

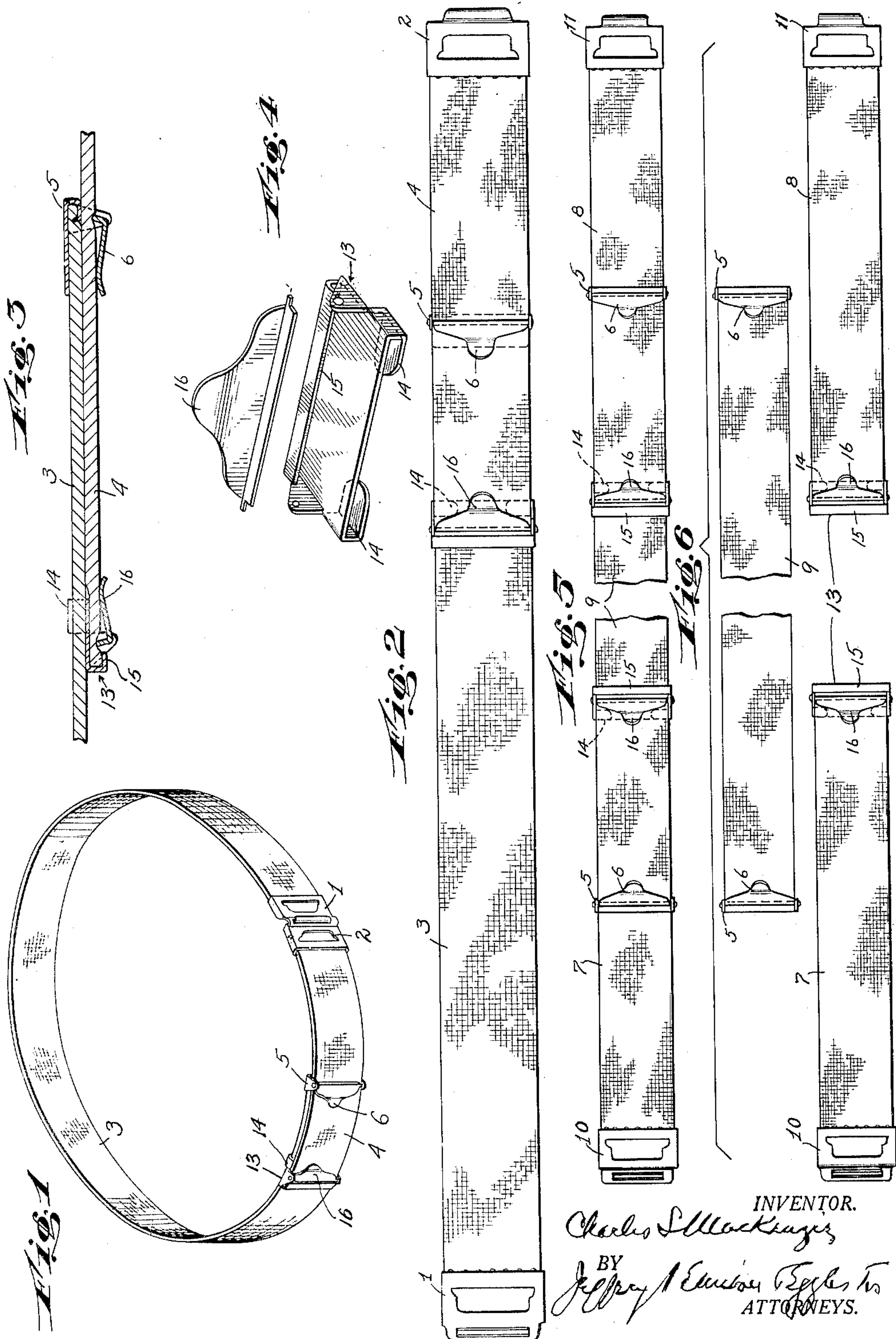
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BELT

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BELT

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The object of this invention is an improved belt for supporting trousers, knickerbockers, riding breeches and other garments. Its chief characteristics are that it is all-elastic and made of a plurality of strips releasably clamped together and affording the wearer greater comfort and efficiency than is possible with the kinds of belts now in use, being so adjustable as to length that it can be used by people having widely different waist measures.

Belts are commonly made of leather, canvas or other inelastic material, and it is quite generally recognized that they have to be drawn so tightly around the body, in order to hold in place the garment they are supporting, that they are uncomfortable; also any contraction of the abdomen releases the pressure and permits the supported garment to slip down. To avoid these and other objections I make my belt of elastic material such as elastic webbing because, by reason of its resiliency, the wearer is caused little or no discomfort and furthermore when the abdomen is contracted the belt likewise contracts while continuing to exert sufficient pressure to hold itself in position, as well as the garment supported thereon.

