

(No Model.)

J. W. CARTER.
STOPPER.

No. 462,857.

Patented Nov. 10, 1891.

FIG. 1.

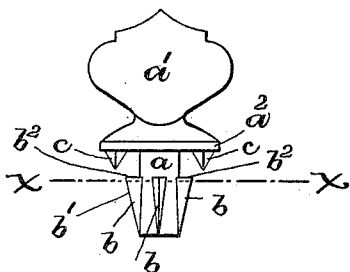


FIG. 2.

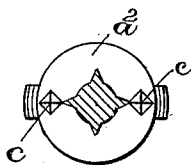


FIG. 3.

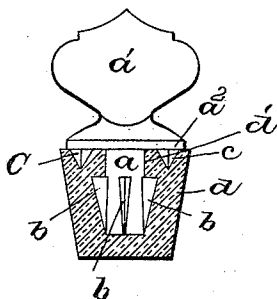


FIG. 4.

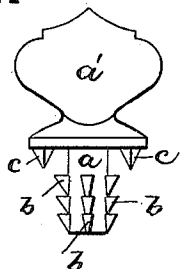


FIG. 5.

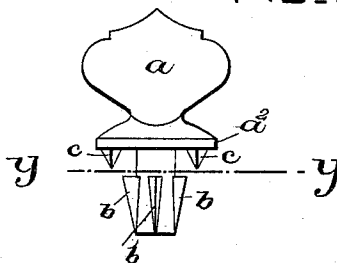
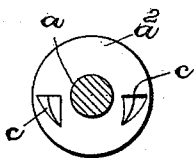


FIG. 6.



WITNESSES.

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SPECIFICATION forming part of Letters Patent No. 462,857, dated November 10, 1891.

Application filed June 19, 1891. Serial No. 396,855. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. CARTER, a citizen of the United States, residing at Newton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Stoppers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The stopper comprises a central spindle or core having a flange and knob or handle, made preferably integral and of glass, wood, metal, formative material, or any other suitable substance, and having also projecting from the shank barbs, preferably having flat upper surfaces, and from the under surface of the flange points or barbs, and a yielding sleeve or jacket, preferably of cork, forced upon said spindle and barbs and against said points to bring its upper edge against the lower surface of the flange.

In the drawings, Figure 1 is a view in elevation of the stopper, with the exception of the jacket. Fig. 2 is a view in section of the stopper inverted upon the line of xx , Fig. 1, and in plan of parts below said line. Fig. 3 is a view, partly in elevation and partly in section, of the complete stopper. Fig. 4 is a view representing a slight change in the size and number of the holding-barbs. Figs. 5 and 6 are views representing the points upon the flange of the stopper as made in the form of barbs.

Referring to the drawings, a represents the core or spindle of the stopper, a' the knob or handle, and a^2 the flange. Extending from the sides of the core or spindle are the barbs b . There may be any number of them used, and preferably they each have the long or relatively-long inclined surface b' upon its under side or side toward the lower end of the core or spindle and the flat or relatively-flat upper surface b^2 . In the drawings I have represented the core or spindle as having four of these barbs arranged lengthwise the core and quarteringly in relation to each other. From the under surface of the flange a^2 there extends downward the points c . I have represented two points in the drawings; but do not

confine myself to that number. I have also shown them as arranged in line with two of the barb projections, and while I prefer this arrangement in relation to the barbs, as it is a help in the making of molded stopper-cores, the mold being divided upon the line of the points, and because they also act to force the cork or other material of the jacket above the barbs against the side of the spindle or core as the core or spindle is being forced into the cork, still I do not confine myself to this location. The core, flange, knob or handle, barbs, and points preferably are made integral, and while I prefer that they be formed of glass, yet I do not wish to be understood as limiting myself to glass, as any other suitable substance may be used for the purpose. The jacket d is preferably made of cork, although not necessarily so, as it may be made of rubber or any other resilient material, and is preferably formed with the hole d' , extending from its upper end to near its bottom, the hole preferably being somewhat smaller than the core a , and the two parts are united by forcing the core straight into the hole d' until the upper surface d^2 of the jacket comes into contact with the lower surface of the flange a^2 , when the barbs b and points c will be pressed into the material of the jacket and the material closed over the flat surfaces of the barbs by its resiliency or elasticity and also by the spreading action of the prongs c . This insures that the jacket be held to the remainder of the stopper in a manner to prevent their being separated by a pulling action upon the jacket by the knob or handle or by a turning action of the knob or handle in relation to the jacket, the barbs b acting as stops to prevent the first and the points c stops to prevent the second, and both co-operating to make a very perfect union between the jacket and the core and flange.

I do not confine the shape of the points c to that represented in Figs. 1, 2, and 3; but may make them in the shape of barbs, as represented in Fig. 6, and when so made I prefer that the barb faces oppose each other, so that whichever way the stopper is turned there shall always be a barb face opposed to the direction of the turning movement.

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Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. As an improved article of manufacture,
5 the stopper composed of a core or spindle *a*,
having laterally-extending barbs *b*, the flange
*a*², provided with the downward-extending
points *c*, the knob or handle *a*¹, and the jacket
10 *d*, pressed upon the core or spindle and hav-
ing the barbs and points embedded in its sub-
stance, as and for the purposes described.
2. In a stopper, the spindle *a*, provided with

barbs *b*, having the tapering surfaces *b*¹ and
flat surfaces *b*², the flange *a*², having the down-
ward-extending points *c*, the points and barbs 15
being disposed so that the points act to press
the material of the jacket over the barbs and
against the surface of the core, and the jacket
d, pressed upon the core and held by the barbs
and points, as and for the purposes described. 20

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Witnesses:

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