

J. NEUMANN.
Apparatus for Drawing and Preserving Malt Liquors.
No. 222,300. Patented Dec. 2, 1879.

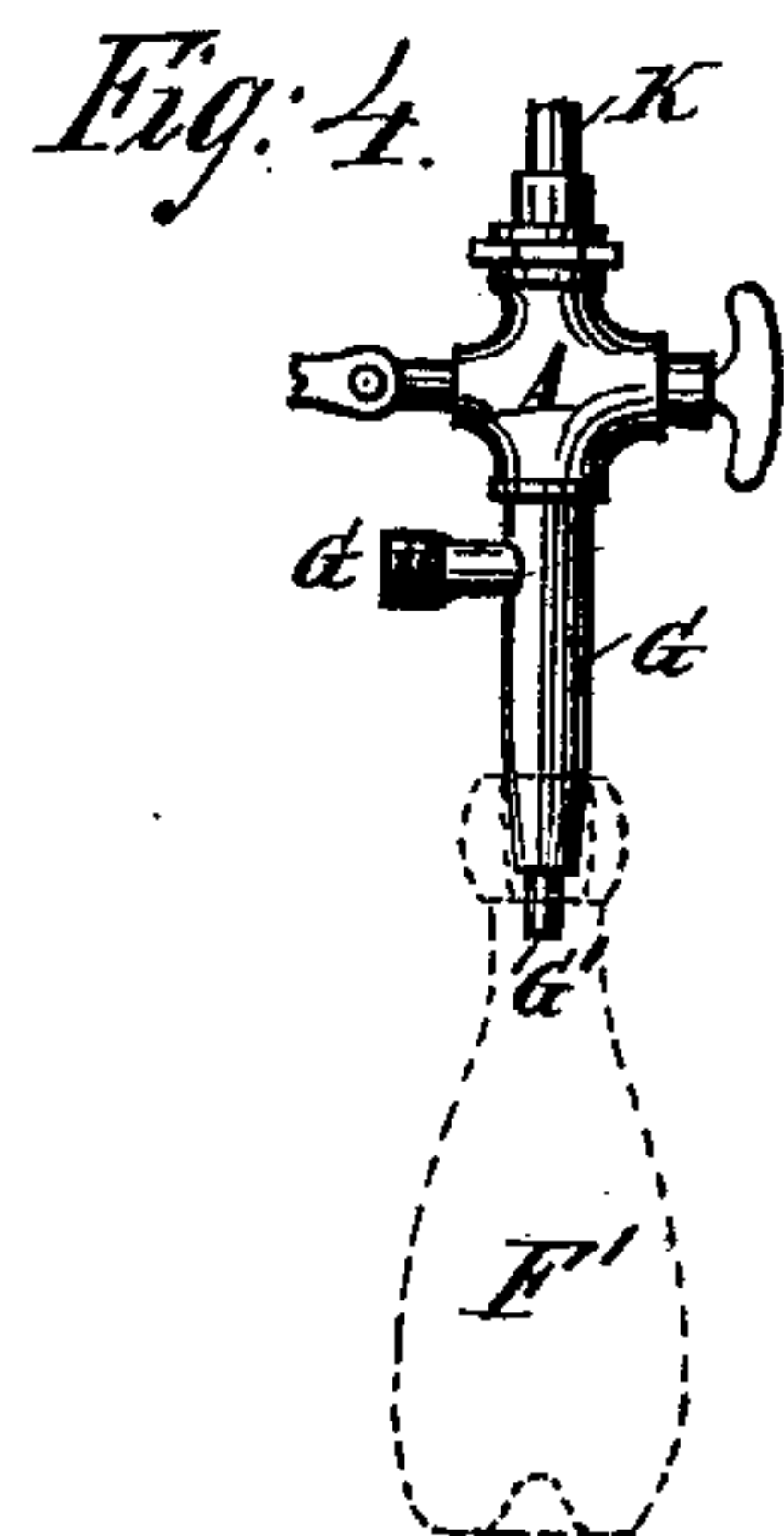
