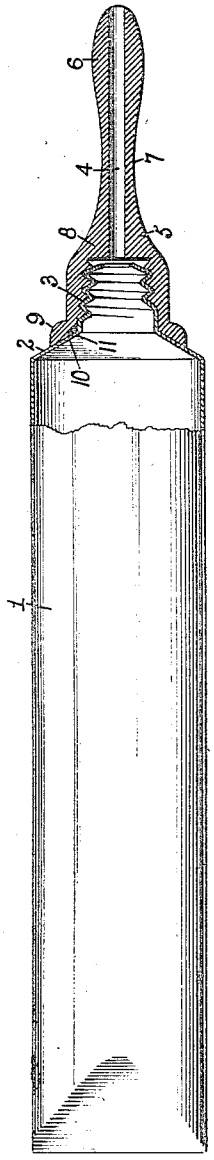
E. J. BRENNESEN.

TUBE INJECTOR.

APPLICATION FILED JULY 12, 1917.

1,266,394.

Patented May 14, 1918.



WITNESSES

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ERNEST J. BRENNESEN, OF NEW YORK, N. Y.

TUBE-INJECTOR.

1,266,394. Specification of Letters Patent. Patented May 14, 1918.

Application filed July 12, 1917. Serial No. 180,110.

To all whom it may concern:

Be it known that I, ERNEST J. BRENNESEN, a citizen of the United States, and a resident of the city of New York, Elmhurst, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Tube-Injector, of which the following is a full, clear, and exact description.

This invention relates to injectors and has for an object the provision of an improved construction whereby an ordinary commercial collapsible tube or other article may be used in connection with the injecting nozzle for dispensing a fluid from the tube as may be desired.

Another object in view is to provide a nozzle which may be screwed on to a collapsible tube after the cap has been removed and provide a liquid-tight connection therewith.

A further object of the invention is the provision of a nozzle of such shape as to be readily inserted and to at the same time properly grip the tube to which it is secured on a comparatively short movement.

In the accompanying drawing:

The figure is a side view of a tube with a nozzle applied thereto, part of the tube and nozzle being shown in section.

Referring to the accompanying drawing by numerals, 1 indicates a collapsible tube of any desired kind provided with an inclined top 2 merging into a discharge neck 3 threaded for substantially its full length and open at the top so as to discharge freely into the passageway 4 of the nozzle 5. The nozzle 5 may be made from rubber or other desirable material and is formed with a slightly enlarged portion 6 merging into a reduced neck 7, said neck in turn merging into what may be termed a body 8 having a bead 9 at the lower edge for reinforcing the beveled contact surface 10. Preferably the contact surface 10 is slightly cutaway at 11 so that when the nozzle is screwed down tight against the inclined end 2 the resilient action of the bead 9 and associated parts and the member 10 will cause a perfectly liquid-tight connection. The threaded neck 3 is preferably somewhat beveled and is intended to interlock with the threads of the body 8 which are also tapering whereby the threads may be quickly and easily interlocked and may be also screwed down tight by a comparatively few number of turns.

In operation the nozzle is intended to be used upon any desired tube, preferably a tube of the kind disclosed in the drawing, though other forms may be used as the contact surface 10 will press against the same and provide a proper tight connection. The tube 1 is of the usual kind found on the market with different kinds of chemicals or drugs provided therein, and may be used for different purposes with the nozzle, as the nozzle may be quickly substituted for the cap of the tube.

What I claim is:

1. In a device of the character described, the combination with a tube having a threaded tapering discharge member, a tapering top merging into the discharge member, of a nozzle having a tapered threaded socket opening from said discharge member, and a resilient tapering contact surface engaging said tapering top of said tube whereby the socket of the nozzle may be quickly applied and a tight connection provided between the nozzle and the tube.

2. In a device of the character described, a nozzle comprising a body merging into a neck and head portion having a passageway therethrough longitudinally thereof and a bead arranged on the lower edge of the body, said bead having a tapering contacting surface arranged on the bottom thereof and also a cutaway portion for producing a resilient action on the bead.

3. In a device of the character described, the combination with a tube having a top merging into a threaded discharge neck, of a nozzle having an end provided with a threaded opening for accommodating said threaded discharge neck, a reinforcing bead on the lower edge of said end, and a tapering contact face on the lower surface of said bead for engaging the end of said tube, said bead being cut away at the juncture thereof with said end for causing the contact surface to resiliently press said top.

ERNEST J. BRENNESEN.