No. 612,358. Patented Oct. 11, 1898.

R. A. LEIGH.

HOLLOW TUBE FOR PNEUMATIC TIRES.

(Application filed Feb. 4, 1898.)

(No Model.)

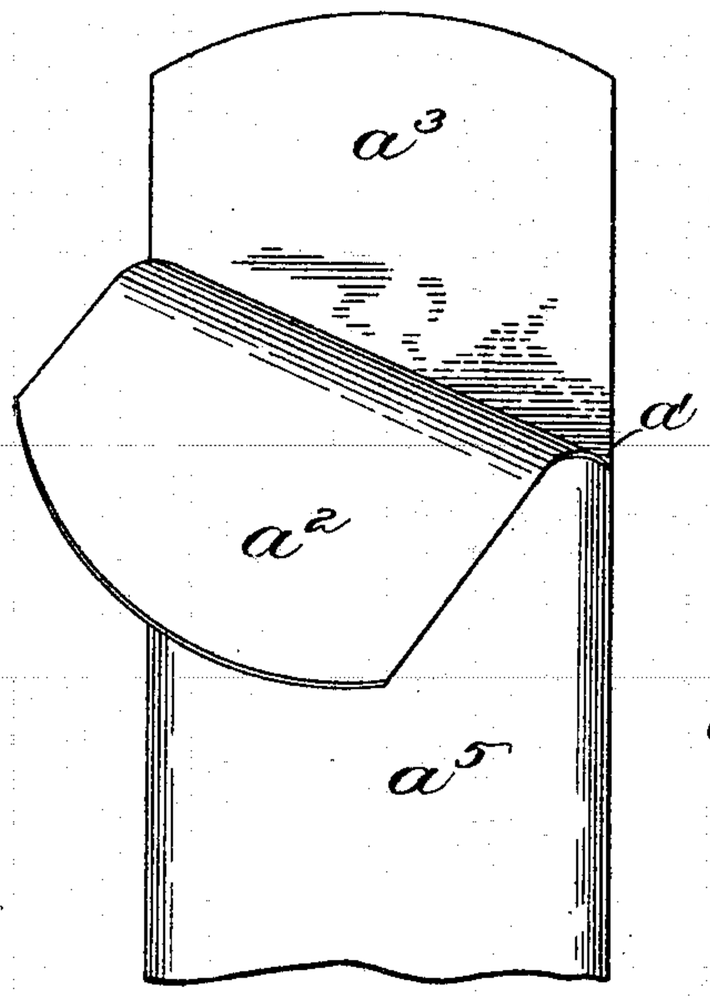

Fig. 1.

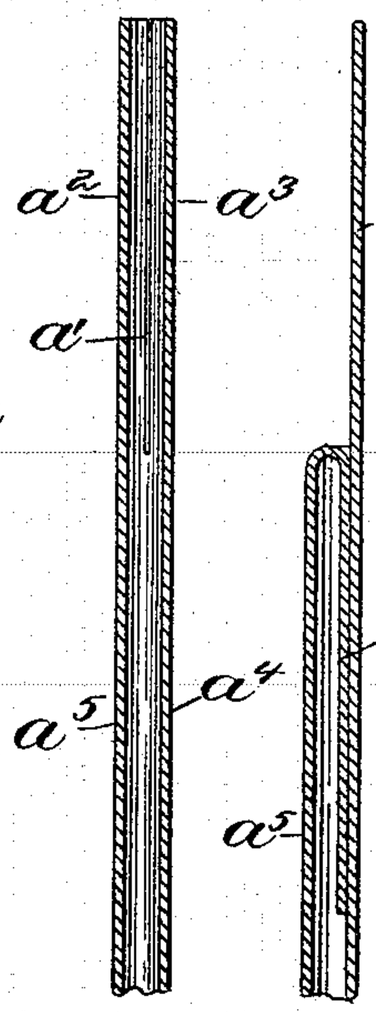

Fig. 2.

Fig. 3.

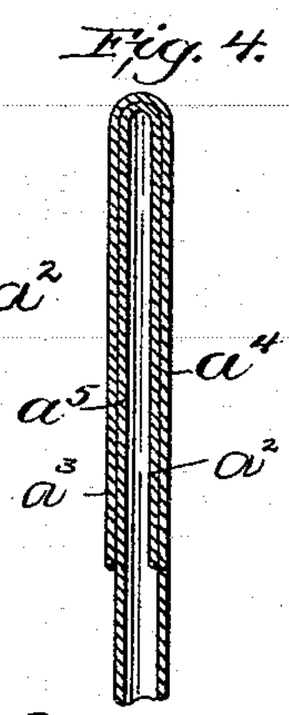

Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

RICHARD A. LEIGH, OF BRISTOL, RHODE ISLAND, ASSIGNOR TO THE NATIONAL INDIA RUBBER COMPANY, OF SAME PLACE.

HOLLOW TUBE FOR PNEUMATIC TIRES.

SPECIFICATION forming part of Letters Patent No. 612,358, dated October 11, 1898.

Application filed February 4, 1898. Serial No. 669,115. (No model.)

To all whom it may concern:

Be it known that I, RICHARD A. LEIGH, of Bristol, in the county of Bristol and State of Rhode Island, have invented certain new and useful Improvements in Hollow Tubes for Pneumatic Tires, of which the following is a specification.

This invention has relation to hollow tubes for pneumatic tires of the class in which the tube is formed with closed ends to partially overlap to provide a practically continuous hollow cushion.

It is the object of the present invention to provide a tube of this character in which the ends are so closed that it may be inflated throughout its entire length; and the invention therefore consists of a tube having its ends closed in the manner illustrated upon the drawings, as well as the method of claiming the end thereof, all as is now to be described and claimed.

Reference is to be had to the accompanying drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 shows a portion of a tube prior to the end thereof being closed. Fig. 2 represents a longitudinal section through the same. Fig. 3 represents one of the laps bent into the tube. Fig. 4 represents the end of the tube as being completely closed.

The hollow tube a is formed of rubber in the usual way, being illustrated as flattened. In closing the end thereof it is slitted for a short distance, as at a' a', so as to form two flaps a^2 a^3. Then the back or outer surface of the flap a^2 is coated with cement, and it is folded into the interior of the tube, so that its back will be cemented to the opposite inner wall a^4 thereof, as shown in Fig. 3. Care is taken to double the flap at or slightly below the line connecting the ends of the cuts a' a', so that when it adheres to the inner wall of the tube the end of the tube is practically air-tight. Finally, the inner surface of the flap a^3 is coated with cement, and it is folded over the bend of the flap a^2 and pressed against the outer surface of the opposite wall a^5 of the tube, to which it adheres. In this way the end of the tube is closed and sealed, but in such way that the tube can be inflated throughout its entire length.

I have not illustrated an entire tube; but it will be understood that the other end is closed in the way above described, so that it is inflatable from extremity to extremity.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim is—

1. A hollow tube for pneumatic tires slit at its end to form two opposing flaps, one of said flaps being doubled into the interior of the tube and secured to the inner surface of the opposing wall and the other flap being doubled over and secured upon the outer surface of its opposing wall.

2. The herein-described method for closing the end of a hollow tube for bicycle-tires consisting in splitting the end of the tube to form two flaps, doubling one of said flaps into the tube and securing it to the inner surface of the opposing wall, doubling the other flap around the bent portion of the first-mentioned flap, and securing it to the outer surface of the opposing wall.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of November, A. D. 1897.

RICHARD A. LEIGH.

Witnesses:
WM. HODGKINSON,
W. G. THURSTON.