

No. 626,315.

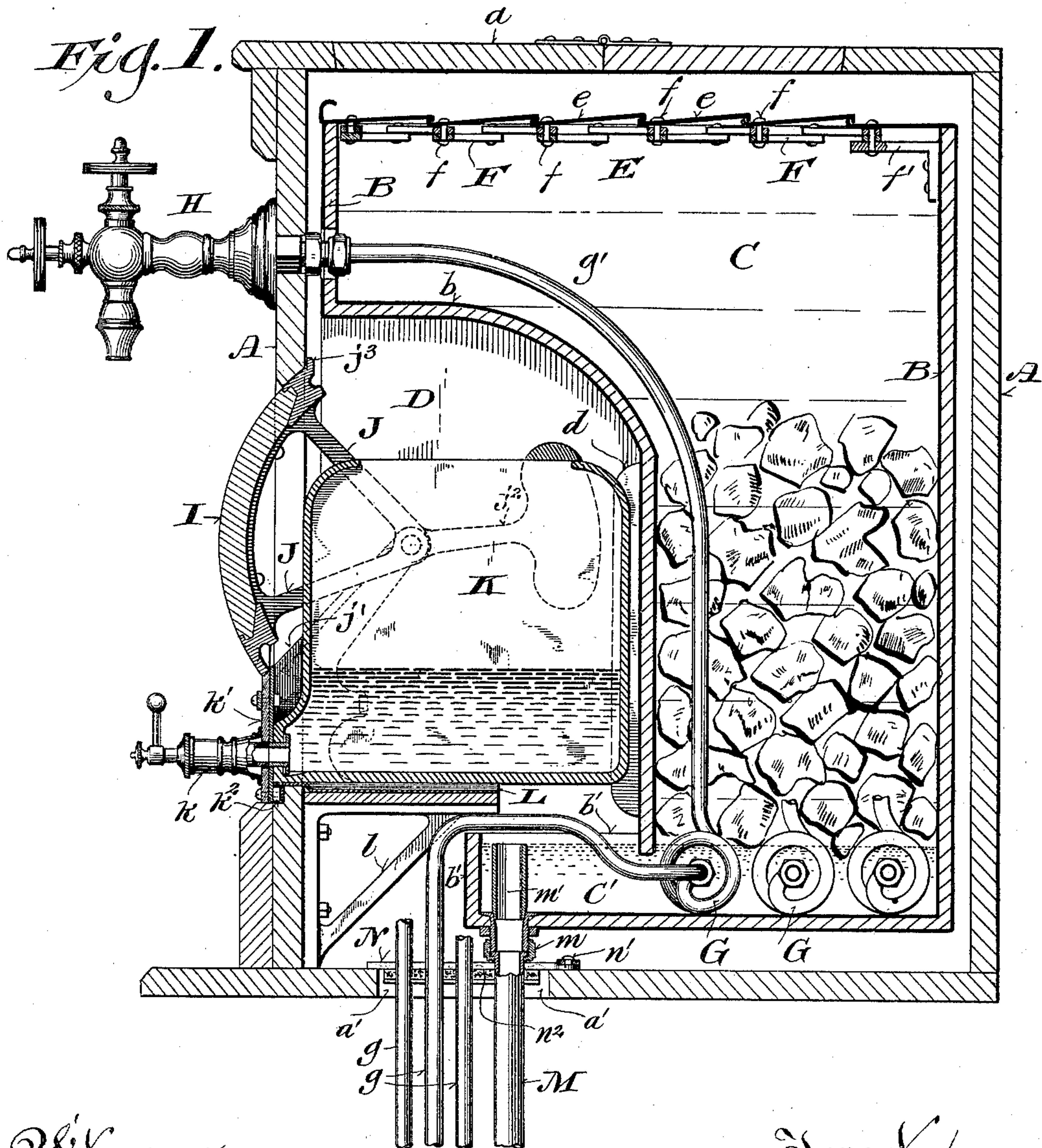
Patented June 6, 1899.

