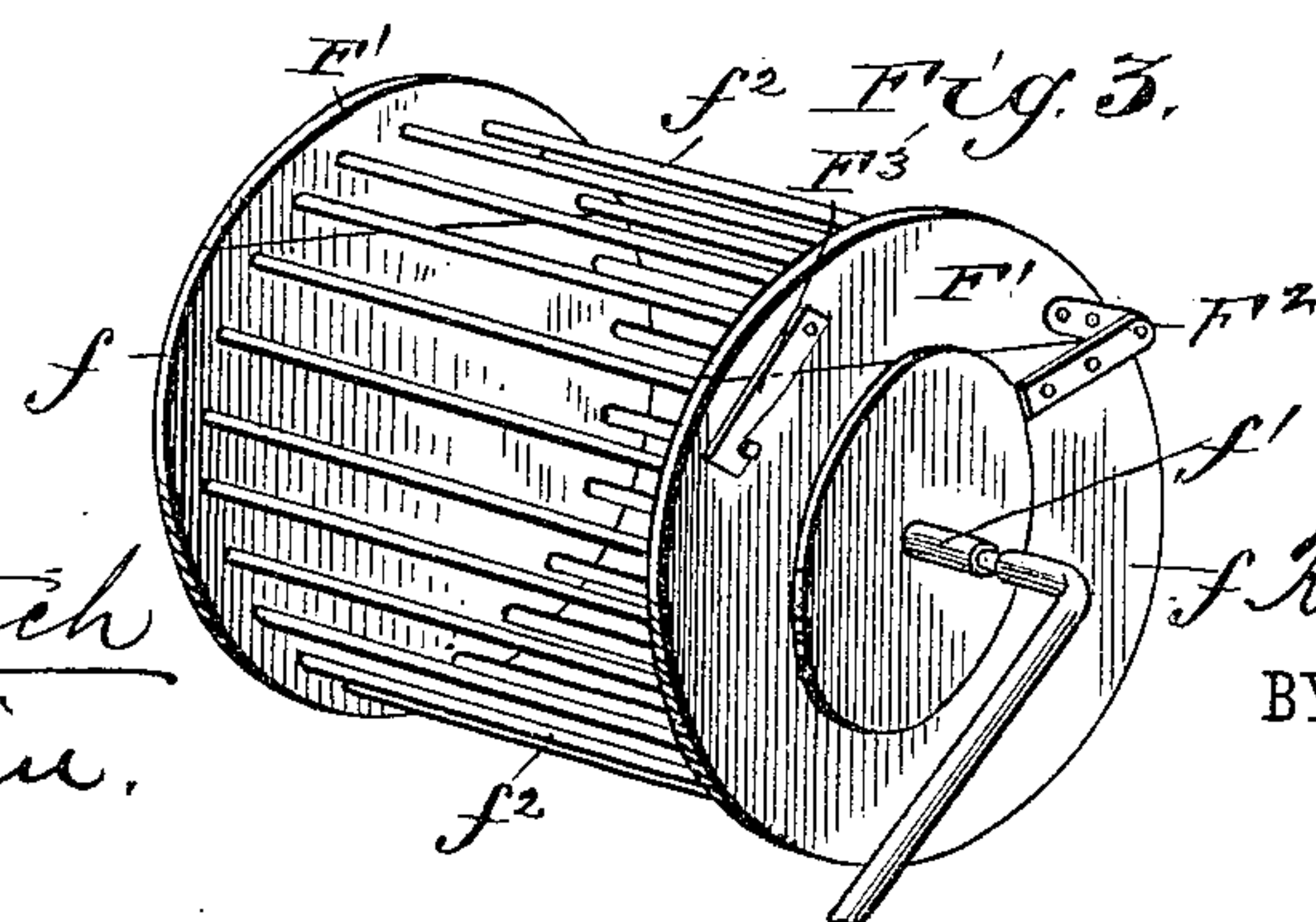
