

No. 611,804.

Patented Oct. 4, 1898.

L. ANDERSON.
WASHBOILER.

(Application filed Jan. 18, 1897.)

(No Model.)

Fig. I.

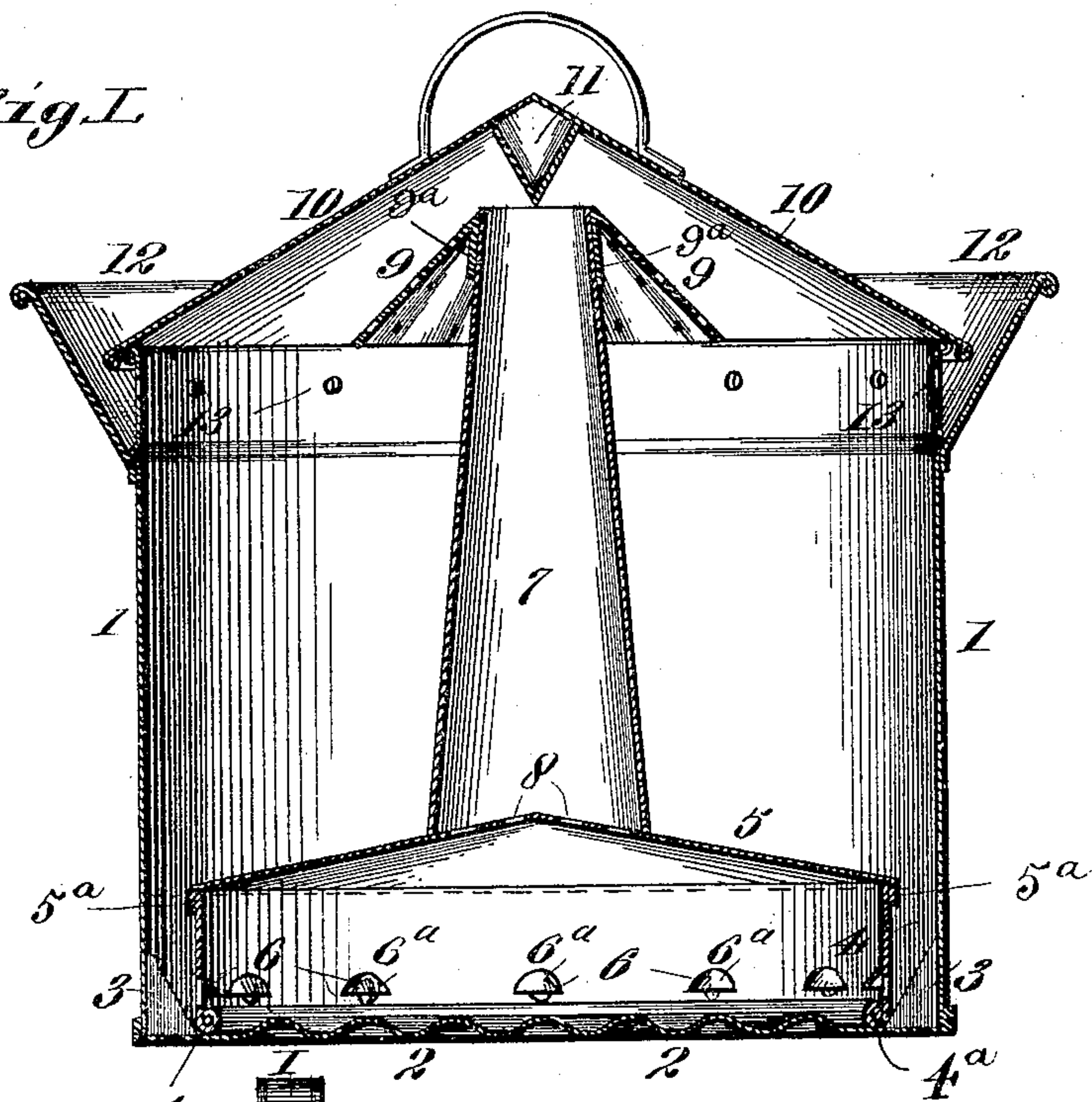


Fig. II.

