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DEVICE FOR DISPENSING BEVERAGES. (Application filed Feb. 8, 1900.) 2 Sheets—Sheet 1. (No Model.) Fif OF AT3 William LAall. Inventor Bu P John Dineen

No. 654,879.

Patented July 31, 1900.

J. DINEEN.

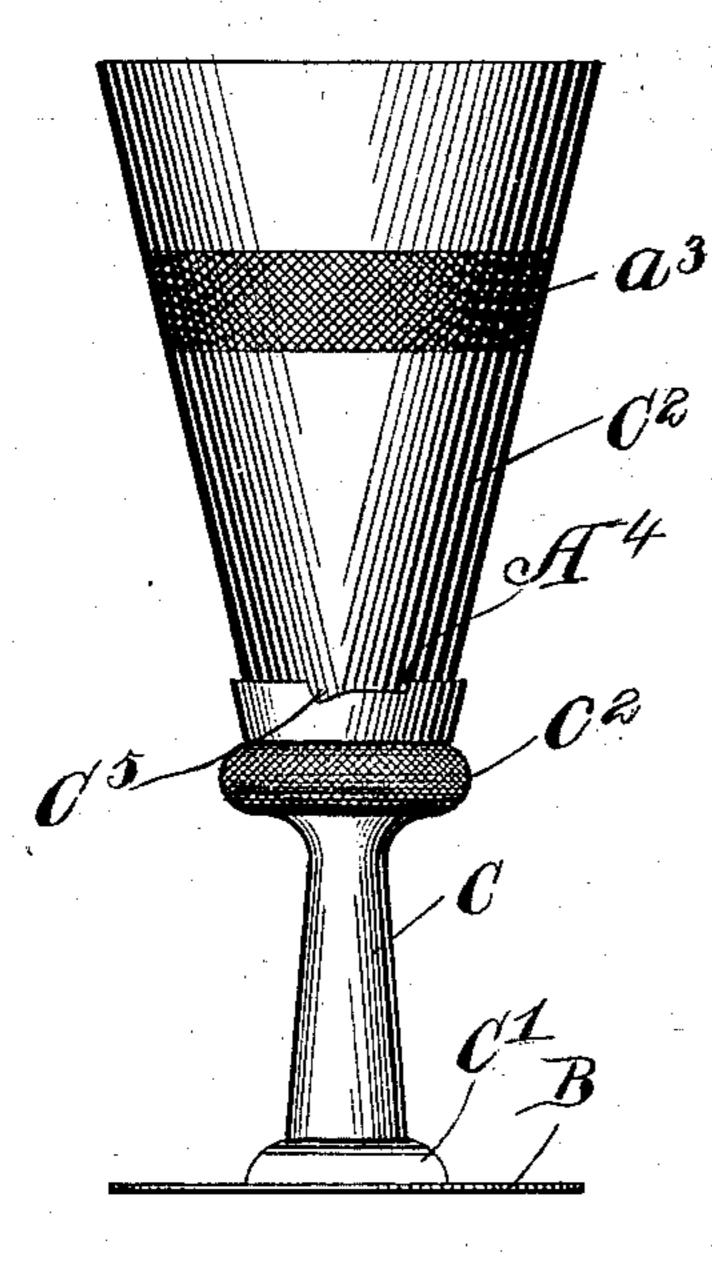
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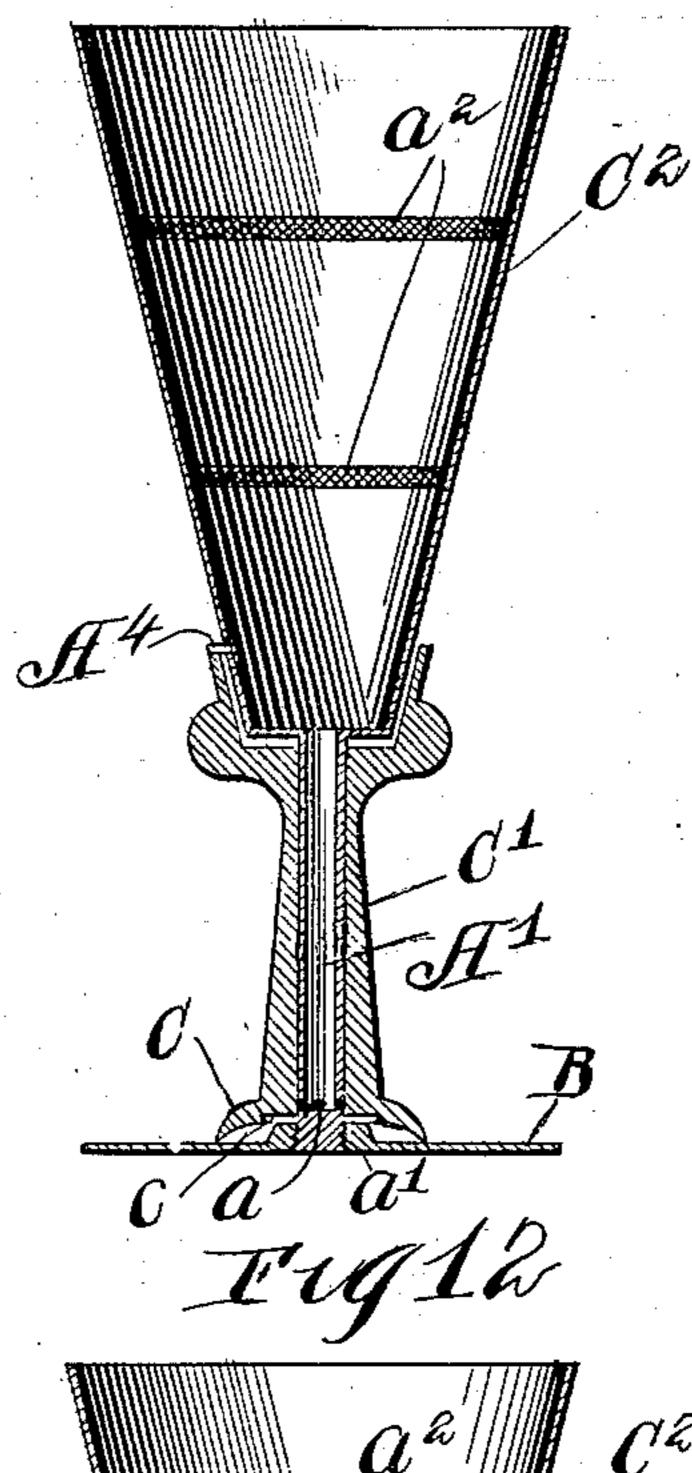
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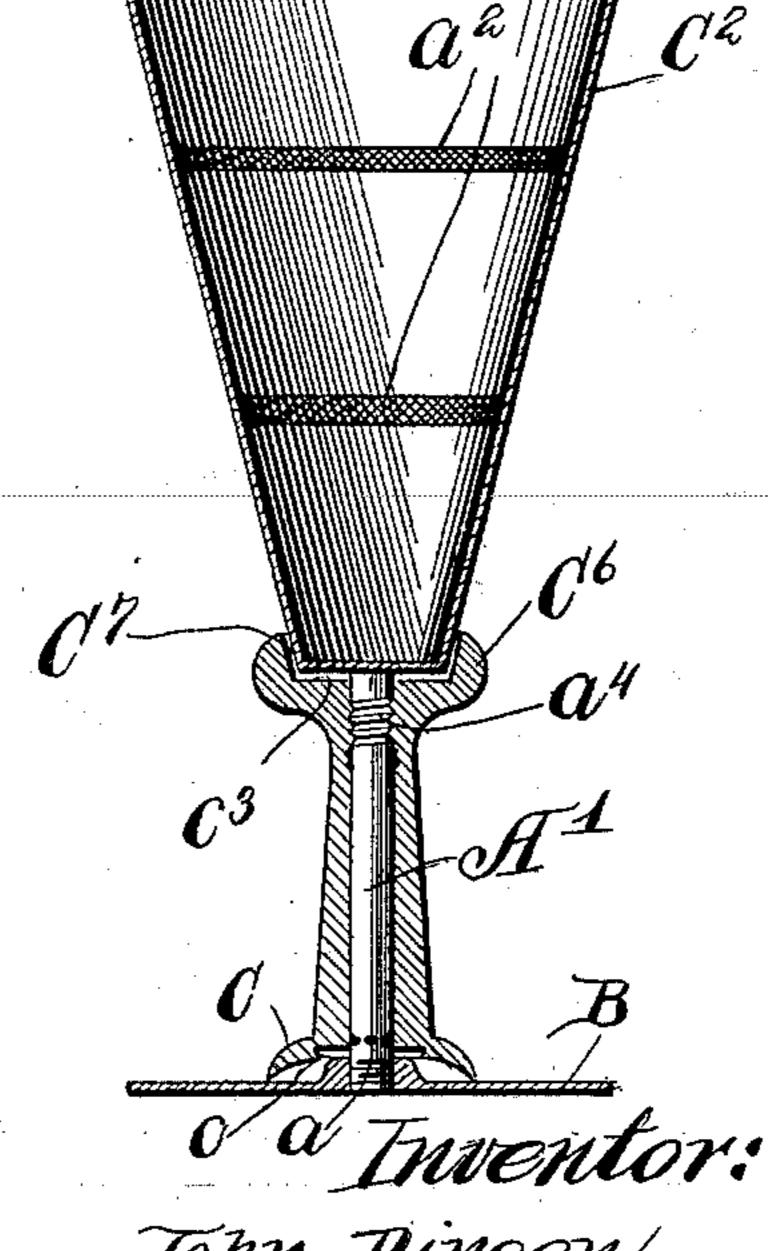
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Fig 10





