(No Model.)

V. REISER & T. SUTCLIFFE.

STOPPER OR COVER FOR BOTTLES, JARS, OR SIMILAR VESSELS.

No. 589,097. Patented Aug. 31, 1897.

FIG. 1.

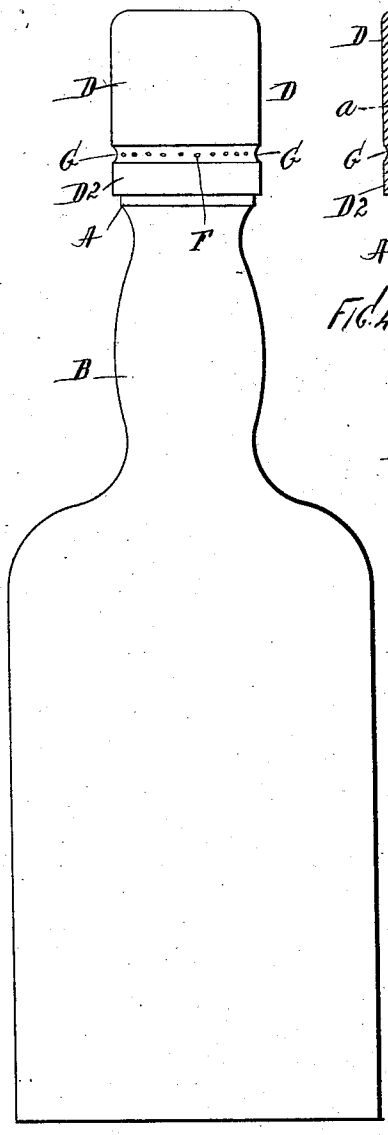


FIG. 2.

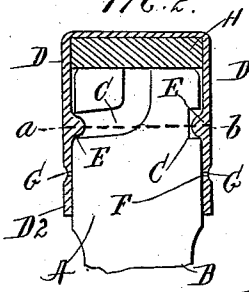


FIG. 3.

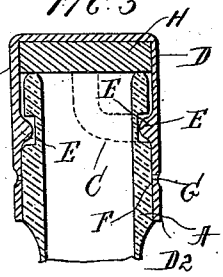


FIG. 4.

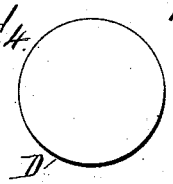


FIG. 5.

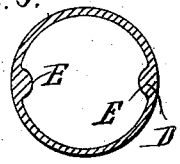


FIG. 6.

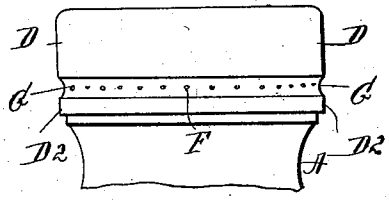


FIG. 7.

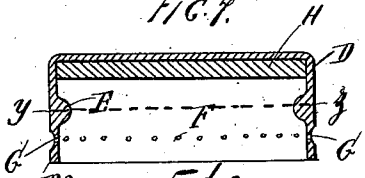
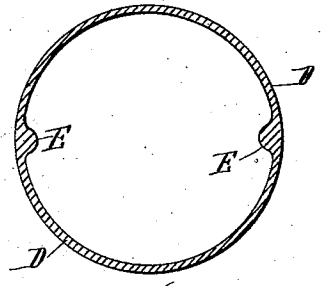


FIG. 8.



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UNITED STATES PATENT OFFICE.

VINCENT REISER AND TOM SUTCLIFFE, OF BRADFORD, ENGLAND.

STOPPER OR COVER FOR BOTTLES, JARS, OR SIMILAR VESSELS.

SPECIFICATION forming part of Letters Patent No. 589,097, dated August 31, 1897.

Application filed April 13, 1897. Serial No. 632,005. (No model.) Patented in England January 20, 1897, No. 1,520.

To all whom it may concern:

Be it known that we, VINCENT REISER, a citizen of the Swiss Republic, and TOM SUTCLIFFE, a subject of the Queen of Great Britain, residing at Bradford, in the county of York, England, have invented certain new and useful Improvements in Stoppers or Covers for Bottles, Jars, and Similar Vessels, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in bottles, jugs, jars, and similar vessels; and the object thereof is to provide a cheap, light, and efficient capsule stopper or cover for vessels of this class.

The invention is the same as that for which Letters Patent were granted in Great Britain January 20, 1897, Serial No. 1,520, and the invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 represents an elevation of a bottle fitted with one of our capsule-stoppers. Fig. 2 represents a bottle-neck with a diametrical section of the stopper thereon, and Fig. 3 a diametrical section of both the bottle-neck and the stopper. Fig. 4 is a plan view of Fig. 2, and Fig. 5 a cross-section of the stopper on the broken line *a b*, Fig. 2. Fig. 6 represents an elevation of the top of a jar closed with one of our improved stoppers. Fig. 7 is a diametrical view of the stopper alone, and Fig. 8 a cross-section on the line *y z*, Fig. 7.

Our improvement consists in employing capsule-stoppers composed of cardboard, strawboard, paper-pulp, or other suitable analogous material compressed into suitable form after it has been brought to a plastic state and then dried to harden.

In the drawings forming part of this specification the separate parts of our improvement are designated by letters of reference in each of the views, and in the practice of our invention, reference being made to Figs. 1 to 5, inclusive, we provide a bottle the neck B of which is provided with a strengthening collar or extension A, which is made cylindrical in form or, by preference, slightly tapered—that is to say, slightly smaller at the top than at the base. The collar A has two grooves C formed in it diametrically opposite each other. The grooves C pass vertically downward a suitable distance and are then deflected in a slightly-inclined direction, and each extends a suitable distance toward the other groove.

The capsule-stopper D has two internal projections E, preferably formed solid with it, and these projections are so located that when the stopper is placed on the bottle-neck the projections pass into the grooves C down to their inclined portions. Then by turning the stopper more or less around on the neck the projections enter the inclined parts of the grooves, and the cork disk H, inside the top of the stopper, is slightly pressed down on the mouth of the bottle and seals or hermetically closes it.

A row of perforations F may be formed circumferentially around the lower part of the stopper, and an annular groove G may also be formed around the stopper to still further reduce the strength of the walls of the stopper at that part. The part D^2 of the stopper below the groove G is lined with gum or other suitable cement or other adhesive material, so that when the capsule is in position the lower part may be cemented to the neck. In this case to open the bottle the capsule is twisted around with sufficient force to sever it at the perforations.

The capsule shown in Figs. 6, 7, and 8 is made in the same way, but it is preferably not so deep. For small bottles only one groove C and projection E may be employed.

Having fully described our invention, we claim as new and desire to secure by Letters Patent—

The herein-described capsule or cover for a bottle, the same being composed of compressed paper-pulp and provided with a depending annular flange or rim which is provided with inwardly-directed lugs or projections, the neck of the bottle being provided at its opposite sides with downwardly-directed grooves having lateral extensions, and which are adapted to receive said lugs or pro-

jections, the lower portion of the said depending flanges being lined with gum, and provided adjacent to said gummed portion with a series of perforations, and a disk composed of cork adapted to be placed in said cap or cover, as set forth.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of the subscribing witnesses, this 1st day of April, 1897.

VINCENT REISER.
TOM SUTCLIFFE.

Witnesses:
DAN COATES,
WM. HY. GRIMSHAW.