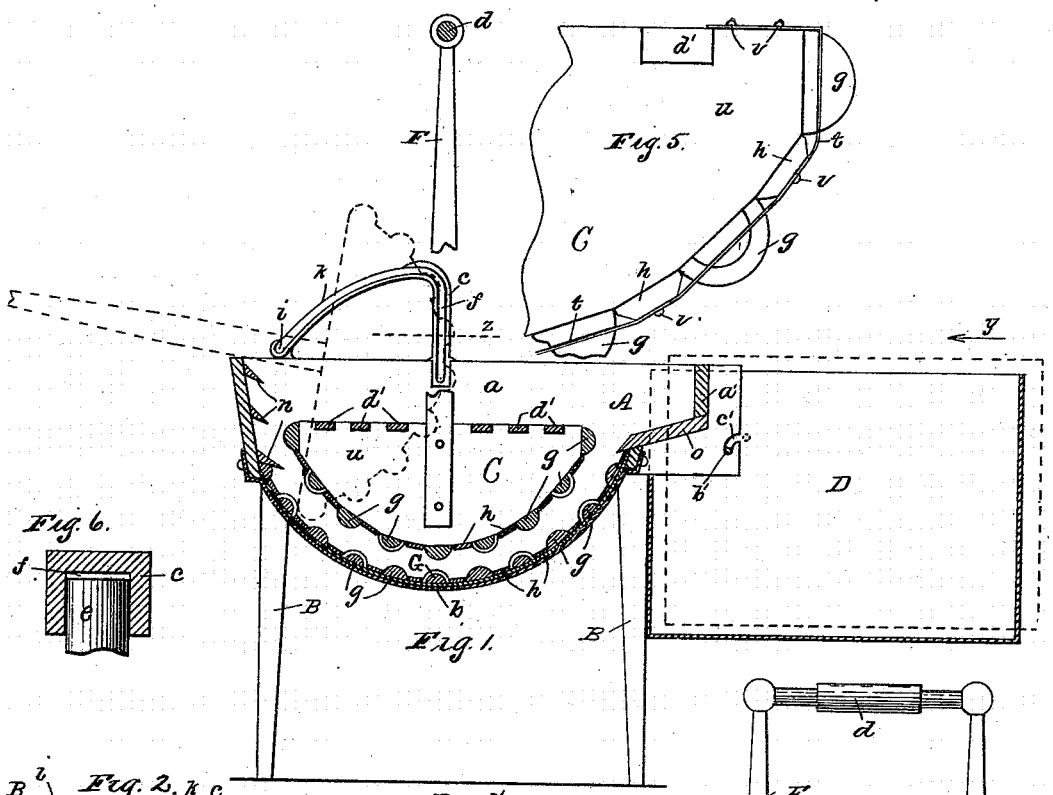

Fig. 1.

Fig. 6.

Fig. 5.

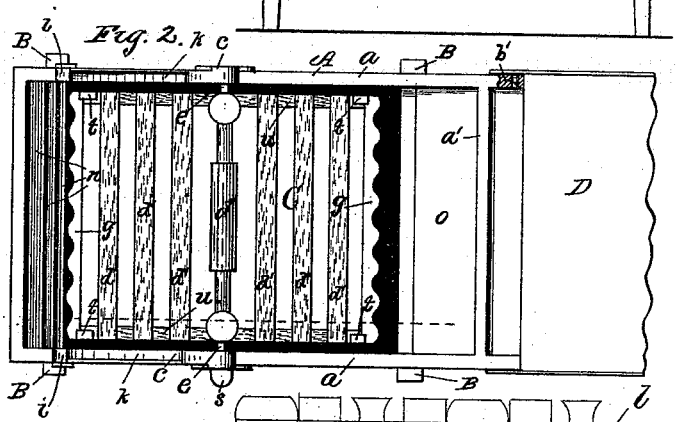

Fig. 2.

