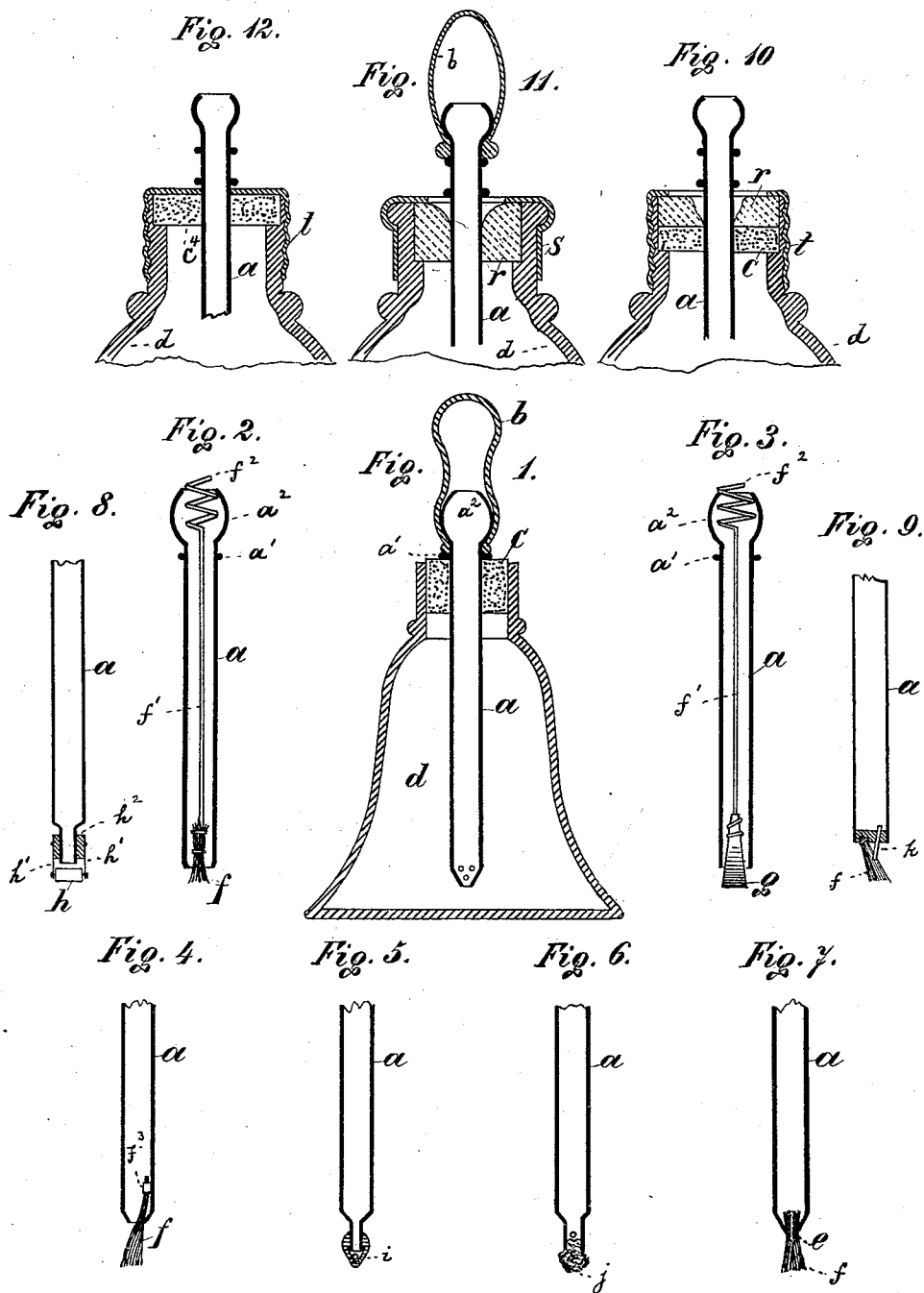


(No Model.)

A. BÜHLER.
MUCILAGE HOLDER.

No. 453,229.

Patented June 2, 1891.



Witnesses:
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UNITED STATES PATENT OFFICE.

ADOLPH BÜHLER, OF REICHENHALL, GERMANY.

MUCILAGE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 453,229, dated June 2, 1891.

