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APPARATUS FOR ATTACHING WAISTBAND AND BELT LOOPS TO A GARMENT BODY

2,700,946

Filed Feb. 3, 1951

5 Sheets-Sheet 1

Fig. 2.

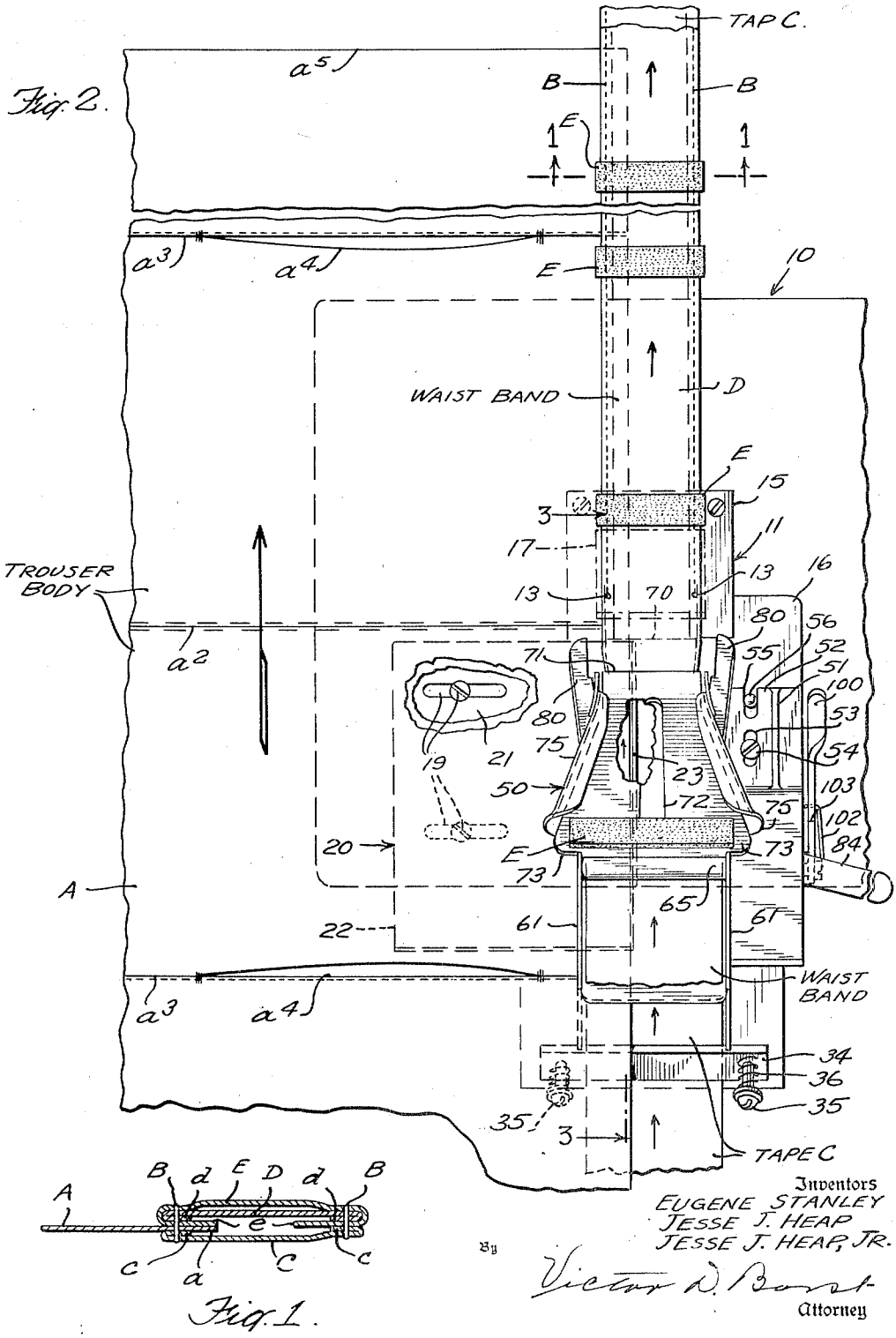


Fig. 1.

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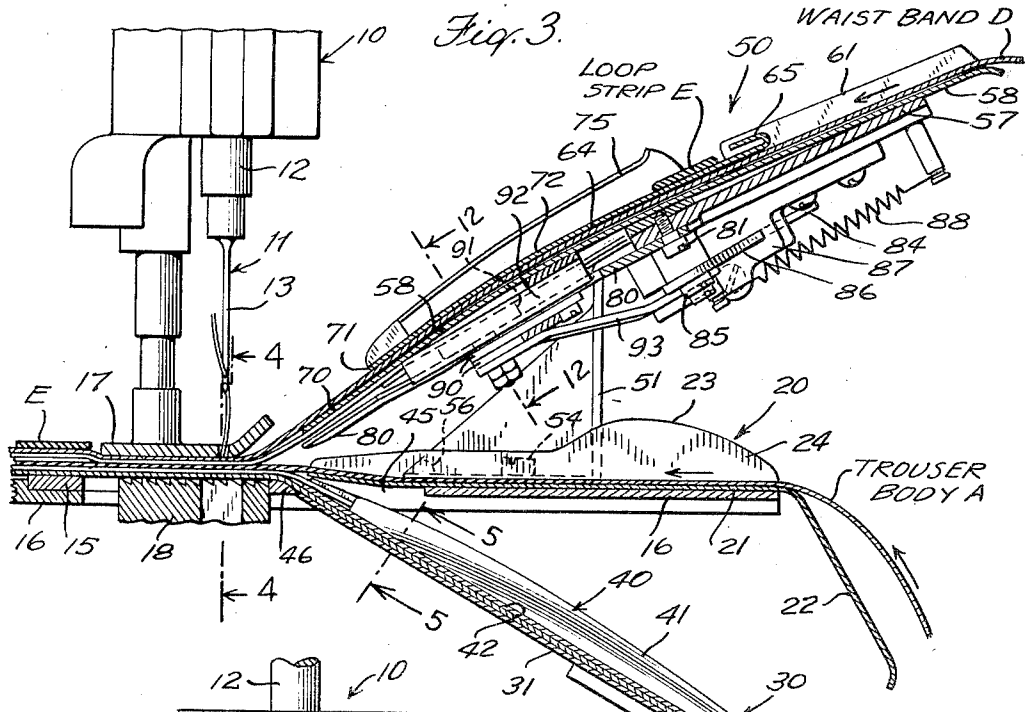
Victor D. Bond