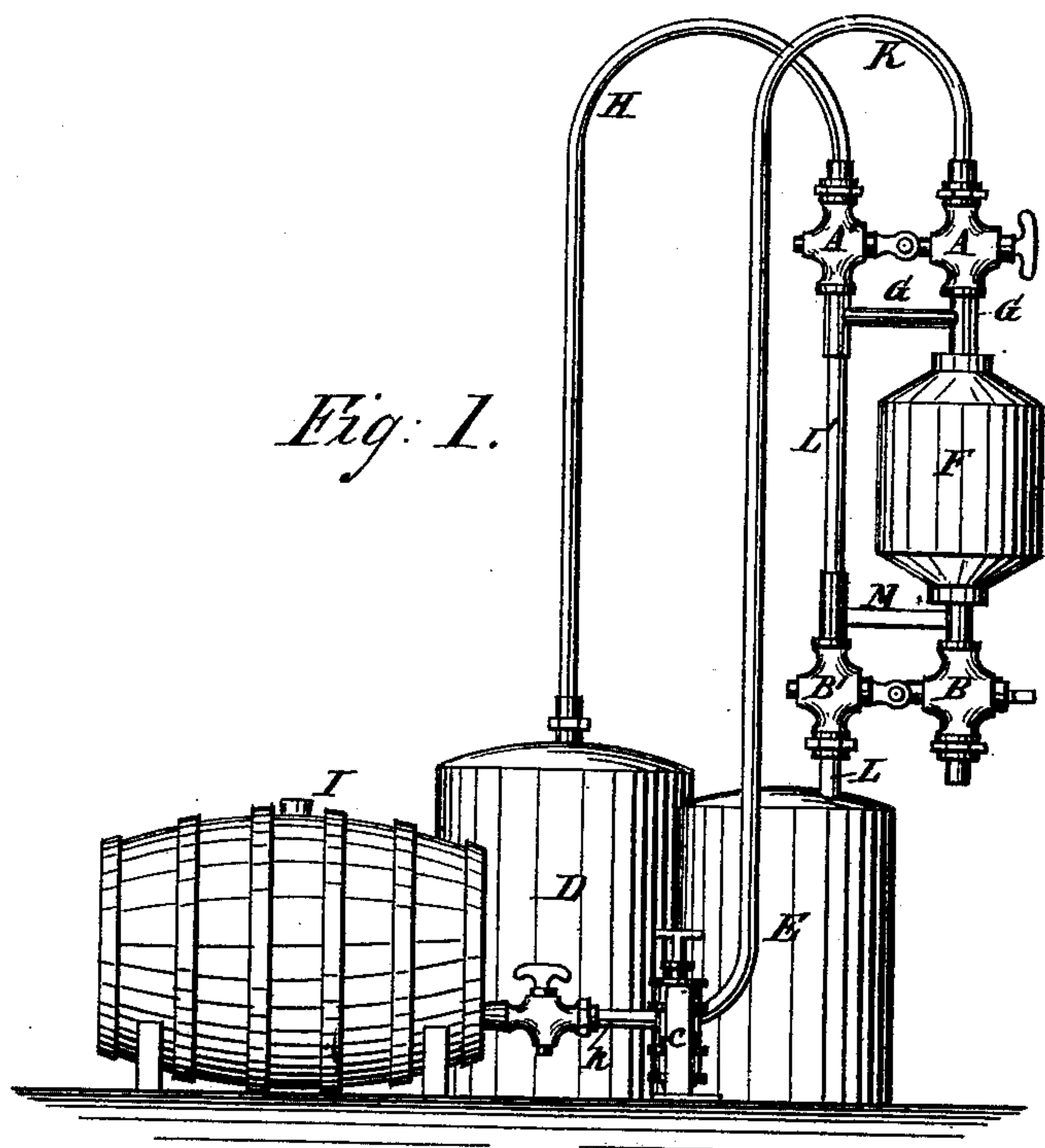
