A. T. VAN ALSTYN.

BELT.

APPLICATION FILED OCT. 13, 1915.

1,320,811.

Patented Nov. 4, 1919.

2 SHEETS—SHEET 1.

Fig. 1

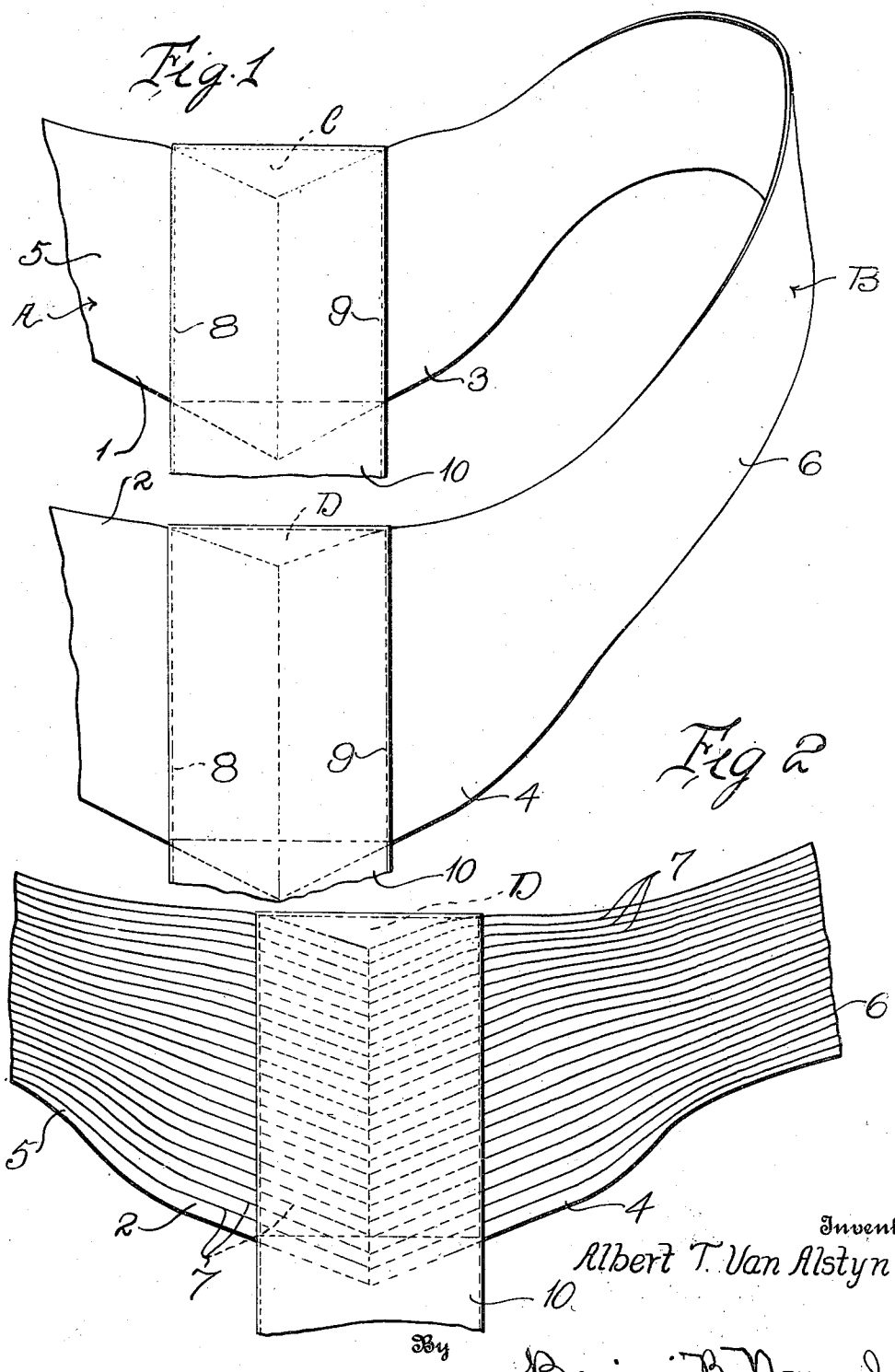


Fig 2

Inventor

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2 SHEETS—SHEET 2.

