

F. BEZNER.
Improvement in Washing-Machines.
 No. 131,327. Patented Sep. 17, 1872.

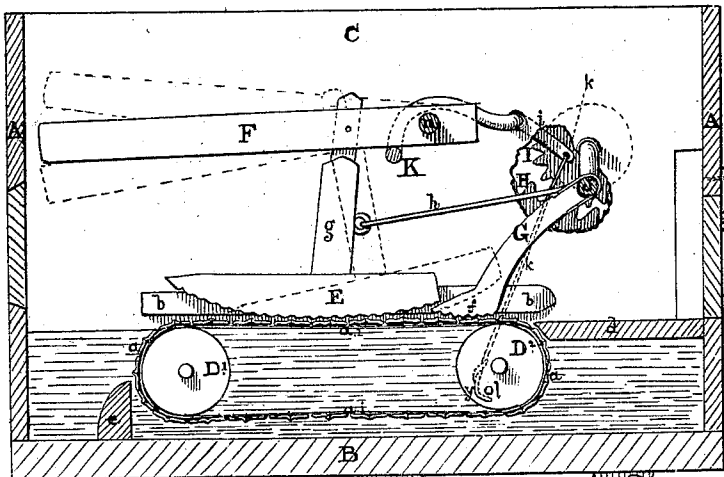


Fig. 1.

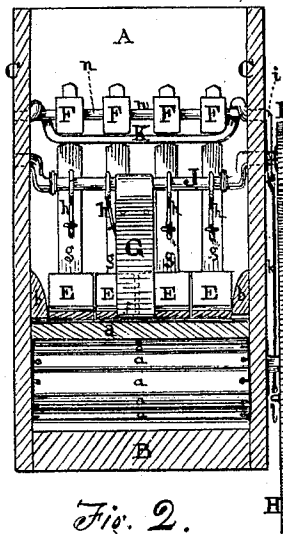


Fig. 2.

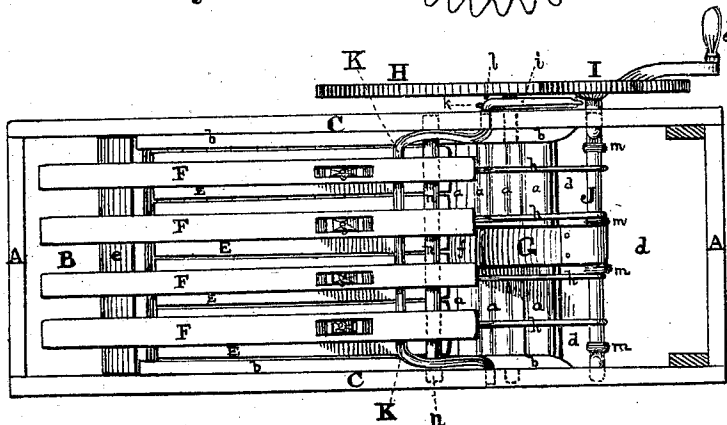


Fig. 3.

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his atty.

UNITED STATES PATENT OFFICE.

FRIEDRICH BEZNER, OF DELAVAN, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 131,327, dated September 17, 1872.

To all whom it may concern:

Be it known that I, FRIEDRICH BEZNER, of Delavan, in the county of Tazewell and in the State of Illinois, have invented a Washing-Machine; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents an elevation, seen from the side, the side piece removed; Fig. 2, end elevation, with end piece removed to give full view; Fig. 3, a plan.

