

(No Model.)

2 Sheets—Sheet 1.

E. W. ALLEN.
WASHING MACHINE.

No. 605,987.

Patented June 21, 1898.

Fig. 1.

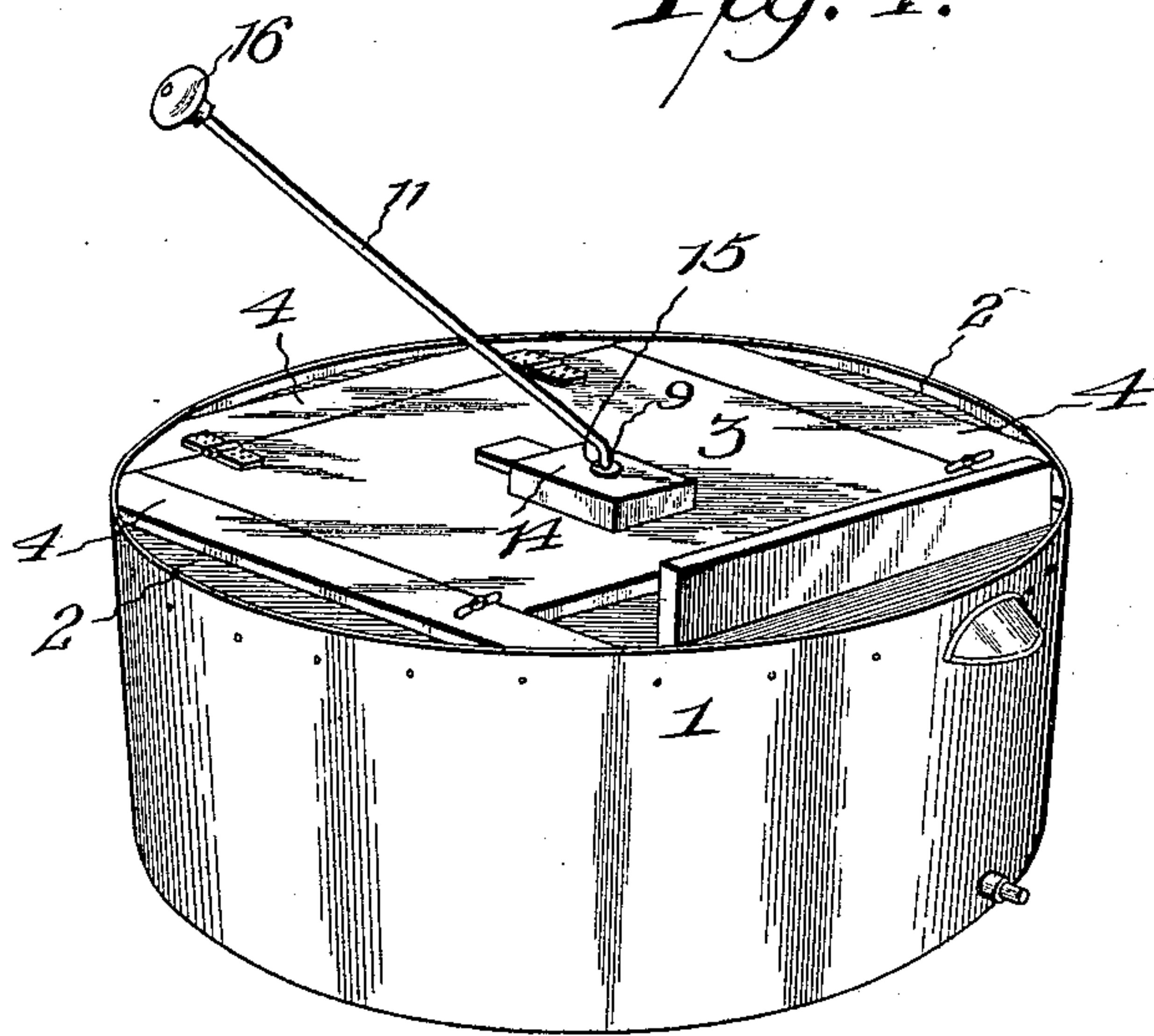
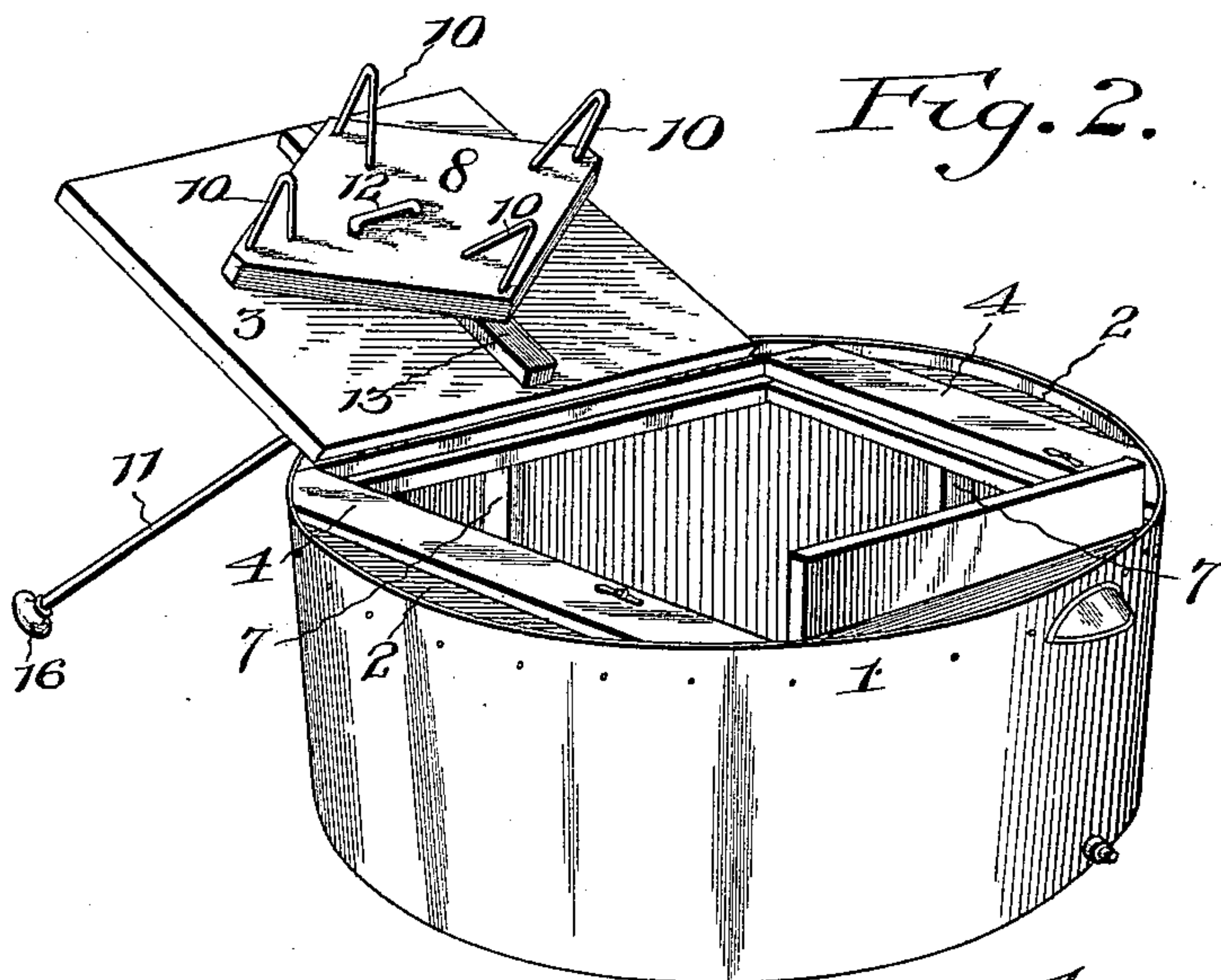


