

No. 171,048.

Fig. 1

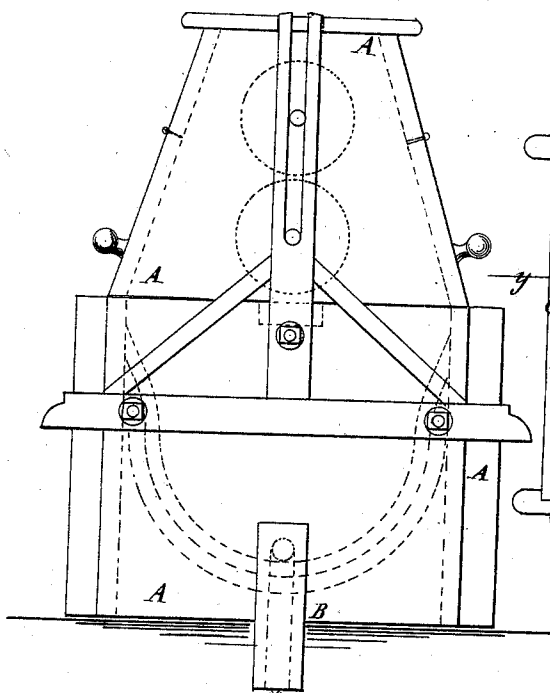


Fig. 2

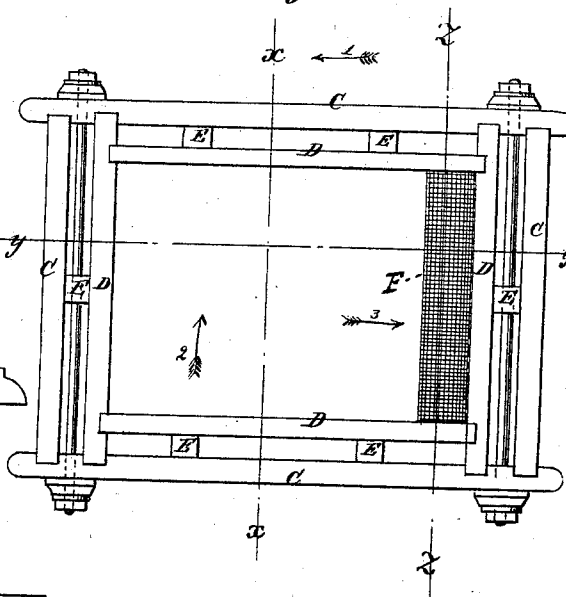


Fig. 3

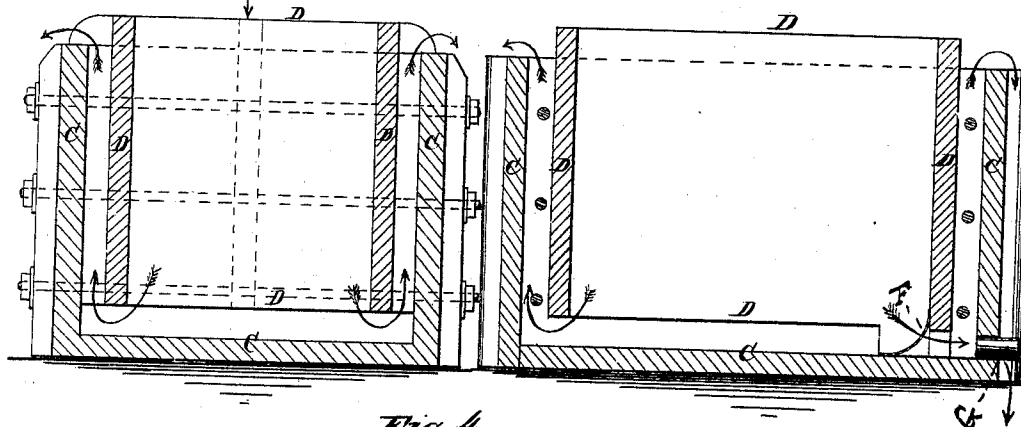
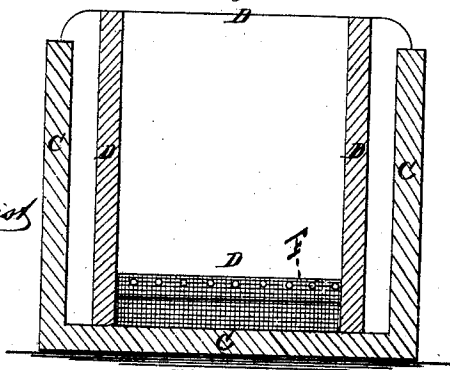


