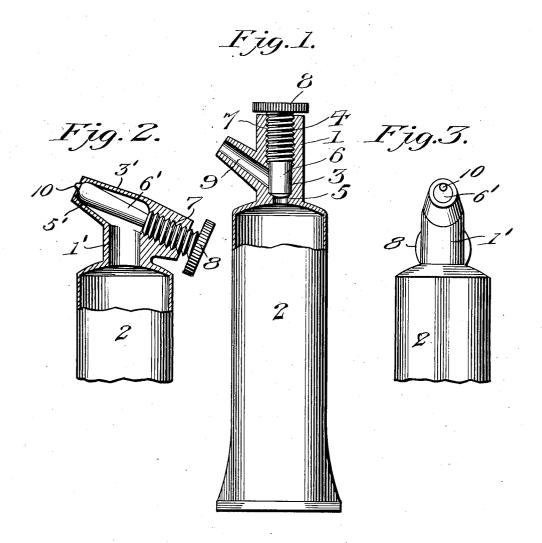
No. 814,605.

PATENTED MAR. 6, 1906.

F. C. HOLLY. COLLAPSIBLE TUBE. APPLICATION FILED FEB. 18, 1905.



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## UNITED STATES PATENT OFFICE.

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## COLLAPSIBLE TUBE.

No. 814,605.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed February 18, 1905. Serial No. 246,299.

To all whom it may concern:

Be it known that I, FORREST C. HOLLY, a citizen of the United States, residing at Yazoo City, in the county of Yazoo and State of Mississippi, have invented new and useful Improvements in Collapsible Tubes, of which the following is a specification.

This invention relates generally to collapsible tubes such as are designed especially to 10 contain paste or other semifluid substance, and particularly to valve mechanism used in connection with the neck portions of such tubes.

The objects of the invention are to im-15 prove and simplify the construction of such valve mechanism.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combi-20 nation and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment there-

In the accompanying drawings, forming a 25 part of this specification, Figure 1 is a side elevation, partly in section, of a paste-tube equipped with the improvements of the present invention. Fig. 2 is a section, and Fig. 3 an elevation, of a modified construction.

The improved tube is constructed with a neck 1 and a body portion 2, which is formed of any suitable collapsible material. neck I is formed with a bore having a smooth portion 3 and a threaded portion 4, said threaded portion being relatively longer than the smooth portion 3. At its lower end the smooth portion 3 is contracted, as shown at 5, to form a rounded valve-seat.

Fitted into the bore of the neck 1 is a valve 40 having a smooth portion 6 and a threaded portion 7, said threaded portion being relatively longer than the smooth portion 6. The valve is also formed with a milled handle or finger-piece 8, which is of greater diameter 45 than the upper end of the neck 1, so as to permit the valve to be readily manipulated with the fingers. Leading out of the smooth portion 3 of the neck is an exit-passage 9.

The improvements of the present inven-so tion prevent the clogging of the neck with paste, as is usual in ordinary tubes of this character. Furthermore, in manipulating the valve the fingers of the user are prevented from coming in contact with the paste.

The object in making the threaded portion of the bore longer than the smooth portion thereof is to permit the smooth portion 6 of the valve to be withdrawn entirely from the smooth portion 3 of the bore in the neck 1 without disengaging the threads of the valve 60 entirely from the threaded portion of the neck.

In the construction shown in Figs. 2 and 3 the valve 6', which cooperates with the contracted valve-seat 5', is angularly disposed 65 with respect to the neck 1', and said valve is provided with an eccentrically-disposed projection 10, which is adapted to cut all the paste away from the valve-seat when the valve is closed, whereby the clogging of the 70 valve-seat with hardened paste is avoided. It will be observed that the smooth portion 3' of the bore is gradually enlarged toward the threaded portion and that the smooth portion of the valve is gradually decreased or 75 contracted toward the threaded portion. This construction permits a supply of paste to accumulate adjacent to the valve-seat, so as to be always ready for use.

Changes in the precise embodiment of in- 80 vention illustrated and described may be made within the scope of the following claims without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what \$5

is claimed as new is-

1. A collapsible tube having a neck formed with a bore having a smooth portion and a threaded portion, one end of the smooth portion being contracted to form a valve-seat, a 90 valve having a smooth portion provided with an eccentrically-located projection and disposed in the smooth portion of the neck, and a threaded portion to fit the threaded portion of the neck, and a passage communicating 95 with the smooth portion of the bore of the neck at an angle thereto.

2. A collapsible tube having a neck formed with a bore having a contracted valve-seat, a valve fitted into said bore and having an ec- 100 centrically-disposed projection for the pur-

pose specified.

3. A collapsible tube having a neck, a valve-seat, and a valve angularly disposed with respect to the neck, and provided with 105 an eccentrically-located projection.

In testimony whereof I affix my signature in presence of two witnesses.

FORREST C. HOLLY.

Witnesses:

P. E. MANUEL, B. Y. Buckley.