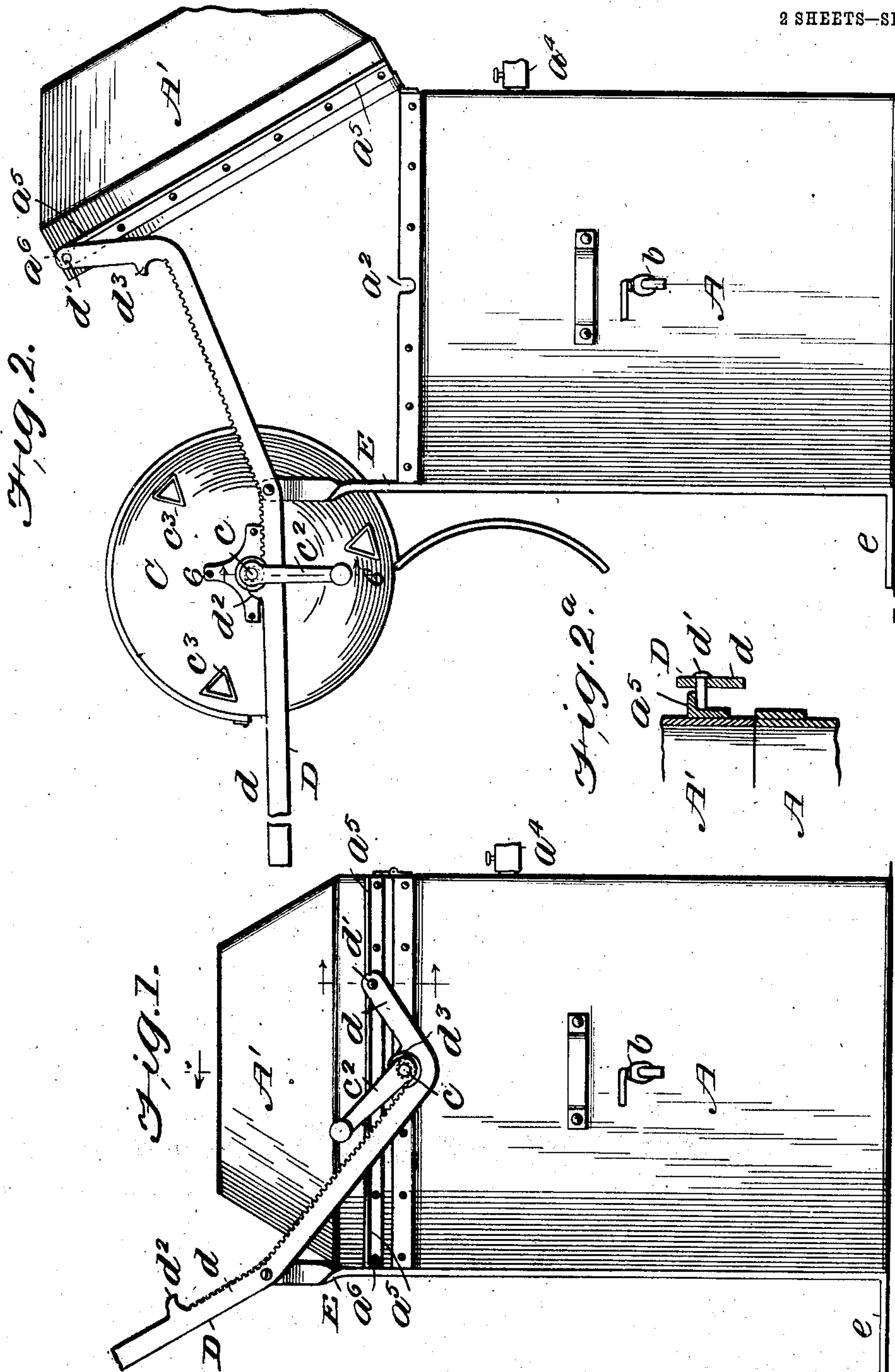


No. 850,061.

PATENTED APR. 9, 1907.

J. W. SEIFERT.  
WASHING MACHINE.  
APPLICATION FILED OCT. 27, 1906.

2 SHEETS—SHEET 1.



WITNESSES

F. E. Barry  
Amos W. Hart

INVENTOR  
JOHN W. SEIFERT

BY Munn & Co.