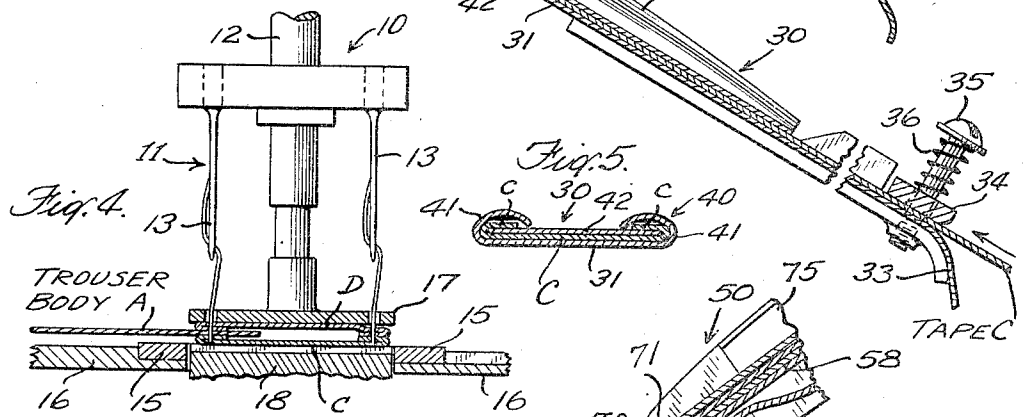
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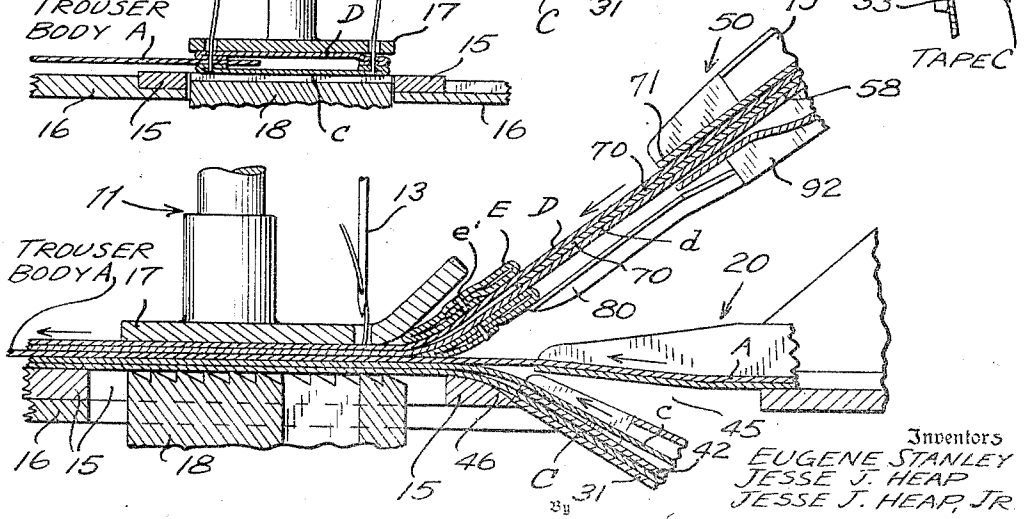


Fig. 6.

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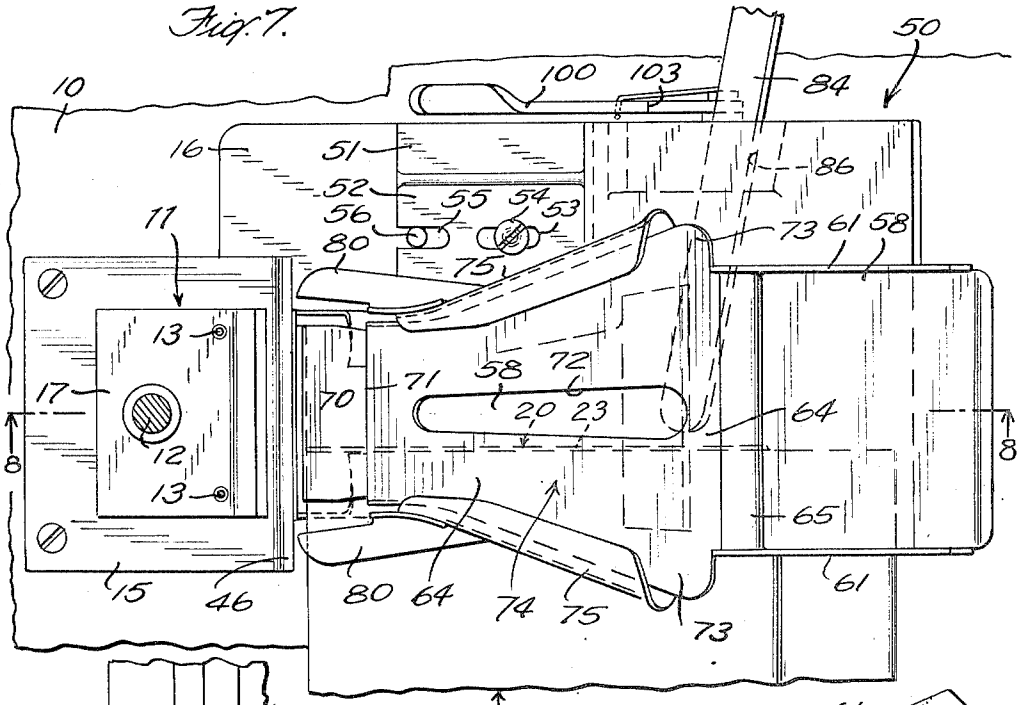
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Fig. 7.



