

DE WITT HAWLEY.
WASHING MACHINE.
APPLICATION FILED MAY 22, 1908.

976,362.

Patented Nov. 22, 1910.

FIG.1.

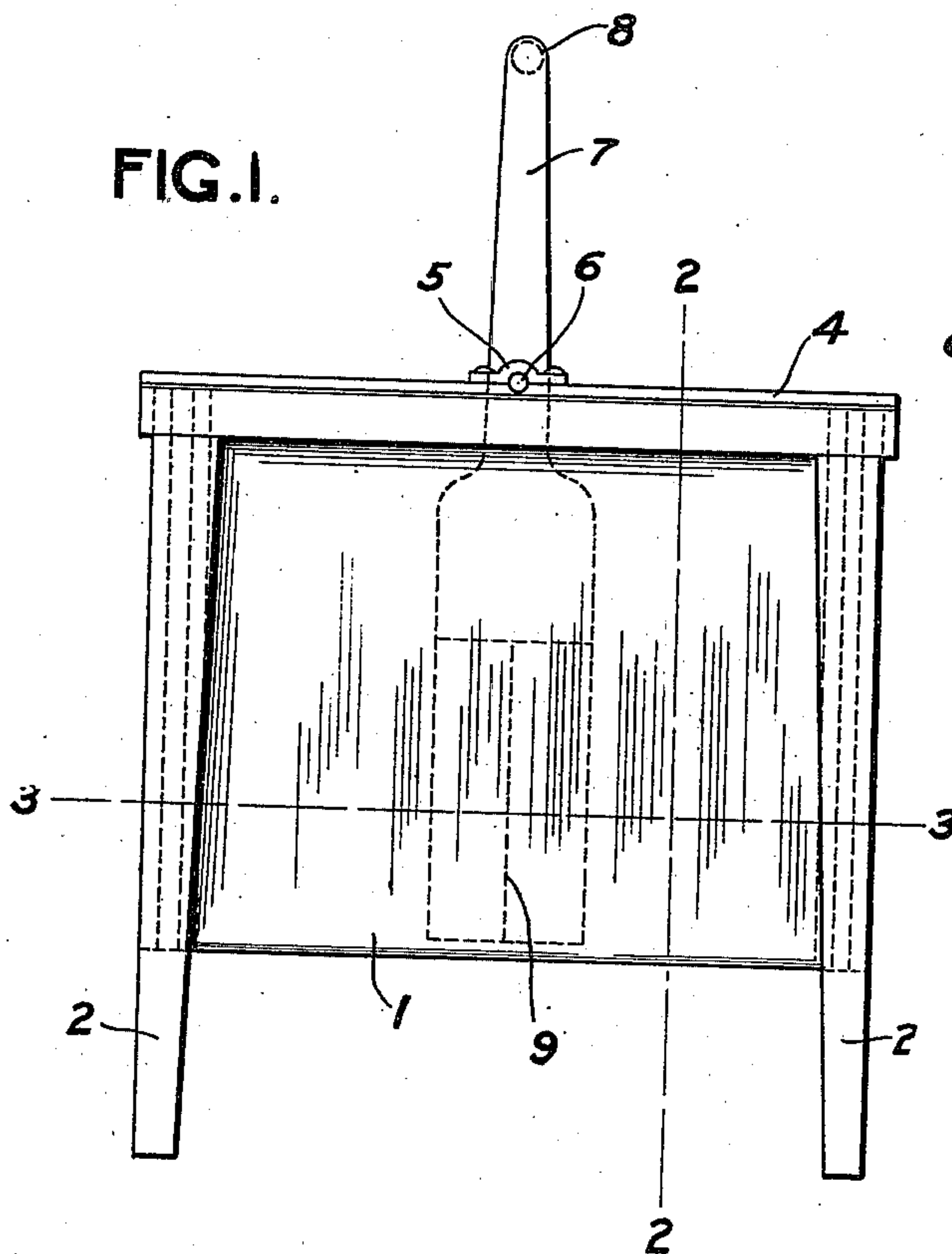


FIG.2.