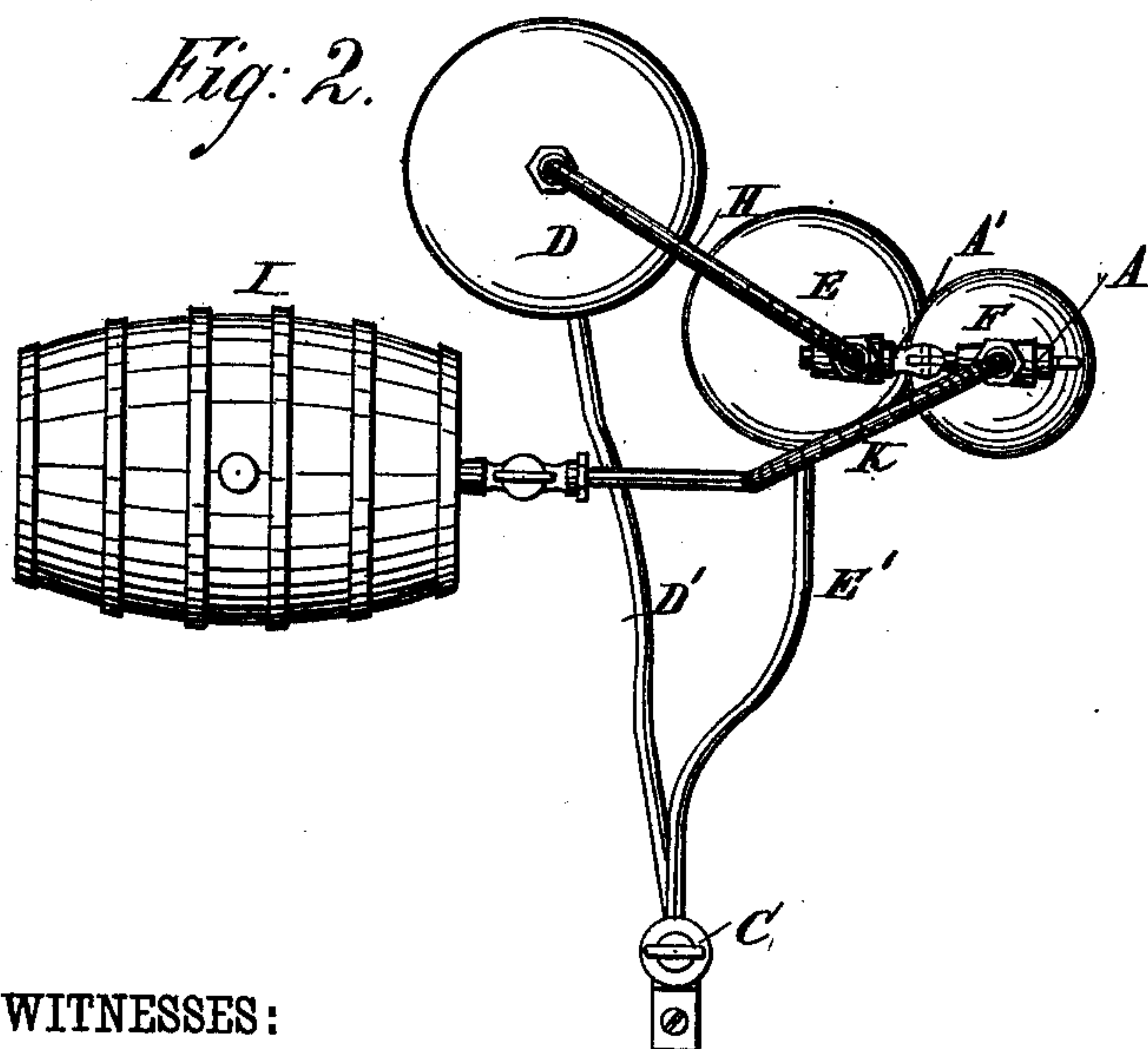
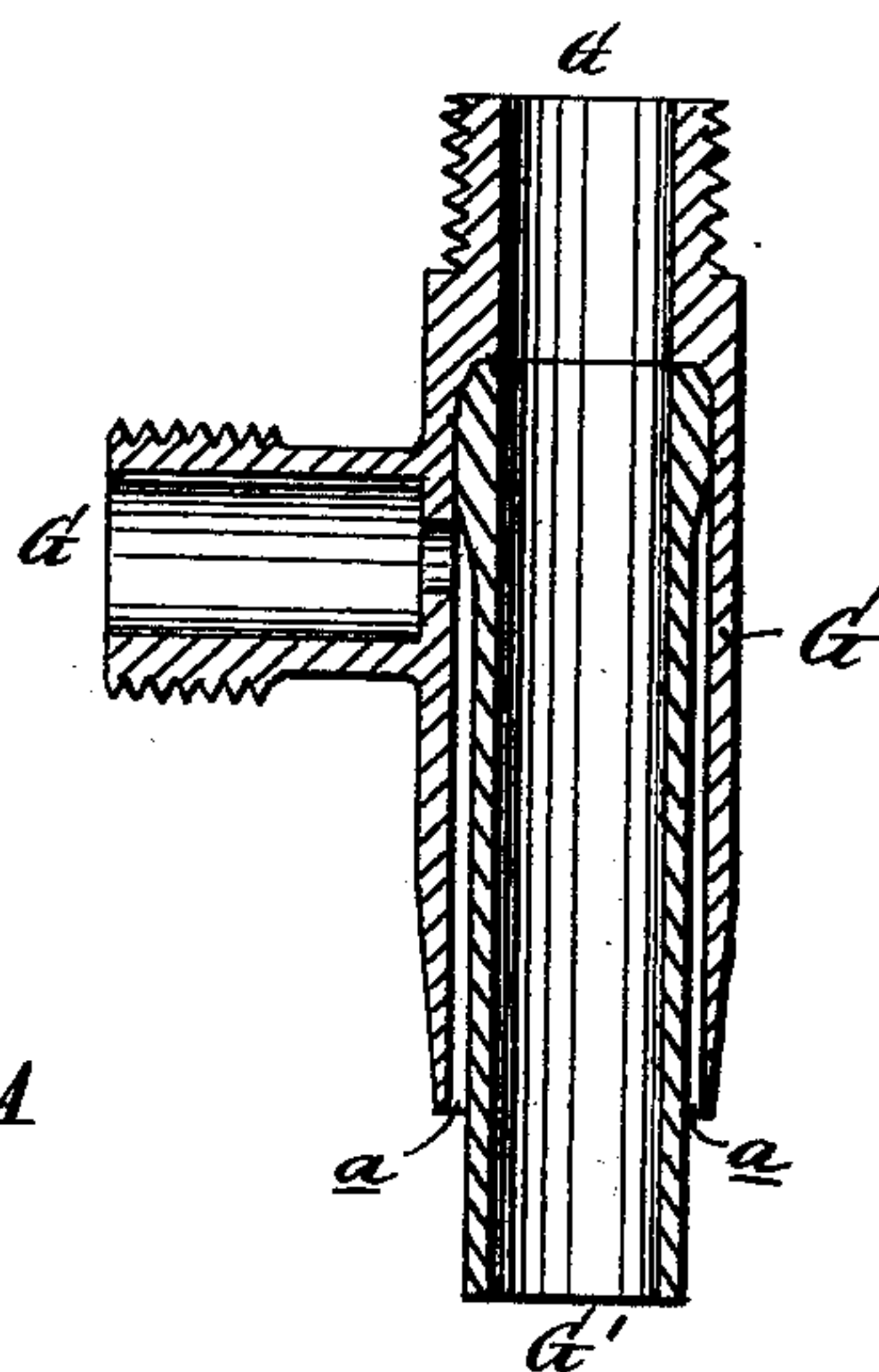


