

(No Model.)

E. O. LOACH & F. HAWKER.
MANUFACTURE OF BOTTLE STOPPERS.

No. 540,263.

Patented June 4, 1895.

FIG. 1.

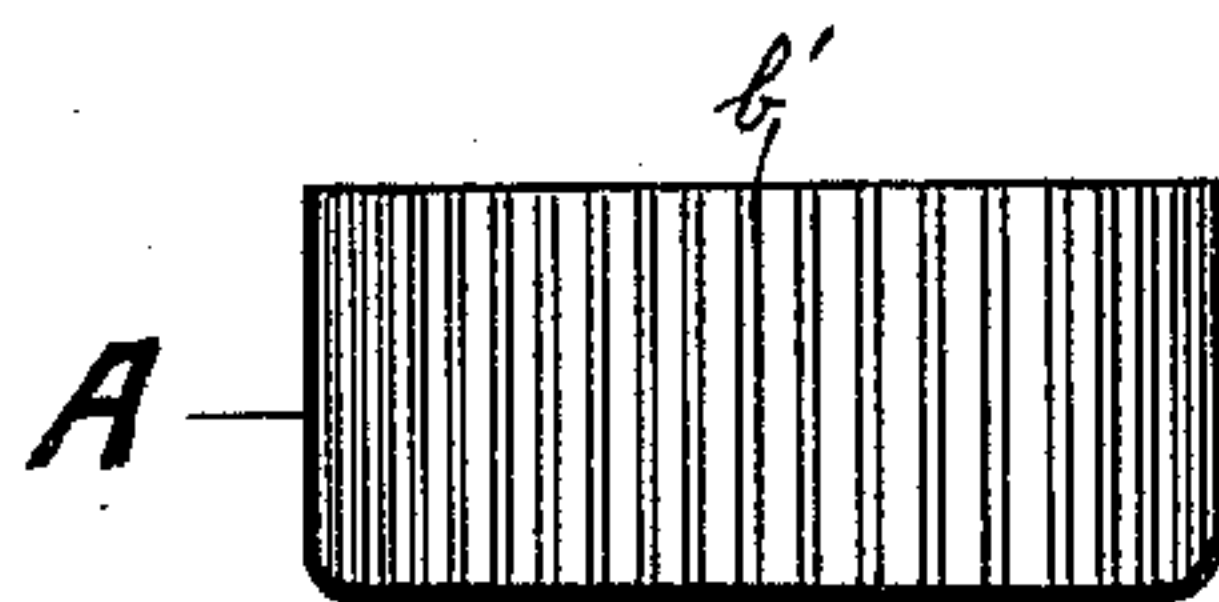


FIG. 3.

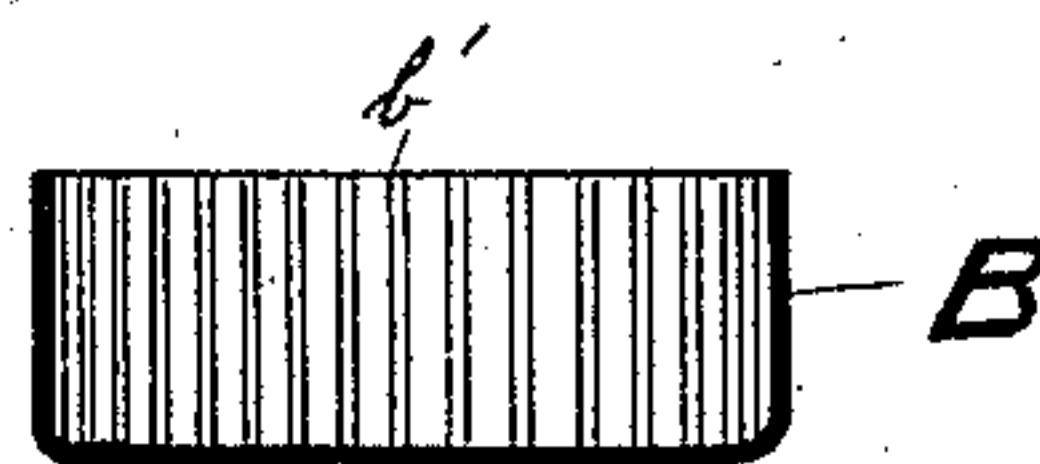


FIG. 2.

