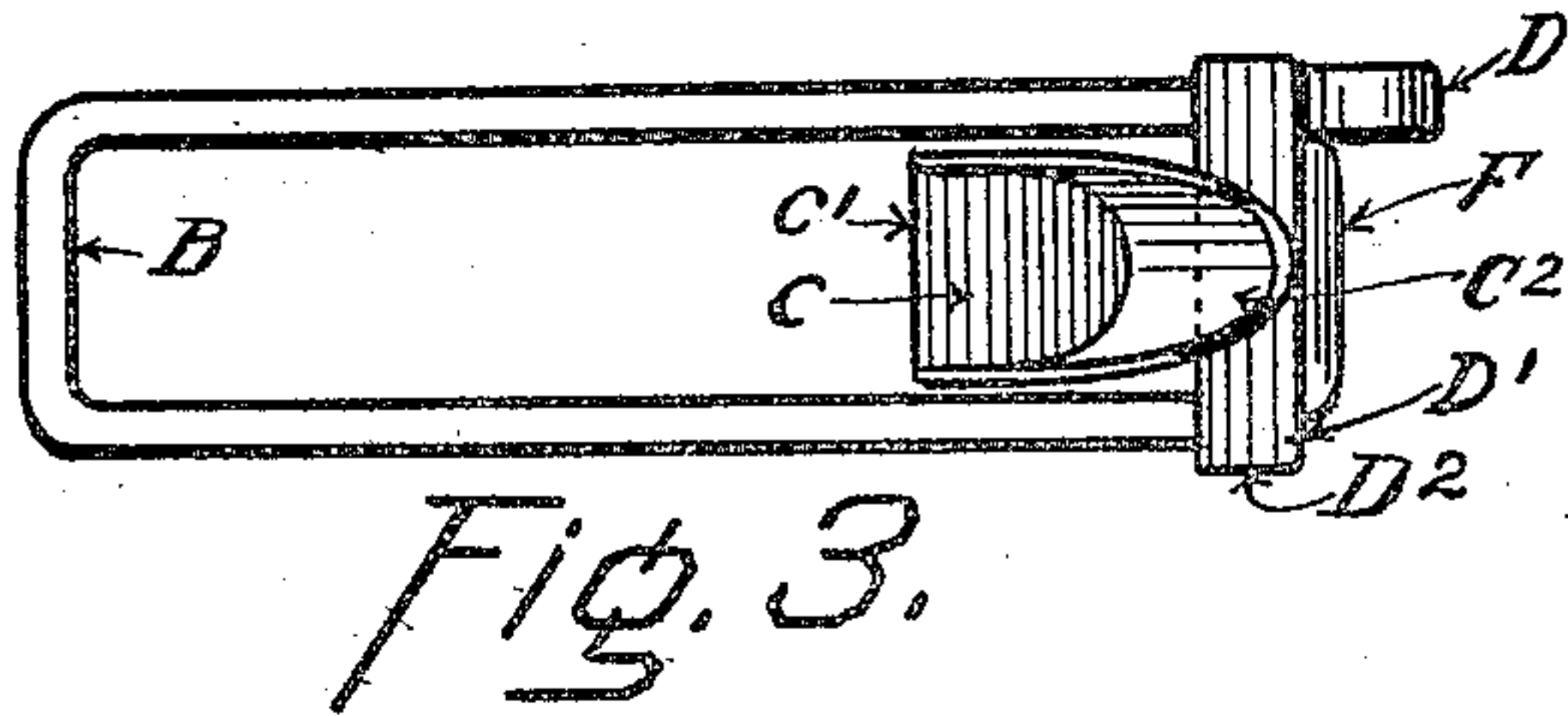
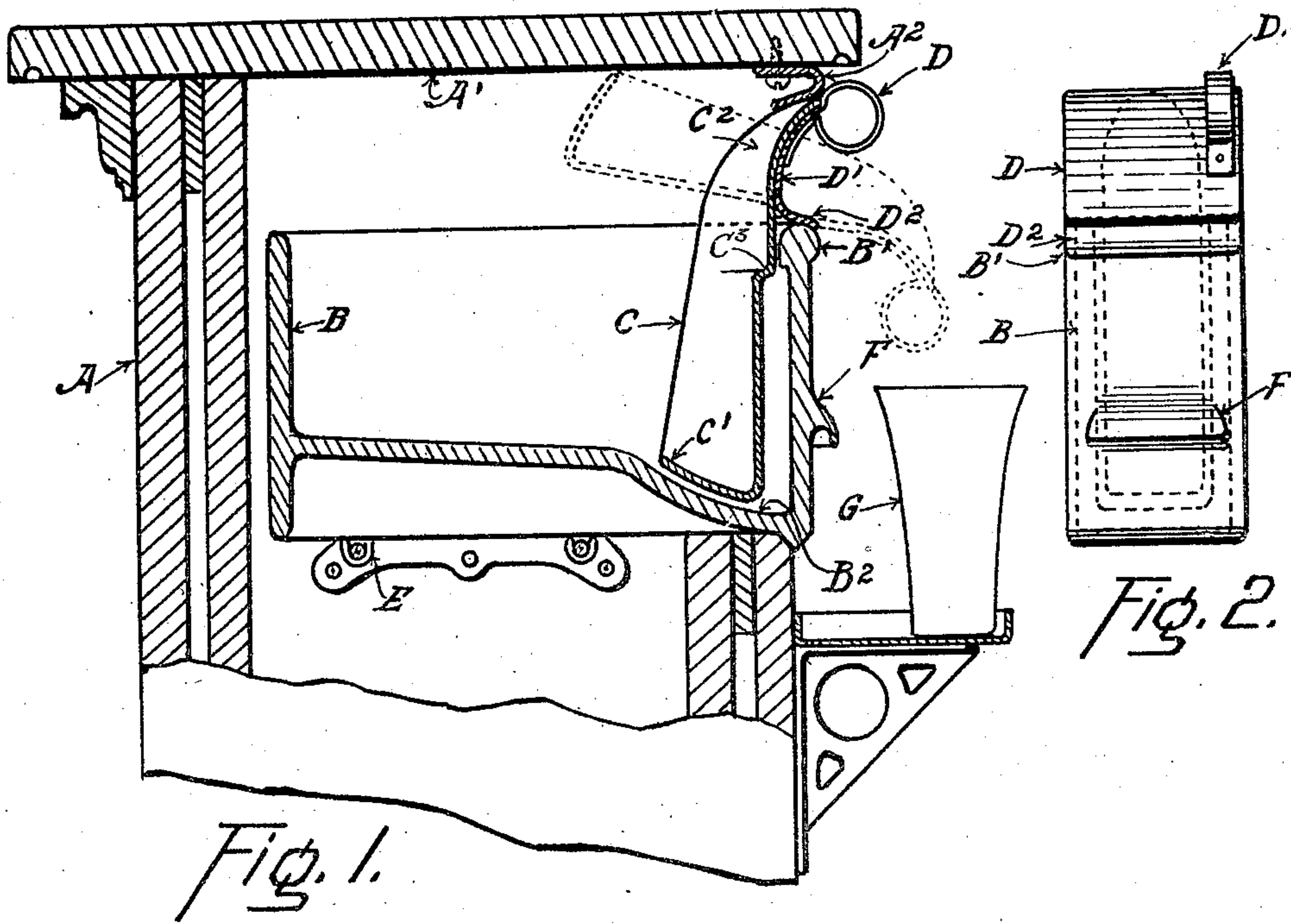


