

[54] **WAIST-SUPPORTING GARMENT**

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[22] Filed: **Oct. 29, 1973**

[21] Appl. No.: **410,904**

[52] U.S. Cl. **128/578, 128/78**

[51] Int. Cl. **A41c 1/00, A61f 5/02**

[58] Field of Search **129/78, 518-579**

[56] **References Cited**

UNITED STATES PATENTS

1,276,410	8/1918	Pratt	128/579 R
1,572,826	2/1926	Virgin	128/579 R
3,441,027	4/1969	Lehman	128/578
3,570,480	3/1971	Stubbs	128/78

FOREIGN PATENTS OR APPLICATIONS

557,910	8/1932	Germany.....	128/579 R
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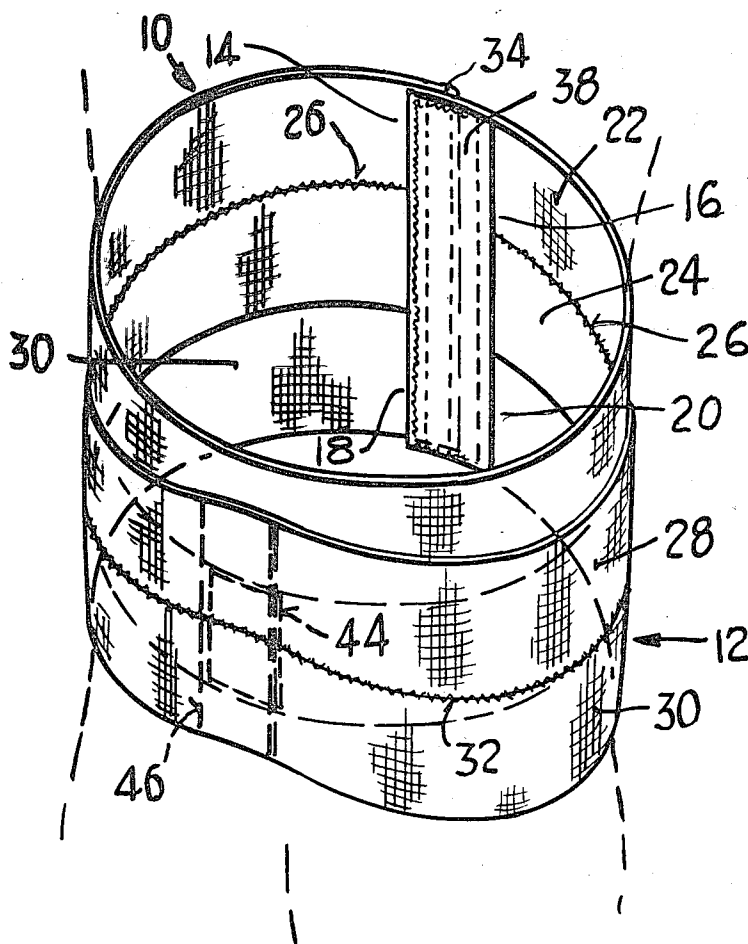
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silient, thin, flat ribbon-like belt members intended to encircle the waist of the wearer, the members having corresponding juxtaposed ends which are secured together in partially overlapping relation, and being positioned to be coextensive with each other. The secured ends of the belt members are provided with co-operable, separable fastener means such as rows of hooks and eyes whereby they can be joined so as to hold the members around the waist of the wearer in the manner of a corset or girdle. At least portions of the belt members are arranged in overlapping relation, and co-operable Velcro fastener elements are disposed substantially at their midpoints for securing the same together in any of a number of different overlapping positions, thereby to provide for different widths of the garment. With the hook and eye fasteners at the rear of the user, opposite or front portions of the belt members can be adjustably related by making them overlap either more or less, thereby to provide a reinforced support of the abdomen at the desired places while at the same time ensuring comfort for the wearer. Or, the hook and eye fasteners can be located at the wearer's abdomen, and the opposite belt portions adjusted at the rear to give firm support where needed.

