Aug. 20, 1940. V. C. LUPPERT 2,211,980

BED

Filed Oct. 29, 1938

Fig. 1.

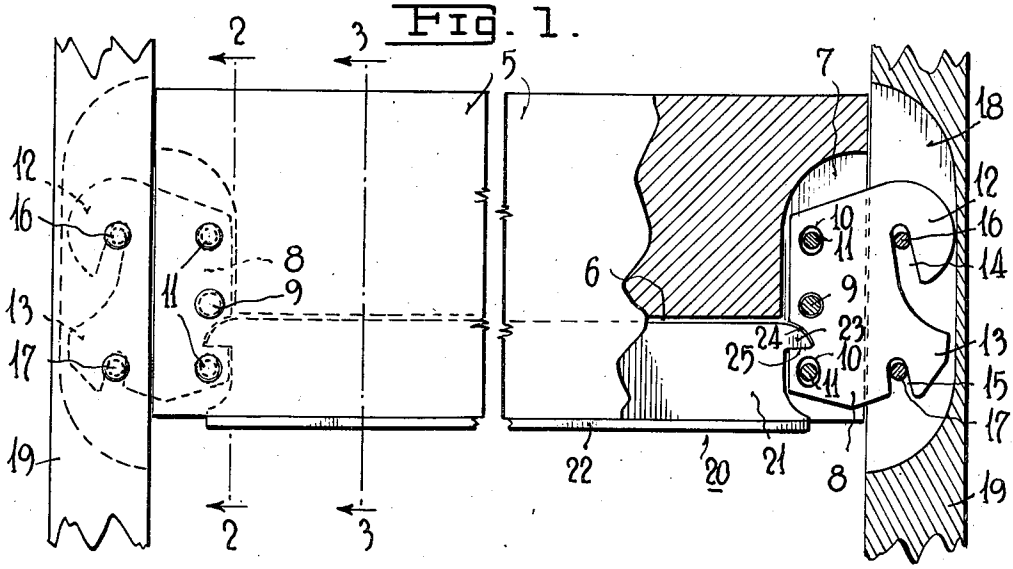


Fig. 2.

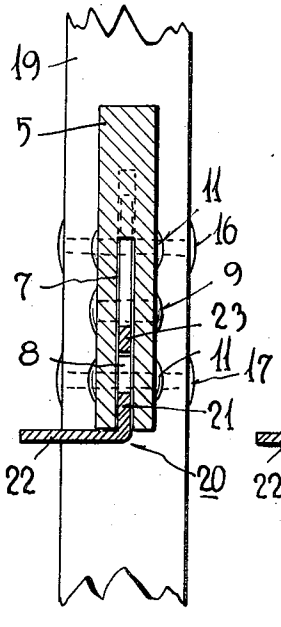


Fig. 3.

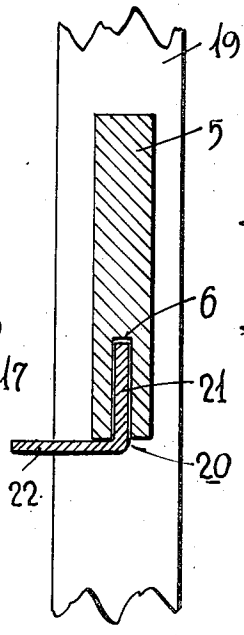
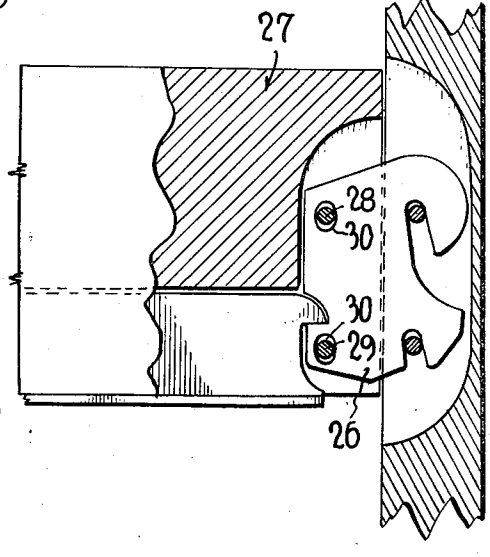


Fig. 4.



