

No. 681,841.

Patented Sept. 3, 1901.

L. A. WESTON.
BEER FILTER AND COOLER.

(Application filed Dec. 5, 1900.)

(No Model.)

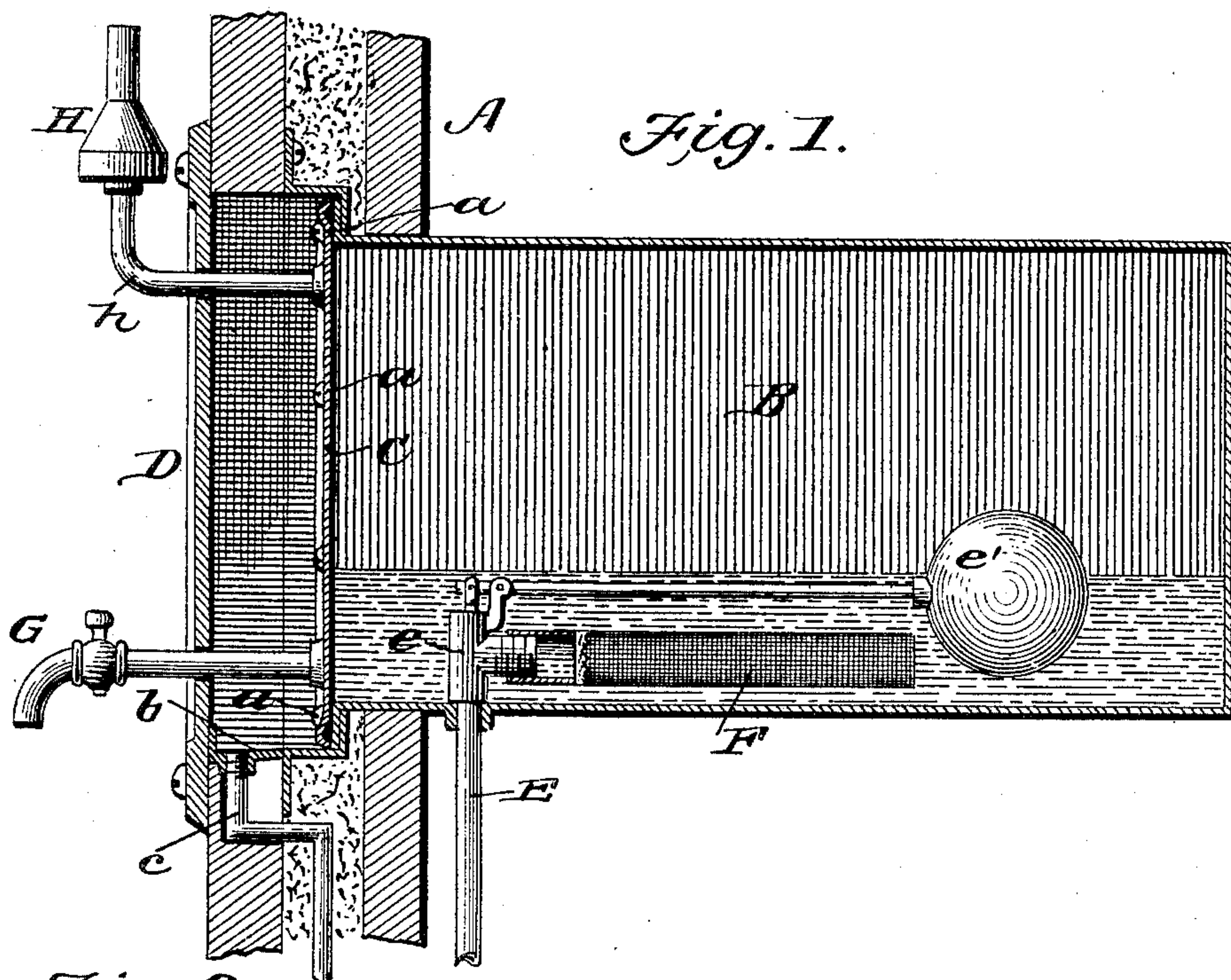
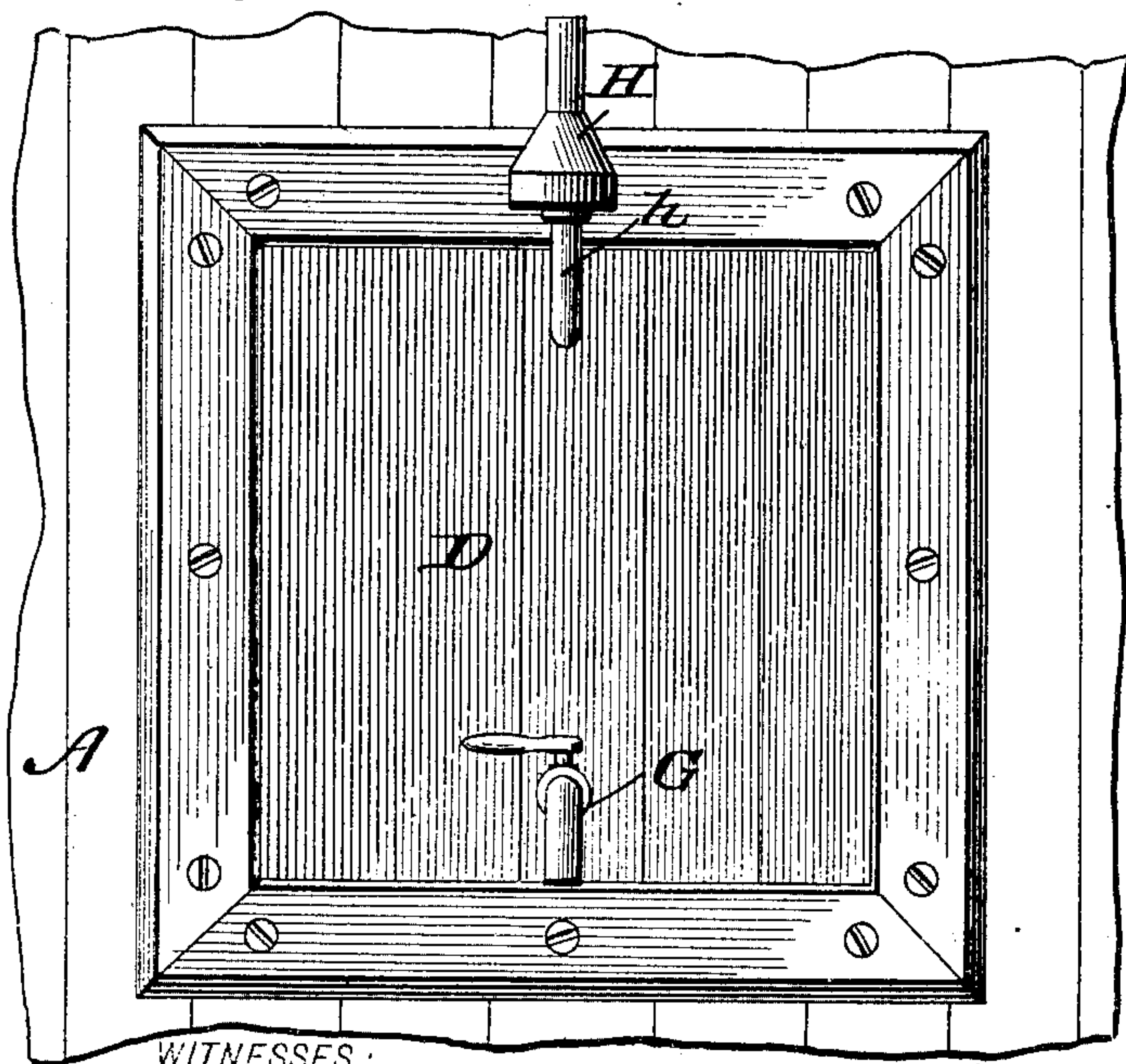


