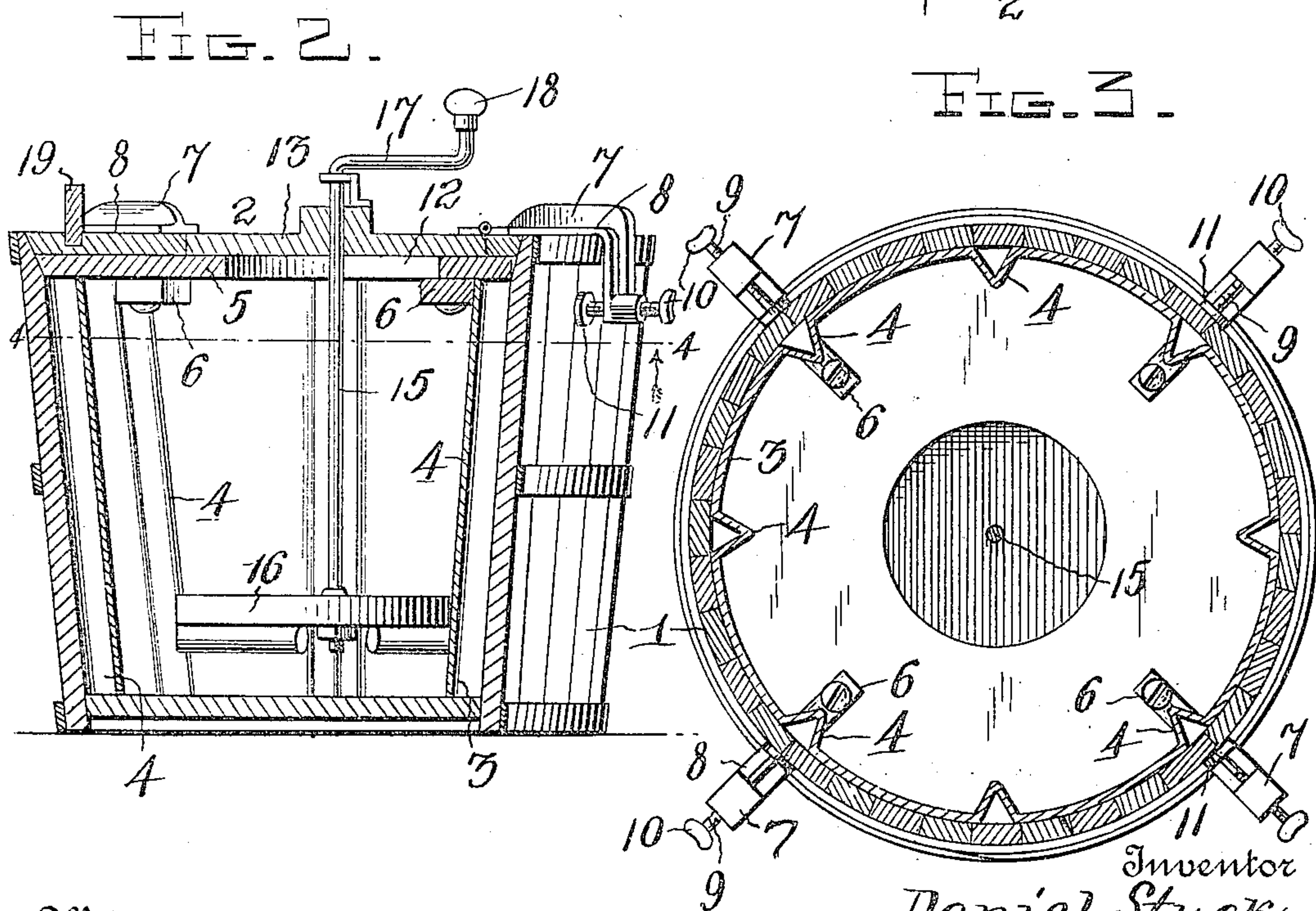
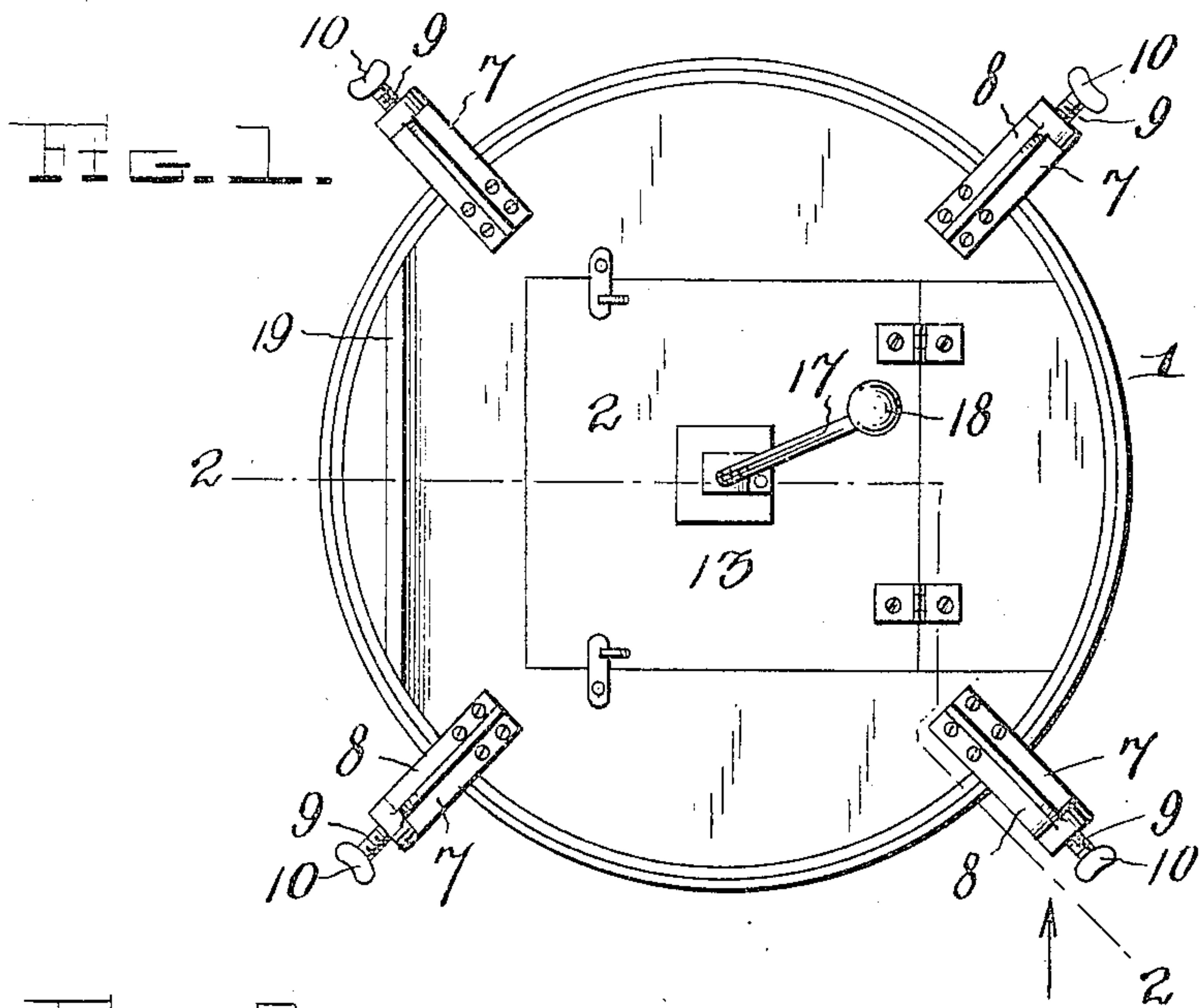


