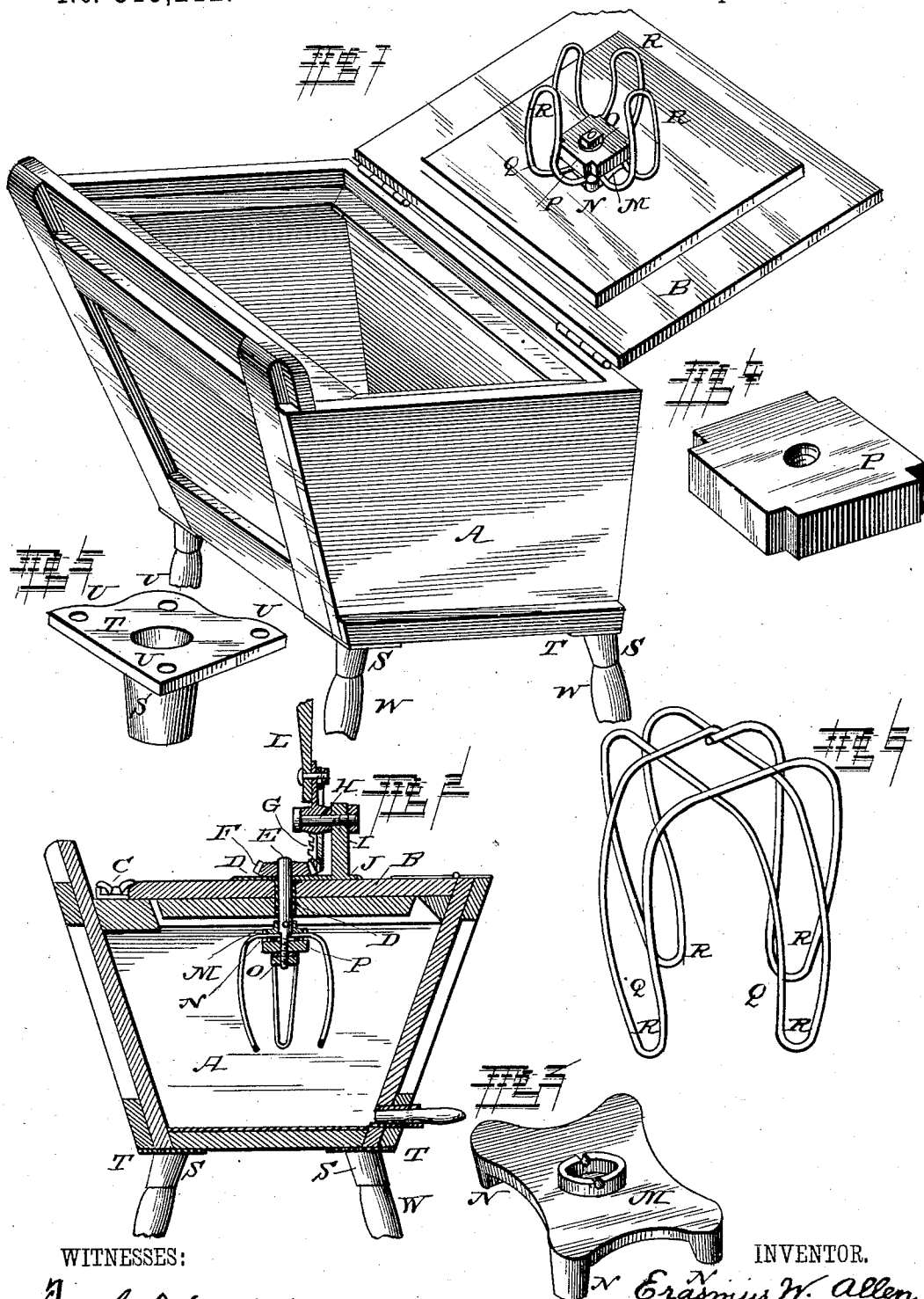


(No Model.)

E. W. ALLEN.
WASHING MACHINE.

No. 315,212.

