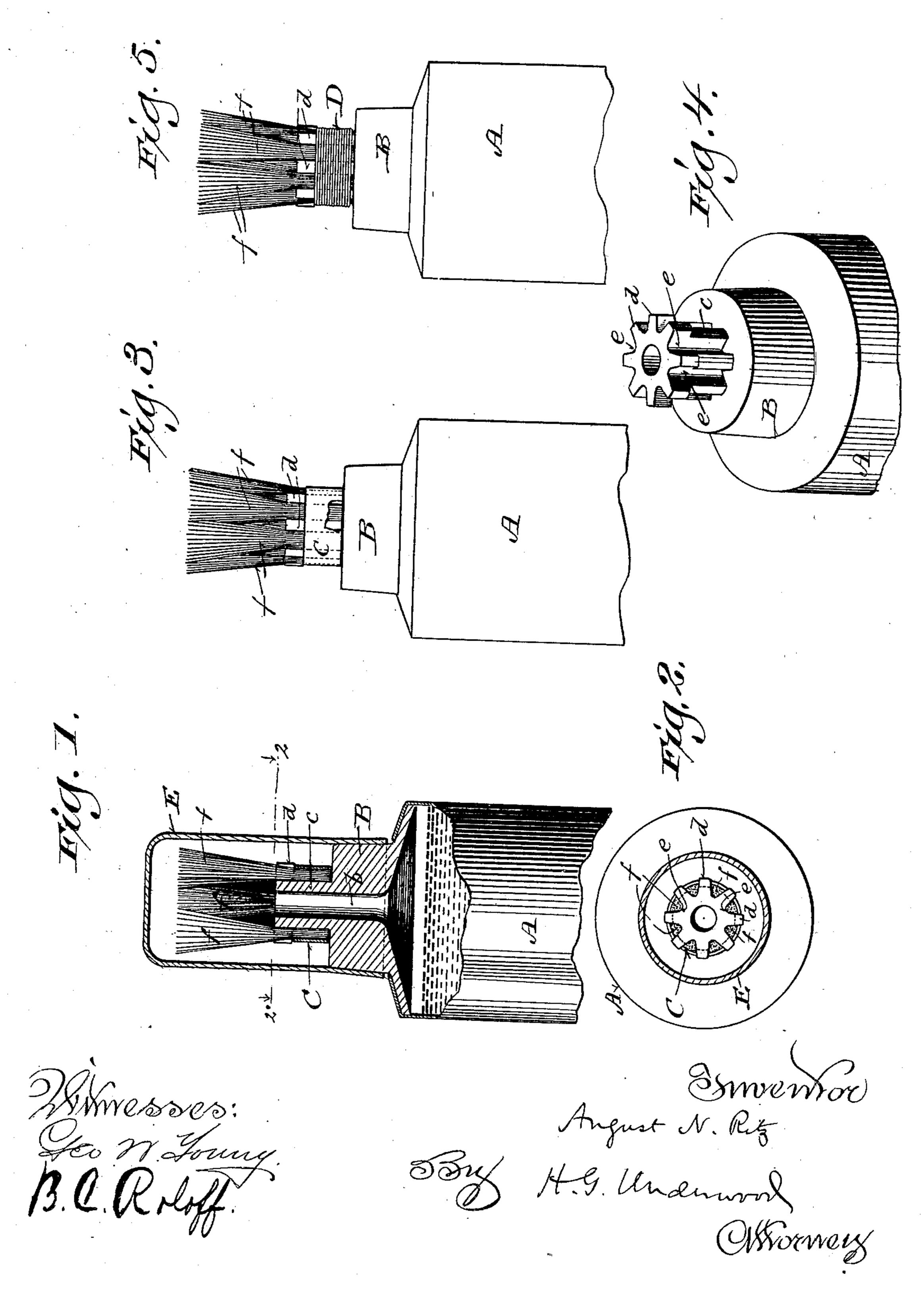
## A. N. RITZ. PASTE TUBE.

(No Model.)

(Application filed Sept. 17, 1900.)



## United States Patent Office.

AUGUST N. RITZ, OF MILWAUKEE, WISCONSIN.

## PASTE-TUBE.

SPECIFICATION forming part of Letters Patent No. 668,357, dated February 19, 1901.

Application filed September 17, 1900. Serial No. 30,229. (No model.)

To all whom it may concern:

Be it known that I, AUGUST N. RITZ, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State 5 of Wisconsin, have invented certain new and useful Improvements in Paste-Tubes; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to tubes for holding 10 and distributing prepared paste and other adhesive substances; and it consists in certain peculiarities of construction and combination of parts, as will be fully set forth hereinafter in connection with the accompanying draw-

15 ings and subsequently claimed.

In the said drawings, Figure 1 is a vertical sectional view through the operative end of a paste-tube embodying one form of my present invention. Fig. 2 is a transverse sec-20 tional view taken on the line 22 of Fig. 1. Fig. 3 is a side elevation of the parts shown in Fig. 1, partially broken away and with the cap or cover removed. Fig. 4 is a perspective view of said end of the device with the bris-25 tles and their retaining means removed. Fig. 5 is a side elevation of the operative end of another form of my device.

Referring to the drawings, A represents the tube proper, which is preferably a spun-metal 30 cylindrical body of the type commonly called a "squeeze-tube," and B designates a nozzle, also preferably of metal, secured to the tube A in the ordinary manner. The said nozzle B has a bore b therethrough and is further 35 formed with a neck c and outer annular flange d, the said neck and its flange being formed with a series of longitudinal exterior channels e e e for the reception of tufts of bristles fff, which are secured in place either by the 40 retaining-band C (shown in Figs. 1, 2, and 3) or by a wrapping of filament, such as thread or fine cord or wire, as shown at D in Fig. 5.

E represents the cap or cover, which in its preferred form herein illustrated is merely a 45 slip-cover held by frictional engagement with the exterior surface of the nozzle B. If desired, the bore b may be closed by a suitable cork or plug; but I have not deemed it necessary to illustrate such in the drawings, the 50 said cork or plug being, of course, removed

when the device is to be used.

The operation of my device will be readily understood from the foregoing description of its construction, taken in connection with the accompanying drawings. When the device 55 is to be used, the cap or cover E is slipped off, (and the bore b uncorked, if same has been independently closed,) and then the tube A is squeezed, which will force its contents out through the said bore b of the nozzle B onto 60 the brush formed by the bristles ff, and the device is then used like any brush for spreading and distributing the contents of the said tube, the lower end of which (not shown) is closed and of the ordinary construction of 65 squeeze-tubes. By reason of the band C or filamentary wrapping D being between the flange d of the neck c and the base of the nozzle B the tufts of bristles are kept securely in place without any wiring or stitching through 70 the tufts or clamping, and the whole device is an inexpensive and extremely convenient article for the purpose intended.

The described flange d serves to prevent the bristle-retaining means C or D from slip- 75 ping off the end of the nozzle-neck in the use of the device, and this constitutes a novel and

valuable feature of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters 80

Patent, is—

The combination with a receptacle for paste and other adhesive substances, of a nozzle, secured to one end of said receptacle, said nozzle having a flanged outer neck formed 85 with exterior longitudinal channels, and the flange of said neck being located at the outer end thereof, and of greater diameter than that of said neck, tufts of bristles arranged in said channels; and retaining means sur- 90 rounding the inner ends of said bristle-tufts between the flange of the nozzle-neck and the base of the nozzle.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in 95 the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

AUGUST N. RITZ.

Witnesses:

H. G. Underwood,

B. C. Roloff.