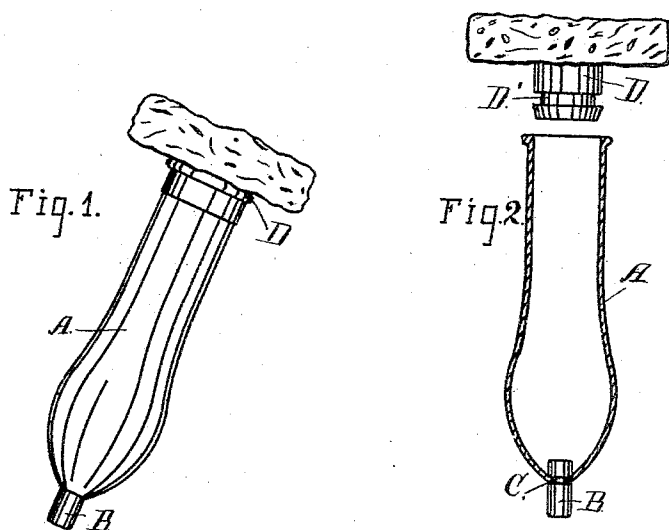


(No Model.)

P. D. HORTON.
SLATE WASHER AND WIPER.

No. 339,652.

Patented Apr. 13, 1886.



Witnesses:

Wm. Mayer
Joseph E. Ford

Inventor:

Peter D. Horton
By *Wm. Smith*
Att'y

UNITED STATES PATENT OFFICE.

PETER DAVIS HORTON, OF SAN FRANCISCO, CALIFORNIA.

SLATE WASHER AND WIPER.

SPECIFICATION forming part of Letters Patent No. 339,652, dated April 13, 1886.

Application filed November 21, 1885. Serial No. 183,580. (No model.)

To all whom it may concern:

Be it known that I, PETER DAVIS HORTON, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented a new and useful Improvement in Slate Washers and Wipers, of which the following is a specification.

The object of my invention is to provide a means for the easy washing and rapid drying of the surfaces of slates, mainly adapted for use in schools; and my invention is intended as an improvement upon a slate washer and wiper for which Letters Patent of United States have been allowed to me.

In the accompanying drawings, forming a part of this specification, Figure 1 is a view in perspective of my improved slate washer and wiper. Fig. 2 is a vertical section of the same with stopper and sponge removed.

In carrying out my present invention I employ an elastic bulb, sack, or pouch, A, similar to that described in my former specification, the outer end of which is pierced with a hole to receive a plug, B. An annular groove, C, is made centrally in the plug, so that when the plug is forced into the perforation in the end of the bulb the opening will be expanded or distended and the mouth of the opening spring into the annular groove, closing tightly around the plug and rendering it water-tight at that point.

The stopper D in the mouth of the flexible or elastic bulb, to which a sponge is attached, is of metal or wood, as I have found that a stopper made of cork and placed at that point is more liable to be forced out of the mouth when pressure is brought to bear upon the bulb or fluid-container. An annular groove, D', is formed around the stopper, similar to that shown in the plug hereinbefore described, and when the stopper is in position in the mouth of the bulb or liquid-container the rim or edge of the mouth will be sprung into the groove and contract around it in such a manner as to render the mouth of the bulb or fluid-container air and water tight.

The stopper in the mouth of the bulb and the plug in the lower end thereof are two important features of my invention, as by the former I am enabled to make the mouth of

the container air and water tight, and by the latter I am enabled to hold the liquid or fluid in suspension and force it out in a spray from the elastic container or in drops, as desired. For the purposes of this plug I have discovered that when certain kinds of wood having porous and straight or parallel fibers are placed in the end of an elastic or flexible tube or bulb containing water or other liquid or fluid and the mouth of the tube closed, when pressure is brought to bear upon the bulb or tube, the water will be forced out through the fibers of the wood drop by drop or in spray, and when the pressure upon the pouch or bulb is removed and expansion takes place any remaining water on the extreme end of the porous plug will be drawn back through the plug into the bulb and be held in suspension until pressure is again brought to bear upon the bulb, leaving the end of the plug comparatively dry. Thus no more than one drop at a time need be expelled or forced out through the end of the plug instead of a small stream, as in my former invention. In selecting woods for the plug in the end of the bulb maple wood is desirable; yet there are several kinds which may be employed for that purpose.

It is evident from the above description that my device may be employed as a holder for the various perfumes and medicines where only small portions are needed at certain times.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a slate washer and wiper, the combination of the flexible water-container A, the sponge-carrying stopper D, provided with a circumferential groove, and adapted to be inserted into the mouth of the bulb, and the plug B, circumferentially grooved at C, and inserted in an orifice in the end of the bulb A, opposite its mouth, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

PETER DAVIS HORTON. [L. s.]

Witnesses:

C. W. M. SMITH,
CHAS. E. KELLY.