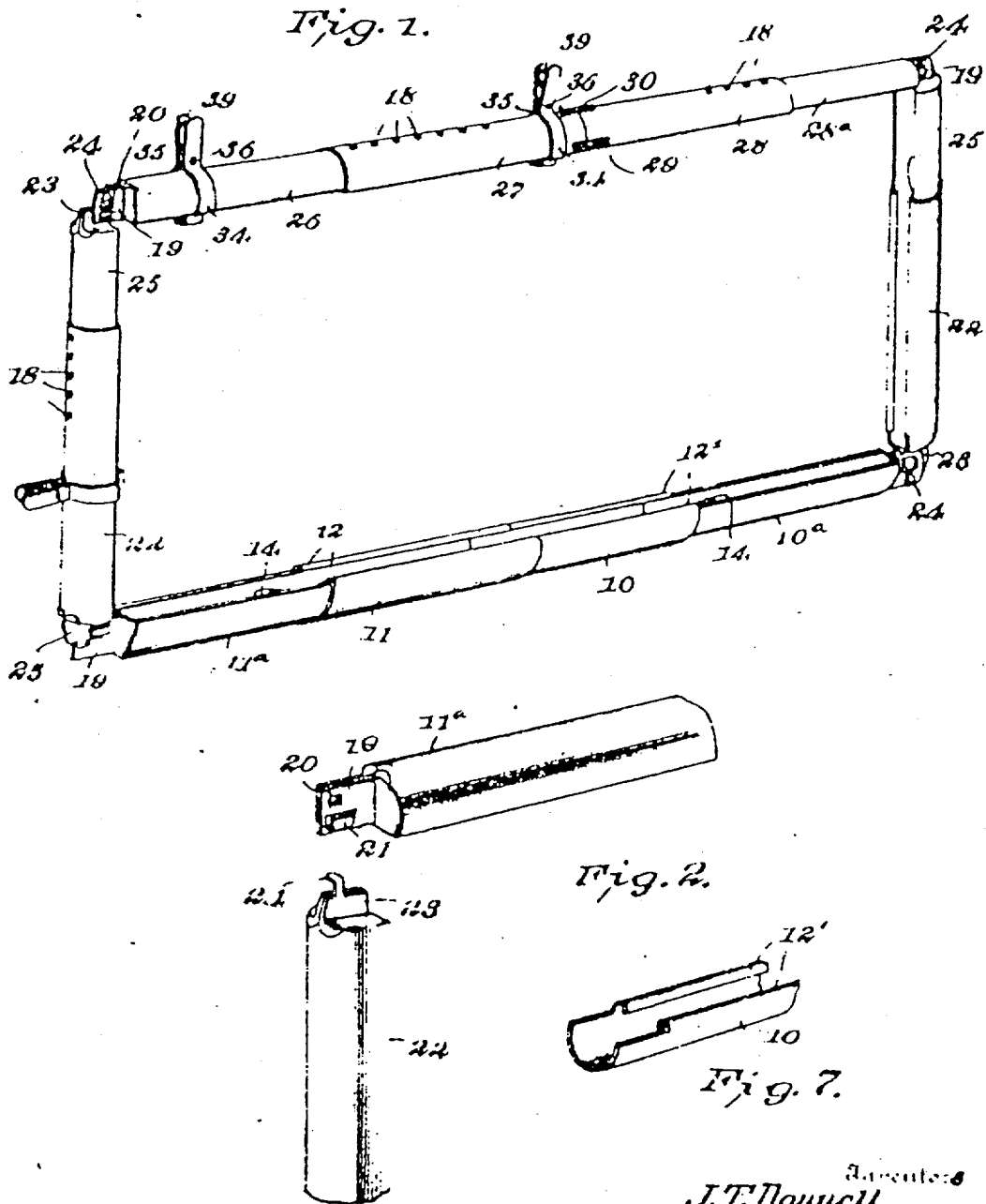


J. T. DONNELL & R. & T. B. SHROPSHIRE.
CURTAIN STRETCHER.
APPLICATION FILED NOV 18, 1909

988,554.

