

(No Model.)

E. STAHL.

APPARATUS FOR CHARGING AND DRAWING CARBONATED BEVERAGES.

No. 523,872.

Patented July 31, 1894.

FIG. 2.

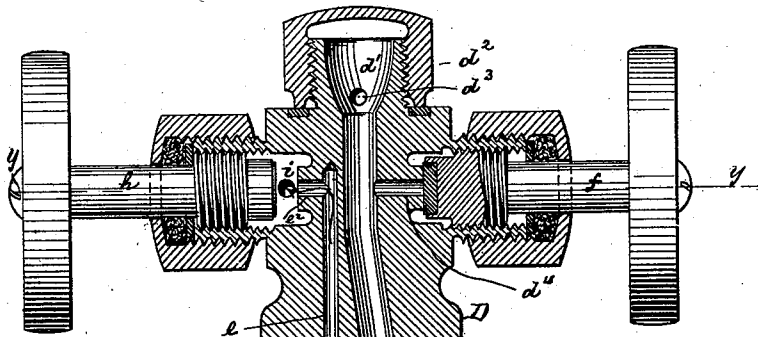


FIG. 3.

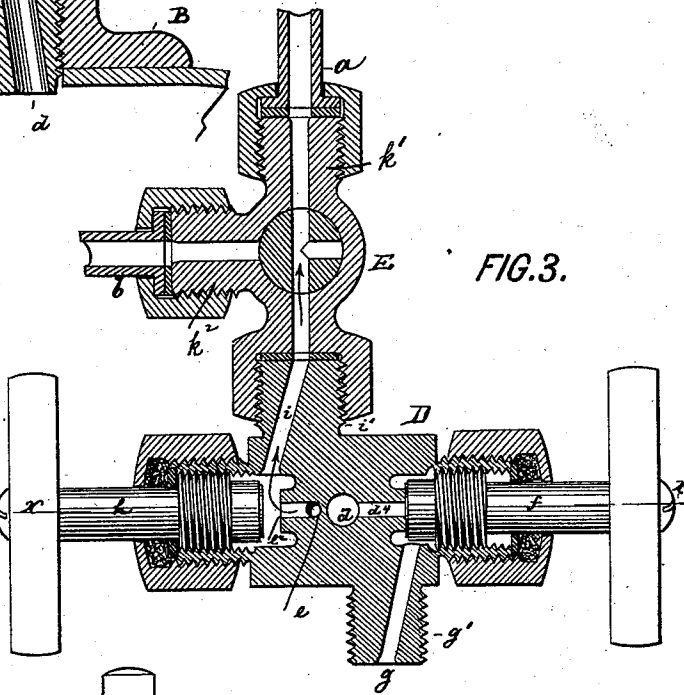
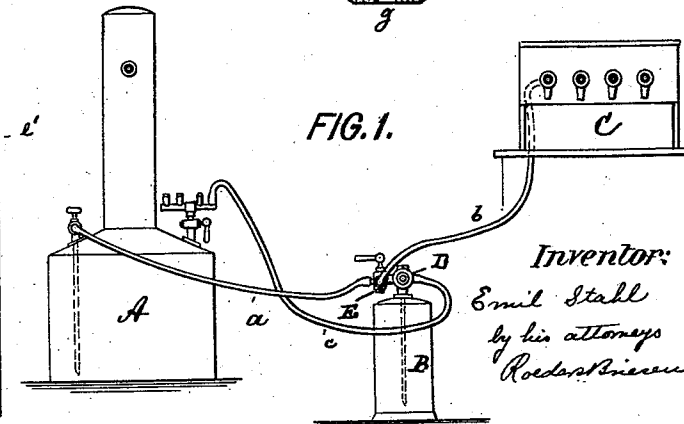


FIG. 1.



Witnesses:
John Becker
Am. Schuly

Inventor:
Emil Stahl
by his attorneys
Rodgers & Ingersoll

UNITED STATES PATENT OFFICE.

EMIL STAHL, OF NEW YORK, N. Y.