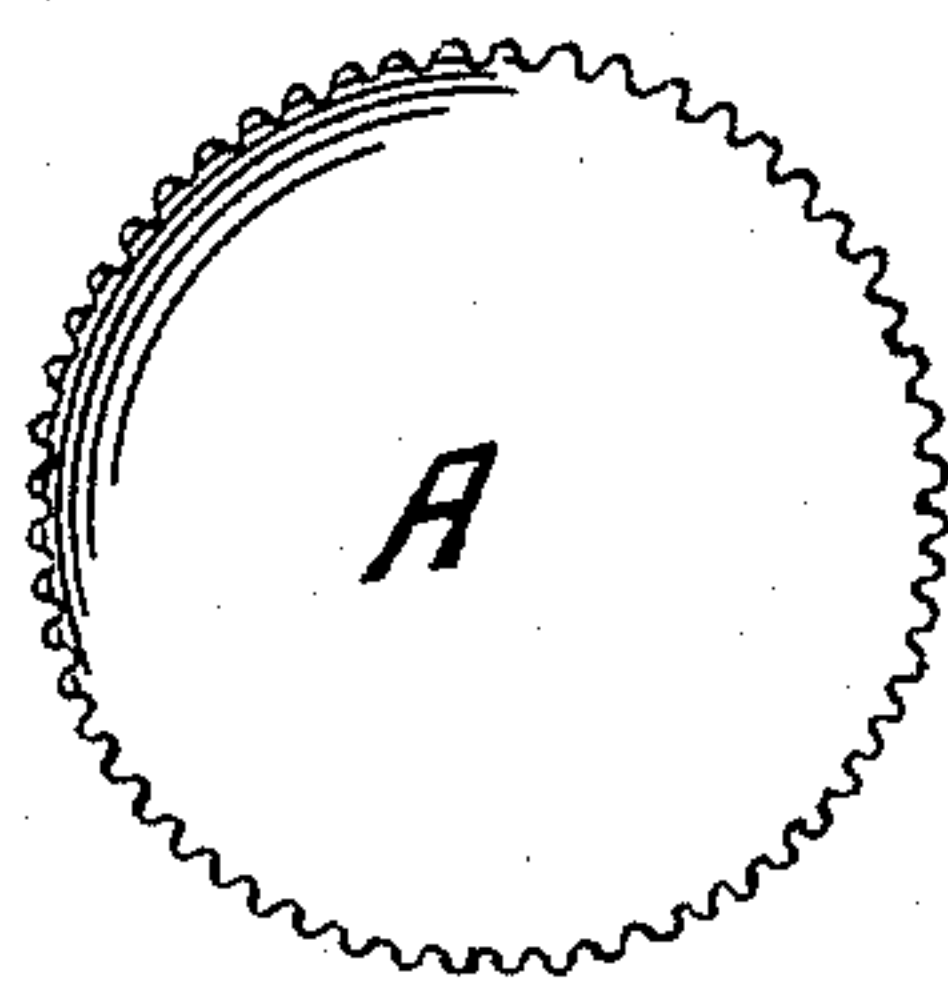


FIG. 5.

