

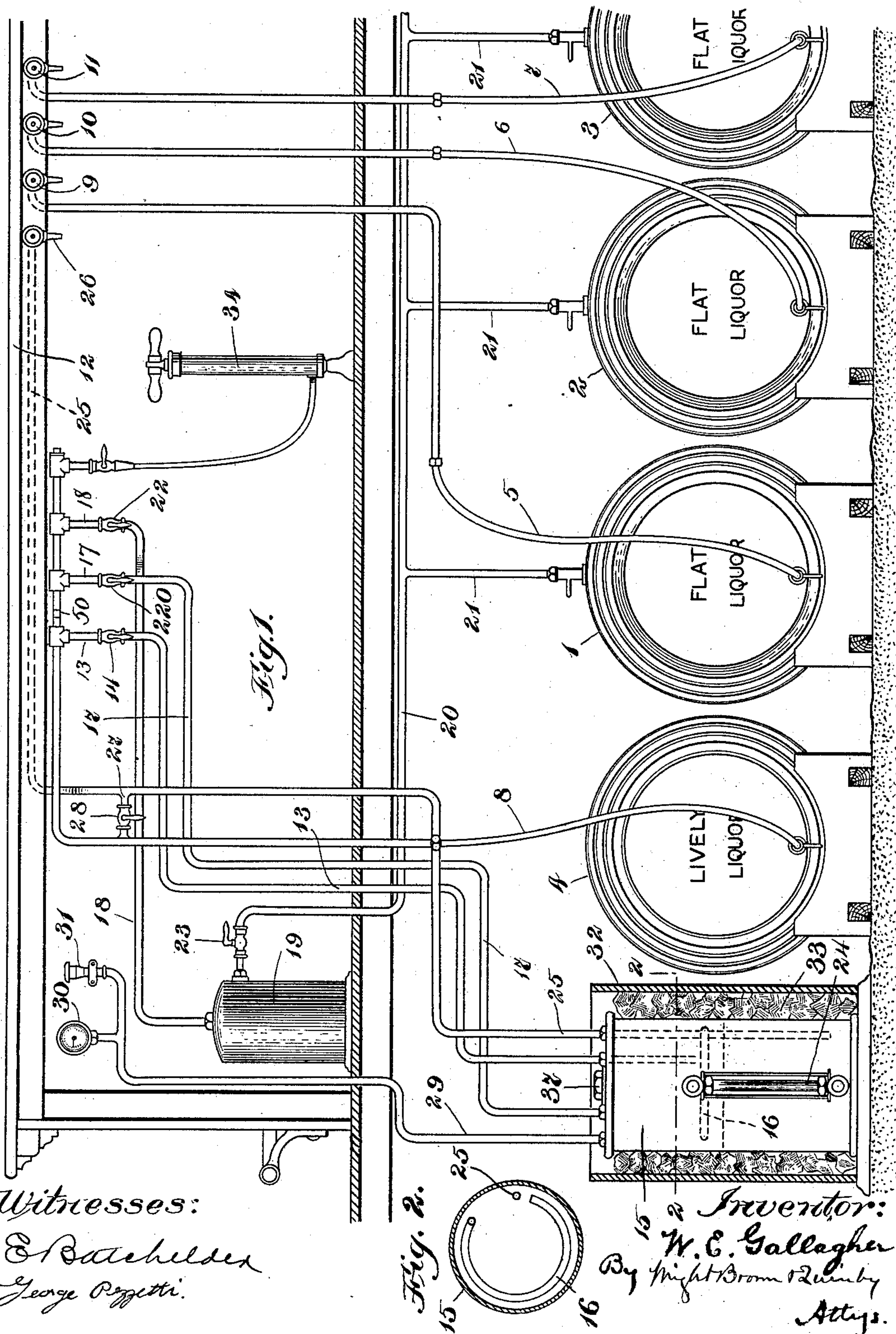
No. 692,438.

Patented Feb. 4, 1902.

W. E. GALLAGHER.
LIQUID DISPENSING APPARATUS.

(Application filed Aug. 17, 1901.)

(No Model.)



Witnesses:

E. Batchelder
George Pizzetti.

Fig. 2.

Inventor:
W. E. Gallagher
By Night Brown & Quincy
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM E. GALLAGHER, OF SOUTH FRAMINGHAM, MASSACHUSETTS.

LIQUID-DISPENSING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 692,438, dated February 4, 1902.

Application filed August 17, 1901. Serial No. 72,367. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. GALLAGHER, of South Framingham, in the county of Middlesex and State of Massachusetts, have
5 invented certain new and useful Improvements in Liquid-Dispensing Apparatus, of which the following is a specification.