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United States Patent Office.

JOHN DINEEN, OF CHICAGO, ILLINOIS.

DEVICE FOR DISPENSING BEVERAGES.

SPECIFICATION forming part of Letters Patent No. 654,879, dated July 31, 1900.

Application filed February 8, 1900. Serial No. 4,444. (No model.)

To all whom it may concern:

Be it known that I, John Dineen, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Devices for Dispensing Beverages; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of

this specification.

This invention relates to a novel device for dispensing beverages, and refers more specifically to a device for compounding bever-15 ages known as "liquor floats," wherein two or more liquors of different specific gravities are placed in one glass or receptacle with the different kinds of liquors arranged in superposed layers, the purpose being to keep the 20 several layers separate, so that the colors of the different layers will present an attractive appearance to the eye. As an instance of such beverage may be mentioned "lemonade-claret," in which the claret is poured over 25 the liquid compound constituting the lemonade, or a "pousse-café," wherein a number of different liquors are placed in the same glass in superposed layers. Heretofore it has been the common practice in compounding 30 such beverages to pour the liquors constituting the several layers into the glass over a flat article, such as a spoon, which spreads the liquor in a thin film, so that when it strikes the liquor in the glass it will float thereon 35 and be prevented from mixing therewith. One objection to this practice is that it requires a great amount of skill on the part of the dispenser to compound the beverage and also requires considerable time in order to 40 prevent the mixing of the different liquors. A further objection to said practice is that when the liquor constituting each separate layer is poured from a bottle there is no means of accurately determining when a given quan-45 tity of liquor has been poured from the bottle, so that the compound as a whole will contain disproportionate quantities of the vari-

ous liquors.

It is the object of my invention to provide a device by which such beverages may be compounded by inexperienced and unskilled persons and in a less time than heretofore re-

quired for such work, and also to enable the dispenser, if he desires, to accurately determine the amount of each kind of liquor to be 55 included in the beverage. To this end I provide a receptacle, which may be like an ordinary measuring-receptacle used by dispensers of beverages and known as "jigger," having at its lower end an opening which 60 may or may not be controlled by a valve, and providing below said opening means for spreading or spraying the liquid discharged through said opening or otherwise controlling or retarding its discharges, so as to prevent 65 the liquid from leaving the device in a solid jet or stream, the purpose being to prevent the liquid from agitating the liquid in the receptacle into which it is being poured, so that when it strikes said liquid it will float on the 70 top thereof and not mix therewith.

The invention consists in the matters hereinafter set forth, and more particularly point-

ed out in the appended claims.

As shown in the drawings, Figure 1 is a per- 75 spective view of a device embodying my invention. Fig. 2 is a central vertical section of the principal parts thereof. Fig. 3 is a section similar to Fig. 2, showing the device in position to release the fluid from the re- 80 ceptacle. Fig. 4 is a detail of one form of means for giving relative movement to the parts constituting the closing means. Fig. 5 is a vertical section of the receptacle proper removed from the device. Fig. 6 is a vertical 85 section of the outer casing removed from the device. Fig. 7 is a detail plan view of the parts shown in Fig. 4. Fig. 8 is a view of one of the spreader-disks removed. Fig. 9 is a side elevation of a modified form of the device. 90 Fig. 10 is a vertical section thereof. Fig. 11 is a side elevation of another modification. Fig. 12 is a vertical section thereof.

