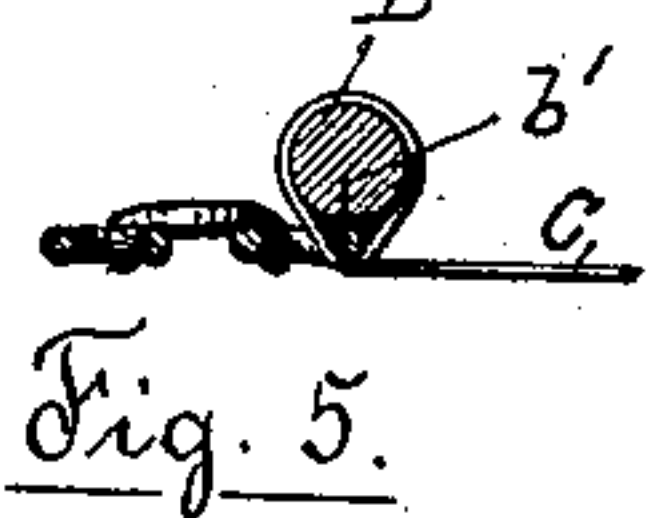
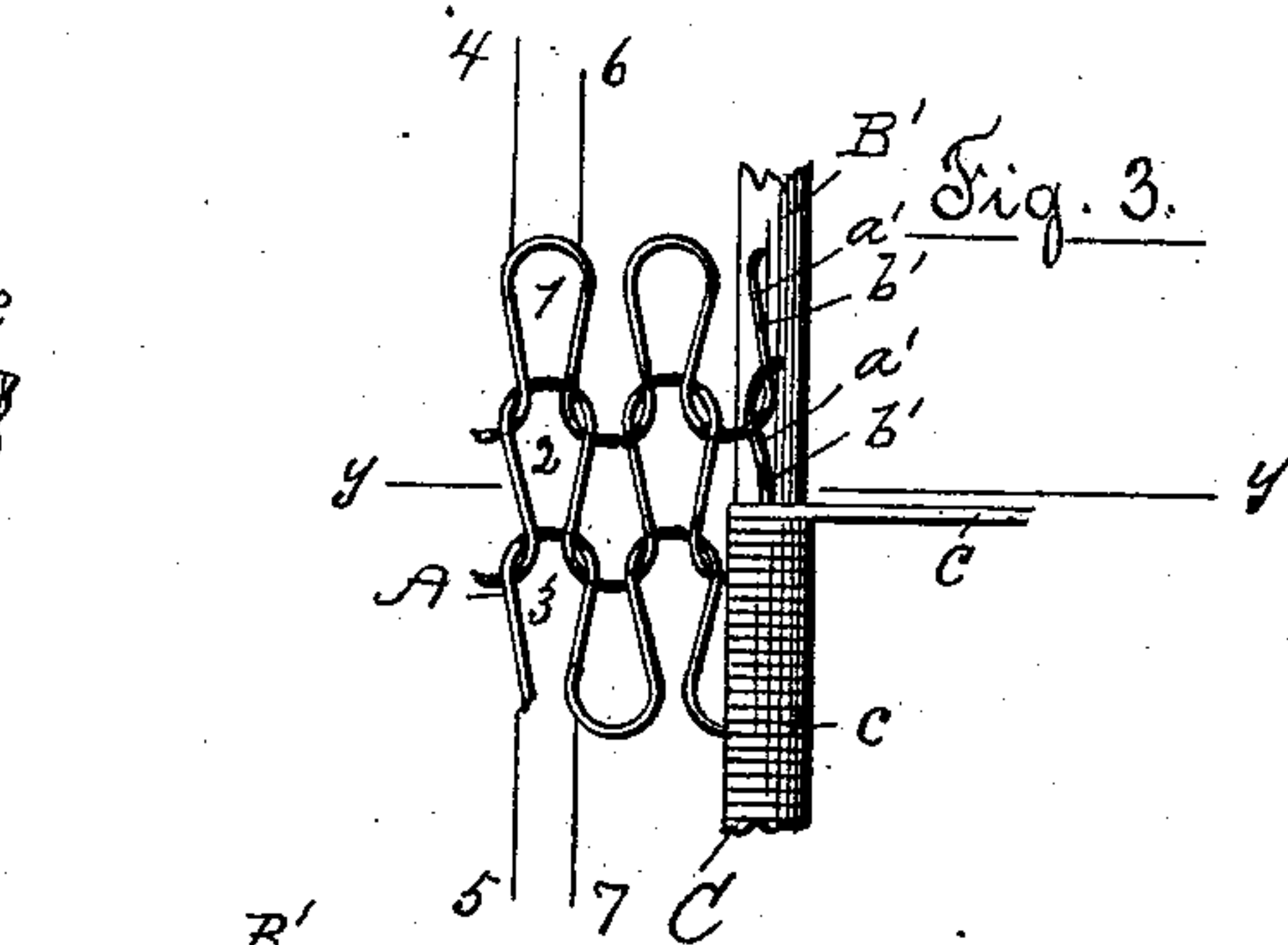
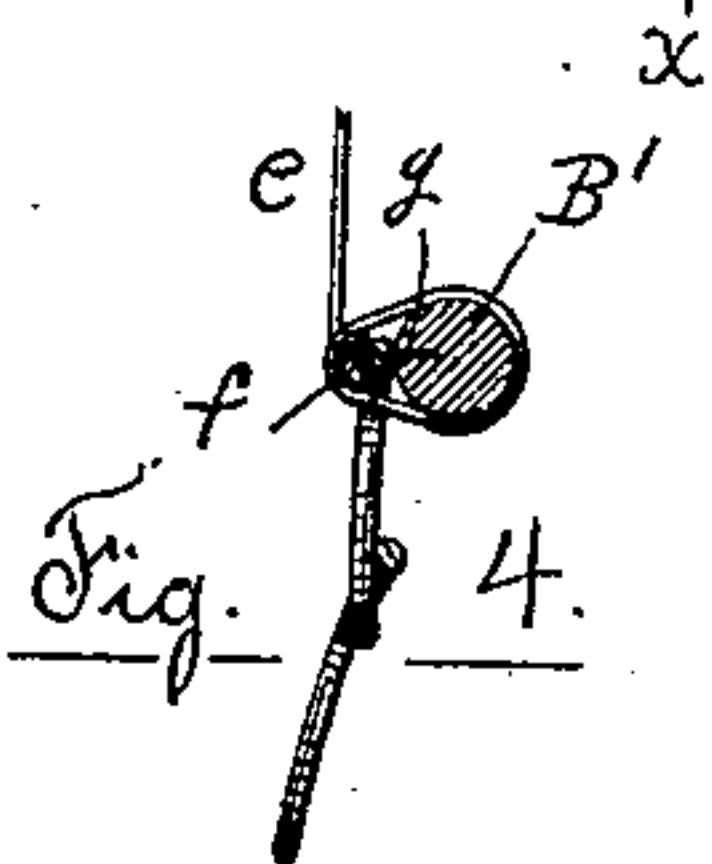
