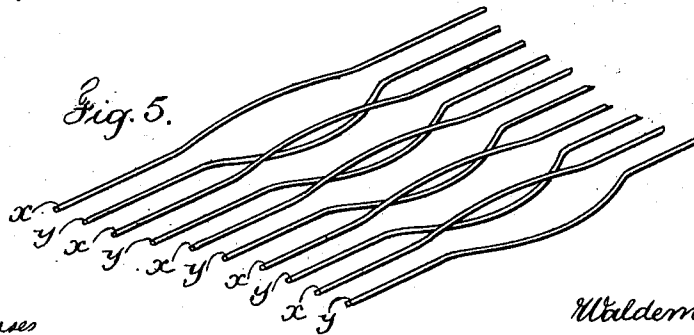
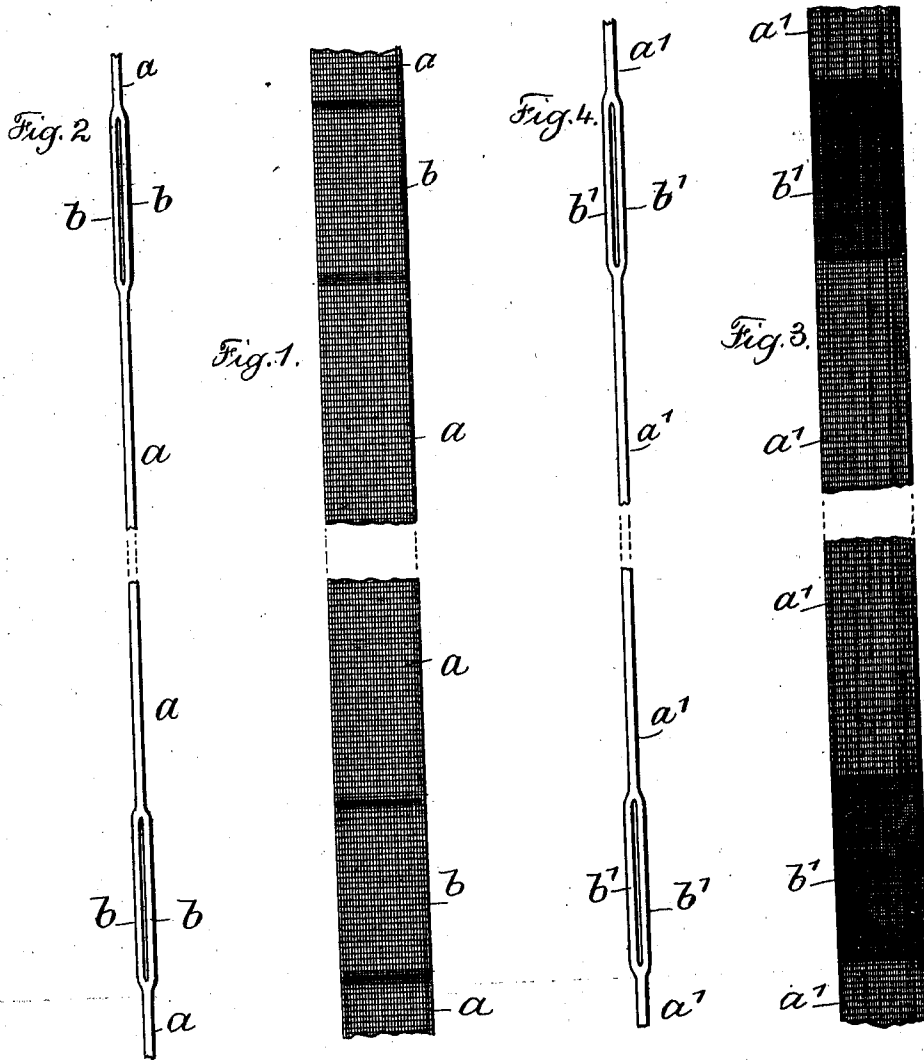


W. KOPS.
ELASTIC WEBBING.
APPLICATION FILED JUNE 4, 1910.

989,985.

Patented Apr. 18, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

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ELASTIC WEBBING.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WALDEMAR KOPS, a citizen of the United States, residing in the borough of Manhattan, in the city, county, and State of New York, have invented an Improvement in Elastic Webbing, of which the following is a specification.

