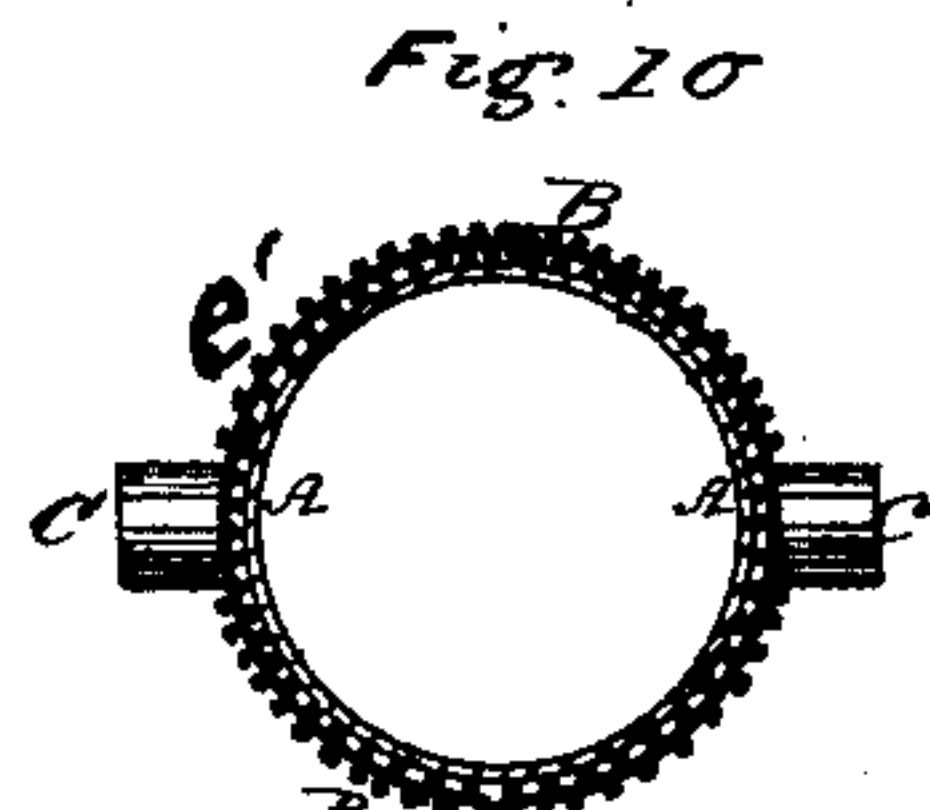
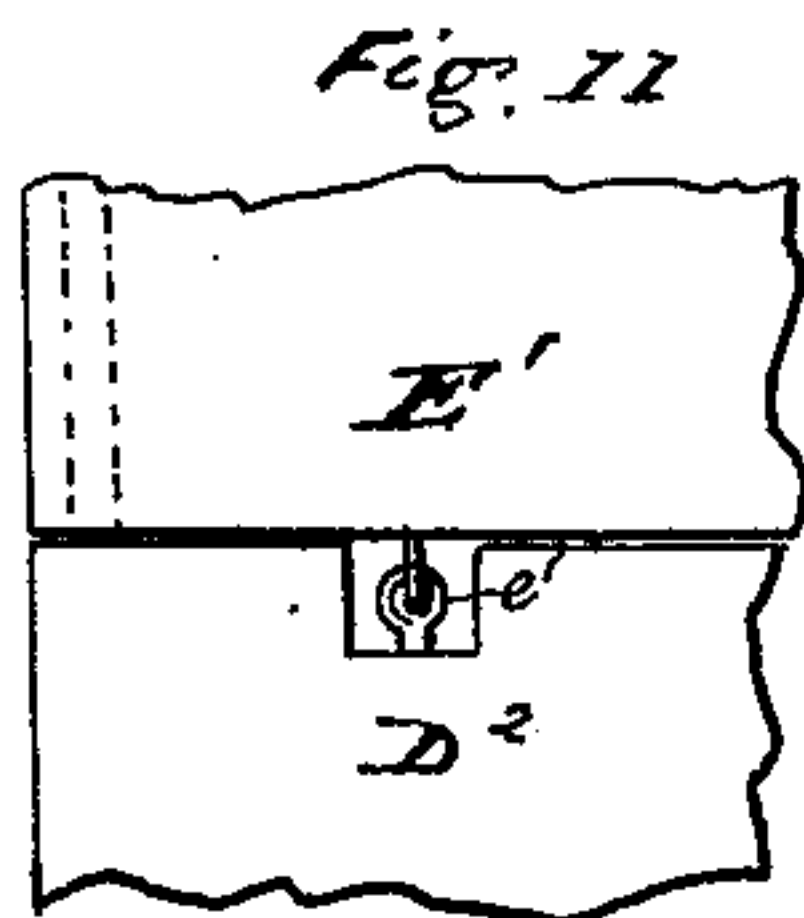