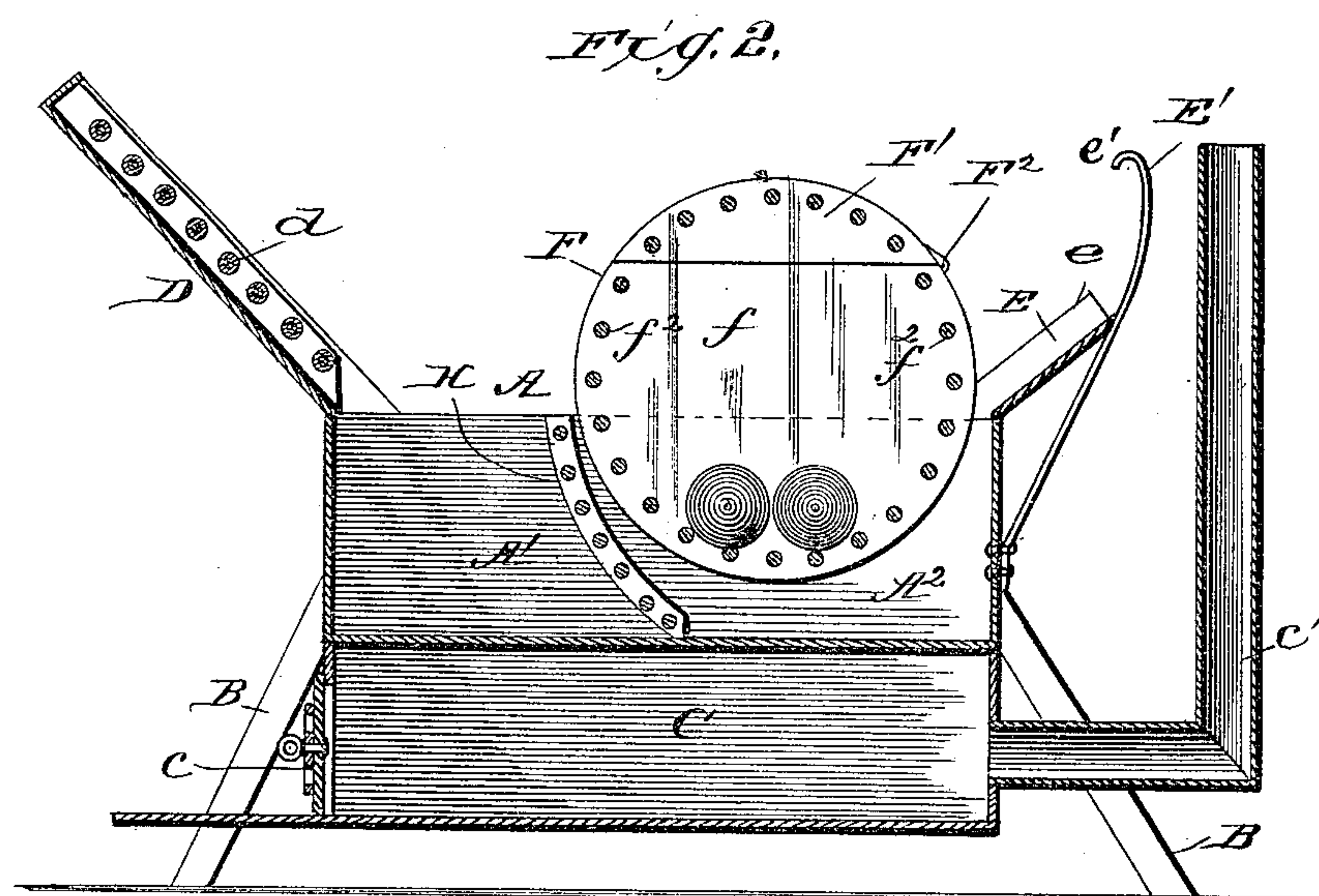
