(Specimens.)

G. C. MOORE.

ELASTIC WOVEN FABRIC.

No. 456,154. Patented July 21, 1891.

Fig. 1.

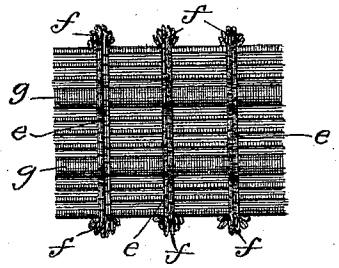
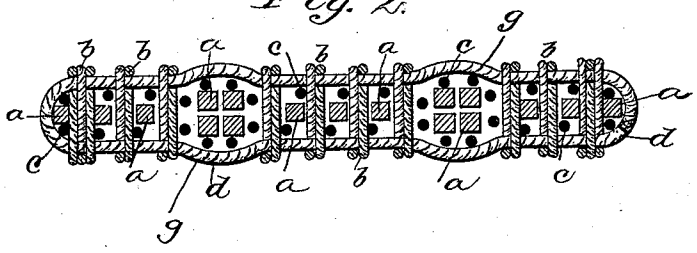


Fig. 2.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE C. MOORE, OF EASTHAMPTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOSEPH W. GREEN, JR., OF SAME PLACE.

ELASTIC WOVEN FABRIC.

SPECIFICATION forming part of Letters Patent No. 456,154, dated July 21, 1891.

Application filed July 5, 1890. Serial No. 357,782. (Specimens.)

To all whom it may concern:

Be it known that I, GEORGE C. MOORE, a citizen of the United States, residing at Easthampton, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Elastic Woven Fabrics, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has for its object to produce an ornamental narrow elastic woven fabric suitable for garters, suspenders, &c. To this end my improved fabric is woven in such a way as to produce at intervals thereon transverse ribs with ornamental loops at the edges of the fabric, this ornamental appearance being preferably augmented by longitudinal ribs, produced as will be hereinafter described.

In the accompanying drawings, Figure 1 represents in plan view and somewhat enlarged a short section of my improved fabric, and Fig. 2 is an enlarged diagram illustrating a cross-section thereof.

My improved fabric consists of rubber warps *a*, fibrous binder warp-threads *b*, longitudinal filling or stuffing warp-threads *c*, and a weft *d*. The weft is interwoven with the fibrous and rubber warp-threads in the usual manner, excepting at the points *e*, where several shots of the weft *d* are made without change of the warp-threads, in order to mass or double the weft upon itself, and thus produce a transverse corded or ribbed effect. As shown in the drawings, each of these transverse cords or ribs *e* consists of two cords, each of which is produced by massing several shots of the weft together without change of the warp-threads, and at this point when weaving the fabric the warp-threads *b* remain stationary and the filling or stuffing threads *c* are changed in position to separate the two transverse cords of each cord or rib *e* from each other and to bind the weft of the cords with the body of the fabric. The weft at the point where the transverse ribs are made at both sides thereof at the edges of the fabric is extended out over wires in weaving to form the ornamental edged loops *f*, these loops being preferably made of two or more lengths, as shown, to increase the ornamental effect.

My improved fabric is also woven in such a manner as to present longitudinal cords or ribs *g*, this effect being produced by massing several rubber warps and a suitable number of filling or stuffing threads together in one tube, as is more clearly shown in Fig. 2, where four rubber warps, in connection with a suitable number of fibrous filling or stuffing warp-threads, in this instance eight in number, are represented as being inclosed in the tubes forming the cords or ribs *g*. As the weft is floated over these massed rubber warps and the filling or stuffing warp-threads inclosed therewith, long stitches are formed at these points, giving a marked corded effect, which is somewhat augmented by the rubber warps being piled upon each other, as is more clearly shown in Fig. 2, to make the cords or ribs *g* stand out prominently on both sides of the fabric.

I am aware that it is not new, broadly, to weave ribbons and other narrow fabrics with projecting loops, forming what is known as "pearl-edge," and I do not therefore wish to be understood as claiming this feature broadly; but, so far as I am aware, narrow elastic fabrics having transverse ribs produced by massing several shots of the weft together, combined with ornamental edge loops opposite these transverse ribs, either with or without longitudinal cords or ribs, have not heretofore been produced.

What I claim is—

1. An elastic fabric composed of rubber warps, fibrous binder warp-threads, filling or stuffing warp-threads, and a weft-thread, the said fabric being provided on its outer surfaces with transverse ribs *e*, formed by massing several shots of the weft together between the changes of the warp-threads, and the said fabric having at its edges opposite said ribs the loops *f*.

2. An elastic fabric composed of rubber warps, fibrous warp-threads, filling or stuffing warp-threads, and a weft-thread, the said fabric having longitudinal cords or ribs *g*,

formed by massing several rubber warps together in one tube, and having also the transverse ribs *e*, formed by massing several shots of the weft together between the changes of the warp-threads, and the said fabric having at its edges opposite said transverse ribs the loops *f*.

In testimony whereof I affix my signature in presence of two witnesses.

GEO. C. MOORE.

Witnesses:
JOS. W. GREEN, Jr.,
JAMES E. COYLE.