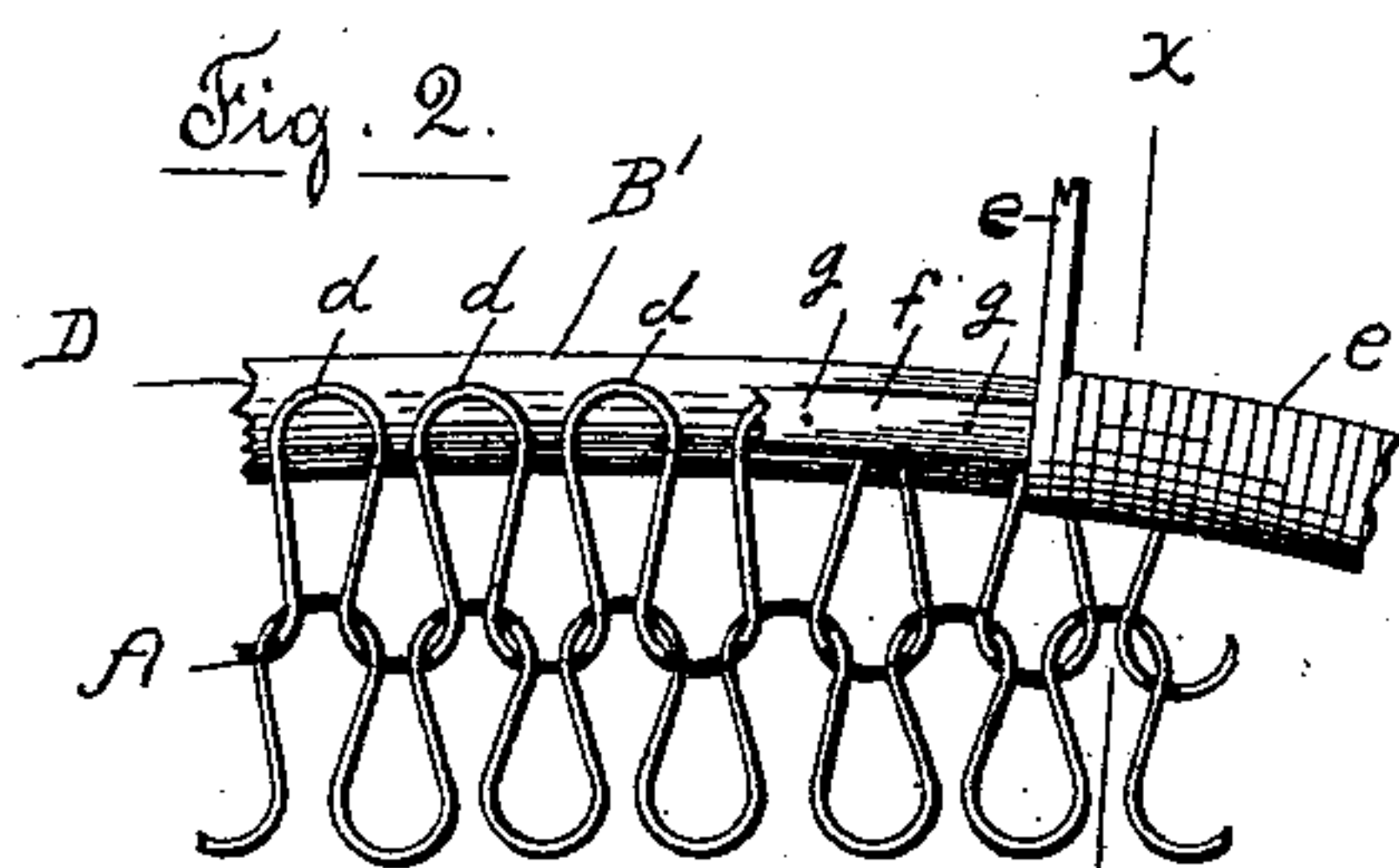