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Application October 29, 1938, Serial No. 237,717

6 Claims. (Cl. 5—286)

This invention relates to improvements in beds and more particularly to means for fastening side rails to bed posts and for supporting slats from the posts.

One of the objects of the invention is to provide a corner fastening adapted to tightly draw the end of a rail into engagement with a side surface of a bed post.

Another object is to supply a corner fastening which will function properly even though it is improperly applied to the end portion of a rail. Such misapplication is caused by holes not being bored exactly at the proper places, and this is due to carelessness or bit shifting in case it hits a hard streak in the grain of wood.

Another object is to supply a slat support which may be made from a piece of ordinary angle iron, such support being in turn supported by special corner fastenings.

With the foregoing objects outlined and with other objects in view the invention consists in the novel features hereinafter described in detail, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims.

In the drawing:

Fig. 1 is a fragmentary elevation partly broken away and partly in section of a side rail, bed posts and one form of my improved means for supporting slats and connecting the rail to the posts.

Fig. 2 is a transverse sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a similar view taken on the line 3—3 of Fig. 1.

Fig. 4 is a sectional elevational view of a modification.

Referring to Figs. 1 to 3 inclusive, 5 designates a wood rail having at its lower edge portion a groove 6 which extends throughout the entire length of the rail and has enlargements 7 at the ends thereof. In each enlargement I arrange a flat metal bracket 8 which is secured to the rail by a central pin 9 that extends through the rail and bracket. Immediately above and below the pin 9, the bracket is provided with slots 10 to accommodate pins 11 of less diameter than the width of the slots. These pins also pass through the rail and bracket and they limit the rocking movement of the bracket on the pin 9. The bracket extends outwardly beyond the end of the rail and is provided with an upper hook 12 and a lower hook 13 formed by providing the bracket with notches 14 and 15 which are inclined downwardly and outwardly away from the rail and are adapted to receive stationary pins 16 and 17 that extend across a vertical groove 18 in a bed post 19. Due to this construction, it will be understood that even if the pins 9, 16 and 17 are slightly out of position, the hooks 12 and 13 will cooperate with the pins 16 and 17 to tightly draw the end of the rail 5 into contact with the bed post when the hooks are inserted in the slots 18 and the bed rail is forced downwardly. Due to this construction I obtain a three-point contact which assures a firm hold of each hook on a pin of the bed post.

If the above described corner fastenings are to function as supports for the slats (not shown), the brackets 8 at the ends of the rail are interlocked in any suitable way with a metal angle iron 20. The vertical wing 21 of such iron occupies the groove 6, and the horizontal wing 22 projects laterally to support the slats. In order to interlock the support 20 to the brackets, the vertical wing 21 has its ends cut to form projecting lugs 23 which extend into notches 24 in the brackets and rest on horizontal edges 25 of the brackets. Obviously when the parts are assembled, as shown in Fig. 1, the ends of the slats will rest on the angle iron support; the latter will be supported by the brackets 8; and the whole assembly will be supported by the pins 16 and 17 of the bed posts. As the brackets 8 are secured to the side rail by pins 9 and 11, they positively prevent the lug 23 of the angle iron slat support 20 from detaching from the notches 24.

In the modification shown in Fig. 4, each bracket 26 is secured to the side rail 27 by two pins 28 and 29 which pass through holes 30 that are somewhat larger than the diameter of the pins in order to permit a limited amount of play. The use of two pins on side rails and bed posts will naturally be stronger if the four pins draw tight. They can do this in accordance with the invention because the four pins do not contact the bracket equally. Any slight variation in the distance of the pin holes from the grooved face of the post or end of the wooden part of the side rail will cause but one hook to contact the pin in the post. Experience has taught the manufacturer of furniture that very seldom it is that four pins are doing the work. Due to the play permitted by loosely fastening the corner brackets to the rails, in my invention, each bracket may shift to insure that both hooks engage both pins of the bed post. Also due to my construction, there is no stress or strain on the wooden part

of the bed rail as such strains or stresses are transferred to the pins of the bed post.