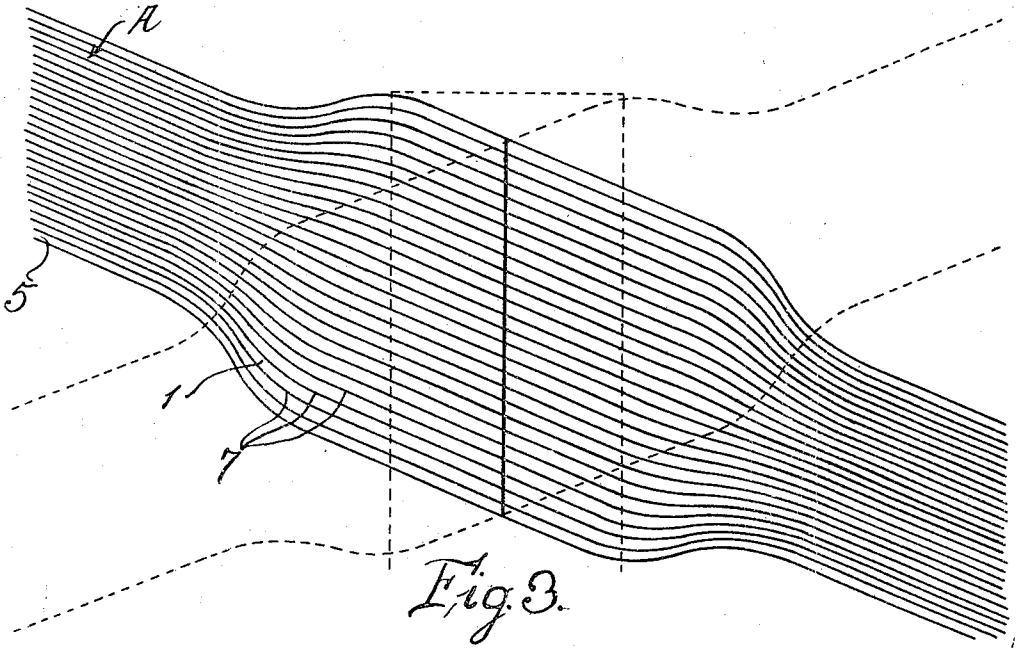


Fig. 3.

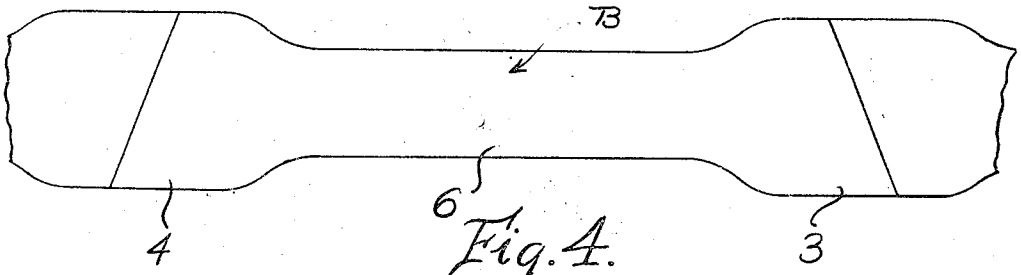


Fig. 4.

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UNITED STATES PATENT OFFICE.

ALBERT T. VAN ALSTYN, OF MONTCLAIR, NEW JERSEY.

BELT.

1,320,811. Specification of Letters Patent. Patented Nov. 4, 1919.

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To all whom it may concern:

Be it known that I, ALBERT T. VAN ALSTYN, a citizen of the United States, residing at Montclair, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Belts, of which the following is a specification.

This invention relates to a belt formed of webbing, for use most particularly in connection with sanitary appliances for women, and bands for the top of skirts and other like articles.

The usual type of belt of non-elastic material for the purposes above mentioned is cut on the bias out of a bulk sheet of material so as to give the belt the proper configuration, and to effect a saving in material. However, with the belt which is thus cut to shape, the edges must be properly hemmed or bound to prevent disintegration of the material, and in thus forming the belt the warp threads of the fabric are also on the bias or so disposed that stresses are received diagonally thereof and, as a consequence, distortion of the belt results which not only produces discomfort to the wearer but practically renders a belt thus distorted useless or at least unsatisfactory.

Furthermore, the elastic belts of this class now on the market, while not subject to the same disadvantages and imperfections incident to those inelastic belts cut on the bias, are undesirable for the reason that they do not, when formed from a straight edge webbing, conform to the configuration of the body of the wearer but must be distorted, when in use, to properly fit and this distortion results in discomfort to the wearer and also prevents the belt from properly supporting and retaining in place the article to which it is attached.

Therefore, one object of the present invention contemplates a belt of the above mentioned class which is woven to shape and therefore needs no binding. Furthermore, a belt thus formed is given the proper configuration in the formation or weaving and therefore has the warp threads of the webbing disposed so as to receive stresses and strains lengthwise which prevents distortion in either an elastic or inelastic belt.

