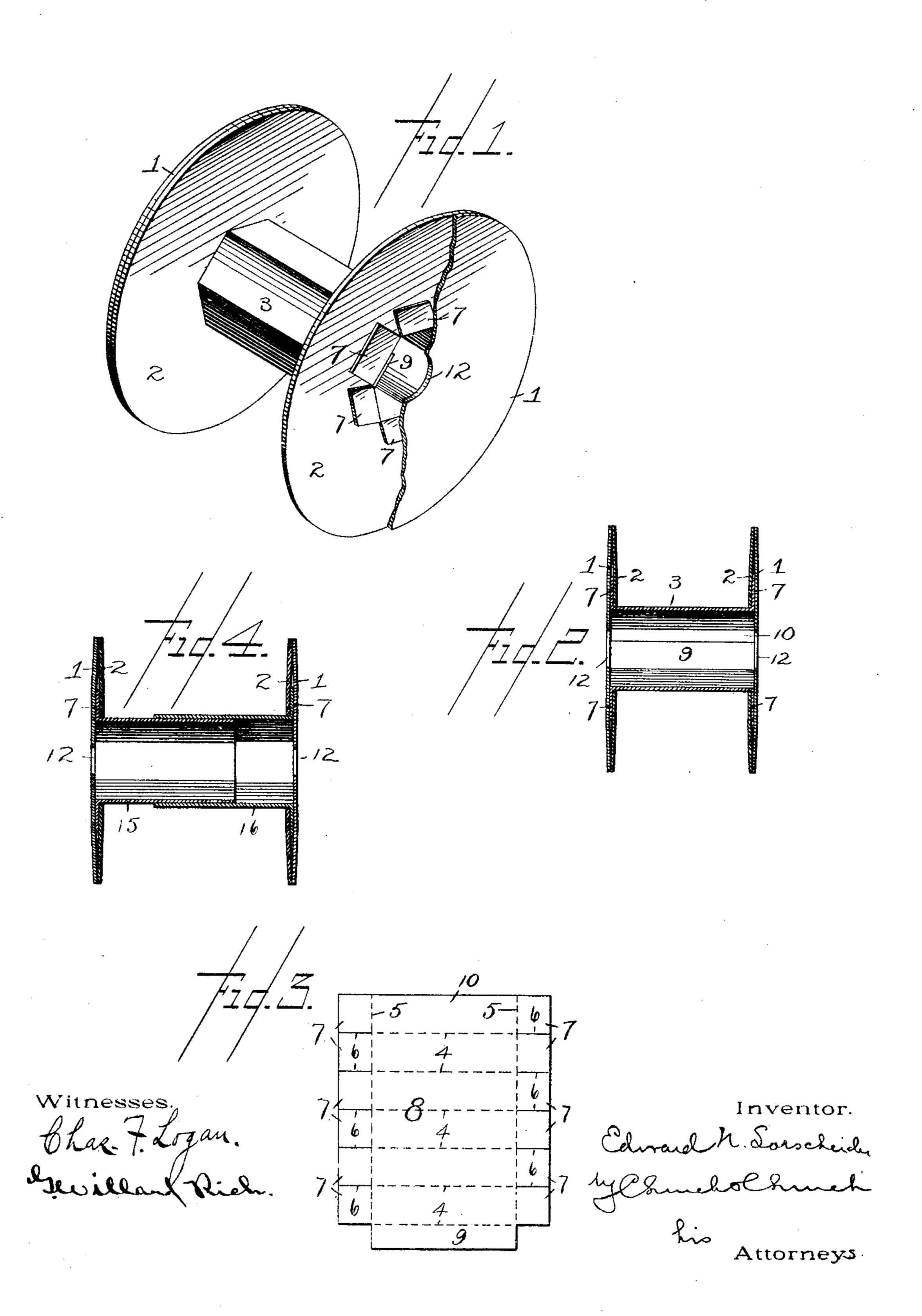
## E. N. LORSCHEIDER. SPOOL.

(Application filed May 27, 1898.)

(No Model.)



## United States Patent Office.

EDWARD N. LORSCHEIDER, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE BUEDINGEN MANUFACTURING COMPANY, OF SAME PLACE.

