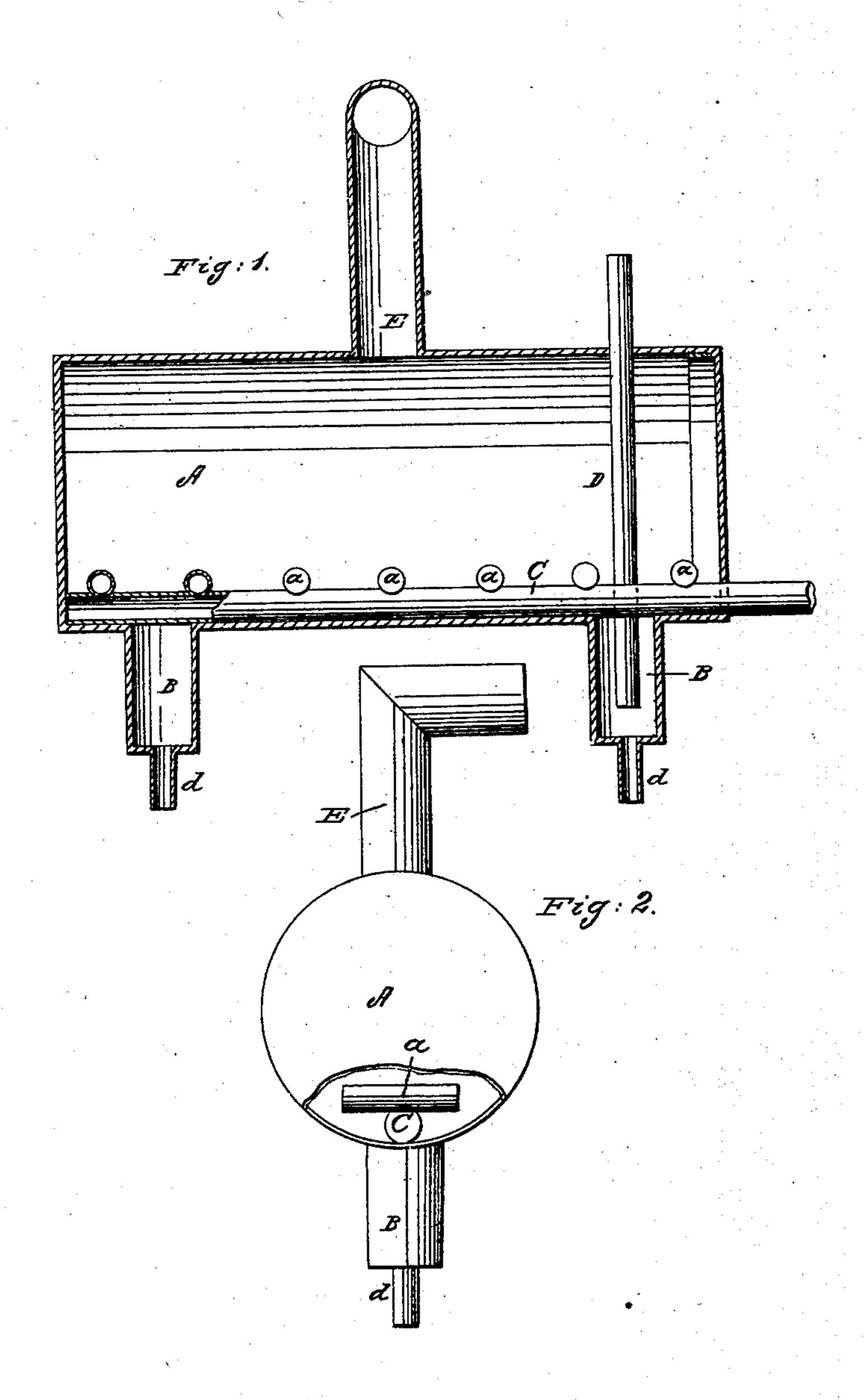
S. GIBBONS.

Still for Refining and Distilling Oils.

No. 68,974.

Patented Sept. 17, 1867.



Witnesses.
Why.

UNITED STATES PATENT OFFICE.

SAMUEL GIBBONS, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN STILLS FOR REFINING AND DISTILLING OILS.

Specification forming part of Letters Patent No. 68,974, dated September 17, 1867.

To all whom it may concern:

Be it known that I, Samuel Gibbons, of Binghamton, in the county of Broome, and in the State of New York, have invented certain new and useful Improvements in Still for Refining and Distilling Oils; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, making part of this specification, A represents a retort or still, made cylindrical or any other suitable shape, and placed in a horizontal position. Depending from and connecting with this still, at its bottom, are two chambers, B B, to which chambers are connected waste-pipes d d. Running into this still from one end, and near its bottom, is a pipe, C, which is provided with a series of short pipes, a, which run crosswise of it and of the cylinder, said short pipes opening into the pipe C, and being provided with a number of small perforations. Drepresents a pipe, which passes down through the still, and opens into one of the chambers B. This pipe is for the purpose of conveying the oil into the still. E represents a pipe which communicates with the still at its top, and is for the purpose of conveying away the vaporized oil.

In using this machine the oil is introduced to the still through the pipe D, and, rising in the chambers B B, flows over the bottom of the still. Heat is applied to the under side

of the still and the chambers B B, and steam, or superheated steam, is introduced through the pipe C, and jets through the perforations of the cross-pipes a a. The steam, being forced through the oil in small jets, causes great agitation in it, and assists greatly in vaporizing it, while it prevents the burning or tarring of the oil from the heat of the still.

The chambers B B answer the purpose of receiving any earthy matter which may be introduced into the still, or the water which may be derived from the condensed steam.

The chambers are cleansed through the waste-pipes d d.

What I claim as new, and desire to secure by Letters Patent, is—

1. The still or retort A, in combination with the chambers B B, constructed and arranged in the manner and for the purpose set forth.

2. The use of the pipe C, provided with a series of cross-pipes or their equivalents, in combination with the still A, as and for the purpose set forth.

3. The arrangement of the pipe D, chambers B B, and still A with the steam-pipe, constructed and used as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of June, 1867.

SAMUEL GIBBONS.

Witnesses:

J. M. Johnson, Geo. E. Palmer.