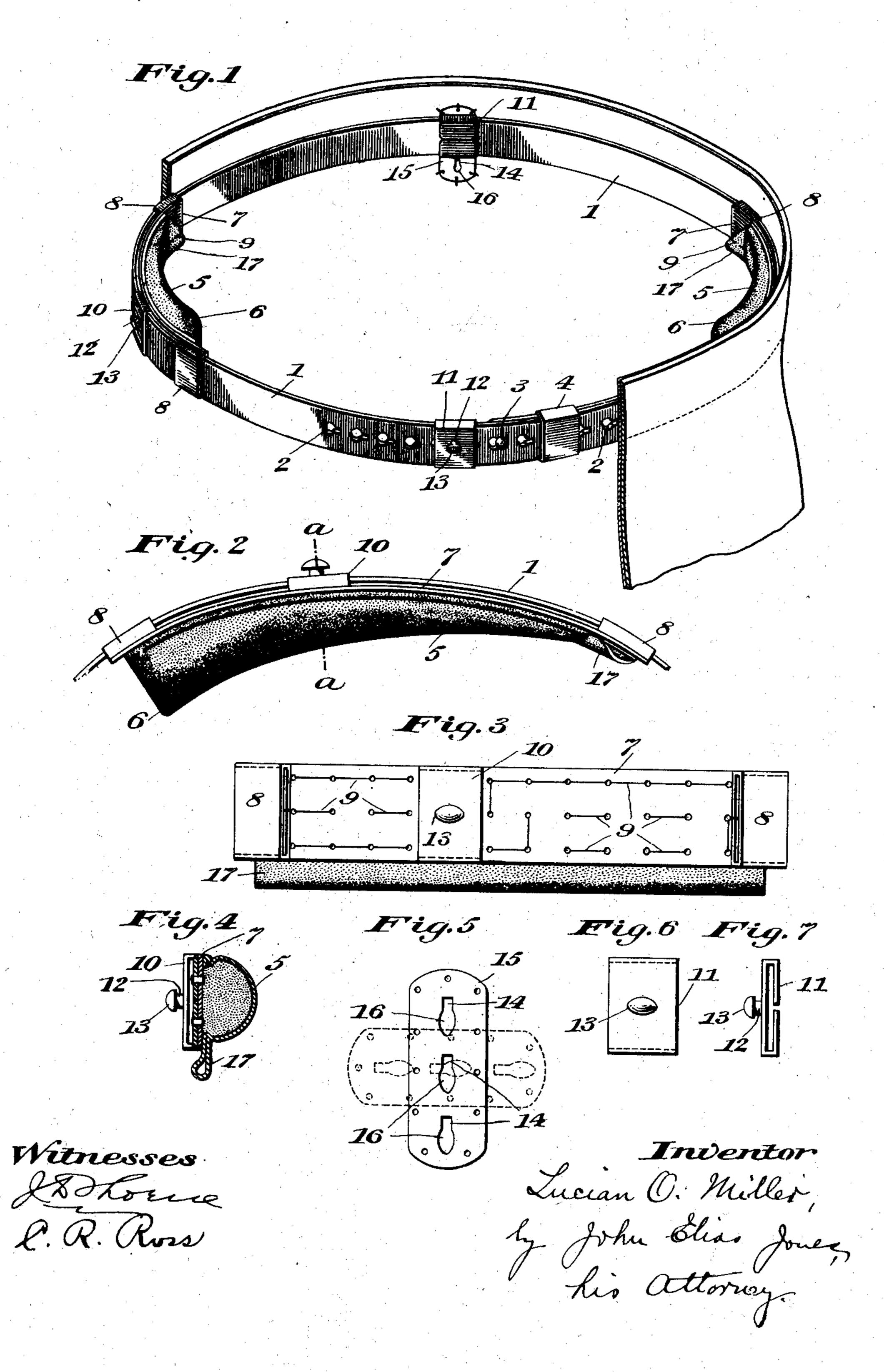
## L. O. MILLER.

