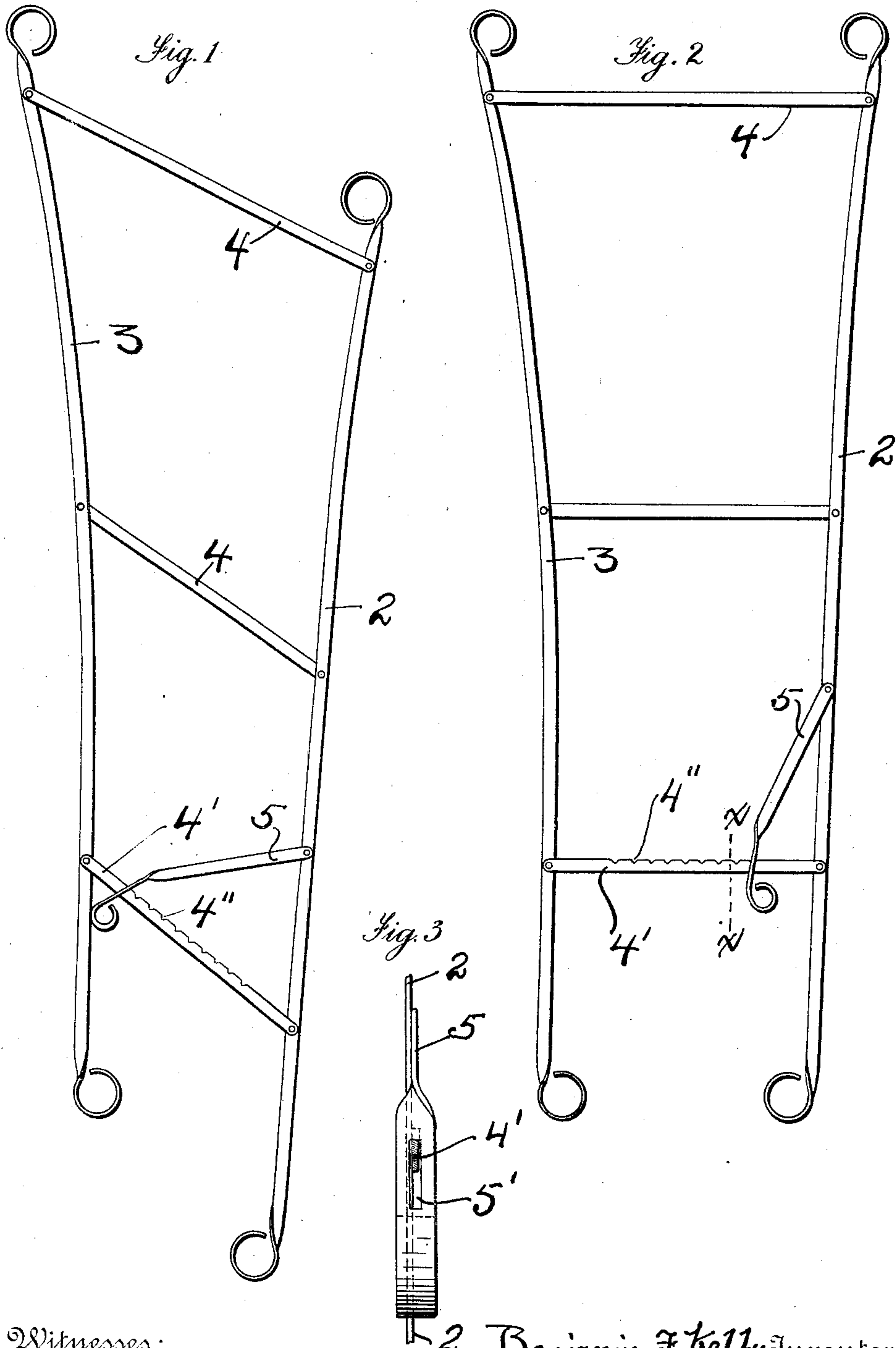


B. F. KELLY.
GARMENT STRETCHER.
APPLICATION FILED FEB. 15, 1908.

910,391.

Patented Jan. 19, 1909.



Witnesses:
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BENJAMIN F. KELLY, OF SALT LAKE CITY, UTAH.

GARMENT-STRETCHER.

No. 910,391.

Specification of Letters Patent.

Patented Jan. 19, 1909.

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To all whom it may concern:

Be it known that I, BENJAMIN F. KELLY, a citizen of the United States, residing at Salt Lake City, county of Salt Lake, and State of Utah, have invented certain new and useful Improvements in Garment-Stretchers, of which the following is a specification.

My invention relates to devices for stretching fabric, and more particularly to devices peculiarly designed for stretching and creasing trousers, though I do not wish to be limited to this use.

The object of my invention is to provide a device which may be easily inserted into a garment and easily expanded and the particular object of this invention is to provide a construction wherein the front and back members of the frame are movable relatively and linked together and wherein the expansion shall come equally upon the front and back bars of the frame and also to provide means whereby the frame is automatically locked in position by the reverse pressure of the garment.

To this end my invention consists in the construction set forth in the accompanying specification and specifically stated in the claims appended.

In the drawings, wherein I have shown an embodiment of my invention, Figure 1 is a face view of the trousers stretcher in its contracted condition. Fig. 2 is a like view of the stretcher in its expanded state as inserted within the leg of a pair of trousers. Fig. 3 is a section on the line $x-x$, of Fig. 2.