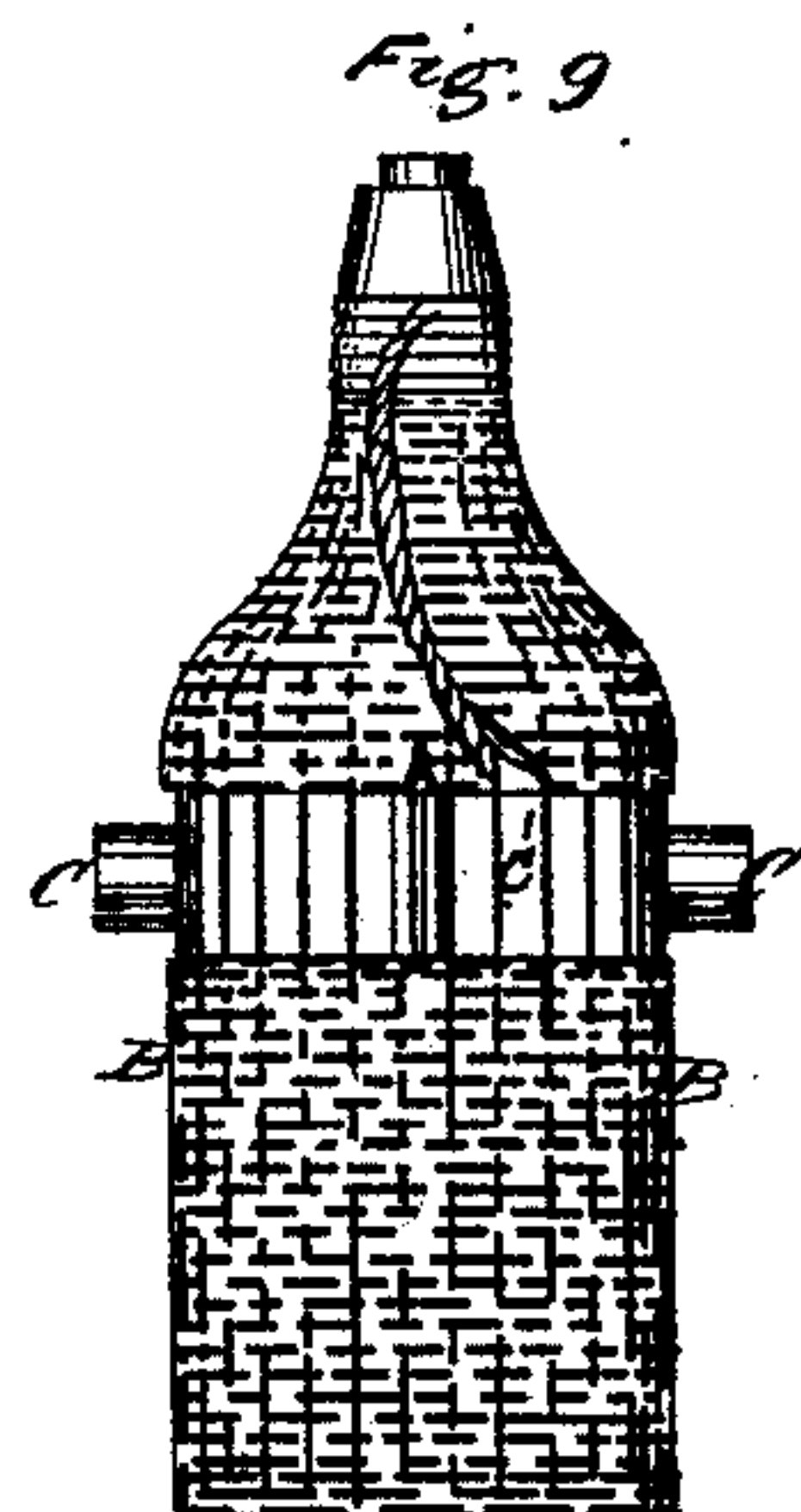
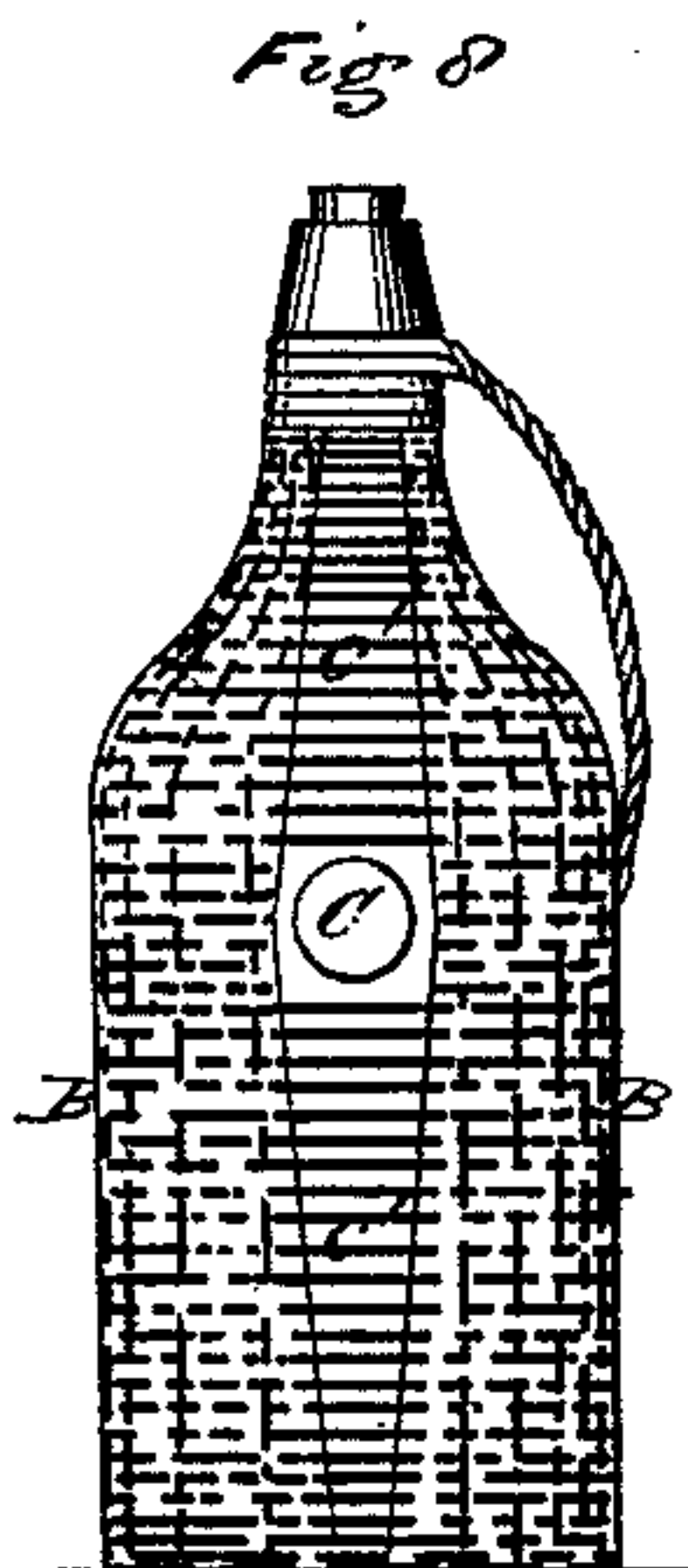
