J. STAUDER.

WASHING MACHINE.

APPLICATION FILED JUNE 29, 1908.

**915,803.**

Patented Mar. 23, 1909.

FIG. 1.

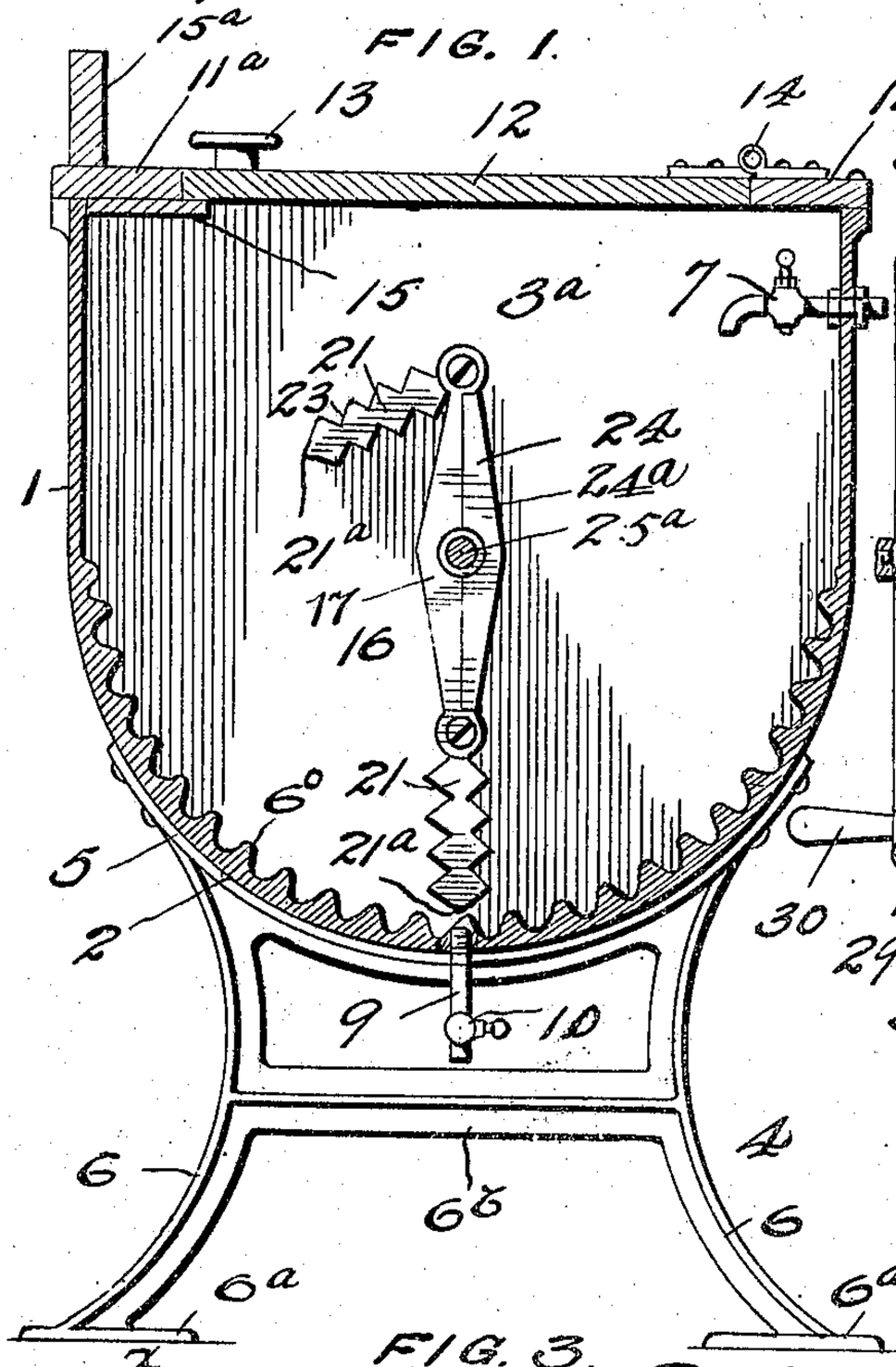



FIG. 2.