My invention relates to an elastic webbing having alternating parts woven alike and intermediate alternating parts woven alike but different from the first parts, with the said parts following one another in succession woven integral in the same strip of webbing.

In the elastic webbing of my invention, alternating parts are woven under tension with all of the elastic strands employed running lengthwise through the webbing and these parts may be of any desired width and length. The parts intermediate to these parts and which alternate therewith in the continuous webbing are made double, that is, in parallel woven sections, each with elastic strands therein of about half the number contained in the aforesaid single strips, and these double parts of the same width as the other parts may also be of any desired length. These double and alternating parts may be woven under tension so that the whole webbing is elastic, or the said double parts may be woven close without tension and be non-elastic.

The webbing of my invention has numerous uses in the manufactures and arts.

In the drawing, Figures 1 and 3, are elevations showing the forms of my invention, and Figs. 2 and 4 are edgewise views of the parts shown in Figs. 1 and 3. Fig. 5 is a diagrammatic illustration representing the divergence of the elastic strands as between the single and double woven parts of the webbing.

Referring to Figs. 1 and 2, a represents the elastic sections woven under tension of any desired length and of any desired width. $b\ b$ represent the double elastic sections both containing elastic strands and woven under tension; the sections $b\ b$ each having one-half the same number of elastic strands as are contained in the sections a ; one of said sections b requiring of course in the art of weaving, an additional shuttle; the elastic strands being divided or in other words, separated as illustrated in Fig. 5, that is to say, the elastic strands x going in one direc-

tion into one section b and the elastic strands y going in the opposite direction in the other elastic section b .

Referring to Figs. 3 and 4, a^1 represents the elastic sections and $b^1\ b^1$ the non-elastic sections. Like the form of my invention in Figs. 1 and 2, the elastic sections a^1 may be of any length or desired width and these parts are woven under tension so as to be elastic under tension. The sections $b^1\ b^1$ each contain one-half of the elastic strands which are woven in the sections a^1 , and as referred to heretofore in connection with Fig. 5, the elastic strands x are moved in one direction and the elastic strands y in the opposite direction for weaving the non-elastic sections $b^1\ b^1$; an extra shuttle in this art being of course employed for weaving one of the elastic strands b^1 . These sections b^1 are woven without tension so that the weft threads are close woven upon the released elastic strands; tension being again applied to the elastic strands for weaving with a single shuttle as the parts $b^1\ b^1$ merge again into the sections a^1 .

The elastic webbing of my invention is made in continuous indeterminable lengths and may be severed at any point as desired according to the use to which the elastic webbing is to be put.

As an illustration, the sections a may be severed about the center, as may also the sections $b\ b$ or $b^1\ b^1$; or the sections $b\ b$ or $b^1\ b^1$ may be cut through at places just before they merge with the sections a^1 so as to get the benefit of the full length of the sections b or b^1 ; or the sections $b\ b$ or $b^1\ b^1$ may be cut through about center and the sections $a\ a$ or $a^1\ a^1$ not severed at all.

I claim as my invention:

1. An elastic webbing consisting of a flat strip with alternate elastic parts woven under tension and with intermediate alternate inelastic parts woven double and each of said double parts containing approximately half of the elastic strands running through the aforesaid elastic part, the various sections being woven continuous.

2. An elastic webbing consisting of a flat strip having alternate main elastic sections woven under tension and shorter intermediate inelastic parts woven double and integral with the aforesaid elastic parts, and each of said double parts containing portions of the elastic strands of the elastic

part, the various sections being woven continuous.

3. An elastic webbing consisting of a flat strip having alternate elastic sections woven
5 under tension and intermediate inelastic parts woven double and integral with the aforesaid elastic parts, and each of said double parts containing portions of the elastic strands of the elastic part, the various
10 sections being woven continuous.

4. An elastic webbing consisting of a flat strip having main elastic sections woven

under tension, and intermediate alternating inelastic parts each containing approximately half of the elastic strands of the
15 main elastic parts woven without tension and non-elastic, the various sections being woven continuous.

Signed by me this 9th day of May 1910.

WALDEMAR KOPS.

Witnesses:

GEO. T. PINCKNEY,
E. ZACHARIASEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
