

(No Model.)

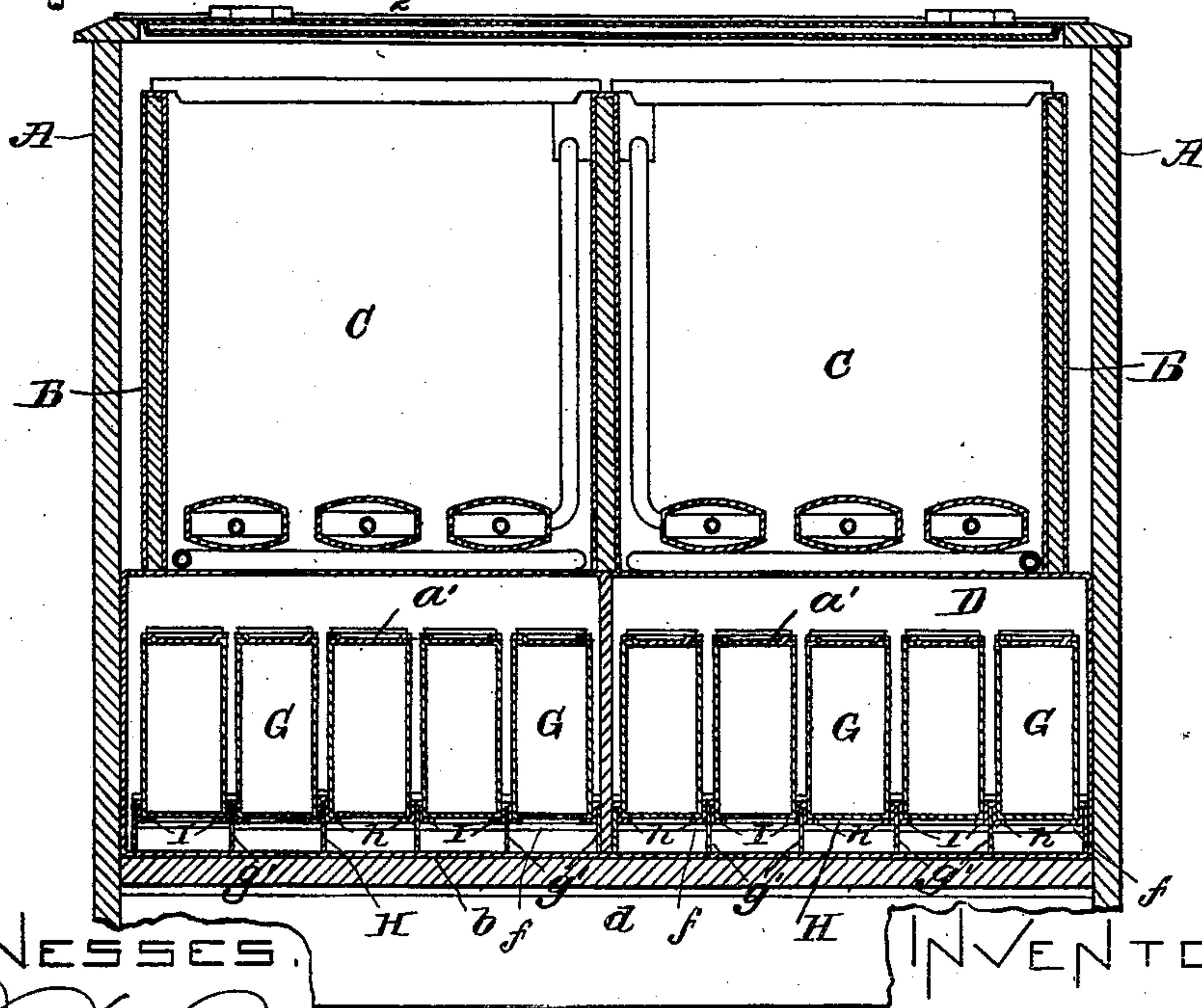