Patented Apr. 4, 1911.

1 SHEET-SHEET 1.



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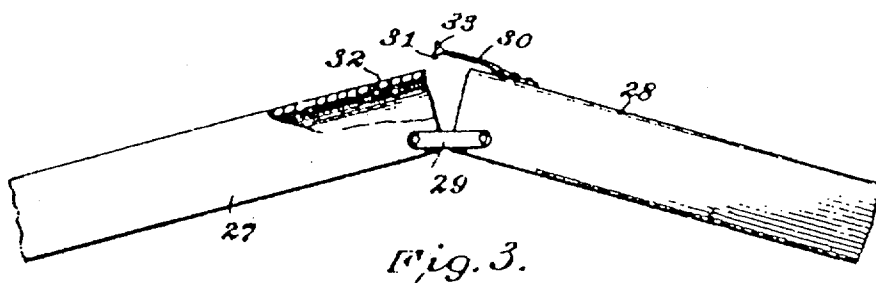


Fig. 3.

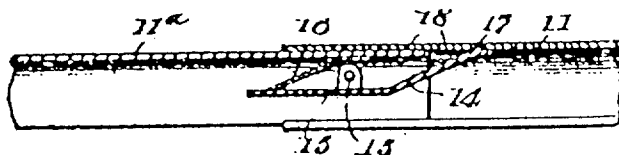


Fig. 4.

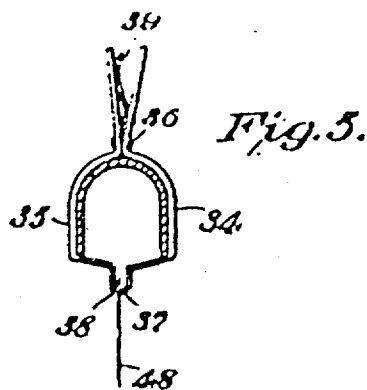


Fig. 5.

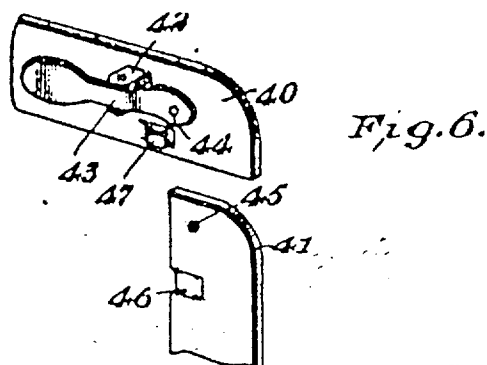


Fig. 6.

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residing at Ozark, in the county of Franklin and State of Arkansas, have invented certain new and useful Improvements in Curtain-Stretchers, of which the following is a specification.

This invention comprehends certain new and useful improvements in curtain stretchers of the folding or collapsible type, and the invention has for its primary object a simple and efficient construction of stretcher of this character embodying a frame provided at its corners with hinges of a novel nature, enabling the disengaging of the frame bars of the stretcher when it is desired to collapse the same, the hinges being retained in interlocked relation by securing the sections of a jointed frame bar together in longitudinal alinement with each other.

With these and other objects in view as will more fully appear as the description proceeds the invention consists in certain constructions and arrangements of the parts that we shall hereinafter fully describe and claim.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of our improved curtain stretcher, the parts being shown in extended and operative relation to each other; Fig. 2 is a perspective view of two adjoining portions of frame bars, disclosing an improved separable hinge; Fig. 3 is a side elevation partly in section, of the jointed side bar of the stretcher frame which admits of the knocking down of the frame upon the breaking of the joint; Fig. 4 is a longitudinal sectional view through the telescopic ends of the sections of one bar of the frame disclosing the means for adjustably locking the same. Fig. 5 is a transverse sectional view of one of the frame bars disclosing one of the clasps that are carried by the frame for engagement with the curtain; Fig. 6 illustrates a modified form of the corner separable hinge; and, Fig. 7 is a detail perspective view of a portion of one of the slip joints employed in the members or bars comprising the frame.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The rectangular frame of our improved curtain stretcher includes a side bar embodying telescoping sections 10 and 11 that are channeled, preferably, as shown, and that are formed at their side edges with inwardly turned interlocking flanges 12', 12, whereby they are extensibly connected together. The section 10 has its flanges 12' terminating in

