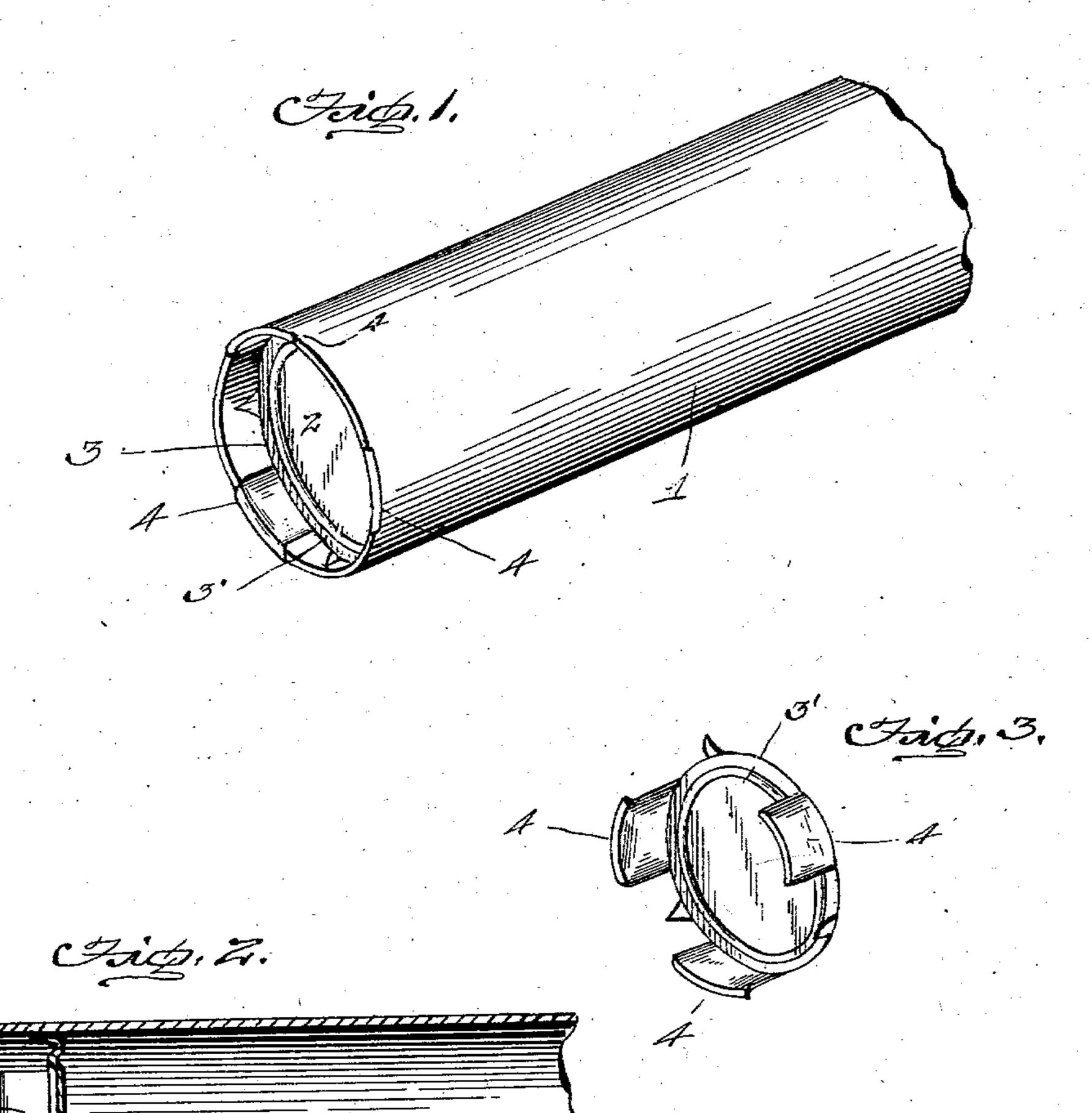
A. L. LAMBERT.

TUBE CLOSURE.

APPLICATION FILED AUG. 28, 1902.

NO MODEL.



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Witnesses Jas a. g. Koehl.

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## United States Patent Office.

ALBERT LESLIE LAMBERT, OF BRIDGETON, NEW JERSEY.

## TUBE-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 730,378, dated June 9, 1903.

Application filed August 28, 1902. Serial No. 121,394. (No model.)

To all whom it may concern:

Be it known that I, Albert Leslie Lam-BERT, a citizen of the United States, residing at Bridgeton, in the county of Cumberland and 5 State of New Jersey, have invented certain new and useful Improvements in Tube-Closures; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in 10 the art to which it appertains to make the same.

The invention relates to tube-closures designed for closing the ends of paper or wooden tubes and preventing the contents thereof

15 becoming lost during transportation.

The object of the invention is to provide a device of this character which shall be simple in construction, durable in use, comparatively inexpensive in production, and easily 20 applied to and removed from the tube, but which when in place in the tube cannot become accidentally removed.

With these objects in view the invention consists in certain features of construction 25 and combination of parts, which will be here-

inafter fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of a fragment of the mailing-tube, illustrating the application of the 30 invention. Fig. 2 is a longitudinal vertical sectional view through the same, and Fig. 3 is a detail perspective view of the device removed from the tube.

In the drawings, 1 denotes a paper tube, 35 and 2 the closure therefor. The closure consists of a body portion 3, preferably circular and made of sheet metal of desired thickness and strength and provided with a strengthening-rib 3' and with stops 4 to limit the in-40 sertion of the device in the tube and with barbs or other retaining devices to prevent the accidental disengagement of the closure from the tube after it has been inserted in position. The outline of the body portion 45 preferably corresponds in shape to the crosssectional area of the tube, and the retaining devices or barbs are preferably made integral with and projecting in a diagonal direction from the edge of the body portion and have 50 sufficient spring to yield toward the center l

of the body portion in the insertion of the closure within the tube and after the closure has been inserted in position to spring outwardly and engage the material of which the tube is made, so that any tendency of the 55 closure to withdraw or become accidentally disengaged with the tube will cause the barbs to bury themselves into the material of the tube, and thus securely lock the closure in position.

To remove the closure, it is only necessary to insert the knife-blade between the retaining-barb and the side of the tube, when the

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closure may be readily removed.

From the foregoing description, taken in 65 connection with the accompanying drawings, the construction, operation, and embodiments of the invention will be readily understood without requiring any extended information.

While the construction herein described 70 and illustrated in the accompanying drawings is the preferred form of the device, it is obvious that various changes in the form, proportions, size, and minor details of the structure may be made without departing 75 from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what

I claim is—

1. A closure for the purpose described, com- 80 prising a body portion and retaining-barbs projecting radially and inclined outwardly from the edge thereof in a direction oblique to the plane of the body portion, substantially as set forth.

2. A closure for the purpose described, comprising a body portion and retaining springbarbs projecting from the edge thereof, and stops for limiting the insertion of the body portion within a tube, substantially as de- 90

scribed.

3. A closure for the purpose described, comprising a body portion and retaining-barbs projecting radially and inclined outwardly from the edge thereof, in a direction oblique 95 to the plane of the body portion, and means for limiting the insertion of the body portion within a tube, substantially as set forth.

4. A closure for the purpose described, comprising a body portion and retaining-barbs 100 projecting radially and inclined outwardly from the edge thereof in a direction oblique to the plane of the body portion, and means for limiting the insertion of the body portion within a tube, said means comprising outwardly-projecting stops adapted to engage the edge of the tube, substantially at set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT LESLIE LAMBERT.

Witnesses:

EJBON C. LAMBERT, MYRON NICHOLSON.