Patented Apr. 7, 1885.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ERASMUS W. ALLEN, OF SENECA, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 315,212, dated April 7, 1885.

Application filed June 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, ERASMUS W. ALLEN, a citizen of the United States, and a resident of Seneca, in the county of Nemaha and State of Kansas, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved washing-machine, showing the same with the cover in its open position. Fig. 2 is a vertical transverse sectional view of the machine, showing the same with its cover closed. Fig. 3 is a perspective detail view of the clamping device at the lower end of the vertical shaft, by means of which the stirring-fingers are secured in position. Fig. 4 is a detail perspective view of the fastening-nut. Fig. 5 is a detail view of one of the sockets by means of which the legs are attached to the suds-box of my improved washing-machine, and Fig. 6 is a detail view in perspective of one of the stirring-fingers.

The same letters refer to the same parts in all the figures.

This invention relates to that class of washing-machines in which a suitably-operated oscillating disk is provided with downwardly-extending pegs or fingers, which serve to stir or agitate the clothes contained in the suds-box, in the cover of which the shaft of the said disk is journaled; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings, A designates the suds-box, which is constructed with downwardly-inclined or converging sides, by which construction I have found that the water is not as easily splashed over the edges as in the boxes which are usually constructed with vertical edges. I have, moreover, found that by this construction the water driven in an outward direction by the centrifugal motion of the operating-disk, to be hereinafter described, will have a tendency to be deflected upon the upper side or surface of the contents of the box

with a considerable degree of force, which materially aids in the cleansing or washing of the clothes. The upper side of the box or casing is provided with a hinged cover, B, adapted to be retained in a closed position by means of suitably-arranged turn-buttons or catches C C, which are pivoted upon one end or ledge of the box. The said cover is provided with a centrally-located box, D, having a bearing for a vertical shaft, E, carrying at its upper end a pinion, F, meshing with a gear-wheel, G, mounted upon a shaft, H, which is journaled in a suitable box or bearing, I, formed in a bracket, J, extending upwardly from and cast in a piece with the box or plate D. The said gear-wheel is also provided with an upwardly-extending lever or handle, L, by means of which it may be conveniently oscillated, so as to impart motion to the operating-shaft of the machine. The shaft E is provided at its lower end with a disk, M, provided at its four corners with downwardly-extending lugs N N. The lower end of the said shaft is screw-threaded to receive a nut, O, by means of which a clamping-disk, P, may be secured in position. Q Q are the stirring-fingers or agitators, which are to be constructed, preferably, of galvanized wire or other equivalent material which will not be disposed to rust and thereby injure the clothes. The said fingers are formed from a continuous strand of wire, which is bent to the shape clearly shown in the drawings—that is, comprising four curved and downwardly-extending loops, R R, the shanks of which are held and retained securely by means of the clamping-disk P and nut O. The bottom of the suds-box is formed, preferably, of a sheet of galvanized metal, under which a wooden bottom may be secured for the purpose of re-enforcing and strengthening the said sheet-metal bottom.

S S are sockets constructed of cast metal, and provided with flanges T, having perforations U, adapted to receive screws, bolts, or other fastenings, by means of which they are secured to the under side of the box, at the corners of the same, the said sockets serving to receive the legs W, upon which the machine is to be supported in operation.

The operation of this device will be readily understood. The articles to be washed are to be placed in the box, together with soap and

water in suitable quantities, and the lever-handle is then to be oscillated or reciprocated, thereby imparting to the contents of the box such a degree of agitation as will serve to effectually cleanse the articles of clothing. When this result has been effected, the water may be drawn off through a suitable spigot or opening, and the clothes may then be removed from the box and wrung.

10 Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

15 The combination, with the vertical shaft having at its lower end a disk provided at its four corners with downwardly-extending lugs

or projections, of the downwardly-extending curved loops formed from a single or continuous piece of wire, and retained in position by means of a clamping-disk forced in an upward direction upon the said shaft by means of a nut upon the lower end of the latter, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ERASMUS W. ALLEN.

Witnesses:

S. C. BOROM,

C. C. K. SCOVILLE.