988,554. CURTAIN-STRETCHER. JOHN T. DONNELL, RANDOLPH SHROPSHIRE, and THOMAS B. SHROPSHIRE, Ozark, Ark.
Filed Nov. 18, 1909. Serial No. 528,705.

To all whom it may concern:

Be it known that we, JOHN T. DONNELL, RANDOLPH SHROPSHIRE, and THOMAS B. SHROPSHIRE, citizens of the United States,

spaced relation to the inner end of the section whereby to form a stop for the slip joint coupling between the sections 10 and 11.

The section 11 is extensibly connected to a section 11^a in telescoping relation thereto, as best illustrated in Fig. 1, and the outer end of the section 11^a, which forms part of one corner of the frame is flattened upon itself to form a web 19, as best illustrated in Fig. 2. The web 19 is formed with a transverse aperture 20 extending there-through, and with a punched out tongue 21 which is offset from the face of the web. The end bar of the frame which joins the section 11^a is also constructed in extensible telescoping sections designated 22 and 25, and the section 22 is flattened at one end to form a web 23, said web being provided with an outwardly extending finger 24 which is laterally bent at its outer extremity for engagement through the aperture 20 of the web 19 of the section 11^a. The tongue 21 of the said web 19 is designed to engage one face of the web 23, whereby, it will be understood, the section 22 may be easily connected to the section 11^a by first inserting the finger 24 in the aperture 20 with the sections in more or less oblique relation to each other, whereupon, by swinging the one section on the other about the finger and aperture as a pivot so that the sections will assume a right angular relation to each other, the tongue 21 will engage the web 23 and prevent any separation of the hinge thus formed so long as the sections are held at right angles to each other.

The section 10, before mentioned, is extensibly connected to a section 10^a just like the section 11 is connected to its section 11^a. That end bar of the frame which joins the section 10^a is, like the end bar which joins the section 11^a, constructed in extensible telescopic sections 22 and 25 and is connected to the section 10^a by a separable hinge of the same construction as that described with reference to the section 11^a. These end bars that are formed of the sections 22 and 25 have their sections 25 connected by similar separable hinges like those hereinbefore described, to side bar sections 26 and 28^a that are extensibly connected to intermediate side bar sections 27 and 28 just as the sections 10^a and 11^a are connected to the sections 10 and 11. The sections 27 and 28 have a jointed connection with each other, said connection in the present instance being formed by pivoted side straps 29. The sections 27 and 28 are normally held in alinement with each other by means of a spring latch 30 secured to one of said sections and provided at its free end with a lug 31 adapted to snap into an aperture 32 formed in the adjoining section. The latch 30 is formed with a finger lug 33 whereby it may be disengaged

from the aperture 32 so as to permit the sections 27 and 28 to break joint and assume an oblique relation to each other.

From as much of the description as has preceded, in connection with the accompanying drawings, it will be understood that so long as the sections 27 and 28 are held in alinement with each other they will tend to hold the side and end bars of the frame at right angles to each other and thereby prevent the separation of the hinges at the corners, the connection between the ends and the side opposite the sections 27 and 28 being such as to brace against the movement of the members 22 toward each other. In order to disengage the bars from each other, it is only necessary to release the latch 30, whereupon the joint between the sections 27 and 28 may be broken, accompanied, of course, by the telescopic action between the members 27 and 28 and their companion sections 26 and 28^a. Consequently the webs 19 and 23 may be turned upon each other and the side and end bars at the corners swung to assume oblique angles relative to each other, this resulting in disengaging the tongues 21 from the webs 23 and thereby permitting the fingers 24 to be disengaged from the apertures 20 and the hinges to be separated.

