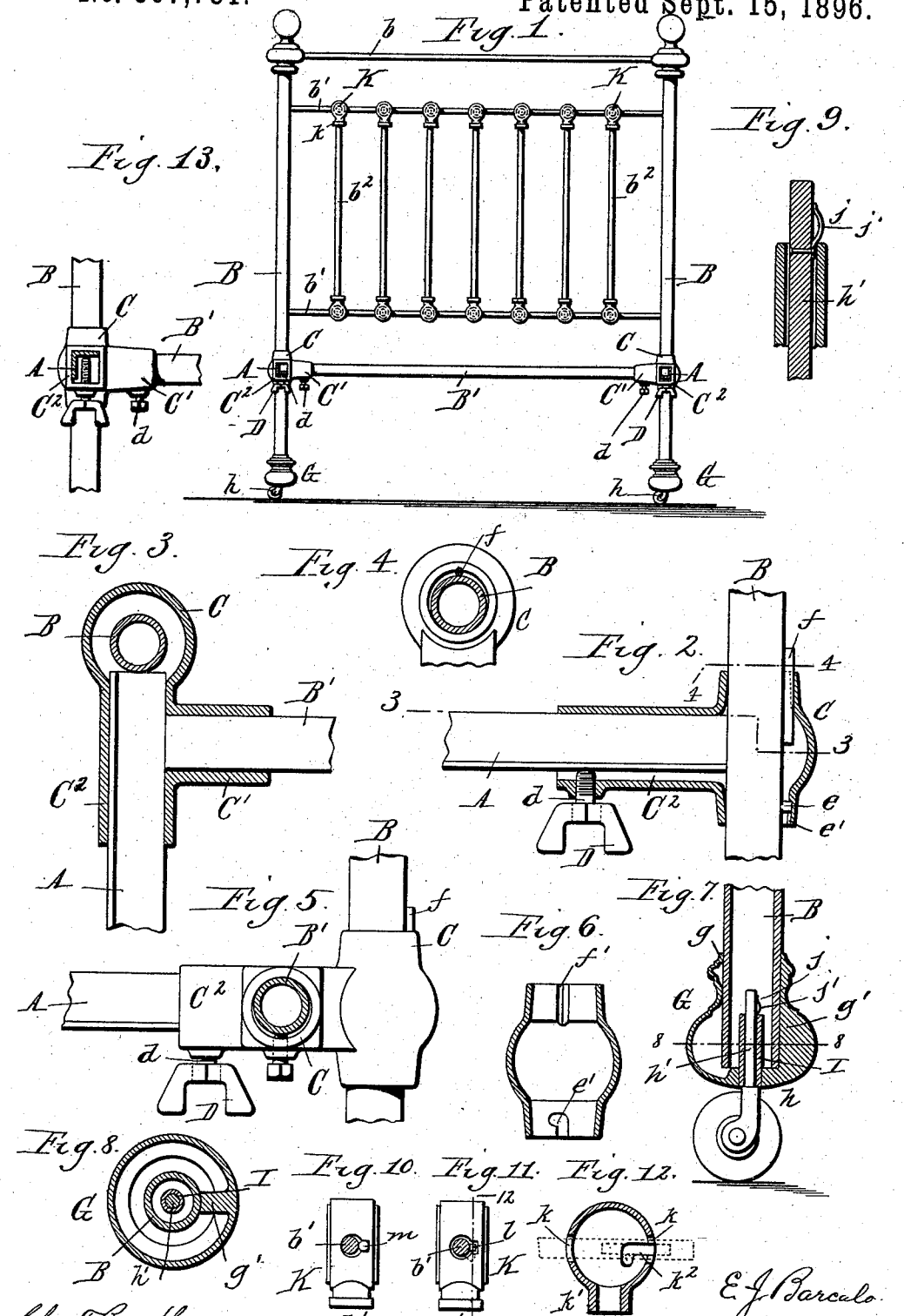


(No Model.)

E. J. BARCALO.
BEDSTEAD.

No. 567,731.

Patented Sept. 15, 1896.



Chas. F. Burkhardt,
Henry L. Deck. } ^{It'} WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD J. BARCALO, OF BUFFALO, NEW YORK.

BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 567,731, dated September 15, 1896.

