

N. THOMPSON.
BOTTLE STOPPER.

No. 104,794.

Patented June 28, 1870.

Fig: 1.

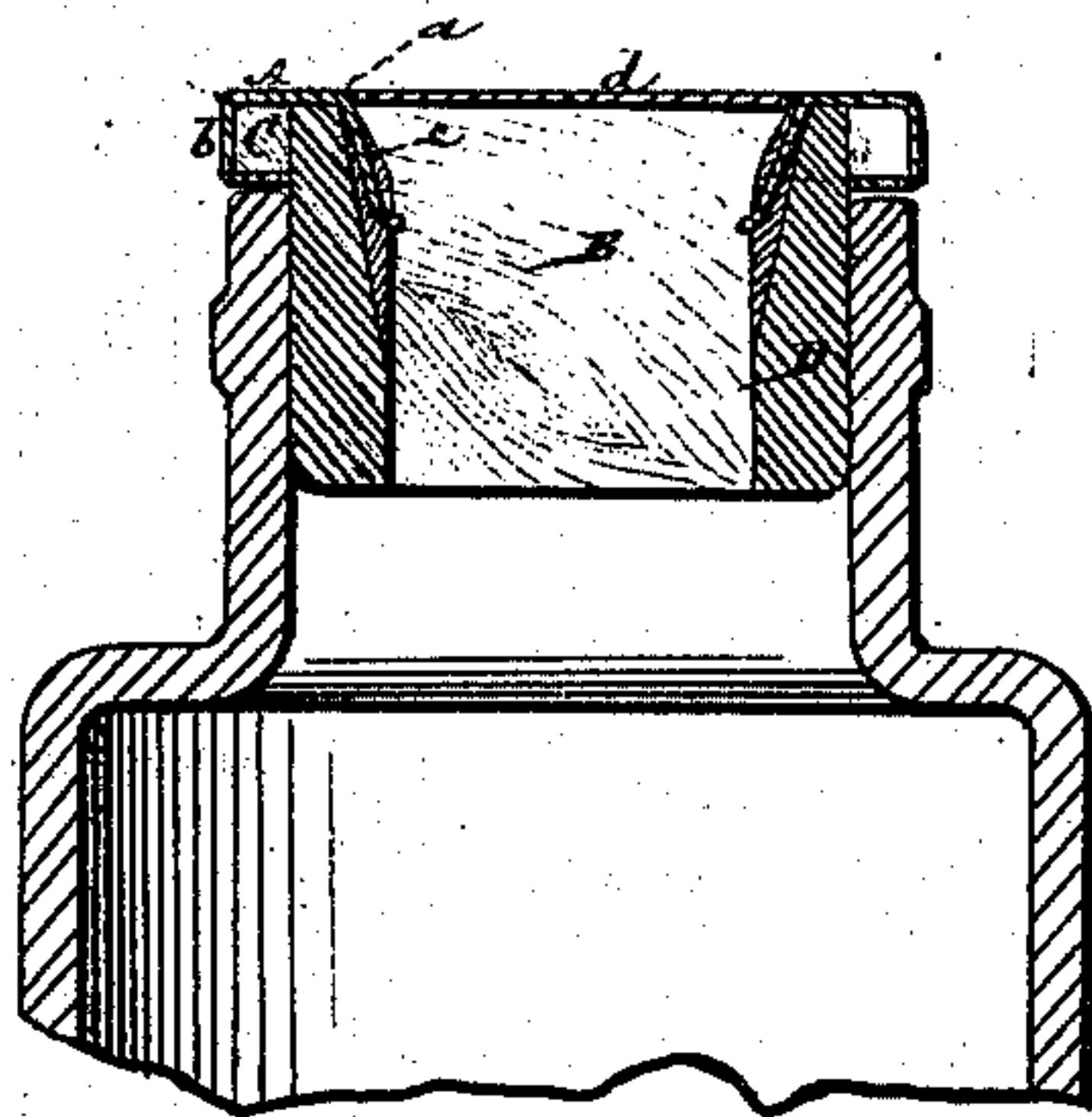


Fig: 2.

