J. W. Moyer,

Bedstead Fastening

Fatented May 15, 1847. Nº5.117.

UNITED STATES PATENT OFFICE.

J. W. MOYER, OF UTICA, NEW YORK.

BEDSTEAD-FASTENING.

Specification of Letters Patent No. 5,117, dated May 15, 1847.

To all whom it may concern:

Be it known that I, J. W. Moyer, of Utica, in the county of Oneida and State of New York, have invented a new and useful Improvement in Methods of Fastening the Rails to the Posts of Bedsteds, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before 10 known and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—
Figure 1 represents the mortise in a part

15 of the post; Fig. 2 the tenon on the end of the rail; Fig. 3, a reversed view of one of the metal spurs let into the tenon; and Fig. 4, a vertical section of the post and rail taken through one of the fastening spurs.

The same letters indicate like parts in all

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the figures. The rails and posts of bedsteads have been secured by means of wedge-formed metal spurs attached to the tenons and fitting into 25 corresponding recesses in the mortise of the posts; but this method, patented in various forms and arrangements, has been objected to and nearly thrown out of use for the reasons that the fastening of the spurs and sockets to the tenons and in the mortises is attended with difficulty and liable to derangement; and because the least motion of the posts forces up the wedge-formed spurs, and thus unfastens the connection. The lat-35 ter of these objections does not apply to that class of bedsteads in which the rails turn and are connected with the posts by means of round tenons, for the tension of the sacking cords prevents the rails from turning back 40 by pressure on the wedge formed spurs; and the former objection has been avoided in the turning rail bedsteads by an improvement lately patented in which wedge formed spurs are attached to the tenon which when let into the mortise cut or force their way into the wood of the post surrounding the mortise. But it will be obvious that this plan is not applicable to the square tenon bedstead for the pressure of the wood of the post thus forced open by the spur acting on its entire surface, when made wedge formed would tend constantly to force up the spurs and thus unfasten the rails more readily than if fastened into metal sockets.

The object of my present improvement is to avoid both objections for the square tenon

bedsteads which are preferred to the other class by a large portion of the public, by making that face of the metal spurs which is toward the shoulder of the tenons wedge 60 formed from the sharp lower edge so that they can be forced into the wood of the post and draw the shoulders of the rails tight against the posts, and then from the wedge part to the top parallel with the shoulder 65 so that the bight of the wood acting on the two parallel faces of the spurs shall prevent the pressure on the inclined part of the face from forcing them out.

In the accompanying drawings (a) repre- 70 sents the square tenon on the end of the rail (b) and properly adapted to a mortise (c) in the post (d), the height or length of the mortise being greater than the tenon to allow the latter to move up and down in the for- 75 mer. On each side of the tenon there is a metal spur (e) (one only being represented in the drawings) that projects from, and is cast with a plate (f) that is let in flush with the surface of the tenon, and there secured 80 by a screw (g); and to prevent weakening the tenon by cutting away too much of the wood the inner face of the plate is provided with three round spurs (f') that fit in corresponding holes in the tenon. That face of 85 the spur (e) which is toward the end of the tenon is parallel with the shoulder of the tenon, the lower edge is sharp, and the back face, or that toward the shoulder of the tenon, is wedge formed from the sharp lower 90 edge about one third of the way up, and thence to the upper edge parallel with the other face.

The sides of the mortise are grooved out, as at (h, h), so that the tenon-of the rail can 95 be inserted, with the two spurs, up to the shoulder, and then by forcing down the rail, with a hammer or mallet, the lower sharp edge of the spurs are forced into the wood at the lower edge of the grooves (h, h); the 100 grain of the wood being forced open by the wedge form of the spurs, which tends to draw the shoulder of the rail close up to the post; and after the spurs have penetrated the wood so far as to carry the wedge part 105 below the lower edge of the grooves (h, h)the elasticity of the wood forced open by the wedge, causes it to bight on the parallel surfaces of the spurs and prevent it from being forced out by the bight on the wedge part. 110 By this arrangement the only fastening required for the metal spurs is a simple screw

to keep them in place when the tenon is out of the mortise, for when in the mortise the surfaces are in contact and the plates of the spurs cannot be drawn out of their recesses.

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What I claim as my invention, and desire to secure by Letters Patent in the method of fastening bedsteads above described, is—

Making the back face of the spurs which secure the tenons in their mortises, partly 10 diagonal and partly parallel with the front face thereof and the shoulder of the tenons, substantially as described, when this is com-

bined with the grooves in the sides of the mortise and the sockets formed by, and for the reception of the spurs, as described, 15 whereby the rails and posts of square tenon bedsteads can be fastened at less expense and held together more firmly than by any other plan known to me.

J. W. MOYER.

Witnesses:

A. P. Browne, Chas. M. Keller.