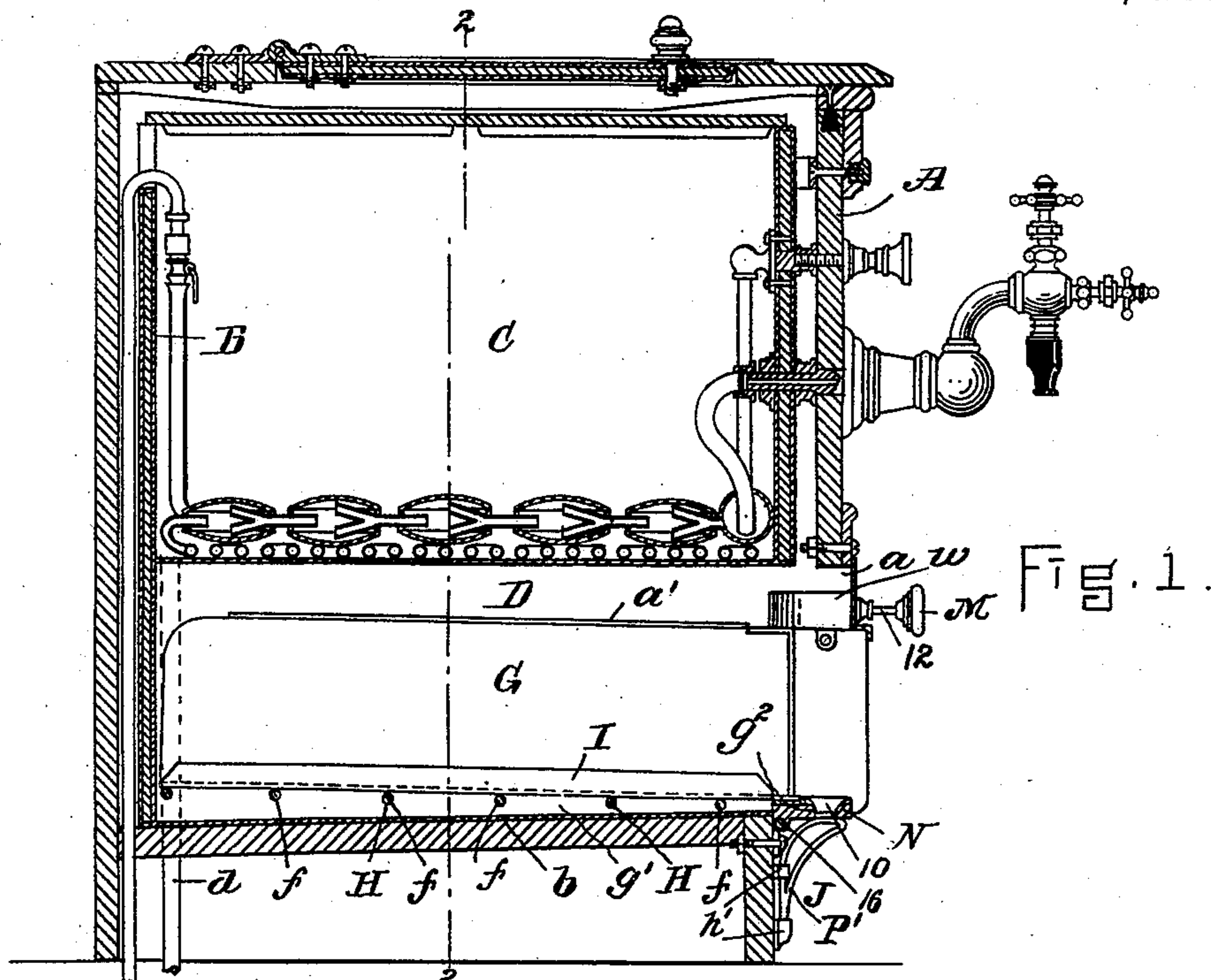
3 Sheets—Sheet 1.

