

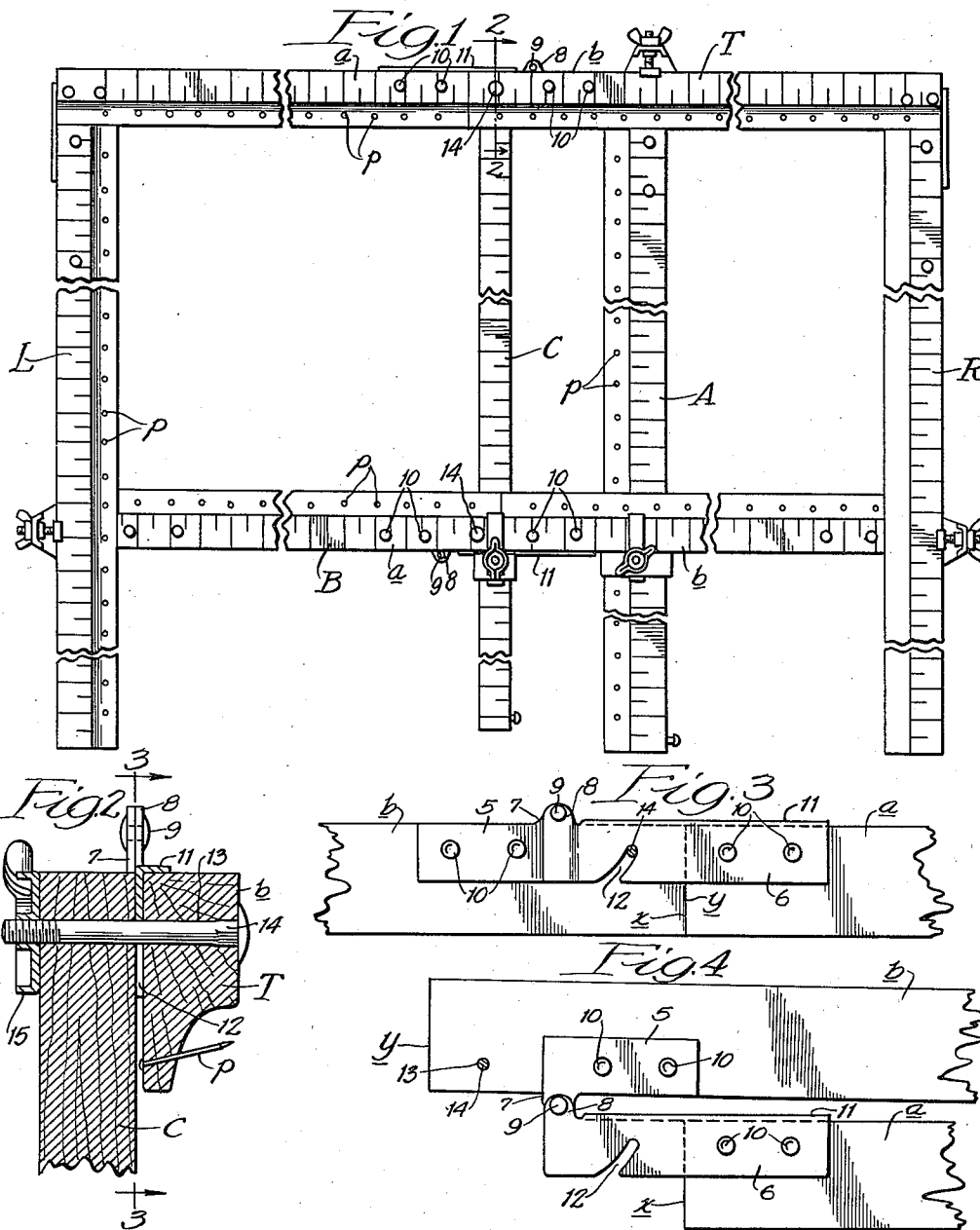
Oct. 8, 1940.

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2,217,003

CURTAIN STRETCHER

Filed Aug. 4, 1939



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UNITED STATES PATENT OFFICE

2,217,003

CURTAIN STRETCHER

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Application August 4, 1939, Serial No. 288,395

1 Claim. (Cl. 287—99)

My present invention is concerned with a stretching frame having a special utility for supporting damp curtains or other fabrics which are to be dried. More particularly the present improvements are directed to a hinge fitting, applicable to any of the bars of the stretching frame, whereby to permit folding thereof when the frame is to be disassembled.

The hinge fitting hereinafter described is advantageous in that it is strong, it is easily applied, it furnishes a secure stop by which to sustain the connected bar sections in an aligned relation, and it permits readily the attachment of a center brace extending vertically between the top and bottom bars. Such a hinge fitting is particularly advantageous when employed with the top and bottom bars which are usually the longest, and so most in need of being shortened by a folding operation when the frame is to be taken down, as for storage or shipment.