As shown in the drawings, A designates a cup or receptacle corresponding in general 95 shape to what is usually termed in the trade as a "jigger," in which the different liquids of a mixed beverage are poured preparatory to compounding the same. Said receptacle is made conical and is provided at its lower 100 smaller end with a central tubular stem A', the bore of which is in communication with the interior of the receptacle. Said stem is provided near its lower end with a plurality

of radial openings a a, leading outwardly from the bore of said tubular stem. The stem is also provided at its extreme lower end with a screw-threaded section a', which is adapt-5 ed to receive a centrally-apertured screw-

threaded disk B.

C designates a sleeve which surrounds said tubular stem A' and has endwise movement thereon. Said sleeve is imperforate and fits ro closely on said stem and is adapted to close the openings a of the stem. Said sleeve C is provided at its lower end with a radial flaring annular flange C', which is concentric with the sleeve and stem A' and is adapted 15 to bear at its lower margin against the upper surface of the disk B when the sleeve is in its lowermost position. The said sleeve when in its lowermost position covers the radial openings a in the stem A', and at this time 20 prevents the passage of liquid from the receptacle through said stem. Moreover, when said sleeve is in its lowermost position the contact of the flange C' with the upper face of the disk B serves as second closing means 25 against the passage of liquid from the device. The said sleeve is provided at its lower end, at the base of said flange C' and opposite to the radial openings a when the sleeve is in its uppermost position, with an annular con-30 centric chamber c, and the circumferential wall of said chamber is inwardly inclined, as shown in Figs. 2, 3, and 6. The liquid passing from said openings a is directed radially and impinges against said wall, which serves 35 to deflect the liquid toward the center of the disk, so that it will flow uniformly off the same

on all sides. As a convenient means for giving endwise movement to the sleeve C to open or close the 40 valve constituted by the sleeve and apertured tubular stem, the said sleeve is connected at its upper end with a conical casing C2, which fits outside of and surrounds the receptacle A. Said casing extends to near the top of the 45 receptacle A and is provided at its upper edge, at one side thereof, with a notch C3, having a cam-shaped bottom, which is adapted to be engaged by a radial pin A2, projecting outwardly from the receptacle A near the top 50 thereof. The said sleeve C and casing C2 are made to rotate on the receptacle A and its stem and will desirably be made integral. When the pin A² engages the higher edge of the notch C³, as shown in Figs. 2 and 4, it 55 will hold the sleeve C downwardly in position to close the radial openings a and the annular flange C' thereof in contact with the disk B, and thereby prevent passage of the liquid from the device. When it is desired to per-60 mit the liquid to pass from said receptacle, the casing C² will be rotated in a direction to bring the lowest part of the notch C³ in line with the pin A2, when the said casing and sleeve may be raised upwardly, so as to un-65 cover the openings a and to move the flange C' out of contact with the disk B. At this time the liquid will be free to pass through

the stem out over the disk and escape into the glass into which the lower end of the device is held. When the device is to be closed, 70 the casing C² will be rotated in the reverse direction, and the cam-shaped bottom of the notch C³ will act to move the casing and sleeve downwardly into position to close the device. The upper edge of the casing is pro- 75 vided at the entering end of the cam-notch C³ with a stop-shoulder C⁴, which projects outwardly into the path of the radial pin A², so as to limit the relative movement of the receptacle and casing, it being obviously un- 80 necessary to rotate the casing further, as the full opening will be produced when the pin engages the extreme upper edge of the notch. The upper edge of the receptacle A is bent outwardly to form a curved flange A³, 85 which covers the upper edge of the casing C² and conceals the cam-notch C³ and pin A².