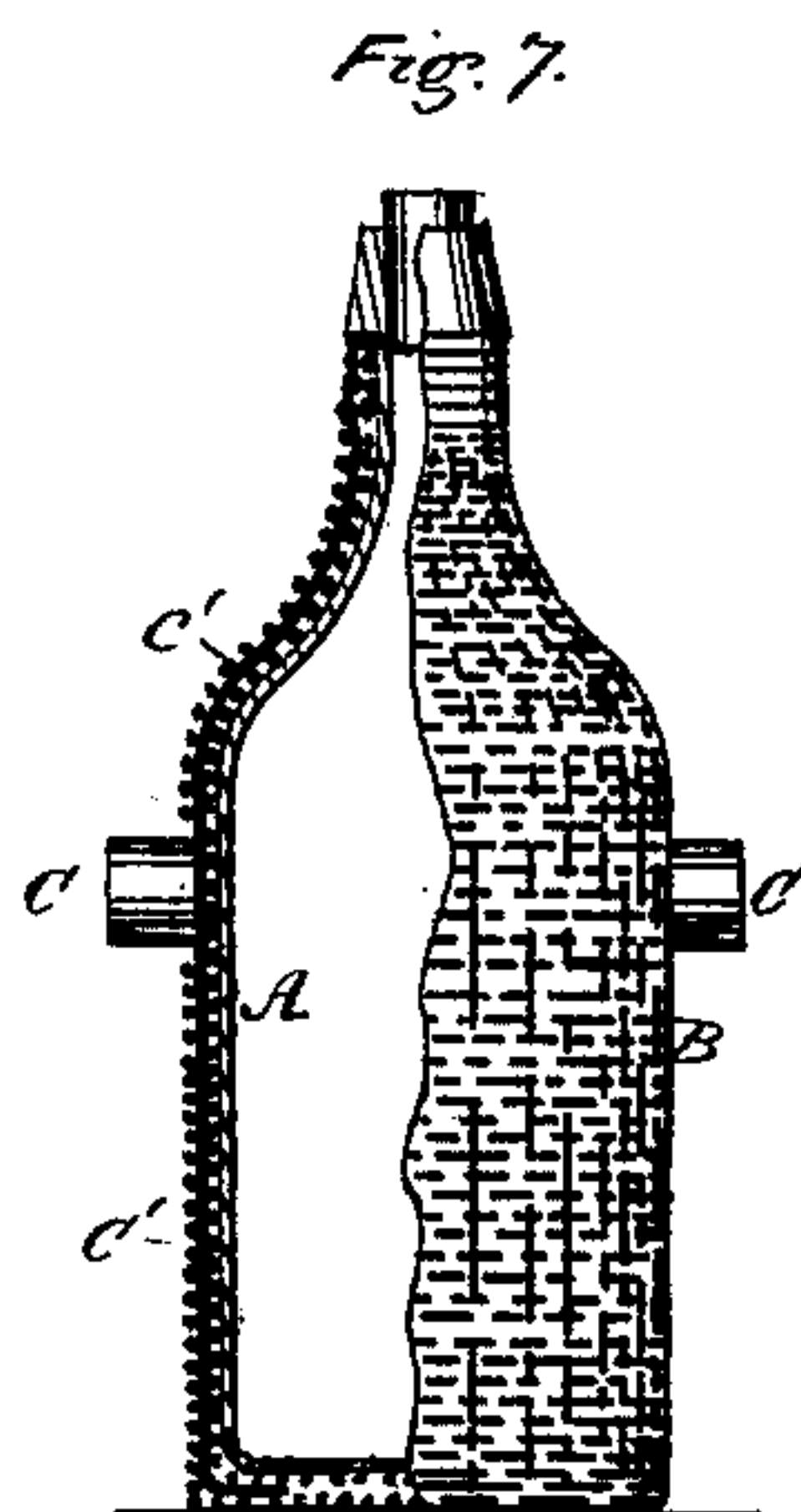
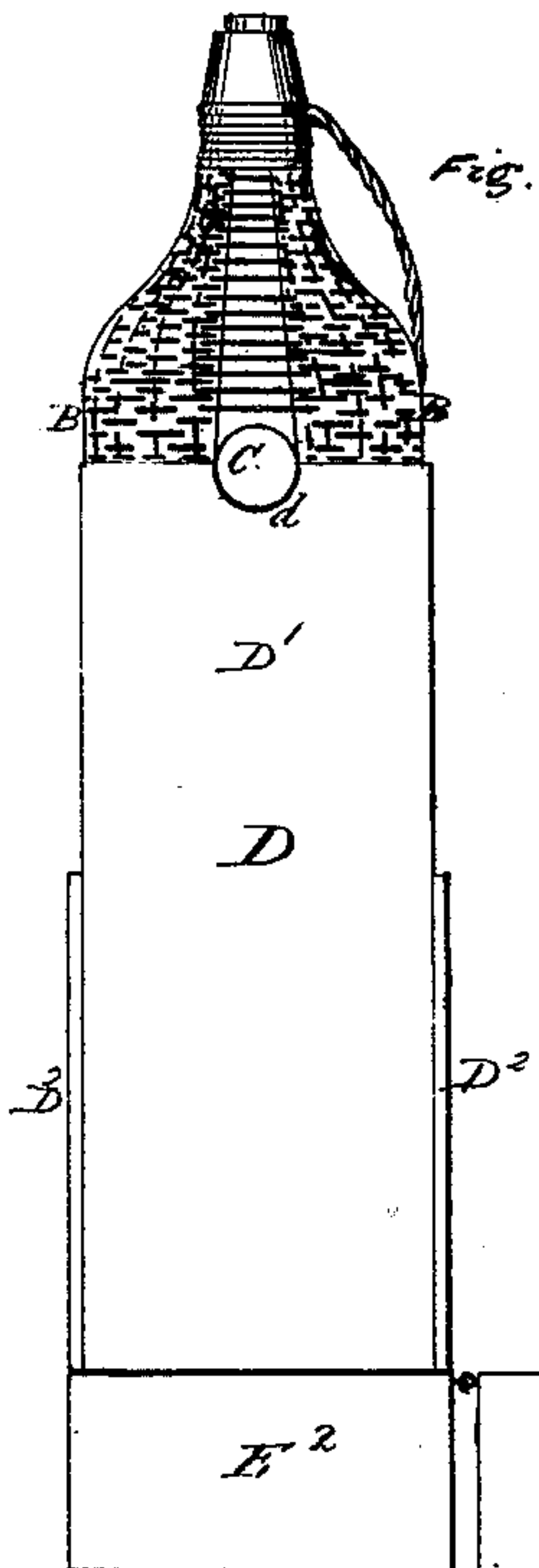
