No. 857,902. PATENTED JUNE 25, 1907.

L. S. PLUMMER.

TROUSERS STRETCHER.

APPLICATION FILED MAR. 30, 1907.

Fig. 1.

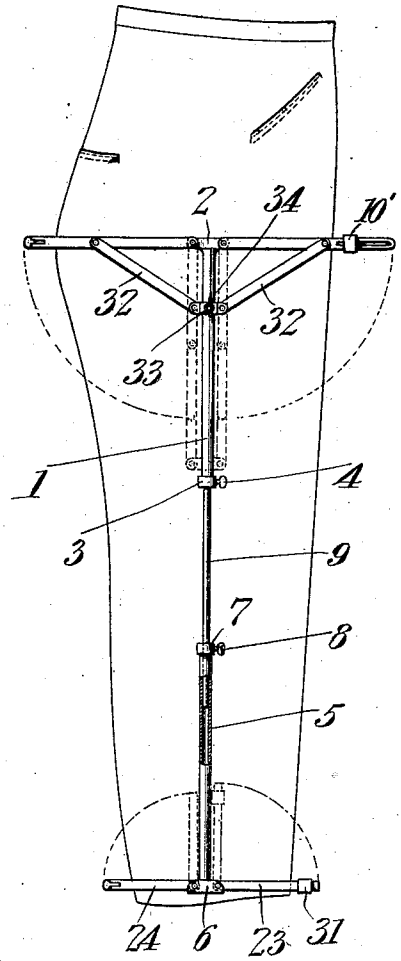

Fig. 2.

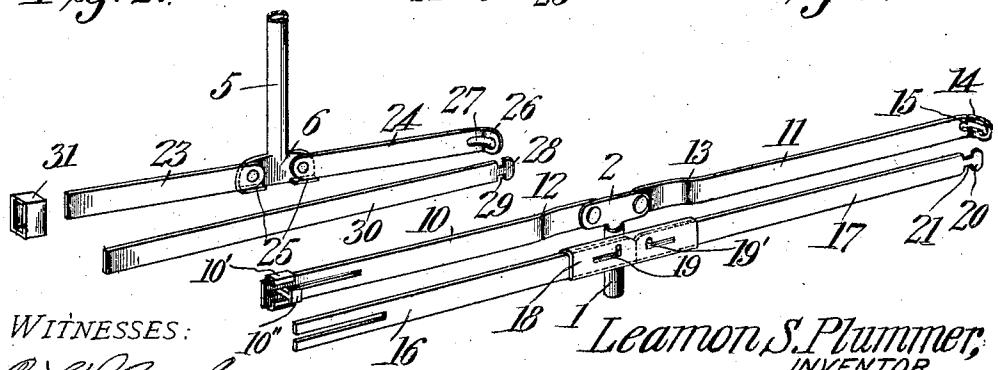

Fig. 3.

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TROUSERS-STRETCHER.

No. 857,902. Specification of Letters Patent. Patented June 25, 1907.

Application filed March 30, 1907. Serial No. 365,507.

To all whom it may concern:

Be it known that I, LEAMON S. PLUMMER, a citizen of the United States, residing at Swanton, in the county of Fulton and State of Ohio, have invented a new and useful Trousers-Stretcher, of which the following is a specification.

This invention has reference to improvements in trousers stretchers, and its object is to produce a strong and easily adjusted device for the purpose which may be closed up to such an extent as to occupy but little space and which may be easily carried in a satchel.

The invention consists essentially of two main portions having telescopic connection whereby they may be separated to the desired extent and will also occupy but little space when disassembled and packed for transportation, and each of these main portions carries folding parts which, when extended so as to be in line one with the other, may receive another part which coacts with the folding parts to form a clamp between which the proper portion of the garment to be stretched is grasped and held against accidental displacement. Those parts of the device which are necessarily of considerable length are made foldable so as to occupy, when folded, but little space, the purpose being to produce the device in such form that when it is folded the length of any one part is so reduced that the device may be readily inserted in a satchel of ordinary length for transportation.

The invention will be fully understood from the following detailed description taken in connection with the accompanying drawing forming part of this specification, in which,—

Figure 1 is a side elevation, partly in section, of the device applied to a pair of trousers; Fig. 2 is a detail perspective view of a portion of the lower section to illustrate the operation of clamping; and Fig. 3 is a perspective view, partly in section, showing the structure of the upper or longer clamp.

Referring to the drawings, there is shown a hollow stem or socket 1 having a head 2 formed at one end and a clamp sleeve 3 at the other end carrying a thumb-screw 4. There is also shown another socket 5 having a head 6 formed at one end and carrying at the other end a clamp sleeve 7 provided with a thumb-screw 8. These two socketed stems receive, when in operative position, each one end of a rod 9 which may telescope into either socketed stem 1 or 5 or into both, and is held in the adjusted position by the thumb-screws 4 and 8.

Pivotally connected to the head 2 are the contiguous ends of two arms 10—11, each slightly bent, as shown at 12 and 13 respectively, so that the main portions lie in approximately the same plane as the head 2. The free end of the arm 11 is turned at an angle, as shown at 14, and is there provided with a slot 15. The free end of the arm 10 is slotted, as shown, and carries a clip 10′ having a projecting headed pin 10″. Coacting with the arms 10 and 11 are two other arms 16 and 17 pivotally connected at their meeting ends by a U-shaped yoke 18. This yoke has angle slots 19 in which engage pins 19′, one on each arm 16 and 17. When the arms 16 and 17 have their contiguous ends together, the pins engage in the angle ends of the slots and so hold the two arms in alinement. When the yoke 18 is lifted the two arms 16 and 17 may be pulled apart and then folded one on the other.

