

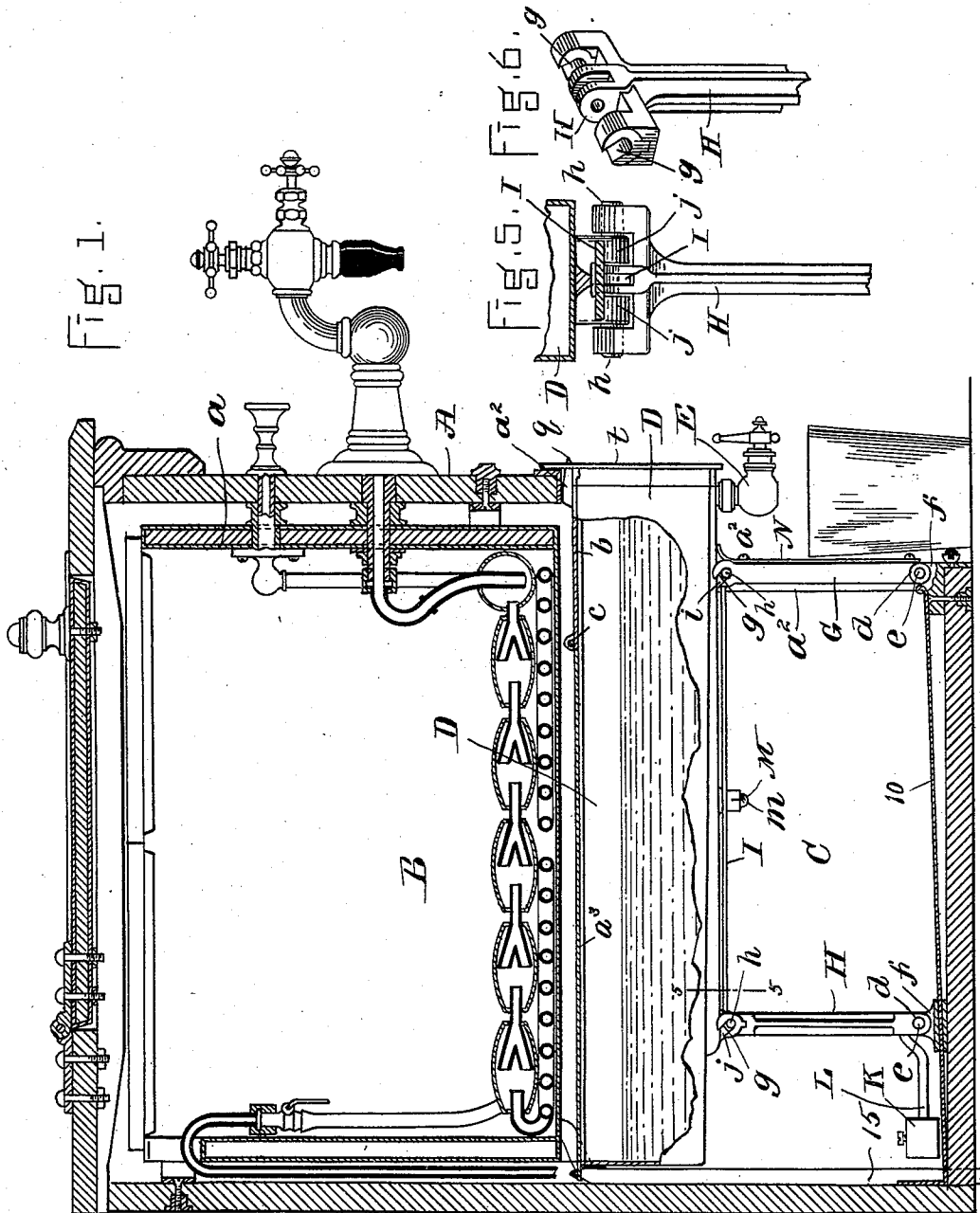
(No Model.)

2 Sheets—Sheet 1.

W. HELMER.
SODA WATER DISPENSING APPARATUS.

No. 532,731.

Patented Jan. 15, 1895.



WITNESSES.

G. Henry Marsh.
A. C. Humiston.

INVENTOR.

William Helmer.

by *P. E. Schenck*
Att'y.

