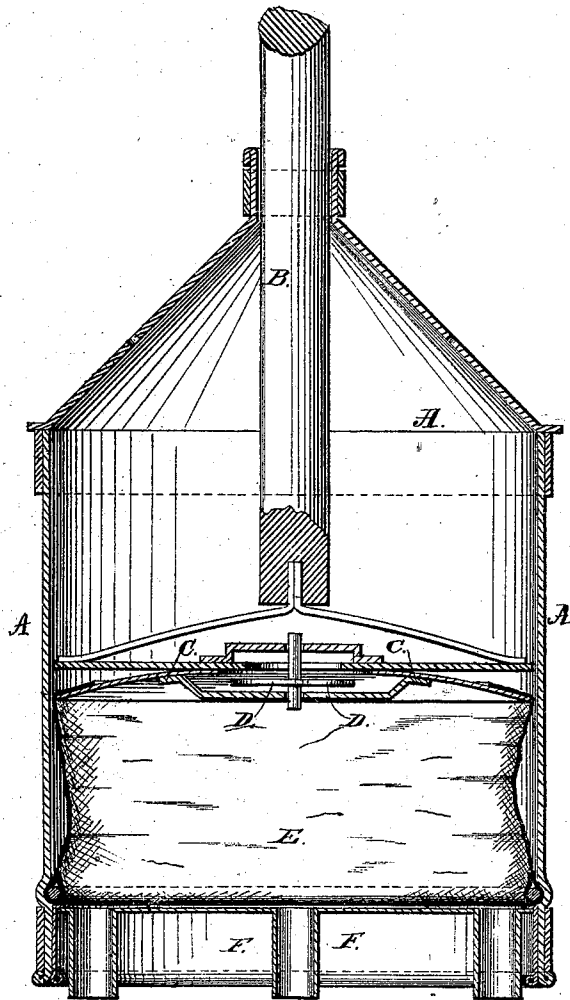


H. H. MESSENGER.
Washing-Machines.

No. 149,592.

Patented April 14, 1874.



Attest

Geo. B. Douley,
James Ingham

Inventor

Henry Hase Messenger

UNITED STATES PATENT OFFICE.

HENRY H. MESSENGER, OF LEON, IOWA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **149,592**, dated April 14, 1874; application filed October 15, 1873.

To all whom it may concern:

Be it known that I, HENRY HAYS MESSENGER, of Leon, Decatur county, in the State of Iowa, have invented a Washing-Machine, of which the following is a specification:

My invention consists in a device for condensing and forcing air through the clothes.

The drawing is a sectional view of the machine.

A is the cylinder, containing the interior parts of the machine. B is the piston-rod, working at the top of the cylinder. C is the piston-head. It contains the valve D, by means of which the canvas bellows E is filled with air when the piston-rod is drawn upward. This bellows E is attached to the piston-head by a draw-string, and is kept in its place in a crease in the cylinder, when the machine is in operation, by a spring-wire at the bottom of the bellows. F is a movable bottom of the machine, pressed up into the lower end of the cylinder. It contains seven tubes, through which the air is forced into the clothes.

The operation of the machine is as follows:

The clothes having been put in an ordinary tub, warm water and soap added, the machine is placed square upon the clothes. The piston-rod being raised and the bellows filled with air, the piston-rod is forced downward, the air condensed and forced into the clothes to any ordinary depth in the tub. This upward and downward motion of the piston-rod, alternately filling and discharging the air-bellows, with the movement of the machine around the tub, soon completes the washing.

The cylinder is made of tin, galvanized iron, copper, or brass. The bellows is made of canvas or duck cloth. The piston-rod is an ordinary handle, about three feet in length.

I claim as my invention—

The combination of the cylinder A and the piston-head C with the valve D, bellows E, and bottom F, as and for the purpose specified.

HENRY HAYS MESSENGER.

Witnesses:

E. H. MINOR,
HENRY C. TAYLOR.