(No Model.)

## F. McILVENNA.

BOTTLE STOPPER.

No. 345,160.

Patented July 6, 1886.



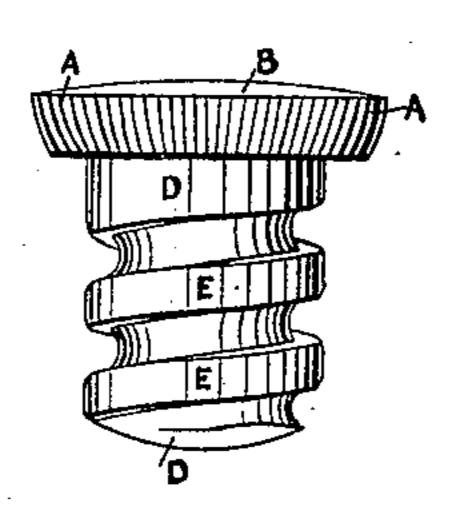


FIG.3

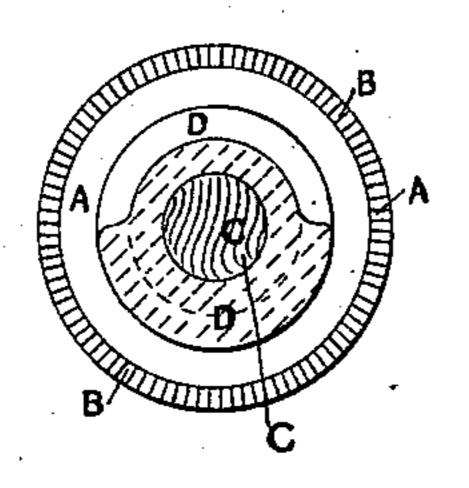
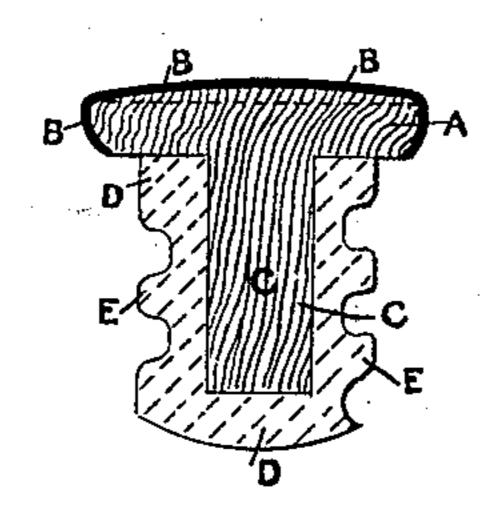


FIG.2



WITNESSES

INVENTOR

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Felix Mo Hvenna Verterhoonte. atty!

## United States Patent Office.

FELIX McILVENNA, OF MANCHESTER, COUNTY OF LANCASTER, ASSIGNOR TO WILLIAM PHILLIPS THOMPSON, OF LIVERPOOL, ENGLAND.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 345,160, dated July 6, 1886.

Application filed March 29, 1886. Serial No. 196,968. (No model.) Patented in England August 18, 1885, No. 9,784.

To all whom it may concern:

Be it known that I, Felix McIlvenna, a subject of the Queen of Great Britain, residing at Manchester, in the county of Lancaster, in the Kingdom of England, have invented certain new and useful Improvements in Bottle-Stoppers, (for which I have received Letters Patent in England, No. 9,784, dated August 18, 1885,) of which the following is a specification.

This invention has for its object a screwstopper that shall not give a taste to the liquids bottled, and shall be cheap and effective.

An india-rubber and vulcanite screw-stop15 per has been largely made in Great Britain, and for ease of bottling and drawing is well liked; but the rubber gives a taste to the bottles, and the cost is great—thirteen marks a gross—whereas the cost of my improved stop20 per is less than half this.

My invention consists, first, in cutting a coarse thread in cork; second, to enable the cork to stand the torsive strain, I insert a center and top of wood; third, to enable the whole to have an agreeable appearance, to have a milled edge, and to be able to stamp the name of the bottler on it, I cover it with a metallic cover, preferably of thin tinned iron, stamped with the name and trade-mark of the bottler.

In the drawings, Figure 1 is a side elevation of the stopper; Fig. 2, a vertical central section, and Fig. 3 a horizontal section of the same.

A is the head; B, the tinned metallic cover; C, the central core of wood; D, the cork-body, and E a thread formed thereon.

The cork is cut rather larger in diameter than the bottle-neck, and is bored with a 40 round hole for the peg, and the top and peg (turned in one piece or in two pieces and firmly glued together, as desired) is smeared with glue and the cork forced onto it. Previous to this the cover, made of tin with a little lead, 45 is stamped and pressed onto the top, as shown, with a tool giving it a corrugated or milled edge. As it is found that the cover of tin is apt to slide round on the wooden cap if the latter be quite round, a few depressions are o made in the said cap A, and the tin being pressed into these, it is prevented from slipping. The screw on the cork is now cut, but not quite up to the cap. The object in having the wood cap and center is twofold. It is

| found very difficult to cut a screw in a cork 55 | without a wood end and core to take the strain, and it is also found that without the core the cork is apt to screw off and break up in corking, and especially in uncorking the bottle.

I am aware that it is possible to screw a plain cork into a screwed bottle, and that the screw of the bottle presses into the cork and forms temporary threads on the cork; but it is found that the trough of the thread in the bottle is never filled, and the closure leaks; also that it is very difficult to cork and uncork this arrangement if screwed in tight enough not to leak, as even with a centering of wood and a wood cap it requires great strain, and the 70 cork is apt to tear off under that strain, whereas if the thread be cut in the cork it screws in quickly, easily, holds perfectly water-tight, and can be as quickly and easily uncorked.

I claim as my invention—

1. The process of making screw-cork stoppers, which consists in boring out the center of the stopper and filling the same with a hard tough material cemented to the cork, then cutting the thread on the cork, whereby &c a thread is produced without fear of fracture of the cork through torsive strain.

2. As a new article of manufacture, a cork stopper having a cut screw-thread formed thereon.

3. The combination of the metallic covering with a milled edge, the head and core of hard tough material, and the cork body having a cut screw-thread formed thereon.

4. The herein-described stopper, comprising 50 a cork body provided with a central socket and external cut screw-thread, and a wooden plug inserted in said socket and provided with an enlarged head.

5. In combination with a cork stopper hav- 95 ing a screw-thread cut thereon, a core and milled head of hard tough material, whereby a firm grasp can be taken and the torsive strain carried down to all parts of the stopper equally, and thus the cork at any one point be 100 required to stand only the strain of its own friction at that point.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses: FELIX McILVENNA.
JOSEPH J. ROYDEN,
J. OWDEN O'BRIEN.