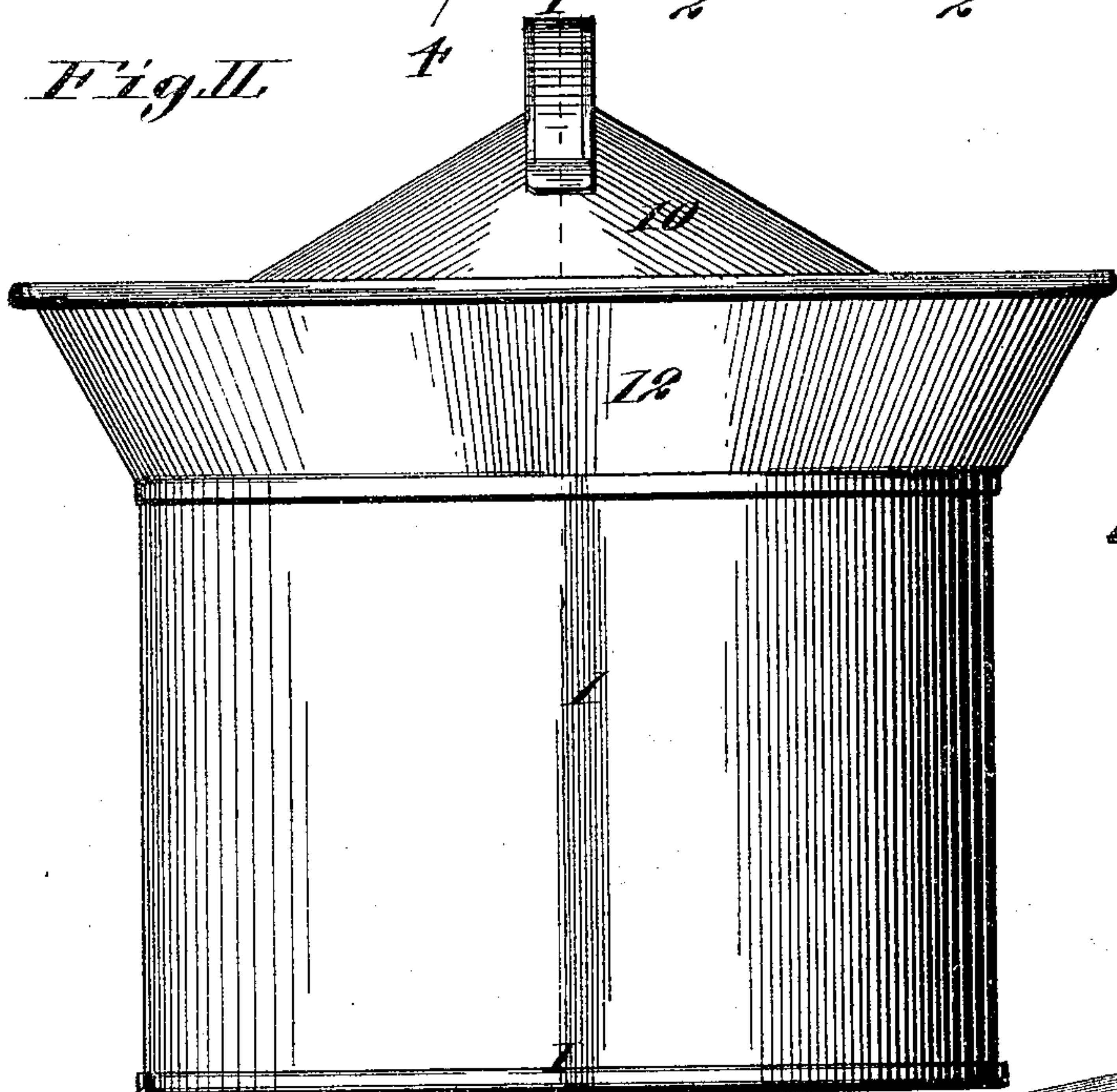


Fig. III.