No. 828,477.

PATENTED AUG. 14, 1906.

W. HELMER.
LIQUID DISPENSING APPARATUS.
APPLICATION FILED OCT. 11, 1905.



WITNESSES.

Chas Roberts
Joseph T. Brennan.

INVENTOR.

William Webster
by Robert D. Mitchell
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM HELMER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO
AMERICAN SODA FOUNTAIN COMPANY, OF BOSTON, MASSA-
CHUSETTS, A CORPORATION OF NEW JERSEY.

LIQUID-DISPENSING APPARATUS.

No. 828,477.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed October 11, 1905. Serial No. 282,246.

To all whom it may concern:

Be it known that I, WILLIAM HELMER, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Liquid-Dispensing Apparatus, of which the following is a specification.

My invention relates to liquid-dispensing devices, and has for a special object the provision of a simple, easily-operated, easily-cleaned, and effective device for dispensing such fluids as fruit-syrups, milk, cream, condensed soups, or, in fact, any liquids ordinarily kept under atmospheric pressure.

In the drawings hereto annexed, which illustrate an embodiment of my invention, Figure 1 is a vertical cross-section of a counter liquid tank and dispensing device. Fig. 2 is a front elevation of the liquid tank and dispensing device, and Fig. 3 is a top view of the same.

