Nov. 23, 1926. 1,608,352

C. H. YOUNG

GARMENT SUPPORTING DEVICE

Filed July 30, 1923 2 Sheets-Sheet 1

Fig. 1.

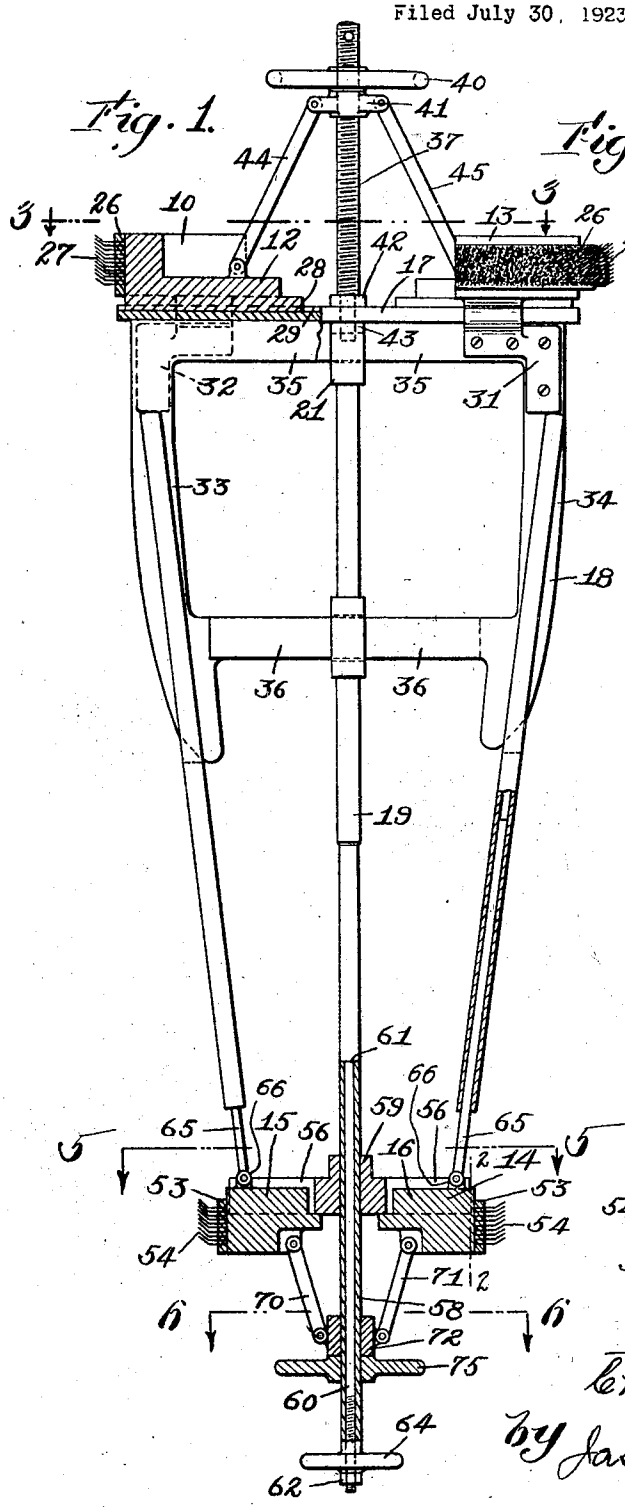
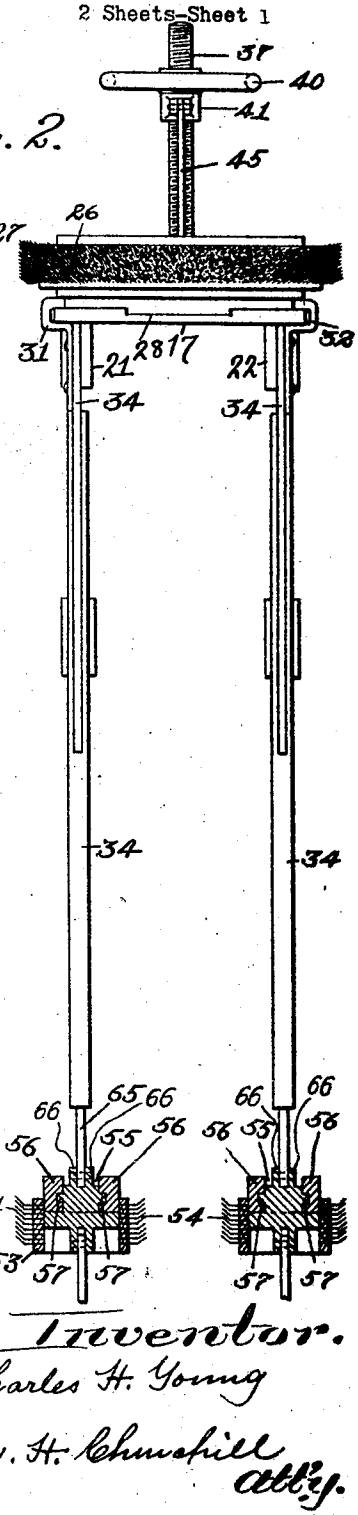


Fig. 2.