Fig. 2.



Inventor

Witnesses

A. Roy Appleman

By *his*

Attorneys,

Erasmus W. Allen.

T. F. Riley

C. A. Snow & Co.

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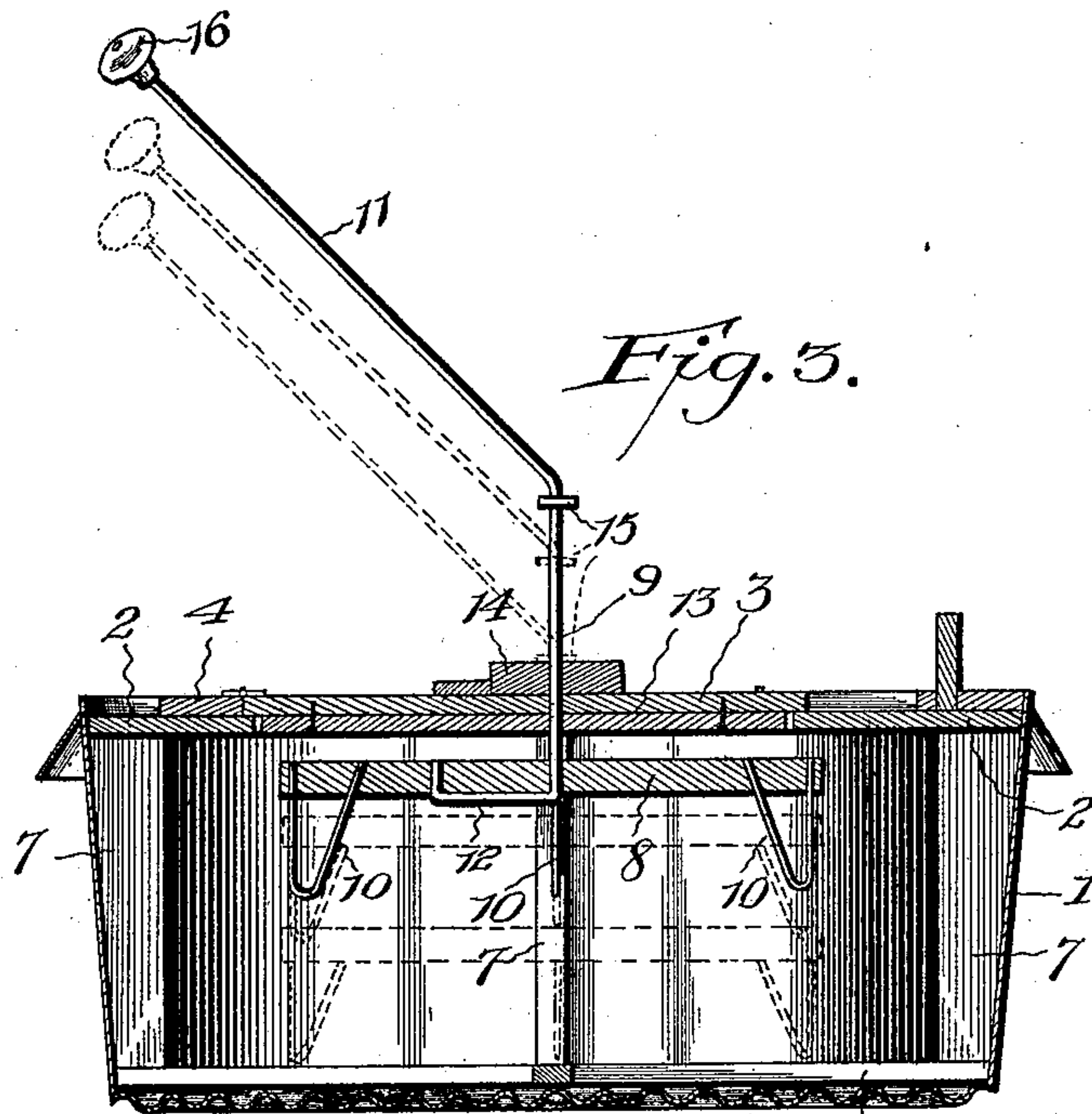


Fig. 3.

