C. E. ROSS.

Washing-Machine.

No. 164,217. Patented June 8, 1875.

Fig. 1

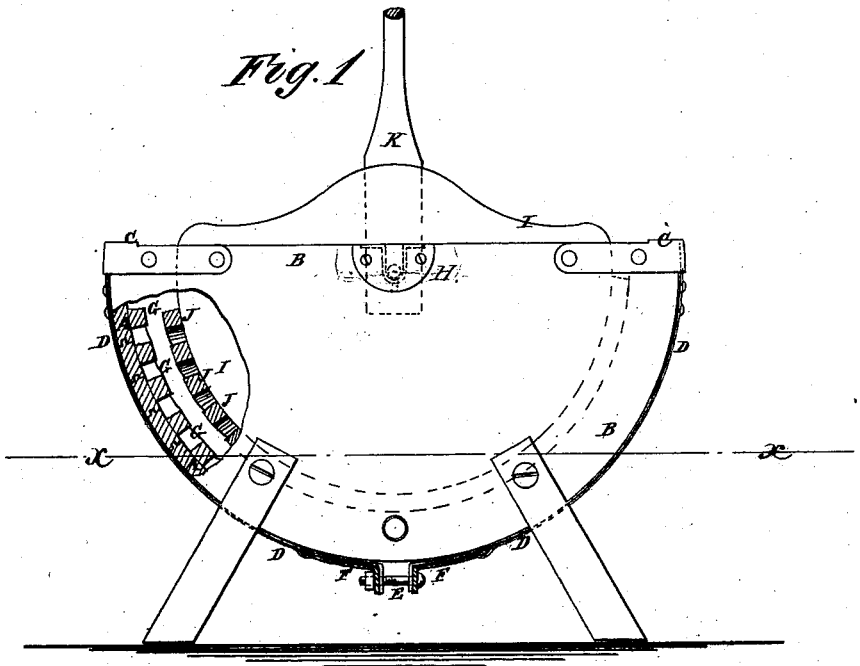


Fig. 2

Fig. 3

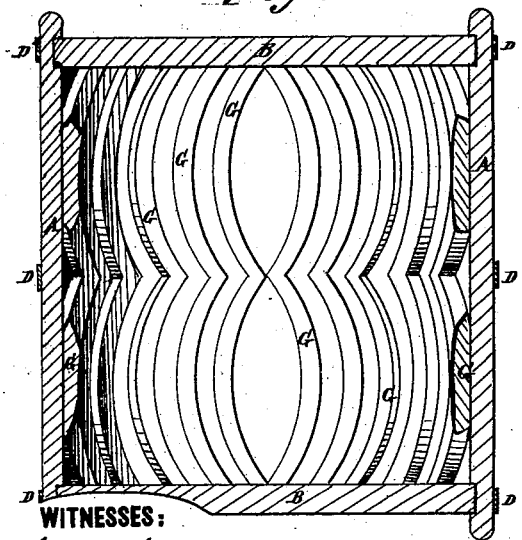


Fig. 4

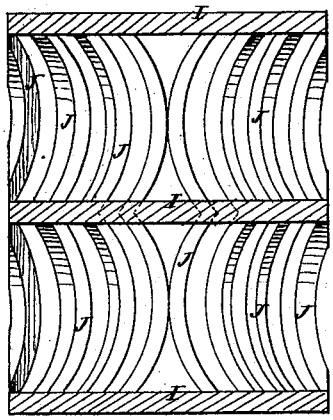
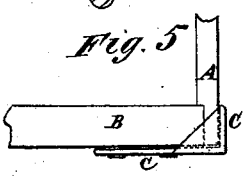


Fig. 5



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CHARLES E. ROSS, OF LINCOLN, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **164,217**, dated June 8, 1875; application filed May 15, 1875.

To all whom it may concern:

Be it known that I, CHARLES E. ROSS, of Lincoln, in the county of Logan and State of Illinois, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification:

Figure 1 is an end view of my improved washing-machine, part being broken away to show the construction. Fig. 2 is a detail view of the straining device. Fig. 3 is a horizontal section of the suds-box taken through the line *x x*, Fig. 1. Fig. 4 is a horizontal section of the oscillating rubber taken through the line *y y*, Fig. 1. Fig. 5 is a detail top view of one corner of the suds-box.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved washing-machine, simple in construction and effective in operation.

The invention consists in the corner clamps, the metallic straps, the angular blocks or plates, and the bolts, in combination with the suds-box of the machine, and in the curved cleats whether made with a single or double curve, in combination with each other with the concave surface of the suds-box, and with the convex surface of the rubber, as hereinafter fully described.

A B is the suds-box, which is made semicylindrical in form and of any desired size. The curved sides and bottom A are formed of staves or narrow boards, three or four inches wide, tongued and grooved to each other. The staves or strips A are grooved transversely upon their inner sides about an inch from their ends to receive the curved edges of the semicircular end boards B. The corners of the suds-box A B are strengthened by the metallic straps or plates *c* attached to the corners of the end boards B, and which overlap the outer side and top edge of the corners of the upper strips or staves A, as shown in Figs. 1 and 5. D are three more or less metallic straps, the outer ends of which are secured to the upper or edge strips or staves A. The straps D are made in two parts, the adjacent ends of which meet or nearly meet beneath the center of the suds-box A B, are bent outward at right angles, and have holes formed in them to receive the bolts E. F are clamping-plates or blocks which are bent at right angles to fit into the angles formed by bending the ends of the straps D. The outer parts of the projecting arms of the plates F have holes formed in them corresponding with the holes in the ends of the straps D to receive the bolts E. In the other arms of the plates F are formed holes for the straps D to be passed through to keep the said plates in place upon and in line with the said straps D. By this construction, by tightening up the nuts of the bolts E, the staves or strips A will be drawn closer together to take up any shrinkage of the wood, and thus keep the suds-box always tight. To the concave inner surface of the suds-box A B are attached arched or curved cleats G. The cleats G may be made in a double curve, each half the length of the suds-box A B, as shown in Fig. 3, or they may be made in a single curve extending from end to end of the suds-box. The cleats G upon each side of the center of the bottom are placed with their concave sides toward said center, or downward, as shown in Fig. 3. In the centers of the upper edges of the ends B of the suds-box are formed notches or slots, which are lined with metal to prevent wear, and which are designed to receive the ends of rod H, which passes through the semicircular plates I of the rubber, through the centers of the circles of which said plates are a part. The plates I are placed parallel with each other, and to their curved edges are attached curved cleats J, which may be made upon a double curve, meeting in the plane of the central plate I, or upon a single curve extending from end to end of the rubber. The cleats J upon each side of the center of the rubber are placed with their convex sides downward, or toward said center, as shown in Fig. 4. The curved cleats G, of the suds-box A B, and the curved cleats J, of the rubber H I, are thus in reversed positions with respect to each other, the result of which construction and arrangement is that the clothes will not be rolled up in the middle part of the bottom of the suds-box. K is a lever or handle, the lower end of which is slotted to receive the middle plate I,

and has a hole formed through it to receive the rod H. The rubber is held down upon the clothes by its own weight.

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

1. The corner clamps *c*, the metallic straps D, the angular blocks or plates F, and the bolts E, in combination with suds-box A B, substantially as herein shown and described.

2. The rubber H I K, curved cleats G and J, made with a single or double curve, in combination with the concave surface of the suds-box A B, substantially as herein shown and described.

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Witnesses:
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