TROUSERS SUPPORTER.

(Application filed Nov. 8, 1901.)

(No Model.)



## United States Patent Office.

LUCIAN O. MILLER, OF CINCINNATI, OHIO.

## TROUSERS-SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 706,493, dated August 5, 1902.

Application filed November 8, 1901. Serial No. 81,540. (No model.)

To all whom it may concern:

Be it known that I, LUCIAN O. MILLER, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Trousers-Supporters, of which the following is a specification.

This invention relates to certain improvements in trousers-supporters, and has for its object to provide a device of this character of a simple and inexpensive nature and of a strong and durable construction adapted for supporting the trousers from the hips or waist of the wearer, so as to avoid all strain upon the shoulders and upper part of the body, the device being at the same time completely hidden within the trousers, so as to be invisible when the coat and vest are removed.

tures of the construction, combination, and arrangement of the several parts of the improved trousers-supporter whereby certain important advantages are attained and the device is made simpler, cheaper, and otherwise better adapted and more convenient for use, all as will be hereinafter fully set forth.

The novel features of the invention will be

carefully defined in the claims.

In the accompanying drawings, which serve to illustrate my invention, Figure 1 is a perspective view showing a fragment of the waist portion of a pair of trousers provided with a supporter constructed according to my 35 invention. Fig. 2 is a partial view drawn to a larger scale and showing one of the adjustable hip-pads forming part of the improved trousers-supporter. Fig. 3 is a view similar to Fig. 2, but showing the outer surface of 40 the slide on which the hip-pad is carried. Fig. 4 is a sectional view taken through the hip-pad in the plane indicated by the line aain Fig. 2. Fig. 5 is a detached detail view showing one of the catch-plates forming part 45 of the improved trousers-supporter and designed for attachment to the trousers. Fig. 6 is a face view showing detached one of the adjustable slides for engagement with said catch-plates, and Fig. 7 is an end view show-50 ing said adjustable slide.

In the views, 1 indicates a waist belt or band formed of a thin and flattened strip of

resilient material, usually spring metal, bent to a curved or circular form and designed to be passed about the waist of the wearer, one 55 end portion of said band or belt being formed with a longitudinal series of keyhole slots or openings 2 and the other end being designed to be lapped over said perforated end, on the inner side thereof, and being provided with a 60 headed stud or projection 3, designed to take through said keyhole slots or openings and to lock therein for holding the band or belt securely in position about the wearer's waist.

4 indicates a keeper held to slide on the 65 band or belt 1 and adapted to take over the lapped ends thereof when slipped along the

band.

5 5 indicate pads arranged at opposite sides of the device and designed when the band or 70 belt 1 is passed about the waist to rest lightly upon the hips of the wearer, the said pads having their forward end portions 6 made thicker than their rear portions, so that when the band 1 is in place about the waist the for- 75 ward part of said band is held forward and is prevented from bearing uncomfortably upon the abdomen. The pads 5 are carried upon slide-plates 7, curved to conform to the curvature of the band or belt 1 and provided 80 at their ends with loops 88, through which the said band or belt 1 is passed. The pads 5 are held to the slide-plates 7 by means of stitches 9, passed through the edge portions of the pads and through openings in the slide- 85 plates, as indicated in Figs. 1 and 3. Each of the slide-plates 7 is also provided with a centrally-arranged loop 10 upon its outer side, through which loop the band or belt 1 is also passed, and said loops 10 carry on their outer 90 sides central studs 12, having transversely or horizontally elongated heads or enlargements 13, adapted for engagement in keyhole slots or openings 14, produced in catch-plates 15, secured to the inside of the trousers, near the 95 waistband thereof, by means of stitches or otherwise, there being usually four of these plates 15, one each at front and back and one at each side of the trousers. The enlarged ends 16 of the openings 14 in catch-plates 15 100 are of a width and length sufficient to permit the enlargements or heads 13 of the studs on loops 10 to pass through the openings for engagement with or disengagement from

the catch-plates when the said plates are turned or twisted a quarter-turn from their normal vertical positions, as indicated in dotted lines in Fig. 5; but normally the length of each elongated head 13 is extended transversely of the slot or opening 14, in which it is engaged, so that when said heads are engaged in the slots they may not be accidentally disengaged therefrom. Each catch-plate 15 is provided with three of the keybole slots.