But no all-elastic belt having the required elasticity to meet the above requirements can be wholly satisfactory which depends upon the usual buckle as the means for adjusting it to the desired tension, for the reason that when an effort is made to draw such a belt through the buckle it stretches from the point where the pull is exerted to the point where resistance thereto is first encountered and that is at the point where it passes through the buckle. Thus it is difficult, and impractical, in this way to secure the desired uniform tension around the waist. If, however, an elastic belt under the desired tension is the correct size just to meet around the waist, then a hook-type clasp with reciprocally engaging clasp members can be employed to fasten the ends together, for the elasticity of the belt material will provide sufficient tension to keep the clasp engaged when the abdomen is contracted. Such a clasp also has the added

advantage of giving a neat and orderly appearance, as there is no free end to protrude or be sustained as in the case where a buckle is employed. But it is not commercially practical to make belts of different sizes to meet exactly all waist measures, nor will anyone's waist measure or the elasticity of a belt remain constant. To overcome these disadvantages it was necessary to provide a means whereby the length of the elastic belt can easily be adjusted, not only to meet the changing requirements of an individual, but also so that it could be adjusted to meet the requirements of people whose waist measures differ widely from one another. The ordinary devices that are now used for that purpose, such as adjusting slides, require a folding over of the belt material. Such a device cannot, however, be satisfactorily employed where the belt is made of an elastic material, such as elastic webbing, having the thickness which utility and appearance require of a belt suitable for supporting trousers, for the reason, that if such belt material were folded over it would form an unsightly and uncomfortable loop or fold. Also such thick elastic material cannot be readily adjusted in a buckle or clasp, so that there would be uniformity of pull along the belt.

Some have attempted to avoid these difficulties by making belts partly of elastic material but with one end thereof equipped with a piece of leather or other non-elastic material carrying a buckle and the other end thereof consisting of a piece of leather or other non-elastic material to engage with the buckle. For reasons which will appear hereafter this form of belt does not possess the advantages afforded by this invention.

To avoid the disadvantages hereinbefore recited as well as others I make my belt of a plurality of detachably connected flat pieces or strips of thick elastic material. I prefer to use either two or three pieces rather than a greater number. In the accompanying drawing—

Fig. 1 represents in perspective a two piece belt according to this invention.

Fig. 2 shows the same belt laid out flat, the outer side being shown.

Fig. 3, an enlarged longitudinal section through the overlap.

Fig. 4, a perspective detail of the guiding clamp.

Fig. 5 is a three-piece belt on the same principle, and

Fig. 6 the same with parts separated.

Referring first to Figs. 1 to 4, which is a two-piece belt; to one end of one of said pieces I attach one part marked 1, of an interlocking or reciprocally engaging clasp. To one end of the other of said pieces I attach the complementary part 2 of such interlocking or reciprocally engaging clasp. These two ends will hereinafter be referred to as the clasp ends and the other ends of said two pieces as the free ends.

Although said two strips may be of any desired lengths, for reasons which will hereinafter appear, one of said pieces marked 3 is preferably approximately three times as long as the other of said pieces, marked 4.

The reason for this is that my invention provides, among other things, that the free end of one of said pieces 3 shall horizontally overlap the free end of the other of said pieces 4 and as I prefer that such overlapping occur on the wearer's side the reason for the differences in length of said two pieces becomes obvious. As I prefer also that such overlapping be on the wearer's right side in order to make it more convenient to adjust, I have the clasp end 1 of the longer of said pieces which is intended to pass around the waist from left to right from the front of the abdomen equipped with the female part of such interlocking or reciprocally engaging clasp and clasp-end 2 of the shorter of said pieces which is intended to pass from the front of the abdomen around the right side equipped with the male part of said interlocking or reciprocally engaging clasp.

To one of said free ends, preferably, the overlapped or inside end of the piece 3, I affix a clamp 5 which when opened will have sufficient space between its jaw member 6 and the underlying piece of belt material, to permit of the insertion of the free end of the other of said pieces and which said clamp when closed will squeeze said inserted piece against the overlapped piece and the base part of said clamp so as to bind it thereto, thus releasably uniting the two pieces. The clamp 5, as shown in Fig. 3 is of metal or other suitably rigid material and permanently fixed or clenched over the cut end of the elastic fabric so as to act as a covering and prevent fraying. Preferably the clenched or folded-over part of the clamp is provided with teeth which are forced into the fabric forming a secure attachment as

indicated. This obviates the necessity of sewing any part of the belt.

It will be apparent that the greater the overlap of the two pieces the shorter the belt, and that if it is desired to lengthen the belt, that can easily be done by opening the clamp and shortening the overlap by drawing through the clamp the overlapping part until the desired length is attained and then closing the clamp. Thus I have provided an elastic belt whose size is easily adjustable and without looping or folding over of the belt material.

