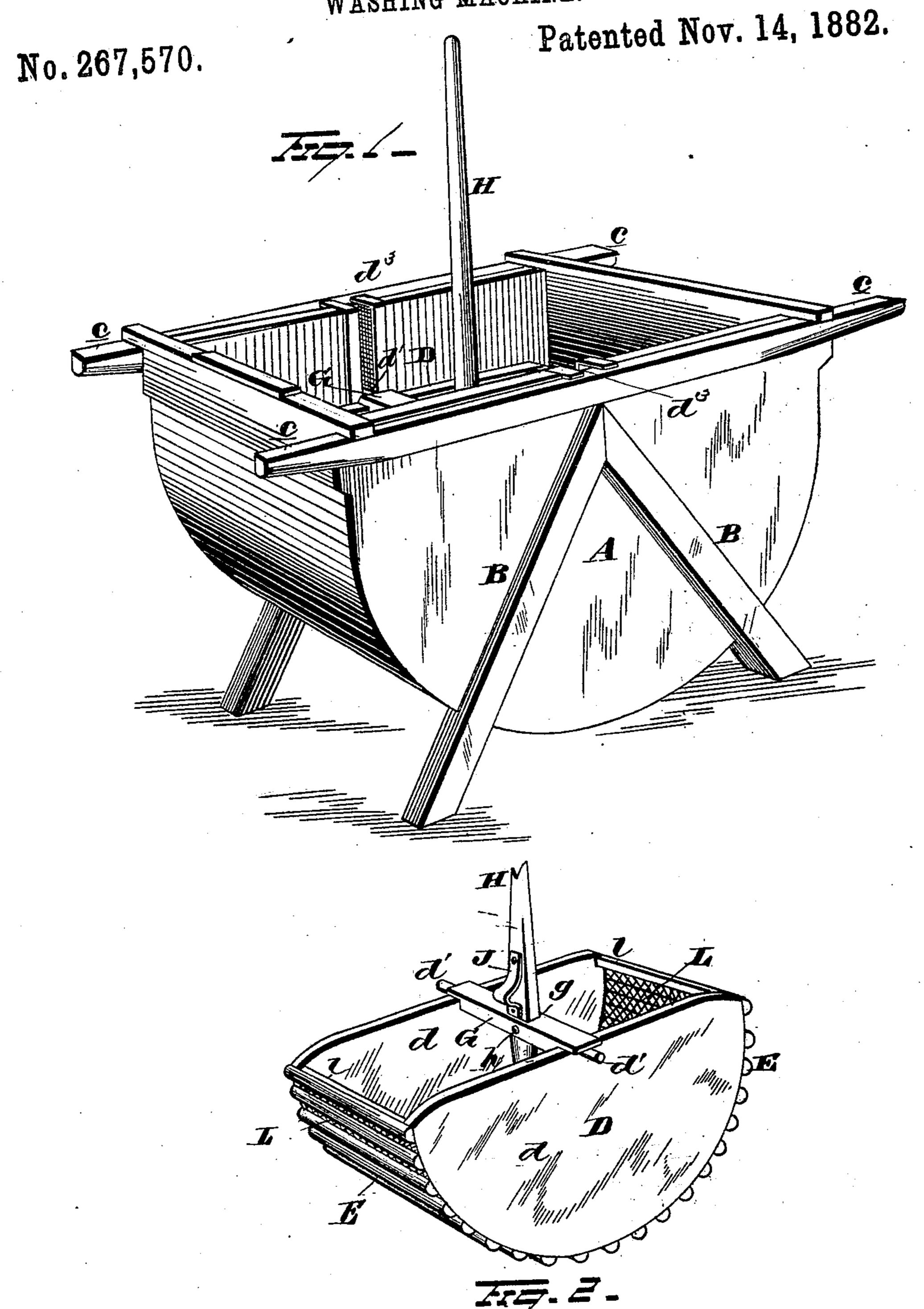
## J. MORRIS.

WASHING MACHINE.



