June 9, 1925 1,541,008

L. TLUCKA

HOSIERY

Filed Aug. 18, 1924 2 Sheets-Sheet 1

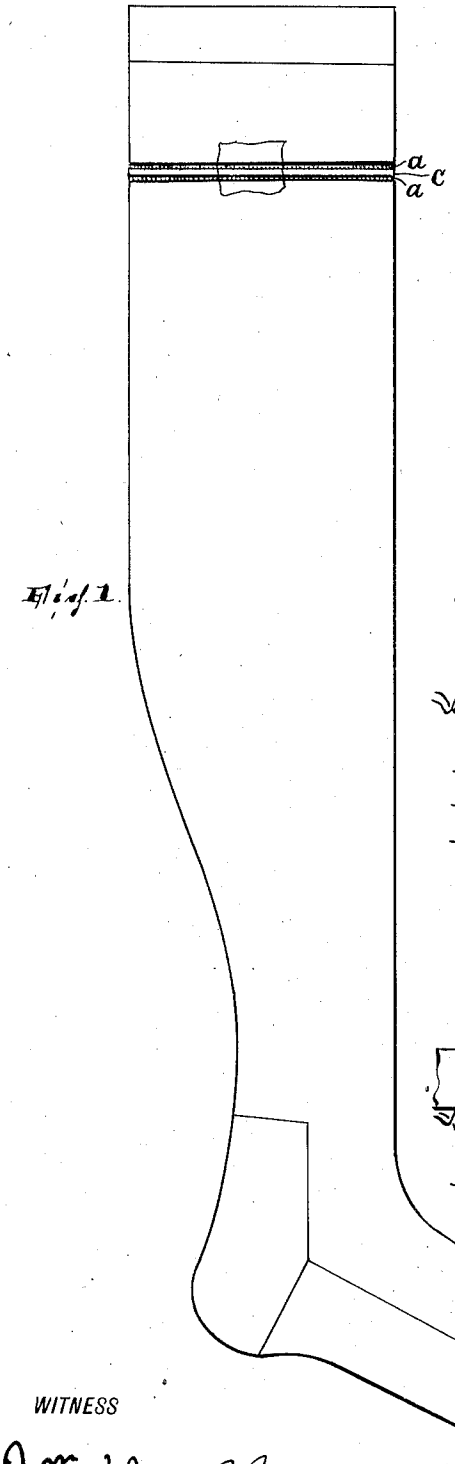


Fig. 1.

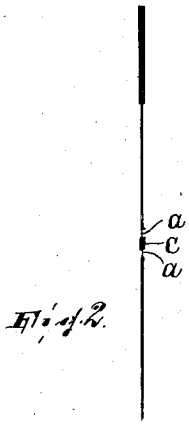


Fig. 2.

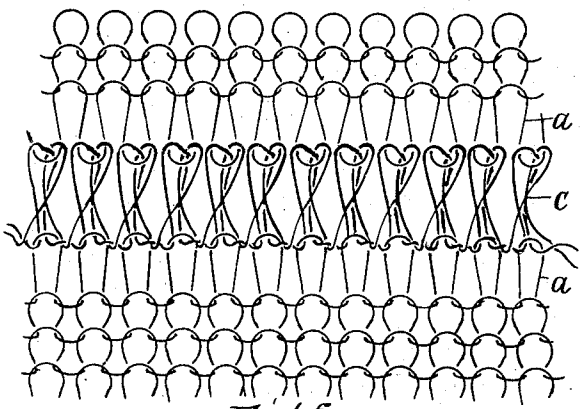


Fig. 5.

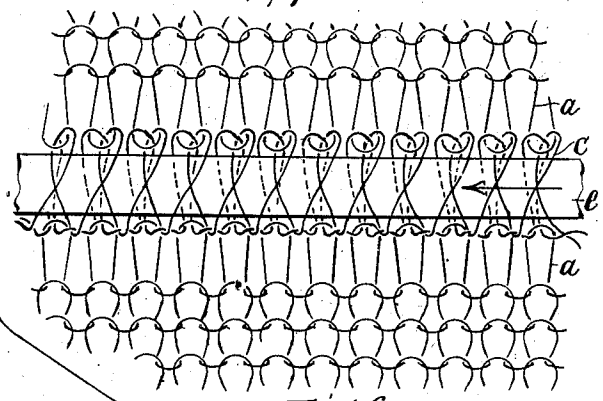


Fig. 6.

