

(No Model.)

J. J. HAGINS.  
BOTTLE OR JUG FILLING APPARATUS.

No. 548,123.

Patented Oct. 15, 1895.

Fig. 1.

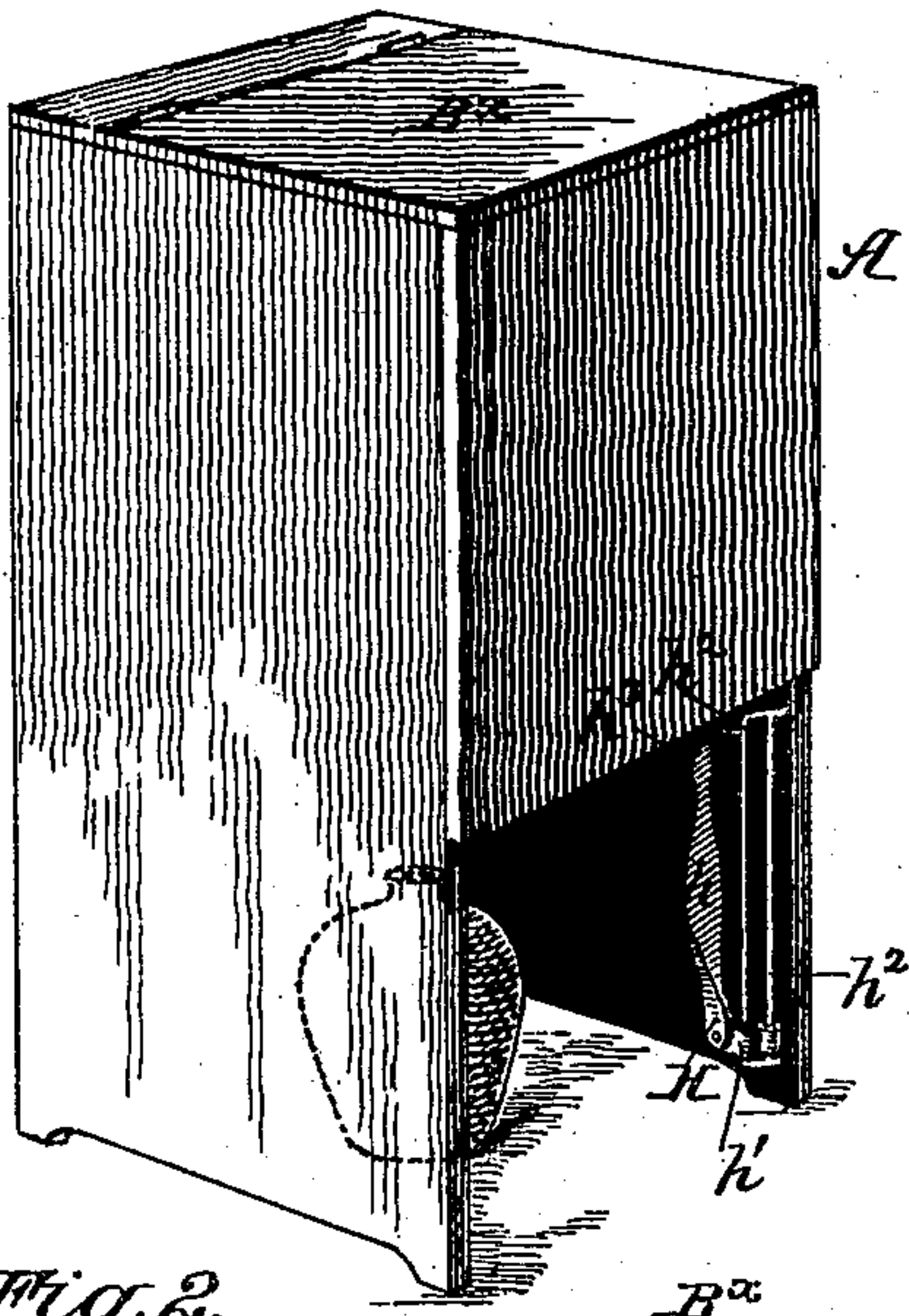


Fig. 4.