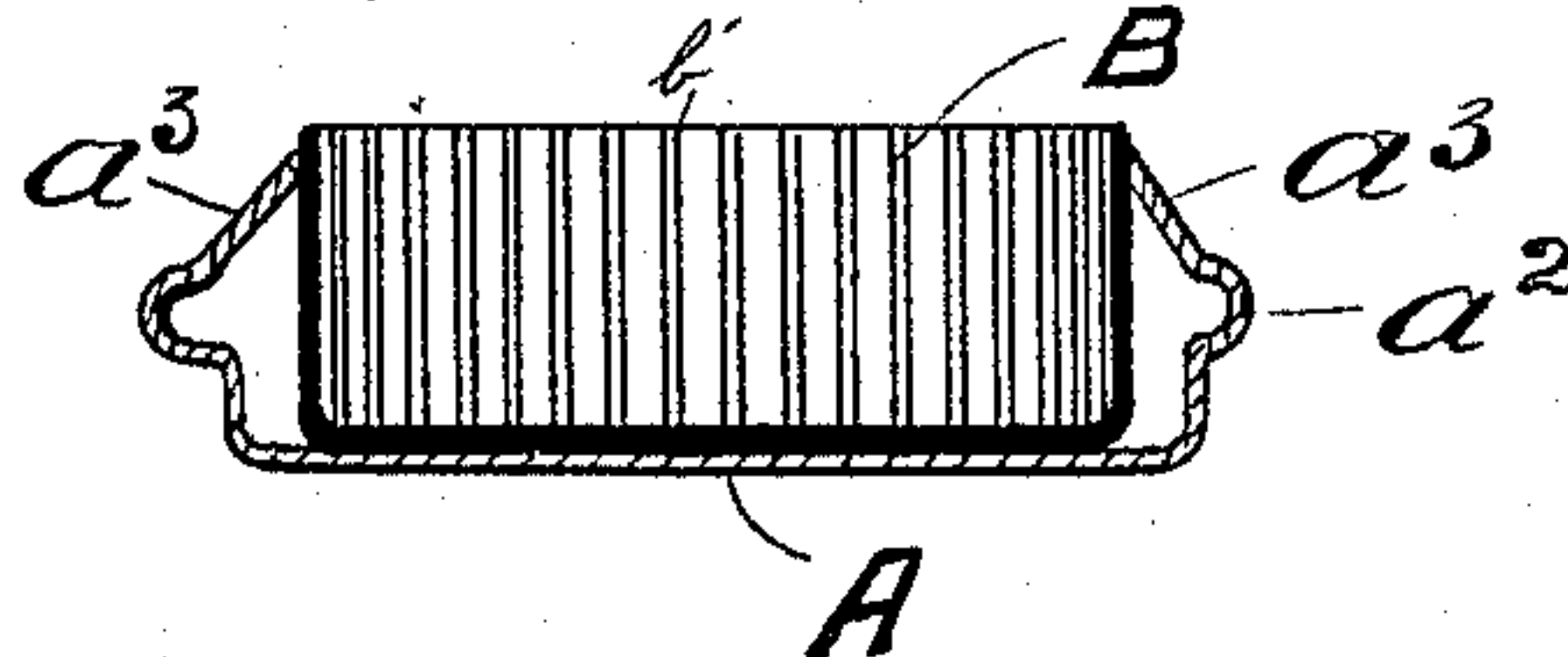


FIG. 4.

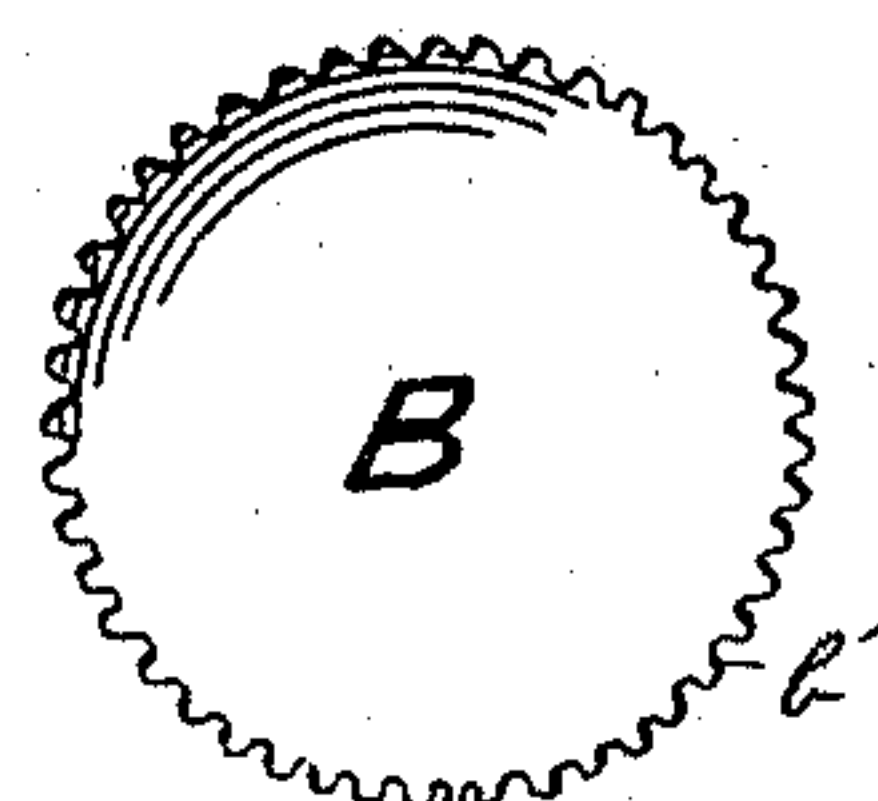


FIG. 6.