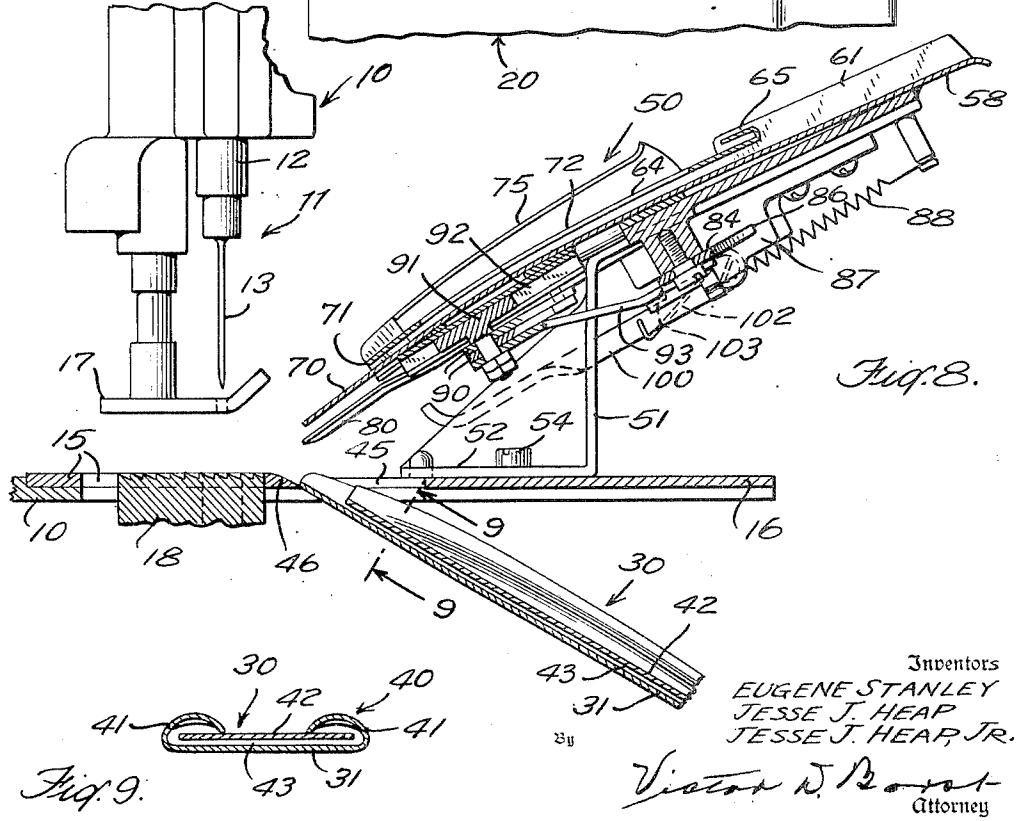


Fig. 8.

Fig. 9.

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APPARATUS FOR ATTACHING WAISTBAND AND BELT LOOPS TO A GARMENT BODY

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Fig. 10.

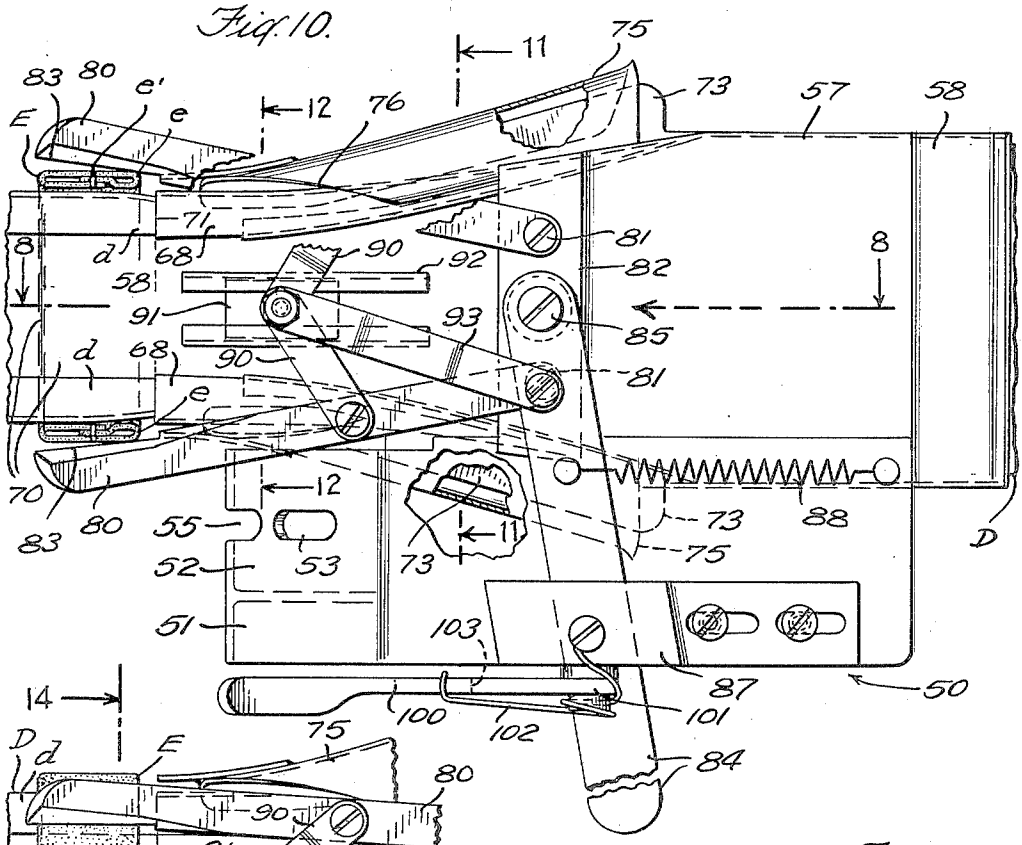
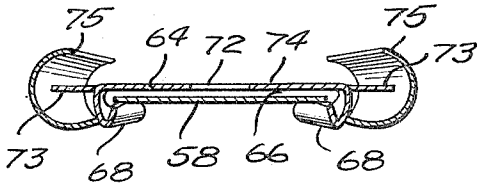


Fig. 13.

Fig. 11.



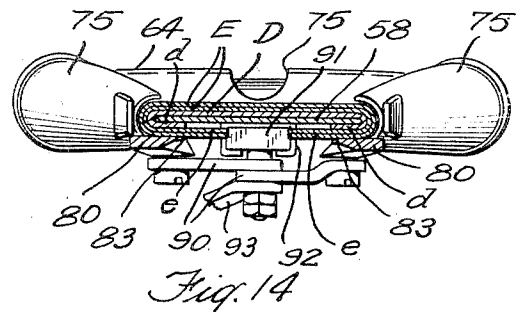
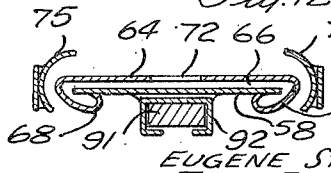


Fig. 14

Fig. 12.