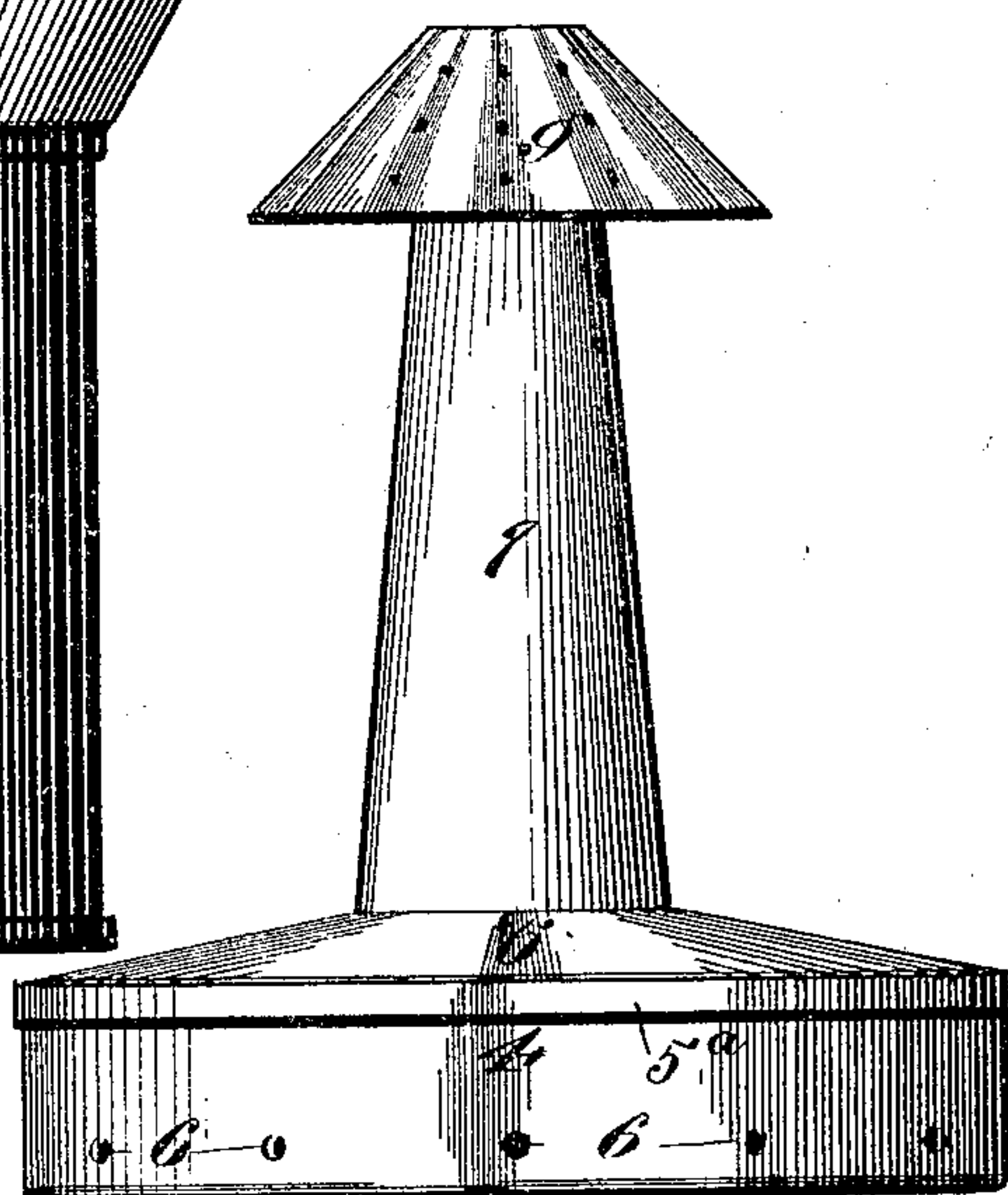
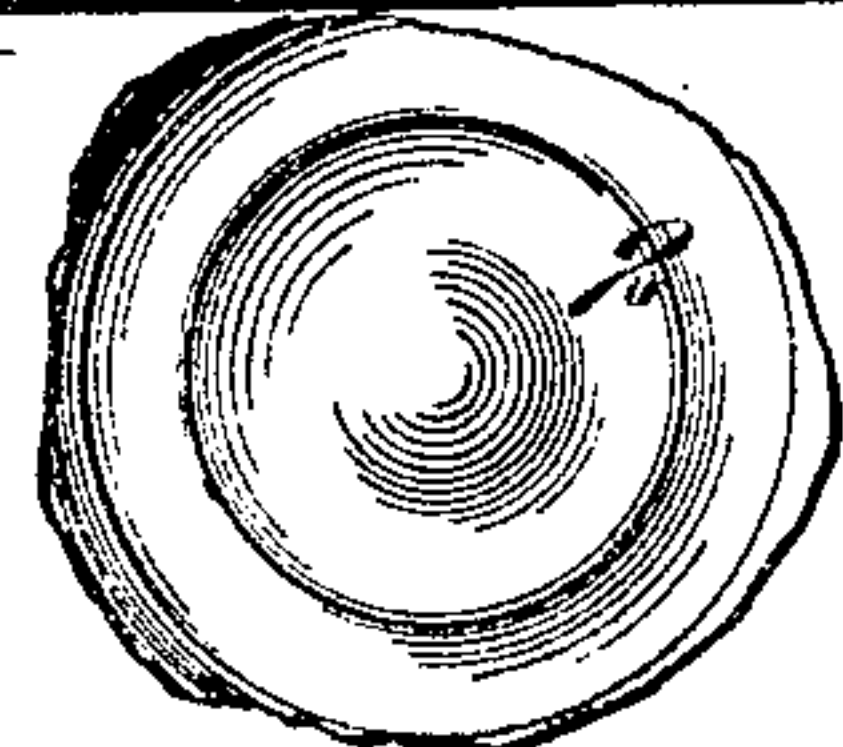