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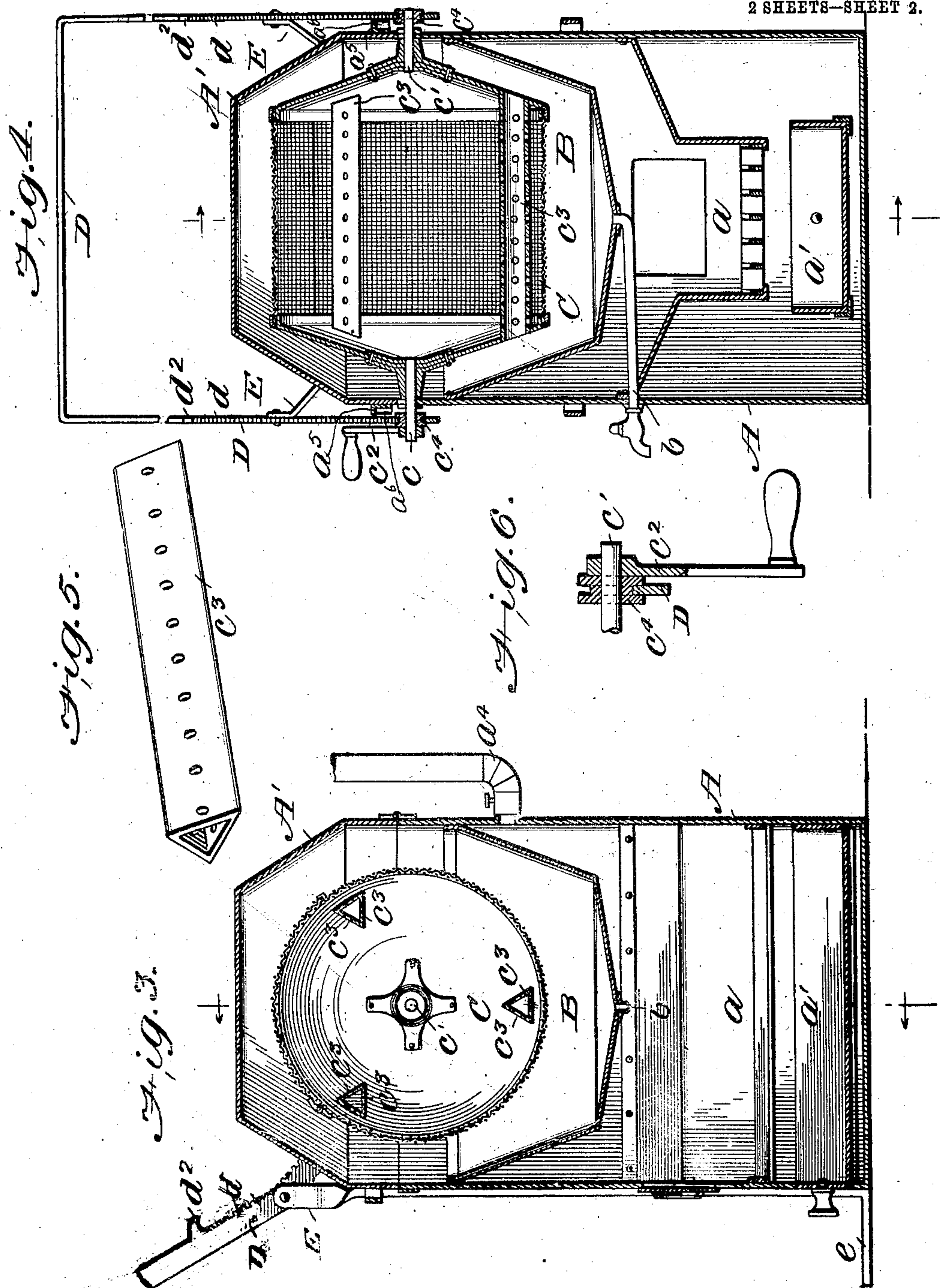
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# UNITED STATES PATENT OFFICE.

JOHN W. SEIFERT, OF EAST POINT, GEORGIA.

## WASHING-MACHINE.

No. 850,061.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed October 27, 1906. Serial No. 340,838.

*To all whom it may concern:*

Be it known that I, JOHN W. SEIFERT, a citizen of the United States, and a resident of East Point, in the county of Fulton and State of Georgia, have made an Improvement in Washing-Machines, of which the following is a specification.

