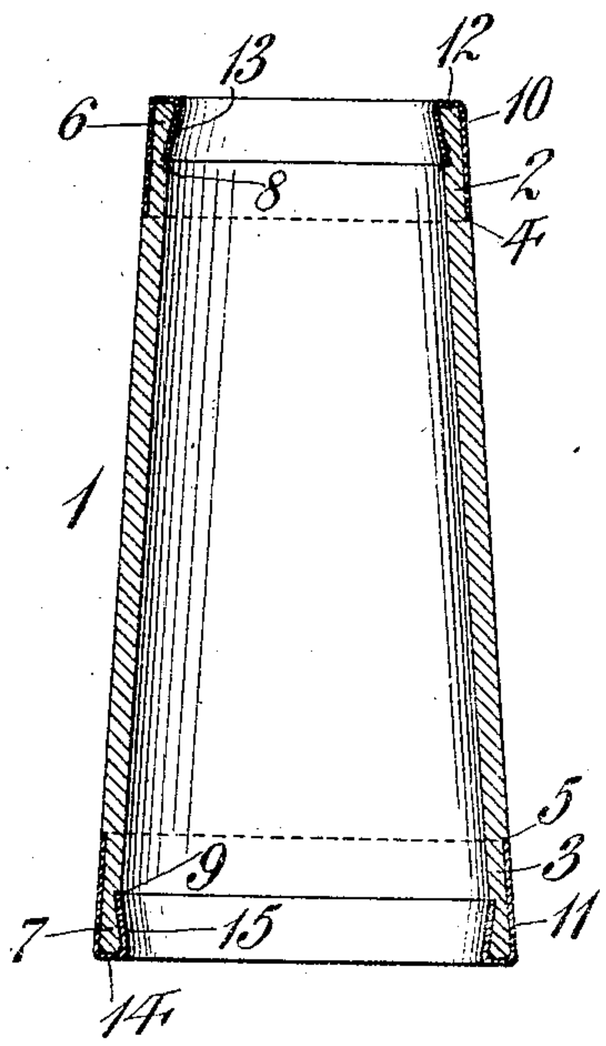
No. 778,003. PATENTED DEC. 20, 1904.

D. T. BERLIZHEIMER.

CONE FOR YARN.

APPLICATION FILED MAR. 7, 1904.

NO MODEL.



Witnesses
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No. 778,003. Patented December 20, 1904.

UNITED STATES PATENT OFFICE.

DAVID T. BERLIZHEIMER, OF PHILADELPHIA, PENNSYLVANIA.

CONE FOR YARN.

SPECIFICATION forming part of Letters Patent No. 778,003, dated December 20, 1904.

Application filed March 7, 1904. Serial No. 196,853.

To all whom it may concern:

Be it known that I, DAVID T. BERLIZHEIMER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Cones for Yarn, of which the following is a specification.

My invention relates to cones on which yarn is wound for use in knitting-machines or the like.

It consists of reinforcing the upper end or both ends of such cones to prevent their breaking or splitting by providing the same with a metal cap, between which and the cone is formed a dovetailed joint, in order to hold the same in proper relative position.

The figure represents in vertical section a cone embodying my invention.

Similar numerals of reference indicate corresponding parts in the figure.

Referring to the drawing, 1 designates a cone which is in the form of a cone frustum and is usually made of straw or similar pulpboard. At its upper and lower ends are reduced portions 2 and 3, forming shoulders 4 and 5, respectively. The inner wall of the cone at top and bottom is further reduced to form portions 6 and 7, having shoulders 8 and 9, respectively. As shown, the portions 6 and 7 are thickest at the extreme end of the cone 1 and are gradually reduced in thickness toward the shoulders 8 and 9, thereby forming annular dovetails.

At each end of the cone is a metal cap, marked, respectively, 10 and 11. The outer walls of these caps are of a thickness to correspond with the thickness of the shoulders 4 and 5, so that the outer surface of the cone is continuous and unbroken. The cap 10 is provided at its upper end with an inturned flange 12, from which depends a downturned portion 13, which is forced into contact with the inner wall of the portion 6 of the cone 1 and with its lower edge abutting against the shoulder 8. In the same way the lower cap or reinforcement 11 has an inturned flange 14 and an upwardly-extending portion 15, the free edge of which abuts against the shoulder 9 of the cone. It will be seen that as here made the inner wall of the cone 1 presents a practically smooth and unbroken surface; but it is obvious that this is unnecessary to my invention, as it is on the outer surface of the cone that the cop-yarn is wound and from which it must reel smoothly and without obstruction. By reason of the tapered shape of the portions 6 and 7 of the cone the caps 10 and 11 are firmly held in place.

It will be evident that changes may be made which will come within the scope of my invention, and I do not, therefore, desire to be limited in every instance to the exact form as herein shown and described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A cone having its end exteriorly reduced forming a shoulder and having a shoulder on its inner wall which latter is reduced from the edge to said shoulder, and a metal cap the outer wall of which is seated in said reduced portion on said cone and the inner wall of which is seated in said inner reduced portion and is inclined inwardly from the outer edge to said inner shoulder whereby a dovetailed joint is formed between said cap and said cone.

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