

(No Model.)

S. MASON, Jr.

APPARATUS FOR PURIFYING AND REFINING ALCOHOLIC LIQUORS
AND OTHER LIQUIDS.

No. 482,018.

Patented Sept. 6, 1892.

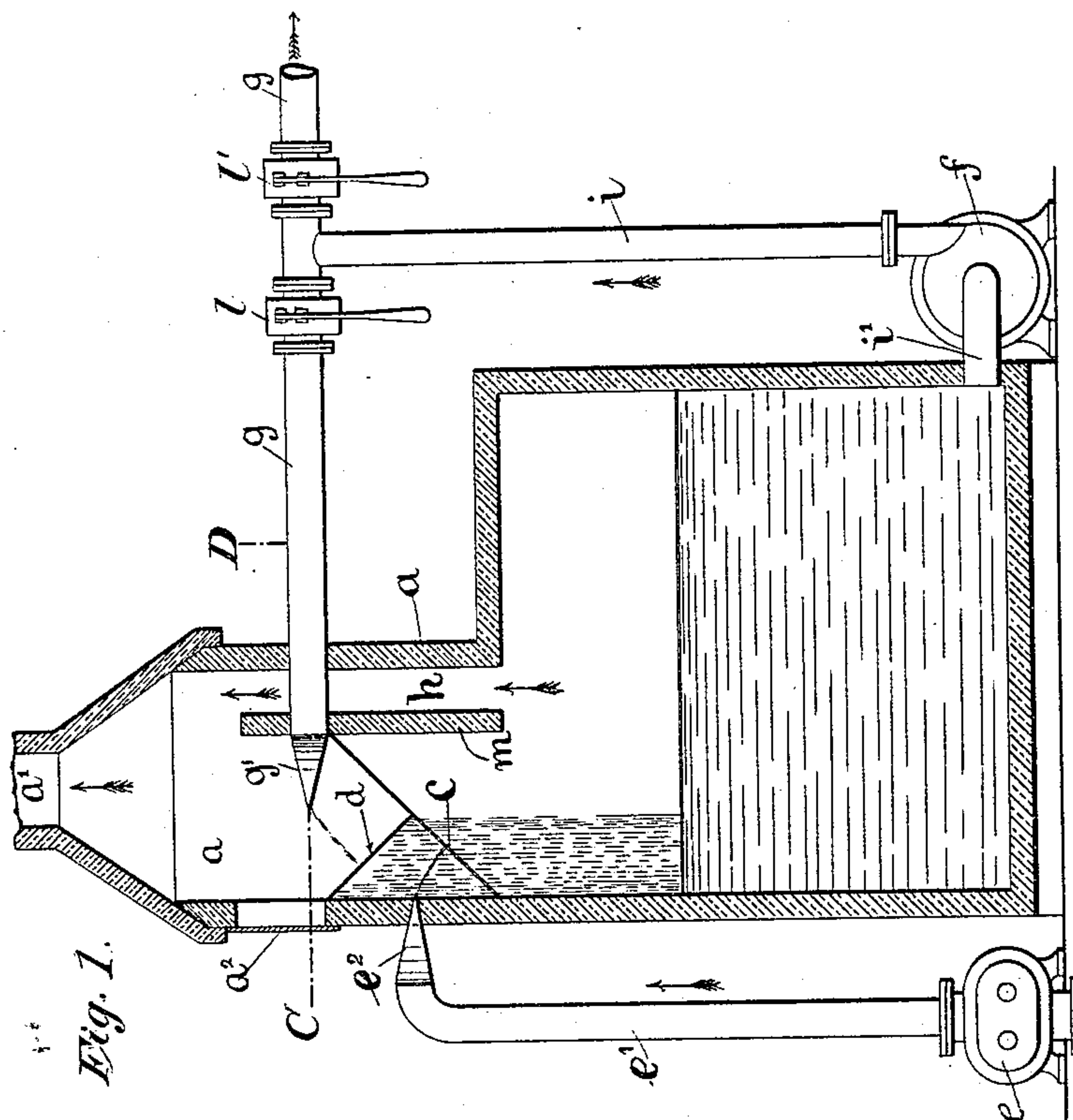


Fig. 1.