While I have disclosed what I now consider to be preferred embodiments of the invention in such manner that they may be readily understood by those skilled in the art, it is manifest that changes may be made in the details disclosed without departing from the spirit of the invention as expressed in the claims.

What I claim and desire to secure by Letters Patent is:

1. In a bed, a wooden rail having a groove at one end thereof, a substantially flat metal bracket extending into the groove, a fulcrum pin securing the medial portion of the bracket to the grooved end of the rail, upper and lower apertures extending through the bracket at points above and below said fulcrum pin, other pins of less diameter than said apertures extending through said apertures and secured to the rail, and a bed post having a vertical groove and a plurality of supporting pins extending across its groove, said bracket being provided with a plurality of hooks which extend into the last-mentioned groove and engage the last-mentioned pins.

2. In a bed, a wooden rail having a groove at one end thereof, a substantially flat metal bracket extending into the groove, a fulcrum pin securing the medial portion of the bracket to the grooved end of the rail, upper and lower apertures extending through the bracket at points above and below said fulcrum pin, other pins of less diameter than said apertures extending through said apertures and secured to the rail, a bed post having a vertical groove and a plurality of supporting pins extending across its groove, said bracket being provided with a plurality of hooks which extend into the last-mentioned groove and engage the last-mentioned pins, and a slat support having one of its ends detachably secured to and supported by said bracket.

3. In a bed, a wooden rail having a first groove at one end thereof, said rail having a second groove in its lower edge portion a substantially flat metal bracket extending into the groove, a fulcrum pin securing the medial portion of the bracket to the grooved end of the rail, upper and lower apertures extending through the bracket at points above and below said fulcrum pin, other pins of less diameter than said apertures extending through said apertures and secured to the rail, a bed post having a vertical groove and a plurality of supporting pins extending across its groove, said bracket being provided with a plurality of hooks which extend into the last-mentioned groove and engage the last-mentioned pins, and an angle iron slat support having a vertical wing occupying said second groove and also having one of its ends detachably secured to and supported by said bracket.

4. In a bed, a wooden rail having a groove at one end thereof, a substantially flat metal bracket extending into the groove, a fulcrum pin securing the medial portion of the bracket to the grooved end of the rail, upper and lower apertures extending through the bracket at points above and below said fulcrum pin, other pins of less diamter than said apertures extending through said apertures and secured to the rail, a bed post having a vertical groove and a plurality of supporting pins extending across its groove, said bracket being provided with a plurality of hooks which extend into the last-mentioned groove and engage the last-mentioned pins, said bracket being provided with a notch, and an angle iron slat support having a wing extending into said rail and provided at one end with a projecting lug which extends into the notch for supporting the angle iron by said bracket.

5. In combination, bed posts having grooves, a grooved rail, brackets extending into the grooves of the posts and rail, each bracket being movably secured to the rail, supporting pins extending across the groove of each post, each bracket having a plurality of hooks engaging the supporting pins of one post, an angle iron slat support having a vertical wing extending into the groove of the rail, and means at the ends of said wing, interlocking the angle iron support to said brackets.

6. In a bed, a wooden rail having a first groove at one end thereof, and a second groove extending along its lower edge portion, a thin metal bracket extending into the first groove and having upper and lower apertures, pins of less diameter than said apertures extending therethrough and secured to the rail, a bed post having a vertical groove and a plurality of supporting pins extending across its groove, said bracket being provided with a plurality of hooks which extend into said vertical groove and engage the last-mentioned pins, and an angle iron slat support having a vertical wing occupying the second groove and having its end supported by said bracket.

VALENTINE C. LUPPERT.