My invention is an improvement in the class of boiler washing-machines, and comprises certain novel features hereinafter set forth.

In the accompanying drawings, Figure 1 is a side view of my improved machine. Fig. 2 is a side view showing the cover raised and the clothes-drum raised and swung laterally off the body of the machine. Fig. 2<sup>a</sup> is a detail section on line 2<sup>a</sup> 2<sup>a</sup> of Fig. 1. Fig. 3 is a central vertical section of the machine. Fig. 4 is a vertical section at right angles to the section illustrated in Fig. 3. Fig. 5 is a perspective view of one of the perforated water-tubes which traverse the interior of the clothes-drum. Fig. 6 is a detail section on the line 6 6 of Fig. 2.

The body A of the machine is constructed of sheet metal of suitable thickness, and it is preferably rectangular in form, although it may have various polygonal forms, if desired. Within the body A is arranged a fuel-grate *a* (see Fig. 4) and below it an ash-pan *a'*. A water-holder or kettle B is supported on the body A and provided with a pipe *b*, having a discharge-cock located outside said body. A cover A', whose lower portion is square, is hinged to and adapted to fit and seat upon the flanged upper portion of the body A. Within the space between the kettle B and top A' is arranged a rotating clothes-drum C, the same having lateral stub-shafts *c c'*, by which it is normally journaled in notches *a<sup>2</sup>*, (see Fig. 2,) formed in the top edge of the body A. A crank *c<sup>2</sup>* is applied to the shaft *c* for revolving the clothes-drum C. The latter has a reticulated periphery, which in this instance is shown made of woven wire, and its sides are concavo-convex and preferably formed of sheet metal of requisite thickness. The drum is traversed interiorly by tubes *c<sup>3</sup>*, (see especially Figs. 4 and 5,) the same extending through the sides of the drum and being open at their ends and also provided along all their sides with a series of perforations. The tubes

are thus adapted to allow free passage of water and also to carry up a portion of the same as the drum revolves and allow its discharge upon the clothes contained in the drum. By this means the tubes greatly facilitate the quick washing of the clothes. They are made triangular in cross-section in preference to a cylindrical form, so that as the clothes-drum revolves they may better engage the clothes and carry them upward a short distance, then allowing them to slide off and fall back into the water. The tubes thus constitute abutments which come in contact with the clothes at each rotation of the drum and serve to roll the clothes upward and also separate and distribute them in an effective manner.

Fuel being placed on the grate *a* and ignited it is obvious that the water which fills the boiler or kettle B will be heated, and the drum C being partly immersed therein the clothes contained in it will be subjected to the action of the boiling water and such pressure of steam as may be generated. The smoke and other unconsumed gases from the fire-chamber will escape through the lateral pipe *a<sup>4</sup>*, which is attached to the body A at a point opposite the kettle B. The pipe is provided with a damper to regulate the draft.

When the clothes have been duly treated in the drum C, the top A' is raised, together with the drum C, and the latter is swung off the body A, as indicated in Fig. 2. For this purpose I employ a lever D, formed of parallel side portions *d*, whose outer ends are connected, the same being pivoted to brackets E, extending upward from the body A, to which they are permanently attached. The lever-arms *d* extend on the sides of body A and are bent at a slightly-obtuse angle at their pivotal points and are also bent upward at an obtuse angle where they pass under the stub-shafts *c c'*. Pinions *c<sup>4</sup>* are mounted on shafts *c c'* and mesh with racks formed on levers D. (See Fig. 6.)

The end of the lever-arms *d* are provided with inwardly-projecting pins *d'*, (see Fig. 2<sup>a</sup>,) and the same underlie the horizontal flange *a<sup>5</sup>* of an angle-iron attached to the lower edge of the cover A'.