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Fig. 3.

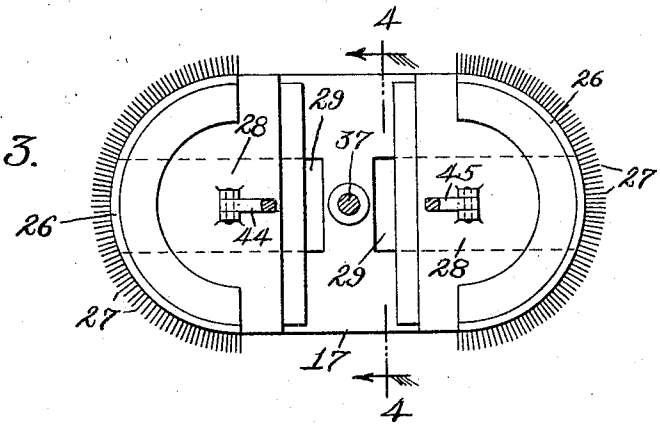


Fig. 4.

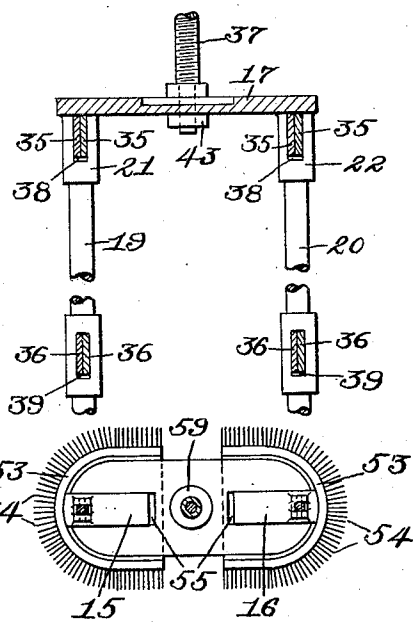


Fig. 6.

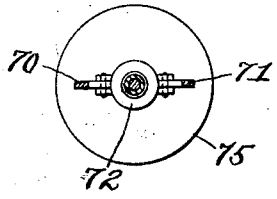


Fig. 5.

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UNITED STATES PATENT OFFICE.

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GARMENT-SUPPORTING DEVICE.

Application filed July 30, 1923. Serial No. 654,536.

This invention relates to a garment supporting device, and particularly to a trouser supporting device, and has for an object to provide a device of the character specified particularly adapted for use in supporting trousers in a stretched and correctly shaped condition to permit the same to be cleaned by either the well known dry or wet methods commonly employed by tailors, laundries and cleaning establishments, without injuring the fabric or shrinking the same. The garment supporting device is also capable of use in restoring shrunk garments to their normal or original condition.

To these ends the garment supporting device is provided with gripping members capable of being inserted down into the interior of the trousers, and adapted to engage and grip the same to the waist portion and at each leg portion thereof. The gripping members are arranged to be capable of relative movement to produce the desired stretch in the fabric of the trousers, and they may and preferably will be mounted upon a frame work constructed to form supports for the waist, seat and leg portions of the trousers to thereby cause the trousers when stretched to assume their correct shape, and also to uniformly distribute the strain upon the fabric to prevent injury to the same.

These and other features of the invention will be hereinafter described and particularly pointed out in the claims at the end of this specification.

In the drawings illustrating the preferred embodiment of the invention, Fig. 1 is a side elevation with a part in section, showing the improved garment supporting device; Fig. 2 is an end elevation of the same, partly in section on line 2—2 of Fig. 1; Fig. 3 is a sectional plan on line 3—3 of Fig. 1; Fig. 4 is a vertical sectional detail on line 4—4 of Fig. 3; Fig. 5 is a sectional plan on line 5—5 of Fig. 1; and Fig. 6 is a similar view on line 6—6 of Fig. 1.

Referring to the drawings, the garment supporting device illustrated therein is provided with a gripping member 10 for engaging and gripping the waist portion of the trousers, and also with gripping members 14, each of which is adapted to extend down into and to grip the interior of the leg portion of the trousers. The gripping member 10 comprises two sections or members 12, 13, movable toward and away from one another and thus capable of expansion into engagement with the interior of the waist portion of the trousers. The gripping members 14 comprise two sections 15, 16, preferably constructed in a manner similar to the gripping member 10 to be capable of expansion into engagement with the interior of each leg portion of the trousers. The gripping member 10 may and preferably will be mounted upon and supported by a top plate 17 of the frame work 18. The frame work 18 is provided with depending members 19, 20, arranged to depend from the top plate 17, and which are herein shown as screwed into bosses 21, 22 on the under side of the top plate. The gripping members 14 are, as will be described, mounted upon the lower portions of the depending members 19, 20.