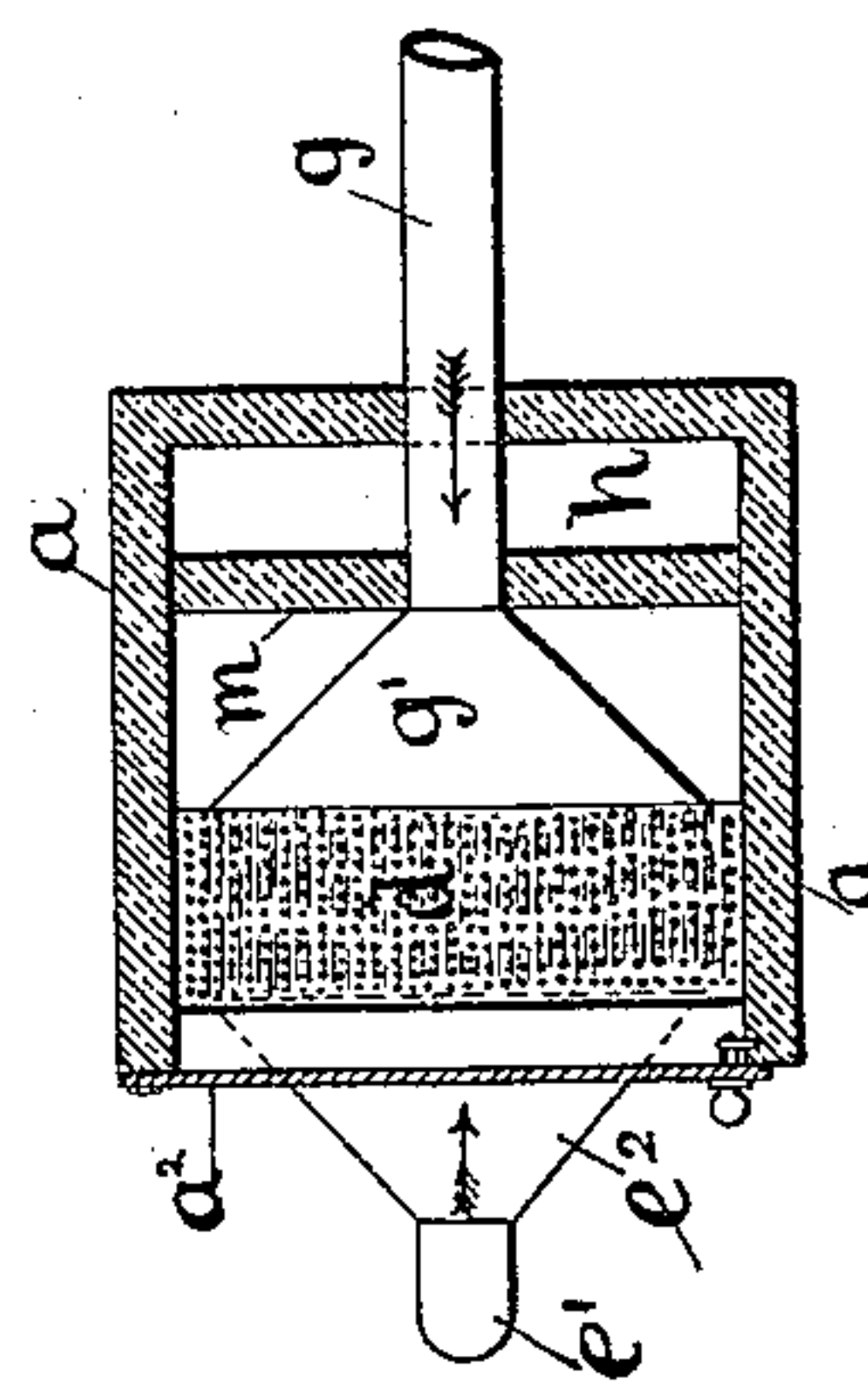


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL MASON, JR., OF MANCHESTER, ENGLAND.

