No. 885,846. PATENTED APR. 28, 1908.

J. A. HICKS.

MEANS FOR SEALING VESSELS.

APPLICATION FILED JAN. 15, 1906.

Fig. 1.

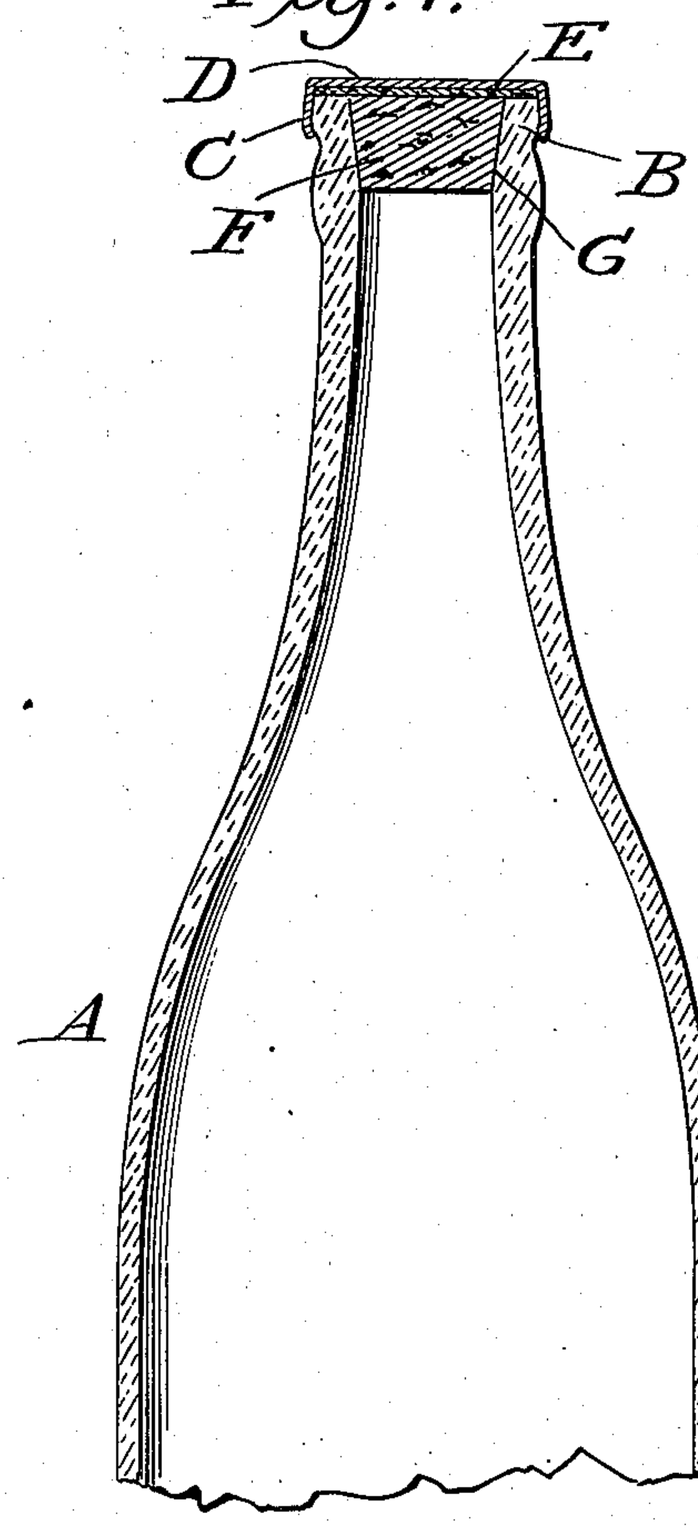

Fig. 2.