This invention has for its object to provide
10 an apparatus for dispensing flat and lively liquors by means of the gas-pressure of the lively liquor, the said pressure being brought to bear upon the surface of the flat liquor, so as to force it to the point where it is to be drawn or dispensed, whereby the necessity
15 for using air-pumps to create an artificial pressure is avoided.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a diagrammatic view of a liquid-dispensing
20 apparatus constructed in accordance with my invention. Fig. 2 represents a horizontal section of the separator.

The same reference characters indicate the same parts in both the figures.

Referring to the drawings, 1, 2, and 3 represent barrels containing flat or still liquors or those which have insufficient aeration or gas-pressure to force them to the point of discharge—such, for instance, as flat ale, lager,
30 and porter—and 4 represents a barrel of lively or aerated liquor, such as lively ale, having considerable gas-pressure. The liquor is drawn from the bottom or lower bungs of these barrels through pipes 5, 6, 7, and 8, and the
35 pipes 5 6 7 from the flat-liquor barrels are shown as leading directly to the dispensing or drawing taps or faucets 9 10 11 behind the bar 12. The pipe 8 from the lively-liquor barrel 4 is continued in a pipe 13, having a stop-
40 cock 14, and discharges into a closed receptacle 15, which I term a "separator," the discharge or outlet end of the pipe 13 being directed horizontally at 16 to avoid the disturbance of sediment in the separator by the discharging force of the liquor. In this receptacle 15 the lively liquor is allowed to separate from its gas, and the gas-pressure is conducted from the top of the separator through
45 a pipe 17 and its continuation 18 to a gas reservoir or receptacle 19, from whence it goes
50 through a pipe 20 and branches 21 21 to the

top bungs of each of the flat-liquor barrels 1 2 3. Thereby I bring the pressure of the lively liquor to bear upon the upper surface of the flat liquor in the several receptacles in
55 place of the ordinary artificial air-pressure and cause the flat liquors to be forced to the taps 9 10 11 by virtue of this gas-pressure. The pipes 18 and 20 contain suitable stop-cocks 22 23. The pipe 17 has a stop-cock 220.
60

The lively liquor accumulating in the separator 15, which latter is provided with a sight-gage 24 to observe the height of the liquor therein, is drawn from the separator through
65 a pipe 25, leading to a tap 26 and having an inlet near the bottom of the separator.

27 is a by-pass pipe connecting the pipe 8 with the pipe 25 and having a stop-cock 28, which upon being opened allows the lively liquor to be drawn directly from the barrel 4
70 through the tap 26.

29 is a pipe connecting with the upper part of the separator 15 and having a pressure-gage 30 and a safety-valve 31.

I cool the lively liquor in the separator 15
75 by inclosing said separator in a box or vessel 32, in which is placed a quantity of ice 33. The flat liquors may be cooled in the usual or any suitable manner, means for which I have not shown.
80

34 is an auxiliary air-pump connected with the pipe 18 to supply pressure to the flat liquors in the absence or exhaustion of the supply of gas-pressure from the lively liquor.

37 is a cap which closes a clean-out opening in the top of the separator 15.
85

The part 50, which is shown between the pipes 13 and 17, is not a conduit, but is a mechanical connection used for strength of construction. There is no passage through the
90 said part 50.

I claim—

1. In liquid-dispensing apparatus, a receptacle for lively liquor, a receptacle for flat liquor, a separator connected with the receptacle for lively liquor, and means to conduct
95 the gas-pressure from said separator to the receptacle for flat liquor.

2. In liquid-dispensing apparatus, a receptacle for lively liquor, a receptacle for flat
100 liquor, a separator connected with the receptacle for lively liquor, means to conduct the

gas-pressure from said separator to the receptacle for flat liquor, and means to cool said separator.

3. In liquid-dispensing apparatus, a receptacle for lively liquor, a receptacle for flat liquor, a separator connected with the receptacle for lively liquor, means to conduct the gas-pressure from said separator to the receptacle for flat liquor, means to draw the
5 liquor from the last-said receptacle, and means to draw the lively liquor from the separator.
10

4. In liquid-dispensing apparatus, a receptacle for lively liquor, a receptacle for flat liquor, a separator, a conduit connecting said
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separator with the lower part of the receptacle for lively liquor, means to conduct the gas-pressure from said separator to the receptacle for flat liquor, means to draw the liquor from the last-said receptacle, a drawing-conduit connected with the lower part of the separator, a by-pass connecting the said two conduits, and a valve controlling said by-pass.
20

In testimony whereof I have affixed my signature in presence of two witnesses.
25

WILLIAM E. GALLAGHER.

Witnesses:

C. F. BROWN,

E. BATCHELDER.