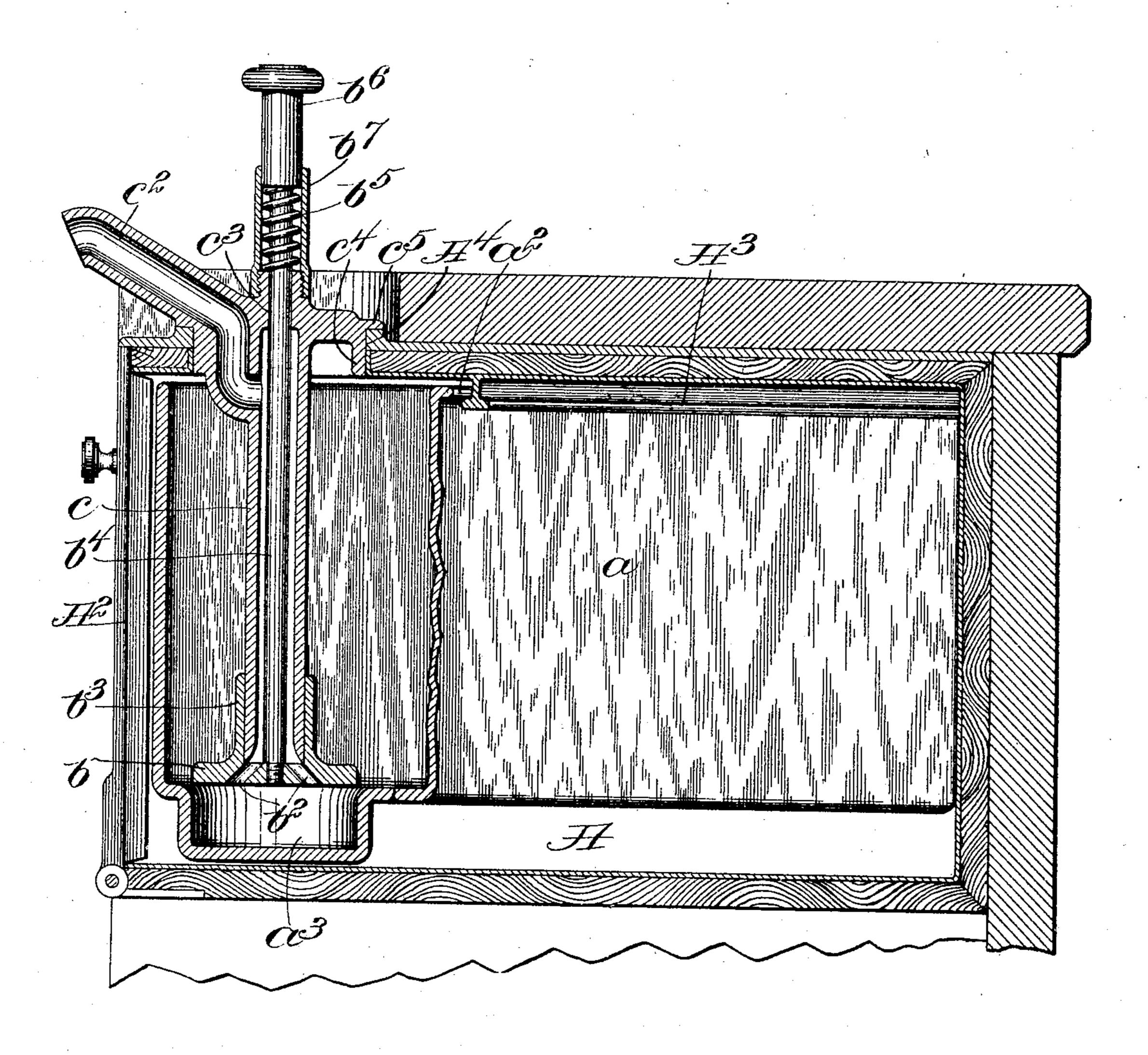
## E. E. MURPHY. DISPENSING APPARATUS. APPLICATION FILED APR. 29, 1904.

NO MODEL.



Witresses: Jas. J. Maloricy.

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Edward Fitturpty.
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## United States Patent Office.

EDWARD E. MURPHY, OF CHELSEA, MASSACHUSETTS, ASSIGNOR TO PUFFER MANUFACTURING COMPANY, A CORPORATION OF MAINE.

## DISPENSING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 774,888, dated November 15, 1904.

Application filed April 29, 1904. Serial No. 205,580. (No model.)

To all whom it may concern:

Be it known that I, Edward E. Murphy, a citizen of the United States, residing in Chelsea, county of Suffolk, and State of Massachusetts, have invented an Improvement in Dispensing Apparatus, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

The present invention relates to a dispensing apparatus for syrups to be used in connection with soda-fountains, and is embodied in a device to be used in connection with a syrup-jar so constructed as to deliver a measured quantity of syrup at each operation.