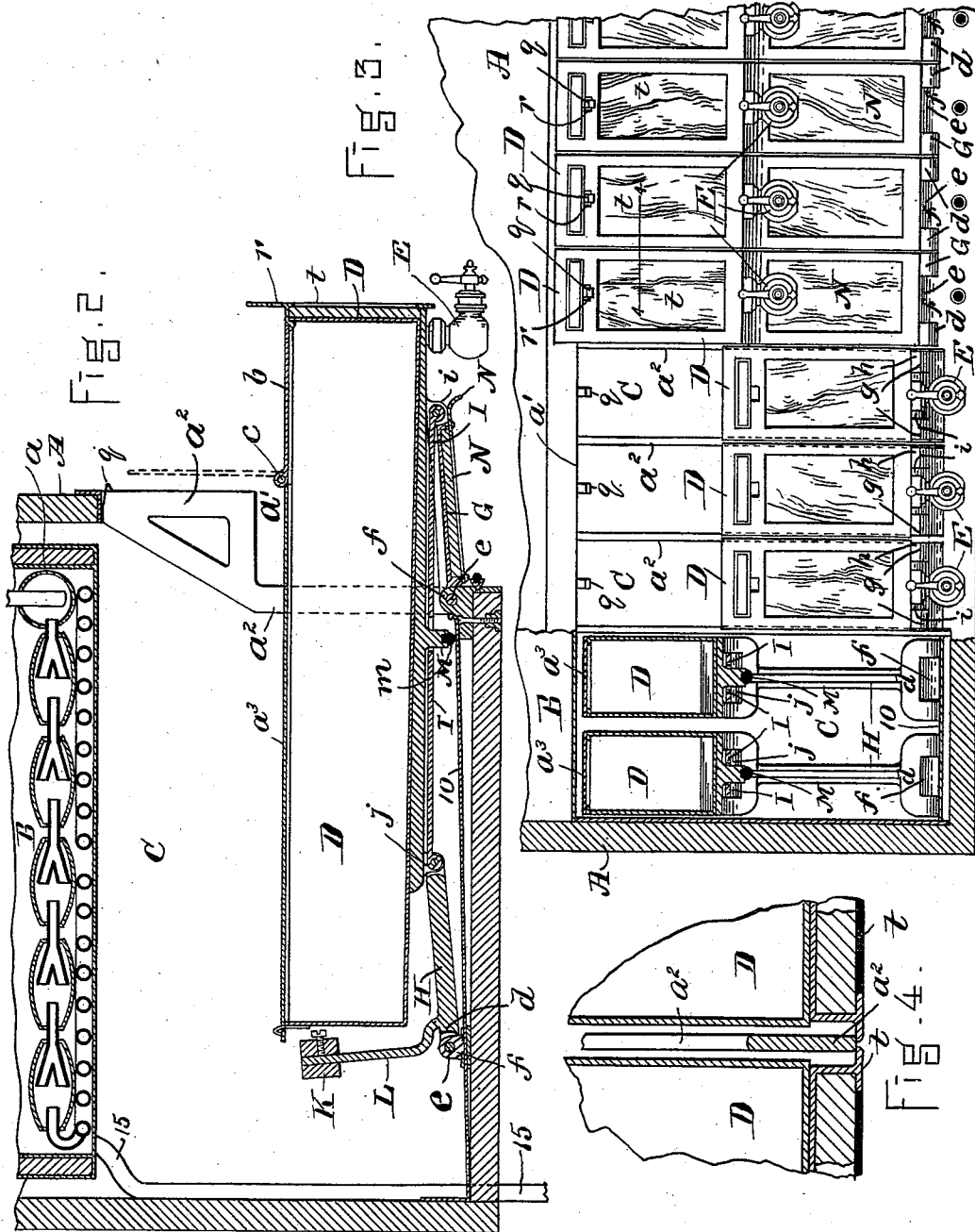
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by J. E. Tschamach,
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM HELMER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
AMERICAN SODA FOUNTAIN COMPANY, OF SAME PLACE.

SODA-WATER-DISPENSING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 532,731, dated January 15, 1895.

Application filed November 30, 1894. Serial No. 530,473. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HELMER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Soda-Water-Dispensing Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a transverse vertical section of a soda-water apparatus embodying my invention. Fig. 2 is a similar section of a portion of the apparatus, showing one of the sirup-cans swung outward and downward into a position for filling. Fig. 3 is a sectional elevation of a portion of the apparatus as seen from the front. Fig. 4 is an enlarged sectional detail on the line 4, 4, of Fig. 3. Fig. 5 is a sectional detail on the line 5, 5, of Fig. 1. Fig. 6 is a perspective view of the upper portion of one of the can-supporting arms.

