

E. J. SANDER.
 DEVICE FOR STRETCHING TROUSERS.

APPLICATION FILED MAR. 7, 1902.

NO MODEL.

Fig. 1.

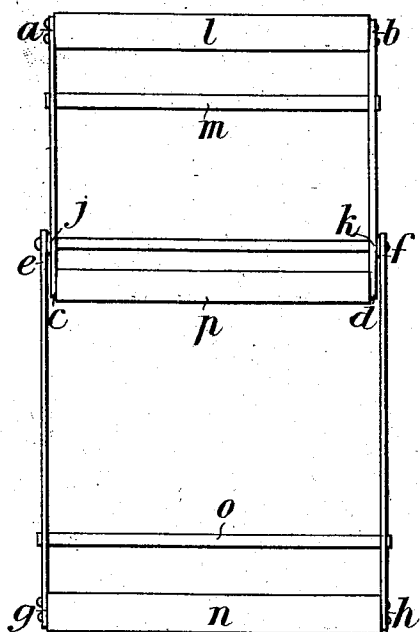


Fig. 2.



Fig. 3.

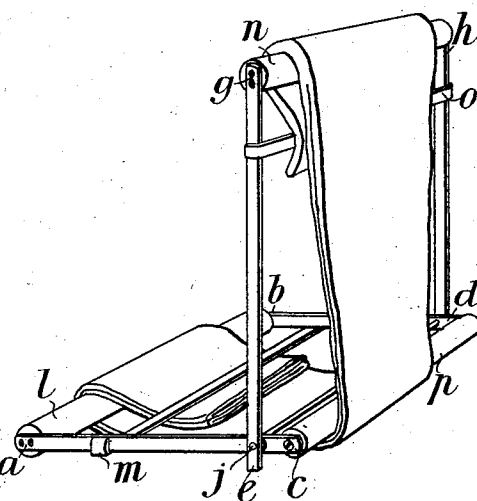
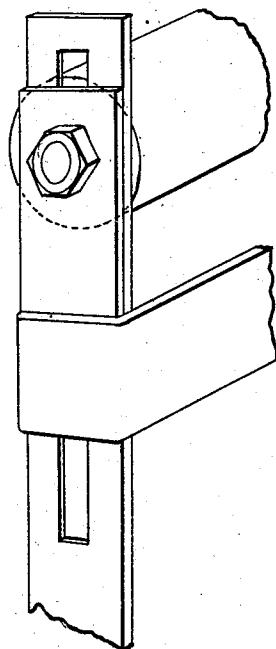


Fig. 4.



Witnesses

John E. Dousfield.
 C. J. Kufem

Inventor:

E. J. Sander.

UNITED STATES PATENT OFFICE.

EDGAR JULIUS SANDER, OF STOKE NEWINGTON, ENGLAND, ASSIGNOR OF
ONE-HALF TO ARTHUR JOSEPH HAWES, OF LONDON, ENGLAND.

DEVICE FOR STRETCHING TROUSERS.

SPECIFICATION forming part of Letters Patent No. 721,749, dated March 3, 1903.

Application filed March 7, 1902. Serial No. 97,116. (No model.)

To all whom it may concern:

Be it known that I, EDGAR JULIUS SANDER, a subject of the King of Great Britain, residing at 96 Bouverie road, Stoke Newington, county of Middlesex, England, have invented a new and useful Improved Device for Stretching Trousers and other Articles, of which the following is a specification.

The object of this invention is to provide a stretcher for trousers and other articles which shall allow of the quick adjustment of the article to be stretched, shall fold into a small compass, shall have no loose parts, and shall be cheap to manufacture.

In the accompanying drawings, Figure 1 is a plan of the stretcher opened out ready to receive a pair of trousers or other article, and Fig. 2 is a side elevation of the same. Fig. 3 is a perspective view illustrating the operation of the apparatus to stretch a pair of trousers. Fig. 4 is an enlarged perspective view showing the method of adjusting the apparatus for articles of different lengths.