A represents the front, and A' the top, of a counter, and B a liquid-tank, preferably rectangular in form, supported, as at E, upon brackets secured to the framework of the counter. The tank B is provided near its front with an internal well or cavity B², and at its upper edge with a suitable round rim B'. Within the tank B is poured a supply of liquid for use in the compounding of drinks. The dispensing device consists of a scoop whereof the main or body portion C is normally located within the tank B, and the upper or lip portion C² stands outside of the said tank. The body portion C is provided with a scooping-lip C'. On the upper or lip portion of the scoop there is secured (or it may be formed integrally with the substance of the scoop itself) a handle D. In the example shown in the drawings this handle is secured to a plate D', the lower edge of which is bent forward, as at D², to form a bearing for the scoop upon the rounded edge B' of the tank B. Where, as in modern soda-fountain equipment, the tanks, such as B, are arranged in a bank adjacent one to the other under a counter, the plate D, which in its normal vertical position stands closely adjacent to a similar plate on adjoining tanks, serves as a screen or cover to the space between the upper edge of the tank and the top of the counter, and thus prevents foreign matter from acciden-

tally getting into the tank. A stop A², which may be fastened to the lower edge of the counter-top A', serves to limit the movement of the scoop in one direction by contacting with the handle D, or it may be some portion of the plate D'. The scoop being pivoted, by the bearing of the bent portion D² of the plate D', upon the edge B', the tank normally hangs of its own weight in the position shown in solid lines in Fig. 1. When, however, it is desired to dispense a portion of the liquid in the tank B, the attendant grasps the handle D and pulls it downward, thus swinging the lip portion C² outside of the tank B outward and downward and the body portion C inside the tank B inward and upward, the scooping edge C' passing through the entire vertical depth of the liquid in the tank B. By this movement the scoop is brought into the position shown in dotted lines in Fig. 1 and delivers its contents, or so much thereof as the attendant desires, into the glass G, conveniently placed for the purpose. When this is done, the attendant merely lets go the handle D, and the scoop swings back to its usual position in readiness for another movement to dispense the liquid from the tank B. Here the stop A² properly limits the return movement of the scoop and at the same time forming a close joint to keep out insects, &c. The employment of such a dispensing device as above described performs not only the function of dispensing the liquid itself, but is also effective to avoid the consequence of stratification, which is liable to occur in viscous liquids, such as fruit-syrups, chocolate mixtures of milk, cream, and the like.

If the liquid in the tank has been allowed to stand long enough for stratification to develop, the scooping edge C' cuts through the several strata and as it were takes a proportionate sample from each, so as to deliver at the lip C² always a uniform quality of liquid. Furthermore, in the normal occasional operation of this device the up-and-down movement of the body portion of the scoop effectively stirs the liquid in the tank B, so that even if stratification has taken place the liquid will presently be uniformly mixed.

A handle portion F is forced upon the tank B, so that removal of the tank or insertion of the same in the counter is easily accomplished. The pivotal connection between

the scoop and the tank leaves these two members separable, so that the scoop may be removed to be cleansed and be returned to place with a minimum of trouble. With the trifling exception of the pivot connection between the scoop and tank there are no articulated or mechanically-connected parts, and it is practically impossible for this liquid-dispensing device to get out of order or to fail to dispense liquids properly, so long as any remain in the tank B.

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

1. In a liquid-dispensing apparatus, a tank adapted to be inserted beneath a counter-top, a scoop pivotally mounted upon an edge of said tank, a protector-plate attached to the scoop above the edge of the tank to close the space between the tank and counter-top, the said scoop adapted to swing up and down in the tank to dispense liquid taken thereby from the tank.

2. In a liquid-dispensing apparatus, a tank, adapted to be inserted beneath a counter-top, a scoop having a body portion and lip portion, pivotally mounted to swing the body portion within and the lip portion outside said tank to dispense liquid taken by the body portion from the tank, and a handle and a protector-plate secured to the lip portion of said scoop to serve as a screen between the

tank and counter-top against the accidental admission of foreign matter to the tank.

3. In a liquid-dispensing apparatus, a tank, adapted to be inserted beneath a counter-top, a scoop having a body portion and lip portion pivotally mounted, to swing the body portion within and the lip portion outside said tank to dispense liquid taken from the body portion from the tank, and a handle and a protector-plate secured to the lip portion of said scoop to serve as a screen between the tank and counter-top against the accidental admission of foreign matter to the tank, and a stop to limit the swing of said scoop.

4. In a liquid-dispensing apparatus, a tank adapted to be inserted beneath a counter-top, a scoop pivotally mounted on the edge of the tank and separable therefrom, and having a lip portion outside the tank to swing up and down in the tank to dispense liquid taken thereby from the tank, and a plate secured to the lip portion of the scoop to serve as a screen between the tank and counter-top against accidental admission of foreign matter.

Signed by me at Boston, Massachusetts, this 2d day of October, 1905.

WILLIAM HELMER.

Witnesses:

ODIN ROBERTS,

JOSEPH T. BRENNAN.