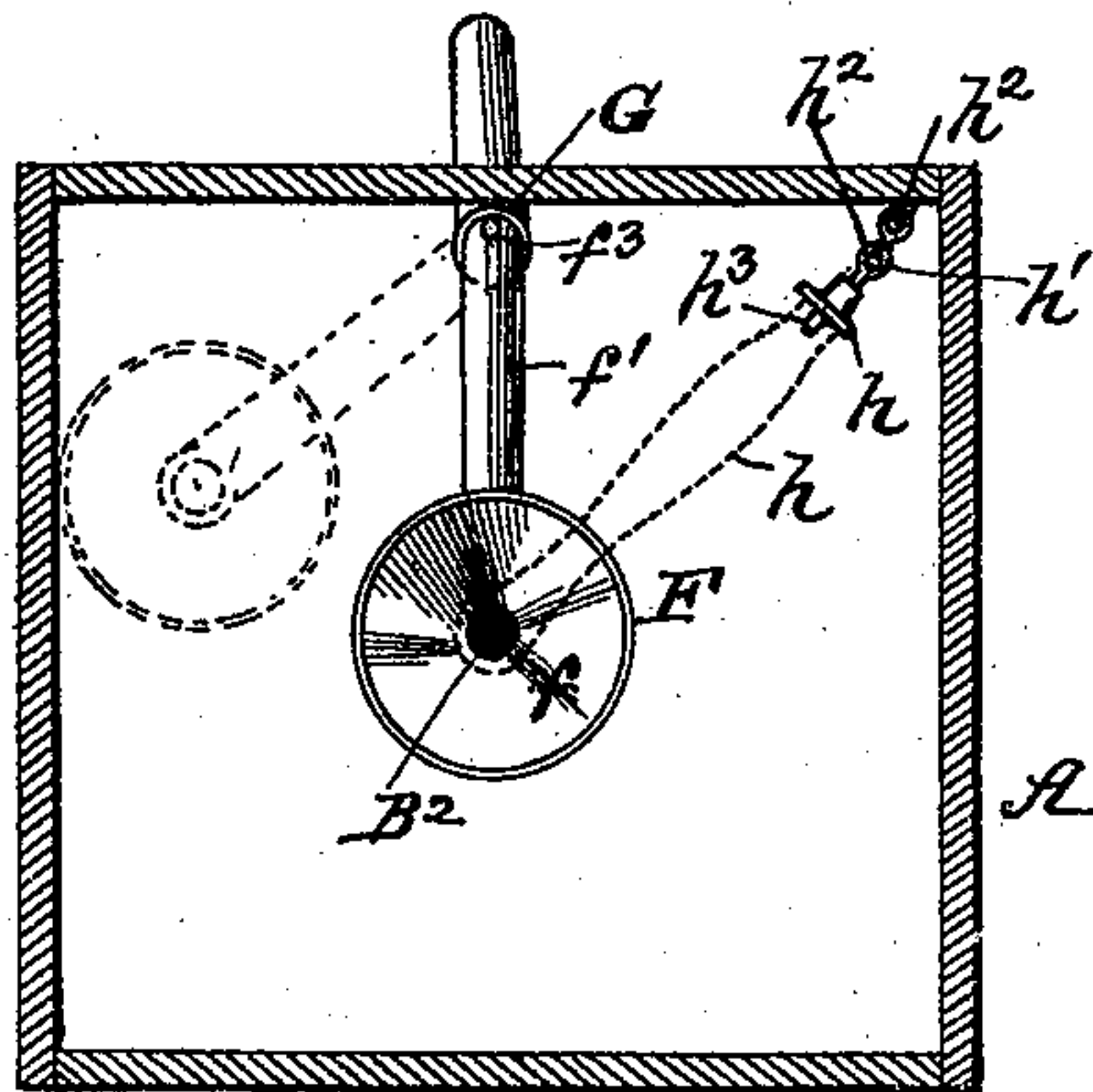


Fig. 2.

