

(No Model.)

J. L. MILLER.
STOPPER.

No. 523,539.

Patented July 24, 1894.

Fig 1

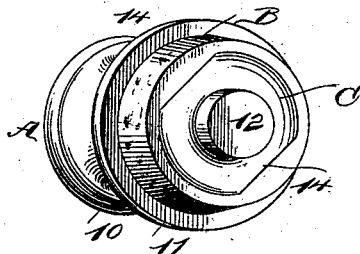


Fig 2.

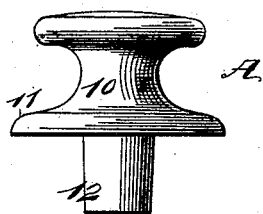


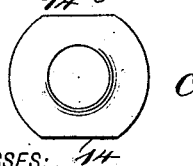
Fig 3.



Fig 4.



Fig 5.



WITNESSES:

Paul J. Schat
J. H. Decker

Fig 6.

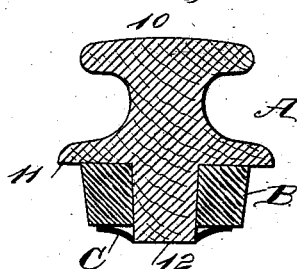


Fig 7.

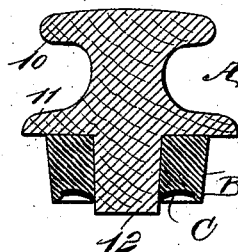
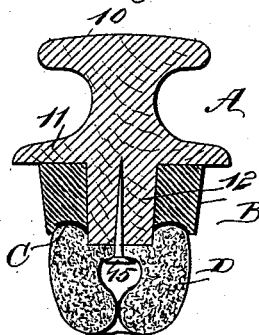


Fig 8.



INVENTOR

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UNITED STATES PATENT OFFICE

JAMES L. MILLER, OF NEW YORK, N. Y., ASSIGNOR TO THE FRANK MILLER COMPANY, OF SAME PLACE.

STOPPER.

SPECIFICATION forming part of Letters Patent No. 523,539, dated July 21, 1894.

Application filed April 18, 1894. Serial No. 508,014. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. MILLER, of New York city, in the county and State of New York, have invented a new and Improved Stopper, of which the following is a full, clear, and exact description.

My invention relates to an improvement in stoppers, and especially to that class having a wooden base or body.

The object of the invention is to so construct such a stopper that the cork section will be firmly secured to the body or base, and will admit of the body being given even violent lateral movement without danger of separating it from the cork section, and to so construct the body that a sponge, a tuft of felt, or equivalent article may be conveniently and economically made a portion of the stopper when occasion shall require.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the complete stopper. Fig. 2 is a side elevation of the wooden body thereof. Fig. 3 is a section through the cork member of the stopper. Fig. 4 is a section through the washer, and Fig. 5 is a plan view of the washer. Fig. 6 is a vertical section through the stopper, the parts having been placed loosely together. Fig. 7 is a section through the complete stopper; and Fig. 8 is a section similar to Fig. 7, but illustrating the attachment of a dauber to the stopper.

The body A of the stopper is made of wood, rubber, bone, or an equivalent material, and comprises a handle 10, which may be in the nature of a knob, a flange 11, integral with or attached to the handle, and a stud 12, preferably forming a portion of the flange, centrally located and extending at a right angle from the under face of the flange.

The sealing section B of the stopper is made of cork, or an equivalent material, and its outer side is usually made tapering, as shown

in Fig. 3, the bottom being of less diameter than the top, while an opening 13 is made in the center, extending through from top to bottom, which opening is adapted to snugly receive the stud 12 of the body. The stud 12 is of greater length than the thickness of the sealing section, and the latter is firmly held in engagement with the body of a washer C. The washer is preferably made of metal, and as shown in Figs. 4 and 5 is circular in general contour, and in cross section represents substantially the frustum of a cone, but its wider or base portion is flattened usually at diametrically opposite sides, as illustrated at 14 in Figs. 1 and 5, causing the margin to be more or less angular.

In the operation of assembling the parts of the stopper, the sealing section B, is placed upon the stud 12 of the body and made to engage with the under face of the flange 11; next, the washer C is placed over the stud, its under portion uppermost, or facing the sealing section, and when the washer is in proper position its under or base portion will contact with the under face of the sealing section of the stopper, as shown in Fig. 6. The washer C is subjected to pressure, the application being made to its under face until the said face of the washer shall have been decidedly concaved or flattened, or until the washer shall have become sunken to a predetermined degree in the cork or sealing section, as shown in Figs. 1, 7 and 8, the pressure applied to the flange serving also to cause the under or apex portion to bind firmly against the stud. The straight edges of the flange, when the latter is sunken in the cork or sealing section, effectually prevent the latter from turning, thus enabling the stopper to be rocked in its seat, or severe lateral force to be applied thereto, in order to dislodge the stopper, without loosening the sealing section, or in the least injuriously affecting the stopper.

If a dauber D, is required, it may be made of hair fabric, sponge or equivalent material, and may be secured to the bottom of the stud 12 by means of a nail or screw 15, or equivalent fastening device, or a suitable cement may be employed for the purpose.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

5 A stopper, comprising a handle section provided with a projecting stud, a sealing section surrounding the stud, and a washer having a central opening for the reception of the stud, said washer being provided with an angular marginal portion which is bent out of

plane with the central portion of the washer, to cause the latter to bind upon the stud when the washer is forced into the sealing section, substantially as described. 10

JAMES L. MILLER.

Witnesses:

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SEYMOUR G. BEST.