J. J. MUCHER.

TUBE SQUEEZER.

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1,311,085. Patented July 22, 1919.

Fig. 1.

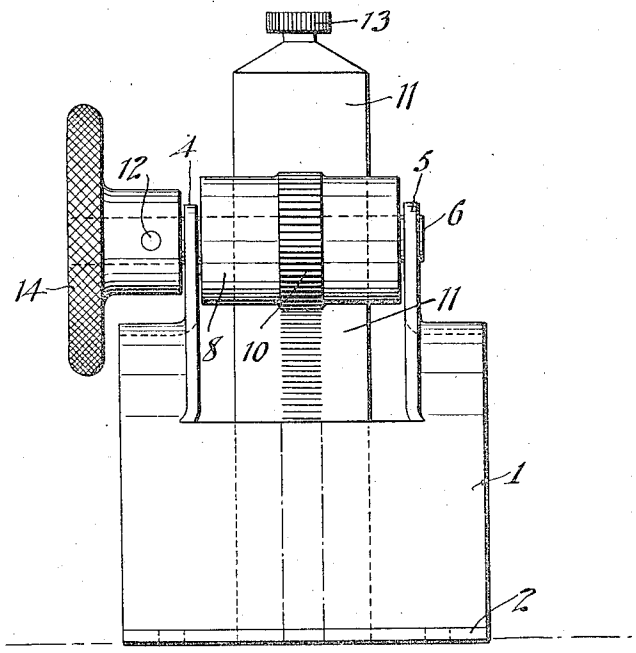
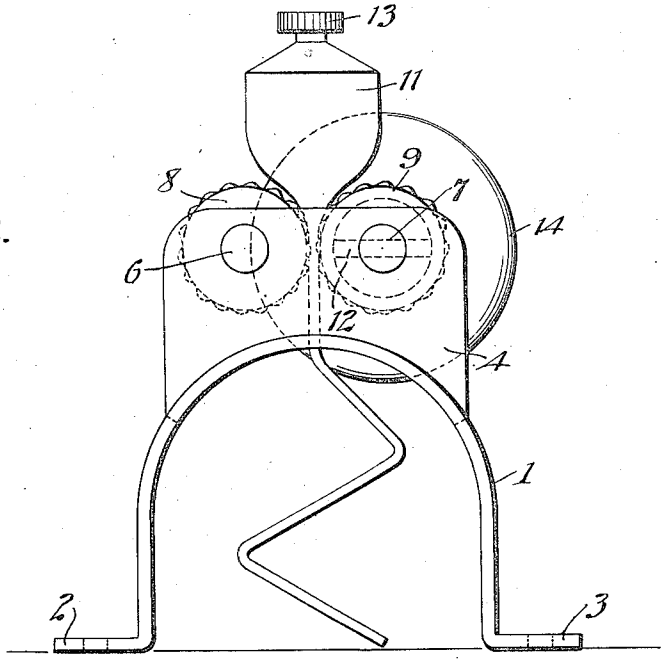


Fig. 2.



WITNESSES

Geo. A. Lemon

A. L. Kitchin.

INVENTOR

John J. Mucher

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN JOSEPH MUCHER, OF BROOKLYN, NEW YORK.

TUBE-SQUEEZER.

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To all whom it may concern:

Be it known that I, JOHN J. MUCHER, a citizen of Russia, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Tube-Squeezer, of which the following is a full, clear, and exact description.

This invention relates to collapsible tube squeezing devices and has for an object the provision of an improved construction which will squeeze a collapsible tube for forcing the contents thereof out of the discharge opening without requiring the operator to hold the tube during the squeezing operation.

Another object of the invention is to provide a squeezing device formed with a toothed roller whereby the tube is not only collapsed but is indented and thereby fed automatically through the machine as the same operates.

In the accompanying drawing:

Figure 1 is a side elevation of the device disclosing an embodiment of the invention.

Fig. 2 is an end view of the structure shown in Fig. 1.

Referring to the accompanying drawing by numerals, 1 indicates the body which may be made of any material, as for instance sheet metal bent so as to form an arched structure having feet 2 and 3 whereby the device may be secured to a wall or other support. The center part of the body 1 is pressed out so as to provide upstanding brackets 4 and 5. Each of these brackets is provided with two apertures for accommodating the shafts 6 and 7 on which the rollers 8 and 9 are mounted. Each of these rollers is preferably smooth except at the central point where a toothed or corrugated section 10 is provided to press into the material of the tube 11 and make indentations or teeth 12 therein whereby the tube 11 may be positively forced through the machine and may be removed by a reverse movement, as a form of rack on each side of the tube will be provided. It is, of course, understood that the cap 13 will be removed when the rollers 8 and 9 are being operated as otherwise the tube would burst. The shaft 7 is rigidly secured to roller 9 and a hand-wheel 14 is also rigidly secured to said shaft, the connecting means being any suitable kind, as for instance, a pin 15. The wheel 14 is a comparatively large finger operated member whereby the rollers may be easily operated and the tube squeezed to the desired extent for discharging any desired quantity from the tube. The tube may contain any desired material, but the construction is especially desirable for tubes containing tooth paste. When used for discharging tooth paste after cap 13 is removed wheel 14 may be rotated from time to time for discharging small quantities on to the brush without the operator's fingers coming in contact with the tube or any other part of the device except the wheel 14. The unused part of the contents is left in the tube for the next operation, in fact the tube is used from time to time as desired until empty after which a reverse movement of the wheel 14 will eject the collapsed tube quickly and another full tube may be substituted without the adjustment of any parts as the new tube is merely positioned with the closed end arranged between the rollers 8 and 9. The tube 11 may be of any desired length as the collapsed part easily folds in the body 1 and therefore does not present anything objectionable. It will also be evident that the parts may be arranged so that the tube 11 will be extending vertically or horizontally as may be preferred.

What I claim is:

1. A squeezing or collapsing device for collapsible tubes comprising a supporting frame formed with a plurality of openings therein, a shaft extending through each of said openings, a roller arranged on each of said shafts, one of said rollers being secured to the shaft on which it is mounted, each of said rollers being formed with a smooth portion and a raised central corrugated portion which is adapted to form indentations in the tube as it is squeezed, and means for rotating said rollers to force the tube therethrough.

2. A squeezing or collapsing device for collapsible tubes comprising a pair of squeezing rollers, means for holding the same in a given position while allowing the rollers to rotate, each of said rollers having a smooth portion and a raised central corrugated portion and means for rotating one of the rollers so as to force a tube therethrough when in operation.

3. A tube collapsing or squeezing device comprising a substantially arc-shaped body having feet for receiving attaching means, a

pair of bent up ears, each of said ears having a pair of apertures, a shaft extending through each of said apertures, a roller mounted on each of said shafts, one of said rollers being rigidly secured to its supporting shaft, and means for rotating the shaft carrying the roller secured thereto, each of said rollers having a smooth portion and a raised central corrugated portion for indenting the tube so as to force the tube through the rollers during the collapsing operation.

JOHN JOSEPH MUCHER.