Application filed January 16, 1896. Serial No. 575,707. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BARCALO, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Bedsteads, of which the following is a specification.

This invention relates more particularly to metallic bedsteads in which the posts or pillars are secured in couplings which connect the side and end rails of the bedstead, and in which the rods or members that connect each pair of posts are united by separable couplings. A bedstead of this character is shown in Letters Patent of the United States, No. 536,368, granted to me March 26, 1895.

One of the objects of my present invention is to so construct the corner-couplings of the bedstead that end and side rails having the form of angle-iron can be reliably clamped to the couplings, if desired.

The invention has the further objects to secure the posts in such couplings by simple and inexpensive means, to improve the construction of the feet of the posts in which the casters are swiveled and the bearings of the caster-spindles, and to simplify the couplings which connect the rods of the end frames of the bedstead.

In the accompanying drawings, Figure 1 is a vertical cross-section of the bedstead. Fig. 2 is a sectional elevation of one of the rail-couplings and the adjacent rails on an enlarged scale. Fig. 3 is a horizontal section thereof in line 3 3, Fig. 2. Fig. 4 is a similar section in line 4 4, Fig. 2. Fig. 5 is a side elevation of said coupling, showing the end rail in cross-section. Fig. 6 is a vertical section of the sleeve of the rail-coupling at right angles to Fig. 2. Fig. 7 is a sectional elevation of the foot of one of the posts. Fig. 8 is a horizontal section thereof in line 8 8, Fig. 7. Fig. 9 is an enlarged vertical section of the caster-spindle and its bearing-sleeve. Fig. 10 is an end view of one of the rod-couplings, showing the key whereby the same is clamped to the rod. Fig. 11 is a similar view showing the locking-pin of the rod turned into register with the groove of the coupling. Fig. 12 is a vertical section in line 12 12, Fig. 11, showing the frame-rod by dotted lines. Fig. 13 is an enlarged fragmentary cross-section of the bedstead, showing the side rail reversed.

Like letters of reference refer to like parts in the several figures.

A represents the side rails of the bedstead which connect the end frames, and which are preferably constructed of angle-iron or flat-sided tubing. Each of the end frames is preferably composed of the two posts or pillars B, the end rail or rod B' connecting the same, the transverse upper rod *b*, intermediate transverse rods *b'*, and upright rods *b*², which connect said intermediate rods. The end rail B' is preferably constructed of round tubing.

The end and side rails are detachably connected by corner fastenings or couplings, each of which consists of an upright sleeve C, embracing the adjacent post, and provided with two horizontal sockets C' C², projecting from said sleeve and arranged at right angles to each other. These sockets receive the end portions of the side and end rails, respectively, the transverse socket C' of the coupling being round in cross-section to fit the correspondingly shaped end rail of the bedstead and the longitudinal socket C² rectangular in cross-section to fit the flat-sided side rail. The sockets of each coupling are provided with set-screws *d*, or other suitable clamping devices, for securing the end and side rails in the sockets, these set-screws being tightened and loosened by a suitable wrench D. By providing the couplings with rectangular sockets, side rails of angle-iron can be firmly clamped in the same, if desired, in which case the clamping-screws of the sockets impinge against the horizontal flange of the angle-iron. The angle-iron rails may be arranged with the horizontal flange at the bottom of the vertical flange, as shown in Figs. 1, 2, and 5, in which case said horizontal flanges form ledges for the mattress; or the angle-iron rails may be reversed to locate the horizontal flange at the top of the vertical flange, as shown in Fig. 13, in which case the clamping-screws are made of sufficient length to bear against the under side of the horizontal flanges.

The sleeve of each coupling is secured to the adjacent post by a locking-pin *e*, arranged on the post and engaging in an L-shaped groove *e'*, formed in the inner wall of the sleeve at or near one end thereof, and a key or pin *f*, which is driven into a longitudinal notch *f'*, formed in the opposite end of the

sleeve, so as to clamp the sleeve to the post, as shown in Fig. 2. In applying the coupling to the post, after passing the sleeve over the post the pin of the latter is interlocked with the L-shaped groove of the sleeve and the key f' is then driven into place.

