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CORNER FASTENING FOR METAL BEDS AND THE LIKE.

APPLICATION FILED JUNE 4, 1914.

1,205,183. Patented Nov. 21, 1916.

Fig. 1.

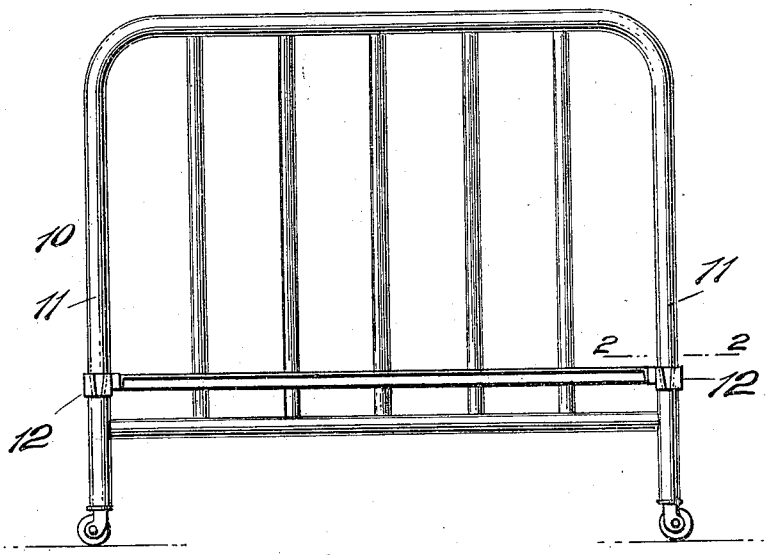


Fig. 2.

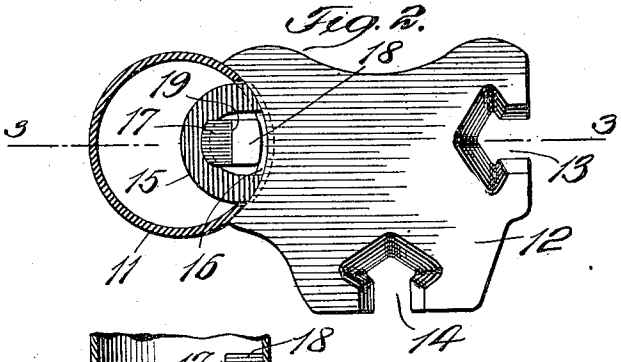


Fig. 3.

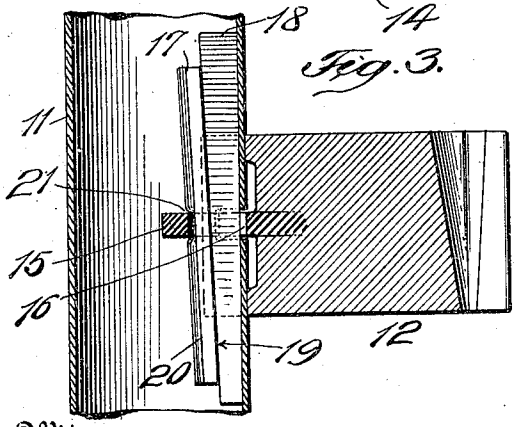


Fig. 4.

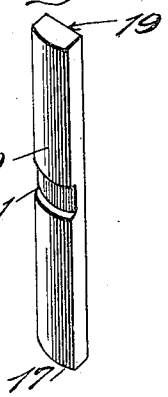


Fig. 5.



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UNITED STATES PATENT OFFICE.

LOUIS FRANK, OF BROOKLYN, NEW YORK, ASSIGNOR TO GREENPOINT METALLIC BED COMPANY, OF BROOKLYN, NEW YORK, A FIRM COMPOSED OF DAVID FRANK AND WILLIAM LIES, BOTH OF BROOKLYN, NEW YORK, AND JOHN TROUNSTINE, OF NEW YORK, N. Y.

CORNER-FASTENING FOR METAL BEDS AND THE LIKE.

1,205,183. Specification of Letters Patent. Patented Nov. 21, 1916.

Application filed June 4, 1914. Serial No. 842,841.

To all whom it may concern:

Be it known that I, LOUIS FRANK, a subject of the Czar of Russia, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Corner-Fastenings for Metal Beds and the like, of which the following is a specification.

The invention pertains to novel means for securing the chills employed in the manufacture of metal beds to receive the side and end rails which support the mattress or spring, to the tubular corner posts of the head and foot frames.

The difficulties connected with the convenient and adequate securing of the corner chills to the corner posts of tubular bedstead frames have long been recognized and many methods of securing the chills have been devised with a view of overcoming the same. It is essential that the chills closely engage the corner posts, since otherwise the side and end rails of the bedstead frame would sag and the frame itself would finally become ruined, and it is also essential that the chills be so secured to the corner posts that the head and foot frames may be freely handled, as in shipping, without danger of the chills becoming loosened.