C. ADAMI.

SODA WATER DISPENSING APPARATUS.

No. 532,739.

Patented Jan. 15, 1895.



W. INESSES.

Henry Marsh.
A. C. Hummiston

Fig. 2.

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Conrad Adami
by W. S. Tschernacher
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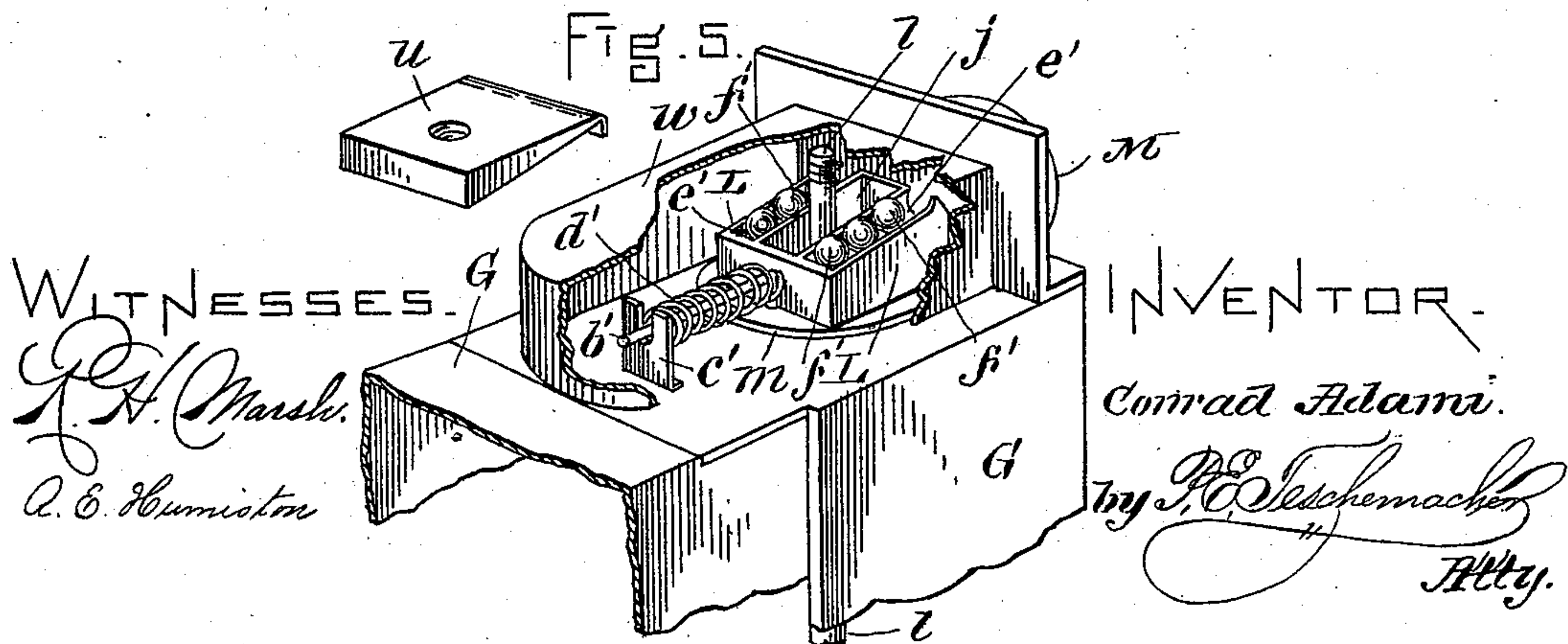
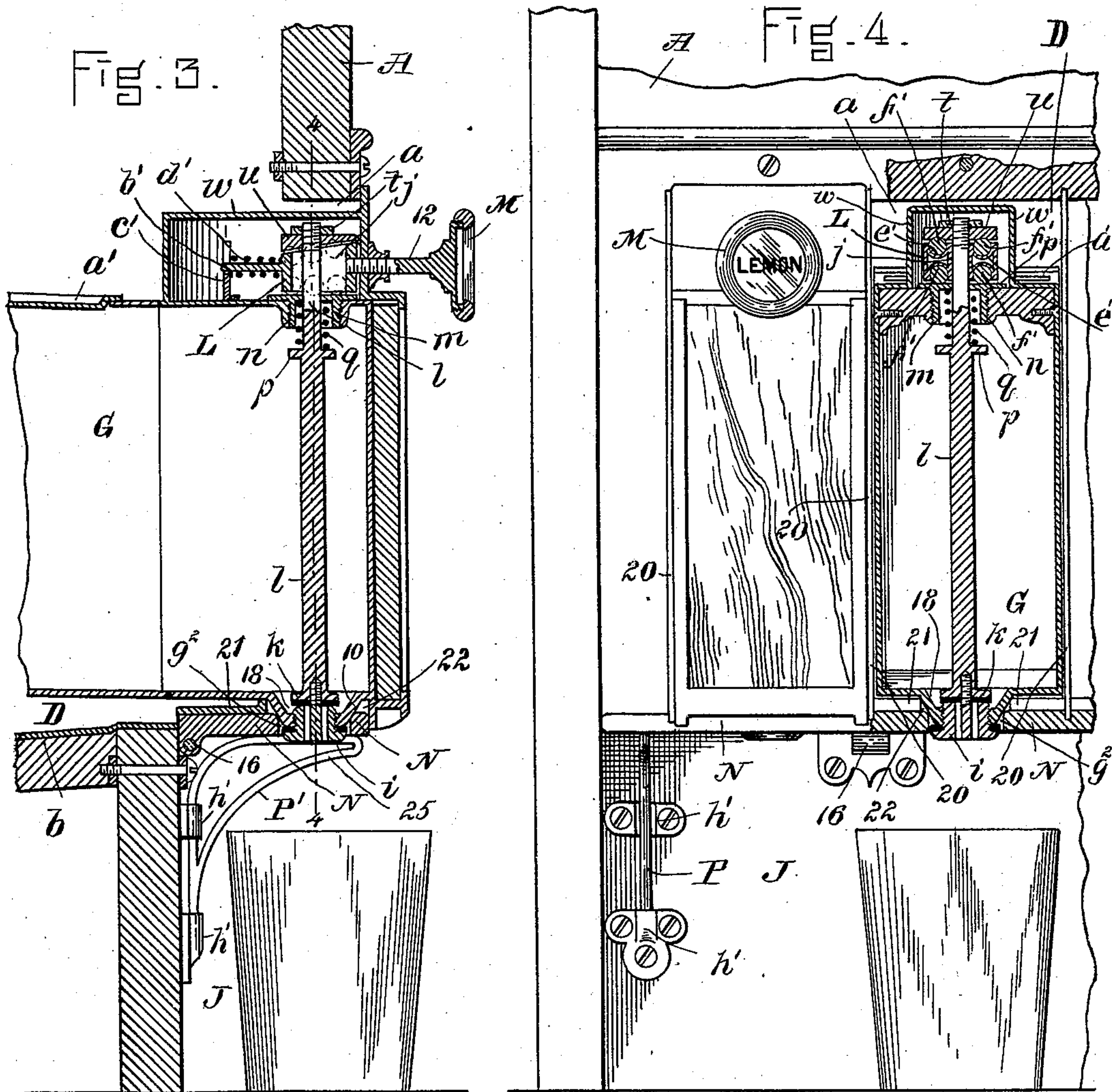
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Fig. 6.