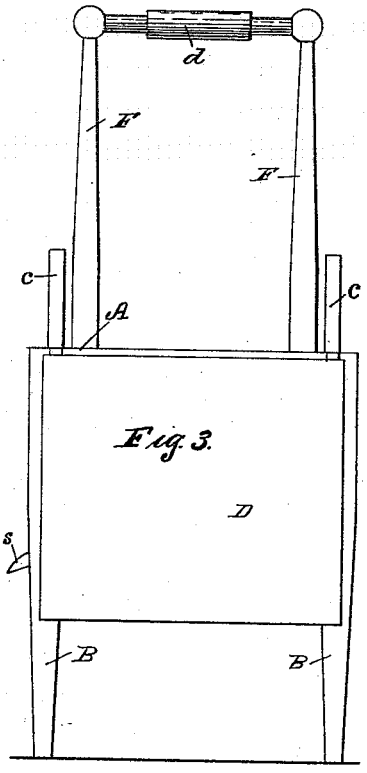

Fig. 3.

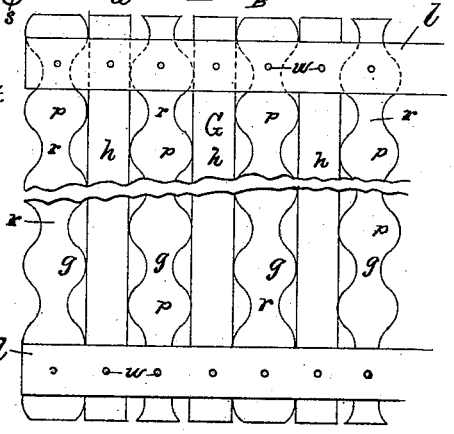

Fig. 4.

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UNITED STATES PATENT OFFICE.

CHARLES E. TOPPING AND CHARLES H. SCUTT, OF MARION, NEW YORK.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 418,595, dated December 31, 1889.

Application filed September 11, 1889. Serial No. 323,591. (No model.)

To all whom it may concern:

Be it known that we, CHARLES E. TOPPING and CHARLES H. SCUTT, of Marion, in the county of Wayne and State of New York, have invented a new and useful Improvement in Washing-Machines, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

Our invention relates to various improvements in a washing-machine for clothes operated by hand, said improvements being hereinafter fully described, and more particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a side sectional elevation of the machine sectioned as on the dotted line *x* in Fig. 2, the beater being shown in two positions by full and dotted lines; Fig. 2, a plan of the machine; Fig. 3, an end elevation seen and indicated by arrow *y* in Fig. 1; Fig. 4, a view of a part of the wash-board drawn to a larger scale; Fig. 5, an enlarged view better showing the manner of holding the rubbing-slats of the beater; and Fig. 6, an enlarged view of a cross-section of a hanger for the beater, taken as on the dotted line *z* in Fig. 1.

Referring to the parts, A is the box or body of the washing-machine supported upon legs B.

C is the beater for the clothes, and D a receptacle for the clothes after they have been put through a wringer. The body, which is box form, is formed with wooden sides *a* and a curved sheet-metal bottom *b*. At the sides of the body are rigidly secured iron hangers or holders *c* for the beater. The beater is formed of a main or body part, from the sides *u* of which rise standards F, provided with a cross-rung *d* at the top, which constitutes a handle by which the beater is operated. The standards are each provided with a horizontal outwardly-projecting trunnion *e*, which trunnions enter vertical grooves or channels *f f* in the respective hangers *c*. These trunnions hold the beater so that it may be rocked in a vertical plane. The lower face or side of the beater is curved and provided with corrugated or beaded rubbing-slats or rubbers *g*, secured transversely thereto. These rubbing-slats are alternated with plain prismatic spacing-slats *h*, employed for the purpose of spreading the rubbing-slats, so that the material being washed may enter the spaces between the rubbing-slats for the purpose of becoming more effectively rubbed or acted upon by the rubbing-slats—that is to say, by spacing the rubbing-slats by means of the bars *h* the beater presents a more uneven working-surface to the clothes and more rapidly washes them. Stay bars or ties *d'* are employed to tie the sides of the beater together to give it strength.