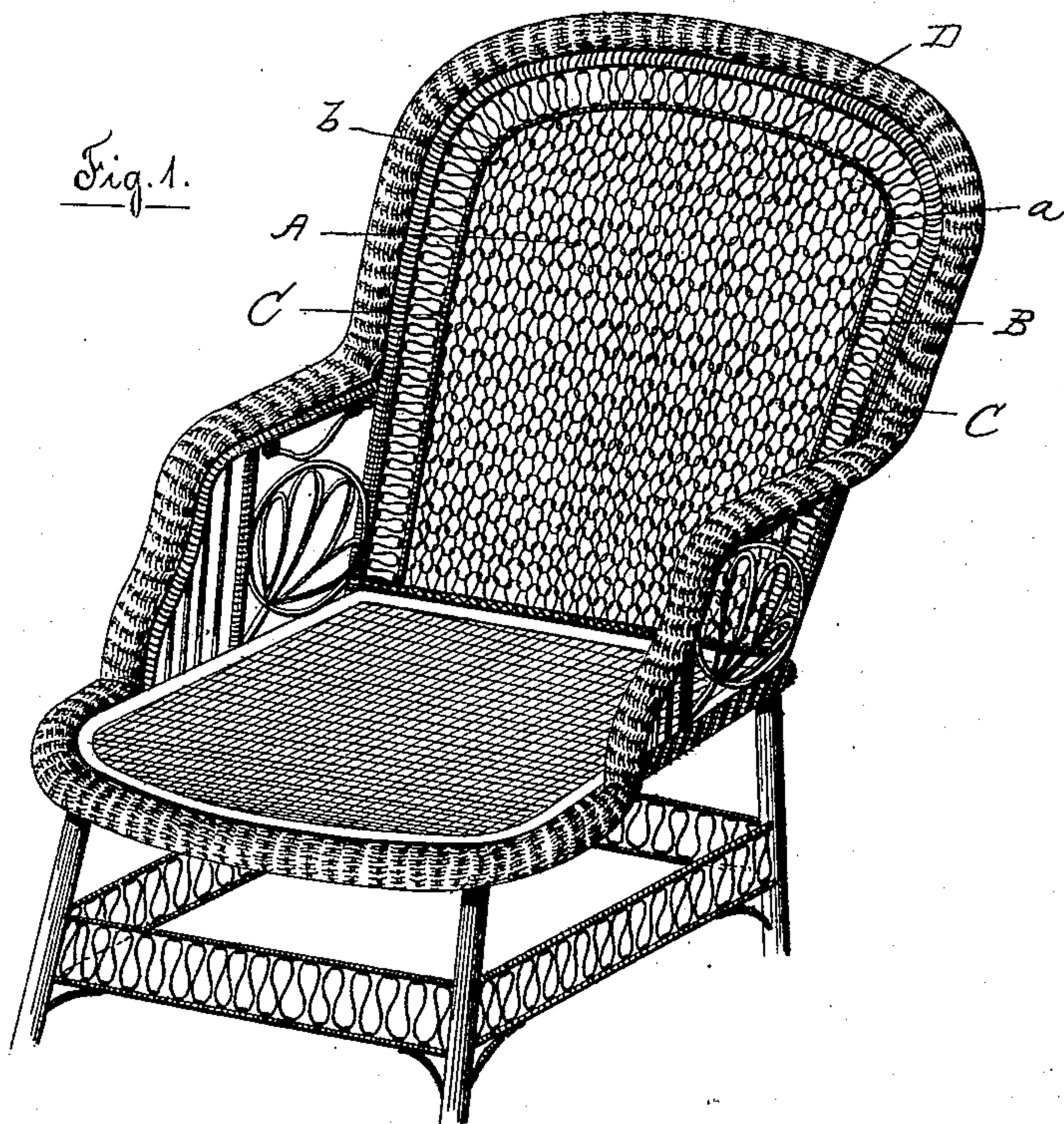