As a modification of the separable hinge reference is to be had to Fig 6 wherein the overlapping webs at the corners of the frame are designated respectively 40 and 41, being rounded, as shown. The web 40 carries a thumb latch 43 which is pivotally mounted in ears 42, said latch being provided with a finger 44 adapted to be entered in an aperture 45 in the web 41. The web 40 is also formed with an offset tongue 47 designed for engagement in a depression 46 formed in the web 41. From the foregoing description of the operation of securing the webs 19 and 23 together, the operation of securing the webs 40 and 41 together will be apparent.

In order to secure the various telescoping frame sections in different extended relations to each other, we have formed one section of each telescopic pair with a series of apertures 18 and have secured in the other section of telescopic pair a pivoted thumb latch 14, said latch being provided with ears 15 by which it is mounted on a pin 13 and being provided at one end with a nib 17 designed for engagement in any one of the apertures 18. The rear end of the latch 14 is engaged by a spring 16, as best illustrated in Fig. 4.

To secure the curtain (a part of which is designated 48 in Fig. 5) to the stretcher frame, we employ any desired number of clasps that are composed of numbers 34 and 35 embracing the frame bars, said num-

bers being connected together, as at 36 and having their handle ends separated by a spring 39 whereby the opposite ends 37 and 38 will grip the curtain.

Having thus described the invention, what is claimed as new is:

1. A curtain stretcher including a frame having sides formed of sections, the adjacent corner sections of the frame having overlapping webs, the underlying web having an offset finger engaging over the upper web and an opening therethrough, the upper web having a downturned finger engaging through the opening in the underlying web, and locking means carried by the frame for holding the end-sections in intermeshed relation.

2. A curtain stretcher including a frame comprising sectional side-bars, detachable interlocking ends carried upon the side-bars, overlapping webs formed upon the adjacent end-sections, the underlying web having an aperture and an offset tongue for engagement over the upper web, the upper web having a downturned finger engaging through the aperture in the underlying web, and hinged sections disposed midway of the ends of one of the sides to admit of the detachment of the end sections.

3. A curtain stretcher, consisting of a rectangular frame composed of bars overlapping at the corners of the frame, the end of one bar being formed with an aperture, the end of the adjacent bar being formed with a finger engaged in said aperture, and means for preventing the detachment of the finger from the aperture when the bars are disposed at right angles to each other, one of said bars being constructed in hinged sections forming a joint, whereby when said joint is broken the sections will assume an oblique angular relation to each other to permit the detachment of the finger from the aperture.

4. A curtain stretcher, consisting of a frame composed of bars connected together at the ends of the frame, one bar being formed at its end with an aperture and an off-set tongue, which latter is designed to engage with the adjoining end of another bar, said latter bar being formed with a finger adapted to enter said aperture, whereby to pivotally connect the bars at the ends, whereby one bar may be turned in a direction to effect its engagement by the off-set tongue, with the finger in the aperture, thereby preventing the detachment of the ends of the bars one from another, one of said bars being constructed in hinged sections and provided with means for holding said sections in alinement with each other, whereby upon the releasing of said means the joint between the hinged sections may be broken and the bars pivotally moved on

each other at their ends to release the tongue and bar end and subsequently permit the withdrawal of the finger from the aperture.

5. A curtain stretcher, consisting of a rectangular frame composed of bars overlapping at the corners of the frame, the end of one bar being formed with an aperture the end of the adjacent bar being formed with a finger engaged in said aperture and means for preventing the detachment of the finger from the aperture when the bars are disposed at right angles to each other, one of said bars being constructed of telescopic sections hingedly connected together to form a joint, whereby when said joint is broken said sections extended in their telescopic action, the sections will assume an oblique relation to each other to permit the detachment of the finger from the bar.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN T. DONNELL. [L. s.]

RANDOLPH SHROPSHIRE. [L. s.]

THOMAS B. SHROPSHIRE. [L. s.]

Witnesses:

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