F. W. WILLIAMSON.  
SODA FOUNTAIN.

(Application filed Nov. 18, 1895.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses.  
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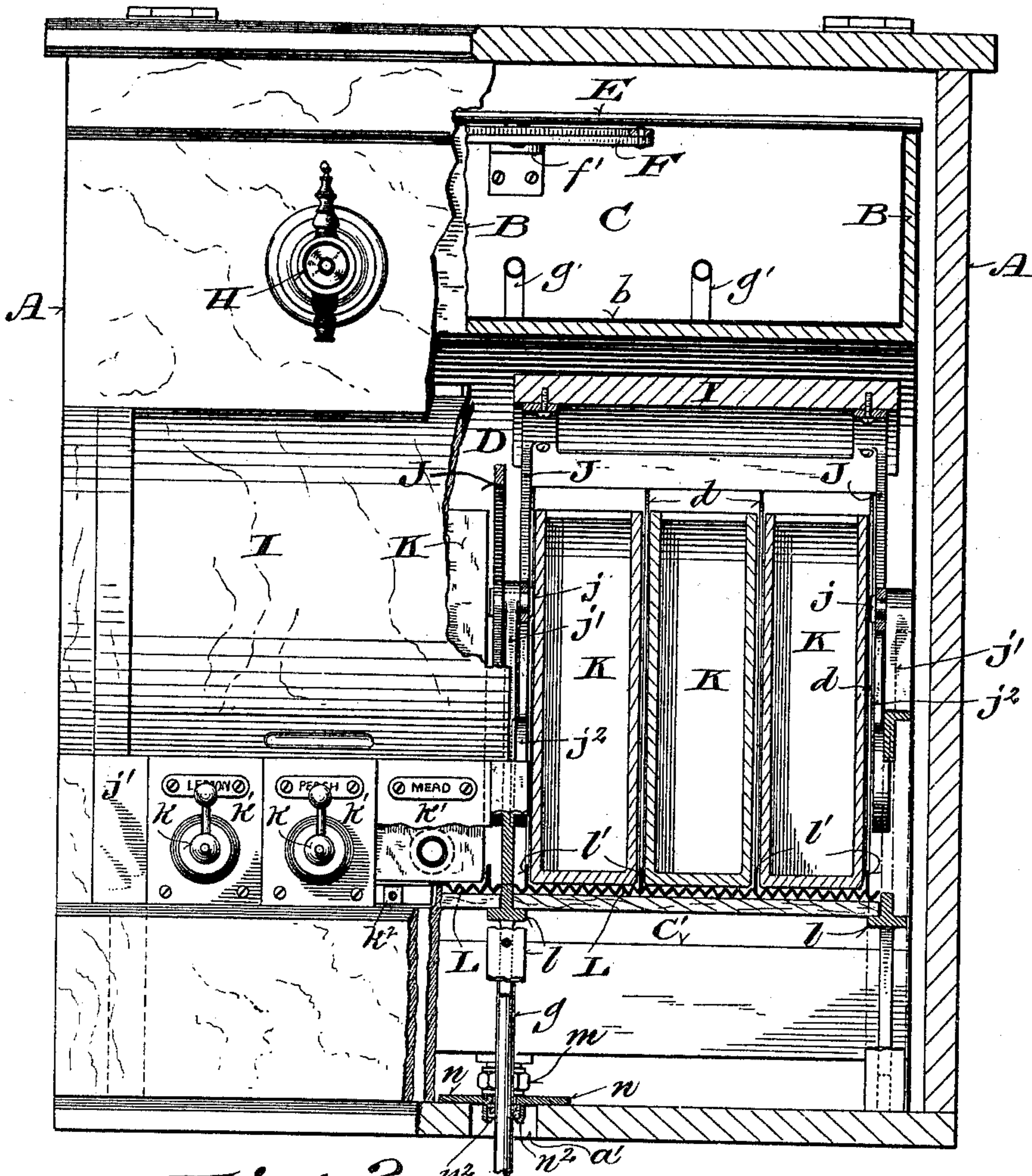
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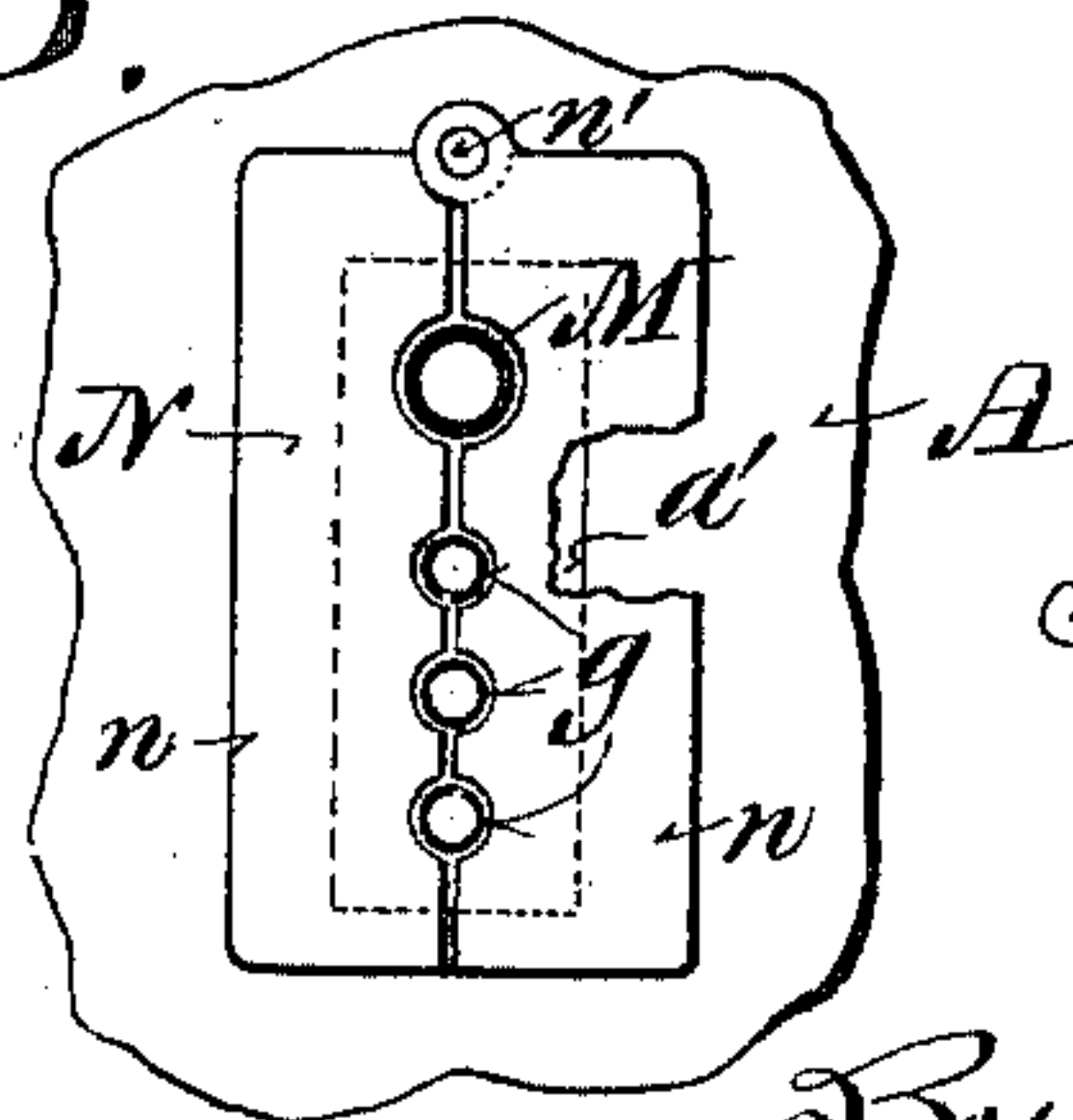
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*Fig. 2.*