[57] **ABSTRACT**

An adjustable-width posture belt consisting of two re-

13 Claims, 10 Drawing Figures



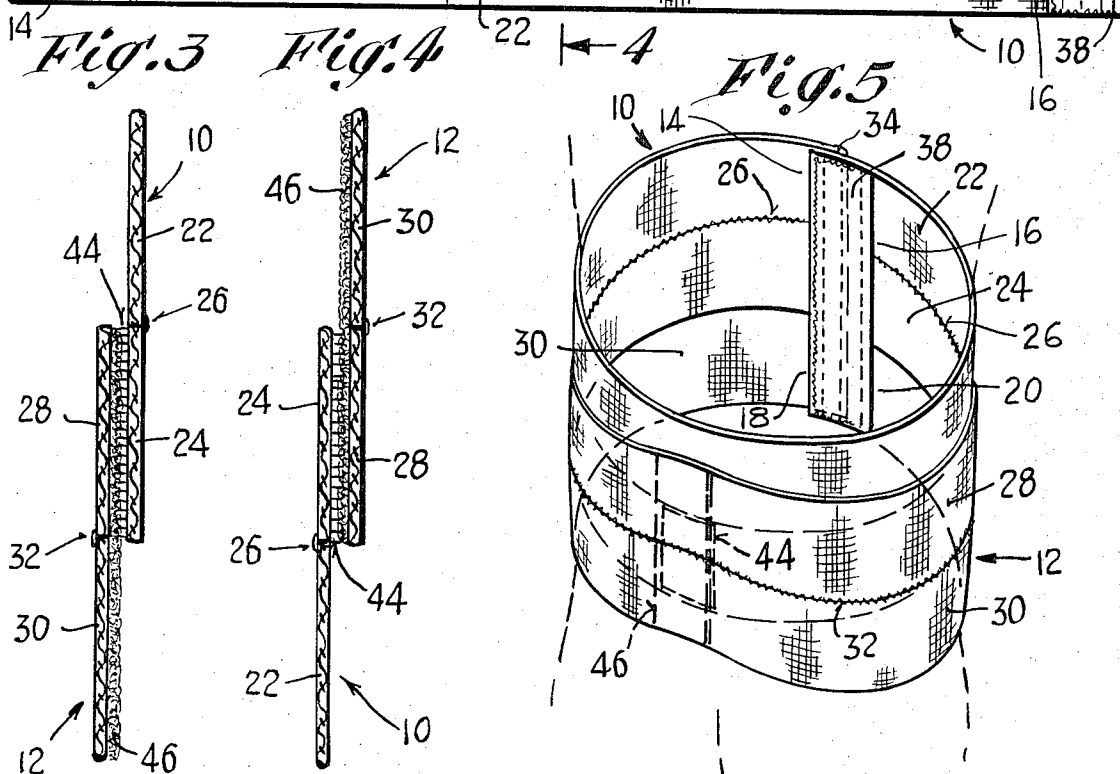
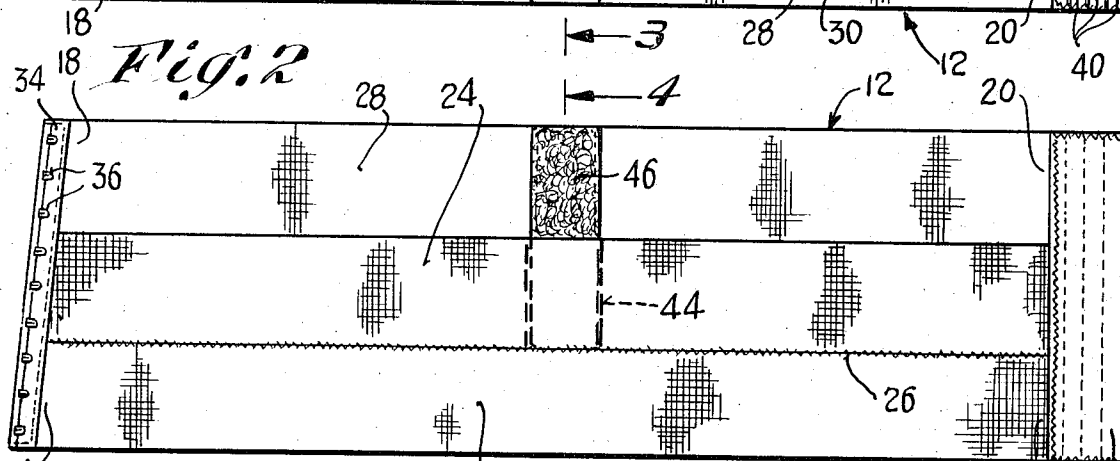
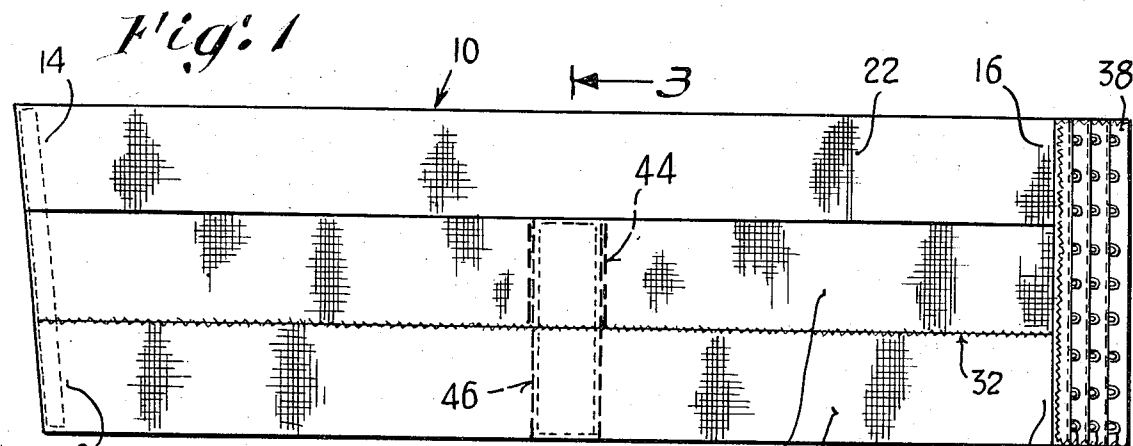