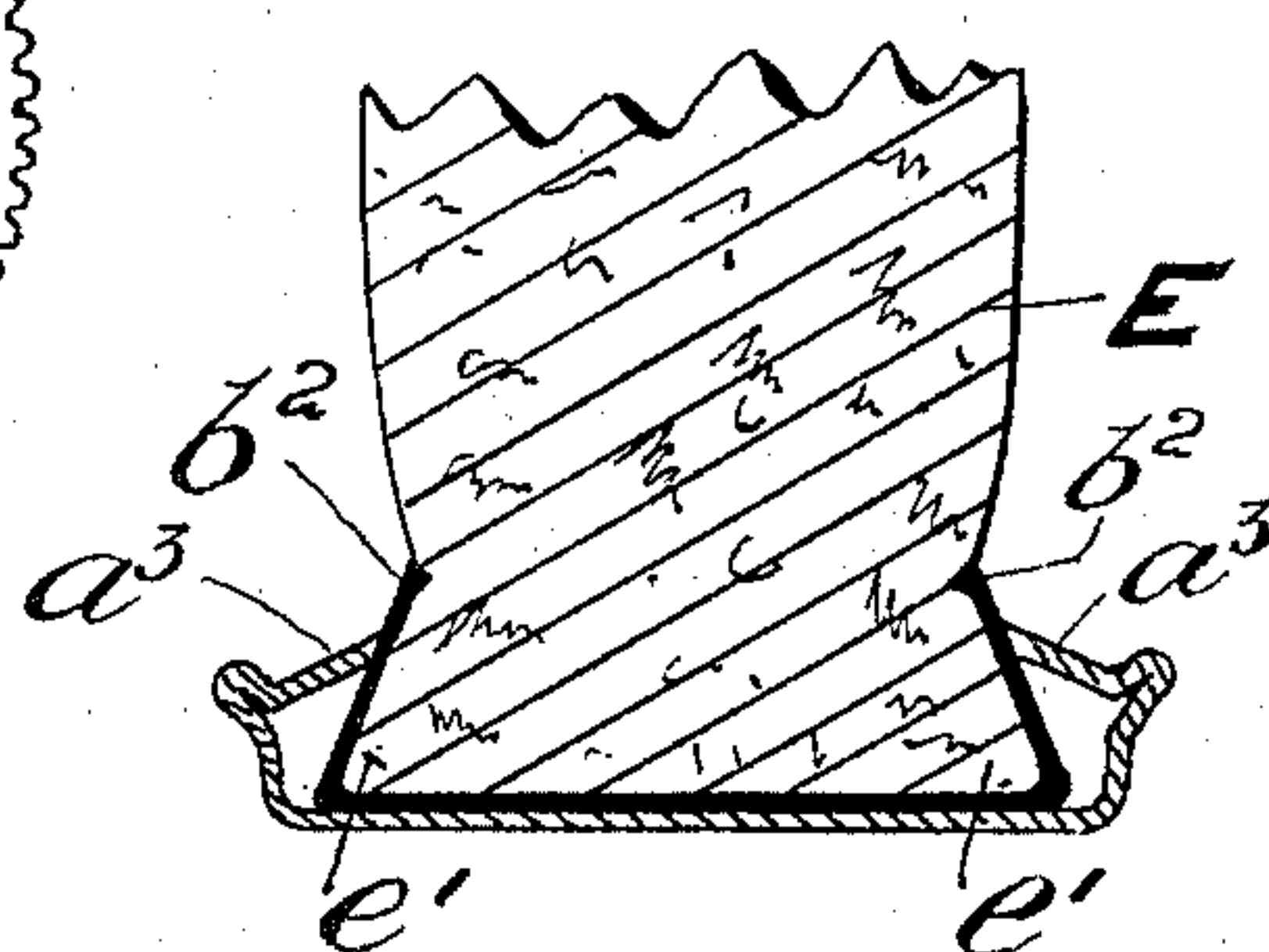


FIG. 10.