In the construction shown the syrup-jar is in the shape of a tank arranged to be slid into a chamber and provided with a pocket or recess at the bottom, from which the syrup is 20 delivered to the nozzle. In conjunction with the delivery-nozzle a plunger is utilized and arranged to be forced into the said recess, the said plunger having openings which communicate with the delivery-passage, so that as 25 the plunger is forced into the recess a certain definite amount of syrup is forced upward through the delivery-passage and out of the delivery-nozzle. The plunger and deliverypassage are arranged to be supported above 30 the jar and may be removed when the jar is to be removed for refilling or cleaning. The delivery tube and nozzle are preferably formed in one piece and provided with an annular flange resting on a support or shoulder above 35 the receptacle which contains the jar, the delivery-tube constituting a guide for the plunger, which is depressible with relation thereto by means of a suitable actuating knob or handle.

The drawing is a view, partly in section and partly in side elevation, of a dispensing apparatus embodying the invention.

The syrup is contained in a jar or tank a, which is arranged to be slid into a chamber or receptacle A, having a door or cover A<sup>2</sup> at the front, the soda-fountain being commonly provided with a number of said chambers, each of which is adapted to contain a jar of syrup.

As herein shown, the jar a is provided with 50 flanges  $a^2$ , which fit over supporting members  $A^3$  near the top of the chamber, each jar being slid into one of the chambers like a drawer. In the drawing one only of the flanges  $a^2$  is shown, the other being at the 55 opposite side of the jar.

In order to deliver the syrup from the jar in measured quantities, the said jar is provided with a pocket or recess  $a^3$ , from which the syrup is arranged to be forced by means 60 of a plunger b, which normally stands above the said pocket, but is arranged to be forced downward into the said pocket, in which it fits closely, the syrup being forced out of the pocket through passages  $b^2$ , formed in the plun- 65 ger. These passages communicate with the dispensing-tube c, which is provided with the outlet-nozzle  $c^2$ , so that the syrup forced out of the pocket  $a^3$  is discharged from the said nozzle, substantially the same amount of syrup 70 being discharged at each depression of the plunger. The dispensing-tube c is arranged to constitute a guide and support for the plunger b, which is shown as having a sleeve  $b^3$  surrounding the tube c and an operating-rod  $b^4$  75 within the tube, the said rod projecting through a passage  $c^3$  near the top of the part in which the dispensing-tube c and the outletnozzle  $c^2$  are formed. The passage  $c^3$  constitutes a guide for the top of the rod  $b^4$ , and in 80 order to maintain the plunger b in its normal position a spring  $b^5$  is interposed between the part in which the passage  $c^3$  is formed and a finger-piece or actuator  $b^{6}$ , secured to the top of the rod  $b^4$ . In order to inclose the said 85 spring and to afford a supplemental guide for the rod  $b^4$ , a sleeve  $b^7$  is fitted around the spring and the actuator member  $b^6$ , the said sleeve being shown as threaded upon the part in which the dispensing-tube c and the nozzle 9°  $c^2$  are formed.

As herein shown, the tube c and nozzle  $c^2$  are formed in a single casting which is provided with an annular tongue  $c^4$ , which fits into an opening  $A^4$  at the top of the chamber 95 A, this member and the plunger b being supported by means of a flange  $c^5$ , which rests on the top of the chamber around the said opening.

The dispensing-tube, nozzle, and plunger can be removed at any time by simply lifting the whole thing out of the opening A<sup>4</sup>, so that this part of the apparatus can be frequently 5 cleaned without trouble. The removal of this part, moreover, leaves the jar a free to be withdrawn from the chamber A to be cleaned or refilled.

When the device is in use, a definite amount of syrup is obtained by pressing downward upon the actuating-knob  $b^6$ , which knob and plunger at once return to normal position, owing to the action of the spring.

What I claim is—

15 1. In a dispensing apparatus for syrups, the combination with a jar provided with a pocket or recess; of a casing for said jar, a dispensingtube suspended from said casing over the said recess; a plunger supported by said dispens-20 ing-tube, said plunger substantially fitting the said recess; means for forcing said plunger downward with relation to said tube in the

said recess; and openings through said plunger communicating with said recess, substan-

tially as described.

2. In a dispensing apparatus, the combination with a dispensing-tube; of a plunger movable with relation to said tube and guided and supported thereby at each end; a spring acting on said plunger to hold the same in a 30 definite position with relation to said tube; openings through said plunger communicating with said tube; and a receptacle for syrup, substantially the same in peripheral size and shape as that of the plunger, and in alinement 35 with said plunger, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two sub-

scribing witnesses.

## EDWARD E. MURPHY.

Witnesses:

MARGARET E. COVENEY, HENRY J. LIVERMORE.