Fig. 6

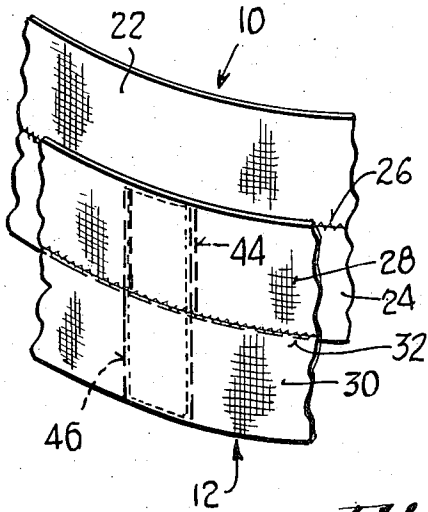


Fig. 7

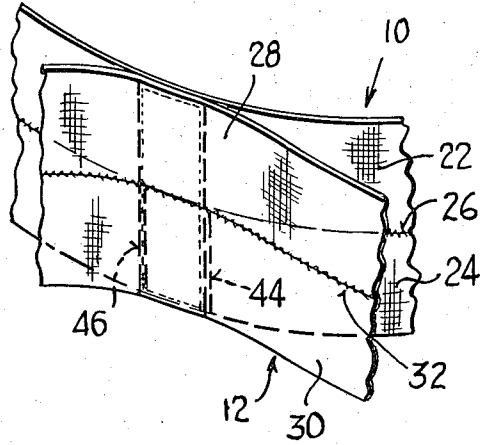


Fig. 8

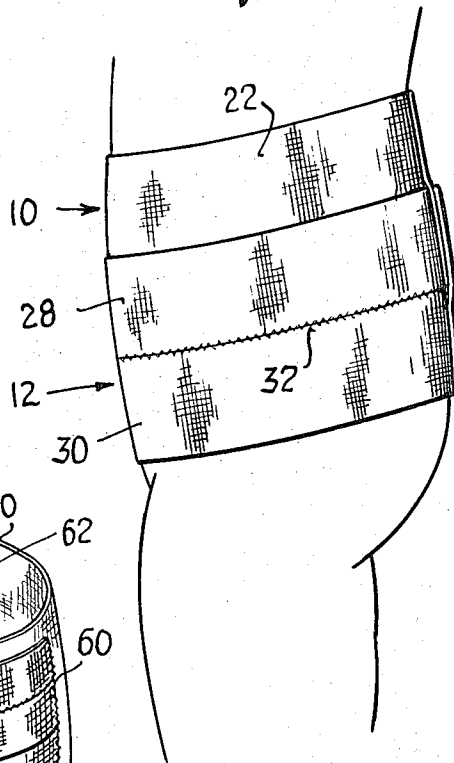


Fig. 9

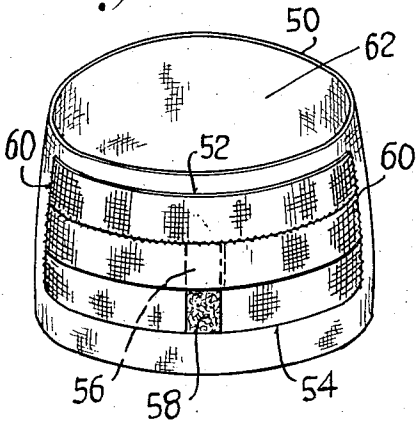
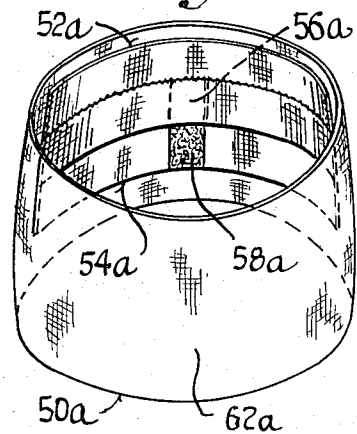


Fig. 10



WAIST-SUPPORTING GARMENT

BACKGROUND

This invention relates to waist-supporting or posture garments such as girdles, corsets and the like, and more particularly to garments of this type which are intended to improve the figure, and also to provide either increased back or abdominal support for the wearer. In the past, many types of girdles, abdominal belts, etc. have been proposed and produced to serve various purposes. Some were simple two-way stretch garments such as continuous or endless girdles intended to improve the posture, provide supporting means for stockings, etc. Others had elaborate panel and strap arrangements, supposedly to pull in bulging hips, support sagging muscles and so forth. As a general rule, these garments served reasonably well for the purpose intended but in most cases they involved costly two-way stretch materials and multiple operations comprising complicated stitching, sewing-in of diagonal seams or reinforcing panels, etc. whereby the garment became costly to produce.

Further, many prior garments although serving the intended purpose of support, shaping of the wearer's hips, etc., were uncomfortable to wear and applied pressures at unnecessary places, to the end that the users would experience great relief upon removing the garment after a period of wear. While in some cases the garment featured adjustability as to tension, shape, support, etc. the means for effecting the same were inconvenient and in many instances not wholly effective or durable.

SUMMARY

The above drawbacks and disadvantages of prior waist-supporting garments, girdles and the like are obviated by the present invention, which has for an object the provision of a novel and improved elastic or resilient garment of extremely simple construction, which can be easily and quickly adjusted, especially as to its width, thereby to provide the maximum support of the desired regions of the wearer's body, while at the same time being capable of economical production so that the manufacturing cost can be held to a low figure. Another object of the invention is to provide an improved waist-supporting garment as above characterized, which is constituted of one-way stretch elastic webbing of a commercially available type, joined in a unique manner and so related as to produce a wrinkle-resistant, effective and at the same time comfortable-to-wear article. An important feature of the invention resides in the provision of an improved elastic supporting garment as above set forth, which can be easily and quickly applied by the user, and as easily and quickly removed after use.