Fig. IV.



Attest:
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UNITED STATES PATENT OFFICE.

LAURITZ ANDERSON, OF QUINCY, ILLINOIS.

WASHBOILER.

SPECIFICATION forming part of Letters Patent No. 611,804, dated October 4, 1898.

Application filed January 18, 1897. Serial No. 619,627. (No model.)

To all whom it may concern:

Be it known that I, LAURITZ ANDERSON, a citizen of the United States, residing at Quincy, Adams county, State of Illinois, have
5 invented a certain new and useful Improvement in Steam-Washboilers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.
10 My invention relates to that class of steam-washboilers in which a fountain is provided within the boiler for the purpose of conveying the steam from the base of the boiler to its top and creating a continuous circulation
15 through the clothes in the boiler by means of the recurring passage of steam up through the fountain, through the clothes, and back to the fountain again.

The object of my invention is to provide a
20 steam-fountain of a construction that will distribute the steam evenly throughout the boiler and return it to the fountain at the base of the boiler next to the boiler-wall, such location being the coolest portion of the boiler,
25 causing the steam to more readily condense before entering the fountain at its lowermost portion.

My invention also relates to other features of construction that will be hereinafter fully
30 set forth; and my invention consists in features of novelty hereinafter fully described and claimed.

Referring to the drawings, Figure I illustrates a vertical section taken on line II, Fig.
35 II. Fig. II is an exterior elevation of my improved boiler. Fig. III is an elevation of the steam-fountain. Fig. IV is a detail view of the central portion of the corrugated bottom of the boiler.