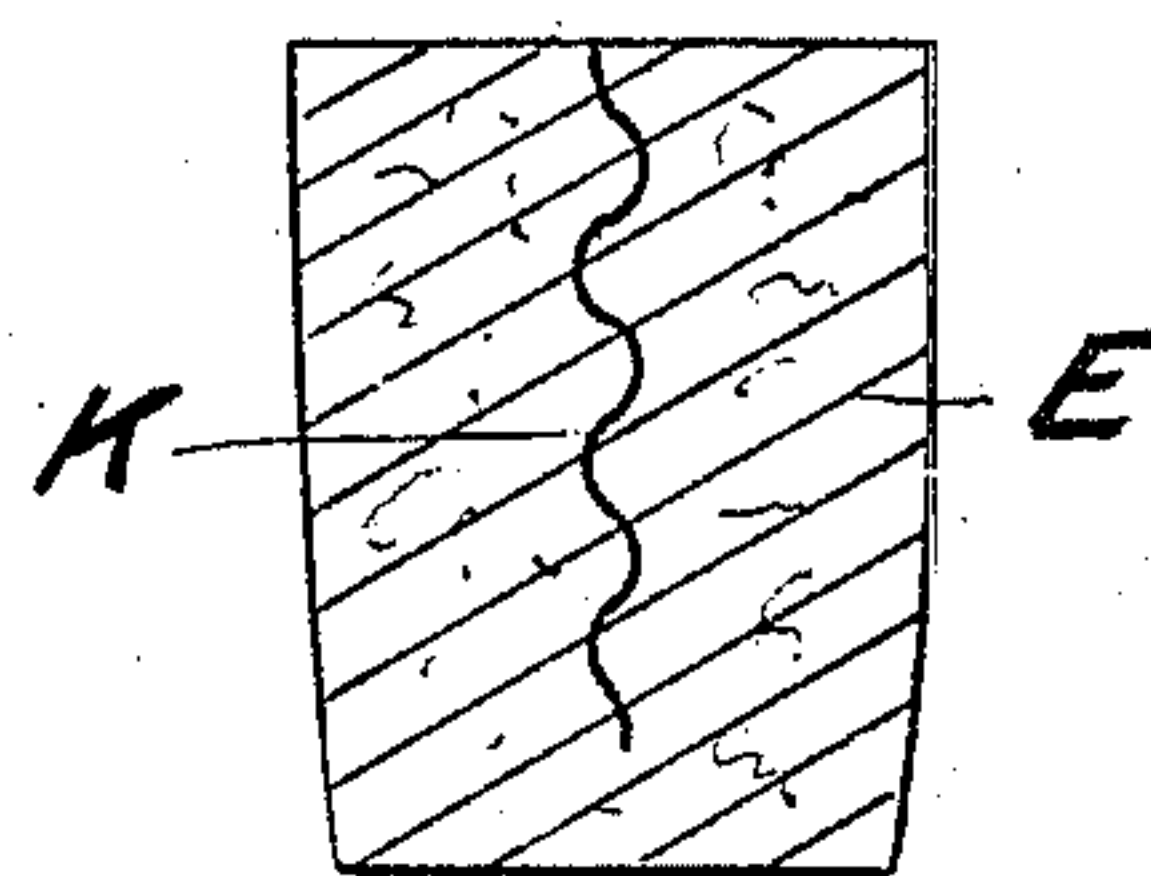


FIG. 8.

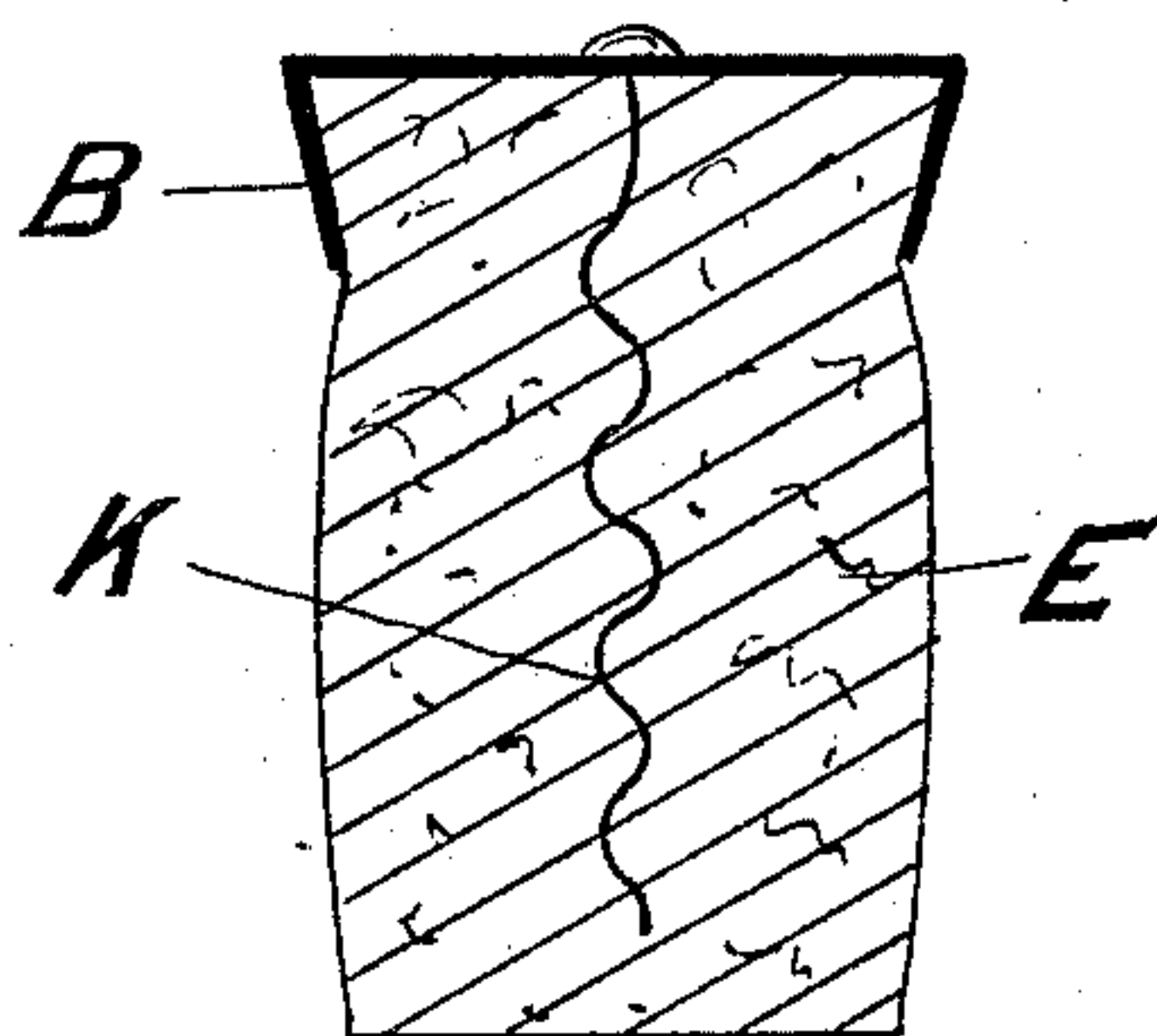


FIG. 7.