My invention relates to that class of soda-water-apparatus in which the sirup-cans are introduced within the can-chamber through an opening in the front of the casing, and has for its object to facilitate the handling of the sirup-cans for the purpose of refilling the same, or removing them for cleansing or repairs.

To this end my invention consists in a sirup-can detachably mounted on a swinging supporting device pivoted within the can-chamber and having a parallel-motion, whereby the can, as it is swung in and out on said supporting device, is retained in a horizontal position, and its movement effected noiselessly and with great ease.

My invention also consists in certain novel features and details of construction as hereinafter fully set forth and specifically claimed.

In the said drawings, A represents the body or casing of a soda-water apparatus, composed as usual of marble or other suitable material, and provided with a metallic lining *a*.

B is the ice-box, or cooling chamber containing a series of coolers of any suitable construction which are connected as usual with the draft-tube at the front of the casing. Beneath the cooling chamber B is located the can-chamber C for containing a series of long

narrow sirup-cans D, which are arranged side by side, as shown in Fig. 3, within said chamber into which they are introduced through a longitudinal opening *a'* formed in the front of the casing, and extending from side to side of the apparatus. To the casing in front of the can-chamber is secured a series of narrow metallic division plates *a*² placed one between each two adjacent cans for the purpose of separating the same and preventing their contact with each other while being introduced within the can-chamber or withdrawn therefrom.

Each of the cans D is provided at the bottom of its front end with a gate or faucet E which may be of any suitable or approved construction, and on the upper side of each can is an opening through which it may be filled, said opening being provided with a cover *b* hinged at *c*. The entire top *a*³ of the can is made removable to facilitate the cleansing of its interior, and said top may be held in place by suitable catches or fastenings if desired.

The floor or bottom 10 of the can-chamber C is inclined downward toward the rear, as shown in Figs. 1 and 2, whereby the water produced by condensation is caused to flow to the inner end of the chamber from which it escapes by a drain or waste pipe 15 located at this point.

Beneath each can D is arranged a pair of vertical arms or supports G, H, the lower bifurcated ends *d* of which are pivoted at *e* to lugs *f* secured to the bottom of the can-chamber. These supports G, H, are connected together by a horizontal connecting rod I, whereby they are caused to move in parallelism, and at the upper end of said supports which are bifurcated, as shown, are formed open sockets *g*, Figs. 1, 5, and 6, within which fit trunnions or journals *h* projecting from lugs *i, j*, secured to the bottom of the can D, which is thus supported in its proper horizontal position upon said arms G, H, in such manner that it can be swung outwardly and downwardly therewith into the position shown in Fig. 2, the can being counterbalanced by a weight K made adjustable on an arm L projecting rearwardly from the lower end of the inner arm H, by which construction the move-

ment of the can as it is swung outward or inward may be effected noiselessly and with the greatest ease, while the can is at all times maintained in a horizontal position and substantially parallel with the bottom of the can-chamber.

Projecting down from the bottom of the can and through an aperture in the connecting-rod I is a stop M which when the can is swung outward and downward is brought into contact with the bottom of the can-chamber as shown in Fig. 2 and thus serves to limit the range of movement of the can in an outward direction, the can when in its lowest position being sufficiently withdrawn from its chamber to permit the cover *b* to be raised for the purpose of refilling the can with sirup.

I prefer to provide the bottom of the stop M with an elastic buffer *m*, but if desired this buffer may be dispensed with, in which case I should provide the bottom of the can-chamber with an elastic cushion or pad properly disposed to receive the end of the stop M when the can is swung down.

When it is desired to remove the can from the apparatus it is only necessary to swing it down into the position shown in Fig. 2, and then draw it forward out of the chamber, the sockets *g* at the ends of the arms G, H, being then in a position to permit the trunnions *h* to disengage themselves therefrom, the supporting device being returned to its normal position by the counterbalance weight K after the can has been removed from the apparatus.

