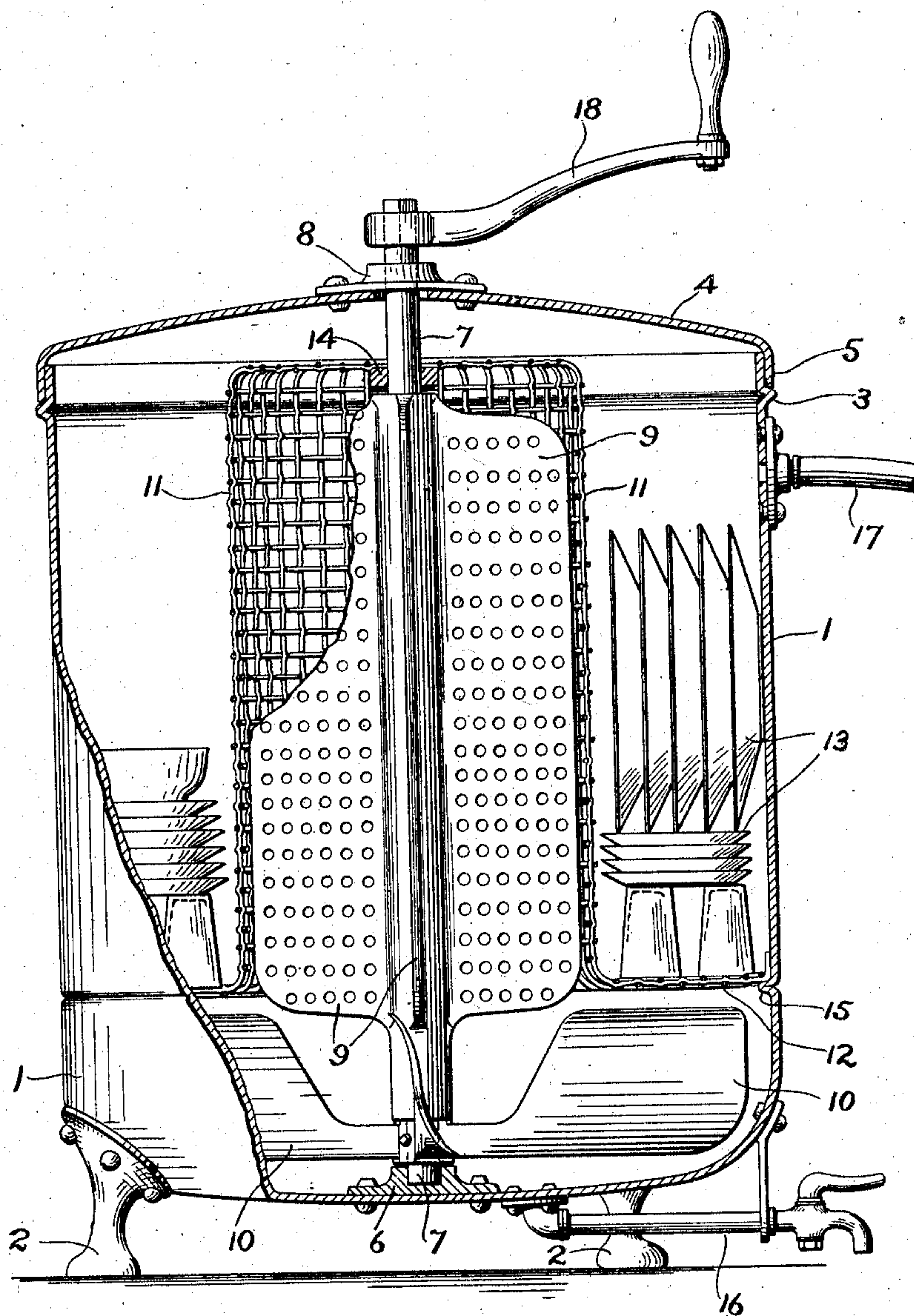


No. 839,898.

PATENTED JAN. 1, 1907.

R. R. SMITH.
DISH WASHING APPARATUS.
APPLICATION FILED FEB. 7, 1906.



WITNESSES:

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GENERAL SPECIALTY MANUFACTURING COMPANY, OF PHILADEL-
PHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

DISH-WASHING APPARATUS.

No. 839,898.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed February 7, 1906. Serial No. 299,861.