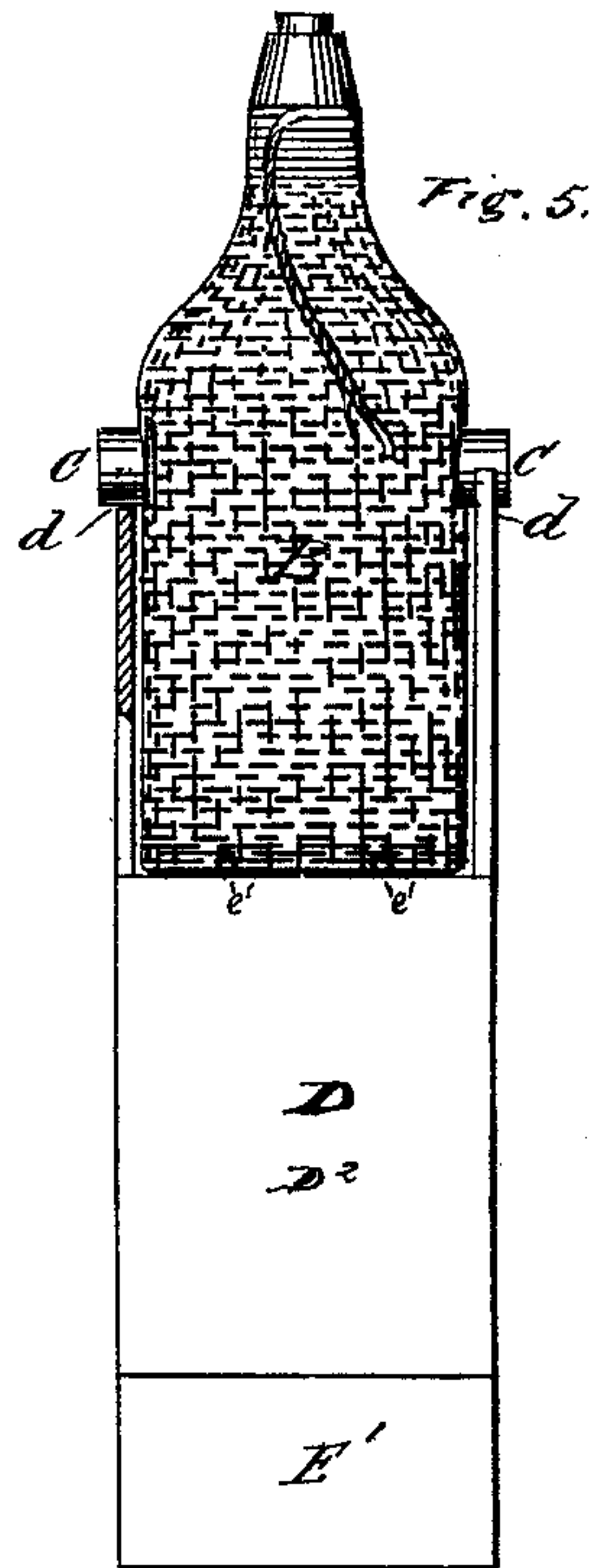