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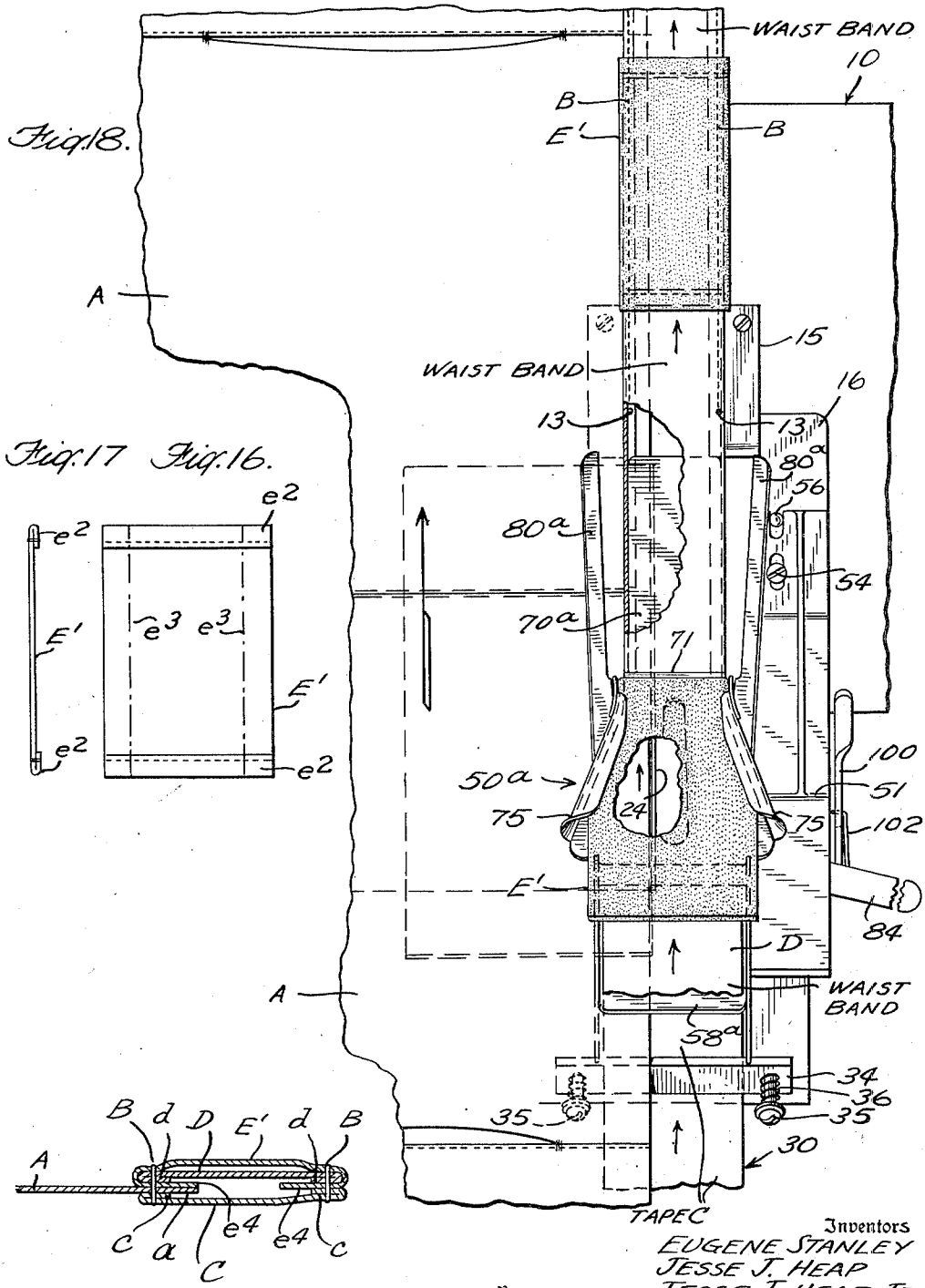


Fig. 18.

Fig. 17

Fig. 16.

Fig. 15.

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United States Patent Office 2,700,946 Patented Feb. 1, 1955

2,700,946

APPARATUS FOR ATTACHING WAISTBAND AND BELT LOOPS TO A GARMENT BODY

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Application February 3, 1951, Serial No. 209,222

7 Claims. (Cl. 112—2)

The present invention relates to the art of applying a waist band, a lining or backing tape for said band and belt loops to a garment body.

In applying a waist band, a tape and belt loops to the body of a garment, as for example, to the top of a trouser body, the hemming, folding, assembling and sewing steps required have hitherto been performed by successive time consuming operations. Moreover, in such prior processes, the waist band and its backing tape have been stitched together at their edges and the loops have been later sewed or tacked on at both ends directly to the outside of the waist band. If one end of each belt loop was tucked in and held between the waist band and the tape at one edge, the other end of the loop necessarily was either folded over the stitched waist band and tape at the other edge and attached directly to the tape or was attached directly to the outside of the waist band. The loops therefore did not have the neat appearance desired, did not lie flat against the waist band and were not firmly fastened to the waist band unit.

One object of the present invention is to provide a process of folding, hemming and assembling the parts of a waist band unit described and for sewing them to a garment body and especially to a trouser body or panel by a single operation.

Another object is to provide devices combined and related to fold, hem and assemble the parts of a waist band unit described and to sew them to a garment body and especially to a trouser body or panel by a single operation.

A further object is to provide a new and improved sewing machine attachment by which the waist band is hem-folded at its margins, fabric strips or pieces are simultaneously folded at their ends around the hem-folded margins of the waist band to form belt loops and the assembly is directed towards the stitching mechanism of a sewing machine.

In carrying out the process of the present invention in its more specific aspects, the end of the garment body to which the waist band unit is to be applied is fed in a direction towards a sewing mechanism having two needles operating to stitch at the same time along both longitudinal edges of the waist band unit assembled. Simultaneously, the fabric tape which is employed to prevent the waist band from stretching and to impart rigidity to the waist band is directed in the same general direction on one side of the face of the garment body and towards the stitching mechanism and at the same time has its longitudinal edges hem-folded. While these operations are being performed, the waist band is directed on the other side of the face of the garment body and in the same general direction towards the stitching mechanism. During its travel towards the stitching mechanism, the waist band has its edges hem-folded and at the same time, the loop strips or pieces are placed in proper position across the path of movement of the waist band and are moved in the same direction, while the ends of said strips or pieces are folded over the hem-folded edges of the waist band. Thus, the hem-folded waist band, the loop strips or pieces with their ends folded around the edges of said band, the tape with its margins hem-folded and the garment body are delivered simultaneously and in proper relationship towards the stitching mechanism.

The structural means for carrying out the one-operational process described comprises in its more specific aspects means for guiding the garment body towards the stitching mechanism, a hemming attachment for the tape on one side (above or below) of said guiding means and a combined waist band hemmer and loop piece folder attachment on the other side of said guiding means. The two attachments and the guiding means for the garment body direct the tape, waist band and garment convergently towards the field of action of the stitching mechanism.

