D. F. DYKE.

CORNER LOCK FOR BEDSTEADS.

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1,269,691.

Patented June 18, 1918.

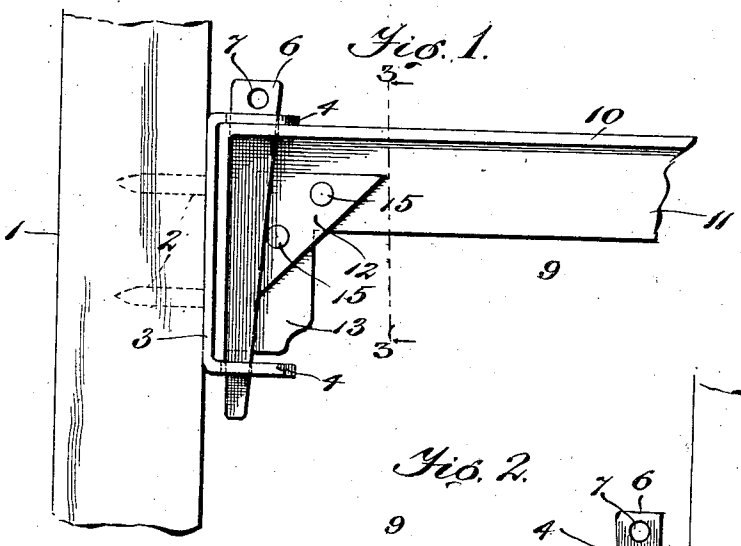


Fig. 1.

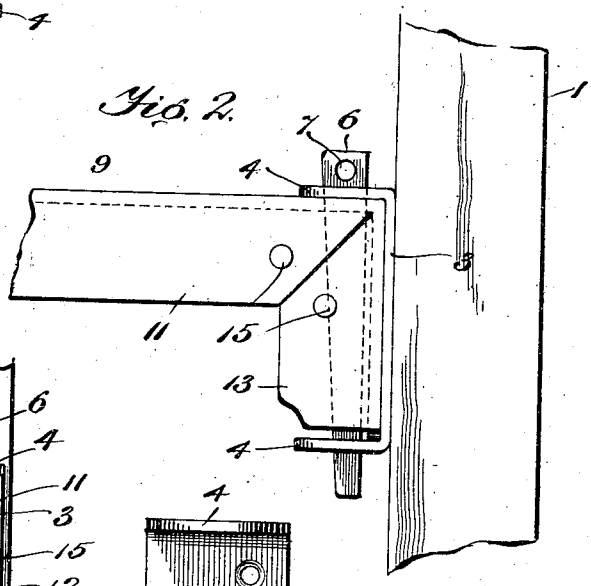


Fig. 2.

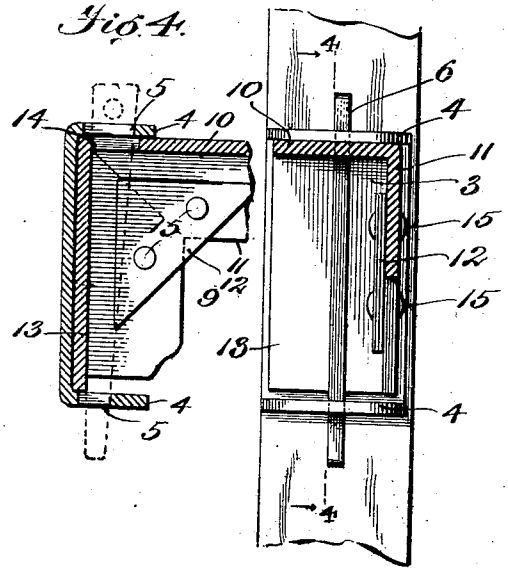


Fig. 4.

Fig. 3.

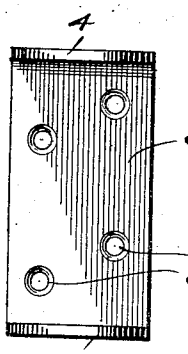


Fig. 5.

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CORNER-LOCK FOR BEDSTEADS.

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To all whom it may concern:

Be it known that I, DARRELL F. DYKE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Corner-Lock for Bedsteads, of which the following is a specification.

This invention relates to corner-locks for bedsteads; and the principal objects of the invention are to reduce the cost of such articles by substituting a simple and inexpensive means for securing the rails to the corner-posts of the bedstead for the more or less complicated and expensive devices now commonly employed for this purpose, and yet, at the same time, to retain the necessary strength and rigidity in structures of this character.

