

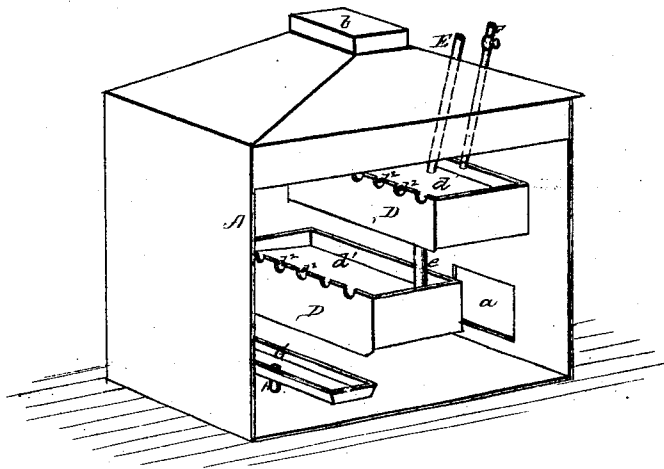
*J. P. Greeley,*

*Ageing Liquors.*

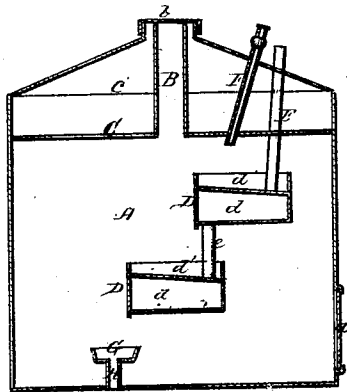
*No. 109611.*

*Patented Nov. 29. 1870.*

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

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*John P. Greeley*  
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# United States Patent Office.

JOHN P. GREELEY, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 109,611, dated November 29, 1870; antedated November 17, 1870.

## IMPROVEMENT IN APPARATUS FOR AGING WHISKY AND OTHER SPIRITS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN P. GREELEY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Apparatus for Toning Whisky and other Liquids, of which the following is a specification.

Figure 1 is a perspective view of my invention with the front removed, and

Figure 2, a vertical central section of the same.

The object of this invention is to remove the raw taste of new whisky or other liquors, and give the same age and tone in a few hours by cooking it in a close chamber; and

It consists mainly of such a chamber provided with a descending series of vessels, each of which is divided into two compartments, viz., a tank for hot water or steam in the lower part, and a shallow trough in the upper part, the liquor running over each of said vessels in succession.

The upper part of said chamber is divided into another chamber, which may contain ice or other refrigerating material.

The details of construction and method of operation will be more fully described hereafter.

In the drawing—

A represents an air-tight chamber or apartment, which has a sliding door, *a*, in one side, and a flue, B, through the top, which flue is covered by the cap *b*.

The upper part of chamber A is divided by the horizontal partition C into a smaller chamber, *c*.

D D represent a series of vessels within chamber A, descending diagonally from the upper to the lower part of the same.

Said vessels are of any suitable number, and are divided into two parts, *d d'*, the former of which constitutes a tank or water-receptacle, while the latter constitutes a shallow trough, in one side of which are the orifices *d''*.

E represents a tube leading from the outside of chamber A to the tank *d* of the upper vessel D, which is connected to the next below by tube *e*.

F represents a tube running through chamber *c*, and terminating just above the upper vessel D.

G is a narrow trough under the lower vessel D, in which is the tube H, which passes through the bottom of the chamber.

### Operation.

The tanks *d* are filled with hot water or steam by means of pipes E *e*, and the liquor to be treated is admitted through pipe F to the trough *d'* of the up-

per vessel D, which it fills, and overflows through orifices *d''* to the trough of the next lower vessel, and so on until it reaches the trough G and flows out through tube H.

This process separates all the gases from the liquor in the form of vapor, which may be allowed to pass out through tube or flue B by removing cap *b*, or may be condensed upon the bottom of chamber *c*, the same being filled with ice or other refrigerating material, and returned to the bottom of the chamber.

Whenever a draught through the apparatus is necessary, the door *a* is opened and cap *b* removed.

The method of heating or cooking liquor by hot water obviates all danger of burning the same.

The objections to methods for aging liquor heretofore used are: the scorching of the liquor by hot air, the great shrinkage by evaporation, or the injurious effect of chemicals introduced.

My method has none of these objections, and liquor treated by it has all the qualities of liquor three years old and upward.

The poisonous gases and injurious volatile products are eliminated without injury to the liquor and with but slight loss of proof, while the expense of the treatment is nothing compared with that connected with other methods, and especially the usual one of keeping the liquor in casks in a room heated to a high degree.

Having thus fully described my invention,

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

1. The vessels D, consisting of the tanks *d* and troughs *d'*, as and for the purpose set forth.

2. The vessels D, in combination with tube F, trough G, and tubes E *e*, substantially as described.

3. The chamber A, in combination with the flue B and door *a*, as shown.

4. The combination of the chamber A and refrigerating-chamber C.

5. The combination of chamber A, refrigerating-chamber C, vessels D, pipes E *e* F, flue B, and door *a*, arranged and operating substantially as described.

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

JOHN P. GREELEY.

Witnesses.

BENJ'N GREELEY,  
CHARLES F. BROWN.

\* Assignor to himself & Benjamin Greeley of South Dedham, Ma