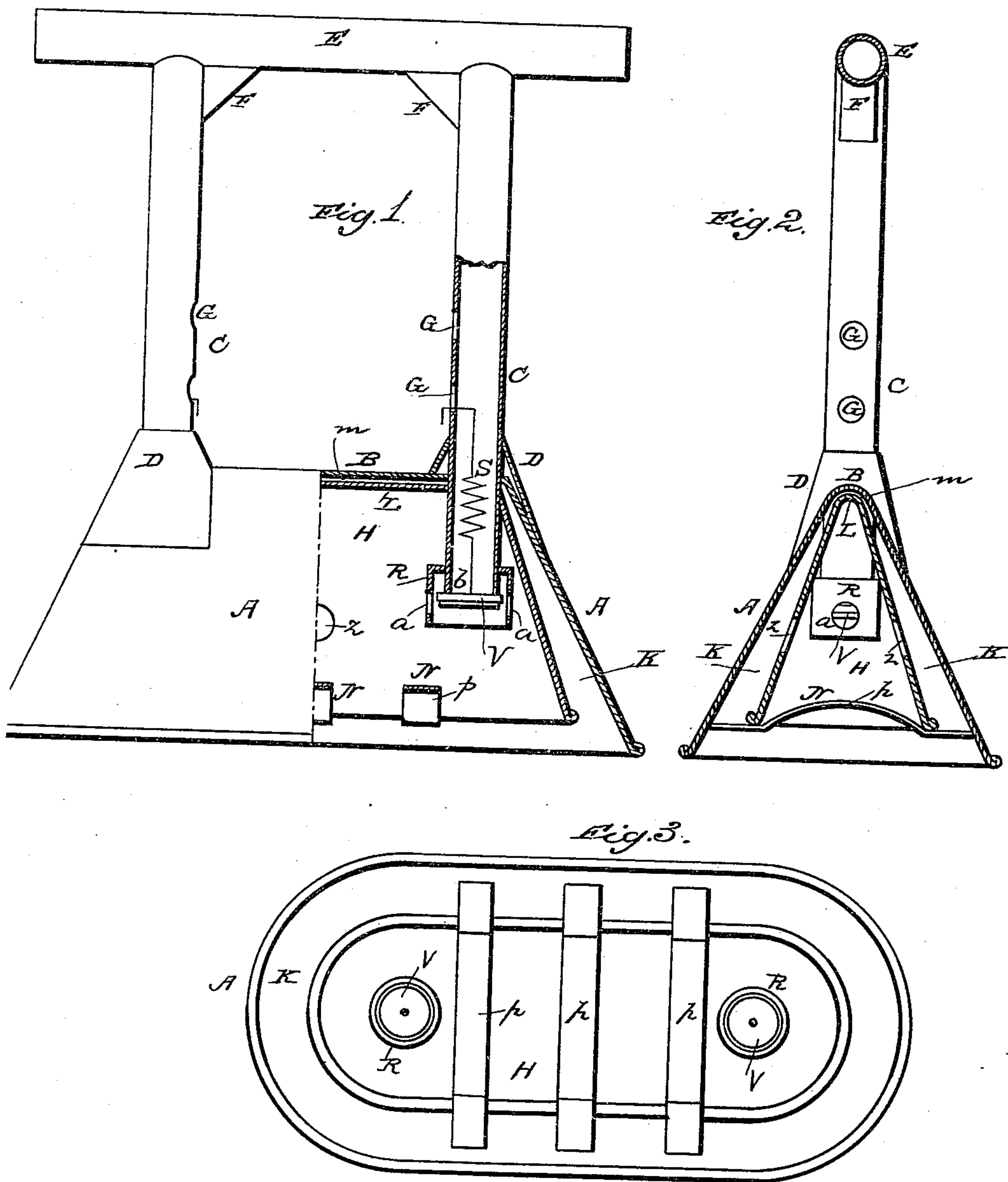


(No Model.)

J. A. LOOMIS.  
WASHING MACHINE.

No. 329,577.