(No Model.)

E. L. TAFT.
RATTAN FURNITURE.

No. 437,462.

Patented Sept. 30, 1890.



Witnesses
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EDWARD LOVELL TAFT, OF GARDNER, ASSIGNOR OF ONE-HALF TO HENRY MURDOCK RICH, OF ATHOL, MASSACHUSETTS.

RATTAN FURNITURE.

SPECIFICATION forming part of Letters Patent No. 437,462, dated September 30, 1890.

Application filed January 30, 1888. Serial No. 262,461. (No model.)

To all whom it may concern:

Be it known that I, EDWARD LOVELL TAFT, a citizen of the United States, and a resident of Gardner, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Rattan Furniture, of which the following is a specification, accompanied by drawings which form a part of the same, and which represent a portion of a rattan chair, with detailed views illustrating the features of my invention.

Figure 1 represents a portion of a rattan chair embodying my invention. Fig. 2 is an enlarged view showing the mode of construction of the portion of the chair-back between *a* and *b*, Fig. 1. Fig. 3 is a similar view showing the construction of the sides *c c* of the back of the chair. Fig. 4 is a sectional view on the line *x x*, Fig. 2, and Fig. 5 is a sectional view on line *y y*, Fig. 3.

Similar letters refer to like parts in the different figures.

My invention relates to the method of uniting a knit rattan fabric to the frame-work of different kinds of rattan furniture, as hereinafter described, and set forth in the annexed claims.

My invention is illustrated in the accompanying drawings, and is herein described as applied to the back of a chair. (Shown in perspective view in Fig. 1 of the drawings.)

A denotes a panel formed of a knit rattan fabric, also illustrated in enlarged view in Figs. 2 and 3, and consisting of a series of interlocked loops. The sides of each loop in the knit fabric form substantially a straight line with the corresponding sides of its connected loops, the sides of the loops 1 2 3, Fig. 3, being coincident with the straight lines 4 5 and 6 7.

B denotes the frame-work of the chair-back, to which the knit fabric *A* is attached, and consists in the chair represented in the drawings of a bent bar *B'*, Figs. 2 and 3, fastened at its ends to the frame-work of the chair-seat, forming the nearly vertical sides *C C*, with a bent section *D*, the inclosed space forming a panel filled by the knit fabric *A*, which is large enough to overlap the bent bar *B'*, so the edges of the knit panel *A* will rest upon the center of the bar.

The knit fabric *A* forming the panel is

placed on the frame-work with its loops in the position shown in Fig. 1, with the longer diameter of the loops placed vertically, in order that the longitudinal sides of the loops may rest upon the vertical sides *C C* of the bent bar *B'*, as shown at *a' a'*, Fig. 3, the sides of the loops substantially coinciding with the center line of the side *C* of the bent bar *B'*. The sides of the loops are then fastened to the sides *C C* by nails or pins *b' b'*, Fig. 3, and both the bar *B'* and the overlying sides of the loops are wound with a thin strip or band of rattan *C*, firmly binding the sides of each loop to the sides *C C*, and forming when finished a bar of substantially the same diameter throughout its entire length.

I am aware that chairs have been made in which the frame-work was provided with a groove upon the side next the panel of knit fabric, in which the longitudinal sides of the edge loops were placed and united with the frame by means of a thin strip of rattan. In that method of construction the strain upon the loop so united to the frame was directly away from the frame and in a line passing through the center of the frame. The entire strain was thus brought upon the thin winding strip of rattan.

In the method shown in the accompanying drawings and herein described the longitudinal sides of the edge loops are laid upon and not against the bar *B'*, and the strain upon the loops is tangential to the bar *B'* instead of diametrical thereto, thereby relieving the winding strips of the direct strain upon the loops. By the one method the office of the winding strip is to hold the longitudinal sides of the loops against the sides of the frame in a line coincident with the line of strain upon the loops. In the other the office of the winding strip is to hold the longitudinal sides of the edge loops against the side of the frame, but in a line at right angles to the line of strain.

The bent ends *d d d*, Fig. 2, of the loops are placed upon the bent section *D* of the bar *B'*, as shown in Fig. 2, and a strip *e* of rattan is placed over the curved ends of the loops in order to form a continuous bar over which to wind a binding strip or band *e* of rattan, by which the strip or band *f* of rattan is drawn

down firmly upon the bent ends of the loops, firmly clamping them between the band *f* and the curved section D of the bar B'.

