## IBIN. MucilageBrush. Nº988205. Patented Man 30,1809.

India Rubber Fig:2.

Witnesses Lake Oh, Jones Anti-Corres Inventor Douglas Bly By Hraser 460



## DOUGLAS BLY, LATE OF MACON, GEORGIA.

Letters Patent No. 88,265, dated March 30, 1869.

## IMPROVEMENT IN MUCILAGE-BRUSHES.

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, Douglas Bly, late of Macon, in the county of Bibb, and State of Georgia, have invented a new and improved Instrument for Applying Mucilage; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which-

Figure 1 represents my improved form of mucilage-

brush in section, elevation, and end view.

Figure 2 consists of similar views of a brush of the same form, the tubular portion having an external covering of fibrous material.

Fig. 1 also represents a handle, formed of transverse corrugations, for retaining the same at proper depth

in the cap.

My invention consists of a mucilage-brush, or instrument, formed of a tubular elastic and flexible material, as India rubber, or other non-absorbent and equivalent material, provided with a suitable handle, its interior cavity serving as a cell for the retention and distribution of the mucilage; and in the method of retaining the brush at a proper depth of immersion in the mucilage-bottle.

I make my brushes in two ways, first, by taking short sections of India-rubber tubing, of a suitable size and length, and inserting the handle, b, in one end, securing the two together in any convenient manner; and also, by covering the tubular portion of a brush so formed with a coating of buckskin, or other material of a soft, fibrous texture, as shown at c, fig. 2, the latter being for a brush of superior quality, and adapted to work with more ease and facility, as the covering retards the discharge or delivery of the mucilage therefrom, and causes it to be more evenly spread, or distributed over the surface to which it is applied.

The hollow, or tubular form is best adapted for a brush for this purpose, as it enables it to receive and retain, by capillary attraction, a greater quantity of mucilage, and diminishes the difficulty of dropping, while it delivers it gradually and equally, enabling it to be applied with precision to the desired place.

Such a brush does not divide, or become as rigid on drying, as one of bristles does, but is self-retaining in

form.

When the fibrous covering is used, the rubber tube forms a flexible interior, or supporting-structure. I find buckskin, from its nature, best adapted to retain the mucilage, by means of the papilla on its surface, and effect the distribution of the same, though felted or woven tubing, of suitable fibrous material and porous structure, will accomplish the same result, and form a substantial equivalent.

Such material, being absorbent, will not alone retain its form, so as to serve the purpose, but does so perfectly when sustained by the internal rubber tube, which is non-absorbent.

The tube may be perforated, to allow of the escape of air from the interior when immersed, to facilitate

the entrance of the mucilage.

Some of its advantages consist in its having a wide base, so that the mucilage that is held in suspension will cover a larger surface than in an ordinary brush. The tube, when applied to the paper, expands laterally by the pressure, so as to cover a larger surface, but at the same time preserves a well-defined limit at its boundary.

It is cheaply and easily made, the tube-portion being cut from India-rubber tubing, in sections of suitable length, in one end of which the handle is inserted and secured; and the fibrous covering is readily applied, when a superior quality of brush is required.

In order to prevent the brush sinking too deeply into the mucilage when remaining in the bottle, I form the handle with a series of annular grooves, or corrugations, as at i i, fig. 1, and also form the cap with its tube, or stem, through which the handle passes, slightly elongated, and with an annular indentation, h, corresponding with the grooves i. This tube being divided longitudinally, leaves sufficient elasticity to the sides to readily slip over the grooves, when required, to adjust the depth of the brush, and at the same time to be self-retaining therein, and prevent sinking too deeply into the mucilage.

I do not claim, broadly, the use of India rubber for

a mucilage-brush.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. An instrument for applying mucilage, consisting of a tubular section of elastic non-absorbent material, with a handle affixed, substantially as herein described.

2. Said instrument, when formed as above, and provided with an exterior covering of fibrous and absorbent material, to which the inner, or non-absorbent and elastic tube serves as a supporting and form-retaining structure, substantially as set forth.

3. Also, the corrugated handle, in combination with the correspondingly-indented neck of the capsule, sub-

stantially as set forth.

In witness whereof, I have hereunto signed my name, in the presence of two subscribing witnesses.

DOUGLAS BLY.

Witnesses:

J. Fraser,

J. A. DAVIS.