If three pieces are used to make the belt, as in Figs. 5 and 6, I prefer to have two short pieces 7 and 8 and one intermediate long piece 9. One of the shorter pieces is tipped with the female part 10 of an interlocking clasp and the other of said shorter pieces with the male part 11 of such clasp. Either or both of the shorter pieces, 7 and 8, may overlap the longer piece or vice versa but if the overlapped piece is the longer piece of belt material, I prefer to affix to each end of it a clamp the same as clamp 5, above described, to receive the two shorter pieces. For convenience in making the adjustment, the longer piece 9 is approximately equal in length to the combined length of the two shorter pieces. The purpose of this is that it affords two mediums for adjusting the length of the belt, one on each side. Thus the belt may be enlarged within the scope of the two overlapped pieces precisely the same as if only two pieces were thus detachably attached to one another with an overlap equal to the combined overlap where three pieces are used. If, therefore, three pieces are used with an overlap on each side of say six inches it would be equivalent to a twelve inch overlap when only two pieces are used.

A comparatively large amount of overlapping is very desirable especially from a commercial standpoint as it permits the use of the same length belt for people whose waist measures differ widely. This being so, the retailer is not required to lay in such a large stock of belts composed of several different sizes to meet the requirements of people having different sizes of waists but is enabled to meet practically all demands for belts of this kind from a stock containing three adjustable sizes having adjustments of around twelve inches each. In addition to the foregoing advantages this plan of overlapping likewise provides the wearer with a means of adjusting the size of his belt to meet changing conditions of his waist measure as well as temporary expansion or contraction of his abdomen. It can also be employed to compensate for excessive stretch of the belt material due to unusual conditions of heat and moisture and as stated it avoids all looping or folding over of the belt material.

It is desirable to hold the overlapping part horizontal with the overlapped part of the belt and while this may be accomplished in different ways, I prefer to bind the overlapping end with a clamp 13 the sides of which are extended and bent over to form the ears 14 to embrace the underlying portion of the belt and thus support the overlapping portion horizontally parallel therewith without binding it thereto. The advantage of binding the end of the overlapping piece with a clamp such as 13 and not with a permanently affixed binding, is so that it may be readily removed in order to insert it, in the first instance, through the adjustment clamp 5 and in order to permit shortening of the length of overlap by cutting off some of the strip. In such case the cut end is inserted under the ledge 15 of clamp 13 and permanently locked therein by folding over the hinged clamp jaw 16 of said clamp, as indicated in Fig. 3. The cut end is thus covered and prevented from fraying and the necessity of sewing or riveting a tip on the strip is obviated.

Having thus described my invention, what I claim and desire patent for is:

1. A belt to be worn around the waist for supporting trousers, and other garments composed of a plurality of pieces of a flat, elastic material or elastic webbing, said pieces horizontally overlapping and underlapping each other for a greater or less distance as desired, the overlapping and underlapping parts being releasably clamped together so that all of said pieces so clamped will in effect form one continuous piece, the extreme ends of which are respectively equipped with the complementary parts of a suitable interlocking clasp.

2. A belt to be worn around the waist for supporting trousers, and other garments composed of two pieces of a flat elastic material of different lengths, one of which is approximately three times longer than the other, one of said pieces having permanently affixed to its end, a releasable clamp through which when open the free end of the other of said pieces is inserted in horizontal relation to the piece to which the clamp is affixed, being releasably bound thereto when the clamp is closed, the clasp end of one of said pieces being equipped with the female part, and the clasp end of the other piece being equipped with the complementary male part of an interlocking clasp.

3. A belt to be worn around the waist for supporting trousers, and other garments which is composed of a plurality of pieces or strips of flat, elastic material horizontally overlapping and underlapping one another at the free ends thereof, said ends being releasably bound to one another by means of a releasable clasp which is permanently affixed to the free end of the piece to which

the end of another piece is to be releasably bound, said clamp being so constructed that it performs the double function of covering the cut end to which it is attached, and also gripping and holding the piece which overlaps or underlaps it at any desired point, and the united pieces so releasably clamped together, equipped at their respective clasp ends with the complementary parts of an interlocking clasp.

4. A belt to be worn around the waist for supporting trousers, and other garments, composed of two or more pieces or lengths of flat, elastic woven or frayable material which said pieces or segments horizontally overlap and underlap one another, being releasably bound together by clamps attached to an end of one of said pieces or segments, releasably clamping or binding to it its overlapping or underlapping piece, and which said overlapping or underlapping piece or segment as is not equipped with a clamp to clamp it to some other piece carries on an end thereof a guide or guides slidably engaging the piece to which it is so releasably bound, the clasp ends of said pieces or segments so bound together being respectively equipped with complementary parts of an interlocking clasp for fastening the belt around the waist and all of which said clasps, clamps and guides are of metal or other rigid substance, the parts thereof which permanently affixed them to the belt material being folded or turned over the cut ends thereof so as to act as a covering for such ends to prevent fraying, and being attached thereto by teeth stamped into said metal or other rigid substance of which the same are made, being thereby forced into the belt material, so as to obviate the necessity of sewing of any part of the belt.

In testimony whereof, I have signed this specification.

CHARLES S. MACKENZIE.