(No Model.)

H. J. WOLTERS.

RACKING OFF APPARATUS FOR STORAGE VAT DEVICES.

No. 516,323. Patented Mar. 13, 1894.

Fig. 1.

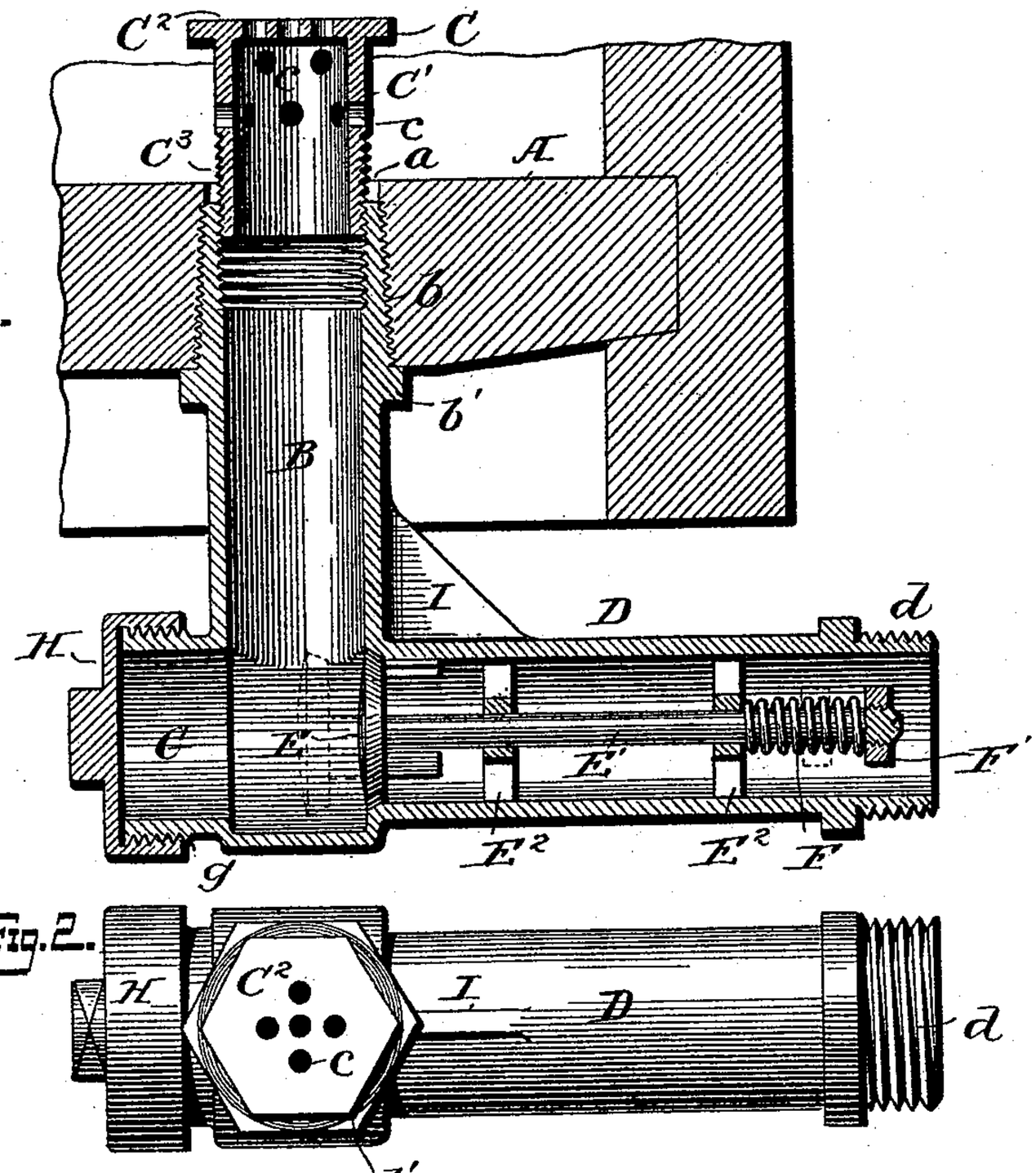


Fig. 2.

Fig. 3.