In accomplishing the foregoing I provide essentially a pair of resilient and elastic, thin, flat, ribbon-like belts each of which is adapted to encircle the waist of the wearer, said belts having an appreciable width and being preferably constituted each of two coextensive strips of wide elastic webbing sewed together along a pair of longitudinal edges. The ends of the two belts are joined together in partially overlapping relation so as to dispose the belts alongside each other or coextensively. Cooperable hooks and eyes are provided on the end-joining means, for securing the joined ends of the belts

to each other when the belts are in place encircling the wearer's waist. The mid-portions of the belts opposite the hook and eye fasteners can be made either to partially overlap or else fully overlap, as well as to have intermediate overlapping positions, and Velcro fastener elements are secured to said mid-portions to fix them to each other with the desired amount of overlap. By such arrangement, the effective width of the central portions of the garment can be varied between wide limits, and the amount of elastic support provided by such portions can be varied. With one setting a maximum support can occur midway between the upper and lower edges thereof, for example. The advantageous result of such arrangement can be increased support for the back, or for the abdomen of the wearer at desired locations, with lesser forces being exerted at the upper and lower edges of the garment. Thus, as a consequence, there is less tendency for the garment to cut into the wearer's flesh, and improved comfort while still providing the necessary supporting function.

Other features and advantages of the invention will hereinafter appear in the following detailed description wherein:

FIG. 1 is a plan view of the garment stretched out flat, illustrating the outer side thereof.

FIG. 2 is a plan view of the reverse or inner side of the garment, laid out flat.

FIG. 3 is a vertical section taken on the line 3—3 of FIG. 1.

FIG. 4 is a vertical section taken on the line 4—4 of FIG. 1.

FIG. 5 is a front perspective view of the garment as it is being worn by a user with the fasteners at the rear, the center portions of the garment being almost completely overlapping.

FIG. 6 is a fragmentary perspective view like FIG. 5, showing central (front) portions of the garment only one-half overlapped.

FIG. 7 is a fragmentary front perspective view like FIG. 6 but showing central portions of the garment fully overlapped.

FIG. 8 is a side elevational view of the garment being worn by a user, with the central (front) portion one-half overlapped.

FIG. 9 is a front perspective view of another embodiment.

FIG. 10 is a perspective view of still another embodiment.

Referring first to FIGS. 1—4, the improved garment shown therein comprises a pair of resilient and elastic, thin, flat, ribbon-like belts 10, 12 disposed in overlapping relation with each other, said belts being discontinuous and each having a pair of ends 14, 16 and 18, 20 respectively which are partially overlapped and juxtaposed.

Preferably the belt 10, which may be considered as the inner belt, is formed of two relatively wide elastic webs 22, 24 which are stitched together along a pair of longitudinal edges, such stitching being indicated at 26 in FIG. 3.

The outer belt 12 is likewise preferably constituted of two relatively wide elastic webs 28, 30 which are stitched together along one pair of longitudinal edges, the stitches being indicated at 32 in FIG. 3.

The juxtaposed ends 14, 18 of the belts are preferably one-half overlapped and are secured together by a

strong binding strip 34 which is provided with a plurality of metal hooks 36.

Preferably, as shown in FIGS. 1 and 2, the binding strip 34 extends along a slight diagonal with respect to the lengths of the belts 10, 12 whereby when the garment is assembled, one edge thereof can have a larger girth than the other. Usually the edge of larger girth is considered to be the bottom of the garment, while the other edge of smaller girth is the top, as viewed in FIG. 5.

The juxtaposed ends 16, 20 are also one-half overlapped, and are secured together in such overlapping relation by a relatively wide and sturdy binding strip 38 having a plurality of rows of eyes 40 which are cooperable with the hooks 36 to secure the two ends of the garment together in three different adjusted positions whereby there is had three different sizes.