Referring now to Figs. 1 and 3, the gripping member 10 is herein shown as composed of two sections, each comprising a semi-cylindrical block having a strip of card clothing 26 extended around and secured to the outer face thereof to present a series of pins or engaging members 27 for engaging and gripping the interior of the waist portion of the trousers when the sections of the gripping member 10 are moved apart or expanded. The sections of the gripping member 10 may and preferably will be provided with longitudinal tongues 28, depending from the under side thereof, which are received within and slide in longitudinal grooves 29 in the upper surface of the top plate 17, as shown in Figs. 1 and 3.

In order to prevent upward displacement of the gripping member 10 from the top plate 17, side plates 31, 32 are attached to and arranged to depend from the semi-cylindrical blocks comprising each section of the gripping member 10, and the side plates 31, 32 are shaped to curve over the side edges of the top plate, as shown in Fig. 2. The side plates 31, 32 are herein shown as attached to tapered frames each comprising side plates 33, 34, curved to conform to the shape of the trousers at the seat portion thereof, and having upper and lower cross members 35, 36, slidably received in slots 38, 39 in the depending members 19, 20, shown in detail in Fig. 4.

In order to move the sections of the gripping member 10 outwardly into their expanded position, the top plate 17 is preferably provided with a threaded rod 37 upstanding therefrom, and having a collar 41

slidably mounted thereon. The lower end of the rod 37 is reduced and extended through a hole in the top plate 17 and in a boss 42 upstanding therefrom, and is provided with a collar 43 pinned to the end portion of the rod 37 below the top plate 17. The collar 41 is connected by links 44, 45 to each section of the gripping member 10, the links being pivoted to each section and to the collar. The rod 37 is also provided with a hand wheel 40 screwed thereon so that when the hand wheel is screwed down upon the rod 37, the collar 41 is forced downwardly and operates through the links 44, 45 to cause the sections of the gripping member 10 to slide outwardly upon the top plate 17.

Each of the gripping members 14 is preferably of substantially the same construction as the gripping member 10 and, as herein shown, each comprises two sections 15, 16 having curved outer portions to which card clothing 53 is attached to present a plurality of pins or engaging members 54. Each section 15, 16 is arranged to slide in a channel or opening 55 formed in each end of a supporting member or piece 56. Each section 15, 16 is provided with tongues 57 received in suitable grooves in the portions of the piece 56 forming the sides of the channel or opening 55 so as to retain the sections 15, 16 and supporting piece or member 56 in operative relation and to permit the sections to be moved longitudinally of the supporting member 56. Each supporting member or piece 56 may and preferably will be mounted upon a threaded sleeve 58 extended through a threaded hole in the piece 56 and in a boss 59 upstanding therefrom, as shown in Fig. 1. The sleeve 58 is preferably provided with a hand wheel 64 formed integral therewith to enable the sleeve to be manually rotated. Each sleeve 58 is rotatably supported upon a reduced lower end portion 60 of one of the depending members 19, 20, being maintained in position thereon by a shoulder 61 and nut 62 screwed upon the lower threaded end thereof. With this construction, upon rotation of the sleeve 58, the supporting member or piece 56 is caused to move up or down as the sleeve rotates, acting as a nut in threaded engagement with the sleeve. In this manner, each gripping member 14 may be bodily moved longitudinally of the depending members 19, 20, to not only adjust them for different lengths of trouser legs, but also to produce longitudinal stretching of the trouser legs, as will be described.

Each section of the gripping members 14 may and preferably will be connected to the side members 33, 34 of the tapered frames, and as herein shown the lower end portion of the side members 33, 34 are tubular, and rods 65 pivoted to ears 66 upon the upper surface of each section are arranged to telescope into the tubular lower portion of the side members 33, 34. With this construction, when the gripping members 10, 14 are expanded the tapered frames formed by the side members 33, 34 are moved outwardly into a position to engage, stretch and support the seat and leg portions of the trousers in their correctly shaped position.

In order to expand the sections of the gripping members 14, each section is connected by links 70, 71 to a collar 72 slidably mounted on the sleeve 58, the links 70, 71 being pivoted to both the section and the collar. A hand wheel 75 is screwed upon the threaded sleeve 58 below the collar.