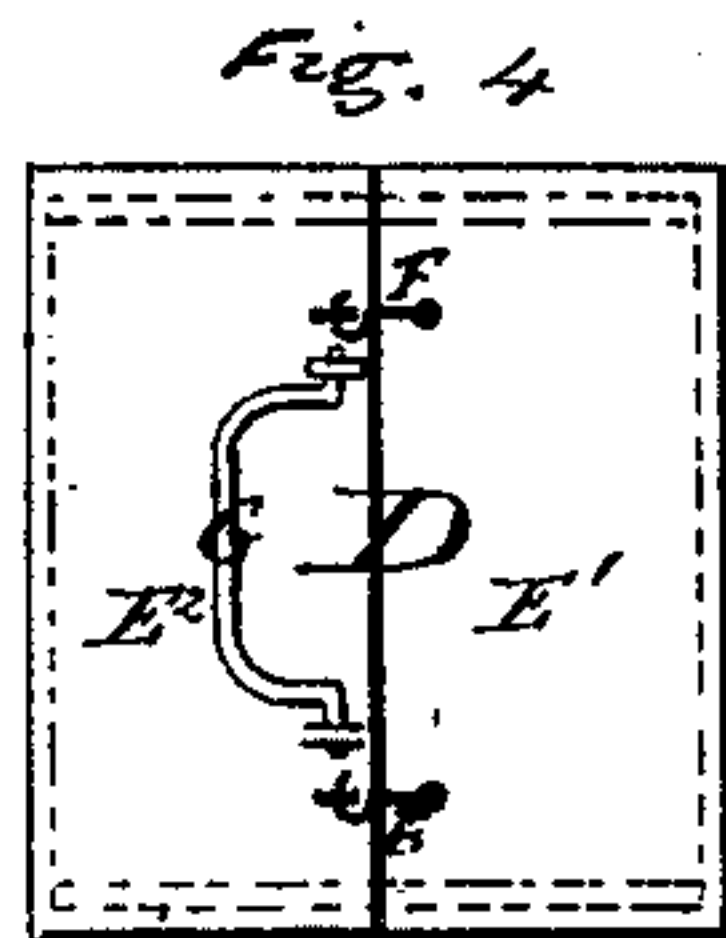
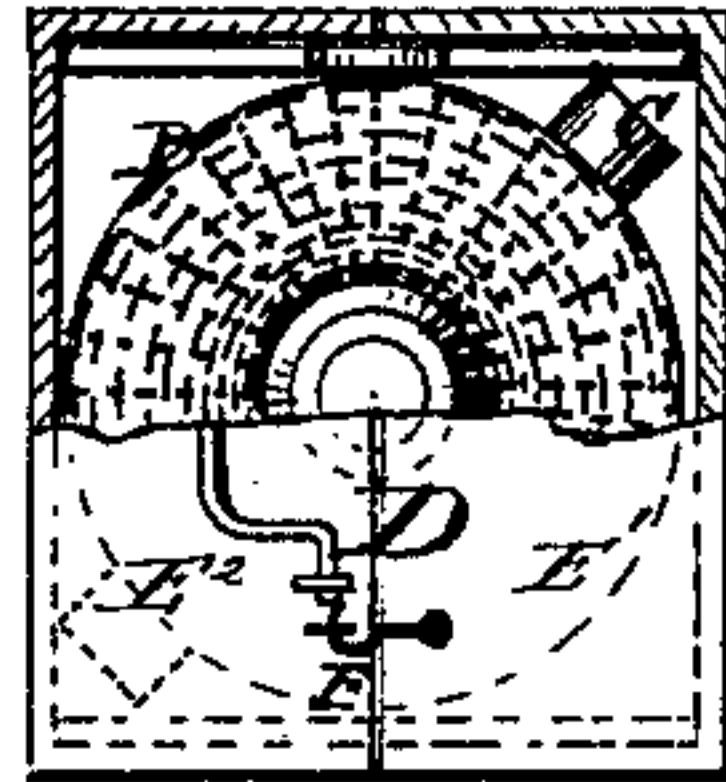
