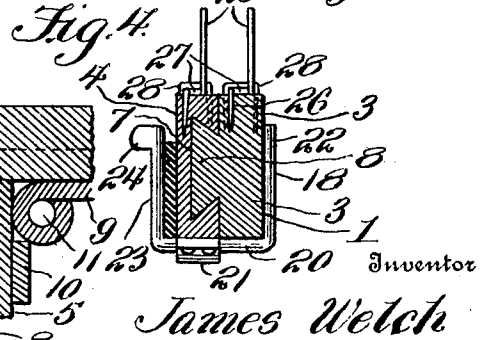
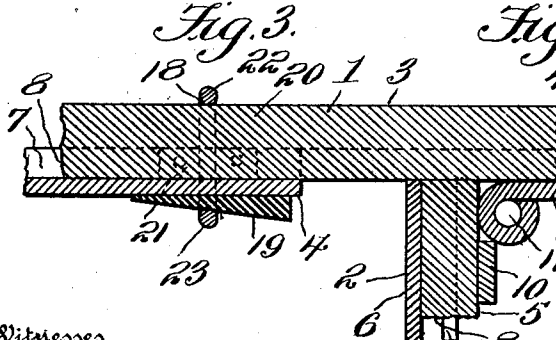
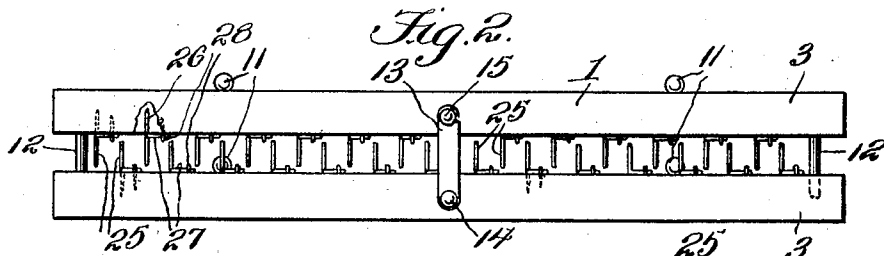
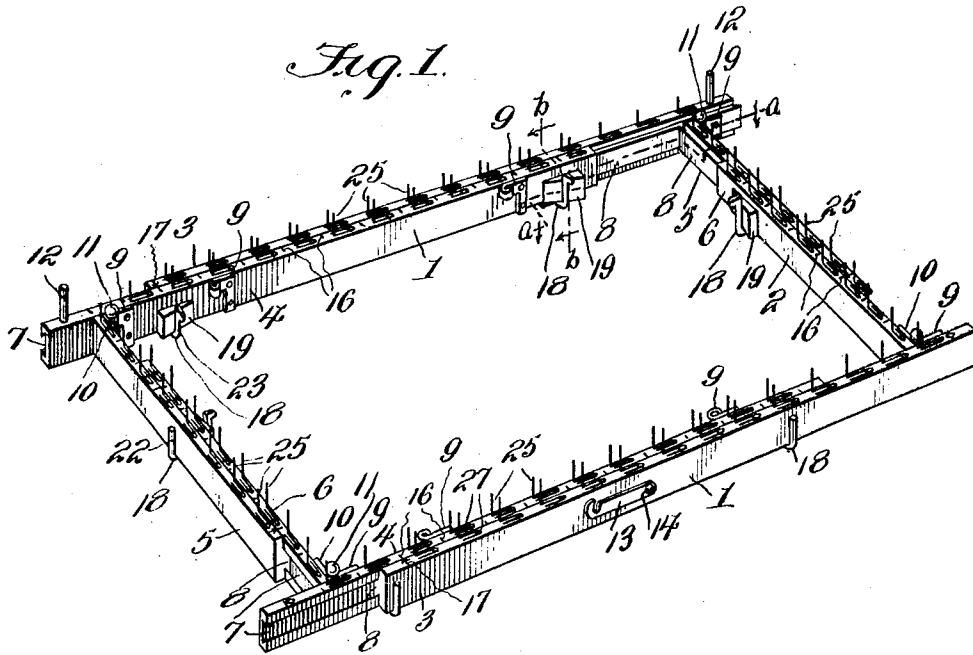


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LACE CURTAIN STRETCHER.  
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1,119.668.

Patented Dec. 1, 1914.



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# UNITED STATES PATENT OFFICE.

JAMES WELCH, OF TORRINGTON, CONNECTICUT.

## LACE-CURTAIN STRETCHER.

1,119,668.

Specification of Letters Patent.

Patented Dec. 1, 1914.

Application filed February 21, 1912. Serial No. 679,007.

*To all whom it may concern:*

Be it known that I, JAMES WELCH, a citizen of the United States, residing at Torrington, in the county of Litchfield and State of Connecticut, have invented new and useful Improvements in Lace-Curtain Stretchers, of which the following is a specification.

This invention is an improved lace curtain stretcher for stretching lace or other curtains while drying or repairing the same, the object of the invention being to provide an improved device of this character which may be adjusted to accommodate a curtain of any size, which may be readily secured in adjusted position, and which, when not in use, may be readily compactly folded to enable the same to be stored in a small space.

Another object of the invention is to effect improvements in the construction of the pins which are employed to secure the curtain to the bars of the stretcher.

Another object of the invention is to effect improvements in the means for locking the parts of the stretcher in adjusted position.

