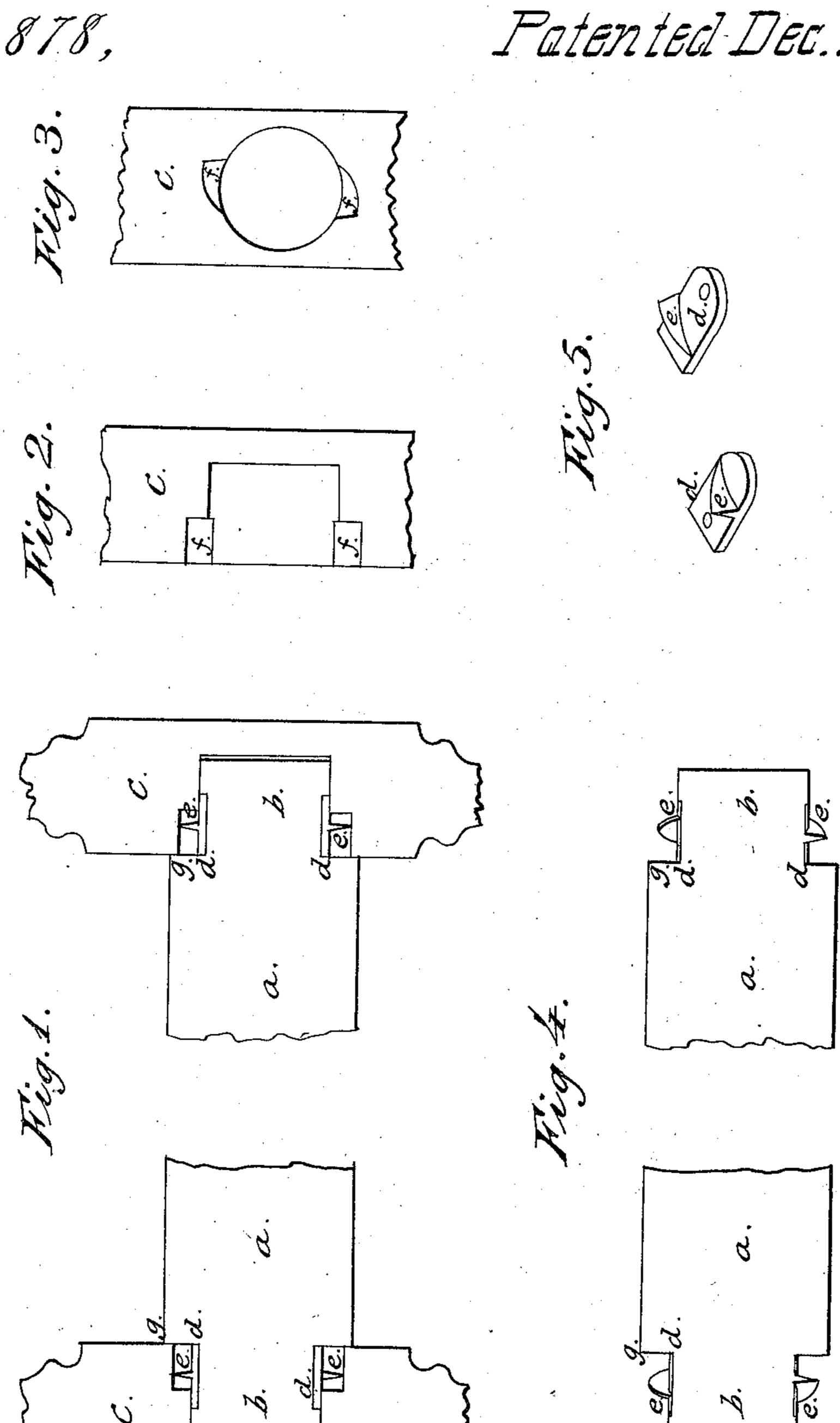
B. Hinkley,

Bealstead Fastening,

Nº4, 878,

Patented Dec. 9, 1846.



UNITED STATES PATENT OFFICE.

BENJN. HINKLEY, OF UTICA, NEW YORK.

BEDSTEAD-FASTENING

Specification of Letters Patent No. 4,878, dated December 9, 1846.