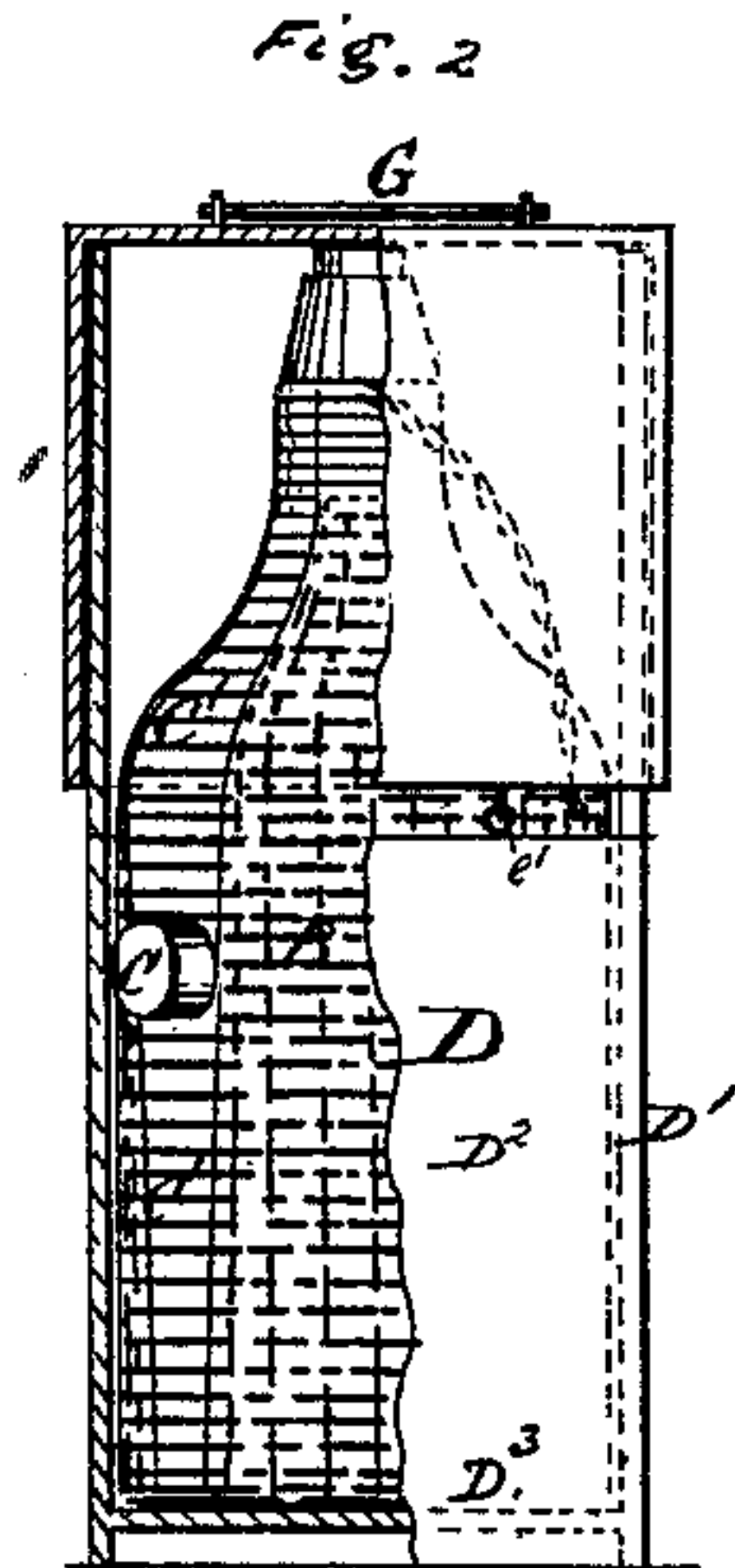
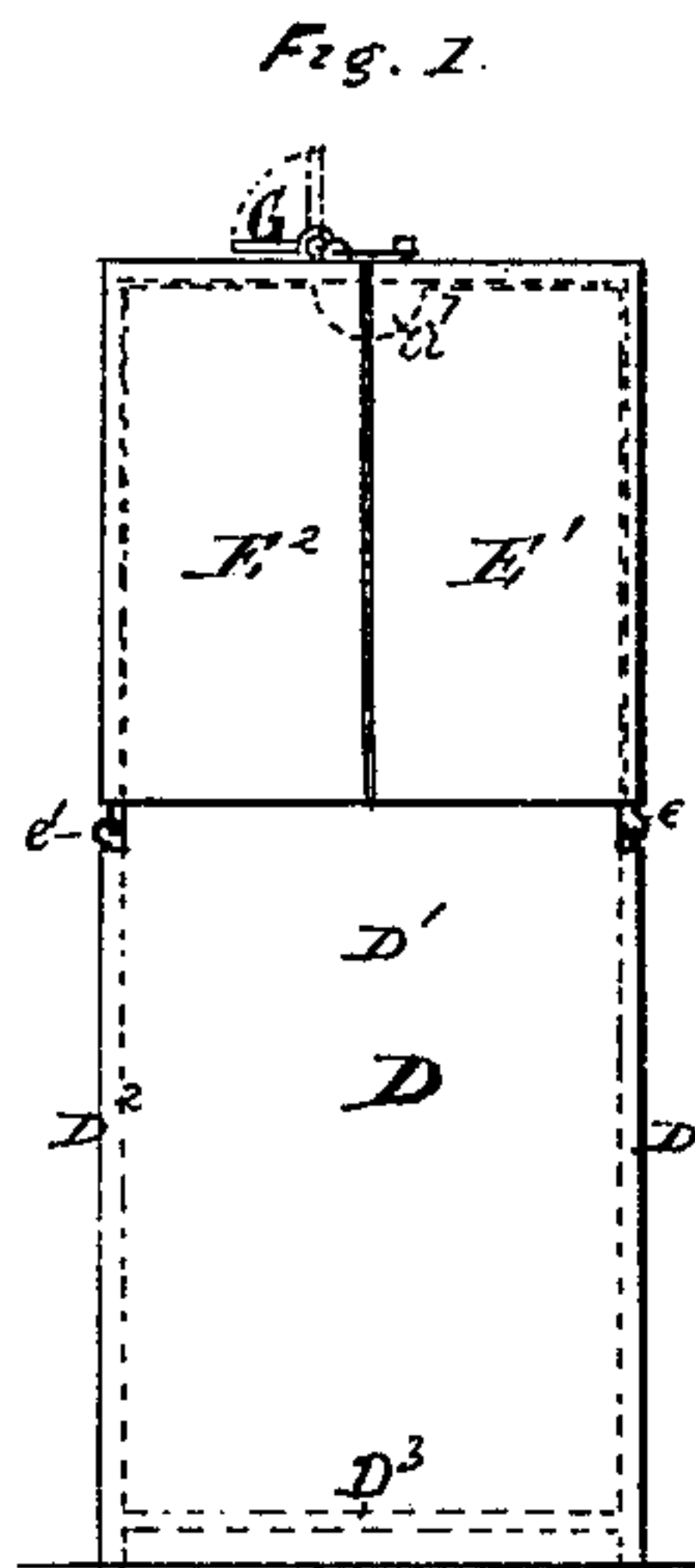