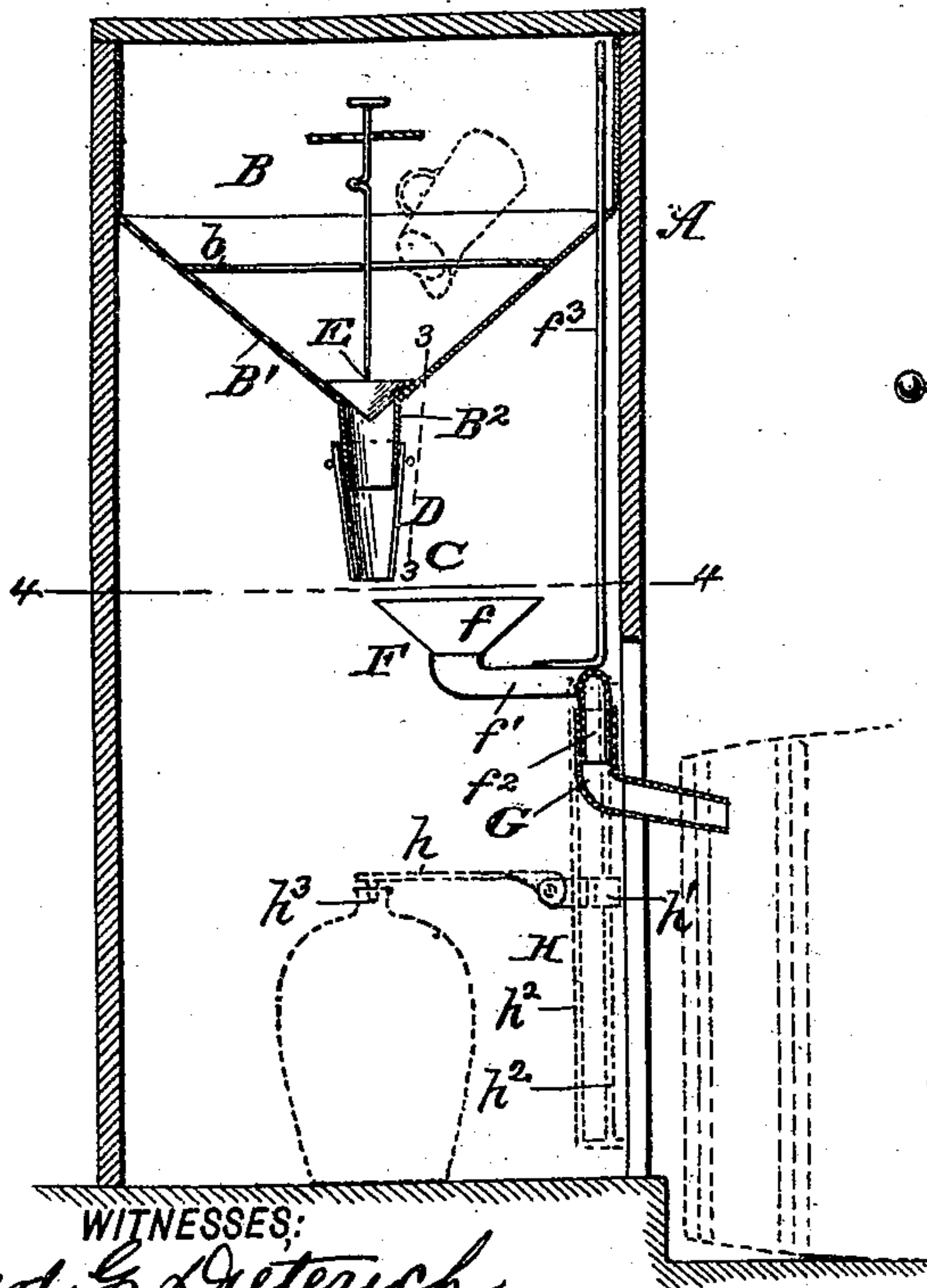
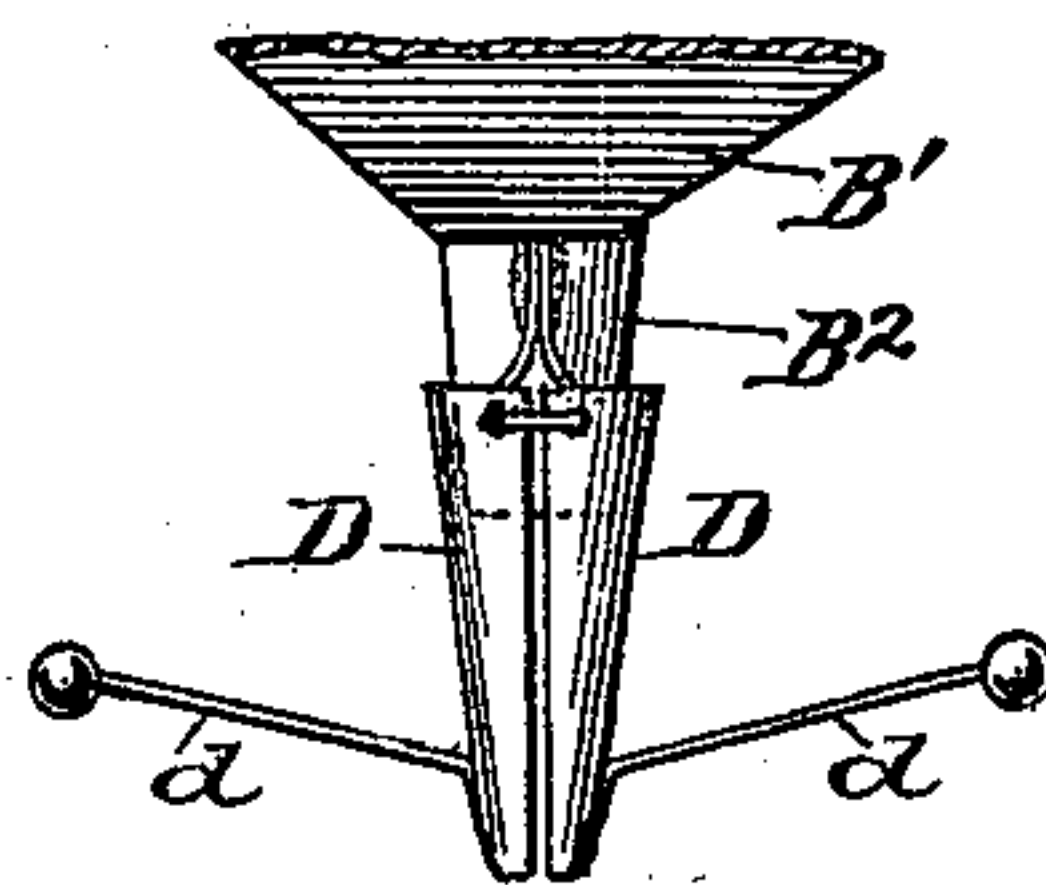


