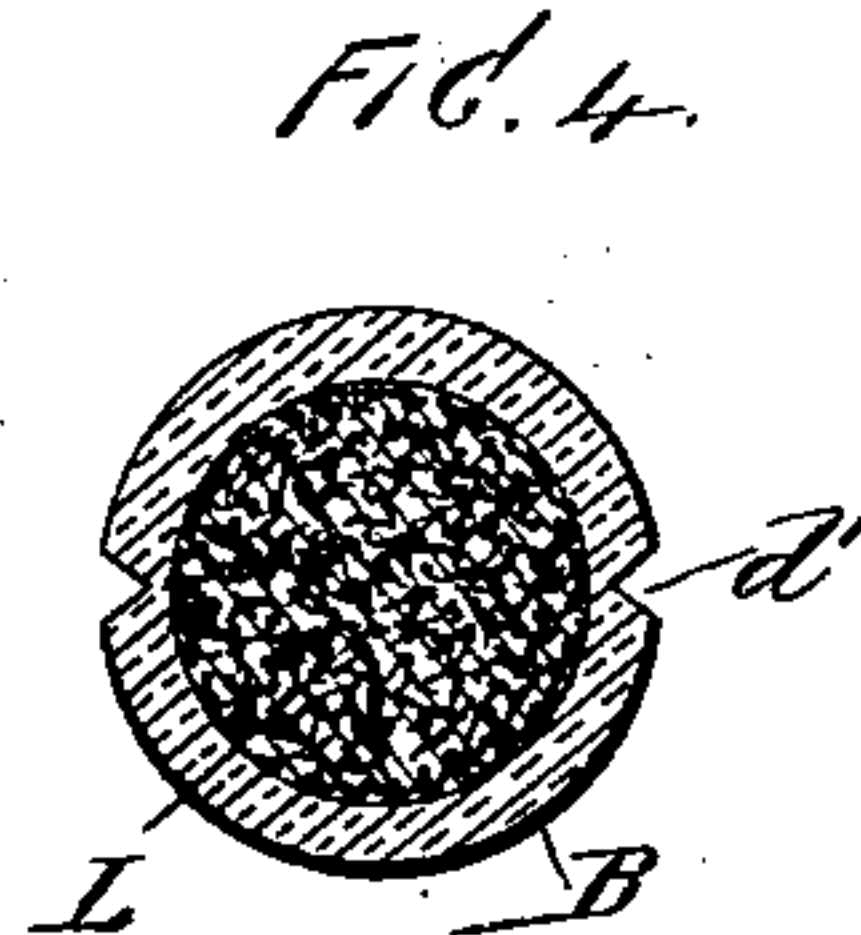
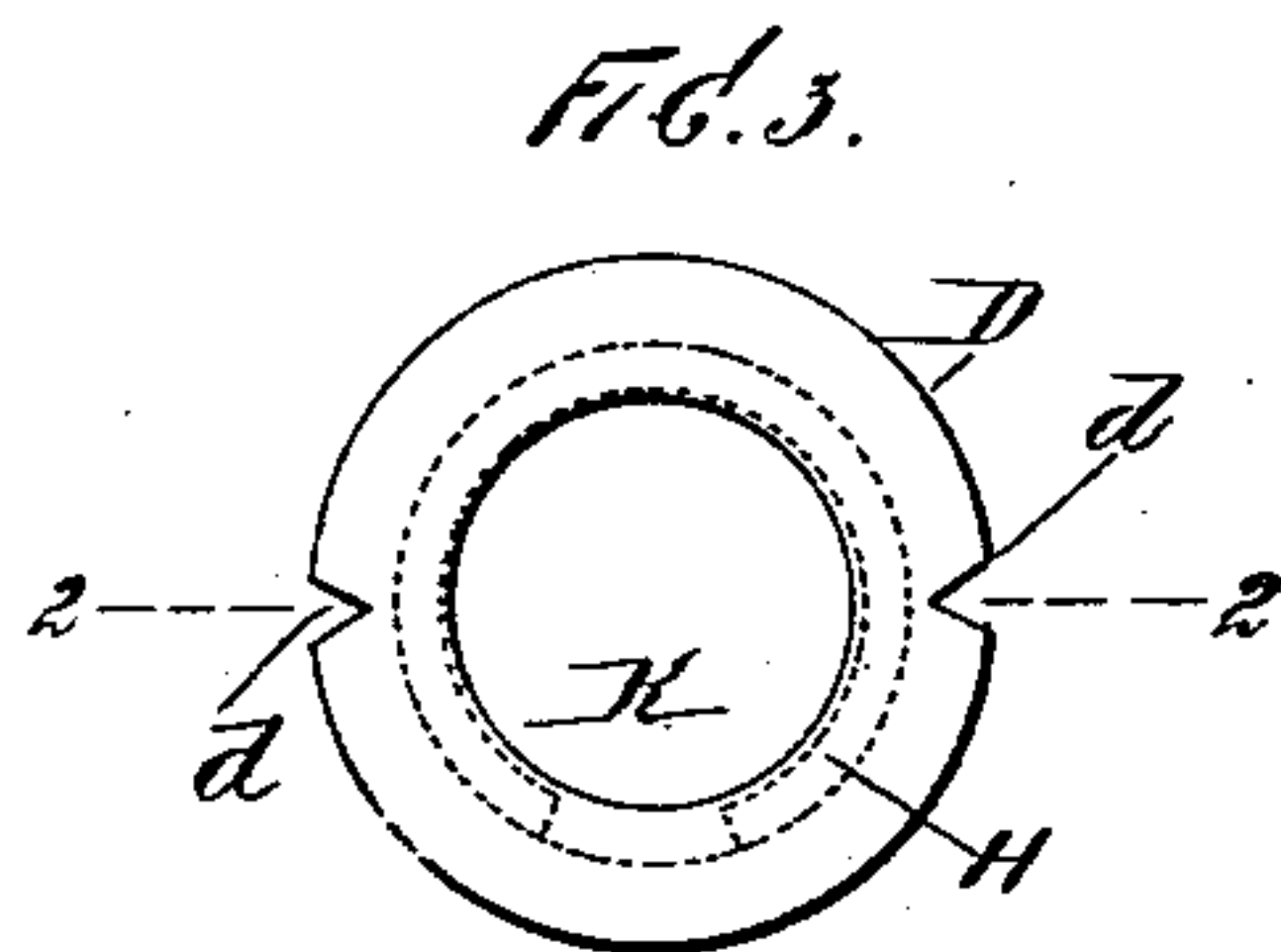
