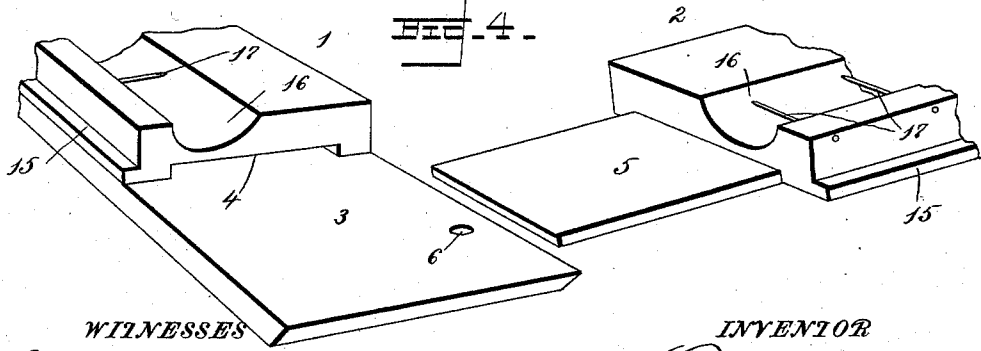
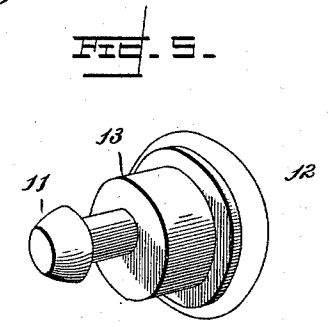
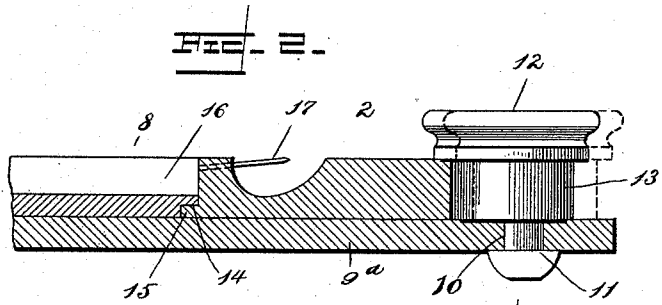
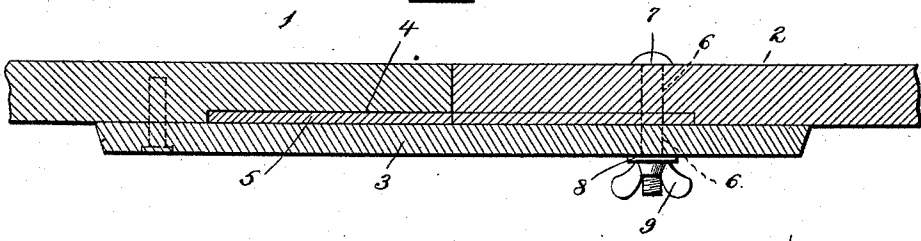
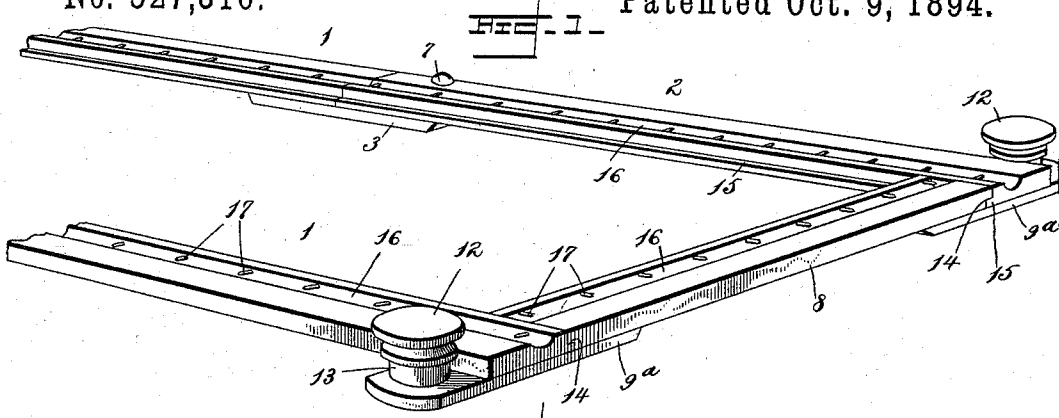


(No Model.)

M. V. BONSELL.
LACE CURTAIN FRAME.

No. 527,316.

Patented Oct. 9, 1894.



WITNESSES

INVENTOR

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UNITED STATES PATENT OFFICE.

MILLIE V. BONSALE, OF SALEM, OHIO, ASSIGNOR TO THE PELZER ART CO., OF SAME PLACE.

LACE-CURTAIN FRAME.

SPECIFICATION forming part of Letters Patent No. 527,316, dated October 9, 1894.

Application filed March 19, 1894. Serial No. 504,216. (No model.)