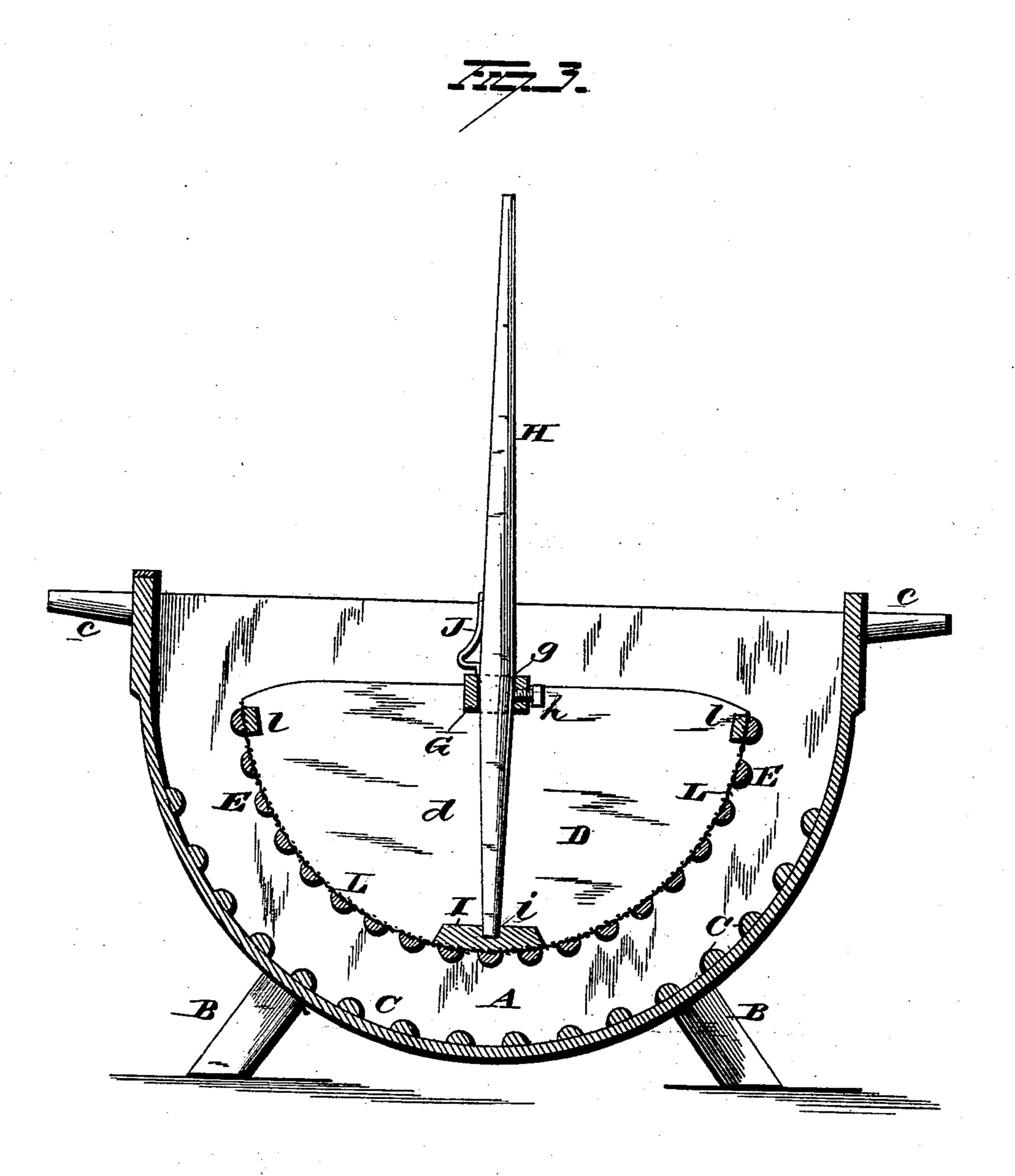
S. S. Nottingham Ofto, D. Veymon

### J. MORRIS.

WASHING MACHINE.

No. 267,570.

Patented Nov. 14, 1882.



S. S. Nottingham

Sto. 20. Vernoum.

John Morris
By Habuguan
Attorney

# United States Patent Office.

### JOHN MORRIS, OF BRISTOL, RHODE ISLAND.

#### WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 267,570, dated November 14, 1882.

Application filed August 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, John Morris, of Bristol, in the county of Bristol and State of Rhode Island, 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 the same.

ing-machines known as "reciprocating-rubber" machines, and its object is to provide a machine of this character which will combine simplicity and economy of construction with durability in use.

The invention consists in the combination, with a stationary rubbing-surface, of a reciprocating rubber provided with a screen or net-

The invention further consists in the features of construction and combinations of parts hereinafter fully described, and pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a washing-machine constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section of the same, and Fig. 3 is a perspective view of the reciprocating rubber removed from the tub.

A represents a semicircular tub or box, supported by suitable legs or supports, B. The bottom of the tub is provided with a series of ridges or cross-bars, C, which form a stationary rubbing-surface. The tub is also provided at its ends with handles c to adapt it to be readily moved.

D represents a semicircular reciprocating rubber, consisting of vertical sides d d and a series of slats or cross-bars, E. The rubber 40 D is supported within the tub A by means of lugs d' d' projecting from each side of the rubber, and bearing in vertical slots  $d^3$   $d^3$  of the tub.

G represents a central cross-bar, secured to the upper side of the rubber D, and provided centrally with an opening, g, for the passage of a handle or lever, H, whose lower end projects into a perforation, i, of a block, I, secured

to the bottom of the rubber, as shown. The handle H is removably secured in place by a 50 screw, h, passing through the bar G and into the handle. Upon one side of the latter, near the bar G, is secured a loop, J, to assist in removing the handle when desired.

Upon the upper sides of the slats E of the 55 rubber is secured a netting, L, of zinc or galvanized wire. The netting is secured at each end of the rubber by strips l, nailed or otherwise secured to the end slats. This wire-netting may be manufactured at a comparatively 60 small cost, and when secured as shown effectually prevents the clothes from entering and becoming wedged between the slats E, and thereby become torn while being washed.

The slats or cross-bars of both the tub and 65 reciprocating rubber are preferably made of hard wood, and are secured in place by galvanized nails.

It will be observed that the bars of the tub and rubber alternate with one another, so that 70 the bars of the rubber are located immediately over the spaces between the bars of the tub. Thus the maximum rubbing surface is secured.

By the construction above described the rubber D may be readily removed from the 75 tub for the introduction or removal of clothes, and the handle of the rubber may be removed when desired.

Having fully described my invention, what I claim as new, and desire to secure by Letters 80 Patent, is—

In a washing-machine, the combination, with the semicircular tub provided on its interior with transversely-ribbed rubbing-surface, of a removable semicircular oscillating rubber having rubbing-slats secured to its curved periphery and projecting outward therefrom, and a wire-netting secured to the inner surfaces of said bars or slats, substantially as set forth.

In testimony whereof I have signed this 90 specification in the presence of two subscribing witnesses.

JOHN MORRIS.

Witnesses:

O. L. Bosworth,
James A. Hiller.