SELF-SUPPORTING TROUSERS
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This invention relates to self-supporting trousers and has for its object to provide an improved construction of the supporting means for such trousers which accommodates itself to the movements of the wearer without any noticeable change in appearance of the trousers and provides a comfortable fit at the waist line.

In accordance with the invention the waist band at each side of the trousers is in two sections of which the end portion of one section or an extension thereof is slidably within the other and pleats are provided in the material of the trousers at each side which pleats extend into the waist band where the material adjacent one edge of each pleat is stitched to the slidable section of the waist band. The two sections of the waist band at each side of the trousers are connected by a band of elastic webbing disposed in a tunnel formed by the waist band and its lining, one end of the webbing being connected with the end portion or extension of the one section and the other end being connected with the remainder of the other section but otherwise unattached to the waist band. This band of elastic webbing when the waist band is stretched permits the pleats to open and when the strain on the waist band is relieved restores the pleats to the normal pleated position. Preferably a second band of elastic webbing is provided on the trousers adjacent to the first webbing being connected at one end with the lining of one section of the waist band and at a remote point with the inside of the other section of the waist band but otherwise unattached to the waist band and serving to distribute the strain on the waist band. The pleats may be arranged to close forwardly or rearwardly.

A third elastic band may be stitched to the inside of the pleat at one end and to one of the elastic bands at the other, so as to ensure that when the pressure on the waist band is relieved the pleat will fold in the desired direction.

The waist band lining may be provided on its face in known manner with spaced pads preventing the shirt of the wearer from riding up.

One embodiment of the invention is illustrated in the accompanying drawings in which FIGS. 1 and 2 are exterior fragmentary views of one side of the trousers, FIG. 1 showing the waist band of the trousers in the unstretched condition and FIG. 2 showing the waist band of the trousers in the stretched condition and showing the pleat adjacent the side seam opened. FIGS. 3 and 4 are fragmentary views corresponding to FIGS. 1 and 2 respectively of the inside of the trousers. FIG. 5 is a perspective view of the waist band of the trousers from above while FIG. 6 is an enlarged fragmentary view looking in the direction of the arrow A in FIG. 5 with two adjacent sections of the waist band lining raised to show the construction.

Referring to the drawings, 9 indicates the material of the body of the trousers, 10 indicates the side seams of the trousers, 11 the usual side pocket and 12 the hip pocket. 13, 14 indicate two sections of the waist band and 13a, 14a the corresponding sections of the lining of the waist band, 15 indicates a small pleat provided in the material of the trousers adjacent the side seam at each side of the trousers with the material adjacent its respective attached sections of the waist band. The pleat is preferably stretched along the folding lines as illustrated by the dotted line 16, in FIGS. 1, 3, 5 and 6, to ensure correct assumption of the folds when the pleat closes.

Referring to FIG. 6, 17 and 18 indicate two elastic bands controlling the opening and closing of the pleat. As will be observed, the elastic bands 17 and 18 are connected at their respective ends only with the sections of the waistband or waistband lining. One end portion of the elastic band 17 is attached to the inside of the lining section 13a and the other end to a narrow portion between the ends of the lining sections 13a and 14a. The other end portion of the elastic band 17 is attached to the inside of the waistband section 14 at a point remote from the attachment to the lining section 13a. The waistband section 14 includes a tapered extension 14b which extends to the side near to the waistband section 13 and its lining section 13a. One end of the second elastic band 18, as shown in FIG. 6, is attached to the inner face of the projecting end of the extension 14b, while its other end is attached at a point remote therefrom to the waistband section 13. The two bands of elastic webbing 17 and 18 may be otherwise connected to the waistband and lining sections.

The pleat 15 includes two folds, one on the outside of the trousers and one on the inside. In FIG. 6, one end of an auxiliary elastic band 19 is sewed to the upper portion of the inside fold 24 of the pleat 15, while its other end is sewed to the body of the elastic band 18, thereby facilitating the folding of the pleat in one direction when the strain on the elastic bands 17 and 18 is relieved.

