

E. BAUMGARTEN.
WOVEN ELASTIC FABRIC.
APPLICATION FILED JAN. 5, 1910.

978,541.

Patented Dec. 13, 1910.

Fig. 1.

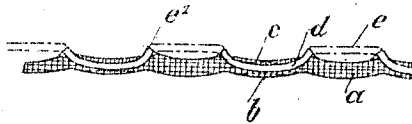


Fig. 2.

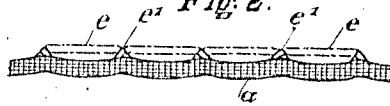
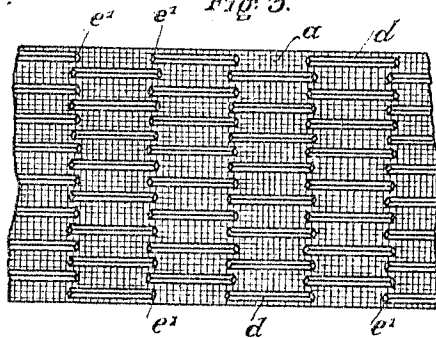


Fig. 3.



Witnesses:

Otto Reimer
W. J. Woldert.

Inventor:

Emil Baumgarten

By J. Singer
Att.

UNITED STATES PATENT OFFICE.

EMIL BAUMGARTEN, OF BARMEN, GERMANY.

WOVEN ELASTIC FABRIC

978,541.

Specification of Letters Patent. Patented Dec. 13, 1910.

Application filed January 5, 1910. Serial No. 536,459.

To all whom it may concern:

Be it known that I, EMIL BAUMGARTEN, residing at Barmen, Rhenish Prussia, Germany, a subject of the Emperor of Germany, have invented a new and useful Improvement in Woven Elastic Fabrics, of which the following is a specification.

My invention relates to an elastic fabric woven on a loom the object of my invention being to insert into a textile band or ribbon groups of india rubber threads and to fix said threads by any suitable kind of binding and to extend the ends of said threads so that the outside of the fabric is covered with elastic portions. Such a fabric may be employed for any purpose where a sliding of the fabric should be avoided for instance as garters, gun straps and the like.

My invention is fully shown on the accompanying drawing in which—

Figure 1 is a vertical section through the fabric, Fig. 2 is a side view of the same, Fig. 3 is a top view.

According to my invention the fabric *a* is made of two layers *b*, *c* between which are interposed any suitable number of india rubber threads *d* or threads of any other elastic material, said threads may also be of any suitable thickness or sectional shape. The threads are preferably arranged alternately as shown in Fig. 3 and bound in the fabric by the weft threads in any desired manner. The threads are extending on the outer surface of the fabric forming thereon slings as shown in dotted lines in Fig. 2 but said slings are cut away in such a manner that the ends *e* extend over the surface of the fabric and preferably the ends are cut oblong. The fabric is then covered with a large number of elastic portions which resist a sliding of the fabric on its support and this action will be still enlarged by the shape of the fabric which assumes a slightly undulated form.

What I claim is:

1. As a new article of manufacture, a woven fabric having lengths of rubber strands woven therein with the ends of the strands projecting from the surface of the fabric.

2. As a new article of manufacture, a woven fabric having a plurality of lengths of rubber strands woven therein with one end of each strand projecting from the surface of the fabric.

3. As a new article of manufacture, a woven fabric having a plurality of lengths of rubber strands woven therein with the greater length of each strand embedded in the fabric and a short end portion projecting from the surface of the fabric.

4. As a new article of manufacture, a fabric having a plurality of lengths of rubber strands secured thereto with the ends of said strands projecting from one surface of the fabric.

5. As a new article of manufacture, a woven fabric having a plurality of relatively short lengths of rubber strands woven therein with the central portions of each strand embedded in the fabric and both ends of each strand projecting from the surface thereof.

6. As a new article of manufacture, a woven fabric having a plurality of lengths of rubber strands secured thereto with the free ends of said strands projecting from one surface of the fabric in crossed relation with respect to each other.

7. As a new article of manufacture, a woven fabric having a plurality of lengths of rubber strands secured thereto with the free ends of said strands projecting from one surface of the fabric, said strands being so disposed that the projecting free ends will be arranged in groups spaced apart from each other.

8. As a new article of manufacture, a piece of fabric having a plurality of ends of rubber strands projecting therefrom, the ends of the strands being cut at an angle to the plane of the fabric.

9. As a new article of manufacture, a piece of fabric having a plurality of rows of short lengths of rubber strands woven therein, the rows being spaced apart to cause the ends of the strands of one row to overlap the ends of the next adjacent row, the free ends of the strands projecting outwardly from the surface of the fabric.

100

10. As an article of manufacture, a piece
of fabric having a plurality of rows of short
lengths of rubber strands woven therein
with the strands of adjacent rows in par-
allel relation and in staggered order, the
5 ends of the strands of one row overlapping
the ends of the next adjacent row, the free

ends of the strands projecting outwardly
from the face of the fabric.

EMIL BAUMGARTEN. [L. s.]

Witnesses:

OTTO KÖNIG,

CHAS. J. WRIGHT.