10 15 is provided with three of the keyhole slots or openings 14, arranged in vertical series one above another, so that the belt or band 1 may be adjusted up or down with respect to the waistband of the trousers to raise or lower

the trousers. The studs 12 on loops 10 are designed for engagement with catch-plates at opposite sides of the trousers, and at front and back the band or belt 1 carries slides 11, bent from sheet metal to the form shown in Figs.

1, 6, and 7, which slides are adjustable along the band or belt 1 and are also provided with headed studs 12, similar to the headed studs on the loops 10, and are adapted for engagement with the catch-plates at front and back of the trousers. As stated, the slides 11 are in themselves adjustable along the band or belt 1 in order to accommodate the device for different persons; but it will also be seen that the loops 10, are also adjustable for a similar

30 purpose by movement of the slides 7 along the band or belt 1.

In order to prevent the side portions of the band or belt 1 from cutting or chafing the hips in case it should rest thereon outside the 35 pads 5, I provide the pads with loose flaps or extensions 17, which depend beneath the pads, as indicated in Figs. 1, 3, and 4, and are interposed between the lower edges of the slide-plates and belt or band 1 and the hips of the wearer. These extensions are formed, as herein shown, of doubled portions of the ma-

terial employed for covering the pads 5.

From the above description it will be seen that the device is of an extremely simple and inexpensive nature and is especially well adapted for use, since it is entirely hidden within the trousers and supports the trousers from the waist and hips, leaving the shoulders and upper part of the body perfectly free from strain and interfering in no way with

free movement of the body. The device is also of such a nature as not to interfere with the removal of the trousers, it being only necessary when the trousers are to be removed

55 to release the lapped ends of the band or belt 1 at the front, whereupon the trousers may

be readily removed without requiring the catch-plates to be disengaged from the loops 10 and slides 11. The construction of the pads 5 is also such that the band or belt 1 is 60 prevented from bearing uncomfortably upon the abdomen or from resting too tightly upon and chafing the loins, so that the muscles of the back are in no way interfered with. It will also be obvious from the above descrip- 65 tion that the device is capable of some modification without material departure from the principles and spirit of the invention, and for this reason I do not wish to be understood as limiting myself to the precise form and ar- 70 rangement of the several parts of the device herein set forth.

Having thus described my invention, I claim—

1. In a trousers-supporter, the combination of a band or belt adapted to be passed about the waist, plates adapted for attachment inside the trousers, and slides having loops embracing and movable along said band or belt and provided with pads adapted to rest 80 upon the hips of the wearer, one loop of each slide having means for detachable engagement with one of said plates for supporting the trousers from said band or belt, substantially as set forth.

2. In a trousers-supporter, the combination of a band or belt adapted to be passed about the waist and provided with means for attachment to the trousers and slides having pads adapted to rest upon the hips of the wearer, 90 said pads having loose extensions below the slides and adapted to be interposed between the person and the lower edges of the slides and said band or belt, substantially as set forth.

3. In a trousers-supporter, the combination of a band or belt adapted to be passed about the waist, slides having loops embracing and movable along said band or belt, a headed stud on the outer side of one loop of each 100 slide, pads on the slides and adapted to rest on the hips of the wearer and catch-plates adapted for attachment inside the trousers and provided with openings in which said headed studs are adapted to be engaged, substantially as set forth.

Signed at Cincinnati, Ohio, this 4th day of November. 1901.

LUCIAN O. MILLER.

Witnesses:
C. R. Ross,
JOHN ELIAS JONES.