

No. 851,586.

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W. L. CLARK.

PASTE TUBE.

APPLICATION FILED DEC. 29, 1905.

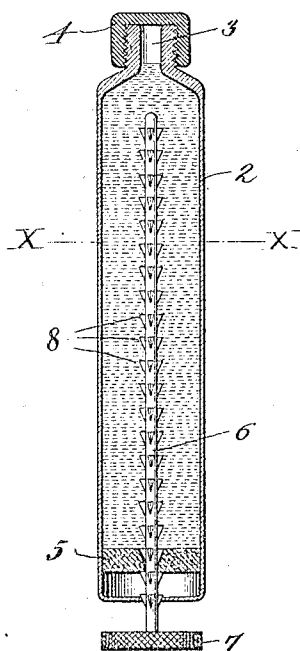


Fig. 1.

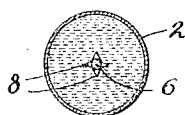


Fig. 2.

WITNESSES

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WALTER L. CLARK, OF NEW YORK, N. Y.

PASTE-TUBE.

No. 851,586.

Specification of Letters Patent.

Patented April 23, 1907.

Application filed December 29, 1905. Serial No. 293,761.

To all whom it may concern:

Be it known that I, WALTER L. CLARK, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Paste-Tubes, of which the following is a specification.

This invention relates to packages or receptacles for pasty or viscous materials, powders and the like, and is more particularly intended to provide a simple and inexpensive construction of that type of receptacle which comprises a rigid or non-collapsible tube in which the material is contained and from which it is forced by means of a piston originally located behind the mass of material contained in the tube, said piston being pushed forward by suitable means to whatever extent is necessary to force any desired quantity of material out of the mouth of the tube.

In the accompanying drawings, Figure 1 is a central longitudinal section through a receptacle constructed in accordance with my invention, and Fig. 2 is a cross section on the line $x-x$ in Fig. 1.

My receptacle is represented in the drawings as consisting of a cylindrical tube 2 having at one end an open mouth or outlet 3 which is normally closed by a cap 4 of the usual construction.

5 represents a piston which is originally located at the opposite or closed end of the tube 2, or behind the material with which the tube is filled, and 6 represents a small rod or stiff wire which passes centrally through the piston and the closed end of the tube and is provided at its outer or exposed end with a head or thumb piece 7 by which it is operated. The rod 6 is also provided with a number of teeth or barbs 8 which point forward or toward the mouth of the tube 2, and the construction of the piston 5 is such that when the rod 6 is drawn outward its teeth 8 will pass with comparative freedom through the piston, while upon pushing said rod in the opposite direction said teeth will engage the piston and force it forward, thus expelling a certain quantity of the material through the mouth of the tube, according to the distance through which the piston is moved. Said rod 6 preferably has substantially the same

length as the tube 2 and is provided with teeth throughout its length, as shown, in order that it may be available to operate the piston from any position of the latter through any desired distance, until all the material originally contained in the tube has been expelled therefrom. By preference the piston 5 is composed of a disk of thick felt which fits the interior of the tube 2 with such tightness that when the rod 6 is drawn outward the frictional resistance to the movement of the piston will be greater than the resistance encountered by said rod in passing through the piston, while when the rod 6 is forced inward the frictional resistance between the piston and the tube will be overcome by the force applied to the piston through the medium of the rod and its engaging teeth 8. However, the described arrangement will be operative even though the piston slides in the tube with such freedom that it will be drawn back with the rod 6 upon an outward movement of the latter, since in this case such backward movement of the piston will be stopped as soon as the piston reaches the closed end of the tube, whereupon a further outward movement of the rod will provide for advancing the piston through the desired distance when said rod is again pushed inward.

It will be evident that the piston may be constructed of various materials and may be arranged to be engaged and pushed forward by the rod in various other ways than that above described without departing from the principle of my invention.

I claim as my invention:

1. A receptacle for viscous or powdery materials comprising a rigid tube having an outlet at one end and containing a piston made of yielding material and adapted to be located at the opposite or closed end of the tube, behind the material contained therein, in combination with a longitudinally-movable rod passing through the piston and one end of the tube and provided with slanting teeth which point forward in the direction of the outlet of said tube, substantially as described.

2. A receptacle for viscous or powdery materials comprising a rigid tube having an outlet at one end and containing a piston made of felt and adapted to be located at the

opposite or closed end of the tube, behind the material contained therein, and a longitudinally-movable rod passing through the piston and the closed end of the tube and provided with forwardly-pointing teeth, substantially as described.

5 In testimony whereof, I have hereunto sub-

scribed my name this twenty-second day of December, 1905.

WALTER L. CLARK.

Witnesses:

F. S. TUTTLE,

M. E. STODDART.