(Specimens.)

G. C. MOORE.

ELASTIC FABRIC.

No. 519,727. Patented May 15, 1894.

Fig. 1.

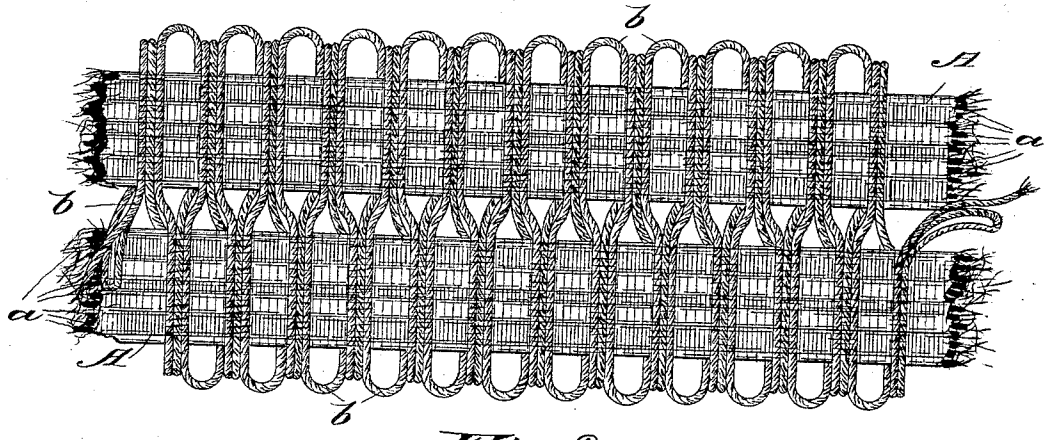
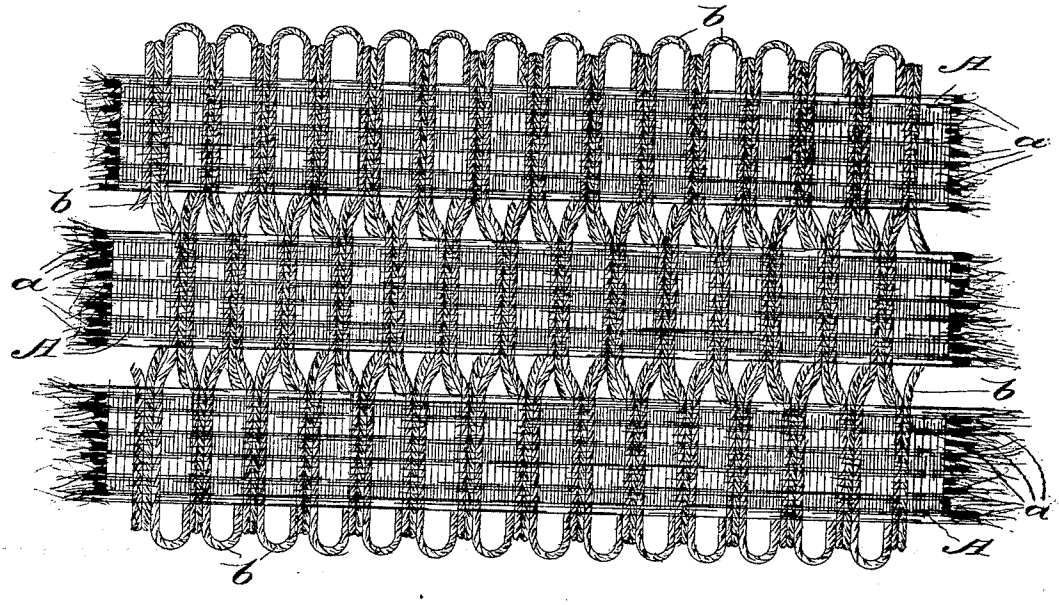
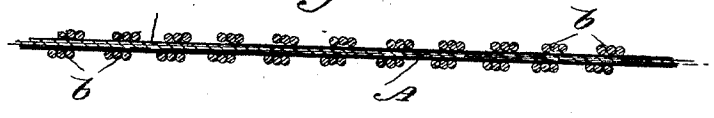


Fig. 2.



