No. 649,967. Patented May 22, 1900.

F. M. TINKHAM.

CORNER FASTENING FOR METAL BEDS.

(Application filed Sept. 16, 1898.)

(No Model.)

Fig. 1.

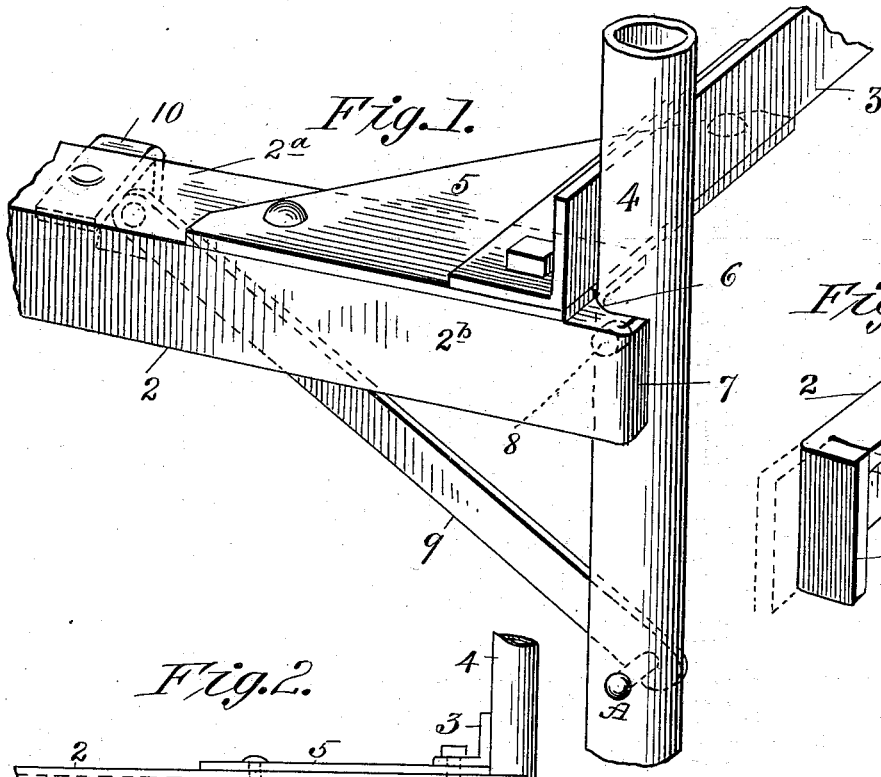


Fig. 4.

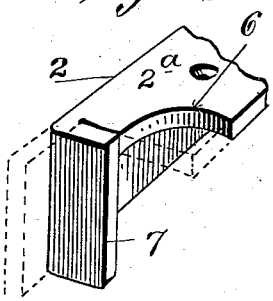


Fig. 2.

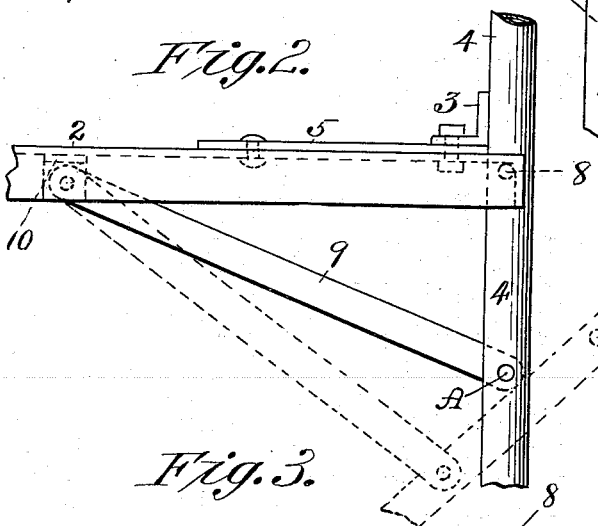


Fig. 5.