G represents the feet or enlargements of the posts in which the swiveling casters h are journaled. Each of these feet is hollow or socketed to receive the lower end of the post and is provided at its upper end with a contracted neck g , which snugly embraces the post. In order to afford a longer bearing-surface for the post within the hollow foot, the latter is provided with an internal radial rib g' , against which the adjacent side of the post rests, as shown in Figs. 7 and 8. The foot is secured to the post by driving the same upon the post.

h' is the upright cylindrical shank or spindle of the caster, which is journaled in an upright sleeve or bearing-tube I, secured at its lower end in an opening formed in the bottom of the foot and extending upwardly into the latter, as shown in Fig. 7. The caster is removably retained in its bearing-sleeve by a catch j , secured to its projecting upper end. This catch preferably consists of an upright spring, which is secured to the spindle at its lower end and provided with a shoulder or bulge j' , adapted to bear against the upper end of the sleeve I, as shown in Fig. 9. Upon inserting the caster-spindle into the bearing-sleeve, the spring j flattens out against the side of the spindle, the spindle being fitted in its bearing-sleeve with sufficient looseness for this purpose, and as soon as the spindle projects beyond the upper end of the sleeve the spring resumes its normal form as shown in Fig. 9, thereby yieldingly retaining the spindle in the sleeve.

K represents the couplings whereby the upright and transverse rods b' b^2 of the end frames are connected together. Each of these couplings consists of a hollow body preferably of circular form, provided in opposite portions of its cylindrical wall with openings k for the passage of one of the transverse rods b' and with a radial socket or projecting collar k' , which receives the end of one of the upright rods b^2 . The coupling is held against lateral displacement on the transverse rod by a locking-pin l , secured to said rod and interlocking with the vertical portion of an L-shaped groove k^2 , formed in the inner side of one of the flat side walls of the coupling, as shown in Fig. 12. The horizontal portion of this groove extends through the cylindrical wall of the casing, forming a notch in the edge of the adjacent opening k , as shown in Figs. 10 and 11. Into this notch is driven a key or pin m , as shown in Fig. 10 and by dotted lines in Fig. 12, whereby the coupling is clamped upon the transverse rod and the pin of the latter is prevented from leaving the vertical portion of the L-shaped groove. In securing the coupling to the transverse

rod, the latter is turned so as to bring its locking-pin into register with the horizontal portion of the L-shaped groove of the coupling, as shown in Fig. 11, and the coupling is then shifted laterally to cause the pin to enter said groove, whereupon the rod is turned in the proper direction to cause its pin to interlock with the vertical portion of the groove. The key is then driven into the horizontal portion of the groove.

In assembling the rods and couplings of the end frames, the couplings are first secured to the intermediate transverse rods, and the upright rods are then inserted in the sockets of opposing couplings.

It will be noticed that the slot in the coupling and the pin on the post serve to position the coupling and rail in relation to the post and the key locks the coupling rigidly to the post after the position thereof has been determined.

I claim as my invention—

1. The combination with the post, having a locking-pin and the adjacent side and end rails of a coupling having a vertical opening to receive said post, the lower end of the coupling having a bayonet-slot therein adapted to be engaged by said locking-pin for positioning said coupling on said post, and the key for locking said coupling rigidly to the post after the position thereof has been determined.

2. The combination with a post of a bedstead, of a foot or enlargement secured to said post and having a socket which receives the lower end of the post and an internal radial rib against which the adjacent side of the post bears, substantially as set forth.

3. The combination with an upright member of the bedstead-frame and a transverse member thereof having a locking-pin, of a coupling consisting of a hollow body provided in opposite sides with openings for the passage of said transverse member, a socket for the reception of the upright member and an internal L-shaped groove adapted to interlock with the locking-pin of said transverse member, substantially as set forth.

4. The combination with an upright member of the bedstead-frame and a transverse member thereof having a locking-pin, of a coupling consisting of a hollow body provided in opposite sides with openings for the passage of said transverse member, a socket for the reception of the upright member, an internal L-shaped groove adapted to interlock with the locking-pin of said transverse member, and a key whereby the coupling is clamped upon said transverse member, substantially as set forth.

Witness my hand this 13th day of January, 1896.

EDWARD J. BARCALO.

Witnesses:

CARL F. GEYER,
KATHRYN ELMORE.