Other, though minor, objects of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

Referring to the drawing:

Figure 1 is a side elevation of a corner-post of a bedstead and rail, the two being locked together in accordance with my invention;

Fig. 2 is a reverse view of Fig. 1;

Fig. 3 is a vertical transverse sectional view of Fig. 1, the view being taken on the line 3—3 of said figure;

Fig. 4 is a vertical longitudinal sectional view on the line 4—4 of Fig. 3; and

Fig. 5 is a detail in front elevation of the socket-plate.

Similar numerals indicate similar parts in all the figures of the drawings.

The corner-post 1 of the bedstead is, in this instance, formed of wood and rectangular in cross-section, but, it will be understood, that the same may be any design and formed of metal, if desired.

To each of the adjacent faces of the four corner-posts 1, is secured, in this instance, by means of ordinary wood-screws 2, (see dotted lines Fig. 1,) a socket-plate 3, the same being formed from sheet-metal of suitable gage, and having its upper and lower ends bent parallel and at right-angles to the plate, as indicated at 4, thus forming upper and lower flanges. A short distance in advance of the plate 3, the flanges are provided with narrow slots 5, designed to receive a preferably tapered locking-key 6, and, therefore, in dimensions, agreeing therewith; that is to say, the rear edges of the slots are in the same vertical plane while the front edges differ in accordance with the inclined edge of the tapered locking-key. This key may be provided near its upper end with an aperture 7, so that the four keys which may constitute the set of corner locks for a bedstead may be conveniently strung together and are less likely to become lost in transit.

The socket-plate 3, in the present instance, being intended for use in connection with a rectangular corner-post, is perfectly flat, so as to snugly fit thereagainst, and the corner-post being of wood, screw-holes 8, are provided in the plate. It will be perfectly obvious that a metal post may be substituted for the wooden post, in which case, ordinary bolts would be substituted for the wood-screws, and also that the plates might, if preferred, be shaped to conform to the exteriors of the posts, such modifications of details all being comprehended in my invention.

9 designates what may be either a side or end-rail, it being understood that the invention is equally applicable to either. This rail is preferably of the usual angle-iron form and therefore consists of the two right-angularly disposed webs 10 and 11. At a distance from each of its ends approximating the distance between the flanges 4 of the socket-plates, the web 11 of the rail is cut to form a triangular notch, from which is removed the triangular section 12, hereinafter referred to as a reinforcing-plate. At the apex of each of these notches the rail is bent so that the two ends are disposed at right-angles to the remainder of the rail and the edges of the notches brought together. In this manner it will be apparent the rail is provided with similarly disposed right-angular extensions 13, the same being of a size and form adapting them to fit snugly against the socket-plates in which they are inserted and between the flanges 4 thereof. The rail, near each end, is provided with a slot 14, the same being so positioned with reference to the slots 5 of the socket-plate that when these two elements—the rail and socket-plate—are assembled as shown, the slot 14 will be slightly in advance of the slots 5, all for a purpose hereinafter apparent.

In order that the rigidity and strength

of the rail may be increased, notwithstanding the necessary recessing, as described, when the ends are bent to form the extensions 13, they may be reinforced by plates riveted as at 15 to the flange 11 of the rail at each side of the recess. For this purpose, and merely to effect a saving in material, the section of the web removed, and indicated as 12, may be utilized, its triangular form well adapting it for the purpose.

The rail, as will be seen, may be used with either side up; that is to say, its horizontal flange may be either at the upper or lower side, so that the mattress support will be, accordingly, elevated or lowered.

The socket-plates being in position, in order to assemble the rails, it is only necessary to insert the angular extensions thereof between the flanges 4 so that the slots 14 of the rails will aline with the slots 5 of the socket-plates, and insert the tapered locking-keys 6 to connect these parts, a few light taps on the upper ends of the keys being sufficient to force them well down into the slots. The rear ends of the slots in the rail are preferably in vertical alinement with the front surfaces of the angular extensions, so that as the keys are driven downwardly through the slots of the rail and socket-plates the inclined front edges of the keys will bind against the front ends of the slots 5 of the socket-plates, while the rear vertical edges of the keys having contact with the angular extensions of the rails throughout the lengths of the latter, will serve to uniformly and evenly force said extensions of the rails inwardly against the socket-plates, whereby an extremely snug fit of these parts is accomplished. When the parts are thus positioned with respect to each other, it will be seen that the horizontal web will bear against one of the horizontal flanges 4 of the socket-plate while the end of the extension of the rail, which end is squared for the purpose, will bear against the companion flange thereof, so that the connection becomes absolutely rigid and the rail is incapable of either drawing out from the socket-plate or from any lateral movement therein, such being the case regardless of whether the horizontal flange of the rail be at the upper or lower side of said rail. Notwithstanding the absolute rigidity with which these parts are locked in operative position, it will be obvious that a few light taps upon the bottoms or lower ends of the tapered keys will be sufficient to loosen the same and permit their withdrawal, so that the bedstead may be taken down or the rails reversed to bring their horizontal supporting flanges or webs to the bottom or upper side of the rail, as the case may be.

