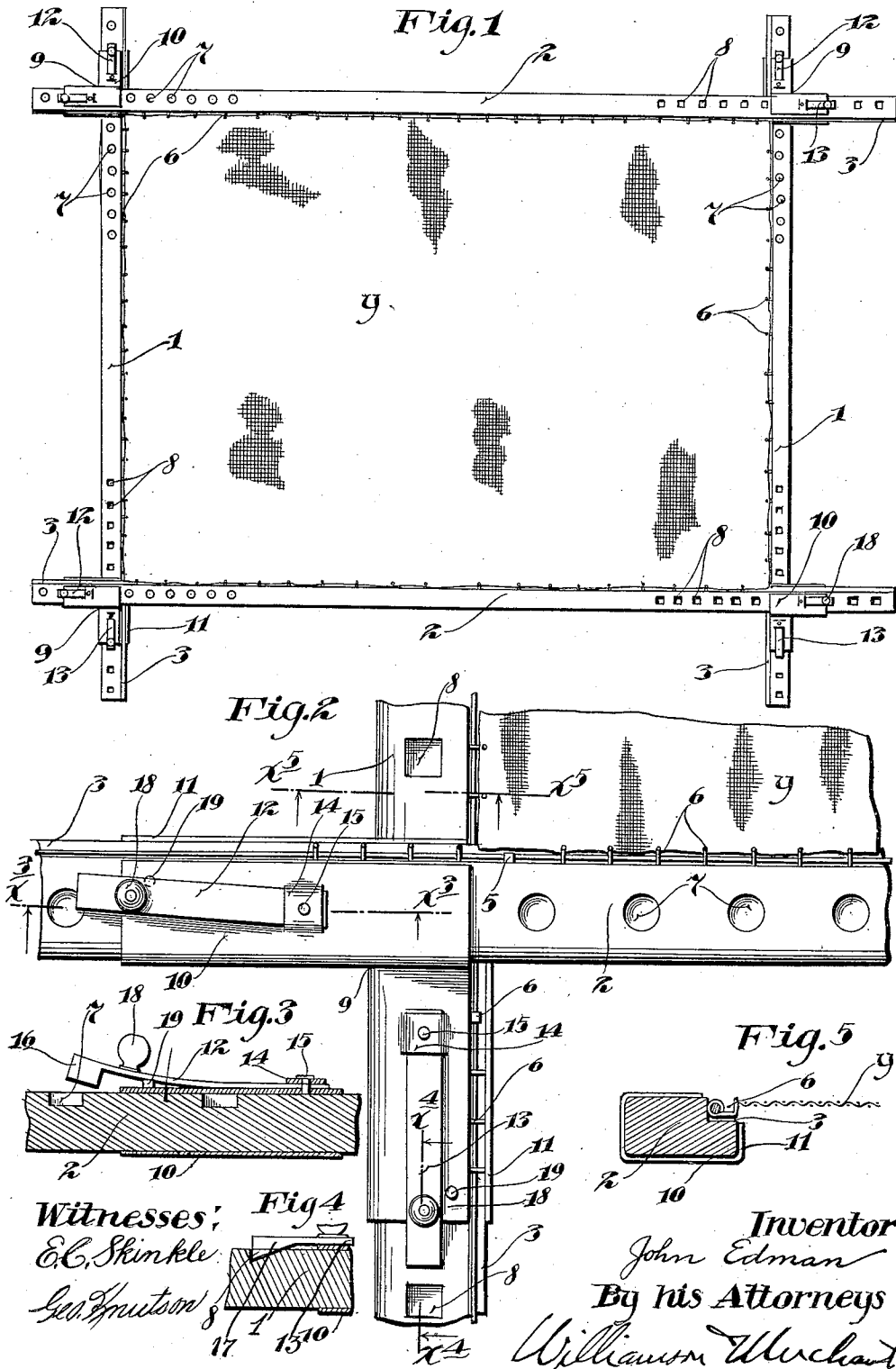


J. EDMAN.
CURTAIN STRETCHER.
APPLICATION FILED MAR. 20, 1912.

1,060,829.

Patented May 6, 1913.



Witnesses:
E.C. Skinkle
Geo. H. Hutton

Fig. 4

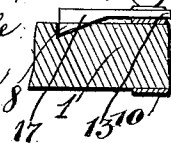
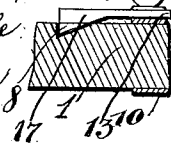


Fig. 5

Inventor,
John Edman
By his Attorneys
William M. Merchant

UNITED STATES PATENT OFFICE.

JOHN EDMAN, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO CALEB M. LARSON AND ONE-HALF TO CARL H. OLSON, BOTH OF MINNEAPOLIS, MINNESOTA.

CURTAIN-STRETCHER.

1,060,829.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed March 20, 1912. Serial No. 685,079.

To all whom it may concern:

Be it known that I, JOHN EDMAN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Curtain-Stretchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an adjustable frame for stretching curtains and various other analogous articles, and to this end, it consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a plan view of the improved curtain stretcher having a curtain secured thereto; Fig. 2 is a detail view, on an enlarged scale, showing one of the corner brackets and connected portions of the frame bars; Fig. 3 is a detail view in longitudinal section, taken on the line $x^3 x^3$ of Fig. 2; Fig. 4 is a detail view in longitudinal section, taken on the line $x^4 x^4$ of Fig. 2; and Fig. 5 is a detail view in transverse section taken on the irregular line $x^5 x^5$ of Fig. 2.