Various other objects, features and advantages of the present invention are apparent from the following particular description and from an inspection of the accompanying drawings, in which—

Fig. 1 is a section taken on the lines **1—1** of Fig. 2 and showing a cross-section through the upper part of a trouser panel or body to which are sewn the waist band, waist band lining or tape and narrow belt loops in accordance with the process of the present invention and by devices embodying the present invention, the belt loops being shown for the sake of simplicity of single ply construction, although actually they may be constructed from prefabricated folded overlapping tubular strips or pieces;

Fig. 2 is a top plan view of the sewing machine attachments embodying the present invention and adapted simultaneously to hem-fold the waist band, fold narrow loop strips around the hem-folded waist band, hem-fold the tape for the waist band and direct these folded parts and the trouser body towards the field of action of the stitching mechanism where these parts and the trouser body are assembled and sewn together, these attachments being shown in connection with the stitching machine operating on the different fabric components of the waist band assembly;

Fig. 3 is a longitudinal section of the sewing machine and its attachments taken approximately on lines **3—3** of Fig. 2 but shown on a larger scale, the multi-ply loop strips being shown of single ply construction for the sake of simplicity;

Fig. 4 is a transverse section of the sewing machine taken approximately on lines **4—4** of Fig. 3;

Fig. 5 is a transverse section of the lower hemming attachment for the tape taken approximately on lines **5—5** of Fig. 3;

Fig. 6 is an enlargement of a part of the sewing machine and attachments shown in Fig. 3, the loop strips however being shown in their actual multi-ply tubular prefabricated form;

Fig. 7 is a top plan view of the upper attachment for hem-folding the waist band, and for simultaneously folding the ends of the loop strips around the hem-folded edges of the waist band, the attachment being shown on a scale larger than that of Fig. 2 and without the waist band and loop strips to be operated upon;

Fig. 8 is a longitudinal section of the upper and lower attachments taken approximately on lines **8—8** of Figs. 7 and 10;

Fig. 9 is a transverse section of the lower tape hemming attachment taken approximately on lines **9—9** of Fig. 8;

Fig. 10 is a bottom plan view of the upper band hemming, strip folding attachment shown in Fig. 7 but prior to the operation in which the folded ends of a loop strip are tucked sharply around the edges of the waist band and pressed against the hem-folds in said band, the attachment being shown in connection with the waist band and also in connection with loop strips of tubular prefabricated form;

Fig. 11 is a transverse section of the upper attachment taken approximately on lines **11—11** of Fig. 10 but shown without the waist band and the loop strip;

Fig. 12 is a transverse section of the upper attachment taken approximately on lines **12—12** of Fig. 10 and on lines **12—12** of Fig. 3 but on a larger scale and shown without the waist band and the loop strips;

Fig. 13 is a duplicate of the strip tucking part of Fig. 10 but shown at the instant the folded ends of the loop strip are tucked sharply around the edges of the waist band and pressed against the hem-folds of said band;

Fig. 14 is a transverse section of the upper attachment taken approximately on lines **14—14** of Fig. 13;

Fig. 15 is a cross-section through the waist band re-

gion of the trouser body constructed in accordance with the present invention as shown in Fig. 1, except that the belt loops are comparatively wide and of single ply construction;

Fig. 16 is a top plan view of the wide loop pieces of Fig. 15 before application to the waist band to form the wide belt loops;

Fig. 17 is an end view of the wide loop piece shown in Fig. 16, and

Fig. 18 is a top plan view of sewing machine attachments embodying the present invention, the upper attachment being shown designed to handle the wide loop pieces of Figs. 16 and 17.

In considering the drawings, it should be borne in mind that in Figs. 1 and 3, the loop strips are shown of single ply construction for the sake of simplicity and in Figs. 6, 10, 13 and 14 these strips are shown in their actual prefabricated multi-ply tubular form. Figs. 7, 8 and 9 show the devices without the fabric parts being operated upon.

The invention although having wide application in the garment field is particularly applicable to trouser construction and especially to trouser construction of the jean, overall, work or outdoor type.

Fig. 1 shows the waist band trouser construction produced by the one-operational process and devices of the present invention and comprising a trouser panel or body A having its top margin *a* retained by a line of stitching B between the facing inturned hem-fold *c* of a fabric tape C and inturned hem-fold *d* of a fabric waist band D on the lower side of the waist band unit. On the upper side, the tape C and the waist band D have inturned hem-folds *c* and *d*, respectively, in face to face contact and are permanently fastened together by another line of stitching B. Forming part of the waist band unit are narrow belt loops E, each comprising a strip of fabric material having a fold *e* at one end tucked between the top margin *a* of the trouser body A and the corresponding hem-fold *d* of the waist band D on the lower side and having a fold *e* at its other end tucked between the hem-fold *c* of the tape C and the hem-fold *d* of the waist band on the upper side of the waist band unit. The folded tucked ends *e* of the loops E are permanently retained in position described by the two lines of stitching B.

The belt loops E are each shown in Figs. 6, 10, 13 and 14 preconstructed of a strip of fabric material having its longitudinal margins folded in overlapping relationship to form a tube and sewed together and to the outside section of the strip by a line of stitching *e'*. The loop strips are in this prefabricated multi-ply form before application to the waist band but may be of single ply construction if desired.

In Figs. 15, 16 and 17, the process is illustrated in connection with a waist band unit having comparatively wide belt loops E'. The strips or pieces from which these loops are formed are shown in Figs. 16 and 17 comprising a single layer of fabric material preconstructed with hems e^2. The lines e^3 in Fig. 16 indicate the sections along which the ends of the loops piece E' are folded over the hem-folded margins of the waist band D, in accordance with the present invention. The hems e^2 in assembled position of the loops E' extend at the sides of the loops crosswise of the waist band unit and these loops have folds e^4 at their ends tucked between the trouser body A and the waist band D at the lower side of the waist band unit and between the tape C and the waist band D at the upper side of the waist band unit. In all other respects, the waist band unit is similar to that shown in Fig. 1 and it is made by a process similar to that of making the construction of Fig. 1.

The apparatus for making the waist band construction shown in Fig. 1 comprises the usual sewing machine **10** (Figs. 2 to 6) having a stitching mechanism **11** of the double needle type. This stitching mechanism comprises a reciprocable needle bar **12** carrying two needles **13** operating simultaneously through a throat plate **15** in a bed **16**. A presser foot **17** operates directly over the throat plate **15** and a feed dog **18** projects upwardly through said throat plate.

