

(No Model.)

J. D. DE GEAR.
STEAM BEER GOVERNOR.

No. 570,086.

Patented Oct. 27, 1896.

Fig. 1.

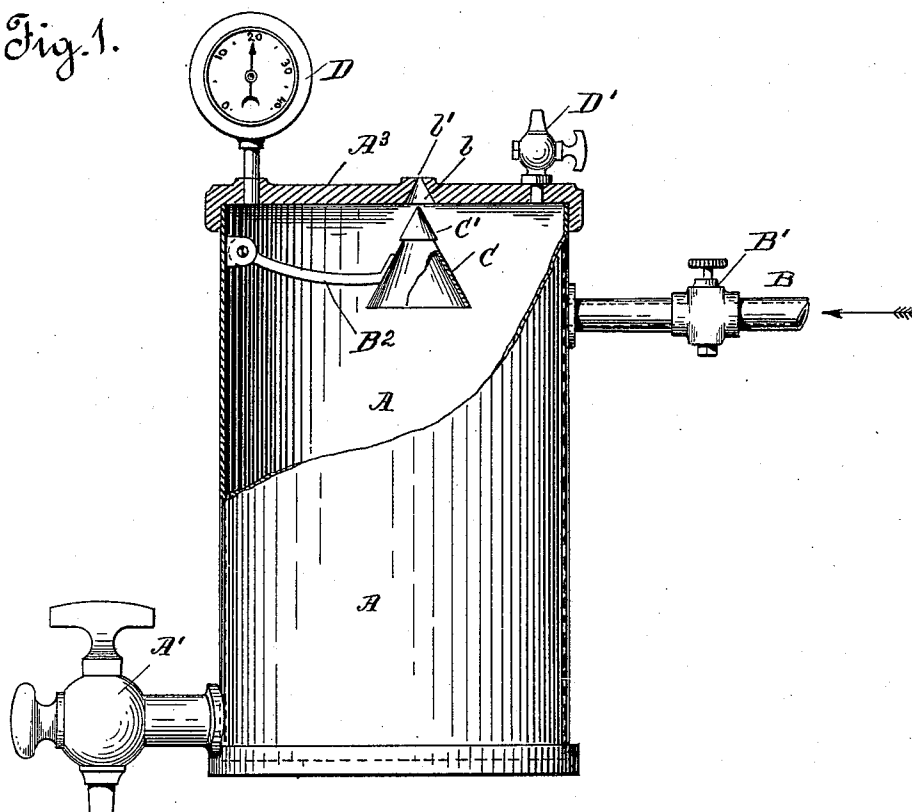
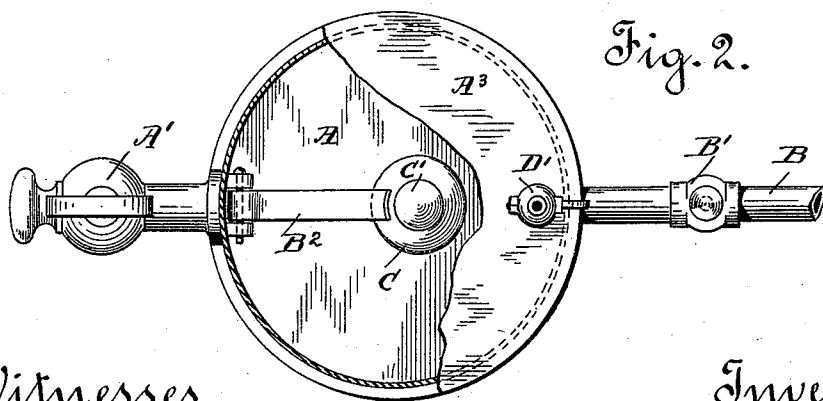


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

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STEAM-BEER GOVERNOR.

SPECIFICATION forming part of Letters Patent No. 570,086, dated October 27, 1896.

Application filed October 11, 1895. Serial No. 565,328. (No model.)

To all whom it may concern:

Be it known that I, JEFFERSON D. DE GEAR, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Steam-Beer Governors; and I do hereby declare that the following is a full, clear, and exact description thereof.

10 This invention relates to a certain new and useful beer-governor designed more especially for use in connection with what is known as "steam-beer;" and it consists in the arrangement of parts and details of construction, as
15 will be hereinafter fully set forth in the drawings and described and pointed out in the specification.

It is necessary that the kegs containing steam-beer be provided with a vent-opening, in order that the gas generated by the working of the beer may escape; else the pressure thereof will cause the barrel to burst. As the gas escapes considerable foam is carried therewith, which runs down the sides of the
25 barrel and, standing, causes a disagreeable odor to arise—as of stale beer. This is the objection to the use of steam-beer in all first-class saloons, and it is to overcome this objection that my invention is principally directed, and at the same time to permit of the
30 rapid and solid drawing of this class of beer from the keg.

In order to fully understand my invention, reference must be had to the accompanying
35 sheet of drawings, wherein—

Figure 1 is a side view in elevation of the device with the reservoir partly broken away, and Fig. 2 is a top plan view of the device.