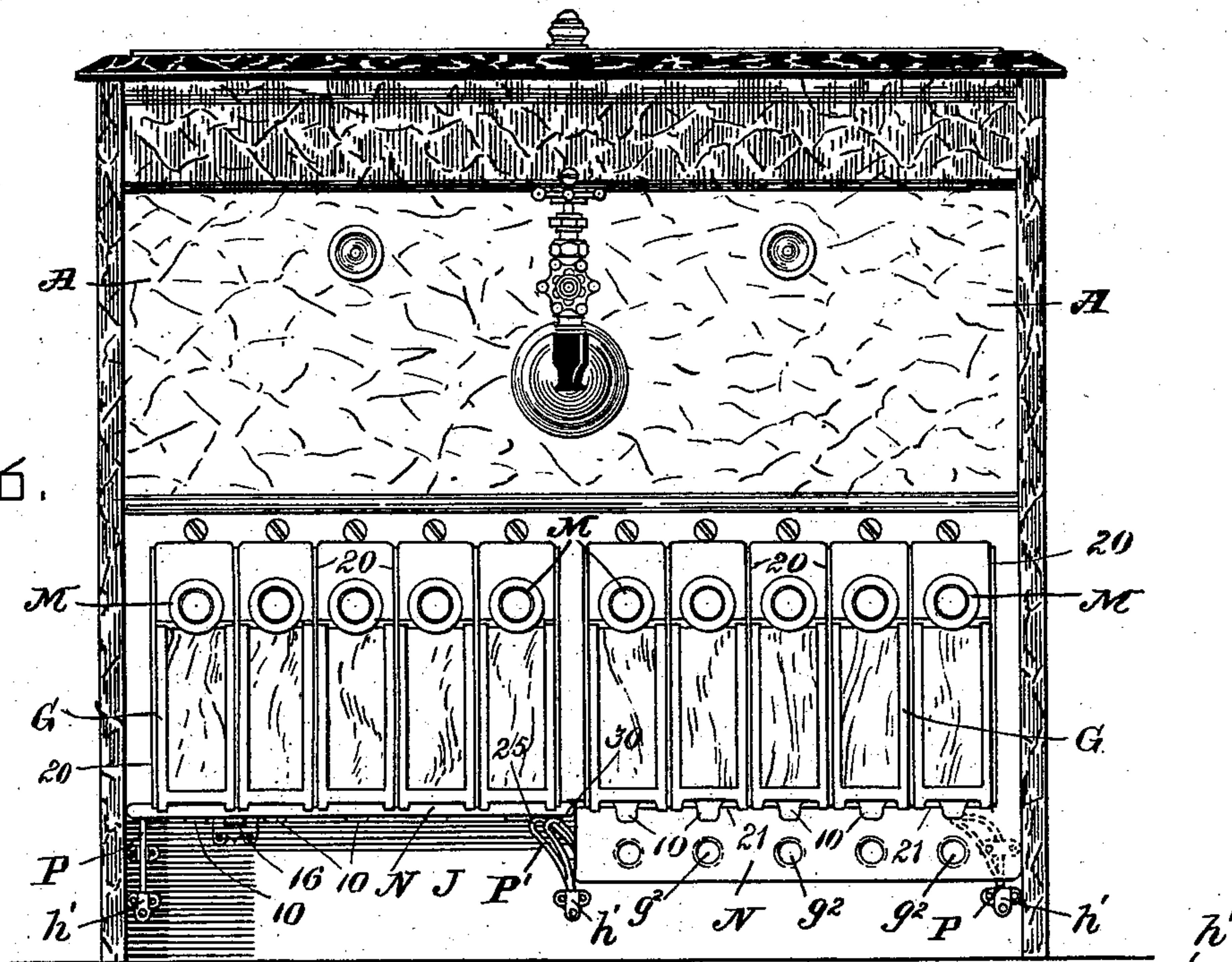
