

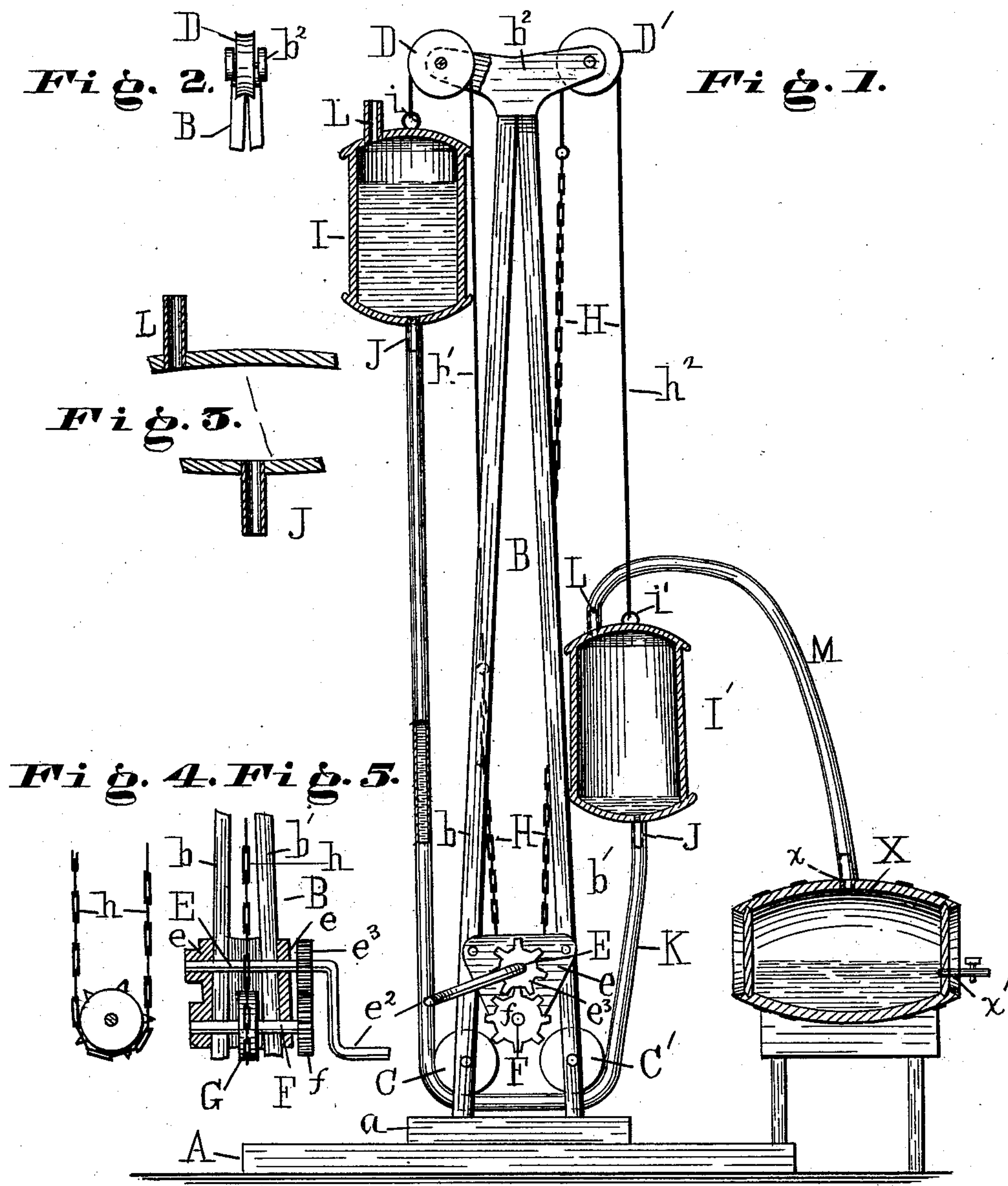
(No Model.)

G. SURRATT & H. HEYMAN.

APPARATUS FOR FORCING BEER FROM KEGS.

No. 349,012.

Patented Sept. 14, 1886.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE SURRATT AND HARRY HEYMAN, OF GAINESVILLE, TEXAS.

APPARATUS FOR FORCING BEER FROM KEGS.

SPECIFICATION forming part of Letters Patent No. 349,012, dated September 14, 1886.

Application filed July 9, 1886. Serial No. 207,589. (No model.)