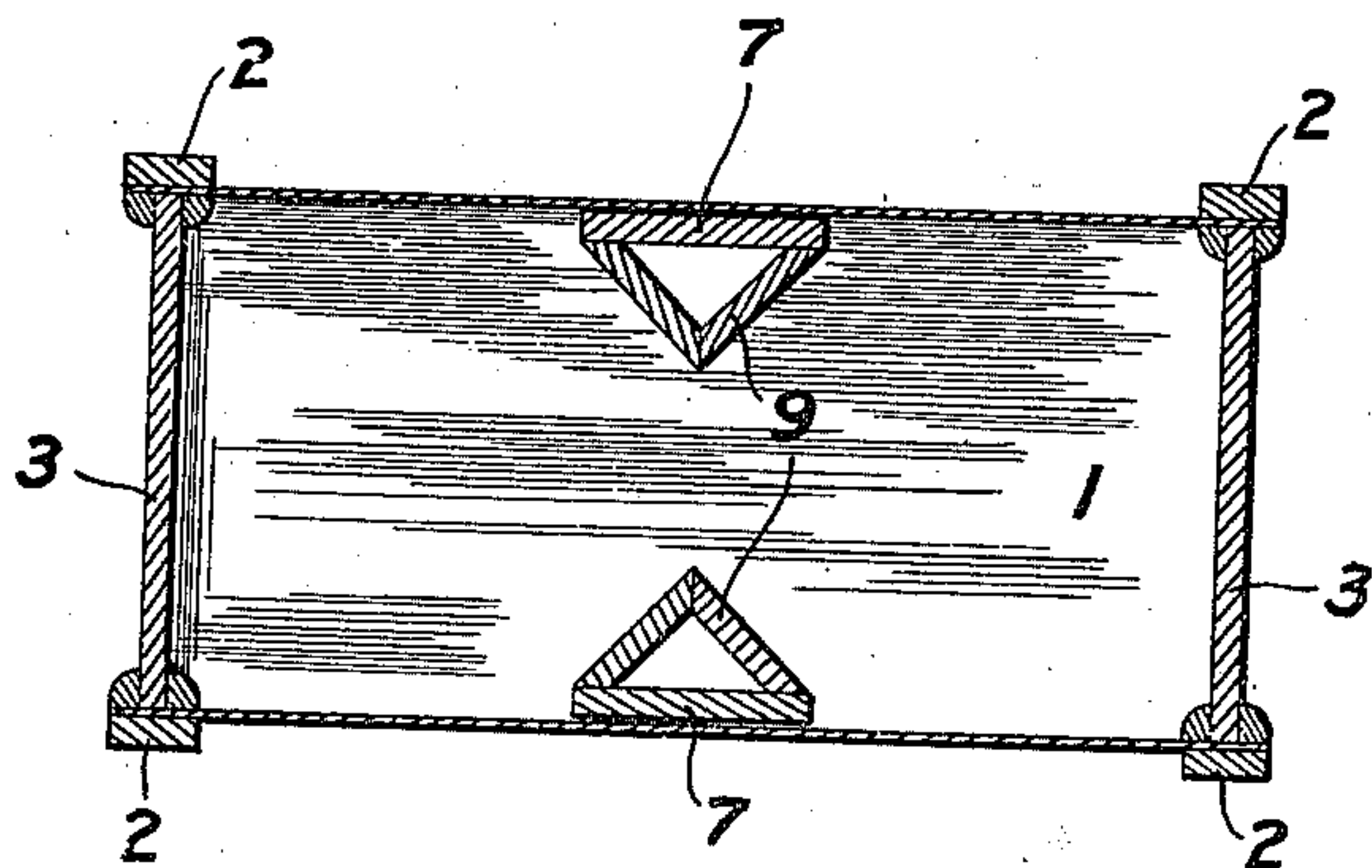
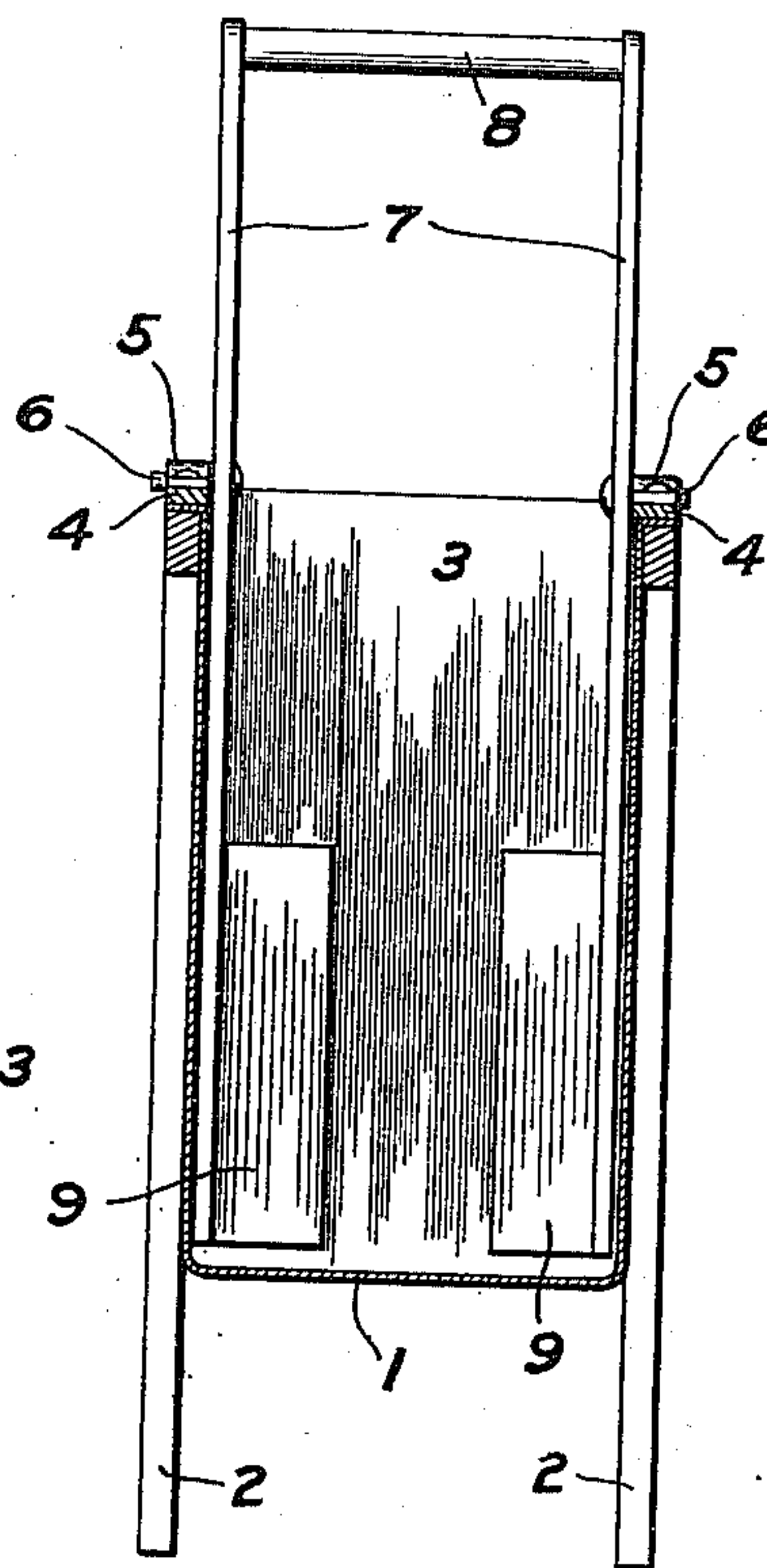