40 In the drawings, 1 designates the side wall of the boiler, and 2 its bottom. The bottom 2 is formed with a series of circular concentric corrugations for the purpose of increasing its heat-contacting surface.

45 3 designates centering guide-blocks for seating the steam-fountain located in the bottom of the boiler against its exterior wall, in which position the said blocks are secured by any suitable means.

50 The steam-fountain has a vertical rim 4 and a dome imperforate on the exterior of the stand-pipe 7, that forms a false bottom upon

which the clothes are supported. The rim 4 is formed with an annular inner beading 4^a. The dome is formed with a peripheral vertical
55 flange 5^a, by which it caps the rim 4. In the rim 4, near its base, over the beading 4^a, are a number of inlet-ports 6, through which the condensed water enters the fountain to be again heated to produce steam that ascends
60 through perforations 8 in the center of the dome 5 into the stand-pipe 7. On the interior of the rim 4, over the inlet-ports 6 and the beading 4^a, are overhanging guards 6^a, that break the flow of the water and steam
65 through the openings 6, inasmuch as guards form stops that prevent the ready exit of the water or steam from the interior of the fountain.

The central portion of the dome 5, in which
70 the perforations 8 are formed, also provides a support for soap, which will there receive the full impact of steam, producing suds that will be conveyed upward through the stand-pipe 7 and out and into the clothes. On the
75 upper end of the stand-pipe 7 is a fluted and perforated conical cap 9, the wall of which inclines in a downwardly direction, over and through which wall the steam passes, by this means evenly distributing the steam through-
80 out the interior of the boiler. The perforated cap 9 is secured to the stand-pipe by an annular flange 9^a.

10 designates the conical boiler-cover, to the interior of the dome of which is secured
85 a conical breaker 11, that hangs pendent and spreads the steam outward in an even manner around the stand-pipe and onto the cap 9, thereby causing all of the clothes to receive
90 an evenly-divided quantity of steam.

In the upper end of the wall 1 of the body of the boiler are a number of perforations
13. Exterior of the boiler is an annular rim 12, connected to the boiler at a point considerably beneath said openings 13. The pur-
95 pose of this rim 12 is to provide a receptacle for a quantity of water beneath the openings 13, with which water the steam on escaping through the openings comes in contact with the water in said receptacle, and owing to
100 said water being of a lower temperature the steam is caused to condense on coming in contact therewith. The openings 13 permit of the return of water to the boiler when suf-

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ficient steam has condensed to reach above the level of the base of the openings. The guide-blocks 3 are provided for the purpose of centering the rim 4 of the fountain, there-
5 by equally dividing the space surrounding said rim and affording an opportunity for the ingress of water around the entire rim. The dome 5 being imperforate exterior of the stand-pipe, the water to enter the fountain
10 must necessarily pass to the wall of the boiler, the coolest portion thereof, where its temperature is most readily lowered, by reason of which it more readily enters the fountain.

I claim as my invention—

15 1. A steam-wash boiler comprising a body, a cover, a pendent conical breaker located within the apex of the cover, and a fountain having a stand-pipe provided with an open
20 upper end in close proximity to and surrounding the point of the conical breaker and the

downwardly-flaring cap secured to and surrounding the upper end of the stand-pipe; substantially as described.

2. A fountain for steam-wash boilers, comprising an annular rim formed with a series 25 of perforations, a series of interior downwardly-projecting guards located over the perforations, the upwardly-extending stand-pipe, the dome on which the stand-pipe is supported, imperforate on the exterior of the 30 stand-pipe, and perforated within the stand-pipe to provide a soap-screen, and the downwardly-flaring cap secured to and surrounding the top of the stand-pipe; substantially as described.

LAURITZ ANDERSON.

In presence of—

E. S. KNIGHT,
N. FINLEY.