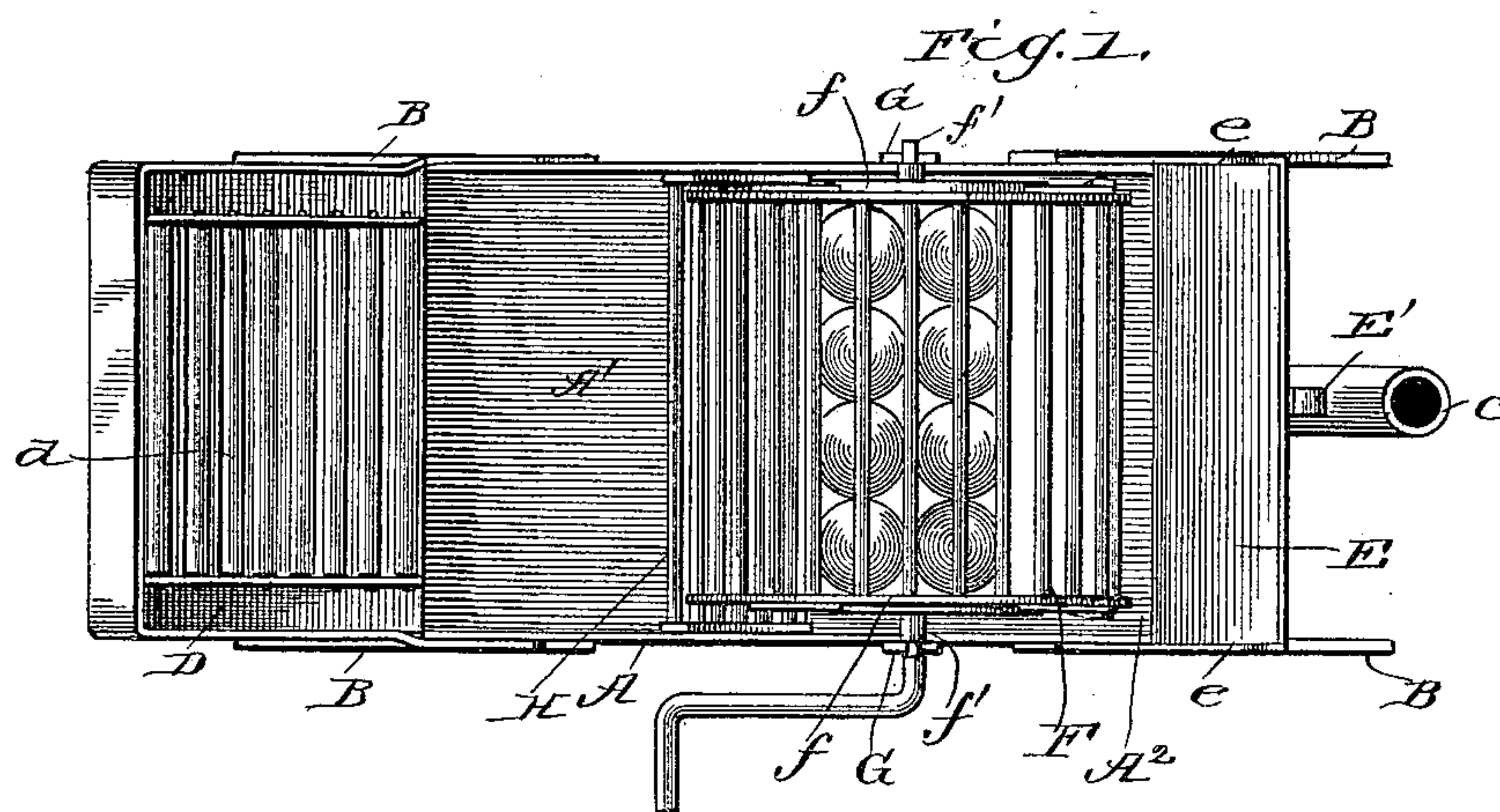