As viewed in FIGS. 1 and 2, when the garment is laid out flat, the inner belt 10 and the outer belt 12 will each be one-half overlapped.

Further, in accordance with the present invention, the centers (front portions as seen in FIG. 5) of the belts 10, 12 are provided with separable gripper means disposed substantially at the midpoints thereof, for securing said portions together in any of a number of different overlapping positions. Such securing means may advantageously be constituted of multiple-hook type fastener fabric of the type known commercially as "Velcro" fasteners. Referring to FIG. 3, the inner belt 10 has a Velcro fastener strip 44 attached to the outer side of the web 24 and the outer belt 12 has a cooperable but longer Velcro fastener strip 46 attached to its inner side, such strip underlying both the web 28 and the web 30.

It will now be understood that the belts 10, 12 can be adjustably secured to each other at their central portions, in a large number of different overlapping positions. In FIG. 5 the front portions of the belt are illustrated as being almost but not quite completely overlapped at their centers. In FIG. 7 the belts are shown as being completely overlapped, whereas in FIG. 6 the belts 10, 12 are illustrated as being one-half overlapped. With the adjustment of FIG. 6, the garment will have a single web thickness along its upper and lower edges and will have a double thickness of webs along the intermediate portions whereby the maximum amount of support will occur along said intermediate portions. With the single thickness of web at the upper and lower edges there is less tendency for chafing pressure points to exist, and less tendency for the garment to cut into the flesh of the wearer while at the same time adequate support is had over the entire surface. In situations where the wearer is not especially fleshy, a greater midsection support can be had by a complete overlap of the central portions, as illustrated in FIG. 7, since there is not the likelihood of any flesh overhanging the garment and becoming sore. Various degrees of overlap may thus be obtained, to suit the requirements of the wearer, as for example the three-quarter overlap illustrated in FIG. 5. The one-half overlap position is also shown in FIG. 8, which corresponds to the showing of FIG. 6.

While the garment is illustrated herein as having the hook and eye fasteners at the back of the wearer, they can as well be disposed at the front so as to secure an adjustable support for the wearer's back.

Another embodiment of the invention is illustrated in FIG. 9, which shows a garment 50 that may be in the form of a two-way stretch girdle. Secured over a larger portion of the garment 50, such as either over the front or the back panel thereof, are thin, flat, ribbon-like belts 52 and 54 each constituted preferably of two elastic webs and being similar in nature to the belts 10, 12 and webs 22, 24 and 28, 30 thereof already described above. The belt 52 is shown as partially overlapping the belt 54, and is provided with a Velcro fastener strip 56 similar to the strip 44 described above. Also, the inner or under belt 54 has a Velcro fastener strip 58 similar to the strip 46. The belts 52 and 54 are discontinuous and coextensive, with their corresponding ends juxtaposed and secured together. It will be seen that the belts at least partially encircle the waist of a wearer. The juxtaposed pairs of ends of the belts 52, 54 are joined to each other by being secured by stitching 60 to the girdle 50, such stitching constituting (with portions of the girdle) a fastening or joining means. This joining means also comprises the remaining portion of the girdle which is not overlapped by the belts 52, 54. In other words, the portion of the girdle designated 62 serves to secure to each other the corresponding pairs of ends of the belts 52, 54, just as the hook and eye fasteners of FIGS. 1-8 and binding strips 34, 38 secure to each other the ends of the belts 10, 12.

By virtue of the Velcro fastener strips 56, 58 the belts 52, 54 can be arranged in different relative positions wherein they overlap each other to either a greater or else a lesser extent. When the garment is being worn, the belts 52, 54 can be located at either the front or back.

Yet another embodiment of the invention is illustrated in FIG. 10, showing a garment 50a in the form of a two-way stretch girdle having secured to its inside, partially overlapping stretchable belts 52a, 54a. The ends of the belts 52a, 54a are stitched to the garment 50a whereby the portion 62a thereof serves as a means for securing or fastening to each other the remote ends of the belts. Velcro fastener elements 65a and 58a enable the belts 52a, 54a to be made to overlap each other to either a greater extent or else a lesser extent.