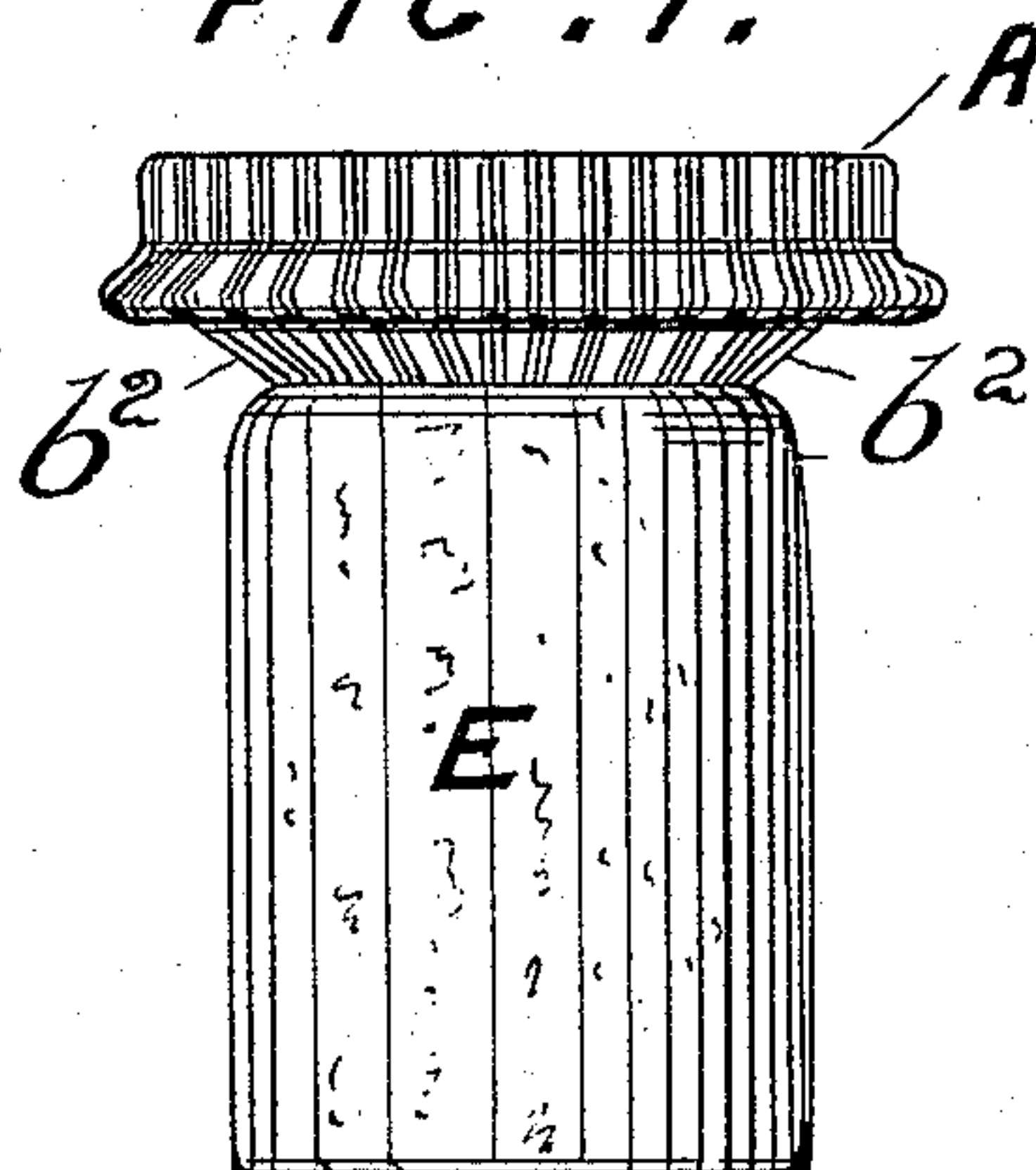


FIG. 11.