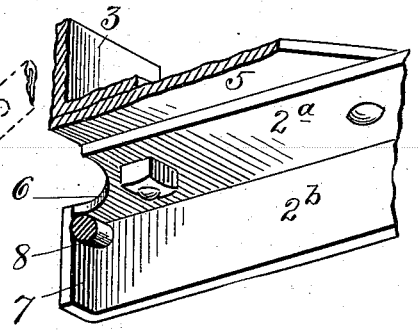
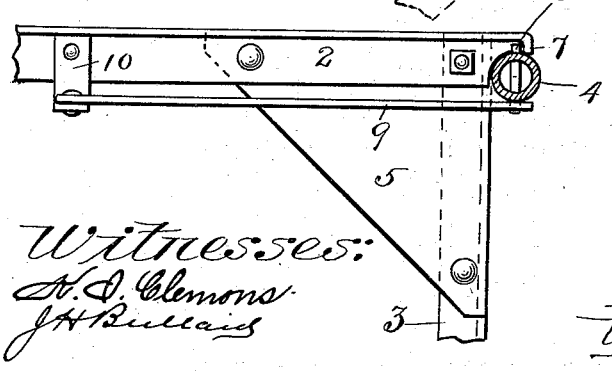


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRANCIS M. TINKHAM, OF SPRINGFIELD, MASSACHUSETTS.

CORNER-FASTENING FOR METAL BEDS.

SPECIFICATION forming part of Letters Patent No. 649,967, dated May 22, 1900.

Application filed September 16, 1898. Serial No. 691,083. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS M. TINKHAM, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Side-Rail and Post Connections for Metal Beds, of which the following is a specification.

This invention relates to the construction of metal bedsteads, and has special reference to the construction of a fastening device for the corner-posts and side rails of a bed; and the invention consists in the construction fully set forth in the following specification and clearly pointed out in the claim.

In the drawings forming part of this specification, Figure 1 is a perspective view of parts of a side rail, end rail, and post of a bedstead embodying this construction. Fig. 2 is a side elevation, on a smaller scale, of the parts shown in Fig. 2, some of said parts being shown in a different position in dotted lines. Fig. 3 is a bottom plan view of Fig. 2. Fig. 4 is an enlarged perspective view of one end of a side rail of a bedstead made according to this invention. Fig. 5 is an enlarged perspective view of the under side of one end of a side rail of a bed, showing part of the end rail and a stiffening-plate extending across the corner of the bed.

This invention is particularly applicable to bedsteads in which the side and end rails are rigidly united to form a rectangular frame, and to which frame the corner-posts are pivotally united by a bar, which when the parts are in operative position forms a diagonal brace between said posts and rectangular frame.

Referring to the drawings, 2 2 represent the side rails of a bedstead, 3 3 the end rails, and 4 one of the posts thereof. Said side and end rails are of ordinary construction and made of L angle-iron secured together to form a rectangular frame, the ends of the side rails projecting somewhat beyond the end rails at the point of intersection of said side and end rails. A triangular plate 5 is interposed between the side and end rails at the corners of said frame, and rivets secure said rails to said plate, and a bolt at the corner of the frame passes through both of said rails and said plate. A rivet may be substituted for said bolt, if desired.