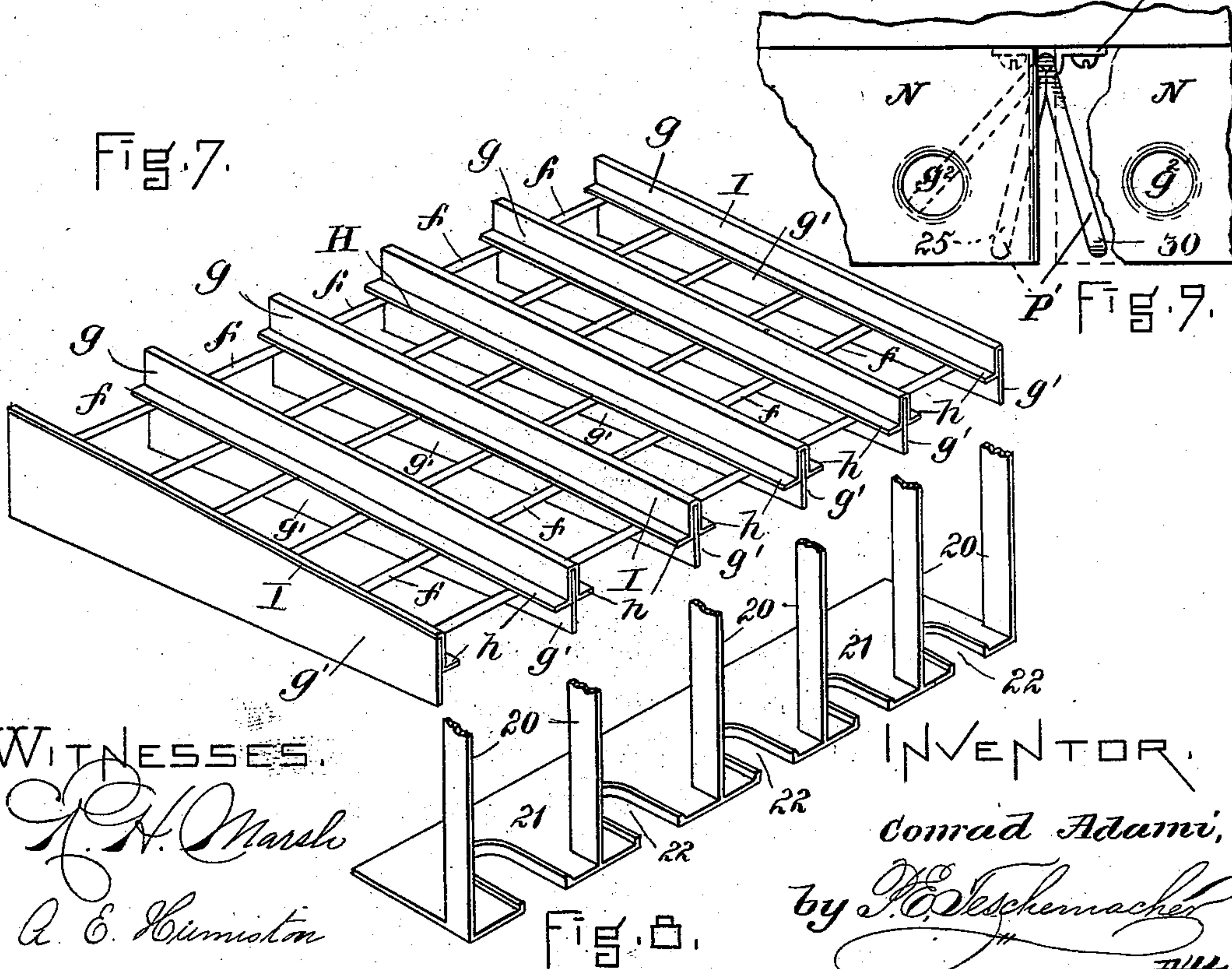