A Fig. 3.



Witnesses:

E. M. Johnson

J. H. Daly.

Inventor:

George C. Moore

by Macleod Calver & Randall

his Attorneys.

THE NATIONAL LITHOGRAPHING COMPANY,
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 FABRIC.

SPECIFICATION forming part of Letters Patent No. 519,727, dated May 15, 1894.

Application filed April 21, 1893. Serial No. 471,286. (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 Fabrics, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has for its object to provide an ornamental elastic fabric into two or more strips of which is woven a gimp cord in such a manner that the said cord shows plainly on both sides of the fabric and is run over at the edges to produce ornamental loops, the said cord running between the separated strips of elastic fabric in such a manner as to form open work spaces between said strips.

In the accompanying drawings, Figures 1 and 2 are illustrations, upon an enlarged scale, of two forms of my improved elastic fabric. Fig. 3 is a short longitudinal section of my improved fabric to show the manner in which the gimp cord stands on both sides thereof.

A A denote narrow strips of elastic fabric woven in any suitable or well known manner, said strips having incorporated therewith rubber warps *a* which are under tension, as usual, during the weaving operation so as to render the fabrics elastic when completed. Interwoven with the elastic strips A are gimp cords *b* which are lightly tied into the elastic strips A, so as to stand out prominently on both surfaces thereof, by some of the fibrous warps, said gimp cords extending between the separated strips A of elastic fabric in such a manner as to leave open work spaces between said strips, which latter, however, are joined together by the said cords. The gimp cords *b* preferably overrun the edges of the elastic strips forming ornamental loops at the outer sides of the latter, giving a pleasing effect.

In Fig. 1 I have shown two separated strips A loosely joined by the gimp cords *b*, the entire fabric thus having an open work center, while in Fig. 2 three elastic strips A loosely joined by the gimp cords are shown. It will thus be understood that my invention comprises any desired number of separated strips of elastic fabric joined by interwoven cords in such a manner as to leave an openwork space or spaces between the strips.

In weaving a two strip fabric, such as is shown in Fig. 1, a three shuttle loom is preferably employed, one shuttle carrying the weft for each strip and the third shuttle carrying the gimp cord. The weaving of each strip takes place alternately, that is, a section equal to the distance between the picks of the gimp cord is woven in one strip and then in the other. When the weaving of a section of a strip is completed the strip last woven will be slightly in advance of the other strip, and the shuttle carrying the gimp cord is then put into action for say three picks when it is suspended and the weaving of the other strip is commenced when three picks more are made by the shuttle carrying the gimp. This will make three picks of the gimp standing out on each side of the fabric, three picks being made in a strip as soon as the weaving of a section is finished, and three picks more of the gimp being made when the section of the other strip is finished and before the weaving of the first strip is again commenced. This alternate weaving of the strips causes the gimp to be disposed in the diagonal manner illustrated by the drawings.

In weaving a three strip fabric such as is shown in Fig. 2, the two outside strips will be woven at the same time, while the weaving of the center strip will alternate therewith, in such a case a four shuttle loom being preferably employed, three of the shuttles carrying the weft for the strips and the fourth shuttle carrying the gimp cord.

In order to enable the weft to be properly beaten up when these strips are thus unevenly woven it is necessary that the reed should be split, one part being yieldingly held up to the weft by means of spiral or other springs.

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

1. An improved fabric consisting of a plurality of comparatively narrow flat strips of woven elastic fabric separated from each other, said strips having interwoven therewith by the fibrous warps thereof a cord or cords by which the said separated strips are

joined together, said cord or cords being so disposed as to form an open work space or spaces between the said strips.

2. An improved fabric consisting of a plurality of comparatively narrow flat strips of woven elastic fabric separated from each other, said strips having interwoven therewith by the fibrous warps thereof a cord or cords by which the said separated strips are joined together, said cord or cords being so disposed as to form an open work space or spaces between the said strips, and the said cord or cords overrunning the outer edges of the said strips to form projecting loops.

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

GEO. C. MOORE.

Witnesses:

JOS. W. GREEN, Jr.,

JAS. H. C. RICHMOND.