The cheapness and simplicity of this corner-lock will at once be obvious, and it will be observed that not only are the parts of which it is composed comparatively few, but that they may be readily formed of sheet-metal at a comparatively slight expense.

Having described my invention, what I claim, is:

1. In a corner-lock for bedsteads, the combination with a socket-plate adapted to be secured to a corner post, said socket-plate comprising a vertical rear wall, and opposite walls disposed at an angle to the rear wall and each provided with a slot, of a bed-rail bent near its end to form an angular extension conforming to the angle formed by the vertical wall and one of the angularly disposed walls and provided in its horizontal portion with a slot coincident with that of the socket-plate, and a key passed through the two slots and locking the end of the bed-rail within the socket-plate.

2. In a corner-lock for bedsteads, the combination with a socket-plate adapted to be secured to a corner-post, said socket-plate comprising a vertical rear wall, adapted to be secured to a corner-post, and upper and lower horizontal walls parallel to each other and disposed at an angle to the rear wall and provided with vertically alining slots, of a bed-rail having its end bent to form an extension agreeing in length with the space between the horizontal walls of the socket-plate so as to fit therebetween, said bed-rail having a slot in line with the slots of the socket-plate, and a tapered locking-key inserted within the slots of the socket-plate and the bed-rail and serving to lock these two parts together.

3. In a corner-lock for bedsteads, the combination with a socket-plate comprising a rear vertical wall and upper and lower horizontal flanges or walls, the latter being provided with vertically alining slots formed therein in advance of the rear wall, of a bed-rail bent near its end to form an extension disposed at a right-angle to its remaining portion and of a length agreeing with the distance between the upper and lower horizontal walls or flanges of the socket-plate so as to fit therebetween and having its horizontal portion provided with a slot coincident with and extending slightly in advance of the slot in the upper wall or flange of the socket-plate, and a tapered locking-key passed through the slots of the bed-rail and the socket-plate so as to lock and bind the bed-rail within the socket-plate.

4. In a corner-lock for bedsteads, the combination with a socket-plate comprising a rear wall and upper and lower walls or flanges disposed at an angle to the rear wall and provided a short distance in advance of the latter with vertically alining slots, of a bed-rail bent near its end at a right-angle to its remaining portion and forming an angularly disposed extension agreeing in

length with the distance between the upper and lower walls or flanges of the socket-plate and having its horizontal portion provided with a slot coincident with but slightly in advance of the slots in said socket-plate, and a tapered locking-key having a vertical rear edge adapted to bear against the angular extension of the bed-rail and at its front edge to bind against the front ends of the slots in the socket-plate so as to lock and bind the bed-rail within the socket-plate.

5. In a corner-lock for bedsteads, the combination with a socket comprising upper and lower parallel forwardly disposed walls, the latter provided with vertically alining slots, of a bed-rail bent near its end so as to form an extension disposed at an angle to the remaining portion of the rail, said extension being of a length agreeing with the distance and fitting between said forwardly disposed walls of the socket, a slot formed in the horizontal portion of the rail and in line with the slots of the socket, and a tapered locking-key passed through the slots of the socket and of the bed-rail, whereby to lock and bind these two parts together.

6. In a corner-lock for bedsteads, the combination with a socket comprising upper and lower forwardly disposed walls having openings in alinement with each other, of a bed-rail bent near its end to form an angular extension agreeing in length with the distance between the walls of said socket and provided with an opening alining with the openings in said walls, and a fastening device passed vertically through the openings in the walls and in the bed-rail.

7. In a corner-lock for bedsteads, the combination with a socket-plate comprising a rear wall and upper and lower forwardly disposed walls, of a bed-rail bent near its end to form an angular extension adapted to enter and conform to the angles in the socket-plate, and means for locking said rail in said socket-plate.

8. In a corner-lock for bedsteads, the combination with a socket-plate comprising a rear wall and upper and lower spaced apart walls disposed at angles to the rear wall and provided with alining slots, of a bed-rail transversely bent near its end at a right angle to its remaining portion and adapted to abut against the rear wall and become positioned between the spaced apart walls of said plate, said rail being provided in advance of its bent end with a slot alining with those of the said spaced apart walls, and a locking-key located in the slots of the socket-plate and bed-rail and serving to secure the bed-rail in position within the socket-plate.

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