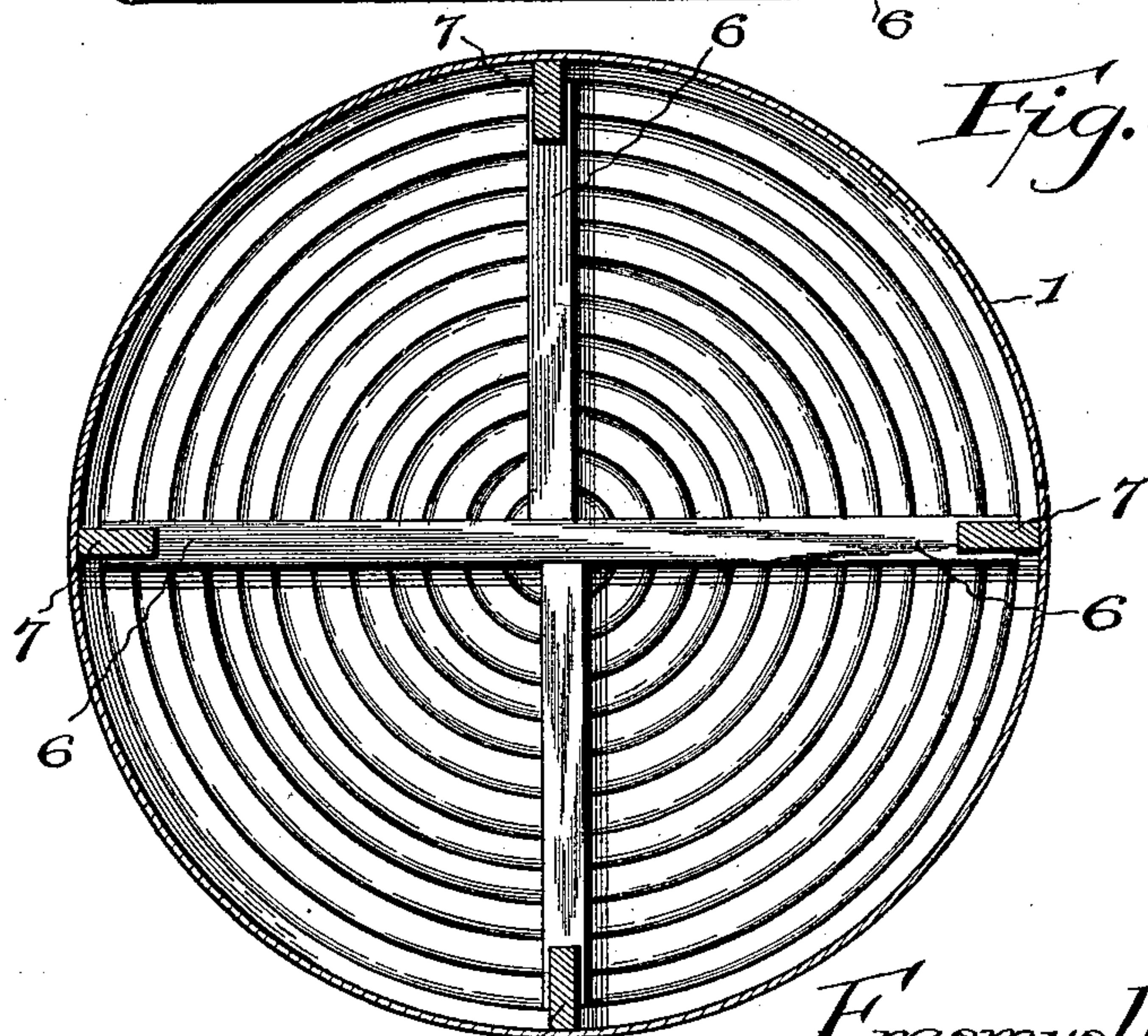


Fig. 4.

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UNITED STATES PATENT OFFICE.

ERASMUS W. ALLEN, OF HOLTON, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 605,987, dated June 21, 1898.

Application filed November 18, 1897. Serial No. 658,981. (No model.)

To all whom it may concern:

Be it known that I, ERASMUS W. ALLEN, a citizen of the United States, residing at Holton, in the county of Jackson and State of Kansas, have invented a new and useful Washing-Machine, of which the following is a specification.

The invention relates to improvements in washing-machines.

10 The object of the present invention is to improve the construction of washing-machines and to provide an exceedingly simple and inexpensive one which will be capable of rapidly and thoroughly washing clothes without
15 injuring them and with the least possible labor.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and
20 pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a washing-machine constructed in accordance with this invention, the cover being
25 closed. Fig. 2 is a similar view, the cover being open. Fig. 3 is a vertical sectional view, the parts being arranged as shown in Fig. 1. Fig. 4 is a horizontal sectional view.

30 Like numerals of reference designate corresponding parts in the several figures of the drawings.

1 designates a washing-machine body, preferably consisting of a cylindrical tub of galvanized iron; but it may be constructed of
35 wood and have any other preferred shape, and it is provided with a horizontal top 2, to which is hinged a rectangular cover 3. The top 2, which is preferably constructed of segmental keepers, forms a rectangular opening,
40 and the cover fits between cleats 4, which are secured to the top 2 at three of the sides of the rectangular opening, one of them having the cover hinged to it. At the other side of the rectangular opening is arranged a wringer-
45 supporting board.