To all whom it may concern:

Be it known that I, MILLIE V. BONSALE, a citizen of the United States, residing at Salem, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Lace-Curtain Frames; 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 relates to improvements in lace-curtain frames and has for its objects to produce a cheap and simply constructed frame to which the curtains may be readily applied and removed, which is capable of being separated and compactly stored, also of being reduced in length for the purpose of producing a shorter frame, to provide for a simple, strong, and convenient connection between the side bars of the frame, to set the pins for engaging the curtain and locate the same in such manner as to be out of the way and in the same plane as the rails, and finally to provide for a simple, convenient adjustment of the side and end bars whereby they always produce a right-angle and obviate the necessity of measuring and adjusting for this purpose.

Various other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective view of a frame constructed in accordance with my invention. Fig. 2 is a transverse sectional view through one of the binding cams. Fig. 3 is a longitudinal sectional view through one of the side bars. Fig. 4 is a detail of the two meeting ends of said side bars. Fig. 5 is a perspective view of one of the cams in detail.

Like numerals of reference indicate like parts in all the figures of the drawings.

In the practice of my invention I employ the longitudinal opposite side bars and their connecting end bars. The side bars are composed of two sections 1 and 2, having their ends abutting at the longitudinal center of the bar, and secured to the under side of the section 1 is a cleat 3. The section 1 has its

abutting end provided with a mortise 4. The section 2 is provided at its abutting end with a tenon 5 adapted to removably fit in the mortise 4 of the section 1, whereby as will be obvious the two sections are adapted for removable connection, and the section 2 is overlapped by the projecting end of the cleat 3. The cleat 3 and the section 2 are provided with a perforation 6, and through the same is passed a bolt 7, one end of which (above the section 2) is threaded and is provided with a washer 8, and thumb-nut 9. When the two sections have been thus assembled and the bolt placed in position and the nut run down upon the bolt, it will be seen that a rigid connection is formed between the two sections, and that, in practical effect, the sections constitute a continuous bar. The end bars 8 have applied to their under sides adjacent to their extremities, cleats 9^a which project beyond the end bars, and which near their outer ends are provided with circular openings 10. Extending up through the openings 10 are headed pins 11, which may be glued or otherwise secured within the openings, and upon each pin there is arranged a rotatable binding-knob 12, the same being eccentrically bored to receive the upper end of the pin, and being provided with a reduced binding portion 13. The ends of the end bars are undercut or rabbeted as indicated at 14.

It will be understood that in operation the extremities of the side bars overlap the cleats 9^a and are interposed between the ends of the end bars and the eccentrically mounted knobs, so that having been adjusted to a proper point, a simple turning of the knobs will cause the binding surfaces 13 thereof to bind against or impinge upon the outer edges of the side bars and secure them against the ends of the end bars. The side bars are furthermore provided along their inner edges with ribs 15, and these take into and slide within the rabbeted portions 14 of the end bars, so that the inner edges of the side bars are overlapped by the ends of the end bars, and also by the enlarged heads of the eccentrics. In this manner a most rigid connection is formed, and the side and end bars all

ways produce a right-angle, in that the ends of the end bars are squared accurately in a manner obvious.

The upper surfaces of the side and end bars are between their outer and inner edges, and slightly nearer the latter than the former, provided with a groove or channel 16, and set into the inner side of said groove or channel and projecting toward the outer edges of the bars, is a series of pins 17, the same being disposed substantially horizontally and below the plane or upper surfaces of the side and end bars.

This completes the construction of the frame, and it will be observed that it may be adjusted with ease and convenience, as well as accuracy, and that by removing the bolts and applying the end bars to merely one section of the side bars, the frame is reduced in size. It will furthermore be observed that by a removal of the end from the side bars and the bolts that connect the sections of the side bars, the whole device may be compactly arranged for shipment or storage. The disposition of the pins prevent them from becoming bent, renders them rigid, and being located below the surfaces of the side and end bars they are out of the way and yet at the same time are in such position as to readily receive or be disengaged from the curtains.

I do not limit my invention to the precise details of construction herein shown and described, but hold that I may make such variations therein as come within the skill and

knowledge of the mechanic without departing from the spirit or sacrificing any of the advantages of the invention.

Having described my invention, what I claim is—

1. In a frame of the class described the combination with an end bar having an undercut end and a projecting portion below the same, of a side bar arranged movably upon the projecting portion and beyond whose outer edge said projecting portion extends and having a rib at its inner edge for engaging the undercut-portion, and a binding device arranged upon that portion of the projecting portion lying beyond the side-bar, substantially as specified.

2. In a frame of the class described the combination with an end bar having an undercut end and a projecting portion below said end, of a side bar mounted upon and adapted to slide over the projecting portion, and having a rib at its inner edge engaging the undercut portion, said projecting portion extending beyond the side bar and a binding-knob eccentrically journaled upon the projection beyond the outer edge of the side bar, substantially as specified.

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

MILLIE V. BONSALE.

Witnesses:

JESSIE CURTIS,
C. W. STREET.