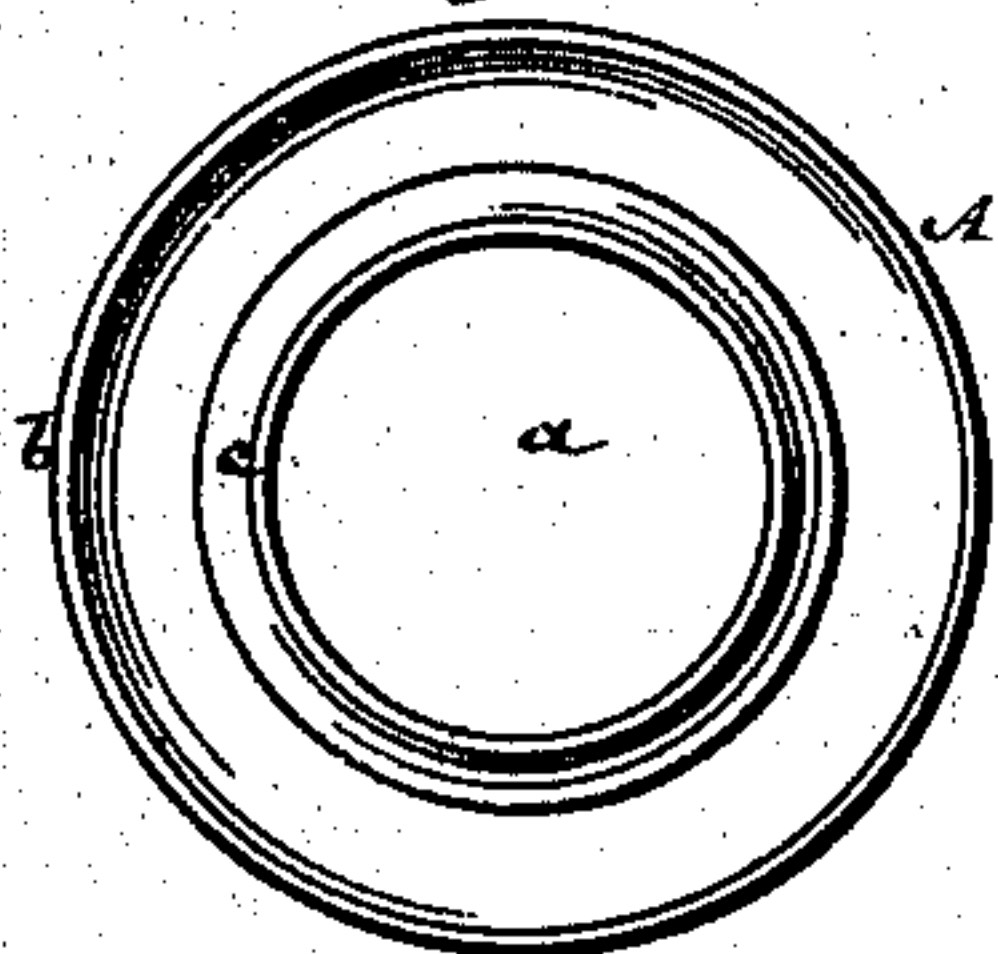


Fig: 3.

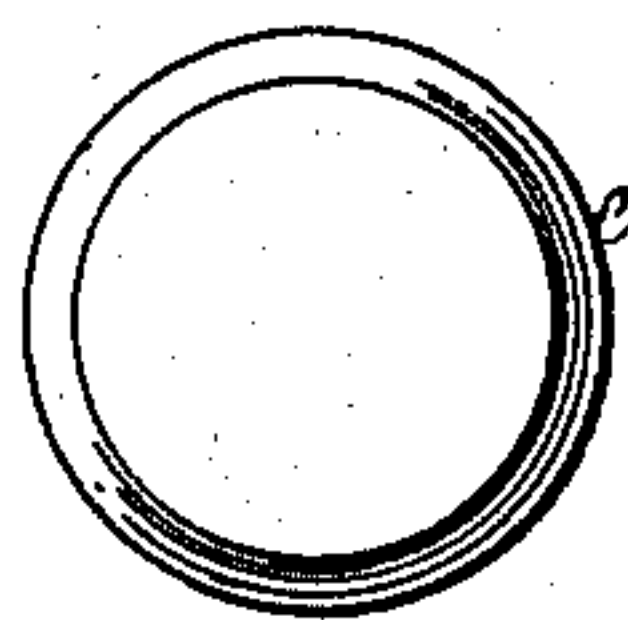


Fig: 6.