The stretcher is composed of two frames, Fig. 1, $a c d b$ and $e g h f$, of metal or other suitable material. The frame $a c d b$ is smaller than the frame $e g h f$, and both are hinged together at the points $j k$, thus allowing of one frame folding within the other.

Between the ends $a b$ of the frame $a c d b$ is fixed a rod l , and farther along a stationary friction-bar m is placed across the back of the said frame, and between the ends $g h$ of the frame $e g h f$ is fixed a rod n , and farther along a stationary friction-bar o is placed across the back of the frame. The rods $l n$ are preferably of wood and of round section, and the friction-bars $m o$ by preference of metal and flat; but they may be made of other suitable materials or section. The flat friction-bars m and o are, as will be observed, held at fixed distances from the rollers or bars l and n , respectively, so that there is no clamping of the garment between said pairs of bars. Each end of the garment is held by folding the end portion over the end bar or roller and between the adjacent flat friction-bar and the central portion of the garment.

This construction permits a certain amount of slip of the garment over the end rollers or bars l and n during the first part of the

stretching operation until the central part of the garment becomes so taut as to press the folded end portions against the friction-bars m and o with sufficient firmness to prevent further slip. This construction by providing for a certain amount of slip at each end of the stretcher prevents the undue stretching of the garment, which is likely to injure it.

Between the extended ends $c d$ of the frame $a c d b$ is a bar p of wood or other suitable material, and by preference the said bar is round and made to roll freely on its centers. This bar p , which I term an "extension-bar," it will be observed is mounted in the overlapping portions of one of the frames, adjacent to but eccentric to the hinge or pivotal connection between the two frames. Now when the two frames are open, as in Fig. 1, the roller p lies within the frame $e g h f$; but directly the frames are folded together the roller p turns outward, as in Fig. 3. This roller is the device for stretching the article placed in the frame, as will be understood by reference to Fig. 1, which shows the position of the frames when the article is first put into the stretcher, the length from a to g or from b to h being less than the length in Fig. 3 from a to g or from b to h over the roller p . It is therefore possible to obtain different tensions by altering the distance of the roller p from the center of the hinges j and k .

The method of fixing and stretching a pair of trousers is as follows: The trousers are laid out flat, one leg upon the other, and the open frame is laid upon them, that side of the frame being next the trousers on which the flat bars m and o are fixed. The ends $g h$ are laid at the hip end of the trousers and the ends $a b$ at the ankle end, as shown in Fig. 3. The ankle ends of the trousers are next folded over the bar l and under the friction-bar m , and then the hip end is folded over the bar n and under the friction-bar o . The frame is now closed, and in closing the roller p causes the trousers to stretch and to press its own ends tightly against the bars m and o , thus gripping them.

As shown in Fig. 2, it is necessary that the rods l and n should not stand farther out of the frame than the tops of the bars m and o , respectively, as the trousers would then be

prevented from pressing tightly on the bars *m* and *o* and would not grip the ends of the trousers properly.

Fig. 4 illustrates a method of adjusting the
5 gripping arrangements to suit unusual lengths
of garments or articles by slotting the sides
of the frames and allowing the gripping-bars
to slide up and down in these slots, tighten-
ing the whole up with a nut, thus securing
10 the two bars to the frame, but maintaining
them at the same distance from each other.

I claim—

In a stretcher for trousers, and other garments, the combination with two frames

hinged together, each frame being provided 15
with an end bar and an adjacent friction-bar,
rigidly secured with respect to and at a distance
from the end bar, the said end bar and
friction-bar of one of said frames being ad-
justable with respect to said frame without 20
changing their positions with respect to each
other, and means for securing said adjustable
bars in their adjusted positions, substantially
as described.

EDGAR JULIUS SANDER.

Witnesses:

JOHN E. BOUSFIELD,
C. G. REDFERN.