

(No Model.)

2 Sheets—Sheet 1.

L. BINNS.
ENDLESS BAND OR CORD.

No. 330,087.

Patented Nov. 10, 1885.

Fig. 1.

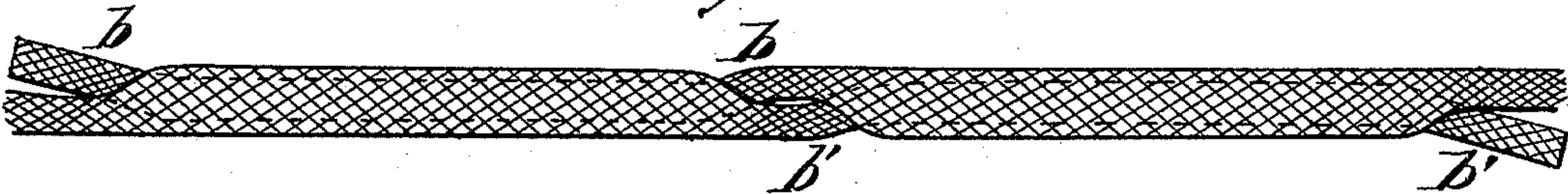


Fig. 2.

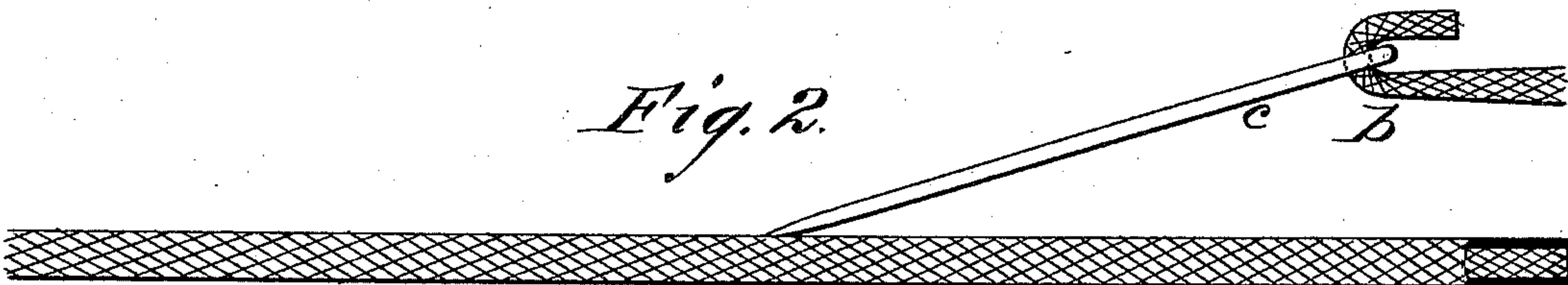


Fig. 3.

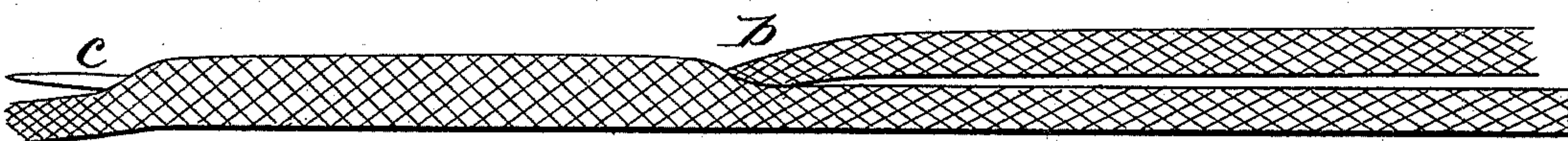
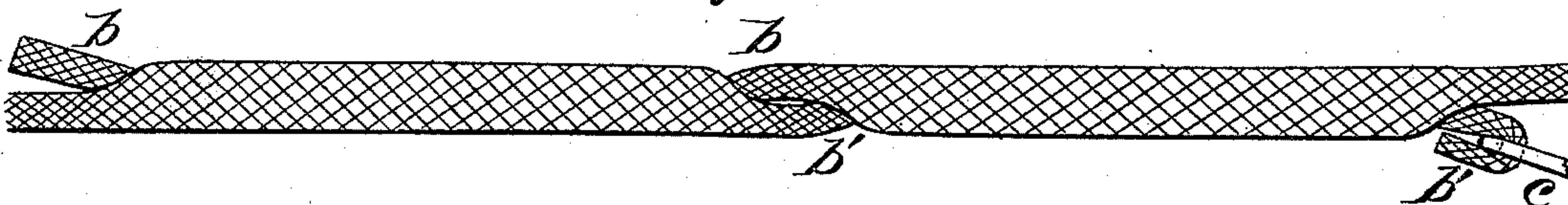