The trouser body or panel A is shown comprising a rear center seam a^2 (Fig. 2), side seams a^3, side pocket sections a^4, and the fly end a^5 and is directed towards the stitching mechanism **11** by a guide attachment **20** (Fig. 3) including a horizontal sole plate **21** detachably fastened to the sewing machine bed **16** as, for example, by slot and screw connections **19** (Fig. 2) permitting its adjustment transversely with respect to the direction of feed of the trouser body. This sole plate **21** has at its rear end an obliquely downward extension **22** (Figs. 2 and 3) in the form of an apron serving as a guide for the trouser body A in its travel towards the sole plate **21**. On one side of the sole plate **21** is an upstanding flange **23** presenting a guide surface **24** for the top edge of the trouser body A. The trouser body A in its travel over the sole plate **21** towards the stitching mechanism **11** is held by the operator with the top edge of said body against the guide surface **24** of the upstanding flange **23**.

While the trouser body A is being directed and fed towards the stitching mechanism **11**, the tape C is fed below said trouser body in an oblique direction towards the stitching mechanism **11** for connection to the top margin *a* of said trouser body and at the same time is hem-folded along its longitudinal margins by a hemmer attachment **30** (Figs. 2, 3, 5, 6, 8 and 9). This attachment **30** comprises a sole plate **31** inclined upwardly towards the stitching mechanism **11** and detachably secured to the bed **16** of the sewing machine **10** in any suitable manner (not shown). A rearward obliquely depending apron extension **33** serves as a guide for the tape C in its movement towards the sole plate **31**. A pressure bar **34** on the rear end of the sole plate **31** and slidable along a stud **35** secured to said plate is pressed against the tape C by a spring **36** and serves to tension and smooth out the tape as it is pulled by the action of the feed dog **18** of the sewing machine **10**.

The attachment **30** also includes a double hemmer **40** comprising scroll sections **41** constituting side extensions of the sole plate **31** and cooperating with the edge margins of a flat fold plate **42** around which the edges of the tape C are turned by the scroll sections **41** to form the hem-folds *c* (Fig. 1). This fold plate **42** (Figs. 3, 5, 6, 8 and 9) is disposed above and parallel to the sole plate **31** to define therewith a passageway **43** (Fig. 9) for the tape C in its movement towards the stitching mechanism **11**. As the tape C is directed towards the stitching mechanism **11** through this passageway **43**, the marginal sections of the tape are progressively hem-folded upwardly and inwardly over the edges of the fold plate **42**. At the forward or exit end of the attachment **30** near the stitching mechanism **11**, the bed **16** of the sewing machine **10** has an opening **45** (Figs. 3, 6 and 8) and a ramp **46** at the forward edge of said opening defined by an edge of the throat plate **15** to guide the hem-folded tape C into face to face contact with the top margin *a* of the trouser body A.

For delivering the waist band D towards the stitching mechanism **11** and at the same time hem-folding its longitudinal margins and folding the ends of the belt loop strips E around the hem-folds *d* of said waist band, there is provided an attachment **50** (Figs. 2, 3, 6, 7, 8 and 10 to 14) disposed above the path of movement of the trouser body A. This attachment **50** comprises a mounting bracket **51** disposed on one side of the guiding attachment **20**, so as not to interfere with the passage of the trouser body *a* therethrough and having a foot **52** which is seated on the bed **16** of the sewing machine **10** and which is removably fastened thereto. For fastening this attachment to the bed **16**, the bracket foot **52** has an elongated slot **53** for receiving a screw **54** threaded into said bed. The attachment **50** can thereby be adjusted along the bed **16** in the general direction of feed of the waist band D, to bring the exit end of said attachment closer to or farther away from the field of action of the stitching mechanism **11** according to the overall thickness of the waist band unit to be formed. To hold the attachment **50** against swinging movement about the screw **54**, the forward end of the bracket foot **52** is provided with an elongated notch **55** receiving a pin **56** projecting from the bed **16**.

Secured to the upper end of the bracket **51** is an inclined frame plate **57** to which is soldered or otherwise affixed a sole plate **58** extending obliquely downwardly towards the stitching mechanism **11** and serving as a support for the waist band D in its travel towards the stitching mechanism. At the entrance or rear end of the sole plate **58**, there is provided a pair of side upstanding guide flanges **61** forming with the sole plate a channel for receiving the waist band D before being hem-folded. The distance between these guide flanges **61** is just a little larger than the width of the waist band D before it is

hem-folded, so that the waist band is guided in proper transverse relationship with respect to the stitching mechanism **11** and the other waist band elements being fed towards said stitching mechanism.

Associated with the sole plate **58** is a hemmer blade **64** having its rear or entrance end reversely bent to form a turned edge **65** over which the fingers of the operator can move without being cut or otherwise injured in feeding the loop strips over said hemmer blade, as will be more fully described. The hemmer blade **64** is parallel to and spaced above the sole plate **58** to define therewith a passageway **66**, Figs. 11 and 12, for the waist band D and has its longitudinal marginal sections turned downwardly and inwardly around the edges of the sole plate **58** to form hemmer scrolls **68**. The sole plate **58** tapers towards a rectangular forward end section **70** (Figs. 3, 6, 7, 10) thereof and the hemmer scrolls **68** correspondingly converge towards said plate section and are contoured in a manner well known in the hemming art to form acute hem-folds *d* in the waist band D. The hemmer blade **64** including its scroll sections **68** terminates at **71** (Figs. 2, 3, 6, 7, 8 and 10) at the rear end of the sole plate section **70**, so that as the waist band D emerges from the passageway **66**, it slides over the plate section **70** with the hem-folds *d* exposed and turned downwardly and inwardly over the edges of said plate section.

To facilitate the threading of the waist band D through the passageway **66** and to afford means by which the waist band can be straightened out in case it tends to clog or choke in said passageway, the hemmer blade **64** has an elongated finger slot **72** extending centrally therealong. By means of this slot **72**, the operator may apply finger pressure to the waist band D in the passageway **66** and help it along the sole plate **58** until the band emerges from the outlet end of the hemmer scrolls **68** or has been straightened out sufficiently to permit the band to travel smoothly towards the stitching mechanism **11**.