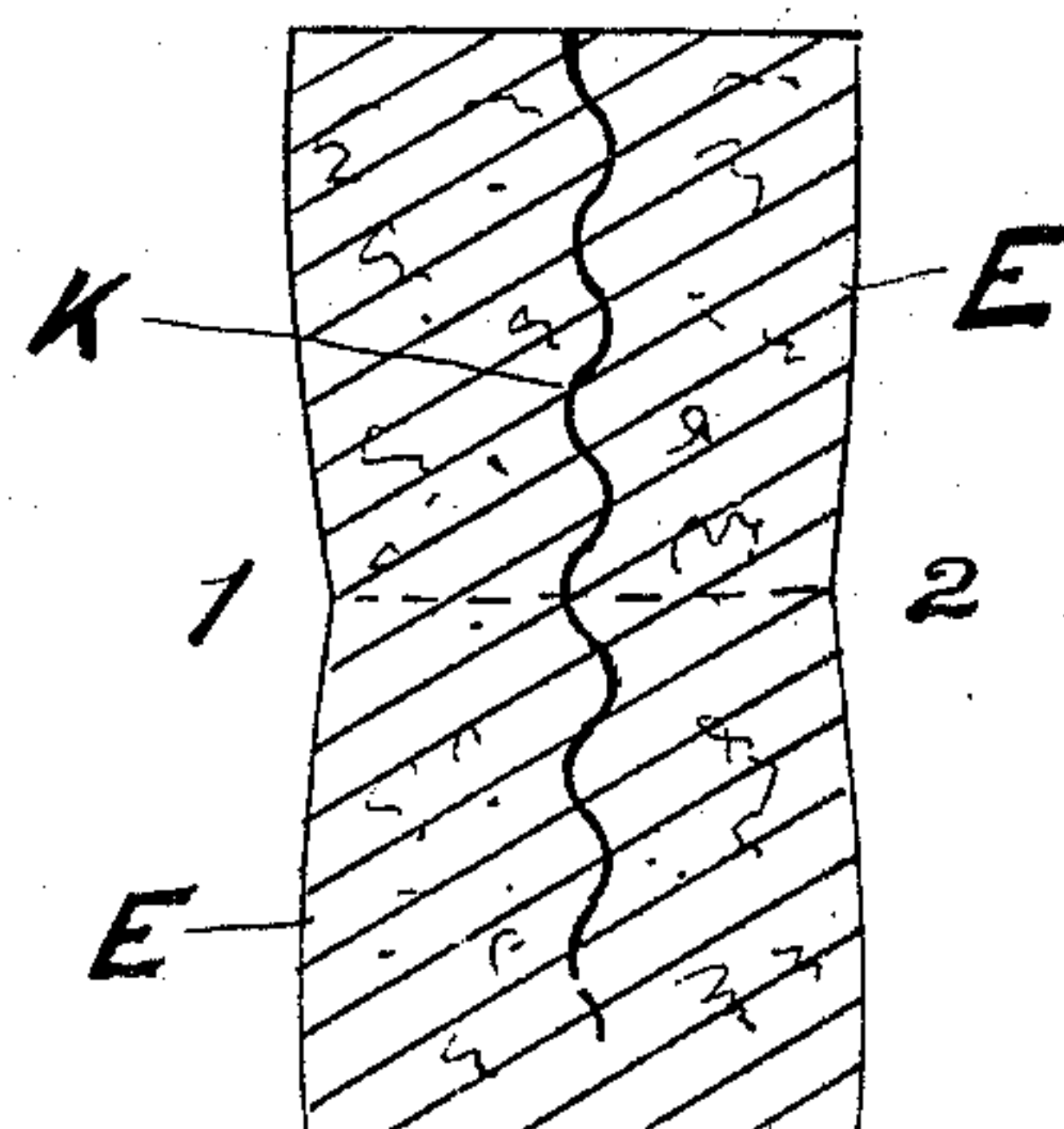
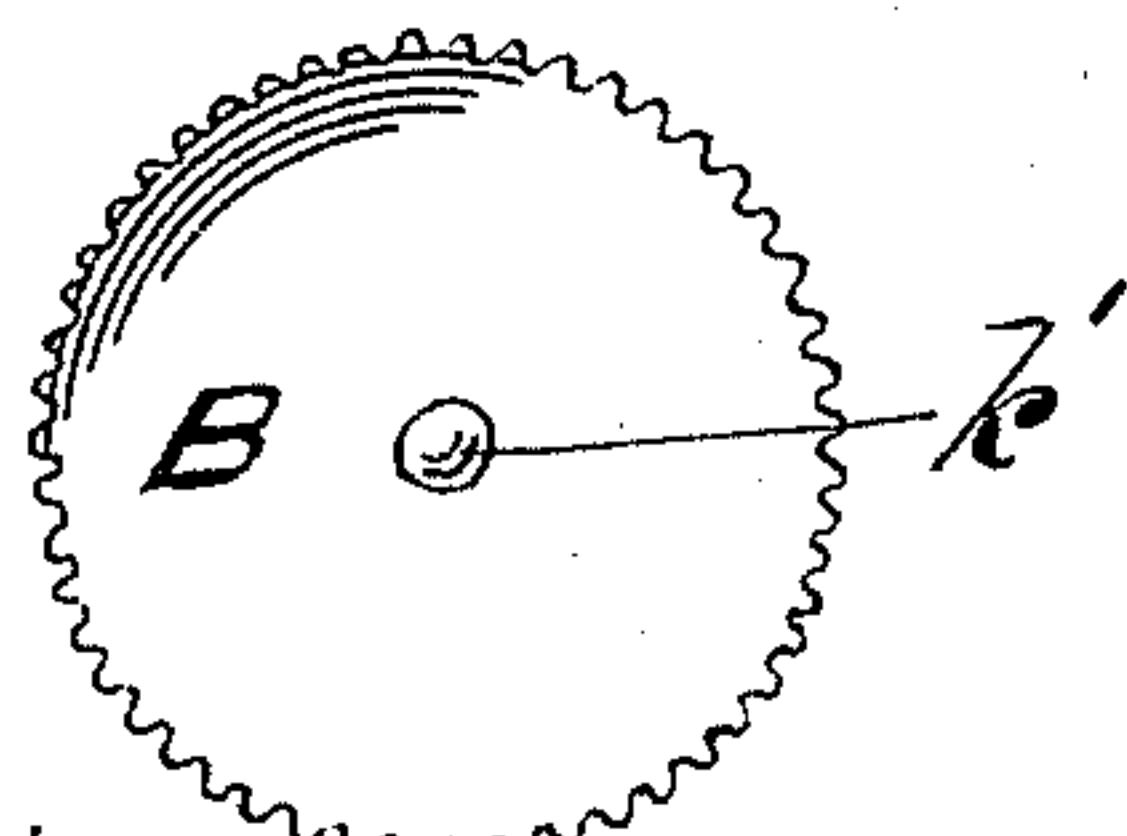