To all whom it may concern:

Be it known that we, GEORGE SURRATT and HARRY HEYMAN, citizens of the United States, residing at Gainesville, in the county of Cooke and State of Texas, have invented certain new and useful Improvements in Apparatus for Forcing Beer from Kegs; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The invention relates to an improved method of keeping atmospheric pressure upon beer or other aerated liquid contained in a keg or similar receptacle, so as to prevent the same from becoming stale or flat from the evaporating of its dissolved gas.

It consists in improvements in the apparatus by means of which the above-stated result is accomplished; and it further consists in the construction and novel arrangement of parts, hereinafter described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the accompanying drawings, Figure 1 represents a side elevation of the machine, partly in section, with a keg, partly full of beer, attached to show the method. Fig. 2 is an edge view of the top of the standard with its top piece attached. Fig. 3 are sectional detail views of the ends of the cylinders and their tubes. Fig. 4 is a detail sectional view showing the chain-wheel, and Fig. 5 is a detail side view of the chain-wheel detached.

Referring to the accompanying drawings by letter, A designates the bed or base plate of the apparatus, having secured upon it centrally the block *a*, from which rises the standard B, composed of the two legs *b b'*, which converge upward and meet at their tops, and the cross-head *b²*, having arms of equal length on each side of the said legs. Each leg *b b'* is composed of two parallel strips, which have near their lower ends bearings for the journals of the pulleys C C', the said pulleys being of equal size and at corresponding positions between the strips of the legs *b b'*, respectively. The head *b²* is also composed of

two parallel strips, having bearings in their ends for the journals of the pulleys D D', preferably equal in size to the pulleys C C'.

E is a shaft journaled in bearings in the upper parts of plates *e e*, preferably of metal, the said parts being secured to strips or cleats, which connect the legs *b b'*, near the lower ends of the same, above the pulleys C C'. The said shaft is provided with the crank-handle *e²*, and has secured upon it, adjacent to said handle, the gear-wheel *e³*, as shown.

F is a shaft journaled in bearings in the plates *e e*, below those of the shaft E, and *f* is a gear-wheel secured upon said shaft, and meshing with the gear-wheel *e³*.

G is a chain-wheel secured centrally upon the shaft F, between the legs *b b'*.

H is a compound belt or band composed of the chain *h*, which forms its central and lower parts, and which engages with the chain-wheel G. The upper parts or ends, *h' h²*, of said belt H connect with the chain *h*, and pass thence upward and respectively over the pulleys D D', and, descending from the same, are attached to rings *i i'* on the tops of the cylindrical receptacles I I', respectively. The said receptacles are similar, and, preferably, of equal size, and have each secured centrally to its bottom or base plate a depending pipe or nipple, J, the two nipples being connected by a rubber tube, K, which has its ends slipped or detachably secured upon the nipple, and passes below the pulleys C C', moving thereon in the manner of a band. Each receptacle I I' has upon its top a pipe or nipple, L, for the attachment of one end of a rubber tube, M, when the apparatus is being used.

The mode of using the apparatus is as follows: Either one of the receptacles I or I' is moved upward to the top of the standard B by means of the crank-shaft E and compound belt H, the other receptacle descending to the lower part of the standard. The lower receptacle is then connected by the tubing M to a beer-keg, X, one end of said tube being slipped upon the nipple L and the other end secured over the central or stave bung-hole, *x*, of the keg. The upper receptacle is then filled with water through its nipple L, and the water gravitating upon the air in the lower receptacle and connecting-tube, K, causes the air to keep constant pressure upon the con-

tents of the keg, and keeps the dissolved gas from escaping therefrom while being drawn from the head bung-hole x' . The friction between the gear-wheels e'' and f prevents the elevated receptacle from falling from its position, as the said friction is sufficient to overbalance the gravity of said receptacle.

We are aware that the two receptacles, the tubing connecting the same, the tubing connecting one receptacle to the keg to be filled, and proper elevating mechanism have been used, and such we do not claim, broadly; but,

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination of the base-plate A, pro-

vided with the block a , the standard B, rising therefrom and composed of the legs b b' and cross-head b'' , the pulleys C C' and D D', journaled in the standard, the gear-wheels e'' and f , respectively upon the shafts E and F, the chain-wheel G, the compound belt H, the similar receptacles, I I', and the rubber tubes K and M, all constructed and arranged substantially as and for the purpose specified.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE SURRATT.
HARRY HEYMAN.

Witnesses:

N. SIMMONS,
F. L. CLEAVES.