APPARATUS FOR CHARGING AND DRAWING CARBONATED BEVERAGES.

SPECIFICATION forming part of Letters Patent No. 523,872, dated July 31, 1894.

Application filed December 5, 1893. Serial No. 492,833. (No model.)

To all whom it may concern:

Be it known that I, EMIL STAHL, of New York city, New York, have invented an Improved Apparatus for Charging and Drawing Carbonated Beverages, of which the following is a specification.

This invention relates to an improved apparatus for charging and drawing carbonated beverages and in which the fountain is connected to the carbonator in such a manner, that the gas required for forcing the beverage from the fountain into the dispensing apparatus is supplied continuously from the carbonator, while heretofore such gas was contained within the body of the fountain.

The principal advantage resulting from my invention is that the water need not be carbonated under a surplus pressure, and as it will not lose any of its absorbed gas, it will retain a uniform pungency and effervescence up to the very last.

In the accompanying drawings Figure 1 represents an elevation of my improved apparatus. Fig. 2 is a longitudinal section of the faucet D, and Fig. 3 a cross section on line *y, y*, Fig. 2.

The letter A represents the carbonator being an apparatus for carbonating water.

B represents the fountain containing the charged water, and C is the dispensing apparatus. *a*, is the water pipe that connects the carbonator to the valve D of the fountain B.

b, is a pipe that connects the fountain to the dispensing apparatus C, by a three way cock E, while *c*, is a gas pipe that connects the carbonator to the valve D of fountain B.

The valve D is of the construction more fully shown in Figs. 2 and 3. The valve-head is threaded at its lower end and engages the tapped neck of vessel B. Through the valve head there extend two passages *d*, and *e*, of which the larger passage *d*, opens at the top into a cup *d'*, that may be closed by a screw cap *d²*. A vent *d³*, in the cup permits the escape of gas, when the screw cap is removed. The passage *d*, is moreover provided with a laterally extending branch *d⁴*, which is controlled by a screw valve *f*, and which is adapted to connect with a lateral passage *g*, extending through a stud *g'*. This stud is connected to the gas pipe *c*. The passage *e*,

is connected at its lower end with a siphon tube *e'*, extending through the fountain B, to a point near the bottom of the latter. At the top, the passage *e*, turns at right angles, the lateral branch *e²*, being controlled by the screw valve *h*, by which it may be connected with a passage *i*, extending through a stud *i'*. To this stud the three-way cock E is attached, that is connected by branch *k'*, with pipe *a*, and by branch *k²*, with pipe *b*.

In use, the cock E is so turned as to cause the carbonator to communicate with the fountain (Fig. 3). The charged water will now flow from the carbonator into the fountain through pipe *a*, cock E, passages *i*, *e²*, *e* and siphon *e'*, until the fountain is filled. During this operation any gas that may be contained within the fountain will flow into the carbonator through pipe *c*.

After the fountain is charged, it is disconnected from the carbonator, shipped to its destination, connected to dispensing apparatus C by pipe *b*, and to a liquid carbonic acid tube by pipe *c*. The water may now be tapped in the usual manner, after the cock E has been turned to connect the fountain with the dispensing apparatus. The necessary pressure for drawing off the water will be supplied from the carbonator or liquid carbonic acid tube through pipe *c*, that delivers the gas through passages *g*, *d⁴*, and *d*, to the surface of the liquid contained within the fountain. As the level of this liquid sinks, the volume of gas contained within the vessel will be proportionately replenished and thus a uniform pressure will at all times be maintained. The cup *d'*, serves to fill salts or flavoring extracts directly into the fountain.

What I claim is—

The combination of a vessel B with a valve D, having passages *d*, *d⁴*, and *e*, *e²*, a cup *d'*, connected to passage *d*, a pair of screw valves *f*, *h*, and a pair of perforated studs *g'*, *i'*, that communicate with passages *d⁴*, *e²*, substantially as specified.

EMIL STAHL.

Witnesses:

F. v. BRIESEN,
WM. SCHULZ.