Application filed April 8, 1890. Serial No. 347,082. (No model.) Patented in France May 3, 1888, No. 189,040; in Germany April 15, 1889, No. 45,989; in England April 27, 1889, No. 7,071, and in Austria-Hungary September 25, 1889, No. 27,742 and No. 44,324.

To all whom it may concern:

Be it known that I, ADOLPH BÜHLER, of Reichenhall, Bavaria, Germany, have invented a new and useful Improvement in Mucilage-Holders, (for which I have obtained patents in the following countries: Germany, No. 45,989, dated April 15, 1889; Austria-Hungary, No. 27,742 and No. 44,324, dated September 25, 1889; England, No. 7,071, dated April 27, 1889; France, No. 189,040, dated May 3, 1888,) of which the following is a specification.

This invention relates to a mucilage-holder of improved construction; and it consists in the various features of improvement more fully pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal central section of my improved mucilage-holder. Figs. 2 to 9 are vertical central sections of modifications of the tube *a*. Figs. 10 to 12 are vertical central sections through the upper part of modifications of the bottle *d*.

The letter *a* represents a rigid tube passing through a perforated stopper *c* into a mucilage-bottle *d*. Above the stopper the tube *a* has a shoulder *a'*, which prevents the tube from being pushed down too far. Above the shoulder *a'* an elastic bulb *b* is secured to tube *a* by being slipped over a head or enlargement *a²* of such tube.

In use a compression and subsequent release of bulb *b* will cause some of the mucilage contained in bottle *d* to rise within tube *a*. The tube is now withdrawn, the perforation in the stopper *c* being so large only that it will wipe off any mucilage on the outer surface of the tube and cause it to return to the bottle. The tube *a* may now be used for directly applying the mucilage to the paper by a gentle pressure upon bulb *b*. The lower end of tube *a* may be constructed in a variety of ways, such as I have illustrated in Figs. 1 to 9.

In Fig. 1 the tube *a* is made tapering and is provided with lateral perforations.

In Fig. 2 a brush *f* projects out of the lower end of tube *a*. This brush is secured to a wire *f'*, the upper end of which is coiled

within head *a²* to constitute a spring *f²*, thus making the brush *f* yielding.

In Fig. 3 the wire *f'* and coil *f²* are retained; but the brush *f* is replaced by a flexible tongue *g*.

In Fig. 4 the wire *f'* and coil *f²* are dispensed with, and the brush *f* is directly secured to the inner surface of tube *a* by non-soluble glue, as at *f³*.

In Fig. 5 the tube *a* terminates in a nozzle which is surrounded by a perforated rubber cap *i*.

In Fig. 6 a sponge or swab *j* is introduced into the contracted neck of tube *a*. This neck is perforated to permit the mucilage to reach the exposed part of the swab.

In Fig. 7 a quilt *e*, passing through the contracted end of tube *a*, feeds the mucilage to the brush *f*.

In Fig. 8 a mucilage-distributing roller *h* is journaled to arms *h'*, secured at their upper ends to a ring *h²* that is made fast to tube *a*. This modification is intended for use in larger apparatuses.

In Fig. 9 the tube *a* is closed by a perforated plug at its lower end. An inclined tube *k* feeds the mucilage to the brush *f*.

In order to prevent the mucilage from hardening around the tube *a* at the stopper *c*, the stopper may be saturated with a fatty matter—such as vaseline, paraffine, &c.—or the stopper may be covered by a layer of such fatty matter.

In Fig. 10, *r* is the fatty layer, having a tapering opening for admission of tube *a* and placed over the stopper *c*. This fatty layer is held in place by a flanged screw-cap *t*, fitting around the neck of bottle *d*.

In Fig. 11 the fatty layer *r* only is used, the stopper *c* being dispensed with. The screw-cap *t* is replaced by a plain cap *s*.

In Fig. 12 there is no fatty layer, a saturated stopper *c⁴* and screw-cap *t* being employed.

What I claim is—

1. The combination of the bottle *d* with the perforated stopper *c*, tube *a*, having the head *a²*, and with a flexible bulb *b*, secured to said head, and a spreader or brush at the op-

posite end of the tube, substantially as specified.

2. The combination of the bottle *d* with the tube *a*, bulb *b*, and with a perforated stopper provided with a fatty layer or a fatty impregnation, substantially as specified.

5 In testimony whereof I have signed this

specification in the presence of two subscribing witnesses.

ADOLPH BÜHLER.

Witnesses:

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