Fig. 3.



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# UNITED STATES PATENT OFFICE.

JOE J. HAGINS, OF ROCK HILL, SOUTH CAROLINA.

## BOTTLE OR JUG FILLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 548,123, dated October 15, 1895.

Application filed February 6, 1895. Serial No. 537,452. (No model.)

*To all whom it may concern:*

Be it known that I, JOE J. HAGINS, residing at Rock Hill, in the county of York and State of South Carolina, have invented a new and useful Bottle or Jug Filling Apparatus, of which the following is a specification.

My invention relates more particularly to an improved apparatus for filling molasses, sirup, and all other viscid liquids into bottles, jugs, kegs, &c.; and it primarily has for its object to provide an apparatus of this kind of a simple and inexpensive construction which can be easily manipulated and which will effectively and positively operate for its intended purposes.

It also has for its object to provide an apparatus of this character having its funnel portion arranged to hold measures and having a lid for the purpose of securing perfect cleanliness, and in which the funnel is so suspended on the frame as to fill the vessels by triculation or pouring through space.

Furthermore, it has for its object to provide an apparatus of this kind having a governor device which opens or closes the feed or discharge opening, according to the force of weight of contents in the funnel, and serving to direct the stream or drip to one point, whereby to avoid the possibility of a gorge forming in the mouth of the vessel being filled.

With other minor objects in view, which hereinafter will be referred to, the invention consists in such novel features of construction and peculiar combination of parts as will be first described in detail, and then be specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improvements. Fig. 2 is a vertical longitudinal section thereof. Fig. 3 is a detail section of the cut-off or governor valve, taken practically on the line 3 3 of Fig. 2; and Fig. 4 is a horizontal section taken on the line 4 4 of Fig. 2.

My improved apparatus comprises a casing A, made of wood or any other suitable material, the upper end of which is formed with a compartment B, the bottom of which is made dish-shaped, as shown at B', which terminates in a pendent spout or nozzle B<sup>2</sup>,

extending into what I term the "drip-compartment" C of the apparatus.