The receptacle A is provided on its inner surface with a plurality of graduating-marks a^2 a^2 to indicate to the dispenser of the bev- 90 erage when the receptacle contains a given or selected quantity of liquid. Desirably the outer surface of the casing C² will be provided with a knurled surface c' to afford a firm finger-grip on the casing. When said casing 95 is to be rotated, the upper edge of the receptacle will be grasped in one hand and the casing in the other hand at the knurled surface c'. The disk B is made detachable from the stem, so that it may be removed and 100 another of a different size (shown in Fig. 8) substituted to be used with glasses of differ-

ent sizes.

The operation of the device is as follows: The device is first closed in the manner above 105 stated and the desired quantity of the liquor constituting one of the layers to be included in the beverage is poured into the receptacle A.. The lower end of the receptacle containing the disk B is then lowered into the re- 110 ceptacle just above the layer of liquid already contained in the glass or receptacle and the casing is rotated with respect to the receptacle A to open the valve at the lower end of the device. When the valve is opened, the 115 liquid passes from the openings α into contact with the inclined circumferential wall of the recess c, and from thence is distributed uniformly upon the disk B toward the center thereof. Said liquid flows off the disk B in 120 all directions and in the form of a thin film, in which state it passes onto the upper layers of liquid in the glass and floats thereon.

With this device a person entirely unskilled in the art of mixing liquors may produce 125 what is known as a "float beverage," and in much less time than has heretofore been required by skilled persons in accordance with the prior practice. Moreover, as before stated, the receptacle A being graduated, the 130 dispenser of the beverage may determine accurately the quantity of each kind of liquor which is to be included in the beverage, and not only properly proportion the quantities

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but produce a considerable saving by reason of being able to exactly determine the amount of each liquor being included in the beverage.

In Figs. 9 and 10 the casing C² terminates 5 near the bottom of the receptacle A and is provided on its upper edge with a notch C⁵, corresponding to the notch C³ of Fig. 4, which coöperates with a radial pin A4, projecting from the lower end of the receptacle A. The ro flange A³ is in this construction omitted. The receptacle is provided near its upper end with an annular knurled surface a³ to afford a finger-grip thereon, and the sleeve C is provided at its upper end with a knurled head c^2 , 15 which is grasped by the finger when the sleeve is to be rotated to discharge the liquid from the device. The notch C⁵ is provided with a stop which limits rotation of the sleeve on the stem A'. The remaining parts of the 20 device are similar to like parts of the construction previously described, and the operation of the device is in all essential respects the same as the operation of the construction previously described.

In Figs. 11 and 12 relative movement of the stem A' and sleeve C is provided by screwthreaded connections between said parts. In said figures said stem is provided near its upper end externally thereof with a screw-30 threaded section a^4 , which engages internal screw-threads in the sleeve, so that when the sleeve is rotated the sleeve is caused to move endwise with respect to the stem. The upper end of the sleeve is continued above the 35 level of the bottom of the receptacle to form a flange C⁶, which incloses a recess C⁷, into which the lower end of the receptacle fits. The bottom of said recess constitutes a shoulder c^3 , which limits the upward movement of 40 the sleeve on the stem when said sleeve has been moved upwardly to discharge liquid from the receptacle. The screw-threads on the sleeve and stem may, however, be made of such length as to limit the movement of 45 said parts at the proper time and constitute a stop for this purpose. The flange C⁶ is knurled, and the receptacle A is provided with an annular knurled surface a^5 to facilitate rotation of the parts.

From the foregoing it will be seen that the closure for the opening in the bottom of the receptacle A may be variously made. Moreover, in case it is not desired to measure the different liquors which go to make up a com-55 pound beverage the valve or closure may be omitted. In this event the device may be held with the lower end in the receptacle in which the beverage is being compounded and the liquor poured therein from a bottle, and 60 the operation of the device in other respects will be the same as that above described. I do not wish, furthermore, to be limited, except as hereinafter made the subject of specific claims, to the particular construction 65 herein shown for spreading or retarding the flow of the liquor as it is discharged from the

device, but wish to have included within the

scope of the invention any means for producing this result, whereby the liquor as it is discharged from the receptacle upon a subjacent 70 layer of liquor will not become mixed with such subjacent layer, but will float thereon.

I claim as my invention—

1. A device for the purpose set forth, comprising a receptacle provided in its lower end 75 with an opening, and means associated with said opening for discharging the fluid therefrom in a thin film.

2. A device for the purpose set forth, comprising a receptacle provided in its lower end 80 with a valved opening, and means for discharging the fluid therefrom in a thin film.