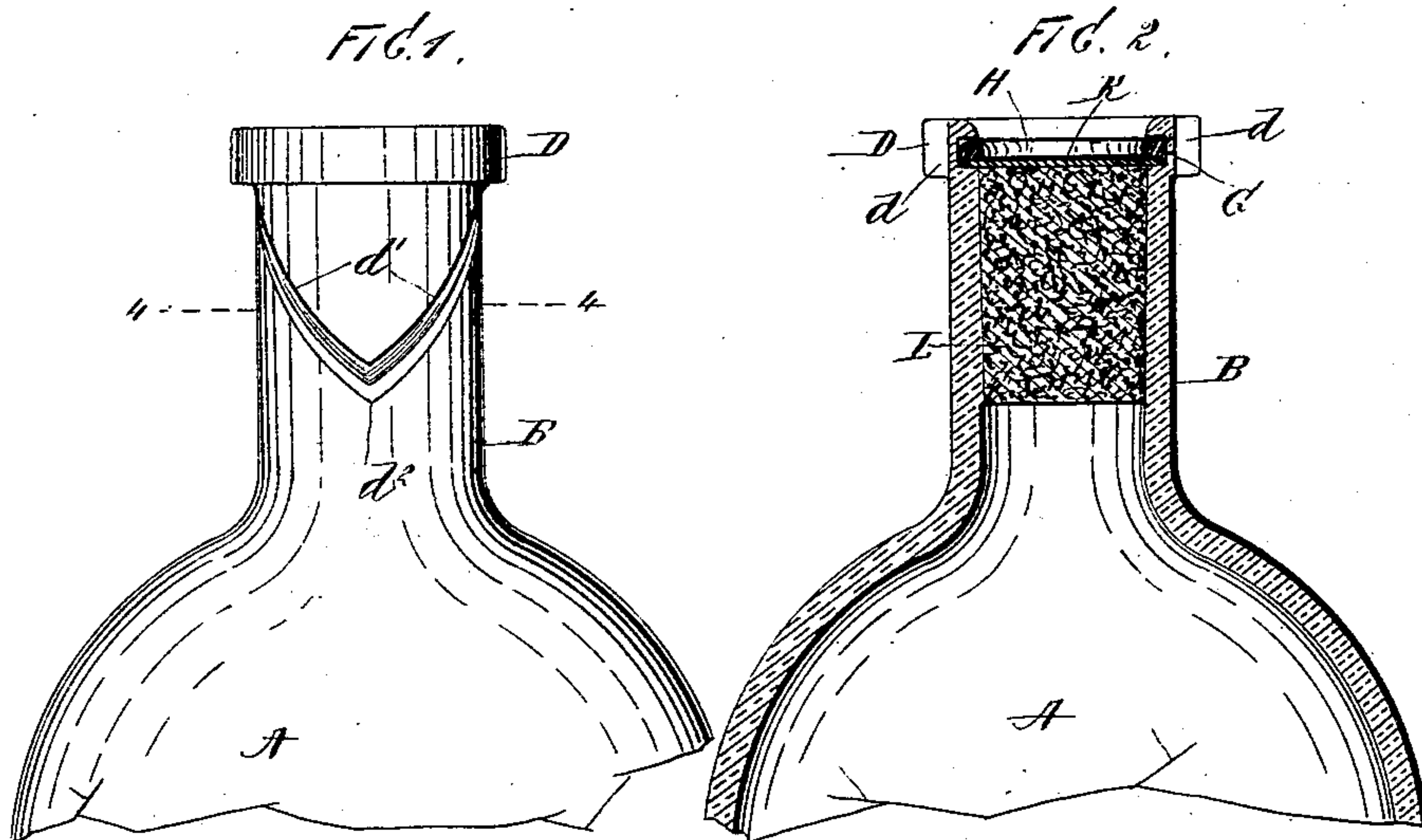