FIG.3.

WITNESSES:

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WASHING-MACHINE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DE WITT HAWLEY, a citizen of the United States, and resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to washing machines, and consists in the apparatus hereinafter described as defined in the succeeding claims.

In the drawings: Figure 1 is an elevation of a washing machine embodying this invention, and showing certain interior features thereof in dotted lines; Fig. 2 is a vertical section on the line 2—2 of Fig. 1, looking toward the left in said figure; and Fig. 3 is a horizontal section on the line 3—3 of Fig. 1, looking downwardly.

The illustrated embodiment of my invention has a tank or container 1 supported on legs 2. The tank may be of metal, of wood, or of any other suitable material. In the present case it has wooden ends 3, and a metallic bottom and sides, as appears clearly from Figs. 2 and 3. Around the top is a suitable rim 4 having, at the middle points of the two sides, suitable bearings 5 for pivot pins 6 of a swinging frame having a cross handle 8 at the top. The swinging frame with the handle is of an inverted U-shape, and the side arms or members 7 are pivoted as above described to the frame of the machine by the pins 6. The side arms of said frame have, at the bottom, inwardly projecting agitators 9, 9, which leave a passage between their nearest portions so that the articles to be washed may pass through between them. In the present case these agitators are of a substantially triangular form in cross-section, as shown in Fig. 3, and their bases are formed by the side arms of the frame 7, while their apices project toward each other. Each agitator lies in a plane substantially at right angles to the wall of the tank and at right angles to the curved path of its movement or vibration, and the side faces of the triangular agitators slope in opposite directions from said plane;

which plane in the present embodiment of the invention lies in a radius from the pivotal center 6. The vibratory agitators, therefore, form a vibrating partition open at the middle within the tank, and having an opening with sloping sides so that it is largest at either end and smallest in the middle.

If now water and articles to be washed are placed in the tank, and the agitators are vibrated by swinging the frame, the articles to be washed will be pressed together as they pass through the middle of the agitator and will spread again as they pass the middle.

By vibrating the agitators, the articles are squeezed and the washing water is forced powerfully among them and through them, without rough treatment of said articles.

What I claim is:

1. In a washing machine, a tank, a pair of vibratory arms pivoted against opposite walls of the tank, and an agitator extending toward the middle of the tank from each arm both being substantially in the same plane which is in a radius from the pivotal center and at right angles to the wall of the tank, and leaving a passage between the two agitators.

2. In a washing machine, a tank, a pair of vibratory arms pivoted against opposite walls of the tank, and an agitator extending toward the middle of the tank from each arm and having faces sloping in opposite directions from a plane substantially at right angles to the wall of the tank and in a radius from the pivotal center, and leaving a passage between the two agitators.

3. In a washing machine, a tank, a pair of agitators in the tank fitting closely against opposite walls of the tank and projecting toward each other, the agitators being of sufficient width to occupy the greater portion of the width of the tank so as to form a substantially restricted passage between them, and means whereby the agitators may be reciprocated simultaneously in the same direction to force the contents of the tank through said passage.

4. In a washing machine, a tank, a pair of agitators in the tank fitting closely against

opposite walls of the tank and projecting
toward each other, the agitators having in-
clined lateral surfaces and being of suffi-
cient width to occupy the greater portion of
5 the width of the tank so as to form a sub-
stantially restricted passage between them,
and means whereby the agitators may be re-

ciprocated simultaneously in the same di-
rection to force the contents of the tank
through said passage.

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Witnesses:

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