

P. A. DOWNER.
Washing-Machines.

No. 137,661.

Patented April 8, 1873.

Fig. 1.

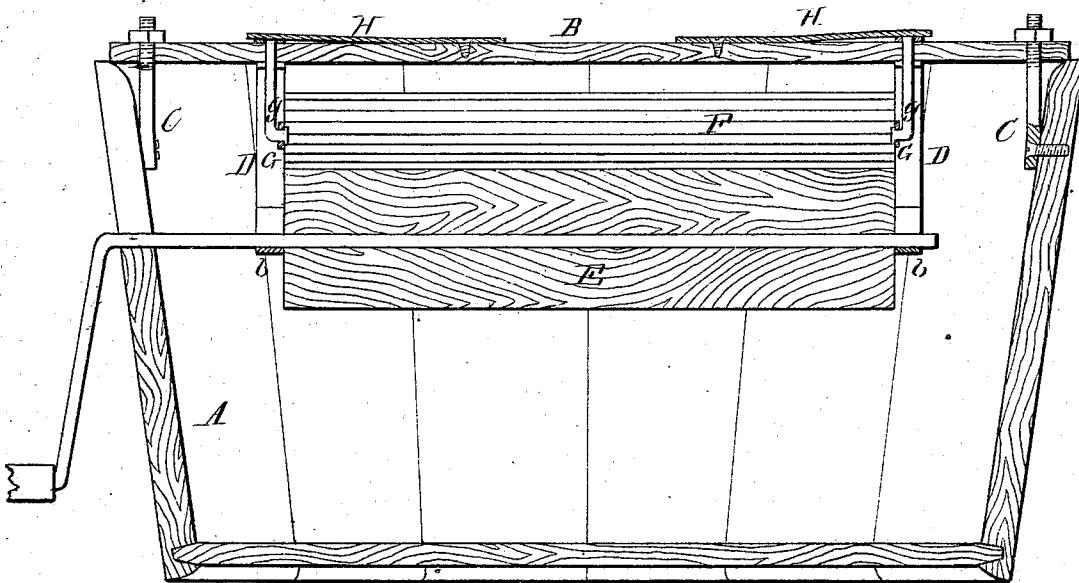
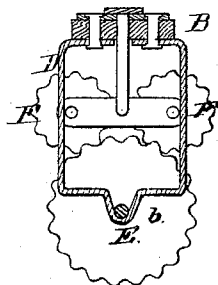


Fig. 2.



Witnesses:
E. A. Bates.
Phil. C. Masi.

Inventor:
P. A. Downer,
Chipman & Fosmire & Co.,
Attorneys.

UNITED STATES PATENT OFFICE.

PHYLEMAN A. DOWNER, OF BALDWIN, IOWA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **137,661**, dated April 8, 1873; application filed November 2, 1872.

To all whom it may concern:

Be it known that I, P. A. DOWNER, of Baldwin, in the county of Jackson and State of Iowa, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical longitudinal section of my invention. Fig. 2 is a detail view of same.

This invention has relation to a washing-machine having two small corrugated rollers arranged above a large one in such a manner as to yield and adapt themselves to the bulk of the clothes while the same are being washed; and it consists in the construction and novel arrangement of the springs by which said small rollers are held with proper pressure against the clothes; also, in the construction and novel arrangement of the hangers or brackets supporting both small and large rollers, substantially as hereinafter more fully described.

Referring to the drawing, A designates the tub containing the washing-machine; B, a transverse bar, secured to the tub by screws passing through the lower ends of eyebolts C; D brackets, formed from metal bars bent to the form shown, with depressions *b* at the bottom to receive the journals of the lower roller. These brackets depend from the bar B. E designates the lower corrugated roller, hav-

ing one of its journals prolonged and formed into a crank. F denotes the upper and small rollers, connected at their ends by links G, to the center of each of which is attached a vertical rod, *g*. The rods *g* pass through the holes in the bar B, and touch flat springs H secured to the top of the bar B, as shown.

The springs H are placed in the position shown so as to be out of the way of the work and above the water where they are unlikely to be injured. Being flat the springs are entirely out of the way of the operator, and take up but little space. When destroyed from any cause the springs may be replaced at a very slight cost.

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

1. In a washing-machine, having the yoked rollers F connected to the vertical rods *g*, the flat springs H arranged on top of the transverse bar B and acting against said rods, substantially as specified.

2. The rectangular frame-like brackets D secured to the under side of the bar B, and constructed with the depressions *b*, in combination with the washing-cylinder E, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

PHYLEMAN A. DOWNER.

Witnesses:

WM. WILCOX,
JAEI BURDICK,
JAMES ARTHUR.