Fig: 3.



WITNESSES:

Achilles Schehl.
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UNITED STATES PATENT OFFICE.

JOHN NEUMANN, OF NEW YORK, N. Y.

IMPROVEMENT IN APPARATUS FOR DRAWING AND PRESERVING MALT LIQUORS.

Specification forming part of Letters Patent No. **222,300**, dated December 2, 1879; application filed September 30, 1879.

To all whom it may concern:

Be it known that I, JOHN NEUMANN, of the city, county, and State of New York, have invented a new and Improved Apparatus for Preserving and Drawing Malt Liquors, of which the following is a specification.

Figure 1 is a vertical side elevation of the device. Fig. 2 is a plan of the same. Fig. 3 is a sectional elevation of one of the pipe combinations. Fig. 4 represents the substitution of a bottle for the stationary receiving-vessel.

Similar letters of reference indicate corresponding parts.

This invention is designed for the purpose of drawing malt and other liquors from a barrel or other vessel without the admission of air or gas thereto, so that the liquor remaining at any time in the barrel shall be prevented from becoming stale.

The invention consists of an air-pump, cylinders, receiving-vessel, and connecting-pipes so arranged that the liquor may be drawn from the barrel into the receiving-vessel by a vacuum, and discharged at will from the receiving-vessel by pressure of air, as herein-after set forth.

In the drawings, A A' B B' represent the cocks; C, the air-pump; D, the vacuum-cylinder; E, the air-pressure cylinder; F F', the receiving-vessels; I, the barrel, and D' E' G G' K L L' the connecting pipes or tubes.

If the cocks A and A', which are coupled together, and the cocks B B', which are coupled together, be closed, the air-pump C may be operated to exhaust air from the cylinder D through pipe D', thereby creating a partial vacuum within the said cylinder D, and to force the air into the cylinder E through the pipe E', thereby creating a pressure of air within said cylinder E. Then if the cocks A A' be opened the air, or most of it, in the receiving-vessel F will escape therefrom through the tube G, passing up through the annular space *a*, between the T-connection of the tube G and the tube G', thence through the cock A'

and the pipe H into the vacuum-cylinder D; and in consequence of this escape of air from the vessel F the liquor from the barrel I, which barrel is to be kept practically air-tight, will flow up the pipe K, through the cock A and tube G', into said receiving-vessel F. Then if the cocks A A' be closed and the cocks B B' be opened, the air under pressure in the cylinder E is forced by the pressure through the pipe L, cock B', pipe L', and tube G into the annular space *a*, and thence into the vessel F, from whence it will force the beer or other liquor therein contained. Thus the vessel F may be alternately filled and emptied and the liquor drawn from the barrel I at will without the admission at any time of air or gas into said barrel I to assist in forcing the liquor from it or to affect its flavor.

The receiving-vessel F may be made of glass or any other suitable material. The rod M serves simply to strengthen the apparatus.

The admission of air from the pressure-cylinder E into the vessel F serves not only to force the beer or other liquor from the latter, but also to aerate it and give it a froth. Were it desirable only to force the liquor from the said vessel F, a perforation made in the top of the said vessel would admit air enough to effect the purpose.

When the liquor in the barrel I is to be bottled, the vessel F may be removed and the bottle F' applied directly to the end of the tube G', so as to embrace also the lower part of the T-connection of the tube G.

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

The within-described apparatus for drawing off liquors, consisting of air-pump C, cylinders D E, receiving-vessels F, and their connecting-pipes and cocks, substantially as herein shown and described.

JOHN NEUMANN.

Witnesses:

I. I. STORER,
C. SEDGWICK.