At the end of the side rail 2 and in the upper or horizontal side 2^a thereof, which projects beyond the side of the end rail 3, a cut 6 of circular form is made, as shown in Figs. 4 and 5, said cut having substantially the same radius as that of the tubular post 4. Said post fits closely in said cut, which is so located relative to the end of the side rail that when said post occupies its proper position relative to the end and side rails, as in Fig. 1, a part of the horizontal portion of the latter will project beyond the vertical center of said post, and the width of that part of the upper side 2^a which is located between the vertical side 2^b and said post determines approximately the distance between said post and the perpendicular or vertical side 2^b of said rail. The horizontal side 2^a of said side rail terminates nearer the post 4 than the vertical side 2^b, (see Fig. 4,) the latter being extended, as shown in dotted lines in said figure, far enough beyond the end of said upper side 2^a to permit the end of the vertical side 2^b to be folded at right angles to the plane of its surface over against the end of the upper side 2^a and form with that part of the side 2^a between the circular cut 6 and the inner surface of the perpendicular side 2^b a box-like inclosure closed at the top and end and opening toward said post 4 and at the bottom, said folded-over portion of the side rail being indicated by 7. On said post 4 at a point opposite the open side of said box-like inclosure a pin 8 is fixed or held in the side thereof and projects at right angles therefrom under that part of the horizontal portion of the side rail lying between said cut 6 and the perpendicular side 2^b of said rail, said pin lying inside of the folded-over portion 7 of the vertical side 2^b and under the horizontal side 2^a of the rail. The post 4 is connected with the side rail 2 of the bed by a metal brace-bar 9, pivotally connected to a clip 10, which is riveted to the side rail 2 at a suitable distance from said post, and the opposite end of said bar is pivotally connected by means of the pins or bolts A with said post at a suitable distance below the connection of the latter with the end of the side rail 2. The manner of effect-

ing the engagement of the said pin 8 with the box-like inclosure on the end of the side rail 2 will be readily understood by referring to Fig. 2, in which it is seen that said post 4 may first be swung downwardly far enough to allow said pin to clear the bottom of the side rail and may then be swung on said bar 9 away from the end of the bed-frame and back under said side rail for shipping purposes, as is common in this class of beds.

By forming a pin-receiving chamber on the end of the side rail of a bedstead, as described, whereby as the post 4 is swung up into the position shown in Fig. 1 said pin 8 thereon will come to a bearing against the under side of the upper or horizontal side of the side rail and will lie close to the folded-over end 7 of the perpendicular portion of the side rail, as shown in Fig. 5, a fastening device is formed for the post of the bed which is extremely simple and strong and of very small cost of construction. Said post is securely held in proper position relative to said rails by the said engagement of the pin with said side rail, and the latter are firmly supported on said pins 8. This construction also necessitates the movement of the pin the entire width of the side rail to release it from its engagement with the end of the rail, thereby rendering it more difficult to accidentally disengage the pin from the rail than if the rail were notched or slotted transversely, as in the latter case the slot could extend but a short distance across the rail and the movement of the pin that short distance would disengage it from the rail. Further than this, the bending of the extended portion of the end of the rail will add strength thereto and prevent the liability of bending the end of the rail in shipping or with the rough usage to which this class of articles is generally subjected. It will also cause the edge of the bent portion to engage with the side of the post and prevent the bottom of the rail from moving in toward the post, as it would otherwise have a tendency to do, being supported only by a short pair at one side of its vertical portion. It also gives to the bed a more finished appearance than if the edge of the horizontal portion of the rail were faced outward and the vertical portion were slotted near its end and the pin projected through said slot. Besides detracting from the looks, the slot would weaken the end of the rail by cutting the rail to a greater or less extent.

The brace-bar 9 holds the post rigidly in a vertical position, the bearing of the post on the edge of the cut 6 and the side of the end rail forming additional support thereto, and the folded-over portion 7 of the side 2^b of the rail by its engagement with the pin 8 prevents any movement of said post in the plane of the lengthwise dimension of said side rail. The end of the brace-bar 9 may have a hook engagement with said post, as shown in Fig. 1, or it may be secured permanently thereto by a pin, as indicated in the other figures.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a bedstead, the combination, with L-shaped angle side and end rails, the vertical portion of the side rails being longer than the horizontal web and folded over against a portion of the end thereof, the portion of the end of the horizontal web beyond the folded portion of the vertical web being cut away, of a triangular piece secured between the rails at each corner of the bed, a post at each corner of the bed provided with a pin which is of substantially the same length as the folded portion of the vertical web and is in a position to engage with the under side of the horizontal portion of the side rail when the post is in a vertical position and within the cut-away portion, and a brace pivotally secured to each end of each side rail at one of its ends and having its opposite end in engagement with the post at that corner of the bed below the pin.

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