The washing-machine body is provided at its bottom, which may be corrugated, with horizontal bars 6, arranged at right angles to each other, extending entirely across the bot-
50 tom and forming a rubbing-surface adapted to be engaged by clothes during the operation of washing and capable of exerting a rubbing

action on them. One of the bottom bars is continuous and the other is preferably constructed of two sections arranged at opposite
55 sides of the continuous bar.

The top of the washing-machine body is supported by vertical bars or posts 7, mounted upon the ends of the horizontal bars 6 at the inner faces of the sides of the body and ex-
60 tending outward therefrom in order to be engaged by the clothes to rub the same. Although only four horizontal bars and vertical posts are illustrated in the accompanying
65 drawings, yet it will be readily understood that their number may be increased to any desired extent.

During the operation of washing the clothes are carried over the rubbing-bars of the body by a substantially diamond-shaped agitator 8,
70 mounted upon a shaft 9 and provided at its corners with depending arms 10, consisting of loops and adapted to receive clothes to enable them to be positively connected with the agitator when it is necessary to exert an excess-
75 ive rubbing action on them. This construction enables the more soiled fabrics or portions thereof to be thoroughly and rapidly washed. The loops or arms 10, which are
80 tapering or V-shaped, have straight downwardly-converging sides and form distinct tapering openings to enable clothes to be readily wedged in them, so as to make a secure attachment. When the agitator is operated,
85 the clothes rotate with it and are thrown outward against the sides of the body, the bars 6 and posts 7 partially retarding them, and thereby producing the necessary rubbing action.

The shaft 9, which passes through a central
90 bearing-opening of the cover, has its upper portion bent at an angle and arranged at an inclination to form a crank-arm 11, and the lower end of the shaft is passed through a central perforation of the agitator and is bent
95 to form an L-shaped arm or hook 12, which extends along the lower face of the agitator to support the latter and projects upward into a perforation or socket of the same. The arm
100 or hook 12 is driven into the agitator, which is preferably constructed of wood, and by this construction the shaft and the agitator are cheaply and securely connected.

The cover is supported and strengthened

by a lower cleat 13 and an upper block 14. The cleat 13 is secured to the lower face of the cover and interposed between the same and the agitator, and the block is arranged
5 on the upper face of the cover. The shaft is capable of vertical movement to enable it to adjust itself to the contents of the body and bear upon the clothes being washed, and its downward movement is limited by a collar
10 or flange 15, arranged at the upper end of the vertical portion of the shaft and adapted to prevent the loop-shaped arms from coming in contact with the horizontal bars of the bottom of the body. The upper end of the
15 straight crank-arm is provided with a suitable handle 16, and the said crank-arm, which is disposed at an inclination when the cover is closed, is adapted to be rotated to operate the washing-machine. The cover is fastened
20 in its closed position by pivoted buttons or othersuitablefastening devices, and the washing-machine body is provided with a suitable drain-opening in which is arranged a removable plug.

25 The invention has the following advantages:

The washing-machine is exceedingly simple and inexpensive in construction, and it is capable of quickly and thoroughly washing clothes at the expenditure of a minimum
30 amount of labor.

When the body is constructed of sheet metal, it is adapted to serve as a boiler and may be placed upon a stove or used in con-

nection with any other suitable heating apparatus. 35

The agitator is vertically movable to adapt itself to the quantity of clothes being washed, and the shaft may be readily lifted to enable the agitator to swing out of the body, and it
40 serves as a handle in opening the cover.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention. 45

What I claim is—

In a washing-machine, the combination of a washing-machine body having a rubbing-surface, a cover having a bearing-opening, an agitator, and a shaft extending through
50 the bearing-opening of the cover and having its upper portion bent at an angle and arranged at an inclination to form a crank, the lower end of the shaft being passed through the agitator and bent at an angle to form a
55 substantially L-shaped arm or hook arranged on the lower face of and supporting the agitator and extending into and engaging the same, whereby the agitator is rigidly connected with the shaft, substantially as de- 60 scribed.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ERASMUS W. ALLEN.

Witnesses:

G. G. EVERHARD,
R. J. LINSOTT.