(No Model.)

R. P. STARBUCK.
WASHING MACHINE.

No. 405,807.

Patented June 25, 1889.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT P. STARBUCK, OF HARRISVILLE, WEST VIRGINIA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 405,807, dated June 25, 1889.

Application filed October 20, 1888. Serial No. 288,654. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. STARBUCK, of Harrisville, (Ritchie Court-House,) in the State of West Virginia, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

My invention is an improvement in washing-machines, and has for an object to provide a novel construction by which the clothes may be boiled, washed, and rinsed in the same body or box; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view, and Fig. 2 a longitudinal section, of my improvement; and Fig. 3 is a detail view of the cylinder.

The suds-box A is suitably supported, usually on legs B, and the furnace C is formed immediately under said box, the fire-door *c* thereof opening at one end of the box, and the uptake *c'* leading up alongside the other end of the box, as shown. By this means and arrangement the water in box A may be quickly heated to boiling-point. On the box at one end I mount and rigidly secure the wash-board D, having the rubbing-bed of rollers *d*, which wash-board may be used in washing heavy thick articles, such as bed-clothes. At the end of the box opposite the wash-board I provide a board or plate E, having sides or flanges *e*, and inclining downward toward the box A. This board operates as a draining-board and also as a means for returning to the box A the water which may be splashed onto the board E by the revolution of the cylinder F, presently described. This cylinder F is formed of end plates *f*, having trunnions *f'*, one of which is extended and bent to form a hand-crank, and slots or rods *f*², extended between these plates *f* near the peripheries thereof, forming what may be termed a "slotted" cylinder, a section F' of which is separated from the other section or main portion and is hinged at F², and has latches F³, forming practically a door, which may be opened and rested on support or upright E', to admit the placing and removal of

clothes, and fastened to secure the clothes in said cylinder. The cylinder is journaled by its trunnions in bearings G, mounted on the box A, the cylinder being arranged at one side close to the rear end of the box or end on which the board E is mounted, and on the opposite side of the cylinder I provide a slotted partition H, arranged close to the cylinder and dividing the box A into compartments A' A², which may be termed, respectively, the "open compartment" and the "cylinder-compartment." This partition serves to prevent the clothing in the open compartment from becoming tangled with the cylinder.

The cylinder is easily removable, so the entire box A may be used in boiling and rinsing, and being conveniently placed in its bearings for use in washing. In washing, the door of the cylinder is opened and the clothes placed in the cylinder, and a number of balls I—usually eight in number—are placed in the cylinder and the door thereof closed, the balls being larger than the spaces between the rods *f*², so they cannot escape between the rods; but when the door is closed will be retained within the cylinder and operate as beaters in the operation of washing. As the cylinder is turned, the clothes in the cylinder will be washed by the circulation of the water through the slats and by the beating of the balls operating within the cylinder.

It will be seen that the upper end of the upright E' is formed with a hook *e'*, which engages one of the slats of the door-section F', and operates as a catch to hold the cylinder from turning forward toward the opposite end of the suds-box as clothing is dragged out of the slatted cylinder over the edge of the opening in said cylinder into the open compartment A' of the suds-box. Consequently it will be seen that the upright E', by its hook *e'*, operates to hold the lid or door F', and also prevents the forward turning of the cylinder as the clothing is dragged there-out.

Having thus described my invention, what I claim as new is—

In a washing-machine, substantially as described, the combination, with the suds-box having a cylinder-compartment and an open

compartment, and an upright E', having a
hook e', and arranged at the end of such
suds-box opposite the open compartment, of
the cylinder operating in the cylinder-com-
partment and having a door-section arranged
5 when open to be supported by upright E' and
be engaged by the hook e' thereof, whereby
the cylinder will be held from turning for-

ward toward the open compartment by the
dragging of clothes out of such cylinder into 10
such open compartment, substantially as set
forth.

ROBERT P. STARBUCK.

Witnesses:

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W. F. WEBB.