*Fig. 3.*



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# UNITED STATES PATENT OFFICE.

FRANK W. WILLIAMSON, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO MARY P. WILLIAMSON, OF SAME PLACE.

## SODA-FOUNTAIN.

SPECIFICATION forming part of Letters Patent No. 626,315, dated June 6, 1899.

Application filed November 18, 1895. Serial No. 569,276. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK W. WILLIAMSON, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Soda-Fountains; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The main objects of my invention are to facilitate removing and replacing the syrup-cans from and in the fountain for the purpose of cleansing and replenishing them, to keep the syrups cool, to economize ice, and generally to improve the construction and operation of apparatus of this class.

It consists of certain novel features in the construction and arrangement of component parts of the fountain, as hereinafter particularly described, and pointed out in the claims. In the accompanying drawings like letters designate the same parts in the several figures.

Figure 1 is a vertical section from front to back of a fountain embodying my improvements. Fig. 2 is a partial front elevation and partial vertical longitudinal section of the same. Fig. 3 is a plan view of the plate through which the supply-pipes of the fountain pass. Fig. 4 is a plan view of the fountain, the top of the outer case being removed and a portion of the sectional cover of the inner case being broken away; and Fig. 5 is a vertical cross-section of a portion of the fountain, showing the rolling front of the syrup-chamber turned up.

A designates the outer wall or casing of the fountain, which may be made of marble or any other suitable material. It is provided in the usual manner with a hinged lid or cover *a*. It contains an inner casing or lining B, which is divided by a partition *b* into an ice chamber or receptacle C and a chamber or receptacle D for the syrup-cans. This inner casing may be made of wood covered and protected by sheet metal, or it may be constructed of any convenient and suitable material. It is provided with a cover E, composed of

longitudinal slats or sections *e e*, having oppositely-turned flanges on their longitudinal edges and pivoted to the members of lazy-tongs F by rivets or pins *f*, which constitute the middle pivots between the sections of the lazy-tongs, as shown in Figs. 1 and 4. The lazy-tongs are pivoted at the rear end to a bracket *f'* on the back of casing B. When the cover is extended, as shown in Fig. 1, the flanges on the sides of its sections engage with each other and constitute stops, which prevent them from spreading too far, thus avoiding open joints between them. When extended and closed, the cover projects at its front edge over and rests upon the upper edge of the front side of casing B, thus forming a closure for the ice-chamber C. The cover is opened by grasping its front side and carrying it backward, so as to close the lazy-tongs and nest the sections *e* together, one above another.

G G are the cooling-coils arranged lengthwise of the fountain in the bottom of the ice-chamber C, and *g g* are the supply-pipes passing upwardly through an opening *a'* in the bottom of the fountain and connected with said cooling-coils, which are in turn connected by pipes *g'* with the faucets H, secured in the front of the fountain above the syrup-chamber. The bottom of the ice-chamber extends forward beyond the partition *b* and is provided with vertical front and end sections *b'*, projecting slightly above the lower edge of said partition and forming a portion of a drip-pan C' for holding ice-water, opening at the top into the lower part of the syrup-chamber D. The partition *b* extends from the front side of casing B rearwardly on an incline or curve of sufficient pitch to shed water and thence downwardly from end to end of the casing. In front of chamber D the inner casing is left open, and an opening is formed in the outer casing A from end to end of sufficient size to conveniently admit of the withdrawal and insertion of the syrup-cans. This opening is closed by a rolling front section I, which may be made of marble or of any other suitable material and of any desired shape in cross-section, flat, cylindrical, or curved. According to the size of the fountain it may be made in two or more sections,



two sections being shown in Fig. 2, or for small fountains it may be made in one piece. Each section is made to move upwardly and rearwardly into the upper part of chamber D and may be supported and guided in opening and closing in any suitable manner. I have shown as suitable for the purpose converging arms J, attached to the ends of the sections and pivoted at  $j$ , as shown in Figs 1 and 5, to brackets  $j'$ . The arms J are formed or provided with rearwardly-projecting weighted extensions  $j^2$  for counterbalancing them and the front section which they carry. Suitable stops  $j^3$  are provided for arresting the movement of the rolling sections at the proper points in opening and closing.