Fig. 7.



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UNITED STATES PATENT OFFICE.

CONRAD ADAMI, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE AMERICAN SODA FOUNTAIN COMPANY, OF SAME PLACE.

SODA-WATER-DISPENSING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 532,739, dated January 15, 1895.

Application filed November 30, 1894. Serial No. 530,475. (No model.)

To all whom it may concern:

Be it known that I, CONRAD ADAMI, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain 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-dispensing apparatus embodying my invention, one of the sirup-cans being shown in elevation. Fig. 2 is a vertical section on the line 2, 2, of Fig. 1. Fig. 3 is an enlarged vertical section through one end of a sirup-can and the parts of the apparatus adjacent thereto, showing the valve operating mechanism. Fig. 4 is a vertical section on the line 4, 4, of Fig. 3, a portion of the apparatus being shown in elevation. Fig. 5 is a detail in perspective. Fig. 6 is a front elevation of the apparatus, showing one of the locking-plates turned down to release the cans above the same. Fig. 7 is a perspective view of the rack which supports the sirup-cans. Figs. 8 and 9 are details to be referred to.

My invention has for its object to simplify and improve the construction of soda-water-dispensing apparatus and consists in certain novel mechanism, whereby the discharge valves of the sirup-cans may be conveniently operated by means of push-buttons or knobs, as hereinafter set forth.

My invention also consists in the combination with the sirup-cans, of a novel device for locking said cans in place within the can-chamber; and my invention furthermore consists in a rack of novel construction for supporting the sirup-cans above the bottom of the can-chamber in such manner as to enable them to be slid in and out with less friction than heretofore, and at the same time afford a free passage for the water or moisture to the bottom of the can-chamber from which it escapes by a suitable drain-pipe connected therewith.

In the said drawings A represents the outer-casing of the apparatus, composed, as usual, of marble or other suitable material, and B the metal lining of the same.

C is the ice-box, beneath which is the can-chamber D for containing the long narrow sirup-cans G, which are arranged side by side and adapted to be slid horizontally in and out of the chamber D through the front of the casing, which is left open at *a* for this purpose. Each can is provided on its upper side with the usual opening through which it may be filled, said opening being provided with a cover *a'*.