Fig. 4.



WITNESSES:

Donn Twitchell.
Cha. Lincott

INVENTOR:

Leedham Binns
BY *Munn & Co*
ATTORNEYS.

(No Model.)

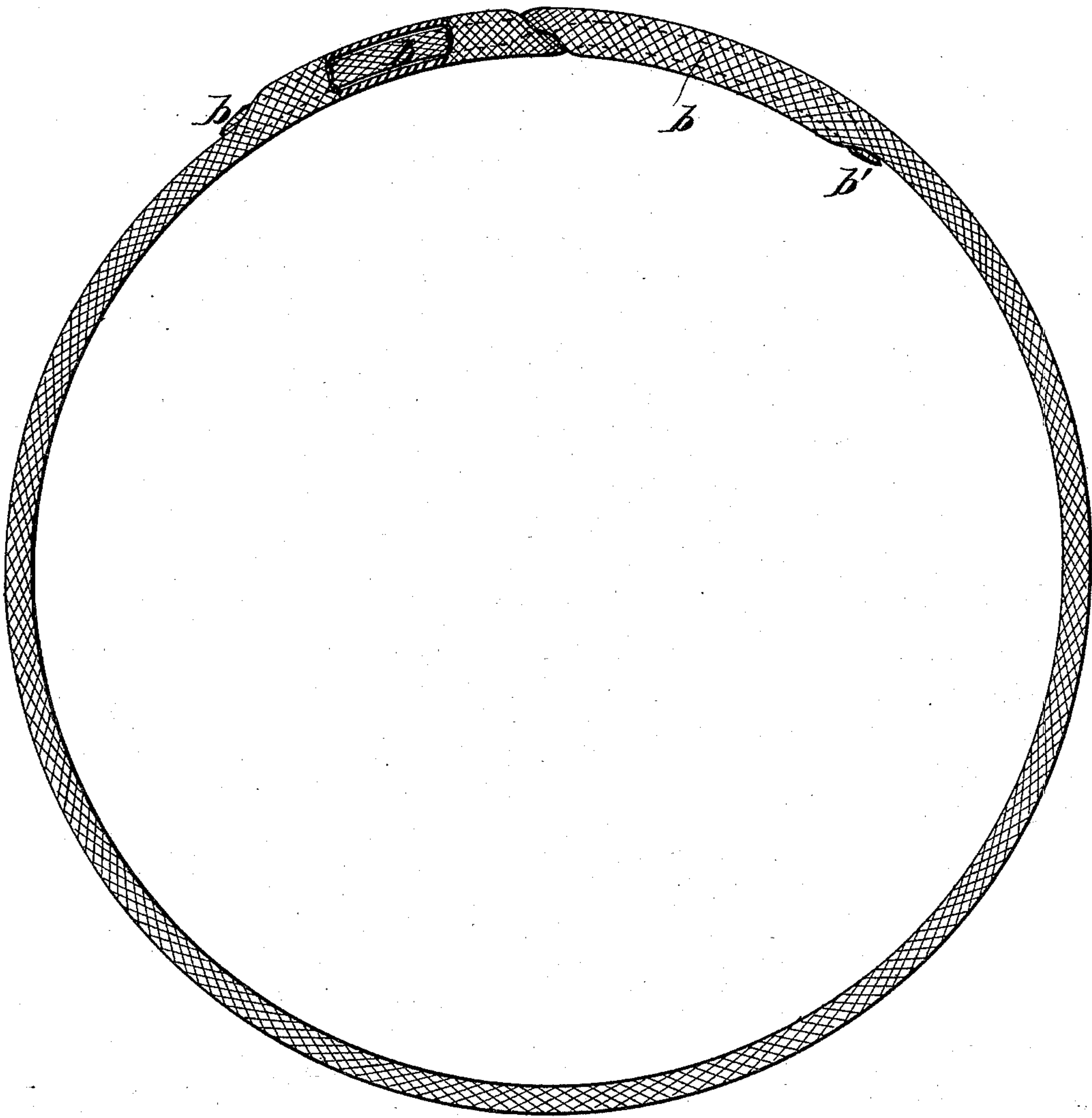
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Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LEEDHAM BINNS, OF PHILADELPHIA, PENNSYLVANIA.