FIG. 9.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWIN OSWALD LOACH AND FRANK HAWKER, OF BIRMINGHAM, ENGLAND.

MANUFACTURE OF BOTTLE-STOPPERS.

SPECIFICATION forming part of Letters Patent No. 540,263, dated June 4, 1895.

Application filed January 16, 1895. Serial No. 535,150. (No model.) Patented in England October 4, 1894, No. 18,780.

To all whom it may concern:

Be it known that we, EDWIN OSWALD LOACH, fitter and tool-maker, of 96 Finch Road, Handsworth, and FRANK HAWKER, manufacturer, of Argosy Works, Branston Street, Birmingham, in the county of Warwick, England, subjects of the Queen of Great Britain, have invented certain new and useful Improvements in the Manufacture of Bottle-Stoppers, (for which we have obtained Letters Patent in England, No. 18,780, dated October 4, 1894,) of which the following is a specification.

Our invention has for its object improvements in and in the manufacture of bottle stoppers by which a metal cap is most securely affixed to the cork for forming a handle for the extraction of the cork without fear of the cap becoming detached from the cork during the operation of extraction.

In order that our invention may be clearly understood and more easily carried into practice we have appended hereunto a sheet of drawings upon which the invention is illustrated.

Figures 1 and 2 are sectional elevation and plan views showing the outside casing A after passing through the first set of dies. Figs. 3 and 4 are similar sectional elevation and plan views of the inside casing B. Fig. 5 is a sectional elevation showing the two casings brought together ready to receive the cork and with the outside casing A turned inward to a such like shape as indicated by the bead a^2 and the inclined piece a^3 . Fig. 6 is a sectional elevation of the two casings A and B and the cork E brought together after passing through suitable tools, which press the edge a^3 down upon the outer part of B, so turning in the edge b^2 into the cork, and thus forming a clip upon the cork, which operation also forces the cork E at e' well up into the now-formed dovetailed recess, thus securing it in position. Fig. 7 shows the cork and mount complete in elevation. Fig. 8 shows a modification by

which the cork is strengthened against the liability of breaking through laterally. Fig. 9 is a plan of Fig. 8. Fig. 10 is another slight modification. Fig. 11 is a diagram showing the part 1 2 where the cork is liable to break.

It will be noticed that the farther the outer flange a^3 is forced down b^2 the tighter B becomes upon the cork E which allows the same tools to be used for several sized corks. Seriations b' also assist to hold the mount upon the cork but they may be greatly varied in number and shape and sometimes dispensed with altogether. The external configuration of the mount A may also be greatly varied without departing from the principle of the invention.

In withdrawing the stopper the cork is sometimes liable to break through the line 1—2 Fig. 11. For the purpose of preventing this I attach a spiral wire K Figs. 8 and 9 to the inner casing B or to both B and A but to B only is generally sufficient. In some cases the spiral K answers without any attachment to the casings but simply runs into the cork E as at Fig. 10.

What we claim, then, is—

A stopper head consisting of the outer casing A provided with the annular bead a^2 and the inwardly inclined upper flange a^3 in combination with the inner casing B adapted to fit on a cork and having its upper edge b^2 extended beyond the said flange in order that when the latter is forced down it may bend inward the walls of the said inner casing and force the said edge b^2 into the cork, the said flange a^3 bearing on the outside of the said inner casing substantially as set forth.

In testimony that we claim the foregoing as our own we have affixed our names in the presence of two witnesses.

EDWIN OSWALD LOACH.
FRANK HAWKER.

Witnesses:

GEORGE BARKER,
GEORGE LESTER.