The free end of the arm 16 is slotted like that of the arm 10, except that the slot is open to receive the headed pin 10″, while the free end of the arm 17 is formed with a T-head 20 having a stem 21 of reduced diameter joining it to the main body of the arm 17. The head 20 is adapted to be inserted through the slot 15, which is of such width and length as to permit this head to move through it when turned so that its head is parallel with the length of the slot, but when this head has been inserted through the slot the arm 17 is turned so as to bring the head at right angles to the length of the slot, which movement is permitted by the reduced neck 21. The head effectually locks the arm 17 to the end 14 of the arm 11. When in this position the arms 11 and 17 may be brought into close relation and the arms 10 and 16 will also be brought into close relation, and when so placed they are held from displacement by the sliding ring or clip 10′ slipped over the meeting ends of the contiguous arms 10 and 16. These sets of arms are so related that they will firmly grasp the body portion of a

pair of trousers placed between them. The parts 14 and 20 perform the functions of an ordinary hinge joint.

The stem 5 has pivoted on its head 6 the contiguous ends of two oppositely-extending arms 23—24, the movement of which around their pivots may be limited by ears 25 formed on the head 6. The free end of the arm 24 is turned at an angle, as shown at 26, and this angle end is provided with a slot 27. Adapted to be inserted through the slot 27 is a head 28 joined by a neck 29 to a straight flat bar 30 approximately equal in length to the two arms 23 and 24 when extended on the head 6. This bar 30 is attached to the end 26 of the arm 24 in the same manner as the arm 17 is joined to the arm 11, that is, it is hinged thereto, and the other or plain end of this bar 30 and the plain end of the arm 23 are coupled together by a clip or ring 31 so that the bottoms of the legs of the trousers may be securely clamped between the bar 30 and the two arms 23 and 24 and there held by the clip 31. The two arms 10 and 11 are held in extended position by links 32 connected to these arms at some distance from their pivotal points and the other ends of the links 32 are connected to a slide 33 movable on the stem 1 and held in any adjusted position thereon by a thumb-screw 34.

It will now be seen that a pair of trousers may be grasped near the body portion by the clamp carried by the stem 1 and near the bottoms of the legs by the clamp carried by the stem 5, and that the trousers may be put under longitudinal strain by the movement away from each other of the stems 1 and 5, and be there held by the rod 9 clamped by the screws 4 and 8. It will be understood, of course, that the arms 23 and 24 may be supported by links similar to the links 32 with an adjustable sleeve 33, but since these two arms 23 and 24 are joined by the unbroken bar 30 and since this clamp is comparatively short, the strengthening links 32 may be omitted. Now, it will be seen that by removing the bars 16 and 17 from engagement with the bars 10 and 11 the latter may be folded upon the stem 1, as indicated in dotted lines in Fig. 1, and the bars 16 and 17 may also be folded upon themselves by the suitable manipulation of the locking device 18—19. It will also be seen that on the removal of the bar 30 the two arms 23 and 24 may be folded upon the stem 5. Thus the entire device is collapsible into such short units that it may easily be inserted in an ordinary satchel.

I claim:—

1. A trousers stretcher comprising a hollow stem carrying a trousers clamp at one end and provided with a clamp sleeve and screw at the other end, another hollow stem having a trousers clamp at one end and provided with a clamp screw and sleeve at the other end, and a rod insertible into each hollow stem through the clamping sleeve thereon and adapted to be held to said sleeves by the clamp screws.

2. A trousers stretcher comprising two hollow stems, clamp screws, an intermediate spacing rod adapted to enter each stem and be clamped thereto, clamps on each stem, each clamp comprising two hinged bars one of which is formed with a hinge member and the other of which is formed with another hinge member to engage the first-mentioned hinge member, and means for removably securing the two members of the clamp in contiguous relation.

3. A clamp section for trousers stretchers comprising a suitable stem, two arms hinged to the stem at their contiguous ends and one arm having a hinge member formed therein at its free end, another arm having a hinge member adapted to the first-mentioned hinge member and movable into close parallel relation with the two arms, and a retaining clip or ring carried by one of the arms hinged to the stem and arranged to engage over and confine the ends of the said arm and the adjacent arm together.

4. In a trousers stretcher, a clamp end therefor comprising a suitable stem, arms each hinged at one end thereto and one of the arms having its free end formed with a hinge member, a locking slide carried by the stem, links each connected at one end to the locking slide and at the other end to a respective one of said arms, and a clamp member coacting with the aforesaid arms and composed of other two arms connected together at one end and one of said last-named arms having a hinge member coacting with the hinge member on one of the first-mentioned arms, a locking sleeve for the hinged connected ends of the second-named arms, and means for confining those ends of the clamp members remote from their hinge connection in contiguous relation.

5. A trousers stretcher comprising a hollow stem having a clamp sleeve secured at one end, two arms at the other end of the stem each pivoted at one end thereto and one of said arms having its free end formed with a hinge member, a locking slide on the stem, links connecting the aforesaid arms to the locking slide, a clamp member coacting with the arms on the stem and comprising two other arms pivotally joined together, a locking sleeve for the pivoted ends of these last-named arms, a hinge member formed on the end of one of said last-named arms and arranged to engage the hinge member on the corresponding arm carried by the stem; another hollow stem having a clamp sleeve at one end, two arms pivoted to the other end of the stem, a hinge member formed on the end of one of these last-named arms, a bar adapted to coact with the last-named arms

and provided with a hinge member for engagement with the hinge member of the corresponding arm carried by the second hollow stem, clips or rings adapted to those ends of the clamps remote from their hinged ends to hold them together, and a rod adapted to enter both hollow stems and to be clamped thereto.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

LEAMON S. PLUMMER.

Witnesses:
T. W. KNIGHT,
R. L. REED.