Like reference characters throughout the several views designate like parts.

My stretcher is composed of a front bar 2 and a rear bar 3 of relatively thin metal, said bars having more or less the general shape of the front and rear profile of a trousers leg. These two bars are connected by pivoted links 4, 4, 4', there being one of these links at each end of the device and one preferably in the center. It is to be understood, however, that I may use any number of links that I choose.

One of the links, preferably the link 4' at the small extremity of the stretcher, that is at what may be termed the bottom of the trousers leg, is serrated or provided with a series of notches 4'' adapted to engage the free end of an extending lever 5 which is pivoted at its other end preferably to the front bar 2 at a point midway between the link 4'

and the adjacent link 4. The preferable connection of the expanding lever 5 with the link 4' and its notches 4'' is to bend the material of the lever 5 at its extremity into a plane at right angles with the general plane of the lever and to slot this portion so turned as at 5', the link 4' passing through that slot. One end of the slot is adapted to engage with any one of the notches on the inner edge of the link 4' and the other end of the slot is adapted to contact with the unnotched edge of the link.

The free end of the lever 5 is inclined to the body of the lever so as to make an obtuse angle therewith. This is for the purpose of increasing the angle between the free end of the lever 5 and the link 4'. The greater this angle between the free end of the lever 5 and the link 4', the less power is required to expand the side bars.

I have shown the end bars 2 and 3 and the end of the expanding lever 5 as turned over so as to form finger holds, as I have found this very convenient.

In operation, it will be seen that with the bars in the position shown in Fig. 1, the front and rear bars of the stretcher are relatively close together, particularly at the lower portion, thus permitting the device to be easily inserted within a pair of trousers. When it is desired to expand the stretcher it is only necessary to draw the expanding lever towards the bar 2, which will bring the two bars 2 and 3 into position where their ends are in alinement with each other, and their links are at right angles to the bars. This, of course, expands the device to an extent requisite to stretch the trousers leg tightly over the edges of the bars, thus not only stretching the fabric but creasing the same.

It will be seen that I use the principle of the toggle lever in my device and that therefore I get great leverage in forcing apart the front and rear bars. The operator does not have to open these bars by hand or force them apart except by drawing the end of the expanding lever across the notched link. It is also to be noted that I get expansion along the whole extent of my stretcher, not merely at the lower end. By drawing the expanding lever from the position shown in Fig. 1 to that shown in Fig. 2, one of the bars is raised relatively to the other and at the same time forced outward by reason of the movement of the links.

In my trousers stretcher, as constructed for ordinary sized trousers, there is an expansion at the top of about two inches, and at the bottom of three and a half. This allows for all difference in sizes. The reverse pressure of the trousers, particularly when they are stretched tightly will tend to force the bars together, and therefore force the end of the slot 5' into engagement with the notches 4''; thus the stretcher is automatically held expanded to the extent desired, it not being necessary to otherwise fasten the expanding lever after the device has been brought to the position required.

When it is desired to take out the stretcher it is only necessary to press inward on the expanding lever when it will be disengaged from the notches and the lever will slide along the link 4' until the front and rear bars are brought closer to each other, when the device may be easily withdrawn from the trousers leg.

While I have shown my device as applied to trousers stretchers, it will be easily seen that it may be as well applied to other forms of stretchers, such as curtain stretchers and the like. In this case the front and rear bars would be used provided with the means for engaging with the edge of a curtain usually used. The two bars would be pivoted to each other by links and the expanding lever would be pivoted to one of the side bars and engage with the notches of one of the links. The construction would be precisely the same as that illustrated in the drawing except that it would be made of relatively heavy wood and that the rear and front bars would be parallel to each other instead of being inclined outwardly from each other at one end.

Having described my invention what I claim is:

1. In a fabric stretcher and creaser, opposite longitudinal bars; links pivoted to and connecting said bars; and an expanding lever pivoted at one end to one of said longitudinal bars having its free end engaging against the inside edge of one of said links,

said link being provided with notches for the reception of the end of said lever. 50

2. In a fabric stretcher and creaser, opposite longitudinal bars; links pivoted to and connecting said bars; and an expanding lever pivoted at one end to one of said bars, the free end of said lever being slotted for the passage of one of said links, said link being provided with notches for the reception of the end of said slot whereby the lever may be set in any position along said link. 55

3. In a stretcher and creaser for trousers and other articles, opposite longitudinal bars independent of and separated from each other along their whole length, said bars being nearer to each other at one end than at the other; links pivoted to and connecting said bars at their ends; an expanding lever pivoted at one end to one of the said bars and having its free end engaging against the edge of the link located at the narrow portion of the stretcher, the free end of said lever being adapted to move along the inside edge of the link; and means for automatically locking the free end of said lever in any position along the link. 60 65 70

4. In a stretcher and creaser for trousers and other articles, opposite longitudinal bars independent of and separated from each other along their whole length; links pivoted to and connecting said bars; an expanding lever pivoted at one end to one of the said bars and having a slot in its free end surrounding the link, one edge of the slot engaging in notches located on the link and adapted to automatically lock the free end of the lever in the desired position along the link against the reverse pressure of the garment. 75 80 85

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses, this twenty-eighth day of January, 1908. 90

BENJAMIN F. KELLY.

Witnesses:

F. CHAMBERLAIN,
RICHARD HARTLEY.