APPARATUS FOR PURIFYING AND REFINING ALCOHOLIC LIQUORS AND OTHER LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 482,018, dated September 6, 1892.

Application filed September 15, 1891. Serial No. 405,807. (No model.) Patented in England April 25, 1891, No. 7,140.

To all whom it may concern:

Be it known that I, SAMUEL MASON, Jr., a subject of the Queen of Great Britain, and a resident of Manchester, in the county of Lancaster, England, have invented new and useful Improvements in Apparatus for Purifying and Refining Alcoholic Liquors and other Fluids, (for which I have obtained a patent in Great Britain, No. 7,140, bearing date April 25, 1891,) of which the following is a specification.

This invention relates to improvements in apparatus for purifying and refining alcoholic liquors, such as whisky, brandy, gin, wine, or other fluids, such as olive-oil and the like, and has for its object to provide means whereby the same is performed in a much simpler, more effective, and continuous manner by gravitating or projecting in an open vessel the said fluid against a blast of air in film form, and thus expel the fusil-oil or other impurities therefrom until it has attained the desired flavor of ripeness, mellow-ness, or purity, while the foul air or gas is permitted to escape to the atmosphere continuously. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section, and Fig. 2 a sectional plan on line C D, of my improved purifying or refining apparatus.

Similar letters refer to similar parts throughout the several views.

In carrying out my invention, and referring to the figures generally, I use a treating-vessel *a* of suitable material, the lower end of which receives the fluid to be treated and the upper end *a'* being open to the atmosphere. Inside the treating-vessel *a*, above the fluid level, I employ two inclined positioned finely-perforated plates *c* *d*, respectively, in connection with air and fluid pipes *e'* and *g*, positioned above the same, having each a flat-shaped mouth *e²* and *g'*. The pipe *e'* leads to an air-pump *e* and the pipe *g* by means of a branch pipe *i* to a fluid-circulating pump *f*, having a suction-pipe *i'* in communication with the fluid-space of the treating-vessel *a*. When the pumps *e* and *f* are in operation, the air is projected in film form against the per-

forated plate *c* and the fluid against the perforated plate *d*, which breaks the same into a fine spray, the fluid from the plate *d* falling through the air-film projected below the same, through the perforated plate *c* in connection therewith, and into the lower part of the treating-vessel *a*. The foul gases or other foreign matter released by this operation are permitted to escape in a continuous manner through the passage *h*, formed by the partition *m* and through the outlet *a'* at the top of the vessel *a*. The inlet-pipe *g* I provide with two valves *l* *l'*, whereby on opening the valve *l* and closing the valve *l'* the circulation of the fluid through the air-spray issuing from the perforated plate *c* can be maintained and on operating the valves *l* *l'* vice versa the fluid after having been sufficiently treated removed from the treating-vessel *a* to any desired place.

To facilitate the examining of the interior of the apparatus or cleaning of the plates *c* *d*, I form the top or outlet *a'* thereof removable and with a door *a²* therein or below the same.

What I do claim as my invention, and desire to secure by Letters Patent, is—

In an apparatus for purifying and refining alcoholic liquors and other fluids, a treating-vessel *a*, open at its upper end *a'* and having internally above the fluid level a vertical passage *h* and inclined positioned perforated plates *c* and *d*, onto which latter are respectively projected in film form air and the fluid to be treated from flat-mouthed pipes *e'* *e²* and *g* *g'*, positioned, respectively, above the plates *c* and *d*, the pipe *e'* leading to an air-pump *e* and the pipe *g* by means of branch pipe *i* to a fluid-circulating pump *f*, in communication with the treating-vessel *a*, the plates *c* and *d* being adapted to thoroughly break up and mix the fluid to be treated with the air and the passage *m* and open end *a'* to permit the foul gases or other foreign matter released to escape from the purified fluid, substantially as set forth.

SAMUEL MASON, JR.

Witnesses:

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