With the above and other objects in view the invention consists in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of a curtain stretcher constructed in accordance with my invention; Fig. 2 is a side elevation of the same showing the curtain stretcher compactly folded; Fig. 3 is a detail, horizontal sectional view on the plane indicated by the line *a-a* of Fig. 1 and showing one of the clamps; and Fig. 4 is a vertical, transverse sectional view of the same on the plane indicated by the line *b-b* of Fig. 1.

My improved stretcher frame comprises a pair of side bars 1 and a pair of connecting end bars 2. Each side bar 1 comprises a pair of members 3, 4 which are slidably connected together for longitudinal movement so that each side bar may be longitudinally adjusted. Each end bar also comprises a pair of similarly connected members 5, 6. One member of each bar is provided on its outer side with a longitudinal dove-tail groove 7 and the other member of said bar is provided on its inner side with a dove-tail tongue or rib 8 which engages the said groove, the said groove and tongue or rib

detachably connecting the members together and enabling the members to be longitudinally adjusted so that the length and also the width of the stretcher frame may be varied as may be required to enable the same to fit a curtain of any size.

When the frame is set up for use the end bars are at right angles to the side bars and their ends abut against the inner sides of the side bars. The end bars are detachably connected to the side bars. To effect such connection I provide devices, similar to hinges, which comprise plates 9, 10, respectively secured to the side and end bars and having co-engaging lugs provided with alining openings, and loose pins 11 to engage the openings of the said lugs and thereby secure them together and hence also secure the end bars to the side bars. By first removing the loose pins the end bars may be detached from the side bars, as will be understood, this arrangement admitting of the compact disposition of the stretcher frame with all of its parts parallel, as shown in Fig. 2. To secure the parts of the stretcher frame together when thus knocked down, I provide the side bars with connecting dowel pins 12 which engage dowel openings in said bars and I also provide hook links 13, each of which is pivoted, as at 14, to one of the bars and engages a headed stud 15 which projects from the other bar.

One member of each bar is provided with a scale 16, the other member thereof being provided with an indicator mark 17 coacting with the scale to indicate the length of the bar when the same is in adjusted position.

In order to secure the members of the bars together in any adjusted position I provide clamps, each of which comprises a U-shaped member 18 and a wedge shaped member 19. Each U-shaped member is arranged on the under side of and astride the members of one of the bars with its central portion pivotally connected to one member of the bar by means of a plate 21. The arms 22, 23 of the U-shaped member respectively bear on the outer sides of the members of the bar to which the said U-shaped member is thus pivotally connected, the arm 23 being provided with a thumb-piece 24 to enable the U-shaped member to be readily turned. The wedge shaped member 19 is preferably a wedge shaped piece of leather or other suitable yielding material and bears against

one side of one of the members of the bar. By turning the U-shaped member so as to cause its arms 22, 23 to lie at right angles or substantially so to the members of the bar on which the clamp is employed, the said arms 22, 23 of the U-shaped member coact with the wedge shaped member to press the members of the bar toward each other and thereby frictionally engage and lock them, as will be understood. By this means I am enabled to lock the bars of my improved stretcher frame in any desired adjusted position without the employment of set screws or other like devices and it will be understood that it only requires an instant of time to operate any one of the clamping devices so as to secure the members of any one of the members of the frame in any desired adjusted position.

20 The bars of the frame are provided on one side with pins 25 which project outwardly therefrom and which are appropriately spaced apart and are adapted to be engaged with the scallops on the edges of the curtain. Each of these pins 25 has a portion 26 embedded in the bar to which the said pin is attached and also has a substantially U-shaped, horizontally arranged bent portion or double arm 27 which bears on the upper side of the bar and is held in place by a staple 28 which is driven into the bar. Hence the pins are firmly anchored to the bars of the stretcher frame so that they cannot possibly become casually detached therefrom, but the pins may be removed if desired by first withdrawing the staples.

Having thus described my invention I claim:

1. A lace curtain stretcher comprising side and end bars and means to detachably connect them together and permit the end bars to fold against the side bars, each of the side bars having curtain engaging pins projecting from one side thereof, one of said side bars also having dowel pins longer than the curtain engaging pins projecting from the same side thereof as and for a greater distance than said curtain engaging pins, the other side bar having openings to receive the said dowel pins, the length of said

pins and the depth of said openings being such that when said pins are in said openings and bearing on the bottoms thereof said dowel pins serve to hold the side bars in spaced relation with their curtain engaging pins opposed, and the ends of said curtain engaging pins clear.

2. A lace curtain stretcher comprising side and end bars and means to detachably connect them together and permit the end bars to fold against the side bars, each of the side bars having curtain engaging pins projecting from one side thereof, one of said side bars also having dowel pins longer than the curtain engaging pins projecting from the same side thereof as and for a greater distance than said curtain engaging pins, the other side bar having openings to receive the said dowel pins, the length of said pins and the depth of said openings being such that when said pins are in said openings and bearing on the bottoms thereof said dowel pins serve to hold the side bars in spaced relation with their curtain engaging pins opposed, and the ends of said curtain engaging pins clear, and means to detachably connect the side bars together and to coact with the said dowel pins to hold the said side bars in such spaced relation.

3. A lace curtain stretcher comprising a pair of side bars, a pair of end bars hingedly connected to said side bars so as to lie parallel thereto when in folded position, curtain engaging pins carried by said bars, dowel pins carried by one of said side bars adapted to engage pockets in the remaining side bar for spacing the free ends of the pins from the side bars and for preventing relative longitudinal movements of said side bars, and a hook carried by one of said side bars and engaging the other for preventing relative lateral movements of said bars when in folded position.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES WELCH.

Witnesses:

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THEODORE A. RACHETER.