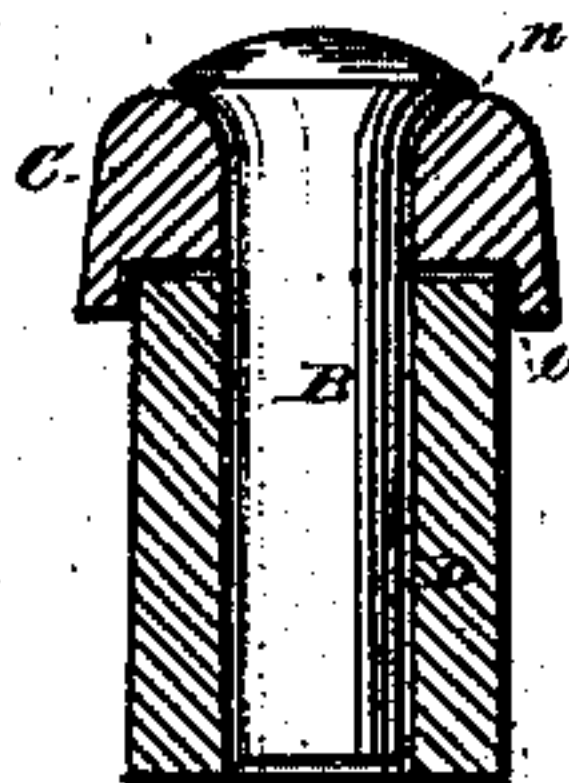


Fig: 5.

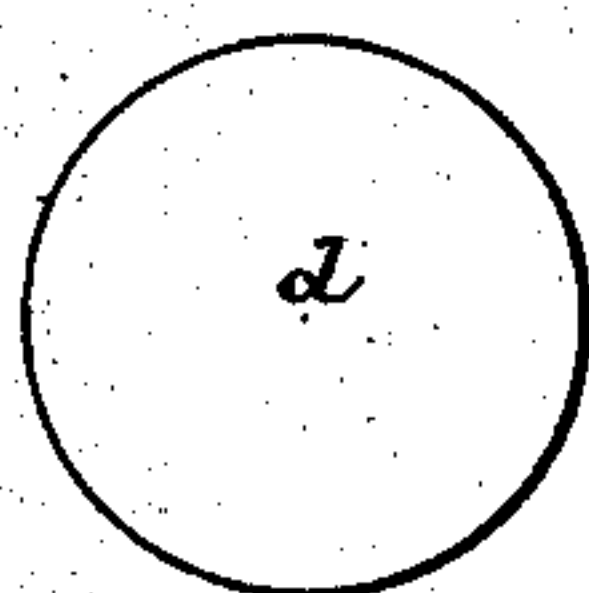
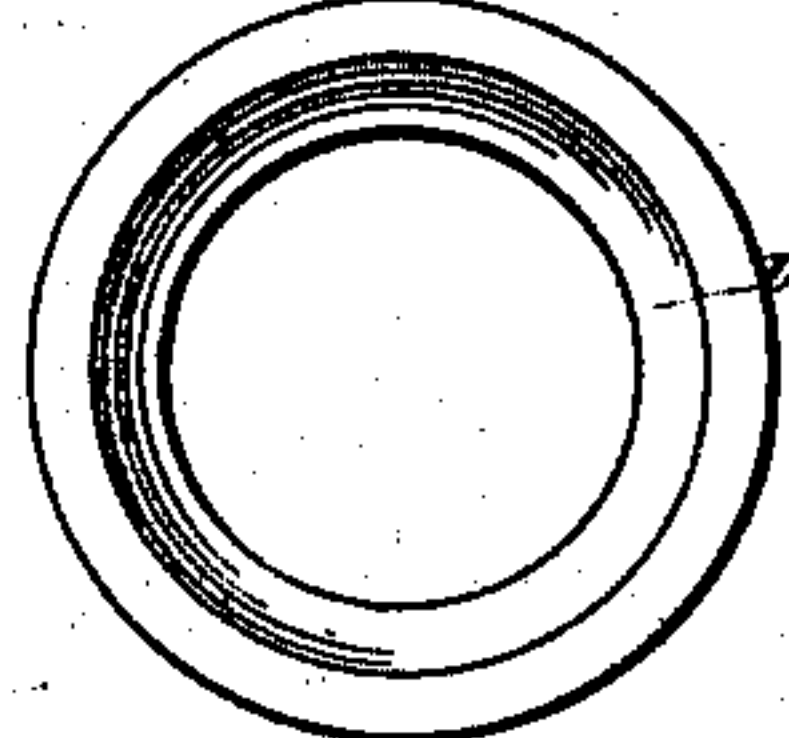


Fig: 4.