To the casing in front of the can-chamber is secured a series of narrow metallic strips 20 as shown in Figs. 4, 6, and 8, which form partitions between the front ends of the sirup-cans, said strips 20 being secured at their lower ends to a horizontal plate 21 extending beneath the cans as shown in Figs. 3, 4, and 6 and provided with slots 22 for the reception of nipples to be hereinafter described, projecting from the bottoms of the cans, said slots being left open in front to permit of the ingress and egress of the nipples as the cans are slid in and out of the can-chamber.

The floor or bottom *b* of the can-chamber D is inclined downward toward the rear as shown in Fig. 1, 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 *d*, located at this point.

The sirup-cans G instead of resting directly upon the bottom of the can-chamber, are supported by a removable rack H Figs. 1, 2, and 7. This rack which rests on the bottom of the can-chamber, is composed of a series of flanged plates I connected together by rods *f* which cross said plates at right angles, and are soldered or otherwise secured thereto, as shown. The plates I are arranged at suitable distances apart so as to admit of the passage of a can between each pair of plates, which thus form guides for the cans to slide on, the upper vertical members *g* of said plates forming low partitions between the cans, while the flanges or horizontal members *h* of said plates form narrow ledges upon which the cans may be easily slid in and out of the can-chamber with very little friction, thus facilitating the operation of removing and replacing the cans and reducing the wear upon the bearing surfaces. Furthermore the

open spaces between the plates and rods of which the rack is composed permit the water produced by condensation within the can-chamber to pass freely to the bottom of the same from which it escapes by the pipe *d*, as previously explained. The lower vertical members *g'* of the plates *I* which rest on the bottom of the can-chamber are made tapering or inclined along the lower edge in order that the cans may be supported with their bottoms slightly inclined downward toward the front to insure complete drainage. The above described removable rack can be cheaply and easily made and is much simpler and less expensive than the ordinary supporting and guiding devices heretofore employed for horizontally sliding sirup-cans of this description.

Each can *G* is provided at its front end on the underside with a projecting nipple *10* into which is screwed from the outside a removable valve-seat *i* forming the outlet through which the sirup is discharged into the glass, which is placed within the usual recess *J* at the bottom of the apparatus.

k is a valve which is fitted to the valve-seat *i* and is provided with a vertical rod or spindle *l* extending up within the front portion of the can *G*, and passing through a flat-screw-cap *m* fitted to an opening *n* in the top of the can through which the valve and valve-rod may be removed when required. Between the under side of the cap *m* and a collar *p* on the valve-spindle *l*, is a spiral spring *q* which serves to keep the valve upon its seat. To the top of the valve spindle *l* is secured by means of a nut *t*, a cap-plate *u* having an inclined under surface against which fits the upper inclined side of a wedge-shaped slide *L*, to the front of which is secured a push-knob or button *M*, the horizontal stem *12* of which passes through the front of a box or casing *w* removably secured to the top of the can and inclosing the cap-plate *u*, slide *L*, and parts connected therewith. The slide *L* is provided with a central vertical slot *j* through which passes the valve-spindle *l*, said slide when pushed in by means of the button *M* acting upon the cap-plate *u* and raising the valve-spindle *l* and valve *k* against the resistance of the spring *q* to permit the sirup to flow into the glass beneath, the parts being returned to their original positions by said spring when the pressure of the finger is removed from the button *M*. Projecting rearwardly from the slide *L* is a horizontal rod *b'* which engages a forked guide *c'* which in connection with the stem *12*, rod *l* and slot *j* serves to keep the slide *L* in its proper position as it is operated by the push-button. A spring *d'* is preferably placed between the guide *c'* and the rear end of the slide *L* to assist the spring *q* to close the valve *k*; but this spring *d'* may be dispensed with if desired.

In the upper and lower surfaces of the slide *L* are formed longitudinal grooves *e'* within which are placed anti-friction balls *f'* which

bear respectively upon the inclined cap-plate *u* and the flat upper surface of the screw-cap *m*, the slide *L* being thus provided with ball bearings whereby it is caused to move with a minimum of friction, the operation of the valve being thereby greatly facilitated.

By making the valve-seat *i* removable from the outside of the can, as above described, it can be easily taken out when obstructed or when cleansing or repairs are required. A slight annular depression *18* is formed around the valve-seat *i*, to receive the last drops of sirup in the can, thereby insuring the complete emptying of the same.