(No Model.)

J. M. GRAU.
BOTTLE.

No. 562,958.

Patented June 30, 1896.



WITNESSES:

John Buckler,
C. G. G.

INVENTOR

John M. Grau
BY
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UNITED STATES PATENT OFFICE.

JOHN M. GRAU, OF WASHINGTON, DISTRICT OF COLUMBIA.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 562,958, dated June 30, 1896.

Application filed November 15, 1895. Serial No. 569,009. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. GRAU, a citizen of the United States, and a resident of Washington, in the District of Columbia, have
5 invented certain new and useful Improvements in Bottles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate
10 corresponding parts.

This invention relates to bottles, jugs, jars, and similar vessels; and the object thereof is to provide a vessel of this class having a neck attachment which is so constructed and arranged that when the bottle has been filled
15 and the neck attachment applied the vessel cannot be emptied without destroying the same or leaving evidence of the fact that it has been once filled and emptied or used.

20 The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of the upper part of a bottle or other vessel provided with my improvement; Fig. 2, a central vertical section thereof on the line 2 2 of Fig. 3; Fig. 3, a plan view, and Fig. 4 a transverse section on the line 4 4 of Fig. 1.

30 In the accompanying drawings I have shown my invention applied to a bottle, and in the practice of said invention I provide a bottle A, having a neck B, on the upper end of which is formed an annular shoulder or flange D, and said annular shoulder or flange is provided at opposite sides with vertical notches
35 or recesses d , which are continued downwardly and outwardly in the neck of the bottle, as shown at d' , and which gradually converge until they meet on the side of the neck, as
40 shown at d^2 . I also form within the neck of the bottle and near the top thereof an annular groove or recess G, which is adapted to receive an open spring-ring H, which is adapted to be forced into position in the said annular groove or recess and to securely hold
45 in place the plate K, which in practice is placed upon the cork or stopper L.

50 The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings. The bottle or other vessel having been filled with the desired contents, the stopper

L is inserted into the neck in the usual manner below the annular groove or recess G, and the plate K is then inserted, said plate K being preferably a spring-plate, or it may be composed of rigid or stiff material, and inserted in any desired manner and by any desired means, and after said plate has been placed in position the open spring-ring H is
55 forced into place within the annular groove or recess G, in which it expands, and by means of said ring the plate K and the stopper L will be securely held in place and cannot be removed without breaking off the neck of the
60 bottle, or a portion thereof; and that portion of said neck which is separated from the main body thereof by the grooves or recesses d and d' is, as will be understood, adapted to be broken off in order to remove the stopper. It will be understood, however, that the
70 entire neck may be broken off, if desired, and my invention is not limited to this feature of the construction, as herein shown and described.

75 I may also place upon the neck B, or that portion thereof which must be broken off in order to empty the bottle, a trade-mark, or the name of the manufacturer of the bottle, or the proprietor of its contents, or the owner
80 thereof, and said designating characters or words, together with others, may be placed upon the bottle or vessel itself, and it will thus be seen that I accomplish the object of my invention by means of a device which is simple
85 in construction and operation and which does not materially add to the cost of the bottle or vessel.

Having fully described my invention, I claim and desire to secure by Letters Patent—

1. In a bottle provided with an interior annular groove in its neck, said neck being adapted to be closed by a stopper inserted therein below said groove, with a plate inserted in the neck upon and covering the top of said stopper and with an open spring-ring inserted in said groove above said plates, a series of notches or grooves formed on the outer surface of the neck extending from the top downward as herein shown and described, said external grooves being made to facilitate the breaking of the bottle-neck.

2. A bottle or other vessel, provided with

a neck in the upper portion of which is formed an annular groove or recess, said neck being adapted to be closed by a plug or stopper, which is inserted therein, below said annular groove or recess, a plate inserted into the neck above said plug or stopper, and an open ring inserted in the said annular groove or recess, above said plate, the neck of the bottle being also provided on its outer surface with notches or recesses, which begin at the upper end thereof, and which are extended

downwardly and outwardly, and converge to a point on the neck, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 12th day of November, 1895.

JOHN M. GRAU.

Witnesses:

EUGENE SIGRIST,
WILLIAM D. WALLACE.