J. F. REINHARD.
 Receptacle for Liquors, Acids and Oils.

No. 204,609.

Patented June 4, 1878.



Witnesses

W. C. Brooks

H. A. Johnstone.

Inventor

John F. Reinhard
 by his attorney,
 Thomas D. Stetson

UNITED STATES PATENT OFFICE.

JOHN F. REINHARD, OF NEW YORK, N. Y.

IMPROVEMENT IN RECEPTACLES FOR LIQUORS, ACIDS, AND OILS.

Specification forming part of Letters Patent No. 204,609, dated June 4, 1878; application filed May 9, 1878.

To all whom it may concern:

Be it known that I, JOHN F. REINHARD, of New York city, in the State of New York, have invented certain new and useful Improvements relating to Receptacles for Liquors, Acids, Oils, &c., of which the following is a specification:

I have devised a construction of what are known as "demijohns," by which each is provided with two trunnions, in addition to the ordinary basket-work or analogous soft and protective covering.

I have also devised a style of packing-case adapted to receive the demijohn, with its trunnions, and to hold it securely, which case may, when properly adjusted, serve as a support for the demijohn in the act of emptying out the whole or a part of its contents.

The exterior of the case is adapted to allow of close packing and of piling one upon another. Portions of the case are made removable, one part when moved serving as a stand for the main body of the case, and another part serving as a stand or support for the measures or other vessels into which the liquid may be drawn.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification.

Figure 1 is a side view of the casing. Fig. 2 is a front view, and Fig. 3 a plan view, of the same, partly in section, showing the within-contained demijohn. Fig. 4 is a complete plan of the casing. Figs. 5 and 6 represent a front and side view of the casing open, with the demijohn mounted in position for use. Fig. 7 represents a front view of the demijohn, partly in section, with my improved trunnions applied thereto. Fig. 8 is a side view of the same. Fig. 9 represents a front view, and Fig. 10 a sectional plan, of a demijohn with trunnions applied according to a slight modification of my invention.

