B. KINNE.

Improvement in Washing Machines.

No. 115,325. Patented May 30, 1871.

Fig. 1.

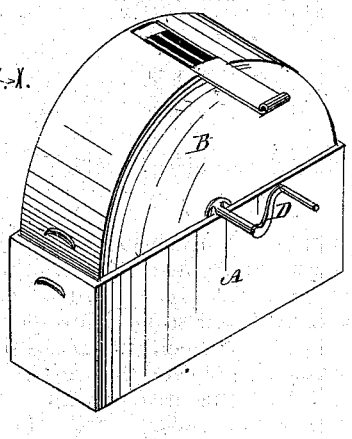


Fig. 2.

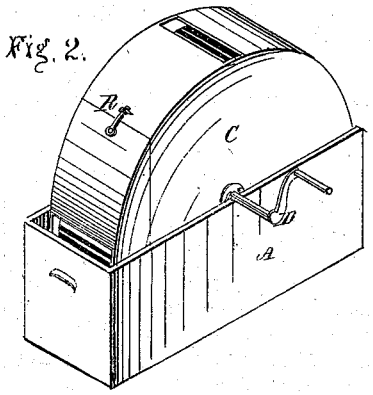


Fig. 3.

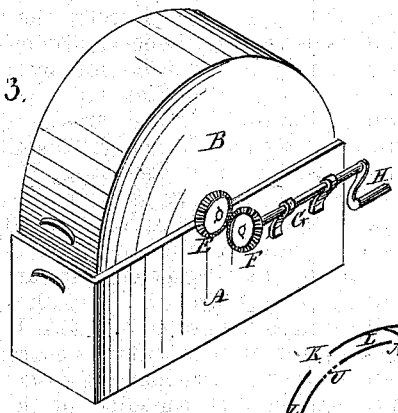


Fig. 4.

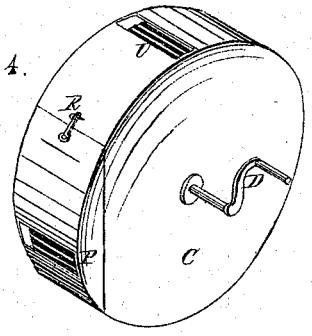


Fig. 5.

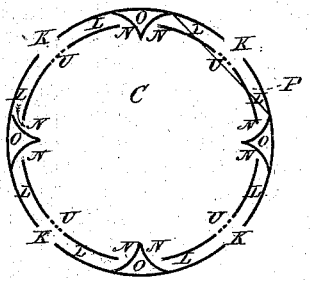


Fig. 6

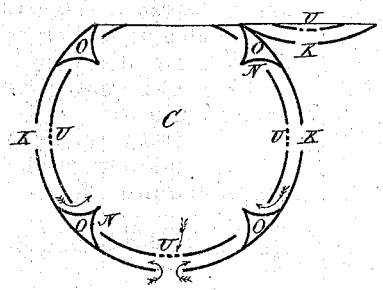
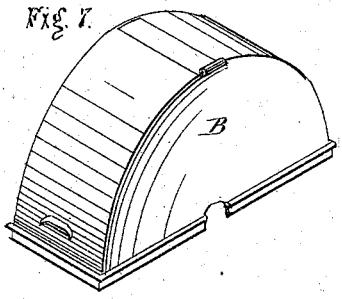


Fig. 7.



Witnesses

R. F. Stevens

H. W. Clemmer

Inventor.

Benjamin Kinne

UNITED STATES PATENT OFFICE.

BENJAMIN KINNE, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 115,325, dated May 30, 1871.

To all whom it may concern:

Be it known that I, BENJAMIN KINNE, of Syracuse, county of Onondaga and State of New York, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 shows the boiler and washing-wheel combined and inclosed. Fig. 2 shows the wash-boiler and wheel uncovered. Fig. 3 shows the beveled cog-wheels and crank attached, by which the wheel may be revolved at the end of the boiler. Fig. 4 represents the washing-wheel detached. Fig. 5 shows a sectional view of the wash-wheel. Fig. 6 shows a sectional view of the wheel with its slide-cover removed. Fig. 7 shows the removable boiler-cover.

My invention relates to that kind of washing-machine in which a washing-wheel revolves in a boiler.

To construct the whole device, make the wash-boiler A with flat bottom to rest upon the top of a stove, and a close cover, B, made to fit tightly upon the upper edge of the boiler. Make the washing-wheel C of galvanized iron or other suitable material, having a projection from the center of each side resting in a box or socket attached to the upper edge of the boiler, and in which the wheel may be made to revolve by the crank D, or by means of the beveled cog-wheels E and F, operated by the shaft G and crank H. The wheel is made with a double periphery, I and J, the outer one, I, having openings K for the ingress and egress of water. Between the inner and outer rims I and J are chambers L, communicating outwardly by the openings K, and inwardly by the grated openings U, through the inner rim, and by the openings N. Between the chambers L place the lifters (of which O shows the cross-sections) projecting within the inner rim J. Between any two of the lifters make the sliding cover P, which constitutes a portion of the wheel when closed.

To operate my invention, place the boiler on the stove and place the wheel within the boiler, as shown at Fig. 2. Put water into the boiler so that it will stand a few inches above the bottom of the wheel. Draw the slide-cover P, and place the clothes T to be washed into the wheel with necessary soap. Close the slide-cover P and lock it with the hook R. Place the outer cover B upon the top of the boiler inclosing the wheel C. When the water is sufficiently heated or boiling, by turning the wheel slowly the clothes will be carried upward by the lifters O and constantly tumbled within the wheel. When the openings K are below the surface of the water the chambers L will be filled, and as the wheel revolves the water will be carried upward and discharged inwardly through the openings N over the clothes, and keeping a constant current downward upon and through the clothes, and outward through the grated openings U. By thus tumbling the clothes with the currents of water caused by its discharging from the chambers, together with the effect of the steam in the wheel, the clothes are rapidly washed. The operation is the same when the motion of the wheel is reversed.

I am aware that buckets have been placed upon the outside of washing-wheels to lift the water; I therefore do not claim them.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The arrangement and construction of the wheel C, when provided with chambers L, discharging water in either direction by the action of the lifters O, in combination with boiler A, as shown and described.

2. The construction and arrangement of sliding cover P, in combination with wheel C and boiler A, as shown and described.

BENJAMIN KINNE.

Witnesses:
R. F. STEVENS,
H. W. CLARKE.