A curtain stretching frame to which is applied the hinge fitting of my present invention is illustrated in the accompanying drawing in the manner following:

Figure 1 is a side elevation of the stretching frame in its entirety;

Fig. 2 is an enlarged sectional detail, taken on line 2—2 of Fig. 1;

Fig. 3 is an enlarged detail in elevation of the top bar hinge; and

Fig. 4 which is a view similar to Fig. 3, shows the hinge swung around to an opposite position.

The frame herein illustrated is adapted for the support of damp curtains or other fabrics which require drying while maintained in a stretched condition. It comprises a horizontal top bar T joined at opposite ends to vertical left end and right end bars L and R, respectively, which latter are interconnected detachably by a horizontal bottom bar B, thereby providing a rectangular structure, all as is common at the present time. In addition, the frame may comprise a vertical central bracing bar C detachably interconnecting the top and bottom bars, and to one side thereof a vertical adjusting bar A. The mounting for the adjusting and bottom bars may be adjustable with the aid of any approved fittings. The front face of four of the bars (the top, bottom, one end and adjusting) may be concavely rabbeted adjacent their inner edges where pins *p* are provided, all as is common practice at the present time.

For purposes of shipment or storage it is desirable that the frame be taken down, or folded, so as to occupy a minimum of space. The several

bars are accordingly joined to each other by fittings which facilitate such an operation. In addition, the top and bottom bars, being the longest, are each formed of two sections *a* and *b*, joined end to end in butt relation in the medial region of the frame, with the aid of hinge fittings having offset pivotal joints, as will now be pointed out.

As shown, the meeting ends *x* and *y* of the top bar sections *a* and *b*, respectively, may be square cut. The hinge fitting comprises two plates 5 and 6 formed near one end of each with outwardly extending ears 7 and 8, respectively, through which are registering openings for the reception of a pivot pin 9. With respect to the longer plate 6, its end whereon the ear is formed is outset slightly whereby to overlap the adjacent end of the other shorter plate, the two plates in consequence being permitted to occupy positions in a common plane, viz., against the rear face of the aligned two sections of the top bar. This point of overlap is designed to be located remote from the meeting ends of the two bar sections—upon the section *b* and away from the section *a*, as herein illustrated.

Each plate may be provided with holes (two being a suitable number therefor) to receive rivets 10 which, when passed through the bar sections as well, will secure each plate fixedly in place. In addition, the longer plate 6 is provided along its upper edge with an out-turned flange 11 adapted to overlie and engage the corresponding face of the two bar sections when the latter are extended outwardly, as shown in Fig. 3. This flange accordingly serves as a stop, irrespective of that which may be afforded by the butt engagement of the meeting ends of the two bar sections. I have also provided in this longer plate an open slot 12 extending from its lower longer edge to terminate at a substantially central point which lies opposite the bar section *b* to which the shorter plate is secured. Opposite the closed end of the slot is a hole 13 through the bar section *b* for reception of a bolt 14 which is adapted to extend through the slot as well, permitting application of a clamping pressure to the plate from a wing nut 15, when threaded on to the bolt, as shown in Fig. 2. The slot may be arcuate in form, concentric with the axis of the pivot pin 9, so that, when pressure from the nut is relaxed, the bolt will offer no interference to swinging movement of the one plate with respect to the other when it is desired to fold or unfold the two bar sections. This same bolt 14 may also traverse the center brace C, thereby serving as a medium by

which to removably connect this bar to the frame. When the two sections of the top bar are swung into extended aligned positions, the bolt will lie adjacent the closed end of the slot, thereby affording, if desired, a stop by which to limit the swinging movements of the bar sections, irrespective of that which may be offered by (1) butt engagement of the meeting ends of these sections, or (2) engagement of the hinge plate flange with the upper edge of the section b.

I claim:

For use with a curtain stretcher comprising a plurality of detachably interconnecting bars providing a frame including top and bottom bars each formed of two aligned sections adapted to lie in end to end relation, a hinge joint between the two bar sections comprising a pair of pivotally connected plates, one fixed to a face of one of the bar sections and the other fixed to the corresponding face of the other bar section with the point of pivotal connection offset from the ends

of the bar sections, one of the plates being extended in part beyond the end of the bar section to which it is fixed and being provided in such extended portion at a point intermediate of the ends of said extended portion with a slot extending inwardly from one edge thereof, there being an opening through the other bar section at a point opposite the inner end of the slot, a bolt inserted through the opening and slot adapted when abutting the inner end of the slot to afford a stop for extended swinging movement of the two bars, a nut carried by the bolt for applying clamping pressure to the extended plate for positively holding the bar sections against folding movement, and a flange carried by the extended plate and projecting therefrom substantially at right angles thereto and being of sufficient length to engage with an adjacent face of each bar section to limit definitely the swinging movement of one bar section with respect to the other.

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