In the use of the garment supporting device the hand wheels 40, 75, are first rotated to permit the sections of the gripping members 10 and 14 to be manually slid by the operator into what may be regarded their contracted or inoperative position. In such position the entire device may be inserted into the interior of the trousers with each of the gripping members 14 and its supporting frame inserted down into a leg portion thereof. The hand wheels are then rotated to force the collars 41, and 72 toward one another and through the links 44, 45 and 70, 71 to cause the sections of the gripping members 10, 14, to slide outwardly until the card clothing upon the outer face of each section engages the interior of the waist portion and of each leg portion of the trousers. The gripping members may be in this manner expanded to any desired degree to produce a definite stretch and tension laterally in the trousers.

In order to stretch the trousers longitudinally, the hand wheel 64 is now rotated causing the threaded sleeve 58 to rotate upon the reduced end portions of the depending members 19, 20, and acting as a screw the sleeves cause the supporting members or pieces 56 and the gripping members 14 carried thereby to be moved bodily downwardly, and during this movement the rods 65 slide outwardly from the lower end of the tubular portion of the side members 33, 34. The gripping member 10 engaging the waist portion of the trousers holds the same in a relatively stationary position so that upon the downward movement of the gripping members 14 the portions of the trousers between the gripping members 10 and 14 are stretched longitudinally, and the supporting frames formed by the side members 33, 34 operate to distribute the strain upon the fabric uniformly so that considerable strain can be applied and the trousers stretched to any desired degree without injury to the fabric thereof.

The present trousers supporting device, it will be observed, enables the trousers to be not only stretched and maintained in a cor-

rectly shaped condition to permit them to be cleaned by either the well known dry or wet methods employed by tailors, laundries or the like without shrinking the fabric or injurying the same, but in addition the device is also capable of use in restoring shrunk garments to their normal or original condition.

While in its preferred form the invention is embodied in a device for supporting and stretching trousers, it is to be understood that the invention may be embodied in other forms within the scope of the following claims.

Having thus described the invention, what is claimed is:

1. In a trousers supporting device, in combination, a supporting frame capable of being inserted into the interior of the trousers, a gripping member for engaging the waist portion of the trousers, a gripping member arranged to engage the interior of each leg portion of the trousers, all of said gripping members being mounted on the frame, means for positively expanding said gripping members to stretch the trousers laterally, and means for relatively moving those gripping members cooperating with the waist and leg portions to stretch the trousers longitudinally.

2. In a trousers supporting device, in combination, a supporting frame comprising a top member and depending members spaced apart, a gripping member comprising two sections mounted on the top member to be capable of movement toward and away from each other, means for positively moving said sections laterally, a gripping member mounted upon each depending member, and means for relatively moving said latter gripping members toward and away from the first gripping member.

3. In a trousers supporting device, in combination, a supporting frame provided with two depending members spaced apart, a plurality of gripping members mounted on the frame, one upon the upper portion thereof and one on each depending member, means for positively expanding all of the gripping members to grip and stretch laterally the waist and leg portions of the trousers, and means for moving the gripping member for each leg portion away from the gripping member for the waist portion including a member in threaded engagement with the gripping member, and means for permitting said member to be manually rotated.

4. In a trousers supporting device, in combination, a supporting frame, gripping members mounted thereon for engaging the waist and each leg portion of the trousers and each comprising two sections slidably mounted on the frame, and means for moving said sections into an expanded position to engage the trousers including a threaded member, a hand wheel screwed thereon, and linkage connecting the hand wheel and said sections.

5. In a trousers supporting device, in combination, a supporting frame having an upper member insertible into the waist portion of the trousers and having leg portions depending from said upper member and spaced apart for insertion into the legs of the trousers, a gripping member slidable on the upper member of said frame into and out of engagement with the waist portion of said trousers, and gripping members for engaging the legs of the trousers, a supporting member for said leg gripping members carried by the depending leg portions of said frame and upon which said leg gripping members are movable toward and from each other and into and out of engagement with the leg portions of said trousers.

6. In a trousers supporting device, in combination, a supporting frame having an upper member insertable into the waist portion of the trousers and having expansible and contractible leg portions depending from said upper member and spaced apart for insertion into the leg portions of said trousers and slidable toward and from each other on said upper member, and means carried by said frame for positively engaging and gripping the interior of the waist and leg portions of said trousers.

7. In a trousers supporting device, in combination, a supporting frame having an upper member insertible into the waist portion of the trousers and having leg portions depending from said upper member and spaced apart for insertion into the legs of the trousers, a gripping member mounted to slide on said upper member into and out of engagement with the waist portion of the trousers, gripping members for engaging the leg portions of the trousers, supporting members for said leg gripping members and upon which the latter are mounted to slide, said supporting members being carried by the leg portions of said supporting frame, and rotatable means for effecting movement of said supporting members on said leg portions.

In testimony whereof, I have signed my name to this specification.

CHARLES H. YOUNG.