When the machine is not in use, the trunnions *e* of the beater rest at the bottom of the channels *f* in the respective hangers *c*; but when clothes are put into the machine the beater is raised by them to a greater or less extent, the trunnions occupying higher positions in the channels of the hangers. These hangers are made vertical for some distance above the body of the machine, for the purpose of permitting the beater to accommodate itself to different quantities or thicknesses of clothes put into the machine, and still at all times to occupy a position substantially concentric with the curved bottom of the body. The verticalness of the channels permits the beater to constantly bear its weight upon the clothes beneath it. The hangers are formed with other rests *i* at their extreme ends for the trunnions of the beater, so the latter may be turned over at one side, or placed in the position shown in dotted lines in Fig. 1, for the purpose of permitting the operator to examine or turn the clothes in the machine; and one side wall of each of the channels of the hangers is omitted at *k*, so that the beater may be lifted out of the body entirely when desired.

The wash-board G (shown in Fig. 4) is composed of beaded rubbing-slats *g* and plain spacing-slats *h*, like those of the beater, held together by plain metallic strips *l*, secured to the flat faces of the slats.

n are narrow horizontal dash-boards secured in inclined position to the inner face of the end board of the body A to prevent water being thrown out thereat by the action of the beater. At the opposite end of the body the inclined bottom board *o* answers the same purpose. The wash-board G is bent and placed in the body between said board *o* and the lowest one of the dash-boards *n*, as shown in Fig. 1, the wash-board being held by some

simple fastener, so as to be removed from the machine for the purpose of cleaning or repairing.

In constructing this machine the wooden rubbing-slats *g* are turned in a lathe with alternate swelled parts *p* and reduced parts *r*, as shown in outline in Fig. 4. These turned pieces are then split by being sawed through along their respective axes. The half-pieces *g* so produced are then used, as shown, to form the wash-board G, and the lower face of the beater opposed to the wash-board, the rounded or beaded surfaces of the halves or slots of the beaters and the wash-board being turned toward each other. These rubbing-slats are placed so that the swelled parts *p* of one slat alternate with the reduced parts *r* of the adjacent slat, as shown in Fig. 4. To avoid having nails where they will touch the clothes, we fasten the rubbing-slats to the beater by means of metal strips *t t*, Figs. 2 and 5, let edgewise into kerfs in the ends of the slats, the ends of the metal strips being bent down and nailed to the edges of the side boards *u* of the beater. These strips of metal rest against the outer surfaces of the spacing-slats *h*, through both of which nails *v* are driven into the sides *u*. By this means all the slats, both beaded and plain, of the beater are held firmly to place without nails being driven into the rubbing-slats *g*. The metal strips *l* of the bottom rubbing-board or wash-board G, Fig. 4, are fastened to the slats by small nails *w* in the bottom side of the board, which nails, when the wash-board is put to place in the body, come next to the bottom *b* of the body and away from the clothes.

It is designed to secure an ordinary clothes-wringer to the vertical end board *a'* of the body and pass clothes through it from the washing-machine into the receptacle D. This receptacle may be a box or basket, as may be desired, having pins *b'* projecting from its sides to enter rests *c'* in the side boards *a* of the body of the washing-machine. When in place, the receptacle rests from gravity against the legs of the washing-machine. When thus constructed, the receptacle is detachable from the machine and may be detached and carried with its contents to the clothes-line or elsewhere.

The water is let out of the body of the machine through a spout *s* of common kind.

What we claim as our invention is—

A washing-machine having a box or body, and a wash-board resting at the bottom thereof, said wash-board being constructed of alternate plain and beaded slats, in combination with a beater within the body of the washing-machine having its side facing the wash-board covered with alternated plain and beaded slats, the latter being secured to the beater by means of metal strips passed through kerfs in the ends of said beaded slats and secured to the sides of the beater by fasteners passed through said metal strips and said plain slats, substantially as shown.

In witness whereof we have hereunto set our hands, this 2d day of September, 1889, in the presence of two subscribing witnesses.

CHARLES E. TOPPING.
CHARLES H. SCUTT.

Witnesses:
E. B. WHITMORE,
M. L. MCDERMOTT.