In the drawings the letter A is used to indicate the reservoir for the beer, which reservoir may be constructed of glass, metal, porcelain, or any suitable material. This reservoir is placed in the saloon, back of the counter, and ordinarily it will be inclosed or
45 hidden from view by a suitably-ornamented front, (not shown,) and said reservoir may be round or square in form. From this reservoir leads the drawing-faucet A', by means of which the beer is withdrawn from the reservoir as desired. This drawing-faucet connects with the reservoir near its bottom, as shown.

From the beer-keg, (not shown,) located at any suitable place—as, for instance, in the cellar of the saloon—leads the supply-pipe B, 55 which pipe enters through the back wall of the reservoir, near its top, and conveys the beer from the keg to the interior of the reservoir. Within the supply-pipe is interposed the pressure-regulator B', which may be of 60 any well-known construction. This regulator cuts down or reduces the pressure of the beer flowing from the keg into the reservoir A. The pressure in the keg is ordinarily between thirty-five (35) and forty (40) pounds 65 per square inch. However, it is not desirable that the pressure within the reservoir stand the same as that within the keg. Consequently the regulator B' is interposed between the keg and the reservoir, which reduces the pressure of the beer flowing into 70 the reservoir to about twenty (20) pounds per square inch.

Within the interior of the reservoir A is fulcrumed, near the top thereof, the lever B². 75 This lever is slightly curved and has secured to its outer end the cone-shaped or tapering valve C. The upper end of this cone-shaped or tapering valve is covered with a coating C' of vulcanized rubber. This cone-shaped 80 or tapering valve closes or opens the vent-opening of the reservoir as the lever B² is raised or lowered.

Within the top A³ of the reservoir is cut the tapering valve-opening b, which terminates in a pin-opening b'. Within this tapering valve-opening fits the upper end of the cone-shaped or tapering valve C, which valve, when seated, completely closes the valve-opening and prevents the escape of the gas 90 retained within the reservoir.

The reservoir is provided with the pressure-gage D for the purpose of showing the pressure within the reservoir, and it is also provided with the vent-cock D', by means of 95 which the reservoir may be vented in case the pressure-gage discloses too much pressure.

The top A³ of the reservoir may be soldered or screwed onto the body portion or it may be formed integral therewith. 100

My device operates in the following manner: Presuming the keg to be connected with the reservoir and the beer to be flowing therefrom into the interior of the reservoir by the

pressure within the keg, the pressure of the gas generated by the beer within the reservoir bears against the under face of the valve C and holds the same firmly seated in the valve-opening *b* of the reservoir, thus preventing the escape of the gas from within the reservoir, so as to maintain a given pressure upon the retained beer. In case the beer is retained within the reservoir until the regulator shows that more than a given pressure is secured the same may be released or reduced by simply opening the vent-cock D' for a short while or until the retained pressure is reduced. The cone-shaped or tapering valve will maintain the valve-opening *b* closed by the pressure of the gas thereon. As the beer is withdrawn from the reservoir through the faucet A' the pressure within the reservoir is reduced and the fulcrumed lever falls by gravity and, carrying the cone-shaped or tapering valve therewith, opens the valve-opening *b* and permits a portion of the generated gas to escape in proportion to the amount of beer withdrawn. It will thus be seen that the reservoir is automatically vented as the retained beer is withdrawn from within the same. As the faucet A' is closed the fresh beer entering the reservoir causes the foaming of the beer therein, which foam, as it rises within the reservoir, lifts the cone-shaped or tapering valve until it closes the valve-opening, so as to prevent further escape of the gas from within the reservoir. It will thus be noticed that the cone-shaped or tapering valve is first floated upward by the foaming of the beer rushing into the reservoir, and that it is afterward held firmly within its seat or valve-opening by the pressure of the retained gas.

By means of my device the beer flowing from the keg enters and settles within the reservoir in a solid body. Consequently the

same may be drawn into the glass solid or with no foaming. This cannot be accomplished by drawing steam-beer from the keg until after a quantity of beer has been withdrawn.

Inasmuch as by my device the full pressure of the beer within the keg is at all times maintained, the said keg may be located in the cellar and the pressure within the keg will suffice to force the beer into the reservoir until the said keg is emptied.

While I have disclosed a fulcrumed lever carrying a cone-shaped or tapering valve for closing the valve-opening of the reservoir, I do not wish to be understood as confining myself thereto, for I am well aware that other styles of valve mechanism may be made use of.

By my device I am enabled to draw sharp steam-beer quickly and I am not compelled to wait for the foam to settle within the glass, as is the case where steam-beer is drawn direct from the keg.

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

In a governor for steam-beer, the combination of a reservoir having a conical valve-opening in its upper end, a pressure-gage and a vent-cock on the top of the reservoir, a lever fulcrumed on one side of the reservoir near the top thereof, and a conical valve secured to the free end of said lever and adapted to enter and close the conical valve-opening.

In testimony whereof I affix my signature, in presence of two witnesses, this 30th day of September, 1895.

JEFFERSON D. DE GEAR.

Witnesses:

N. A. ACKER,
LEE D. CRAIG.