K K are the syrup-cans, which are provided with faucets  $k$  and front plates  $k'$ , adapted to close the opening in the front of the fountain below the rolling front section or sections I. These cans are supported upon a corrugated metallic bottom L, resting upon boards or plates carried by brackets  $l$ . This corrugated bottom may be made in sections for the purpose of convenience in removing it to gain access to the interior of the fountain below the syrup-cans. It overhangs at its rear edge the forwardly-projecting portion of the ice-chamber or drip-pan, so as to drain into it, and at its front edge it is flanged, as shown in Figs. 1 and 2, so as to catch over the edge of casing A, below the front opening therein, and also to engage with the nuts  $k^2$  or other projections on the back side of the front plates of the syrup-cans, and thus hold them from tipping sidewise when their faucets are turned, especially if the latter stick and turn hard. The brackets  $j'$  may be formed, as shown in Fig. 5, integrally with the brackets  $l$ .

The corrugation of the bottom L not only facilitates the drainage of moisture which condenses thereon and on the syrup-cans into the drip-pan C', but also permits access of air from the interior of the fountain to the bottom of the cans, thereby tending to keep them drier and cooler.

To guide and hold the several syrup-cans in place, the rear wall of chamber D and the corrugated bottom L are formed or provided with division-plates  $d$   $d$  and  $l'$   $l'$ .

M is a waste-pipe connected by a coupling  $m$  with the bottom of the ice-chamber or drip-pan C'. It is provided inside of said drip-pan with a detachable extension  $m'$ , which terminates at a level between the top of said drip-pan and the lower edge of partition  $b$ , so as to keep the water in said drip-pan above the lower edge of said partition, and thus form a water seal between the ice-chamber C and the syrup-can chamber D. By removing the extension  $m'$  the drip-pan and ice-chamber may be drained and cleansed. The extension of the bottom of the ice-chamber forward to form a drip-pan and contain ice-water in the lower part of the syrup-can chamber serves to keep the syrups cool.

To prevent the escape of cold air and the entrance of warm air through the bottom of the fountain, which is generally left open around the supply-pipes, I provide a plate N, which is made in two sections  $n$   $n$ , hinged together at  $n'$  and formed in their meeting edges with corresponding semicircular recesses adapted to the supply and waste pipes of the fountain around which they are closed. The sections of this plate are formed or provided on the under side with flanges or seats, as shown in Figs. 1 and 2, for holding pieces of cork  $n^2$   $n^2$  or other suitable packing, which when closed together upon the pipes passing through the opening  $a'$  in the bottom of the fountain will form a tight joint between the sections  $n$   $n$  of said plate and around said pipes, and thus prevent communication of the outside atmosphere with the interior of the fountain.

In constructing and setting up soda-fountains it is impossible or difficult to make openings in the bottom of the fountain in the proper position and of the required size and shape to fit the supply and waste pipes. It has therefore been customary to cut a large opening for such pipes and to leave it open, thus affording warm outside air ready access to the interior of the fountain and accelerating the consumption of ice. By means of the sectional hinged packing-plate above described I am enabled to easily close said opening and form a close joint around the several pipes passing through the bottom of the fountain, notwithstanding variations in the size and location of said opening.

I claim—

1. In a soda-fountain, the combination of an outer casing provided with a movable lid or cover, an inner casing provided with a cover composed of sections movable in opening horizontally from the front toward the rear, and lazy-tongs the several sections of which are centrally pivoted to the several sections of said cover, substantially as and for the purposes set forth.

2. A soda-fountain comprising an ice-chamber and a syrup-can chamber in the front part communicating with each other at or near the bottom, the bottom of the ice-chamber extending into the lower part of the syrup-can chamber and forming a drip-pan for holding ice-water exposed therein, a support for the syrup-cans arranged above and projecting at its rear edge over said drip-pan so as to drain into it, and syrup-cans adapted to rest upon said support and project therefrom at the rear over said drip-pan, substantially as and for the purposes set forth.