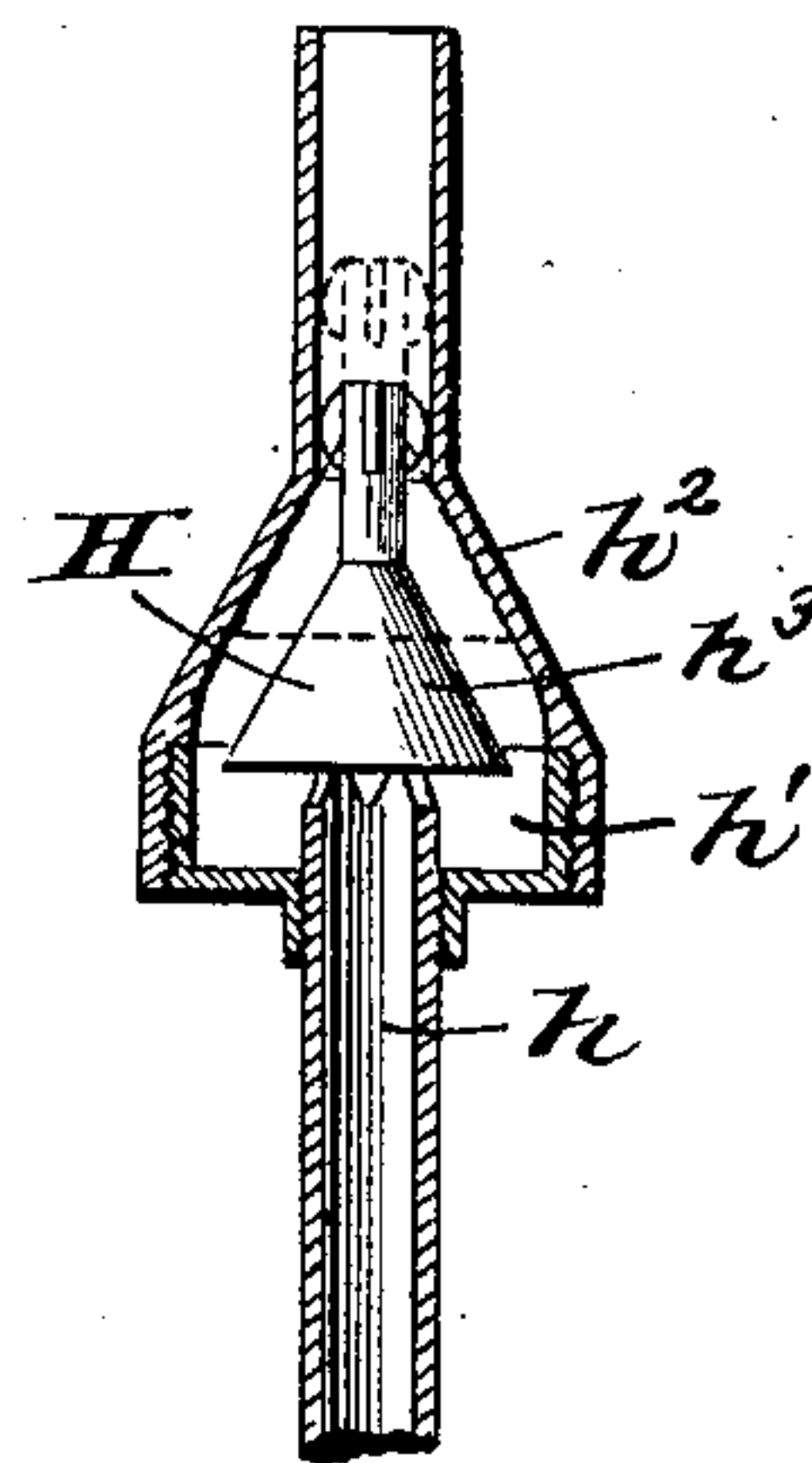
Fig. 2.