ENDLESS BAND OR CORD.

SPECIFICATION forming part of Letters Patent No. 330,087, dated November 10, 1885.

Application filed September 16, 1884. Serial No. 143,206. (No model.)

To all whom it may concern:

Be it known that I, LEEDHAM BINNS, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Endless Bands or Cords, of which the following is a full, clear, and exact description.

This invention relates to endless bands or cords which have their terminal portions united by sheathing them within the body or remaining portions of the band or cord.

The invention consists in a plaited tubular endless band or cord, united at its ends by each of said ends being inserted longitudinally in reverse directions within the portion of the body of the band next adjacent to the other end thereof, instead of and in contradistinction to looping the end portions into each other, so as to lock or engage each with the other, and then sheathing the ends each within the portion of the band from which it proceeds. Such bands, cords, or ropes are more specially designed for driving the spindles of spinning frames and other machinery, and whereby not only may the knotting of the ends of the bands or cords be dispensed with, but, when constructed in accordance with my invention, also the looping of them. This does away with obstructions or projections on the engaging end portions of the bands and insures a smooth run of the bands around the pulleys or whirls being driven, and secures great strength at the meeting or joining ends of the bands or cords, and so that the greater the strain put upon the endless bands or cords the more firmly will their ends be interlocked with their bodies. Such endless bands, cords, or ropes may also be used for window-shades and other purposes; also for garters, sleeve-bands, or wherever a tubular endless band, cord, or rope can be used, the same, when applied for garters, sleeve-bands, and other like purposes, being made elastic, but where used for pulley-driving purposes comparatively inelastic.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a longitudinal view of an endless tubular plaited or braided band or cord in part with its ends joined according to my invention, and in which the two ends of

the band or cord are inserted longitudinally in reverse directions within the body thereof, and directly connected without the interposition of a loop or loops; and Figs. 2, 3, and 4 are diagrams illustrating the manner of inserting said ends. Fig. 5 is a partly sectional view of the endless band complete with its ends united, as in Fig. 1.

Referring to Figs. 1, 2, 3, 4, and 5 of the drawings, I take a plaited tubular band, cord, or rope of any suitable kind, or such as is in ordinary use for different purposes, and of any desired size and quality, and, suitably marking it, cut it into lengths as required to make endless bands, cords, or ropes of the severed pieces or sections. I then take the one end portion, *b*, of a piece or section, and threading it through the eye of a suitable needle, *c*, pass it and the needle from the side longitudinally within and through the body part of the band or cord next adjacent to the other end portion, *b'*, thereof, as shown in Figs. 2 and 3, the needle, with the threaded band or cord end, *b*, coming out again through the side of the portion it is thus inserted within. I then similarly thread the needle with and pass the other end portion, *b'*, of the band or cord in a reverse direction longitudinally within and through in like manner the body portion of the band or cord next adjacent to the first-named end part, *b*, as shown in Fig. 4, thus virtually inserting the opposite ends of the band or cord longitudinally within and through each other, and making the band of a smooth finish at its joining ends, and so that when the band is pulled or drawn upon the longitudinally-inserted ends will only become more closely or securely interlocked with one another.

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

An endless tubular plaited band or cord united at its ends by each of the ends thereof being inserted bodily and longitudinally in reverse directions to each other within the portion of the body of the band next adjacent to the other end thereof, substantially as shown and described.

LEEDHAM BINNS.

Witnesses:

A. GREGORY,
EDGAR TATE.