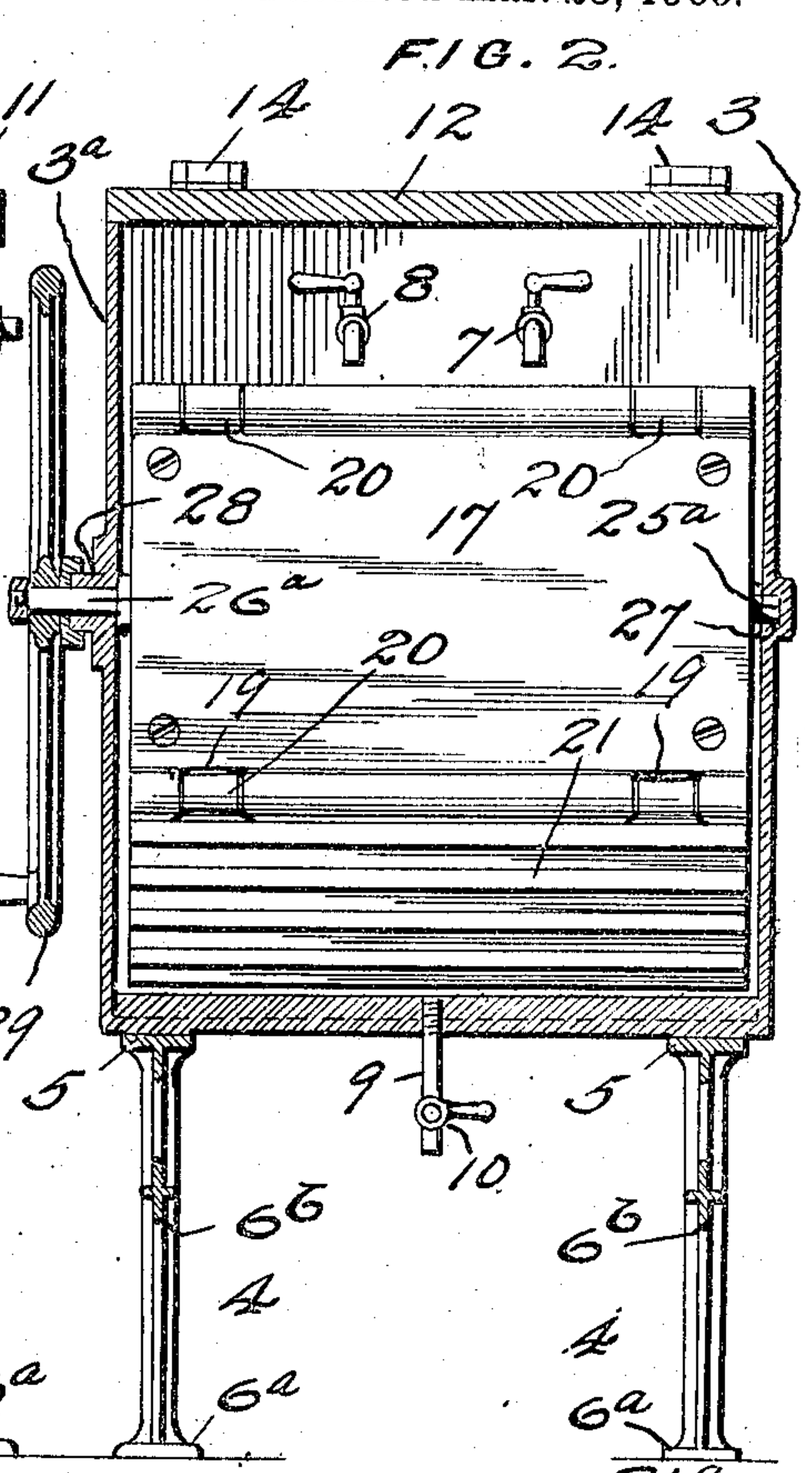



FIG. 3.