To all whom it may concern:

Be it known that I, ROBERT R. SMITH, re-
siding at Philadelphia, in the county of Phila-
delphia, State of Pennsylvania, have invent-
ed certain Improvements in Dish-Washing
Apparatus, of which the following is a speci-
fication.

This invention is a portable dish-washing
apparatus having a shell struck up from
sheet metal, with a removable wire rack
therein for holding the dishes and a double
set of removable dashers or blades for agit-
ating water to effect the washing operation.

The object of the invention is to provide a
simple, inexpensive, and efficient apparatus
having parts that are readily assembled and
dissociated.

In the accompanying drawing there is
shown a broken sectional elevation of a dish-
washing apparatus embodying the invention.

As shown in the drawing, the shell 1, sup-
ported by the feet 2, is suitably formed of
sheet metal pressed to shape, with an external
bead 3 near the top thereof to engage the de-
tachably cover 4, having the flange 5, which
telescopes with the top of the shell-body. A
step-bearing 6, fixed to the bottom of the
shell, receives the lower end of the shaft 7,
which has its upper end journaled in the bear-
ing 8, fixed to the cover. A set of dashers
or blades 9 are fixed on the shaft 7 to throw
outwardly water contained in the shell, and
on the lower end of the shaft are keyed the
dashers or blades 10, which act to throw the
water transversely to the direction given it
by the blades 9, the blades 10 being prefer-
ably twisted. A wire rack, comprising the
cylindrical portion 11, surrounding the
blades 9 and the annulus or shelf 12 above
the blades 10, holds the dishes 13. The rack
is supported in the shell by a bearing 14,
fixed to the top of the part 11, within which
the shaft 7 is journaled, and by the bead 15
formed in the shell to engage the shelf 12. A
valve-controlled outlet 16 is provided in the
bottom of the shell, and an inlet 17 at a point
near the top thereof. In this construction
by detaching the handle 18 from the shaft 7
and removing the lid 4 the rack and shaft,
with the blades thereon, can be lifted out
separately or together and replaced as read-
ily.

In operation the action of the two sets of

blades agitates the water, so as to dash it
against all parts of the dishes contained in the
rack, thus cleansing them in an effective man-
ner. The twist in the lower blades, like a
screw-propeller, provides means for more ef-
fectively throwing the water upward in wash-
ing and drawing it downward in discharg-
ing the water with the solid matter carried
thereby.

Having described my invention, I claim—

1. A dish-washing apparatus comprising
a shell and a shaft therein with two sets of
blades thereon for driving water in trans-
verse directions.

2. A dish-washing apparatus comprising
a shell having a vertically-disposed shaft
journaled therein with an upper set of blades
for dashing outwardly and a lower set of
blades for dashing upwardly.

3. A dish-washing apparatus comprising
a shell with a step-bearing in the bottom and
a sleeve-bearing in the top thereof, a shaft
journaled in said bearings with blades there-
on, and a rack with a shelf exterior to said
blades.

4. A dish-washing apparatus comprising
a shell, a shaft journaled therein, a rack hav-
ing a body portion and a shelf projecting
therefrom, a set of blades fixed on said shaft
so as to act within said body portion and a
second set of blades fixed on said shaft so as
to act beneath said shelf.

5. A dish-washing apparatus comprising
a shell having a body with a step-bearing in
the bottom thereof and a detachable top
with a sleeve-bearing thereon, a shaft jour-
naled in said bearing, blades on said shaft
and a rack having a bearing sleeved on said
shaft.

6. A dish-washing apparatus comprising
a shell, a shaft journaled in said shell, blades
fixed on said shaft and extending through
the greater part of the interior of the shell,
and a rack with a cylindrical body surround-
ing said blades and a shelf exterior to said
blades.

7. A dish-washing apparatus comprising
a shell, a shaft journaled in said shell, blades
fixed on said shaft, and a rack having a cylin-
drical body with a bearing sleeved on said
shaft and a shelf supported by said shell-
body.

8. A dish-washing apparatus comprising

a shell, a shaft journaled in said shell, an upper set of blades for dashing outwardly and a lower set of blades for dashing upwardly fixed on said shaft, and a rack having
5 a cylindrical portion surrounding said first set of blades and a shelf above said second set of blades.

In testimony whereof I have hereunto set my hand, this 31st day of January, A. D. 1906, in the presence of the subscribing witnesses.
ROBT. R. SMITH.

Witnesses:

LOUIS H. BUCK,
HENRY S. GOLDEY.