In a soda-water apparatus provided with horizontal sliding sirup-cans as hitherto constructed, the cans have been supported in an inclined position within the can-chamber, and if filled full when out of the apparatus, were liable to overflow at the front end when replaced within the can-chamber. With my improved supporting device the can is maintained in a horizontal position or substantially so during its entire movement, and all liability of overflow is consequently avoided. The bottom of the can is, however, slightly inclined downward toward the front sufficiently to enable it to completely empty itself through the faucet at the front end.

To the front side of each of the outer supporting-arms G is secured an ornamental plate or panel N of substantially the same width as the can; said plates serving to conceal the supporting-arms and close the opening *a'* in front of the casing between the bottoms of the cans and the base of the apparatus.

The front wall of the casing A is provided immediately above each can, with a spring-catch *q* which passes through an aperture *r* in the front plate *t* of the can and engages the edge of the same as shown in Figs. 1 and 3 thereby preventing any accidental outward movement of the can.

By thus mounting the sirup-cans upon hori-

zontal counter balanced supporting-arms having a parallel movement as described, it will be seen that the movement of the cans in either direction may be effected with a very slight effort, thereby greatly facilitating the operation of refilling or otherwise handling the cans.

By supporting the sirup-can as described in such manner as to leave an air-space of considerable height between the bottom of the can and the bottom of the can-chamber, the cold air in said chamber is afforded free access to the bottom of the can, the contents of which are thus cooled more rapidly than where the can rests directly upon the bottom of the can-chamber.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a soda-water-dispensing apparatus, the combination, with the body or casing provided with a draft-tube and cooling chamber, and having an opening in one of its walls, of a sirup-can detachably mounted upon a swinging supporting device pivoted within the can-chamber, and having a parallel motion, whereby the can may be swung outward and inward upon said supporting-device in parallelism with the bottom of the can-chamber, substantially as set forth.

2. In a soda-water-dispensing apparatus, the combination, with the body or casing provided with a draft-tube and cooling chamber, and having an opening in one of its walls, of a swinging supporting-device pivoted within the can-chamber and having a parallel motion, a sirup-can detachably mounted upon said swinging supporting-device and adapted to be swung outward and inward therewith in parallelism with the bottom of the can-chamber, and means for counterbalancing the sirup-can and its swinging supporting device, substantially as described.

3. In a soda-water-dispensing apparatus, the combination, with the body or casing provided with a draft-tube and cooling chamber, and having an opening in one of its walls, of a swinging supporting-device pivoted within the can-chamber and having a parallel motion, a sirup-can detachably mounted upon said swinging supporting-device and adapted to be swung outward and inward therewith in parallelism with the bottom of the can-chamber, and an arm projecting from said supporting-device, and provided with a counterbalance weight, substantially as described.

4. In a soda-water dispensing apparatus, the combination, with the body or casing provided with a draft-tube and cooling chamber, and having an opening in one of its walls, of a swinging supporting-device pivoted within the can-chamber and having a parallel motion, a sirup-can detachably mounted upon said swinging supporting-device, and a plate or cover secured to the front end of the swinging supporting-device and adapted to conceal the same and close the opening in the

casing in front thereof, substantially as set forth.

5. In a soda-water-dispensing apparatus, the combination, with the body or casing provided with a draft-tube and cooling chamber, and having an opening in one of its walls, of a swinging supporting-device pivoted within the can-chamber, and having a parallel motion, a sirup-can detachably mounted upon said swingingsupporting-device, and adapted to be swung outward and inward therewith in parallelism with the bottom of the can-chamber, and a stop for limiting the range of movement of the sirup-can when swung downward and outward, substantially as described.

6. In a soda-water-dispensing apparatus, the combination, with the body or casing having an opening in one of its walls, of the swinging supporting-device composed of the arms G, H, pivoted to the bottom of the can-

chamber, and connected together by the horizontal parallel-rod I, said arms G, H, being provided at their outer ends with sockets g, and the inner support H having a rearwardly projecting arm L, provided with a counterbalance weight K, and the outer support G being provided with a plate N to close the opening in front of the same, a sirup-can detachably mounted upon said swinging supporting-device, and having trunnions or journals engaging said sockets, and a stop for limiting the range of movement of the sirup-can when swung downward and outward, substantially as described.

Witness my hand this 30th day of October, A. D. 1894.

WILLIAM HELMER.

In presence of—

P. E. TESCHEMACHER,
J. F. HINDS.