3. A device for the purpose set forth, comprising a receptacle provided in its lower end with a valved opening, and a horizontal plate 85

immediately below said opening.

4. A device for the purpose set forth, comprising a receptacle provided in its bottom with a valved opening, means located under said opening for discharging the liquid from 90 the device in a film, and horizontal graduating-marks on the inner surface of said receptacle.

5. A device for the purpose set forth, comprising a receptacle, a tubular stem connected 95 with the lower end thereof, a spreader-plate on the lower end of the stem, said stem being provided above the plate with one or more radial openings, and means for closing the openings.

6. A device for the purpose set forth, comprising a receptacle, a tubular stem connected with the lower end thereof, said stem being provided at its lower end with one or more radial openings, a spreader-plate on the lower 105 end of the stem, and an endwise-movable sleeve surrounding and fitting closely on the

stem.

7. A device for the purpose set forth, comprising a receptacle, a tubular stem connect- 110 ed with the lower end thereof, said stem being provided near its lower end with one or more radial openings, a spreader-plate on the stem below the openings, an endwise-movable sleeve surrounding and fitting closely on the 115 stem, and means for giving end wise movement. to said sleeve.

8. A device for the purpose set forth, comprising a receptacle, a tubular stem at the lower end thereof which is provided near its 120 lower end with one or more radial openings, a sleeve surrounding said stem and fitting closely thereto, and movable endwise thereon, a spreader-plate on the stem below said sleeve, and an annular flange on the lower 125 end of the sleeve adapted for engagement with said plate.

9. A device for the purpose set forth, comprising a receptacle, a tubular stem at the lower end thereof, provided near its lower 130 end with one or more radial openings, a spreader-plate attached to the lower end of said stem, a sleeve surrounding thestem and having rotative and endwise movement there-

on, and which normally covers said radial openings in the stem, means for giving endwise movement to said sleeve to open and close said radial openings, and a stop for lim-5 iting the rotation of the sleeve.

10. A device for the purpose set forth, comprising a receptacle provided at its lower end with a valved opening, a spreader-plate concentric with said opening, and detachably 10 connected with said receptacle below said

opening.

11. A device for the purpose set forth, comprising a receptacle provided at its lower end with a tubular stem, said stem being provided 15 nearits lower end with one or more radial openings, a sleeve surrounding said tubular stem, and adapted to cover said radial openings, means for giving longitudinal movement to said sleeve to open or close the openings, and a 20 spreader-plate concentric with said stem and detachably connected therewith.

12. A device for the purpose set forth, comprising a receptacle, a tubular stem at the lower end thereof provided near its lower end 25 with one or more radial openings, a spreaderplate connected with the lower end of said stem and concentric therewith, a sleeve surrounding said stem and adapted to cover said radial openings, a casing connected with said 30 sleeve and surrounding said receptacle, and means for giving relative endwise movement

to said casing and sleeve.

13. A device for the purpose set forth, comprising a receptacle, a tubular stem on the 35 lower end thereof provided near its lower end with one or more radial openings, a spreader-

plate connected with the lower end of said stem and concentric therewith, a sleeve surrounding said stem and adapted to cover said radial openings, a casing connected with said 40 sleeve and surrounding said receptacle, and a radial pin on the upper end of said receptacle adapted to engage a cam-notch in the

upper edge of the casing.

14. A device for the purpose set forth com- 45 prising a receptacle, a tubular stem on the lower end thereof provided near its lower end with one or more radial openings, a spreaderplate connected with the lower end of said stem and concentric therewith, a sleeve sur- 50 rounding said stem and adapted to cover said radial openings, a casing connected with said sleeve and surrounding said receptacle, a radial pin on the upper end of said receptacle adapted to engage a cam-notch in the 55 upper edge of the casing, and a stop for limiting the rotation of the casing and sleeve.

15. A device for the purpose set forth comprising a receptacle provided at its lower end with an opening and means for breaking the 60 jet or stream discharged through said opening so that when the liquid strikes a subjacent layer of liquid it will float thereon.

In testimony that I claim the foregoing as my invention I affix my signature, in pres- 65 ence of two witnesses, this 2d day of February,

A. D. 1900.

JOHN DINEEN.

Witnesses:

TAYLOR E. BROWN, FRANK DINEEN.