3. A soda-fountain, comprising an ice-chamber and a syrup-can chamber, separated from each other by a partition extending from the front of the fountain rearwardly, thence downwardly from end to end of the fountain and terminating a short distance above the bottom of the ice-chamber, which extends forward beyond said partition and provided with verti-



cally-disposed front and ends, forming a drip-pan for holding ice-water exposed in the lower part of said syrup-can chamber, a waste-pipe leading out of the bottom of said drip-pan, and a removable extension of said pipe projecting upwardly in said pan to a point between the top of the pan and the lower edge of said partition, substantially as and for the purposes set forth.

4. A soda-fountain, comprising an ice-chamber and a syrup-can chamber separated from each other by a partition terminating at its lower edge a little above the bottom of the ice-chamber, which is extended forward beyond it and forms a drip-pan, a corrugated metallic bottom forming a support for the syrup-cans and projecting at its rear edge over and draining into said drip-pan, substantially as and for the purposes set forth.

5. In a soda-fountain, the combination of a suitable casing divided by a partition into a chamber for syrup-cans and an ice-chamber and having an opening in front for the insertion and withdrawal of syrup-cans, syrup-cans having a portion of their fronts exposed in and closing the lower portion of said opening, and an upwardly and rearwardly opening panel or section adapted to close the upper part of said opening above the exposed portion of the syrup-can and to move into the space above the syrup-cans and to the rear of the upper faucets, substantially as and for the purposes set forth.

6. In a soda-fountain, the combination with a suitable casing comprising a syrup-can chamber and provided with an opening in the front into said chamber, of a rolling section adapted to close the upper part of said opening, removable cans provided with faucets and front plates having projections on their back sides, a corrugated metallic bottom forming a support for the syrup-cans to rest upon in said chamber, and flanged at its front edge to hook over the edge of the casing below the opening therein and to engage with the projections on the back side of the front plates of said syrup-cans and prevent the same from tipping sidewise, substantially as and for the purposes set forth.

7. In a soda-fountain, the combination of a suitable casing adapted to set inside of an outer casing and divided by a partition into a front chamber for syrup-cans and a cooling-chamber at the rear thereof and having an opening in front for the insertion and withdrawal of syrup-cans, the syrup-cans provided with faucets and front plates adapted to close the lower part of said opening, a rolling front section adapted to close the upper part of said

opening above said front plates and movable upwardly and rearwardly into the upper part of the syrup-can chamber, substantially as and for the purposes set forth.

8. In a soda-fountain, the combination of a casing containing ice and syrup chambers, and having a vertical opening in front into the can-chamber, a horizontally-disposed bottom or can-support in said can-chamber, approximately at a level with the lower side of said opening, syrup-cans provided with faucets and adapted to be inserted and removed horizontally in and from said can-chamber through said opening, and a rolling front panel or section movably connected with said casing and adapted to close said opening in front of a number of cans contained therein, substantially as and for the purposes set forth.

9. In a soda-fountain, the combination of a suitable casing containing a syrup-can chamber which has an approximately-horizontal bottom or can-support, and having an opening in its front extending downward approximately to the can-support, a number of syrup-cans having front faucets and plates adapted to close the lower part of said opening when the cans are in place in said chamber, and an upwardly-opening panel or section of the casing movably connected therewith and adapted to close the upper part of the opening into said chamber in front of a number of cans, and when closed to rest at its lower edge against or close to the upper edges of the front plates of the cans, substantially as and for the purposes described.

10. In a soda-fountain, the combination of a suitable casing divided by a partition into a chamber for syrup-cans and an ice-chamber and having an opening in front for the insertion and withdrawal of syrup-cans, syrup-cans having a portion of their fronts exposed in and closing the lower portion of said opening, an upwardly and rearwardly opening panel or section adapted to close the upper part of said opening above the exposed portion of the syrup-cans, and a removable bottom or support for the syrup-cans, whereby access to the interior of the fountain, including the can-chamber and the portion below it is facilitated, substantially as and for the purposes described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

FRANK W. WILLIAMSON.

Witnesses:

CHAS. L. GOSS,  
GEO. C. MCCARTHY.