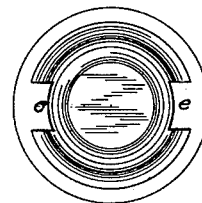
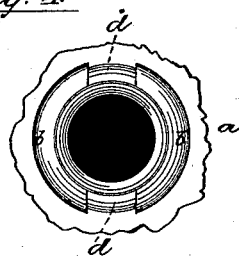
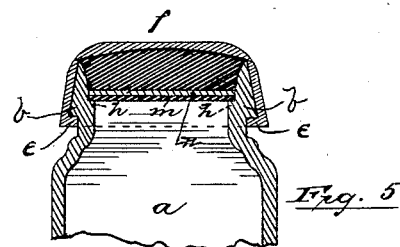
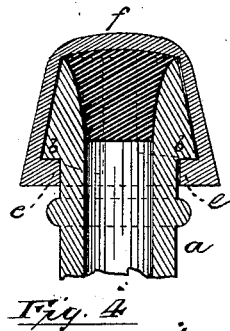
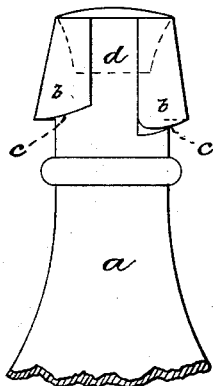
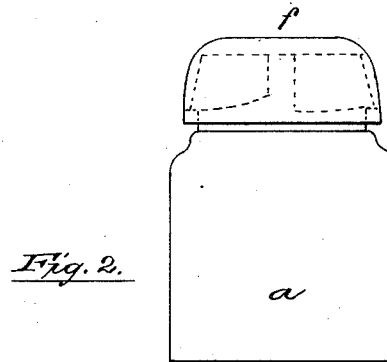
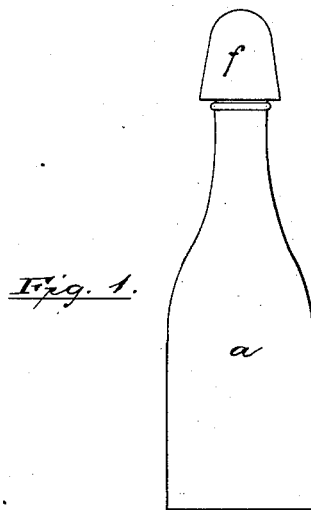


(No Model.)

E. P. HAND.
BOTTLE AND JAR STOPPER.

No. 303,727.

Patented Aug. 19, 1884.



Attest:

W. Campbell.
Edward J. Kempf

Inventor:

Edward P. Hand,
by Drake & Co.,
attys.

UNITED STATES PATENT OFFICE.

EDWARD P. HAND, OF NEWARK, NEW JERSEY.

BOTTLE AND JAR STOPPER.

SPECIFICATION forming part of Letters Patent No. 303,727, dated August 19, 1884.

Application filed May 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. HAND, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Bottle and Jar Stoppers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a cheaper and more effective stopper, and one that can be readily applied to or removed from the bottle; and it consists in the arrangements and combinations of parts, substantially as will be hereinafter set forth, and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which similar letters of reference indicate like parts in each of the several figures, Figures 1 and 2 are side views of a bottle and a jar embodying my improvements. Fig. 3 is a side view of a bottle-head with the cap removed. Figs. 4 and 5 are vertical sections through the bottle and jar heads, respectively. Fig. 6 is a plan of the bottle-head, and Fig. 7 is an inverted plan of the cap.

In said drawings, *a* is the bottle or jar, having the head thereof provided with projecting ears *b b*, having inclined under edges, *c c*. Said ears are separated by lug-passages *d d*, adapted to allow the lugs *e e*, projecting inwardly from the interior wall of the cap, passage to the inclined under edges of the ears. Said cap having the lugs may be of glass, tin, or other material. It is provided with a stopper, *g*, of cork, rubber, or other suitable material, which is cemented or immovably fastened to the top of said cap on the inside

thereof. In addition to this, when the mouth of the vessel is wide, and it is found desirable to prevent contact of the preserves or other contents of the said vessel with the said stopper, I form a shoulder, *h*, in the throat or mouth of the said vessel, and on the same arrange a glass diaphragm, *m*, and upon it an elastic packing, *n*, of rubber or other suitable material, upon which the said stopper presses. The elastic packing *n* serves to remedy any imperfection which may be in the cork or stopper, and to insure an air-tight connection.

To close the bottle, all that is necessary is to press the cap down around the head or neck of the bottle, thereby forcing the stopper into the mouth thereof. Then, by turning said cap, the lugs pass into engagement with the inclines, thus increasing the pressure upon said cork, and locking the parts firmly together, and insuring a perfectly air-tight union of the same, as will be readily understood.

I do not claim, broadly, a cap having a stopper inside thereof and adapted to be secured upon the neck of a bottle by means of lugs and inclined shoulders; but,

Having thus described the invention; what I claim as new is—

1. In combination, the bottle having the shoulder, the cap, the stopper, and the diaphragm, as set forth and shown.

2. In combination, a bottle having near the top ears with inclined under edges, a cap having lugs, a stopper, an elastic packing, and a diaphragm, arranged to operate substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of April, 1884.

EDWARD P. HAND.

Witnesses:

CHARLES H. PELL,
F. F. CAMPBELL.