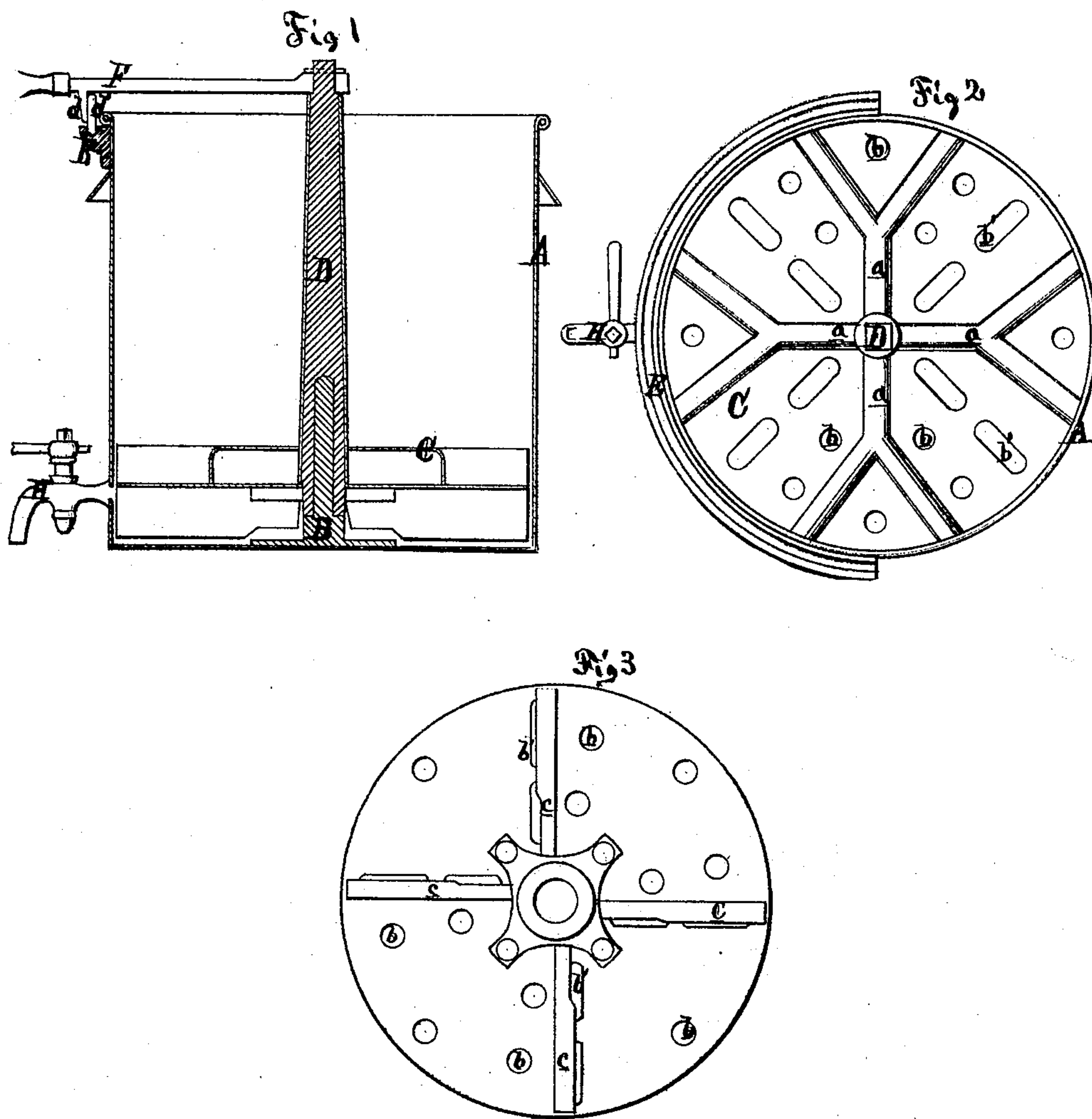


*Russell v McGrath,*

*102,046*  
*No. 102042,* *Washing Machine.*

*Patented Apr. 19. 1870.*



*Witness.*  
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# United States Patent Office.

JOHN RUSSELL AND THEODORE T. McGRATH, OF FENTONVILLE, MICHIGAN.

Letters Patent No. 102,046, dated April 19, 1870.

## IMPROVED WASHING-MACHINE AND BOILER.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern :

Be it known that we, JOHN RUSSELL and THEODORE T. McGRATH, of Fentonville, in the county of Genesee and State of Michigan, have invented a new and useful Improvement in Boilers and Washing-Machines Combined; and we do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a vertical section;

Figure 2 is a plan view, with the cover removed; and

Figure 3 is a bottom view of the rotating bottom.

Like letters refer to like parts in each figure.

The nature of this invention relates to an improved construction of boilers and washing-machines, so that all rubbing by hand is dispensed with, and the clothes can be washed, sudsed, and rinsed, without their being removed from the machine, or the machine from the fire.

It consists in a cylindrical boiler, in the center of the bottom of which is secured a stud, in a false bottom provided with a perpendicular shaft. This bottom is also provided with perforations, deflectors, and ribs.

Attached to the upper end of the shaft is a proper handle extending horizontally beyond the outside of the boiler, and has on its under side a roller which rotates in a semicircular grooved track, the whole operating as more fully hereinafter set forth.

In the accompanying drawings—

A represents a circular boiler provided with a suitable tight-fitting cover made of any suitable material. The bottom of the boiler is strengthened by cross-strips of galvanized iron.

B is a stud rigidly secured to the center of the bottom of the boiler by any proper means.

C is a semi-rotating false bottom, which is secured to the shaft D, which, in turn, is stepped upon the stud B.

This bottom is provided on its upper face with the ribs *a* branching from the center, and whose outer ends are V-shaped, as shown.

It is also provided with perforations and slots, *b b'*,

and on its under side with deflectors, *c*, for the purpose hereinafter described.

E is a semicircular grooved track rigidly secured to the outside of the boiler, at or near its top; and

F is a handle attached to the upper end of the shaft D by any proper means, and has near its outer end a downward-projecting stud, *d*, to which is journaled the roller *d'*, so that it will rotate in the grooved track E.

H is a faucet by which the liquid contents of the boiler can be drawn off.

A boiler constructed as above described is placed over the fire, and in it are put the fabrics to be cleansed, with a sufficient quantity of water, when they are brought to a boil. A semi-rotating motion is then given to the false bottom by means of its handle. The agitation of the bottom in this manner causes the water to be thrown up through the slots by the deflector, and in contact with the clothes, thoroughly cleansing the articles being washed.

The ribs on the upper surface of the bottom, being V-shaped, serve to keep the clothes from catching between the edge of the rotating bottom and the inner walls of the boiler.

The water in which the clothes are washed can be drawn off through the faucet, and clean water put in for rinsing, without removing the boiler from the fire.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a washing-machine and boiler combined, the false bottom C, when provided with the perforations *b*, slots *b'*, ribs *a* and deflectors *c*, when constructed and operating substantially as described.

2. The shaft D stepped upon the stud B and rotated by the handle F traveling upon the small roller *d'*, in combination with the false bottom C and cylindrical case A, when arranged and operating substantially as herein set forth.

JOHN RUSSELL.

THEODORE T. McGRATH.

Witnesses:

H. S. SPRAGUE,  
JAS. I. DAY.