The construction shown in FIG. 6 also includes a loop 20 located inside of the adjacent to the right hand end of the waistband section 13 which serves as a guide for the waistband extension 14b which is slidably within the tunnel formed by the waistband 13 and its lining 13a. Since the elastic band 18 is attached to the inside of the waistband section 13 and to the end of the waistband extension 14b, the elastic does not become visible on the pleat being stretched. In the drawings 21 indicates rubber or like pads sewed to the lining of the waistband to prevent the shirt of the wearer from riding up.

With respect to the details of construction shown in FIG. 6, it will be noted that the material 9 of the body of the trousers extends in the lower portion of the waistband between the sections 13a, 14a, and 14b. At the left side in FIG. 6 the top edge of the material 9 is indicated at 23. This edge runs about the position of the top of the pocket 11 then extends upwardly so that the side seam 10 of this material terminates just above the elastic band 19. The material 9 at the right hand side of the side seam 10 forms the pleat 15 which extends into the waistband and nearly to the top between the sections 13a and 14a. The pleat 15 includes an inside fold line 24 and an outside fold line 25. One end of the elastic band 19 is sewed to the pleat at the fold 24. From the top of the pleat 15, the top edge of the material 9 extends to the right and is sewed to the waistband section 14 by a seam 26 extending from about the position of the outside pleat fold 25 a short distance to the right when the material 9 is reduced in height to lay on the hem of the waistband section 13a, as illustrated by the horizontal line 27. The sections 13 and 14 have folded upper and lower hems. The lower edge of the hem of the section 13 is indicated by the dot and dash line 28, while that of the section 14 is indicated by the dot and dash line 29 which merges into the sloping lower portion of the extension 14b.

The material 9 is sewed to the lower hem of the waistband section 13 by a seam 30 which extends only up to the pleat 15, as will be understood. The material
9 is sewed to the lower hem of the waistband section 14 by a seam 31 which extends only to the pleat.

When the pleat 15 is closed, as shown in FIG. 6, there is only a narrow space 22 between the adjacent ends of the lining sections 13a and 14a. The extension 14b projects along the waistband section 13, and the end of this waistband section coincides approximately with the end of lining section 13a and is shown by a dotted line 32. Therefore, as shown in FIG. 6, the waistband extension 14b is located directly adjacent and inside the waistband section 13, and in front of the upper portion of the pleat 15 and the upper portion of the material containing the side seam 10. When the lining sections 13a and 14a are bent down to their normal positions, and sewed down along approximately the seams 30 and 31, the elastic bands will all be covered.

When the portions of the waistband to the right and left of the space 22 are pulled apart against the actions of the elastic bands 17 and 18, the space 22 widens, as illustrated in FIGS. 2 and 4 and the pleat 15 opens up with the fold 25, moving with the end portion of the section 13.

I claim:

1. Self supporting trousers comprising a body portion and a waistband secured thereto, said waistband being formed in four sections, two at each side of the trousers, said sections provided with linings, one of the two sections at each side of the trousers being movable toward and away from the second section, a pleat in the material of the body portion at each side of the trousers, said pleat extending into the waistband with one edge of said pleat anchored to the movable section of the waistband, a band of elastic webbing attached at one end to the movable section of the waistband and at its other end to said second waistband section at a point remote from its point of attachment to the movable section, a band of elastic webbing attached at one end to the lining of one of said two sections and at the other end to the waistband of the second of said two sections on the same side of the trousers at a point remote from its point of attachment to the lining of said one section and a further band of elastic webbing connecting one of said bands of elastic webbing to the inner side of the pleat.

2. Self supporting trousers comprising a body portion and a waistband secured thereto, said waistband being formed in four sections comprising a section at the rear and a section at the front of the trousers on each side, a lining for each section of the waistband, said linings forming tunnels with the respective waistband sections at each side of the trousers, the front section of the waistband at each side of the trousers being movable toward and away from the rear section, a pleat in the material of the body portion at each side of the trousers, said pleat extending into the waistband with one edge of said pleat anchored to the front section of the waistband, a first band of elastic webbing attached at one end to the rear section of the waistband and extending into the tunnel of the front section and attached at its other end to the front section of the waistband at a point remote from its point of attachment to the rear section, a second band of elastic webbing attached at one end to the lining of the front section and extending within the tunnel of the rear section and attached at its other end to the rear section at a point remote from its point of attachment to the lining of the front section, and a further band of elastic webbing attached at one end to said first band of elastic webbing and at its other end to the inner side of the pleat.

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