Inventor:

N. Thompson

Witnesses:

*Fred. Haynes
R. Chabreau*

United States Patent Office.

NATHAN THOMPSON, OF BROOKLYN, NEW YORK.

Letters Patent No. 104,794, dated June 28, 1870.

IMPROVEMENT IN BOTTLE-STOPPERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, NATHAN THOMPSON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Stoppers for Bottles and other Vessels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a sectional view of a cork or stopper constructed in accordance with my improvement, and as fitted within the mouth of a jar or bottle.

Figures 2, 3, 4, and 5, are face views of details used in the construction of said stopper.

Figure 6 is a sectional view of a modification of same invention.

Similar letters of reference indicate corresponding parts.

My invention consists in a novel combination of suitable materials, whereby a neat, solid, and durable stopper is produced.

In the construction of my improved stopper, when the same is to be metal bound, I first stamp out of sheet metal, a cap, A, having a hole, *a*, through its center, and formed with an outer turned-over border or rim, *b*, and inner tapering or conical-shaped eye or socket, *c*, that serves to receive through it, from the outside, a wooden core or plug, B, of tapering or enlarged form at its back or outer end, to fit within the eye *c*, so that, in drawing out or pulling on the stopper, the cap A cannot be detached from the plug, which it is desirable to dip into hot shellac prior to inserting it through the eye *c*, and, after insertion, to turn the inner edges of said eye so as to cut into or enter an annular groove in the plug, as shown in fig. 1. This makes a firm union of the metal cap and wooden plug.

The outer rim *b* of the metal cap may be also made to receive within it a ring, C, of wood or other suitable material, and the edges of said rim lapped or turned over to hold the ring in place, as represented in fig. 1. This gives solidity to the outer rim portion of the metal cap.

Shellac, or cement of any suitable kind, is then put into the cap, which is placed upon a heated plate, and a ring, D, of cork or gutta-percha, but which it will suffice here to call an annular cork, is driven onto or over the plug, from its inner end, and down into the metal cap, within (where such is used) the ring C as

a binding, and united to the cap and core or plug by the shellac or cement, to facilitate which the cork should be chamfered or tapered away on the inside, as represented in fig. 1.

This completes the stopper, though, if desired, the blank *d*, which was punched out of the metal in forming the hole *a* in the cap, may be sweated onto the latter over the outer end of the plug B, but such is not absolutely requisite.

The details of construction may, in fact, be more or less modified, but, by the combination of a metal cap with a wooden core and cork exterior, the difficulty heretofore experienced of uniting, in a durable manner, a soft material like cork to a metal cap, is obviated, there being no such difficulty in uniting the wooden core to the metal cap, or the cork to the wooden core.

The same principle of construction may be carried out, and the metallic casing dispensed with, as represented in fig. 6, by forming the wooden cap C, to cover the end of the annular cork D with a recess, *e*, for the reception of the latter on its under side, and a central orifice, *n*, tapering from its upper side to receive the tapering formed head of the plug or core B.

The several parts being thus formed, the annular cork D or flexible portion is to be inserted in the recess *e* on the under side of the cap C, with shellac or other suitable cement, and the core B, which is also coated with cement, is then driven from the upper side of the cap C through the cork D, until its enlarged end fits closely in the tapering cavity in the cap.

In this mode of construction, the cork being inserted on one side of the cap, and the core from the other side, with its tapering head fitting into the cavity in said cap, they can only be separated by loosening or softening the cement, and the cork portion, being supported by the wooden core, cannot easily be broken.

What is here claimed, and desired to be secured by Letters Patent, is—

A bottle-stopper composed of a cap, C, and core B, of wood, or other solid material, and an annular collar, D, of flexible material, the latter being inserted in the cap on its under side, and the core with its wedge-like head inserted from its upper side, as set forth, whether said cap be metal bound or not.

NATHAN THOMPSON.

Witnesses:

FRED HAYNES,
R. E. RABEAU.