WITNESS

Wm. Bell.

INVENTOR,

Louis Tlucka,

BY

Johnson & Howard.

ATTORNEY

June 9, 1925.

1,541,008

L. TLUCKA

HOSIERY

Filed Aug. 18, 1924

2 Sheets-Sheet 2

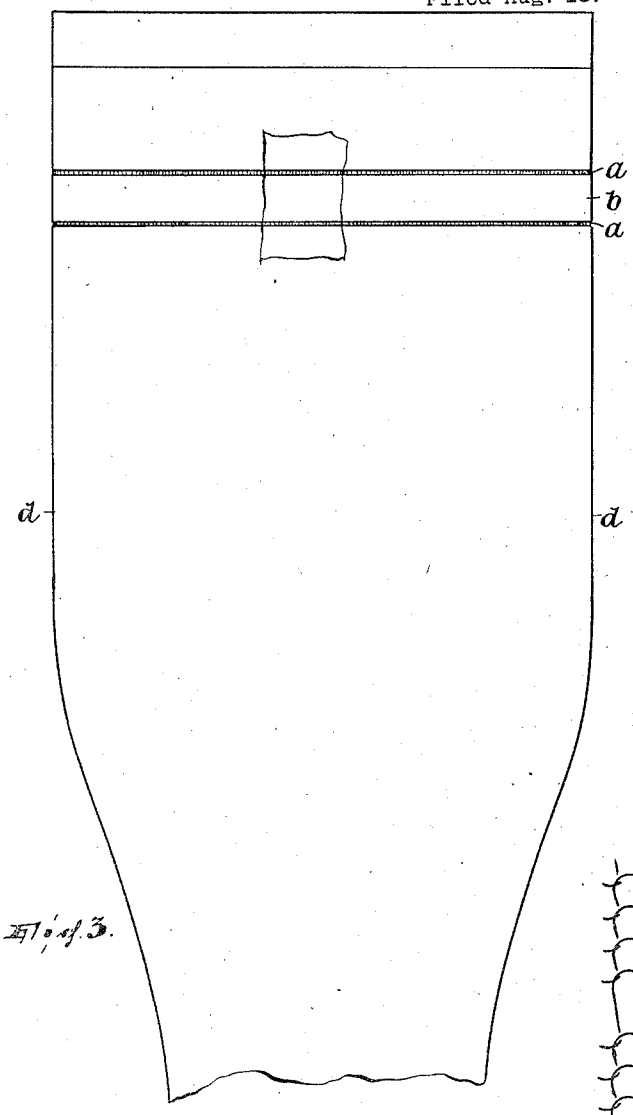


Fig. 3.

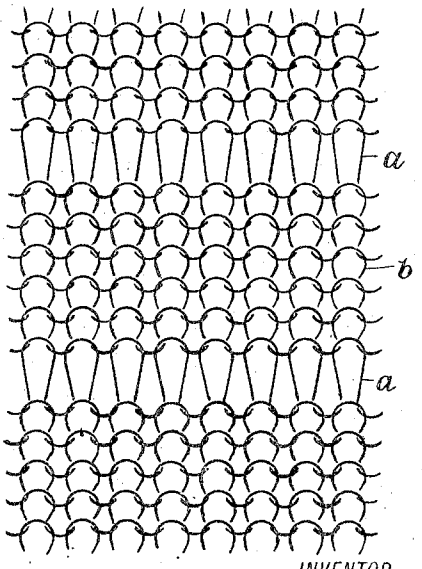


Fig. 4.

WITNESS

Wm. Wall.

INVENTOR,

Louis Tlucka,

BY

Johnson & Howard

ATTORNEY

Patented June 9, 1925. 1,541,008

UNITED STATES PATENT OFFICE.

LOUIS TLUCKA, OF PATERSON, NEW JERSEY.

HOSIERY.

Application filed August 18, 1924. Serial No. 732,754.

To all whom it may concern:

Be it known that I, LOUIS TLUCKA, a citizen of Austria, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Hosiery, of which the following is a specification.

This invention relates to knitted hosiery and its object is to provide a barrier to prevent a run in a stocking from reaching beyond some predetermined line, as near the point where such runs are usually started in hosiery by disruption of a thread due to wear of a garter clasp, such barrier being so formed as to leave the stocking free to expand in the zone occupied by the barrier, and in addition to provide in the structure of the barrier means affording elasticity or having capacity to stretch and contract supplemental to such as exists in the barrier itself and which will serve as a constricting garter incorporated in the stocking, so that the latter can be sold for use either with or without a separate garter.