I will now describe the device by means of which the cans are locked in place after having been pushed into the can-chamber. *N*, *N*, are narrow plates which are hinged or pivoted to the front of the casing at *16*, each plate being of a sufficient length to extend beneath the front end of a series or group of cans as shown in Fig. 6. Each of these plates is provided with a series of apertures *g'* into which fit the nipples *10* of the sirup-cans when the plate is swung upward into a horizontal position as shown in Figs. 3 and 4, thus preventing the cans from being withdrawn until the plate is swung down into the position shown at the right hand side of Fig. 6. When swung upward into a horizontal position these plates are supported by laterally swinging brackets *P*, *P'*, mounted in bearings *h'*, the central bracket *P'* having two branches *25*, *30* whereby it is adapted to support the ends of the two adjacent plates *N* as shown in Fig. 9, it being merely necessary to swing the bracket *P'* to the right or left according to the locking plate which it is desired to release.

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

1. In a soda-water-dispensing apparatus, the combination, with a sirup-can having a discharge outlet at its bottom, of a valve applied to said outlet, a vertical valve rod passing through the front portion of the can, and provided with a spring to keep the valve upon its seat, said valve-stem having a cap or head at its upper end, a horizontally sliding-wedge adapted to act upon the cap of the valve-rod to raise the valve and a push-knob or button located on the outside of the can, and having its stem connected with said sliding-wedge, substantially as described.

2. In a soda-water-dispensing apparatus, the combination, with a sirup-can having a discharge outlet at its bottom, of a valve applied to said outlet, a vertical valve-rod passing through the front portion of the can, and provided with a spring to keep the valve upon its seat, said valve-stem having a cap or head at its upper end, a horizontally sliding-wedge adapted to act upon the cap of the valve-rod to raise the valve, said wedge being provided on its upper and under sides with ball bearings, and a push-knob or button lo-

cated on the outside of the can and having its stem connected with said sliding-wedge, substantially as set forth.

3. In a soda-water-dispensing apparatus, 5 the combination, with a sirup-can provided at its bottom with a valve-seat *i* made removable from the outside of said can, of the valve *k*, valve-rod *l*, spring *q*, cap-plate *u*, secured to the top of the valve-rod *l*, the sliding-wedge 10 *L* provided with ball-bearings and having a vertical slot *j* for the passage of the valve-rod, and the horizontal push-button *M* connected with the wedge *L* and located on the outside of the front of the sirup-can, sub- 15 stantially as set forth.

4. In a soda-water-dispensing apparatus, the combination, with the horizontally sliding sirup-cans, each having a projecting nipple on the under side of its front portion, of a 20 locking-plate hinged or pivoted at its inner edge to the front of the apparatus, and having apertures for the reception of said nipples when said plate is raised into a horizontal position, and means for supporting said 25 locking-plate when raised, substantially as set forth.

5. In a soda-water-dispensing apparatus, the combination, with the horizontally sliding sirup-cans, each having a projecting nipple 30 on the under side of its front portion, of a locking-plate hinged or pivoted at its inner edge to the front of the apparatus, and having apertures for the reception of said nipples when said plate is raised into a horizon- 35 tal position, and the laterally swinging brack-

ets arranged beneath said locking-plate and adapted to support the same in a position to prevent the withdrawal of the cans, substantially as set forth.

6. In a soda-water-dispensing apparatus, 40 the combination, with a casing having a can-chamber, and a series of horizontally sliding sirup-cans, of a can-supporting rack composed of a series of flanged guide-plates connected together at suitable distances apart 45 by rods secured thereto at right angles therewith, said plates having vertical members forming partitions between the cans, and horizontal flanges forming ledges upon which said cans slide, substantially as described. 50

7. In a soda-water-dispensing apparatus, the combination, with a casing having a can-chamber and a series of horizontally sliding sirup-cans, of a can-supporting rack composed of a series of flanged guide-plates con- 55 nected together at suitable distances apart by rods secured thereto at right angles therewith, said plates having upper vertical members *g* forming partitions between the cans, and lower vertical members *g'* adapted to 60 rest on the bottom of the can-chamber, and horizontal flanges *h* forming ledges upon which said cans slide, substantially as described.

Witness my hand this 29th day of October, 65 A. D. 1894.

CONRAD ADAMI.

In presence of—

P. E. TESCHEMACHER,
A. E. HUMISTON.