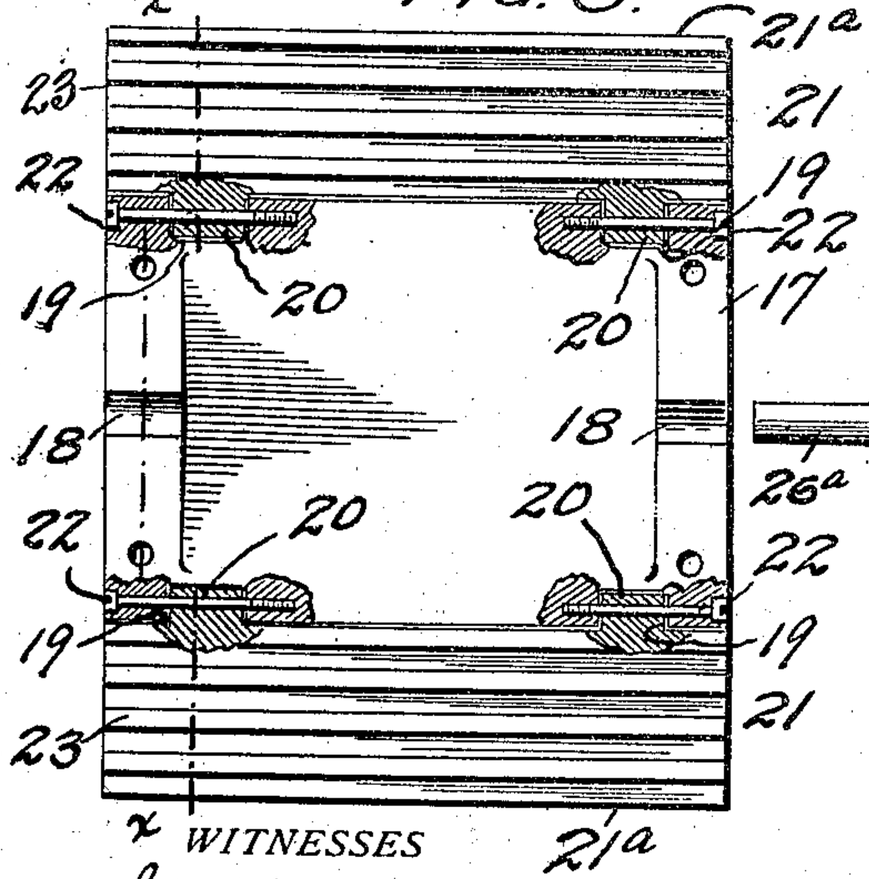



FIG. 4.

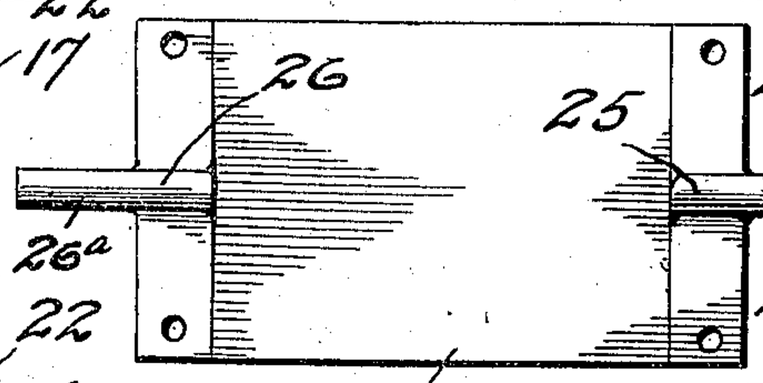
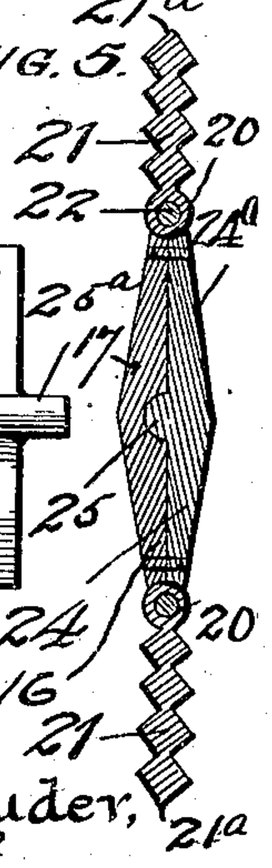



FIG. 5.




WITNESSES

Chas K. Davies

J. Stewart Rice.

Joseph Stauder,
INVENTOR

C. L. Parker.
Attorney

# UNITED STATES PATENT OFFICE.

JOSEPH STAUDER, OF MOUNT VERNON, NEW YORK.

## WASHING-MACHINE.

No. 915,803. Specification of Letters Patent. Patented March 23, 1909.

Application filed June 29, 1908. Serial No. 440,904.

*To all whom it may concern:*

Be it known that I, JOSEPH STAUDER, a citizen of the United States, residing at Mount Vernon, in the county of Westchester 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 improvements in washing machines; and has for its object to provide a machine, which is simple in construction and will wash clothes expeditiously and with the minimum amount of wear to the same.

Other objects and advantages of my invention will appear in the course of the following specification.

In the accompanying drawing, Figure 1 is a cross section through my improved washing machine; Fig. 2 is a longitudinal section through the same; Fig. 3 is a plan view of the beater with a portion thereof removed; Fig. 4 is a plan view of the inner side of the removed portion of the beater referred to in the description of Fig. 3; and Fig. 5 is a section taken through the beater on the line *x*—*x* Fig. 3, with the removed portion shown in Fig. 4 in position thereon.

Referring to the accompanying drawing, which represents the preferred form of my invention, 1 designates the tub or receptacle, which is preferably of iron, cast in one piece, with a rounded bottom 2, and vertical ends 3, 3ª. The tub is supported by two cast iron supports or stands 4, 4, one arranged at each end thereof. These supports or stands are provided with bowed tops 5, 5, which are secured to and so shaped as to conform to the curve of the rounded bottom 2 of the tub, and have curved standards or legs 6, which terminate in broad feet 6ª. Each of the stands is provided with a suitable cross brace 6ᵇ.