This invention consists of a wash-board, composed of strips of tin or other non-corrosible substance, *a*, fastened transversely on a web, *a'*, which runs over rollers *D*¹ *D*², one of which is placed near either end of the wash-box *A B C*, and rotated by a wheel on the end of one of the rollers, *D*². On this endless wash-board *a a'*, so to speak, rest several rubbing-blocks, *E E E E*, whose under surfaces are corrugated, and are propelled back and forth on the clothes, which lie upon the wash-board *a a'*, lengthwise of the wash-box *A B C*, by rods *h h h h*, severally attached to the crank *J*, which is revolved by a pinion, *I*, which engages with a spur-wheel, *H*, on the end of the nearest roller, *D*²; which crank also gives a similar motion—back and forth—to a foot-bar, *G*, and foot *f*, which also rests upon the clothing to be washed and the board *a a'*, and presses the former under the rubbing-blocks *E E E E*. *A A* are the ends of the wash-box, which are square, *C C* being the sides, and *B* the bottom. *D*¹ *D*² are two rollers, which carry an endless web, *a'*, whose surface is entirely covered by transverse strips of tin, *a*, corrugated lengthwise, similar to and intended to act like the corrugations of the common hand wash-board. In front of and on a level with the so called wash-board *a a'* is a horizontal feeding-platform, *d*, extending to the roller *D*². *E E E E* are four oscillating rubbing-blocks, each having a curved lower surface, thicker in the middle and tapering toward the ends; or an arc of a circle, of which their point of suspension or pin in the arms *F* may be considered the center. Each block *E* has a stem, *g*, pivoted loosely in a pin in the arms *F F*, &c., which latter extend horizontally from

a common transverse horizontal rod or pivot, *n*, to the rear of the box *A B C*, and a rod, *h h h h*, extends from each stem *g g g g* to a transverse crank, *J*, pivoted in the upper and forward end of said box. At the outer end of said crank is affixed a pinion, *I*, which engages with the motive spur-wheel *H*, which is provided with a handle, *z*, both wheels being on the exterior of the box. To this crank *J* is also attached a presser-foot, *G*, which extends obliquely forward and downward, and terminates in a foot, *f*, which rests upon the clothes and the wash-board *a a'* immediately under the front of the rubbing-blocks *E E*. Under the ends of the arms *F F* is a crank-like rod, *K*, pivoted in either side of the box, which terminates, near the wheel *H*, in an arm, *i*, from which a rod, *k*, extends below the axle of said wheel, and terminates in an elbow, *y*, which, at each revolution of the wheel *H*, is depressed by a pin, *l*, on the nave or hub of said wheel, or a crank, so as to lift the rubbing-blocks *E E* at intervals.

The operation of this washing-machine is as follows: The usual hot water and soap being introduced, and the handle *z* turned from left to right, or as the hands of a watch rotate, the wheel *H* on the end of the axle of roller *D*² causes the latter to pass the endless web *a'* and its attached strips *a a a* backward under the rubbing-blocks *E E E E* at the same time that the clothes are passed along the feeding-platform *d* under the foot *f*, which pushes them forward under the rubbers *E E*. In the meantime the wheel *H* rotates the pinion *I* on the end of the crank *J*, giving simultaneous motion to the attached foot *f*, just mentioned, and the rubbing-blocks *E*; the latter by means of the rods *h h h h* attached to the stems *g g g g* of the former, thus pushing the former back and forth over the clothes, well rubbing them by means of their before-mentioned corrugated lower surfaces upon the progressive endless wash-board *a a'*, said rubbers *E E* being weighted downward for this purpose by their respective arms *F F F F*. At the same time, also, the wheel *H*, at every revolution, depresses the rod *k* and the elbow *y* attached to the arm *i* of the crank-shaped rod *K*, which, by its horizontal bent portion, on which all of the arms *F F* rest, raises the latter at each revolution to facilitate the passage of the clothes under

the rubbers E E in case the clothes should happen to collect at one spot in a mass or lump.

What I claim as my invention is—

1. The upright lever G and its actuating-crank J, in combination with the endless wash-board *a' a'*, rollers D¹ D², and wheel H, substantially as described.

2. The combination of the box A B C, endless wash-board *a' a'*, the rubbing-blocks E E E E, stems *g g g g*, arms F F F F, pivot-rod *n*, substantially as described.

3. The combination of the arms F F F F, crank or lifter K, its arm *i*, rod *k* connected with wheel H, the wheel H, pinion I, crank J, rods *h h h h* united to the stems *g g g g*, substantially as described.

In testimony that I claim the foregoing washing-machine I have hereunto set my hand this 16th day of February, 1872.

FRIEDRICH BEZNER.

Witnesses:

HENRY W. WELLS,
JOHN BRADON.