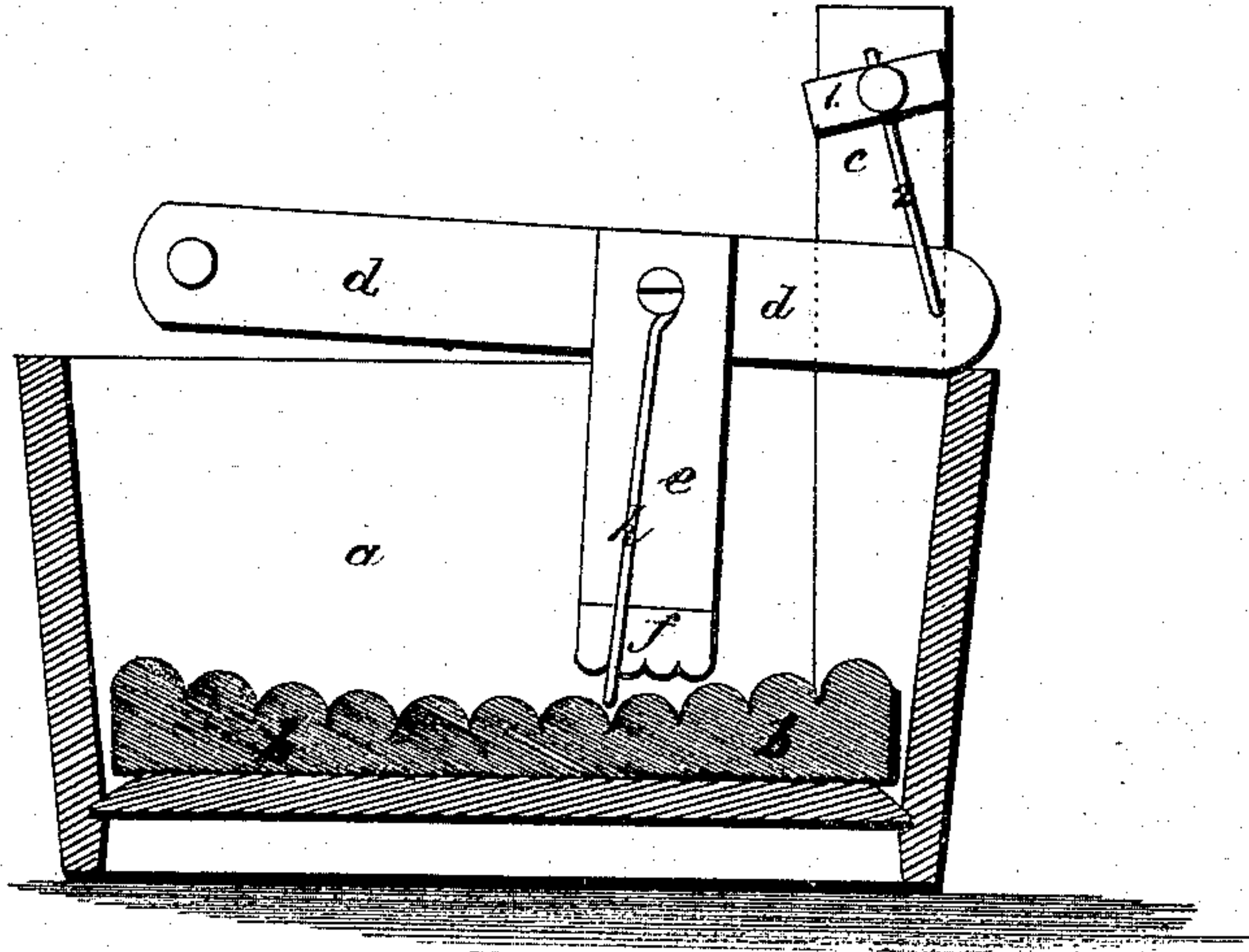


**R. H. BOYD.**  
**Washing-Machines.**

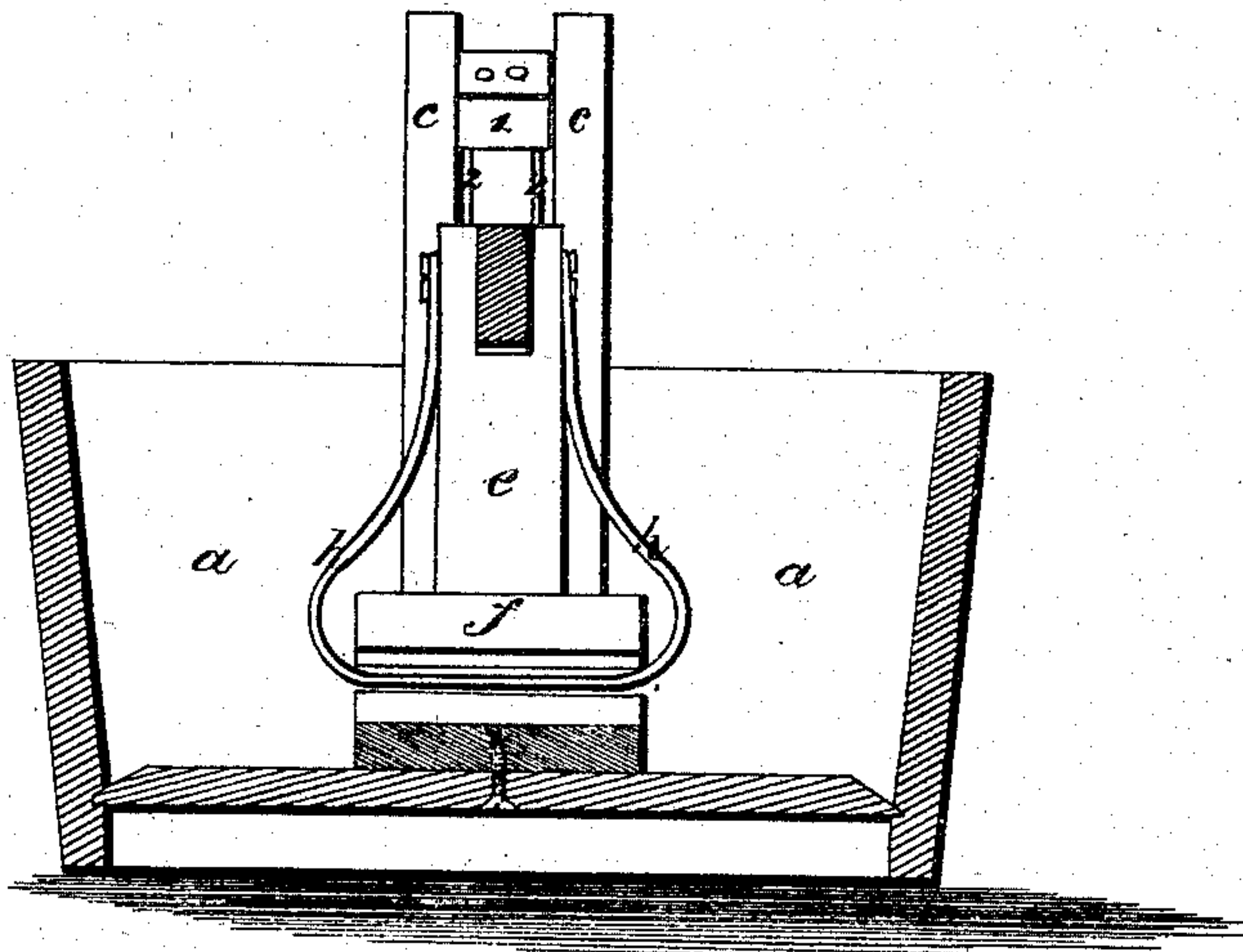
No. 156,872.

Patented Nov. 17, 1874.

*Fig 1.*



*Fig 2.*



WITNESSES.  
*J. W. Barnes*  
*J. F. Lehmann*

INVENTOR.  
*R. H. Boyd*  
*per F. A. Lehmann*  
att'y.

# UNITED STATES PATENT OFFICE.

ROBERT H. BOYD, OF LONDONDERRY, OHIO.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **156,872**, dated November 17, 1874; application filed September 5, 1874.

*To all whom it may concern:*

Be it known that I, ROBERT H. BOYD, of Londonderry, in the county of Guernsey and State of Ohio, have invented certain new and useful Improvements in Washing-Machines; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in washing-machines; and it consists in pivoting to the sides of the rubber a suitable loop, which extends down across its lower surface, and serves as a means to secure the clothes to the rubber while they are being rubbed back and forth over the rubbing-board, as will be more fully described hereafter.

Figures 1 and 2 represent vertical cross-sections of my invention, taken at right angles to each other.

A represents a suitable tub or box, of any desired description, to the bottom of which is secured the corrugated slightly-concave rubbing or wash board *b*. To one end of this board, or to the side of the tub, are secured the two standards *c*, between the upper ends of which is pivoted the bearing 1, from the under side of which depends a stirrup, 2, to which stirrup is attached one end of the operating-lever *d*. As the bearing turns freely upon its journals, carrying the stirrup with it, the lever can be moved freely back and forth over the board *b*, or swung upward and backward over the top of the bearing. Secured to the under side of this lever, near its center, is vertical block *e*, to the lower end of which is

secured the corrugated rubber block *f*, by means of which the clothes are rubbed upon the board *b*. Pivoted to the sides of this block *e*, near its side, is the swinging clasp, hoop, or bail *h*, as shown in Fig. 2, which reaches down below the block *f*, and passes across its lower surface, for the purpose of binding the clothes to it, so that they can be more easily rubbed upon the board *b*.

In order to attach the clothes in this manner the lever *d* is raised upward and back until the block *f* is brought into a convenient position, the clothes laid upon it with their dirtiest side next to the board *b*, and then the bail or hoop *h* is moved up over them in order to clamp or hold them securely in position while being rubbed back and forth.

I am aware that straps have been used for holding the clothes against the under side of the rubber, and this I disclaim. Straps become stretched, soon rot so as to be perfectly useless, and are rubbed to pieces by the friction against the board *b*.

Having thus described my invention, I claim—

In combination with the rubber *f*, the iron hoop *h*, having its upper ends pivoted to the sides of the standard *c*, whereby the said strap may be swung down under the clothes to hold them in position while being washed, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of August, 1874.

ROBERT H. BOYD.

Witnesses:

W. W. MCFARLAND,  
ALBERT C. GATES.