The compartment B has a lid or cover member B<sup>x</sup>, and at a suitable point the bottom or funnel portion has surrounding flanges b, which are adapted to support vessels while emptying and dripping onto the funnel-like bottom, as clearly shown in Fig. 2.

The spout B<sup>2</sup> projects a short distance below the bottom B' and has attached thereto a governor or cut-off valve device which serves to regulate the flow of the liquid and is automatically set or governed by the force or volume of the liquid which passes through the spout, and which serves to regulate such flow and guide it to drop or flow into the jug or other vessel set to receive it. This valve device, which is in the nature of a gravity-operated mechanism, comprises a pair of pendent semi-conical members D D, pivotally connected at their large end to the lower end of the spout B<sup>2</sup>, as shown most clearly in Fig. 3, which members are normally held with their lower ends closed together by the weighted fingers d d, secured to and projected out from the said members D D. By this arrangement of valves it will be readily understood that should the volume or force of the liquid be very slight the force of the liquid will serve to spread the valves very little, which in consequence produces a thin practically uniform and direct flow or drip of the liquid, it being manifest that the said valves will automatically spread or close as the volume of the liquid which passes through the spout increases or decreases.

E indicates a flow-stop or cut-off adapted to close off the spout-opening in the funnel-bottom.

F indicates a drip-catcher, consisting of a dished body f, formed on the end of the take-off pipe f', which pipe is provided with an angle portion f<sup>2</sup>, fitted to turn in a tubular guide or socket G, secured to one side of the casing and extended through the side thereof to form a discharge-nozzle, which in practice is projected into the molasses or sirup barrel, as shown. To provide for turning the drip-catcher, the pipe f' has a handle member f<sup>3</sup>, which extends up into the compartment B, as shown.

H indicates a drop-indicator which is used



to indicate the position in which to place the jug or other vessel to receive the drop or flow of the liquid, such indicator being in the nature of an arm  $h$ , pivoted to block  $h'$ , held to  
 5 slide vertically on guides  $h^2$   $h^2$  on the casing, which arm has a stud or pendent lug  $h^3$ , which in the complete apparatus is arranged when the arm is turned to a horizontal position to be directly under the spout  $B^2$ .

10 To set the jug or other vessel, the arm  $h$  is turned to a horizontal position and adjusted to rest on top of the jug or other vessel, which is set at such point that it will receive the stud  $h^3$ . As such stud is in line with the  
 15 spout  $B^2$ , it follows that the jug will be thus set in a proper position to receive the flow.

By providing an apparatus constructed in the manner shown and described a filled measure can be turned into the compartment  
 20 B and left to stream into the jug, bottle, or other vessel without attention, and as the lid can be closed down after the measure is placed into the said compartment the contents and the measure are secure from flies and dust.  
 25 Furthermore, the measure will drain clean, while the drip is caught and saved and carried back into the barrel.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-  
 30 ent, is—

1. In an apparatus for the purposes described the combination with the discharge nozzle  $B^2$  of the funnel member, of the valve members semi-cone like in shape, pivotally  
 35 connected to the end of such nozzle and provided with gravity means for normally hold-

ing them to a closed position, substantially as shown and for the purposes described.

2. As an improvement in an apparatus for the purpose described the combination with 40 the casing having an upper compartment formed with a funnel like bottom, of a drip collector, movable under the discharge nozzle of the funnel like bottom, provided with a discharge pipe projected to one side of the 45 casing and a hand operated means connected to such collector and extended up into the upper compartment all arranged substantially as shown and for the purposes described.

3. In an apparatus as described the combination with the discharge nozzle, of a drip 50 indicator consisting of a carrier member vertically movable on the casing and a swing arm pivotally connected to the said member having a point or lug adapted to be in line 55 with the said nozzle when the arm is turned down substantially as shown and for the purposes described.

4. An apparatus for the purposes described comprising a casing having an upper com- 60 partment provided with a funnel or dished like body having a central pendent discharge nozzle, valve members fitted on such nozzle to control the flow, automatically set by the force or volume of such flow, and a movable 65 drip catcher held under the said nozzle having a take off member all arranged substantially as shown and for the purposes described.

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Witnesses:

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