Another object resides in so constructing these belts that they may be made up from a strip of webbing woven with spaced expanded portions which are cut diagonally, in a transverse direction, through the expanded portion and joined on the bias to give the proper dip at the front and rear to conform to the shape of the body of the wearer and properly support in place the article attached thereto.

With the above and other objects in view, I will now proceed to describe the particular form of belt illustrated in the accompanying drawing, and which I have found to be practical for use.

In the drawing:

Figure 1 is a view in perspective showing a belt constructed according to my invention.

Fig. 2 is a front elevation showing the manner of joining the cut ends of two expanded portions.

Fig. 3 shows, diagrammatically, the method of forming the belt from the strip of webbing; and

Fig. 4 is diagrammatically illustrative of the strip of webbing.

In detail:

The belt, as shown, comprises the two halves A and B each including the expanded portions 1, 2, and 3, 4 connected by the narrower thigh portions or lengths 5 and 6, respectively. Each half A and B embraces a plurality of warp threads 7 which, in order to produce the expanded portions 1 to 4 inclusive, are spread out or expanded as shown in Fig. 3, by expanding the harness of the loom upon which the strip of webbing is woven, and thus, though the expanded portions are wider than the thigh lengths, they contain the same number of warp threads.

In forming the belt the original strip of webbing (see Fig. 4) consists of a plurality of expanded portions such as indicated by the dotted continuations in Fig. 3 and these are cut diagonally in a transverse direction so that the ends of each half of the belt may be joined on the bias as shown. This produces a belt without waste of material and which, besides having the proper dip at the front and rear, has the warp threads of the webbing of which it is formed disposed in such a manner as to receive distortion stresses and strains lengthwise which forms a belt which cannot be pulled out of shape and which, in the original production or manufacture, is finished on the edges and requires no hemming or additional binding.

By thus forming the belt, however, a drop

occurs at C and D which may be overcome by the novel manner of joining the cut ends which consists in using a tape, at the front and rear, wide enough to span this drop, and stitching the same along lines 8 and 9 in the position shown in Figs. 1 and 2, the tape being designated at 10. To this tape may be attached any suitable form of fastening means, such as a buckle or safety pin, not shown, for supporting sanitary napkins or the like.

From the foregoing it will be evident that the belt herein shown and described provides a construction which is woven formed and thus eliminates the finishing operations requisite to the cut belt, and besides has the advantage that the warp threads are disposed properly to receive the strains in such a manner as to overcome permanent distortion. This belt may be made similarly in either elastic or inelastic fabric, and being equally advantageous in either type.

While I have herein described specific embodiments of the present invention, it is to be understood that, in practice, I may resort to such practical modifications as fall within the scope of the invention as defined in the appended claims.

I claim:

1. A textile belt consisting of thigh portions connected by integrally woven dip portions at the front and rear, said dip portions being expanded in the weave and meeting on the bias to form the dip.

2. A webbing belt consisting of thigh portions connected by front and rear portions expanded in the weave and meeting on the bias to conform to the configuration of the body to be encircled.

3. A webbing belt consisting of woven halves having terminals expanded in the weave and severed on the bias, and means joining the severed ends of said halves to form a continuous belt dipped at the front and rear.

4. A webbing belt formed in halves woven to shape and having narrow thigh portions provided with terminal ends widened by expansion in the weave, and means connecting said terminal ends on the bias to form a continuous belt conforming to the configuration of the body of the wearer.

5. A textile belt elastic to lateral stresses and consisting of thigh portions connected by front and rear portions expanded in the weave and meeting on the bias to conform to the configuration of the body to be encircled.

6. As an article of manufacture, a belt formed from a strip of webbing or textile expanded in the weave at spaced distances, said expanded portions being cut diagonally in a transverse direction to form belt halves which are joined together to form a continuous belt dipped at the front and rear to conform to the body to be encircled.

7. As an article of manufacture, a belt formed from a strip of webbing or textile material comprising alternately expanded and contracted portions, said expanded portions being cut diagonally in a transverse direction to form belt halves which are joined together to form a continuous belt with narrowed thigh lengths connected by front and rear dipped portions of increasing width conforming to the body to be encircled.

8. A belt comprising halves joined on the bias at the front and rear to form dips.

9. A belt comprising a plurality of lengths joined on the bias to form dips at the points where the said lengths are joined.

In testimony whereof I hereunto set my hand in the presence of two subscribing witnesses.

ALBERT T. VAN ALSTYN.

Witnesses:
MARGUERITE H. NEWCOMB,
BENJAMIN R. NEWCOMB.