In order to retain the parts in place preparatory to winding and hold them from any displacement while they are being wound, I usually secure the strip or band *f* and the loops by means of nails or pins *g g*, Fig. 2, and in sectional view in Fig. 4.

It has been usual heretofore in fastening a knit fabric of rattan—such as is shown at A, Fig. 1—to the supporting frame-work of furniture, to attach the bent ends of the loops to the frame by placing the end of the loop against the frame instead of upon it, and securing the loop by a staple or by winding a thin strip or band of rattan around the frame and passing a few coils of the band through the loop. In order to attach the longitudinal sides of the knit fabric, posts have been employed having a groove into which the edge of the fabric was inserted, and the grooved post was then wound with a strip or band of rattan in a similar manner. Such a method of attaching the knit fabric to the back of a chair was made the subject of Letters Patent No. 323,206, granted to Henry Murdock Rich on the 28th day of July, 1885. In the methods above mentioned the longitudinal side of the loops is partially inclosed by the winding strip or band, the post when wound is not of a uniform diameter, and the strain upon the panel forming the back of the chair is entirely resisted by the tensile strength of a limited number of the coils of the winding strip or band.

By my improved method of attaching the knit fabric to the supporting-frame, I distribute the strain nearly uniformly upon all the coils of the winding strip or band of rattan. The bar forming the frame is maintained at a nearly uniform diameter throughout its length, and the strain upon the binding strip or band is very much reduced by means of the friction of the loops upon the frame-work, it being obvious that a much less strain will be exerted upon the bands *c* and *e* to maintain the panel in place in consequence of the loops being firmly bound upon the bar B'.

Although I have illustrated my invention only with reference to its use in forming a chair-back, yet it will be evident that it is equally applicable in all cases where a knit fabric of rattan is united to a supporting frame-work in furniture or analogous articles. What I claim as of my invention, and desire to secure by Letters Patent, is—

1. The combination, with a supporting-bar forming a portion of the frame, of a knit fabric lying in a plane which is tangential to said bar, and having the sides of the loops

at the edge of the fabric lying upon said bar, and a winding strip of rattan wound around and inclosing said bar and the sides of the loops lying thereon, so the strain upon the knit fabric is in a line tangential to said supporting-bar, substantially as described.

2. The combination, with a supporting-bar forming a portion of the frame-work, of a knit fabric, with the curved ends of its loops forming the edge of the fabric laid upon said supporting-bar, a binding-strip laid upon and transversely across the curved ends of said loops, said strip being parallel with said supporting-bar, and a winding strip or band wound around and inclosing said binding-strip and said supporting-bar and clamping the curved ends of said loops firmly between them, substantially as described.

3. In combination, the supporting-bar forming a portion of the frame-work, a knit fabric, with the curved ends of the loops forming the edge of the fabric overlapping said supporting-bar, a strip or bar placed on and transversely across the curved ends of said loops, said overlying bar and the curved ends of said loops being nailed to said supporting-bar and a winding strip or band wound around and inclosing said supporting-bar and said overlying bar and clamping the curved ends of said loops between them, substantially as described.

4. The combination of the bent bar B', forming a portion of the frame-work and having the sides C C and bent section D, a knit fabric A, forming a panel within the bar B', the longitudinal sides of the loops forming the vertical sides of said knit fabric overlying the sides C C and being nailed thereto, and a winding strip or band *c* inclosing said sides and the sides of the loops, substantially as described.

5. The combination of the bent bar B', forming a portion of the frame-work and having the sides C C and the bent section D, a knit fabric A, forming a panel within the bent bar B', the curved ends of the loops forming the edge of the fabric bounded by the bent section D, overlying the bar B', a binding strip or bar *f*, placed transversely across the overlying curved ends of said loops, said bar or strip *f* and the curved ends of said loops being nailed to the bar B', and a winding strip or band *e*, wound around and inclosing said bar B', bar *f*, and the curved ends of said loops, substantially as described.

EDWARD LOVELL TAFT.

Witnesses:

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