The inner side of the rounded bottom 2 is provided with parallel corrugations, as at 6°, running longitudinally thereof, and these corrugations, as well as the whole interior of the tub, are preferably enameled. In one side, and near the top of the tub, are two spigots 7 and 8 for the purpose of supplying hot and cold water, and in the bottom is a waste pipe 9 provided with a suitable valve 10.

Secured to each side of the top of the tube are flat frame pieces. 11, 11ª preferably of wood and the aperture between them is closed by a door 12, provided with a handle 13, and hinged at 14, 14, to the frame piece 11. The door, in its closed position, is adapted to contact with the tops of the ends 3 and 3ª, and a jamb 15 secured to the underside of the frame piece 11ª. There is secured to the upper side of the frame piece 11ª a support 15ª to which a wringer can be attached.

Designated by 16, is a beater, which consists of a side portion 17, the ends of which are provided with grooves 18, 18. The longitudinal edges of the side portion are rounded and cut away at two places on each edge thereof to form recesses 19. Into each of these recesses fits a rounded projection 20 formed on extensions or wings 21, 21, and in this position they are pivotally held by pivot pins 22. The wings 21, 21 each have their exterior edge drawn to a blunt edge as at 21ª, 21ª, and are provided with longitudinal corrugations, at at 23, on each side thereof, as shown. Adapted to be secured to the side portion 17 is a second side portion 24 and these two portions, when secured together, constitute the body portion 24ª of the beater. The second side portion 24 is provided with semi-cylindrical portions 25, and 26, which terminate in cylindrical projections 25ª and 26ª. The semi-cylindrical portions 25 and 26 fit into the grooves 18, 18, while the cylindrical projections 25ª and 26ª are designed to serve as shafts for a purpose to be hereinafter explained. The body portion 24ª of the beater, in cross section, is substantially in the form of two acute angle triangles, with rounded apices, placed base to base. The beater and the wings pivoted to it are preferably made of malleable iron and enameled.

Arranged centrally in the end 3 of the tub is a socket 27, which serves as a bearing for the end of the shaft 25ª of the beater. The other shaft 26ª projects through a stuffing box 28, and has a wheel 29 provided with a handle 30 secured to its rim, keyed on the end thereof.

As will be noted from the drawing, the beater with its pivoted wings is made of such a size that it extends the entire length of the tub 1 and as near the same diameter thereof as possible and still revolve freely therein.

Assuming the articles to be washed have been placed in the tub with the requisite amount of soap and water, the wheel will be turned and the beater thereby caused to revolve. Owing to the fact that the extensions or wings 21, 21, are hinged they will ef-

fectually beat the clothes, and the corrugations thereon will take hold of them with sufficient force to draw them against the corrugations on the inside of the tub, and by reason of their being hinged they will swing back against the pressure of the clothes and thereby avoid tearing them. The wings, it will be noted, can swing back until they contact with the body of the beater. Further, when the clothes come into contact with the sloping sides of the body of the beater they will glide easily off the same.

From the foregoing, it will be seen, that my beater with its pivoted wings will wash the clothes effectually with a minimum amount of wear, and at the same time, by reason of its construction, will readily free itself from the clothes, hence allowing the beater to be easily operated.

Having described my invention, I claim:

1. In a washing machine, a rotary beater comprising a pair of relatively flat plates, secured face to face, each of said plates having their outer faces beveled from a central point to the longitudinal edges thereof, one of said plates having grooves in the inner face thereof, adjacent its end, and the other of said plates having projections in its inner face to interfit said grooves, and extending outwardly beyond the end thereof to form trunnions, and wings having corrugated faces, swingingly secured to the longitudinal edges of the first named plate, substantially as described.

2. In a washing machine, a rotary beater comprising a pair of relatively flat plates, secured face to face, each of said plates having their outer faces beveled from a central point to the longitudinal edges thereof, one of said plates having its longitudinal edges extending beyond the longitudinal edges of the opposite plate, and provided therein with cut out portions, and wings provided with projections pivotally secured within said cut out portions, to permit the same to swing with relation to the beater, substantially as described.

3. In a washing machine, a rotary beater comprising a pair of relatively flat plates, secured face to face, each having their outer faces beveled from a central point to the longitudinal edges thereof, one of said plates having grooves in the inner faces thereof adjacent its end, and the other of said plates having projections in its inner face to interfit said grooves, and extending outwardly beyond the end thereof, to form trunnions, one of said plates having its longitudinal edges extending beyond the longitudinal edges of the opposite plate, and provided in said extending edges with cut out portions, and wings provided with projections pivotally secured within said cut out portions, to permit the same to swing with relation to the said plates, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH STAUDER.

Witnesses:
GARDNER G. WINSHIP,
ARTHUR W. BERTINE.