The invention embodies novel means for efficiently and adequately securing the chills to the tubular corner posts, and said means comprise in connection with the corner post and chill, the latter having a strong metal loop or eye extending through a slot in the side of the post, two coöperating locking members, one being a wedge adapted to engage the inner vertical wall of the corner post and enter the loop or eye of said chill adjacent to said wall and comprising a broad flat surface at its side opposite to that which engages the inner wall of the post, and the other being a bar adapted to enter the outer portion of the eye or loop of the chill and having at one side a transverse groove to engage the inner surface of the outer end of the eye and become interlocked therewith and at its opposite side a broad flat frictional surface to be engaged by and engage the adjacent flat surface of the aforesaid wedge. The aforesaid bar is first interlocked in the outer end of the loop or eye of the chill and then the wedge is driven into position between the flat face of said bar and the inner vertical wall of the tubular corner post with such force as may be required. The bar is prevented from losing its position in the eye of the chill because it is interlocked therewith at the transverse groove in the outer face of said bar and the wedge is adequately held by reason of the extended bearing engagement it has with the face of said bar and the inner wall of the bed post. Wedges have heretofore been employed in connecting the corner chills of bedstead frames with the corner posts, but their frictional engagement has only been against the inner wall of the bedstead post and the narrow edge of the eye connected with the chill, whereas in accordance with my invention I interlock with the eye of the chill an elongated bar affording extended bearing surfaces for coöperation with the outer face of the wedge, and I have found that when the chills are secured by the means made the subject of this application, said chills maintain their position with great firmness and the securing means do not become detached even though the head and foot frames be roughly handled as they sometimes are by truckmen and shippers.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is an elevation of a head or foot frame of a metal bedstead embodying my invention; Fig. 2 is a horizontal section on a larger scale through a portion of the same on the dotted line 2—2 of Fig. 1; Fig. 3 is a vertical section through a portion of the same taken on the dotted line 3—3 of Fig. 2; Fig. 4 is a detached perspective view of the locking bar constituting one member of the

means employed for locking the chill to the corner post, and Fig. 5 is a corresponding view of the wedge constituting the other member of the locking means.

In the drawings 10 designates a customary form of tubular head or foot frame for a metal bedstead, 11 the corner posts, and 12 the corner chills provided with sockets 13, 14 to receive the fastenings ordinarily carried on the ends of the end and side rails of metal bedsteads, said chills varying in the form of their sockets and in some other details in accordance with the nature of the fastenings on the ends of the end and side rails of bedstead frames. The chills 12 correspond with each other, and hence it is sufficient that one chill be shown in Figs. 2 and 3. The chill 12 is formed with a vertical curved recess in its outer end adapted to closely engage the outer surface of the corner post 11, and said chill has secured within the material thereof, during the casting, a metal loop or eye 15 which is horizontal and in use projected through a slot 16 cut in the face of the corner post 11, so that said loop or eye when the chill is in position projects to a considerable extent into the interior of the corner post, as clearly illustrated in Figs. 2 and 3.

The locking means for securing the chill 12 to the corner post 11 comprise a locking bar 17 and wedge 18. The bar 17 is a vertically elongated bar having a flat inner face 19 and a curved outer face 20 and provided transversely of the middle portion of said outer face with a groove 21 which is of a width slightly greater than the thickness of the loop or eye 15 so that said groove may pass upon the inner edge of the outer end of said loop or eye and interlock, at the shoulders formed at the upper and lower edges of said groove, with said loop or eye, whereby the bar 17 becomes held in a fixed position in relation to the loop or eye and incapable finally of having any movement therein. The bar 17 has an adequate transverse width so that it may firmly engage the loop or eye 15 and also so that it may afford the flat surface 19 for coöperation with the wedge 18. The wedge 18 has a rounded inner surface conforming as nearly as may be to the surface of the inner wall of the corner post 11, and a flat outer face to directly engage and coöperate with the flat face 19 of the locking bar 17.

In securing the chill 12 to the corner post the first step is to insert the loop or eye 15 thereof through the slot 16 formed in the corner post and then apply the locking bar 17 within said loop or eye, engaging the groove 21 in said bar with the inner edge of the outer end thereof, after which the wedge 18 will be introduced and driven home between the flat face 19 of the bar 17 and the opposite wall of the corner post, said wedge then taking the position in which it is shown in Figs. 2 and 3. The wedge has a broad surface to frictionally engage the inner wall of the corner post and a broad flat face to engage the broad face 19 of the locking bar 17, and hence when said wedge is driven to position it will act to firmly secure the chill 12 against the outer side of the post and be itself held in position by the broad surfaces afforded by the inner wall of the post and the facing side 19 of the bar 17. During the driving of the wedge 18 to position the bar 17 may tilt within the loop or eye 15 so as to conform to the face of said wedge, but during this action the bar 17 will be held in fixed relation to the loop or eye 15 by reason of the fact that the shoulders at the ends of its groove 21 by engaging the upper and lower surfaces of the inner edge of the outer end of the loop or eye 15, hold said bar against vertical movement.

The means provided by me for securing the corner chills to the corner posts have proven to be highly efficient and remedy certain objections which have existed to securing devices heretofore employed for securing chills to corner posts.

What I claim as my invention and desire to secure by Letters Patent, is:

1. In a metal bedstead or the like having tubular corner posts, chills, and means for securing the same to said posts, said chills each having a loop or eye projected through the side of the post and said securing means comprising a locking bar interlocked intermediate its ends with the inner edge of the outer end of said loop or eye and extending above and below the same, and a wedge positioned between said locking bar and the adjacent wall of the corner post and extending through said loop or eye.

2. In a metal bedstead or the like having tubular corner posts, chills, and means for securing the same to said posts, said chills each having a loop or eye projected through the side of the post and said securing means comprising a locking bar extending vertically through said loop or eye and having a transverse groove to interlock with the inner edge of the outer end of said loop or eye and a wedge positioned between said locking bar and the facing wall of said corner post and extending through said loop or eye, said locking bar and wedge having extended bearing surfaces engaging each other and extending above and below said loop or eye.

3. In a metal bedstead or the like having tubular corner posts, chills each having a loop or eye projected through the side of the post, and means for securing said chills

to said posts comprising a vertically elongated locking bar transversely grooved and at said groove tiltably interlocked with said loop or eye and a wedge engaging said locking bar and the wall of the corner post and extending through said loop or eye.

Signed at Brooklyn, in the county of Kings and State of New York, this 1st day of June A. D. 1914.

LOUIS FRANK.

Witnesses:
ARTHUR MARION,
CHAS. C. GILL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."