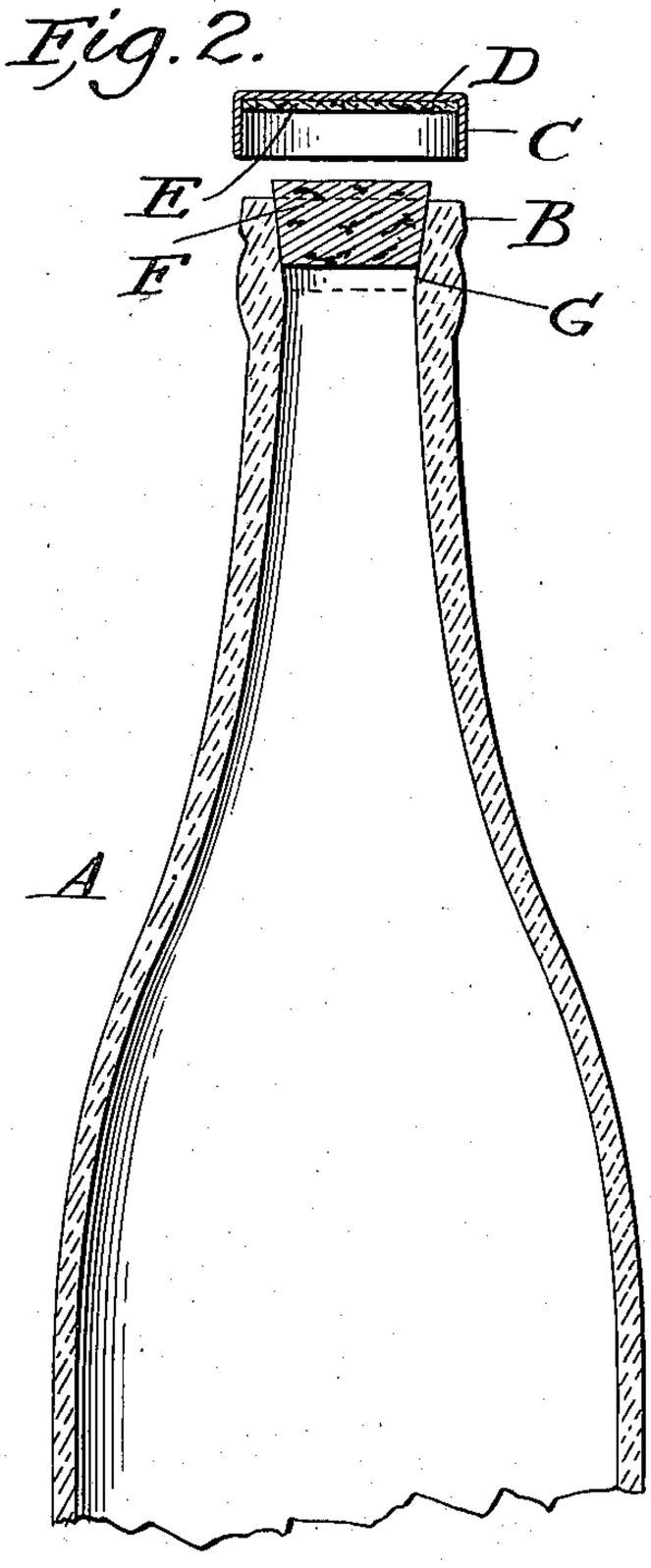

Fig. 3.

Witnesses
James F. Duhamel.
James McHicks

Inventor
John Augustus Hicks

UNITED STATES PATENT OFFICE.

JOHN AUGUSTUS HICKS, OF SUMMIT, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENTS, TO AUTO STOPPER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

MEANS FOR SEALING VESSELS.

No. 885,846. Specification of Letters Patent. Patented April 28, 1908.

Application filed January 15, 1906. Serial No. 296,062.

To all whom it may concern:

Be it known that I, JOHN AUGUSTUS HICKS, a citizen of the United States of America, residing at Summit, Union county, New Jersey, have invented certain new and useful Improvements in Means for Sealing Vessels, of which the following is a specification.

My invention relates to means for sealing vessels and it consists in certain elements and combinations fully set forth and claimed in the following specification.

In order that those skilled in the art to which my invention appertains, may understand, construct and use my invention, I will proceed to describe it referring to the accompanying drawings forming part of this specification in which

Figure 1. is a longitudinal central section of a bottle with my invention applied to it, the sealing means being secured over the mouth of the bottle. Fig. 2. is a longitudinal central section of a bottle having a part of my invention applied to it. A stopper being partially entered in the bore of the bottle, and the other part of my invention in a position above the bottle mouth ready to be closed down upon the bottle, which consists in a sealing cap provided with a sealing wafer within its walls.

A indicates a bottle neck.

B indicates an exterior bead at the top of the neck A.

C indicates a drop flange to a sealing cap and D indicates the top surface of the same to which the flange C is pendent.

E indicates a sealing wafer in the sealing cap.

F indicates a stopper for closing the bore G of the bottle, shown tapering to agree with the taper bore of the bottle.

G is the bore of the bottle shown tapering centrally.

The means shown for securing the cap upon the bottle is similar to that patented to James M. Hicks, Feb. 21st. 1905, No. 783,038 and is preferred, but other equivalent means may be employed.

By the means shown for securing the cap and wafer upon the bottle, the cap flange C is of less diameter than the extreme diameter of the bead B, so that the cap flange is stretched in passing over the said bead and hugs the bead, at its extreme diameter and the lower part of the said flange after it has passed the bead contracts to about its original diameter and hugs the said bead upon its inner surface, thus securing it upon the vessel against pressure from within, it also hugs the said bead so closely as to form a seal between the material of the bottle and the inner surface of the cap flange C, which in most cases is tight against the vapor of ammonia and kindred liquids.

The stopper F is inserted instantly the bottle is filled and before there is any chance for liquids under pressure to discharge gas, subsequently the cap and wafer are applied by force, in doing which the stopper F, is forced home into the bore of the bottle, and the wafer E is compressed upon the top of the walls of the bottle mouth, and the two together form a double seal to the bottle, and with the sealing contact between the flange C and the head B, forms a triple seal. This sealing is used principally where lager beer is put up in bottles and steamed to kill wild yeast and bacteria which is detrimental to beer causing secondary fermentation to the injury of the taste and quality of the beer. The insertion of the stopper instantly the bottle is filled largely prevents this secondary action and the subsequent sealing with the cap and wafer secures an inner sealing and a top sealing, in fact a double sealing, in which the whole mouth of the bottle inside and out is covered with sealing material in addition to the seal between the cap flange C and bead B.

Having now fully described my invention and the manner in which I have embodied it what I claim as new and as my invention and desire to secure by Letters Patent is

A vessel having an unbroken continuous circumferential bead near the top of its neck; downwardly and centrally tapering walls in the bore of said neck; a stopper entered within said taper walls of the vessel; a sealing cap having a top surface; a flange pendent from said top surface and containing a sealing wafer, said cap being secured over and beneath said bead on the vessel neck by pressure exerted vertically thereon, substantially as specified.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this thirteenth (13th) day of January 1906.

JOHN AUGUSTUS HICKS.

Witnesses:
JAMES M. HICKS,
NATHANIEL P. BARR.