When pressure is applied to the outer or free end of the lever B, the pins *d'* press up-



ward against the flanges  $a^5$  and raise the cover  $A'$ , tilting it backward upon its hinges, as shown in Fig. 2. The rack-arms of lever B at the same time raise the clothes-drum C, and when the outer end of said lever is being depressed to the position shown in Fig. 2 the drum rides down on the arms  $b$  until its stub-shafts  $c c'$  come in contact with hooked stops  $d^2$ . At the same time the pins  $d'$  in the ends of the lever D come in contact with stops  $a^6$ , (see Fig. 1,) which are formed at the ends of the angle-irons. Thus the lever D is prevented from tilting farther downward, and consequently the clothes-drum remains supported on the same exterior to the pivotal points of the lever. The lever  $c^3$  of the clothes-drum may then be opened, as shown in Fig. 2, to permit discharge of the clothes. In order to place in the drum other clothes which are to be washed, the drum is rotated to bring the cover on the upper side, and the clothes having been inserted the cover is closed and fastened. Then the lever D is tilted back to the position shown in Fig. 1, whereby the clothes-drum rides back until it comes in contact with the inner hooks or stops  $d^3$ , which are arranged adjacent to the lower or inner obtuse angle of the lever.

It will be noted that when the lever is tilted into the position shown in Fig. 2 the pins  $d'$  engage the stops formed at the ends of the flanges or guides  $a^5$ , and thus the cover is locked into position. The weight of the clothes-drum C on the lever exterior to the pivotal points of the lever insures this position of the cover until the drum is allowed to slide back into the body A and resume its normal position.

The brackets E, to which the lever D is pivoted, are preferably formed by strap or band iron, which is extended downward on the sides of the body A and laterally at the base thereof, thus forming feet  $e$ , that rest on the floor or other base whereon the machine stands. Since these feet  $e$  extend in the same direction as the brackets E, it is obvious that their leverage opposes the tendency of the machine to tilt in that direction when the lever is thrown into the position shown in Fig. 2, and the weight of the clothes-drum is supported on the lever exterior to the body A.

The whole machine is easily portable, it being provided on opposite sides with handles for this purpose.

I claim—

1. The improved washing-machine comprising a hollow vertical body provided with a boiler supported in its upper portion, a movable cover, and a reticulated drum having laterally-projecting shafts, a lever pivoted on supports adjacent to the front of said body, and its free ends extended rearwardly, beneath the drum-shafts, the cover being

provided with lateral projections for engaging such ends of the lever, whereby, when the front end of the lever is depressed, the cover is raised together with the closed drum and the latter removed from the body, as described.

2. The improved washing-machine comprising a hollow body having an interior boiler, a hinged cover, and a rotatable clothes-drum inclosed in the space between the boiler and the cover, and provided with lateral shafts, and a lever pivotally connected with the body and having its inner portions constructed with an upward curve or angle and underlying the drum-shafts, the cover having lateral projections that overlie, and are thus adapted to engage, the ends of the lever when the lever is tilted, as shown and described.

3. The improved washing-machine comprising a hollow body, a cover hinged thereto, a lever pivoted upon fixed supports attached to the body, the inner ends of the levers having a sliding connection with the cover, and a rotatable clothes-drum having lateral shafts, which project over the lever and are adapted to ride thereon, whereby when the lever is tilted the cover is raised and the drum also raised out of the body and suspended from the levers exterior to said body, substantially as described.

4. The combination with a body, and a cover hinged thereto, of a lever pivoted to supports on the body, and provided with stops on opposite sides of the pivotal points, the inner ends of the lever being connected with the cover so that when the lever is tilted the cover is raised, and a rotatable clothes-drum supported normally in the body and having lateral projections adapted to ride on the lever when the same is tilted so that the drum is raised out of the body and supported laterally exterior thereto, substantially as described.

5. The combination with a hollow body, and a hinged cover having lateral flanges on opposite sides, of a lever pivoted to supports on the body, and having at its free inner ends projections which engage the said flange and the cover, so that the latter is raised when the lever is tilted, substantially as described.

6. The combination with a hollow body, having a cover hinged thereto and provided with horizontal flanges on opposite sides, the same having stops at the ends farthest from the hinge, of a lever pivoted upon supports connected with the body and having devices for engaging the aforesaid flanges and for sliding in contact therewith, so that the cover is raised and supported in an inclined position when the lever is depressed as described.

7. The combination with a hollow body,

and a cover hinged thereto and provided  
with lateral guides having stops at their ends  
farthest from the hinges, and lever-bars pro-  
jecting upward from the front of said body,  
5 of a two-arm lever pivoted upon the said  
bars, the inner free ends of the lever-arms en-  
gaging the guides of the cover whereby when

the outer end of the lever is depressed the  
cover is raised and locked in open position,  
substantially as described.

JOHN W. SEIFERT.

Witnesses:

A. McD. WILSON, Jr.,  
S. R. JOHNSTON, Jr.