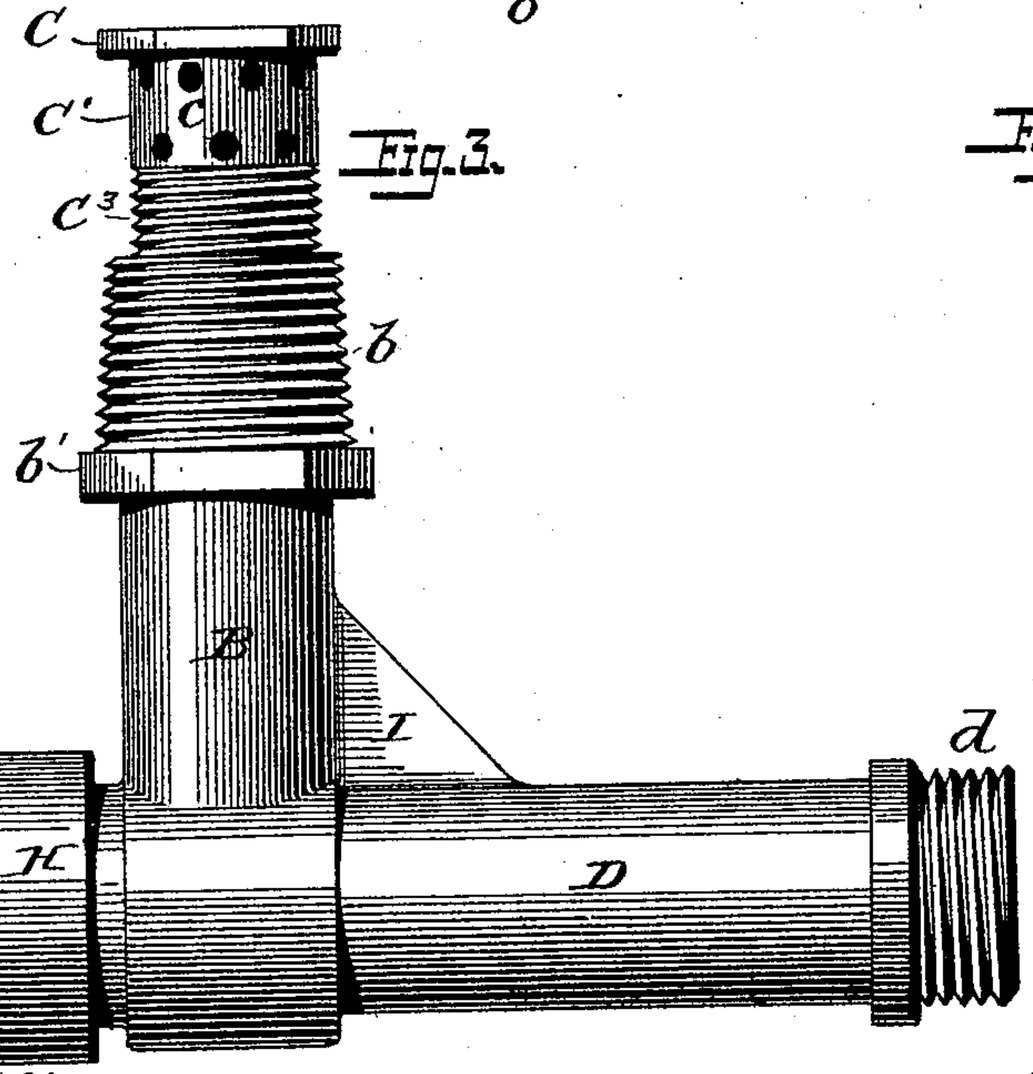
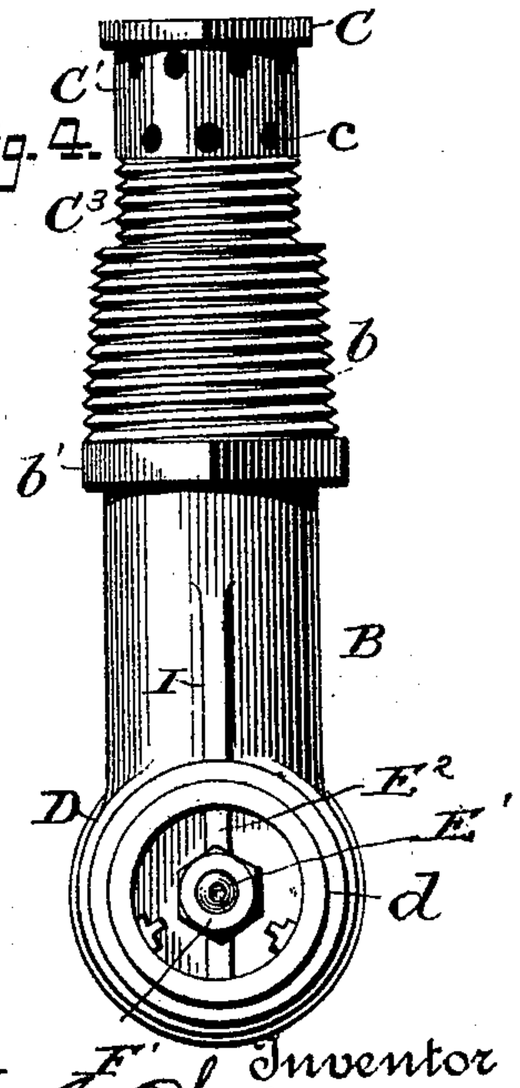


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY JOSEPH WOLTERS, OF YORK, PENNSYLVANIA, ASSIGNOR TO THE ROCHESTER BUNGING APPARATUS COMPANY, OF ROCHESTER, NEW YORK.

RACKING-OFF APPARATUS FOR STORAGE-VAT DEVICES.

SPECIFICATION forming part of Letters Patent No. 516,323, dated March 13, 1894.

Application filed May 4, 1893. Serial No. 472,981. (No model.)