It will now be seen from the foregoing that I have provided a novel and improved posture belt or waist-support garment which is adjustable as to its width, and is especially simple in its construction, involving merely the use of commercially available elastic webbing, together with binding strips and hooks and eyes, said garment having unique adjustability features to provide an advantageous support of either the back or the abdominal regions of the wearer, or both. The garment is seen to be adjustable as to its width at the central portions so as to give the desired support and also to minimize abrasion or chafing discomfort of the wearer. By virtue of the construction involving commercially available one-way stretch elastic strip or webbing, the garment resists wrinkling when being worn, and the manufacturing cost of the garment can be held to a low figure, making for an attractive retail price. The garment is not only adjustable as to the width at the central support portions but also as to its girth at the ends, to vary its size, this by virtue of the multiple hook and eye securing means provided. Further, the garment may be very quickly self-applied by the wearer, and as easily removed after use.

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Variations and modifications are possible without departing from the spirit of the invention.

I claim:

1. An adjustable-width, waist-supporting posture garment comprising, in combination:
 - a. a pair of resilient and elastic, thin, flat, ribbon-like belts each adapted to encircle the waist of a wearer,
 - b. said belts being discontinuous and each having a pair of ends,
 - c. said belts being disposed in coextensive relation to each other and having means joining the corresponding, juxtaposed ends together,
 - d. at least portions of said belts being adapted for arrangement in overlapping relation,
 - e. cooperable separable fastener means on said joining means, for securing the joined pairs of ends of the belts to each other with the belts in place encircling the wearer's waist, and
 - f. separable gripper means disposed substantially at the mid-points of the belts, for securing the same together in any of a number of different overlapping positions.
2. A garment as in claim 1, wherein:
 - a. each belt is constituted of two elastic webs stitched together along longitudinal edges thereof.
3. A garment as in claim 1, wherein:
 - a. the ends of the belts partially overlap each other.
4. A garment as in claim 1, wherein:
 - a. the means joining the corresponding ends of the belts comprise transverse binding strips stitched to said belts,
 - b. said fastener means comprising spaced rows of eyes on one binding strip and a row of hooks on the other binding strip, cooperable with said eyes.
5. A garment as in claim 1, wherein:
 - a. the gripper means on the belts comprise pads secured to the belts, a multiplicity of hooks disposed over the area of one pad, and a multiplicity of elements on the other pad, cooperable with said hooks.

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6. A garment as in claim 5, wherein:
 - a. one gripper pad, secured to one belt, is twice the length of the other gripper pad secured to the other belt.
7. A garment as in claim 1, wherein:
 - a. the gripper means on the belts comprise a Velcro-type fastener.
8. A garment as in claim 1, wherein:
 - a. the ends of the belts overlap each other by a half width.
9. An adjustable-width, waist-supporting posture garment comprising, in combination:
 - a. a pair of resilient and elastic, thin, flat, ribbon-like belts each adapted to at least partially encircle the waist of a wearer,
 - b. said belts being discontinuous and each having a pair of ends,
 - c. said belts being disposed in coextensive relation to each other with their corresponding ends juxtaposed and together,
 - d. at least portions of said belts being adapted for arrangement in overlapping relation,
 - e. means joining said juxtaposed pairs of ends of the belts to each other with the belts in place at least partially encircling the wearer's waist, and
 - f. separable gripper means disposed substantially at the mid-points of the belts, for securing the same together in any of a number of different positions wherein they overlap either more or less.
10. A garment as in claim 9, wherein:
 - a. said joining means comprises a portion of a girdle.
11. A garment as in claim 10, wherein:
 - a. another portion of said girdle is coextensive with and broadside to said belts.
12. A garment as in claim 11, wherein:
 - a. said belts are located inside of said other girdle portion.
13. A garment as in claim 11, wherein:
 - a. said belts are located outside of said other girdle portion.

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