## SPOOL

SPECIFICATION forming part of Letters Patent No. 671,446, dated April 9, 1901.

Application filed May 27, 1898. Serial No. 681,906. (No model.)

To all whom it may concern:

Be it known that I, EDWARD N. LORSCHEI-DER, of Rochester, in the county of Monroe and State of New York, have invented cer-5 tain new and useful Improvements in Reels or Spools for Ribbon, Trimming, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying draw-10 ings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide a reel or spool adapted to contain ribbon, trimmings, or other similar articles, 15 and which shall be light, simple, and capable of being constructed in various sizes from blanks cut from sheet material, such as cardboard; and to these and other ends my invention consists in certain improvements and 20 combinations of parts, all as will be hereinafter described, and the novel features pointed out in the claim at the end of this specification.

In the drawings, Figure 1 is a perspective 25 view of my device, showing part broken away; Fig. 2, a cross-sectional view, and Fig. 3 a plan view, of a blank from which the barrel or spindle is constructed; and Fig. 4, a longitudinal sectional view of a modification.

Similar reference-numerals indicate similar

parts.

I have adapted the various parts of my device to be constructed of sheet material, preferably of cardboard, press-board, or the like, 35 the parts of which may be cut into the required blanks and readily assembled and united by an unskilled operator to set up a complete reel or spool.

1 and 2 indicate circular disks secured to 40 the ends of the barrel or spindle 3 and forming the ends of the reel or spool, the latter disks being upon the inside of the former. The barrel or spindle 3 is formed from the blank shown in Fig. 3, said blank being cut 45 from sheet material, as metal or cardboard, preferably the latter, and scored or creased transversely upon the dotted lines 4 and longitudinally upon the lines 5 and cut upon lines 6 to form the securing-flaps 7 at the 50 ends for fastening the spindle to the spool-

heads, as will be presently described. In setting up the reel or spool the barrel or spindle 3 is first made into the tubular form by bending the blank 8 upon the scored or creased lines 4 and uniting the edges by se- 55 curing the pasting-strip 9 to the under side of the panel 10. The inner head or disk 2 is provided with a polygonal aperture at the center corresponding in shape to the tube and through which the ends of the latter are 60 passed, after which the flaps 7 are turned outward at right angles to the faces of the tube on the scored or creased lines 5 and secured between the outer and inner disks 1 and 2, which are united by gluing or otherwise, 65 giving a stiff firm edge, preferably smooth, upon either side.

It will be understood that either the outer or inner disks could be dispensed with and the radially-extending securing-flaps 7 be se- 70 cured directly to the inner face of the disk 1, or the tube may be passed through the aperture in the disk 2 and the flaps turned out and secured to the outer side of the said disk; but I prefer to employ both, as they afford a 75 smooth finish and make the heads more firm.

12 indicates circular apertures provided in the disks 1 to permit the insertion of the fingers during manipulation to assist in winding or unwinding the goods or to serve as a 80 center for a supporting axis or arbor.

In the drawings I have shown the barrel or spindle 3 hexagonal in cross-section; but the number and arrangement of the flat faces is immaterial, as long as they are such that the 85 pasting-flaps may be turned up on creased or scored lines from flat faces, as shown. Another feature following from the employment of the polygonal spindle in connection with the heads or disks having correspondingly- 90 shaped apertures is that the connection between the parts is so rigid that, if desired, devices for rotating or retarding the rotation of the reel could be applied to the peripheries of the disks without liability of disconnect- 95 ing said disks from the spindle.

Instead of making the spindle of the reel or spool of a single piece having the securingflaps at both ends I may in some instances from the spindle of two telescoping sections roo

being attached to one head of the spool in the manner previously described.

I claim as my invention—

In a reel or spool, the combination with the hollow polygonal spindle formed of two separate telescoping sections, each having the outwardly-extending flaps at the ends, of the heads for the reel, each composed of a 10 pair of disks, one disk of each pair having

15 and 16, as shown in Fig. 4, each section | the polygonal aperture fitting on the spindle and secured to the inner sides of the flaps, and the other secured to the outer sides of the flaps and to the coöperating disk beyond the flaps, substantially as described.

## EDWARD N. LORSCHEIDER.

Witnesses:

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