The attachment **50** is also provided with means whereby the loop strips E as they are pushed along the body **74** of the hemmer blade **64** are turned downwardly and folded loosely around the hem-folded edges of the waist band D, while the hem-folds *d* are being formed on said waist band. The means for performing this operation comprises a pair of triangular wing plates **73** (Figs. 7, 11, 12, 13) soldered or otherwise secured to the sides of the body **74** of the hemmer blade **64**, respectively, above its scroll sections **68** and forming side extensions of said blade body flush therewith. Soldered or otherwise secured to the sides of the sole plate **58** are folders **75** in the form of blades of C-shaped cross-section extending along and around the longitudinal converging edges of the wing plates **73**, respectively, and serving to fold the ends of the loop strips E downwardly and inwardly around said plate edges. These folders **75** have their undersides cut away at **76** (Fig. 10) to permit the ends of the loop strips E being folded to emerge from said folders and terminate at their forward ends with the forward end of the hemmer blade **64** at **71**. As the loop strips E are pushed along the body **74** of the hemmer blade **64**, they are separated from the waist band D by said blade body, so that the ends of the travelling strips are progressively turned downwardly and loosely inwardly by the folders **75** around the edges of the wing plates **73**, without interference from said waist band. As the loop strips E emerge from the exit ends of the folders **75**, they will be laid on to the exposed section of the waist band D on the forward end section **70** of the sole plate **58** and will be turned downwardly and inwardly around the hem-folds *d* of the waist band D in contact therewith and in proper relationship to the band. At that instant, the folds at the ends of the strips E are not laid close to the body of the waist band D. In order to press these strip folds close to and sharply against the underside of the hem-folds *d* of the waist band D, there is provided a pair of fold tucking fingers **80** (Figs. 2, 3, 6, 7, 8, 10, 14) on the underside of the sole plate **58** pivotally connected at one end **81** (Fig. 10) to a support **82** secured by soldering or any other suitable means to the frame plate **57**. The other operative ends of these fold tucking fingers **80** are bevelled to provide pressing edges **83** and are moved edgewise in and out of operative position simultaneously by means comprising a hand lever **84** pivoted between the fingers at **85** to the support **82** and a toggle connection between said lever and said fingers. The lever **84** projects from the right side of the attachment **50** (Fig. 2) in easily accessible position for convenient manipulation, as the operator faces the sewing machine **10** in front of the different attachments **20**, **30** and **50** and is guided for movement forwardly and rearwardly in a slot **86** (Figs. 3 and 8) of a guide block **87** (Figs. 3, 8 and 10) secured to the bracket **51**. A spring 88 connected at its ends to the bracket **51** and the lever **84** urges said lever towards rearward inoperative position shown in Figs. 2 and 10.

The toggle connection between the lever **84** and the fingers **80** comprises a pair of links **90** (Figs. 9, 10, 12) pivotally connected at one end to said fingers and pivotally knee-joined at the other end to a cross-head **91** slidable in a guide **92** secured to the underside of the sole plate **58**. Pivotally connected to the cross-head **91** at the knee-junction of the links **90** and to the lever **84** is a bar **93**.

With the toggle mechanism described, while the lever **84** is in rearward position shown in Figs. 2 and 10, the two fold tucking fingers **80** are spread apart in inactive position. When it is desired to move the operative ends of the fingers **80** toward each other to tuck and press the loosely folded ends of a loop strip E located over the forward end section **70** of the sole plate **58** snugly close to the hem-folds *d* of the waist band D on said plate section the lever **84** is moved against the action of the spring **88** from the position shown in Fig. 2 forward and from the position shown in Fig, 10, clockwise about its pivotal support at **85**. By this operation, the fold tucking fingers **80** are brought inwardly towards each other at their operative ends through the toggle connections **90**, **91** and **93**, so that the downwardly turned or loosely folded ends of the loop strip E are pressed upwardly and snugly against the hem-folds *d* of the waist band D, as shown in Fig. 13.

When the lever **84** is moved forward (Fig. 2) to bring the operative ends of the fold tucking fingers **80** into position shown in Fig. 13 to press the end strip folds against the hem-folds *d* of the waist band D, a latch device comes into operation to hold the lever **84** in this forward fold-pressing position, until manually released. This latch device comprises a catch piece **100** (Figs. 2, 7, 10) pivoted at **101** to one side of the block **87** for angular movement up and down about a horizontal axis and urged into raised position by means of a spring **102**. This catch piece **100** has a step defining a stop or shoulder **103** which engages the edge of the lever **84** automatically when said lever is pushed forward into fold tucking position and holds it in said position until said catch piece is depressed. The depression of this catch piece **100** moves the shoulder **103** out of engagement with the lever **84** and permits said lever to be retracted into inoperative position by the action of the spring **88** and the fold tucking fingers **80** to be moved apart at their operating ends.

In the operation of the devices described, the operator sits in front of the attachments **20**, **30** and **50** (at the lower end of Fig. 2 or at the right of Figs. 3 and 8) and faces the stitching mechanism **11**. Once the tape C is started through the hemmer attachment **30**, it requires no attention from the operator and will automatically be fed in the direction indicated by the arrow towards the stitching mechanism **11** and simultaneously hem-folded. At the same time, the trouser body A is being directed by hand along the guide attachment **20** in the direction of the arrow towards the stitching mechanism **11**. This guiding operation can be conveniently performed by the operator through his left hand. At the same time, the waist band D is being automatically fed towards the stitching mechanism **11** and hem-folded by the hemmer and folder attachment **50**. During this activity, while the lever **84** is in the inoperative rearward position shown in Figs. 2 and 10, the operator with his right hand inserts a loop strip E on the body **74** of the hemmer blade **64** cross-wise of the direction of movement of the waist band D through the attachment **50** and pushes the strip along said blade body in said direction, causing the ends of the strip to be folded loosely downward and inward by the side folders **75**. When the strip E has been moved to the forward end of the body **74** of the hemmer blade **64**, the operator holds the folded strip until the desired section of the waist band D to which the strip is to be attached, as indicated, for example, by a chalk mark on said waist band, emerges from the hemmer scroll sections **68** and is riding in exposed position on the forward end section **70** of the sole plate **58**. At that instant, the operator pushes the folded strip E onto the exposed section of the waist

band D and immediately thereafter, with his right hand moves the lever **84** forward against the action of the spring **88**. This causes the two operative ends of the fold tucking fingers **80** to move inwardly toward each other from the position shown in Fig. 10 to the position shown in Figs. 13 and 14 and to press the end folds of the strip E snugly against the hem-folds *d* of the waist band D. The fingers **80** are retained in this operative position automatically by the stop action of the catch piece **100** on said lever and hold the strip end folds in this position until the strip has been moved into the toe of the presser foot **17**, as shown in Fig. 6. The fingers **80** do not exert sufficient pressure to interfere with the feed movement of the assembled waist band D and folded strip E towards the stitching mechanism and to cause relative displacement of these fabric parts. While the assembled waist band D and tucked strip E are being moved by the feed mechanism of the sewing machine **10** toward the stitching mechanism **11**, the operator may be readying the next strip E along the hemmer blade **64**. After the tucked strip has been moved close to sewing position, the operator depresses the catch piece **100** with his right hand and releases the lever **84** for return to rearward inoperative position under the action of the spring **88**. This moves the fold tucking fingers **80** apart and in position for the next assembly operation.