Patented Nov. 3, 1885.



WITNESSES  
*E. H. Boates*  
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# UNITED STATES PATENT OFFICE.

JAMES A. LOOMIS, OF ARKANSAS CITY, KANSAS.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 329,577, dated November 3, 1885.

Application filed August 16, 1884. Serial No. 140,737. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES A. LOOMIS, a citizen of the United States, residing at Arkansas City, in the county of Cowley and State of Kansas, have invented certain new and useful Improvements in Washing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a side view, part sectional, of my device. Fig. 2 is a cross-sectional view, and Fig. 3 is a bottom view.

This invention has relation to clothes-washers of that class which are operated by intermittent pressure upon the clothes in the tub.

The invention consists in the construction and novel arrangement of devices, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, illustrating this invention, the letter A designates the outer or main pressure-shell, which is made in elongated form with rounded ends and A form in cross-section. The ridge B is straight between the corners, which are perforated for the passage of the air pipes or tubes C C, which are firmly soldered in the perforations, and are strengthened in position by the frustum-braces D. The upper ends of the tubes C C are connected by the handle E, which is rigidly secured thereto, and is braced by the corner-pieces F. Above the frustum-braces perforations G are made in the tubes C. Within the shell A is located a second shell, H, of similar form, but constructed upon a sharper angle, so that the interval K, which extends entirely around between the inner and outer shells, will be smaller at its upper portion than at the base. Over the ridge L of the inner shell the side portions of the interspace K communicate by the passage m. The base edge of the outer shell extends below the level of that of the inner shell, and the cross-braces N serve to connect these marginal portions of the two shells and hold them

in rigid relative position. The middle portions, p, of these braces are bent upward in concave form, as shown. The tubes C project downward within the inner shell, and at about the middle of the depth thereof are provided with enlargements R, which are perforated at a. These enlargements receive the disk-valves V, which are made of metal covered with layers of sheet-rubber, and serve as guards for the same. The ends b of the tubes C project within the enlargements or guards R and form seats, on which the valve-disk rest when drawn up by the tension of the springs S, the upper ends of which are hooked in the perforations of the tubes C above the frustum-braces, so that the springs and valves may be readily and quickly removed when clogged and put in working condition. In the sides of the inner pressure-shell, H, at about the level of the lower ends of the enlargements or guides R, perforations z are made. The outer shell is imperforate.

This washing device is designed to be operated by intermittent pressure upon the articles to be cleansed, which are placed in the suds in the tub. The perforated tubes C let the air down into the inner shell through the valve-seats when the instrument is raised, so that the labor of using it is diminished. The springs S are not designed to have great strength, their tension being sufficient, however, to hold the valves to their seats when the air-pressure is normal. Air and water are designed to be forced by this pressure device into and through the clothes without injuring the same by rubbing. It saves the hands, and will be found to operate efficiently.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a clothes-pounder, the combination, with the inner and outer shells, A and H, of the perforated tubes C C, having their upper ends connected by the handle and their lower ends projecting within the guard, enlargements R, to form seats for the valves, substantially as specified.

2. The combination, with the inner and outer shells, the perforated tubes C, and their guard enlargements, of the disk-valves and springs, as specified.



3. The clothes-pounders consisting of the  
outer elongated A-form shell, A, the inner per-  
forated shell, H, of sharper angle, the cross-  
braces, the tubes C C, projecting within the  
5 inner shell, and having the guards R, the han-  
dle, the frustum-braces D, the corner-braces  
F, the removable valves, and springs, substan-  
tially as specified.

4. In a clothes-pounder, the combination,  
10 with the tubes C, having their upper ends  
connected by a handle, of the removable disk-

valves surrounded by guards, as described,  
and springs in said tubes engaging the perfo-  
rations thereof, the whole adapted to serve  
with inner and outer cones, substantially as 15  
specified.

In testimony whereof I affix my signature in  
presence of two witnesses.

JAMES A. LOOMIS.

Witnesses:

GEO. A. PERRY,  
H. S. LUNDY.