A modification to which I attach some importance is shown on a larger scale in Fig. 11. The hooks and eyes *e e'* are let into their respective parts—that is to say, one is let in on one side, while the other is allowed to project. It makes the joints closer when the parts are

hitched together; but in other respects the device works the same.

Similar letters of reference indicate like parts in all the figures.

A is the body of the demijohn, formed of black glass, or other suitable material adapted to withstand the acids or other liquids which it is to contain. It may be in the ordinary and long-approved form.

B is the ordinary woven covering. I will describe it as made of ordinary rattan; but it will be understood that it may be wicker-work of other woody material, or it may be wire, or even hemp.

C C are cylindrical trunnions, fixed on extended bases C' C', which latter are incorporated with the covering B in the course of the manufacture or afterward. I have in my experiments made the parts C and C' of thin metal, and have extended the parts C' up and down nearly or quite the whole length of the demijohn.

The upper end of the metallic plate C is bent around one of the horizontal strands of the wicker-work, and the plate is interwoven to some extent with the wicker-work, passing on its outside, where the trunnion is attached to the plate, and thence extends downwardly beneath the wicker-work, and its lower end is bent around one of the horizontal strands of the wicker-work.

I will designate the main body of the casing, when necessary, by the single letter D, and its several parts, when desired, by different letters. The two high sides are marked D¹ D¹, and the two short sides D² D². The upper edges of the long sides D¹ are notched or provided with semicircular cavities *d*.

When it is desired to support the demijohn in condition for emptying, it is mounted with its trunnions resting in the notches *d d*. In this position its bottom will swing clear of the short sides D², and it may be tilted with the obvious effect, righting itself immediately when liberated.

To pack the demijohn for storage or transportation, it is lifted until the trunnions C are clear of the notches *d*, and turned one-eighth ($\frac{1}{8}$) of a revolution horizontally, and then lowered into the casing. In this condition the top of its cork *a* comes even with or a lit-

tle below the tops of the high sides D^1 . Two detachable parts of the casing, $E^1 E^2$, are now applied. The part E^1 is engaged by hooks e' , with eyes formed in or attached to the upper edge of the adjacent short side D^2 , and the part E^2 is correspondingly attached. The two parts $E^1 E^2$ being now firmly engaged together at the top by hooks F on the one part engaging in eyes on the other, the package is complete. In storing one upon another, the handle G , attached on the part E^2 of the lowermost, is accommodated by an elevation of the bottom piece D^3 , forming a sufficient recess in the bottom of the case above.

When, in unpacking, the parts $E^1 E^2$ are disengaged from each other, and from the main part D of the packing-case, and the demijohn is mounted in the casing, its trunnions resting in the cavities d , as before described, the parts E^1 and E^2 should be engaged together, as shown in Figs. 5 and 6, and made to serve as stands or supports, the part E^2 serving to support the casing D with its superposed demijohn, and the part E^1 to support any measure or other vessel (not represented) which it is found desirable to use.

Many modifications may be made in the details. The thickness of the casing D and of the added parts $E^1 E^2$ may be increased or somewhat diminished without involving serious difficulty. Metal may be employed for the parts $D E^1 E^2$, or for important portions of them.

The proportions of the demijohn with regard to length and diameter may be varied within wide limits, corresponding variations being made in the incasing parts. So, too, the sizes of the trunnions may be varied; but I prefer about the diameter represented.

I esteem it important that the trunnions C or their broad supporting parts C' do not rest

directly against the fragile material A of the demijohn. It is essential that a layer of the elastic material B intervene between; but the parts C' may be made to serve by holding them with any suitable means on the exterior of the basket-work B .

Figs. 9 and 10 show a modification in the construction which may be sometimes adopted. Here the parts C' are united together to form a hoop, tightly embracing the basket-work B , or, rather, the upright parts thereof, the horizontal parts being omitted for a space equal to the width of the hoop C' . I prefer the construction represented in the other figures.

I can, if preferred, incase the exterior of the basket-work with a coating of papier-maché, or any other material. Sheet metal makes a very good coating where the expense will be warranted. I can in such case omit the wicker-work, or substitute in place thereof a soft lining of felt, paper, or other material.

I claim as my invention—

1. The removable plates C' , each having a trunnion, C , attached to it near its middle, in combination with the wicker-work B , to which the plates are attached, and the body A , as herein specified.

2. In combination with a trunnioned demijohn, $A B C$, the compound packing-case $D E^1 E^2$, the parts $E^1 E^2$ being adapted to serve the double functions of coverings for the packing-case when packed, and of supports for the packing-case and for other vessels when unpacked, all substantially as herein specified.

In testimony whereof I have hereunto set my name in presence of two subscribing witnesses.

JOHN F. REINHARD.

Witnesses:

FRANCIS H. REINHARD,
CHAS. C. STETSON.