The trouser body A, the hem-folded tape C and the hem-folded waist band D with the loop strips E folded thereon moving at the same linear speed through the action of the feed dog **18** of sewing machine **10** are converged towards the stitching mechanism **11** and are sewed together by the two needles **13** simultaneously along opposite sides of the waist band unit to form the finished waist band construction shown in Fig. 1. The different steps performed on the fabric parts are so integrated that they are performed simply and conveniently by a single operation. Not only does this single operation speed up production but also produces a waist band construction in which the belt loops E are attached firmly and neatly.

In case the belt loops are of the wide type shown in Figs. 15, 16 and 17, the hemmer and folder attachment **50** shown in Figs. 2 to 14 is replaced by an attachment **50***a* (Fig. 18) of similar construction, except that the forward exit end section **70***a* of the sole plate **58***a* is longer and the fold tucking fingers **80***a* for the loop fabric pieces are correspondingly longer, to accommodate for the wider belt loops E′ to be constructed therefrom and fastened to the waist band D. This attachment **50***a* is mounted with respect to the field of action of the stitching mechanism **11** in such position that as the assembled hem-folded waist band D and loop pieces E′ folded thereover emerge from the attachment, they move immediately into assembled position with respect to the trouser body A and the tape C. The fabric parts so assembled then move together into the field of action of the needles for simultaneous stitching on opposite sides of the waist band unit.

While the invention has been illustrated and described in connection with a specific embodiment, other equivalent embodiments will readily occur to those skilled in the art within the principle and scope of the invention as defined in the following claims.

What is claimed is:

1. In a device for preparing and assembling a waist band and belt loop pieces in condition for sewing to a garment body, the combination comprising a pair of plates positioned face to face to define therebetween a guide passageway for a waist band in its endwise movement towards a stitching mechanism, hemmer scrolls secured to opposite sides of one of said plates and extending in cross-section around the edges of the other plate for hemfolding the margins of the waist band around the sides of said other plate as the waist band is advanced endwise along said passageway, the outside of the plate to which said scrolls are secured serving as a support for belt loop pieces in their movement along said passageway, wing extensions on the sides of the last-mentioned plate outwardly beyond said scrolls, the outer edges of said extensions converging forward in the direction of movement of the waist band through said passageway, and C-shaped folder blades along opposite sides of said outer extension edges for folding the ends of said loop pieces over said extension edges as said loop pieces are moved along said last mentioned plate.

2. A waist band assembly attachment for a sewing machine comprising a frame member, a hemmer on the frame member having a pair of plates positioned face to face to define a guide passage directed toward the stitching mechanism and converging hemmer scrolls secured to the opposite sides of the upper plate and extending downwardly underneath the lower plate, a pair of outer scroll members disposed in spaced parallel relation to the respective hemmer scrolls, a pair of pivoted tucking fingers supported on the frame member and movable in a plane immediately underneath the lower plate, and means for simultaneously moving the fingers in opposite directions.

3. A waist band assembly attachment for a sewing machine comprising a frame member, a hemmer on the frame member having a pair of plates positioned face to face to define a guide passage directed toward the stitching mechanism and converging hemmer scrolls secured to the opposite sides of the upper plate and extending downwardly underneath the lower plate, a pair of outer scroll members disposed in spaced parallel relation to the respective hemmer scrolls, the lower plate having an extension beyond the upper plate at the exit end of the passage, a pair of tucking fingers pivotally supported on the frame member and disposed to reciprocate in paths immediately underneath said extension on respectively opposite edges thereof and means connecting said fingers together for simultaneous reciprocating movement in opposite directions about the axes respectively of their pivot supports.

4. A waist band assembly attachment as defined in claim 3 in which the top plate of the hemmer has lateral wing extensions beyond the hemmer scrolls projecting into the outer pair of scroll members and tapering in parallelism therewith.

5. A waistband assembly attachment for a sewing machine comprising a frame member, a hemmer on the frame member having a pair of plates positioned face to face to define a guide passage directed toward the stitching mechanism and converging hemmer scrolls secured to the opposite sides of the upper plate and extending downwardly underneath the lower plate, a pair of outer scroll members disposed in spaced parallel relation to the respective hemmer scrolls, a pair of pivoted tucking fingers supported on the frame member and movable in a plane immediately underneath the lower plate, linkage means for simultaneously moving the fingers in opposite direction, a manually operable lever for actuating the linkage means, a spring biasing the lever to the open position of the fingers, and a releasable latch device for detaining the lever in position to close the fingers.

6. A waist band assembly attachment for a sewing machine comprising a frame member, a hemmer on the frame member having a pair of plates positioned face to face to define a guide passage directed toward the stitching mechanism and converging hemmer scrolls secured to the opposite sides of the upper plate and extending downwardly underneath the lower plate, a pair of outer scroll members disposed in spaced parallel relation to the respective hemmer scrolls, the lower plate having an extension beyond the upper plate at the exit end of the passage, a pair of tucking fingers pivotally supported on the frame member and disposed to reciprocate in paths immediately underneath said extension on respectively opposite edges thereof, toggle means for simultaneously oppositely reciprocating the fingers, a manually operable lever for actuating the toggle means, a spring biasing the lever to the open position of the fingers, and a releasable latch device for detaining the lever in position to close the fingers.

7. A waist band assembly attachment for a sewing machine comprising, a support member, a strip guide mounted thereon having elongated upper and lower plate members defining a passage therebetween, the upper plate member having converging hemming scrolls attached to its longitudinally extending edges projecting beneath the adjacent edges of the lower plate, a pair of tucking fingers pivoted to the support member beneath the lower plate of the guide and extending longitudinally thereof, and means for simultaneously moving the free end portions of the said tucking fingers in opposite directions from beneath the guide to a position beyond the guide on each side thereof.

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