In the manufacture of knitted goods it is common to join edges of the same, as at the heels and toes of hosiery, in machines of the class represented for example in the Koehler Patent No. 1,026,808, the actual joining element being thread (usually two threads) knotted at close intervals and having its thread interlinked with loops of the joined portions of the fabric, the knots formed existing entirely independently of the thread or yarn of the fabric—and by knots I mean ties which would not permit disintegration upon mere disruption of extraneous thread, as that of the loops of the joined portions of the fabric. In the improved stocking herein set forth I arrange such a joining element so as to extend in a circumferential line of the stocking, thus to form a barrier to prevent a run in the stocking. My invention further contemplates incorporating in this element, when embodied in a stocking in the way stated, an elastic constricting member, as of rubber, whereby the stocking will have not only an anti-run barrier but may be worn if desired without separate garters of any kind, to be then held up by said elastic member.

It is not material what particular stitch is employed in said element to form its knots in carrying out the stated object of my invention so long as the elastic member is incorporated in said element.

In the drawings,

Figs. 1 and 2 show the invention more or less diagrammatically, Fig. 1 illustrating the finished stocking and Fig. 2 being a section across the barrier;

Fig. 3 shows the fabric as it comes from the knitting machine and before the barrier is formed;

Fig. 4 is a magnified portion of Fig. 3;

Fig. 5 shows the knot-formation in the barrier; and

Fig. 6 shows the manner of incorporating the elastic constricting member.

I herein describe the invention as applied to full-fashioned hose.

The hose is knitted from the top down in the usual way, but near its top and in two transverse lines extending the full width of the goods the loops are formed enlarged, as indicated at *a a* in Fig. 3. The loops are formed enlarged in the courses *a a* so as to facilitate fitting them over points (as 12 in the said Koehler patent) of a looping machine. Said loops are then fitted over the mentioned points and, the intervening knitted material *b* being cut away, in the operation of the looping machine the one course of loops becomes joined to the other by the knot-formation *c* produced, from suitably supplied threads, by the looping machine (Fig. 5). An essential feature of the invention as so far described is the presence in the hose of a knot-formation, as *c*, which joins the portions of the fabric above and below the same and is longitudinally elastic, whereby it will give and take with the fabric when the latter expands and contracts. I have shown in Fig. 5 the said knot-formation (which is here a two-thread one in common use) diagrammatically and open, the knots or ties being not drawn up close as the element actually exists when produced by the looping machine so that their structure may be apparent. It will be understood that said element is a knot-formation whose knots exist entirely independently of the thread or yarn of the fabric, the term "knots" in this description and in the appended claim referring to ties of the kind I have already hereinbefore defined, the importance of the knots being that they prevent any ravelling out or disintegration

of said element itself as on a run reaching to the barrier with consequent failure of union between said element and a loop of the portion of the fabric in which the run takes place.

A barrier is afforded, it will be understood, in the sense that when a run reaches the edge of the portion of the fabric affected which adjoins the barrier it has exhausted its possibilities for proceeding further.

In Fig. 6 I have shown an elastic member, as a rubber strip *e*, running through or incorporated with the knot-formation. In the example illustrated this strip is fed into the knots or ties of said element when they are formed by the looping machine in the same direction—see the arrow—as the knot-formation is fed from the point of forming the same, and so it progresses with and so becomes bound in the knots.

The fabric is then removed from the looping machine and seamed along its edges *d* to give it the form of hose (Fig. 1) and otherwise finished in the regular way.

The barrier element is preferably formed endless, which will of course result when the fabric is seamed along the edges *d* to form the stocking and the ends of said element become bound together by the seaming process; this is not indispensable, through if said element were not endless its ends would tend to pucker the material, which usually would be undesirable.

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

A knitted tubular fabric comprising two knitted tubular portions arranged edge to edge and whose courses substantially parallel each other and an attenuated element arranged between said edges and extending in a circumferential line of the fabric and formed of thread tied in knots at given intervals throughout its length, said element having its thread interlinked with successive loops of and along said edges of said portions and thereby joining the latter, in combination with a constricting attenuated elastic member extending in the same circumferential line as said element and held by the thread thereof at successive points.

In testimony whereof I affix my signature.

LOUIS TLUCKA.