To all whom it may concern:

Be it known that I, Benjamin Hinkley, of Utica, in the county of Oneida and State of New York, have invented a new and use-5 ful Mode of Fastening the Round Tenons of Bedsteads and other Cabinet-Work, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section through the two posts and one rail showing the manner in which they are united; Fig. 2, a section of one of the posts without the rail; Fig. 3, an elevation of the post showing the form 20 of the mortise therein; Fig. 4, a separate view of the rail; and Fig. 5, separate views of the spurs or threads.

The same letters indicate like parts in all the figures. The rails of bedsteads have been fastened to the posts by means of tongues or spurs projecting from opposite sides of an iron tenon inserted in each end of the rails, the spurs being made with sharp edges and in-30 clined relatively to the axis of the tenon in the manner of the threads of a double threaded screw, so that when these are inserted in the round mortise in the posts and turned they cut their way into the wood and 35 form female threads therein; but as this operation is to be performed at the two ends of each rail it will be evident that unless the threads or spurs at each end enter their appropriate mortises in the two posts at 40 precisely the same distance from the shoulders of the tenons, and cut their way through the wood with precisely the same speed that one shoulder will reach its appropriate post before the other, and hence make one an imperfect joint. Again, in all kinds of bedsteads it is important that the rails when fastened should have the pins to which the sacking is secured in a given line or nearly so, which is difficult to be attained when the spurs or threads have to cut their way from the face of the posts to the depth required to give the necessary strength. These are serious difficulties, which are entirely avoided by cutting recesses on each side of the round mortise and to such a depth as to permit the insertion of the tenons

with the spurs or threads thereon to the full depth of the tenon that the shoulder may rest against the post before it is turned to make the spurs or threads cut their way into the 60 wood, which in this case is a very short distance, just sufficient to take the required hold. By this means close joints can be made at each end without any difficulty by inserting the tenons at each end into the 65 posts, then by turning the rails the spurs cut their way into the wood and at the same time compress the wood that forms the recesses for the shoulders resting against the face of the posts, the spurs cannot give way 70 and hence the wood must; and it will be evident that this compression of the wood will prevent it from yielding any further afterward, which would not be the case in the previous mode. This method also insures 75 the ready means of retaining the sacking pins in their places. My invention also consists in making the spurs of metal and inserting them in the usual wooden tenons instead of making the spurs and tenons in a 80 single piece and letting it (the tenon) into the end of the rail, which not only reduces the cost of making the spurs, but lessens the cost of inserting and securing them, and does not weaken the rail so much.

In the accompanying drawing (a) represents one of the rails of a bedstead with a wooden tenon (b, b) inserted into a post (c, c) at each end. On opposite sides of the tenon and at about an inch and a half from 90 the shoulder there is inserted a small plate of cast iron (d, d) which is let into the wood flush and secured by a small wood screw or pin; from the surface of each of these plates projects a spur (e) which is made similar to 95 a segment of the thread of a screw except that the forward portion is gradually reduced down to the surface of the tenon, that it may the more readily be forced into the wood of the mortise to form a correspond- 100 ing recess in the mortise by which it is held to prevent the tenon from being drawn out of the mortise.

The mortise in the post is cut out on each side, as at (f, f), to admit these spurs, and 105 let them enter until the shoulder (g) of the rail touches the face of the post before the rail is turned to form the recesses for the spurs and insure a close joint at each end, and at the same time obtain and retain a 110

proper position for the sacking pins.

It will be obvious that the spurs may be

differently attached to the wooden tenons, as for instance instead of the two plates let in and screwed to the wooden tenon, the spurs may be formed on the end of a metal rod inserted in a hole made through the tenon. Other methods might be mentioned but it is not deemed necessary.

What I claim as my invention and desire

to secure by Letters Patent is—

Making the sharp metal spurs or segment of threads formed with a sharp and reduced edge on the tenons, in combination with the

mortises in the posts with recesses for the admission of the spurs that the shoulders of the rails may be brought up to the posts before the spurs are worked into the wood, whereby perfect joints can be obtained at each end of a rail, and the sacking pins be placed and retained, all substantially as described.

BENJA. HINKLEY.

Witnesses:

A. P. Browne, J. J. Greenough.