D. STUCK.
WASHING MACHINE.
APPLICATION FILED FEB. 2, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

DANIEL STUCK, OF BAY CITY, MICHIGAN.

WASHING-MACHINE.

No. 808,175.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed February 2, 1905. Serial No. 243,864.

To all whom it may concern:

Be it known that I, DANIEL STUCK, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, 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.

My invention relates to improvements in washing-machines, and more particularly to an attachment for a washtub whereby it may be converted into a washing-machine of the rotary-rubber type.

The object of my invention is to provide a device of this character which is simple in construction, durable in use, and comparatively inexpensive to manufacture.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a top plan view of a washtub, showing the application of my invention thereto. Fig. 2 is a vertical sectional view taken on the plane indicated by the line 2 2 of Fig. 1, and Fig. 3 is a horizontal sectional view on the plane of the line 4 4 in Fig. 2 looking in the direction indicated by the arrow.

Referring to the drawings by numeral, 1 denotes a washtub or the like of any suitable form and construction, and 2 denotes my attachment, by means of which the tub may be converted into a washing-machine. The attachment comprises an annular lining 3, preferably formed of metal bent or corrugated to form vertically-disposed inwardly-projecting V-shaped ribs 4, which provide a rubbing-surface, as presently explained. This lining 3 is adapted to be placed within the tub 1, as shown in Fig. 2, and is retained therein by a top plate 5, which is annular in form and of sufficient size to rest within the upper edge of the tub 1. Upon the under side of the top plate 5 is screwed or otherwise secured a series of blocks 6, which have

their outer faces notched in order to engage the ribs 4 upon the lining 3. Upon the upper side of the top plate 5 is secured, by means of similar fastening devices, a plurality of clamps 7. Said clamps comprise an L-shaped arm 8, having one of its ends secured to the plate 5 and its other end formed with a screw-threaded opening, through which works a set-screw 9. Said screw 9 has its outer end formed with a finger-piece 10 and its inner end with a head 11, which is adapted to engage the outer face of the side wall of the tub 1, as clearly shown in Fig. 2 of the drawings. In the center of the top plate 5 is formed an opening 12, which is closed by a removable cover 13. In suitable bearings in said cover is journaled a vertically and concentrically disposed shaft 15, which extends down into the lining 3 and tub 1 and has upon its lower end a rotary-rubber head 16. Said head may be of any desired form and construction and is adapted to coact with the ribbed or corrugated lining 4 and the bottom of the tub 1 in order to rub and wash the clothes in the machine. Upon the upper and outer end of the shaft 15 is a crank-arm 17, provided with an operating-handle 18. Upon the upper side of the top plate 5 is also secured a vertically-projecting rib 19, to which a clothes-wringer or the like may be attached.

The construction, operation, and advantages of my invention will be readily understood upon reference to the drawings and the foregoing description. When the crank 17 is rotated, the clothes between the side and bottom of the rubber 16 and lining 3 and tub 1 will be agitated to effectively remove the dirt from them.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

An attachment of the character described, comprising an annular corrugated metal lining, a top plate formed with a central opening, blocks upon the under side of said plate

to engage the corrugations upon said lining,
clamps to hold said plate and said lining in a
tub, a cover for the opening in said plate, and
a rubber rotatably mounted in said cover to
5 coact with the rubbing-surface formed by
said corrugated lining, substantially as de-
scribed.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

DANIEL STUCK.

Witnesses:

J. A. CARPENTER,
J. A. DOWKER.