The frame of the improved curtain stretcher, as shown, comprises a pair of relatively short bars 1 and a pair of relatively long bars 2, in rectangular arrangement with their ends crossed. These bars 1 and 2 are, as best shown in Fig. 5, rectangular in cross section, and their upper inner edges are cut away to form longitudinally extended notches 3 in which hook supporting rods 4 are mounted. Clips 5 connect the rods to the bars 1 and 2 and hold them spaced apart therefrom. Slidably mounted on the rods 4 is a multiplicity of hooks 6 adapted to engage and hold the edges of a lace curtain or other analogous articles. Longitudinally spaced lock pockets 7 are formed in one end of each of the bars 1 and 2 and ratchet tooth depressions 8 are formed in the other ends of said bars. Corner brackets 9 connect the crossed ends of the bars 1 and 2. Integrally formed with each bracket 9 is a pair of

angular sleeves 10, in which the crossed ends of the bars 1 and 2 are slidably mounted. The sleeves 10 of each pair are located, one above the other and extend at right angles to each other. Longitudinally extended slots 11 extend completely through the sleeves 10 and are arranged to register with the notches 3 to leave free passages for the hooks 6, as best shown in Fig. 5.

Coöperating with each set of lock pockets 7 and with each set of ratchet teeth depressions 8 is, respectively, a latch 12 and a latch 13. Each of these latches comprises a comparatively long flat spring bar, having its inner end passed through a loop strap 14, pressed from the upper face of the coöperating sleeve 10 and pivotally secured thereto by means of a rivet 15 for a limited lateral swinging movement. The free or outer ends of the latches 12 and 13 extend beyond the outer ends of the sleeves 10 and terminate, respectively, in downwardly extending lock detents 16 and lock pawls 17. Lock detents 16 and lock pockets 7 coöperate to adjustably and rigidly secure, one end of each bar 1 and 2 to the sleeves 10, in which they are slidably mounted. And the lock pawls 17 and ratchet teeth depressions 8 coöperate to secure the other ends of the bars 1 and 2 to the sleeves 10, in which they are mounted, against inward sliding movement but with freedom for outward sliding movement. Finger pieces 18 are secured to the upper faces of the latches 12 and 13, near their free outer ends. Upwardly projecting rest pins 19 are integrally formed on the upper faces of the sleeves 10 and are located at one side of the latches 12 and 13. By lifting the latches 12 and 13 and swinging the same laterally, they may be held in in-operative positions by the rest pins 19. With reference to Fig. 1, it will be noted that both of the sleeves 10 of the corner bracket 9 at the upper left hand corner of the frame, are both equipped with latches 12, while the sleeves 10 of the diagonally opposite bracket 9 is equipped with latches 13. The sleeves 10 of the other two brackets 9 are equipped with both of the latches 12 and 13, although in reverse order, the purpose of which will presently appear.

The improved curtain stretcher is put together and operated in the following briefly stated manner: The ends of one of

each of the bars 1 and 2, having the lock pockets 7, are first mounted in the sleeves 10 of the corner bracket 9 equipped with the latches 12, as shown at the upper left hand corner of Fig. 1. These two bars 1 and 2, when thus secured, extend at right angles to each other and are held by the latches 12 against endwise movements in either direction, with respect to the connected corner bracket. It might be here stated that at this corner of the frame is the starting point for securing the curtain *y* on the improved stretcher. At the diagonally opposite, or lower right hand corner of the frame, the ends of the other two bars 1 and 2 having the ratchet teeth depressions 8 are slidably mounted in the sleeves 10 of the corner bracket 9 equipped with the latches 13. At this corner, the right hand bar 1 and the lower bar 2 are adjustably and positively held against inward movement but are free to be moved outward under the ratchet-like action of the latches 13 and depressions 8. The other two corners of the frame are connected by the corner brackets 9 equipped, each with one of the latches 12 and 13. As is evident, by this arrangement of the latches 12 and 13, the right hand bar 1 is free to be moved outward to stretch the curtain lengthwise and the lower bar 2 is free to be moved downward to stretch the curtain crosswise.

What I claim is:

1. In a frame of the kind described, the combination with bars in angular adjustment, of corner brackets connecting said bars, and a pair of latches carried by each of said brackets, certain of said latches having adjustable and positive locking engagement with said bars and certain of said latches having a ratchet-like engagement with said bars, one of said brackets being equipped with the positively locking latches and the other of said brackets being each equipped with one of the positively locking latches and with one of the ratchet acting latches.

2. In a frame of the kind described, the

combination with bars in angular arrangement, of corner brackets connecting said bars, spring latches carried by said brackets, the latches at one of the ends of said bars having positive locking engagement therewith and the latches at the other ends of said bars having a ratchet-like engagement therewith, and means for holding said latches in in-operative positions.

3. In a frame of the kind described, the combination with bars in angular arrangement, of corner brackets connecting said bars, spring latches pivotally connected to said brackets, the latches at one of the ends of said bars having positive locking engagement therewith and the latches at the other ends of said bars having a ratchet-like engagement therewith, rest lugs on said brackets for holding said latches in in-operative positions.

4. In a frame of the kind described, the combination with bars in angular arrangement, of corner brackets connecting said bars, and latches carried by said brackets, certain of said latches having adjustable and positively locking engagement with said bars, and certain of said latches having a ratchet-like engagement with said bars, said latches being arranged to permit opposite bars to be moved away from each other with a ratchet-like movement, but positively holding said bars against endwise movement.

5. In a frame of the kind described, the combination with bars having longitudinally spaced lock pockets, of corner brackets having guide sleeves in which said bars are slidably mounted, spring latches pivotally connected to said sleeves for limited lateral movements and coöperating with said lock pockets to hold the bars in different adjustments, and rest lugs for holding said spring latches in in-operative positions.

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

JOHN EDMAN.

Witnesses:

MILDRED L. MUMMA,
HARRY D. KILGORE.