To all whom it may concern:

Be it known that I, HENRY JOSEPH WOLTERS, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Racking-Off Apparatus for Storage-Vat Devices, of which the following is a specification.

My invention relates to a racking-off apparatus for fermenting and storage vats, such as are commonly used in the manufacture of beer, and while my invention is specially designed for this purpose, it is evident that it may be used for other purposes to which it is adapted, and it has for its object to provide a simple, cheap and effective device which may be readily attached to tubs and vats, and by means of which the said tubs and vats may be emptied of their contents and the same apparatus used in washing or cleansing them, and my invention consists in the apparatus embodying the features of construction and arrangement of parts hereinafter set forth.

Referring to the accompanying drawings, Figure 1, is a vertical, sectional view through the apparatus, showing it in position in a tub or vat. Fig. 2, is a top plan view of the apparatus. Fig. 3, is a side view; and Fig. 4, is an end view.

As above intimated, while my invention may be variously applied, I have shown it as applied to use in the manufacture of beer, and it is well known that in such manufacture, it is common to run the beer from the fermenting tubs into the storage casks, vats or tubs or similar vessels, where it is kept for a proper or desirable length of time, and from which it may be drawn into the chip casks, or into other tubs, vats or storage vessels, and my apparatus is adapted to be used in all such constructions, and I will now proceed to describe its use in this connection.

In the drawings, A represents the bottom of any tub, vat or storage vessel, having an opening *a*, and the apparatus is adapted to be secured in this opening, it being provided with a vertical portion B, having an external screw-thread *b*, which is preferably tapered to fit the opening *a*, and with a rib or collar *b'*. Mounted in this vertical portion or arm B is an inlet C and this consists of a cylindrical body C', having a cap C^2, provided with perforations *c*, and having an external screw-threaded lower end C^3, adapted to be adjustably secured in the upper internal screw-threaded portion B. Arranged at right angles to the portion B is a horizontal, tubular portion D, and this is provided with an external screw-thread *d*, by means of which it is adapted to be connected with an ordinary coupling of a hose-pipe or other similar device. Arranged in the interior of this portion, is a valve E, having a stem E', mounted in spiders or bearings E^2, and provided with a spring F, surrounding the stem, and bearing on one of the spiders and adjusted by a screw-threaded nut F', and arranged to normally hold the valve E to its seat and adapted to be compressed, so as to relieve the valve by means of the hose coupling, or other device, in a well-known manner. Projecting on the under side of the vertical portion B, and parallel to the horizontal portion D of the apparatus, is an extension G, provided with an external screw-thread *g*, on which is fitted a cap H. In order to strengthen the parts, and prevent external breakage or derangement, I preferably provide an angular strengthening web I, connecting the vertical and horizontal arms of the apparatus. Such being the construction of the apparatus, its operation will be readily understood, and it will be seen that it can be securely connected to the tub, vat or other retaining device, and in its normal condition, its exits are closed. If, for instance, it is connected to a storage vat, where it is desired to draw off all of the beer or other fluid, the inlet tube is adjusted so that its openings are on a level with the bottom; but if it is to be attached to fermenting vats, or other receptacles, in which there is a sediment formed, as for instance, the yeast of the beer, the inlet can be adjusted so that its openings will be a proper distance above the bottom, and so that only the clear beer will be drawn off.

When it is desired to withdraw the beer or other fluid, the proper hose or other connection is made with the horizontal arm D of the

apparatus, and the beer may be completely withdrawn from the vat; or when there is a sediment, by adjusting the inlet, all the clear beer may be withdrawn, without danger of disturbing the sediment, by properly adjusting the inlet at the desired height, and in this way, I avoid all loss of beer, or mixing of the sediment therewith, which is common in the ordinary practices of removing the beer from the vats.

When it is desired to cleanse the vats, the cap H can be removed, and the washings passed through the vat and discharged into the proper receptacles or gutters.

The whole device is exceedingly simple and well adapted to the purposes for which it is intended, and results in a large saving of beer, as well as in time and labor, and avoids the danger of knocking off the bungs, which is a source of considerable loss, the device being securely fastened to the vat.

What I claim is—

1. A racking off apparatus for fermenting and storage vats, comprising a vertical arm having a passage therein and arranged to fit the opening in the vat, and a horizontal arm having a passage extending therethrough and an extension provided with a cap, and a valve arranged at the junction of said passages and normally closing outward, substantially as described.

2. A racking-off apparatus for fermenting and storage vats, comprising a vertical arm arranged to be secured in the bottom of the vat and provided with an adjustable inlet pipe, and a horizontal portion provided with a spring-actuated valve, and an extension provided with a cap; substantially as described.

3. A racking-off apparatus, for fermenting and storage vats, comprising a vertical arm having an external, tapered screw-thread and collar, an inlet adjustably fitting the vertical portion, provided with openings, a horizontal portion having an external screw-thread, a spring-actuated valve mounted in said horizontal portion, an extension in line with said horizontal portion provided with a cap, and a web connecting the vertical and horizontal portions, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY JOSEPH WOLTERS.

Witnesses:
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JACOB E. WEAVER.