WITNESSES:

M. S. Blondel.
Edw. W. Byrnes.

Fig. 3.



INVENTOR

Leroy A. Weston.

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

LEROY A. WESTON, OF ADAMS, MASSACHUSETTS.

BEER FILTER AND COOLER.

SPECIFICATION forming part of Letters Patent No. 681,841, dated September 3, 1901.

Application filed December 5, 1900. Serial No. 38,790. (No model.)

To all whom it may concern:

Be it known that I, LEROY A. WESTON, of Adams, in the county of Berkshire and State of Massachusetts, have invented a new and
5 useful Improvement in Beer Filters and Coolers, of which the following is a specification.

My invention is in the nature of an improved beer filter and cooler which is designed to be built in the side wall of an ice-box with only the dispensing faucet and valve projecting outside and with the body of the cooler containing the filter projecting
10 inside of the ice-box chamber to be cooled thereby; and it consists in the peculiar construction and arrangement of the parts, which I will now proceed to describe with reference to the accompanying drawings, in which—

20 Figure 1 is a vertical section through the ice-box wall and my improved filter and cooler sustained thereon. Fig. 2 is a front view, and Fig. 3 an enlarged sectional view, of the valve.

25 A represents the side wall of the ice-box, to which is firmly attached the filter and cooler chamber B. This is made square in cross-section and projects at one end into the ice-box and is supported in this position by
30 having its edges at one end flanged to form a shoulder and firmly seated in a square hole cut in the side wall of the ice-box. The hole that is cut in the outer casing of the side wall of the ice-box is a little larger than the
35 hole in the inner casing, which latter fits snugly to the cross-sections of the body of the cooler-chamber. This forms a shoulder *a*, and on this shoulder is fastened by set-screws a cover-plate C, which tightly
40 closes the said chamber. This construction and arrangement also braces and holds stiffly the chamber B in its horizontal position. Between this cover and the outer
45 face of the wall of the ice-box there is a space which is closed in by an ornamental outside cover-plate D. The bottom portion of the space between these two covers C and D is provided with a sheet-metal trough *b* to catch the drip of condensation, and this trough is provided with an outlet vent-pipe *c* to carry
50 away the drip.

In the bottom of the cooler there is tapped an inlet-pipe E for the beer as it comes from the keg, and this pipe has on its end a regulating-valve *e*, with an arm and ball *e'* and
55 also a horizontally-extended filtering-chamber F, constructed in the form of a cylinder or in other approved shape and construction so arranged that when the beer enters at pipe E it passes through valve *e* until the beer
60 stands at a certain level in the cooler, at which it lifts the float-ball *e'* and closes automatically the valve *e*, so that no more beer can enter, and yet when the level of the beer falls in this chamber as it is dispensed the lower-
65 ing of the ball *e'* will again open the valve *e* and admit more beer. The filter is to be made of fine-wire cloth with any suitable filtering material, and the connecting end of the filter-cylinder is provided with a screw-
70 coupling, so that it can be easily taken off and cleaned.

In the lower part of the cooler-chamber there is a dispensing-faucet G, which extends to the outside through the two front plates C and D,
75 and from the top part of the cooler-chamber there extends through these front plates a valve H, which is designed to retain the pressure of gas in the cooling-chamber until it falls below a certain pressure and then it
80 opens to allow air to pass in. This valve is mounted on the upturned end of a pipe *h*. A cup *h'* is attached to the pipe a little below its upper end and is screw-threaded on the outside, and a funnel-shaped casing
85 *h²*, screw-threaded interiorly, is detachably screwed thereon with its spout end opening outwardly. Within the valve-chamber thus formed there is arranged a valve *h³*, made of rubber or other light material and of a con-
90 ical form, having a stem projecting upwardly into the spout of the funnel-shaped case to hold it in central position, and this valve plays up and down between the end of the pipe *h* and the conical seat of the upper sec-
95 tion of the case. The upper end of pipe *h* has notches in it that prevent the valve from ever closing the end of said pipe. The action of this valve is as follows: When beer passes into the cooler-case, the pressure of gas causes
100 the valve *h³* to rise and close the vent, so that no gas can escape; but when the faucet is

opened and the gas - pressure is relieved in the cooler from failure of valve *e* to work the valve *h*³ drops down on the end of the pipe *h* and allows air to pass in through the notches
 5 in the upper end of the pipe, so that the beer will run freely out of the cooler.

In connection with the cooler I propose to use any suitable relief-valve which will blow off at any desired pressure.

10 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A beer - cooler comprising a chamber fixed in the wall of an ice-box and projecting
 15 into the same, a cover-plate to the end of said chamber, a second cover-plate arranged outside the first on the exterior face of the ice-box, and a drip-trough and vent-spout arranged at the bottom of the air-space be-
 20 tween the two cover-plates substantially as described.

2. A beer-cooler comprising an ice-box having an inner and outer casing with holes through their sides opposite each other, the
 25 hole in the inner casing being smaller than that in the outer one, and a cooling-chamber secured in horizontal position in said side walls and having its body portion made of a size to fit snugly the hole in the inner casing
 30 and having its outer end flanged to a larger size to fit the outer hole and to form also a

shoulder to receive the closing-cover as described.

3. A combined beer cooler and filter comprising an inclosing-chamber having in its
 35 bottom a beer-inlet pipe with a filter and an automatic float-valve arranged within the chamber, a dispensing-faucet arranged near the bottom of said chamber, and an auto-
 40 matic air-inlet valve arranged near the top substantially as and for the purpose described.

4. A combined beer cooler and filter comprising an inclosing-chamber having in its
 45 bottom a beer-inlet pipe with a filter and an automatic float-valve arranged within the chamber, a dispensing-faucet arranged near the bottom of said chamber, a pipe extend-
 50 ing from the top of the said chamber and turned up and notched, a cup mounted on the end of the pipe and screw-threaded exteriorly, an inverted-funnel-shaped case
 55 screwed onto said cup, and a conical valve arranged within the same and playing between the end of the pipe and the upper section of the valve-case substantially as de-
 scribed.

LEROY A. WESTON.

Witnesses:

GEO. W. HAFF,
 B. H. MILLIMAN.