Fig. 4



WITNESSES:

A. W. Almqvist
A. F. Terry

INVENTOR:

INVENTOR:
A. C. Russell
BY *Munnif*
ATTORNEYS.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ASA C. RUSSELL, OF GREAT BARRINGTON, MASSACHUSETTS, ASSIGNOR TO
PARLEY A. RUSSELL, OF SAME PLACE, AND CLINTON H. BLAKE, OF
NEW YORK CITY.

IMPROVEMENT IN FLOCK-WASHING MACHINES.

Specification forming part of Letters Patent No. **171,048**, dated December 14, 1875; application filed
September 25, 1875.

To all whom it may concern:

Be it known that I, ASA C. RUSSELL, of Great Barrington, in the county of Berkshire and State of Massachusetts, have invented a new and useful Improvement in Flock-Washing Machines, of which the following is a specification:

Figure 1 is a side elevation of my improved flock-washer. Fig. 2 is a top view of the flock-screen with washer removed. Fig. 3 is a vertical longitudinal section of the same, taken through the line *yy*, Fig. 2, and looking in the direction of arrow 2. Fig. 4 is a vertical cross-section of the same, taken through the line *zz*, Fig. 2, and looking in the direction of arrow 3.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an apparatus for separating the flock from the water as they escape from the washer, and preserving the flock, while allowing the water to flow away.

The invention consists in the flock-washing apparatus formed of the outer box, made with an open top, and provided with a discharge-opening at its bottom, and the inner box, made smaller than the outer box, with open bottom and top, supported with its lower edge a little above the bottom, and its upper edge a little above the top of the said outer box, having the space between it and the outer box at one end separated from the spaces between the sides of said boxes, and provided with a screen at said end, in combination with the discharge-spout of the washer, as hereinafter fully described.

A represents the washer, in which the loose flock is washed from the web, and about the construction of which there is nothing new, except that the water and loose flock escape from it through a spout, B, as indicated by arrow 4, into the flock-screen, which is placed beneath the floor, upon which the washer A stands, and in such a position that the waste-water can flow away freely. C is the outer box or case of the screen, which may be made of any size or shape that circumstances may require. The box C is made with close bottom,

sides, and ends, and open top. D is the inner box, which is made with close sides and ends, and open bottom and top. The box D is made smaller than the box C, so as to leave a space all around between the sides and ends of the two boxes, as shown in Figs. 1, 2, 3, and 4, and is kept and supported in position by being attached to uprights E, interposed between it and the box C. The box D is secured in position with the lower edges of its sides and ends a little above the bottom of the box C, and with its upper edge rising a little above the upper edge of the box C, so that the water that flows into the box D may flow beneath the lower edge of the said box D into the spaces between the boxes, may rise in the two boxes, and flow over the upper edge of the box C, preventing the box D from ever becoming full, and preventing the escape of any of the flock which floats upon the surface of the water in the inner box D. At one end of the apparatus the space between the ends of the two boxes C D is separated from the space between the sides of said boxes, so that all the water that enters the said end space must enter through the space beneath the lower edge of the end of the inner box D, which space is covered by a wire-gauze screen, F. In the lower part of the end of the outer box C is formed a hole, which is closed with a plug, G, or other stopper. When it is desired to remove the flock from the apparatus the inflow of the water is stopped, and the plug G is withdrawn, allowing the water to flow out, and leaving the flock lying upon the bottom of the box C. A workman then enters the box D and shovels out the flock. In this way the loose flock washed from the web in the washer A is preserved, and may be dried and again used, instead of being entirely lost, as has heretofore been the case.

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

The flock washing or treating apparatus formed of the outer box C, made with an open top, and provided with a discharge-opening at its bottom, and the inner box D, made smaller

than the box C, with open bottom and top, supported with its lower edge a little above the bottom, and its upper edge a little above the top of the said box C; having the space between it and the box C at one end separated from the spaces between the sides of said boxes, and provided with a screen, F, at said

end, in combination with the discharge-spout B of the washer A, substantially as herein shown and described.

ASA C. RUSSELL.

Witnesses:

JUSTIN DEWEY, Jr.,

PARLEY A. RUSSELL.