O. P. & G. A. HILLER.

BED JOINT.

APPLICATION FILED JUNE 19, 1913.

1,099,600.

Patented June 9, 1914.

2 SHEETS—SHEET 1.

Fig. 1

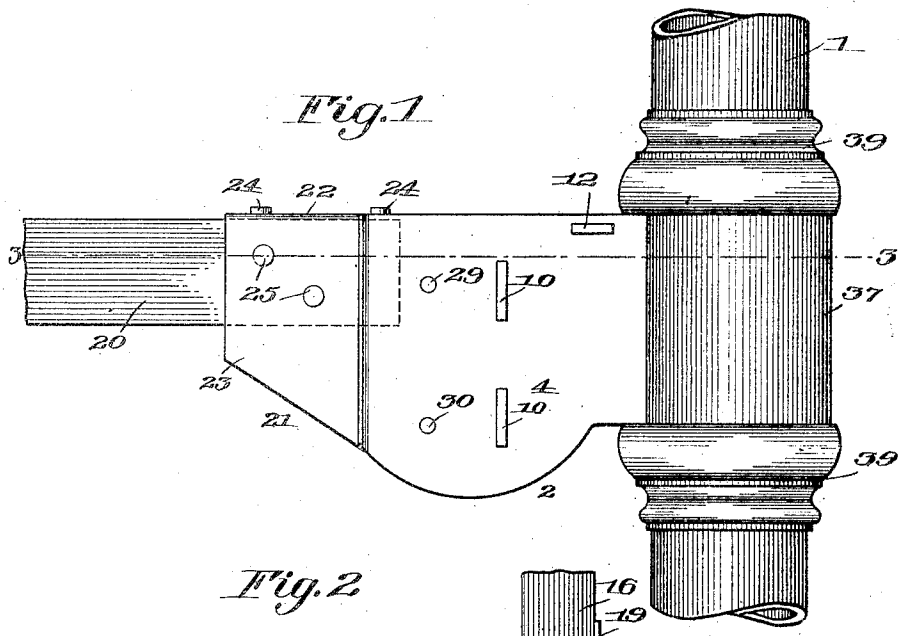


Fig. 2

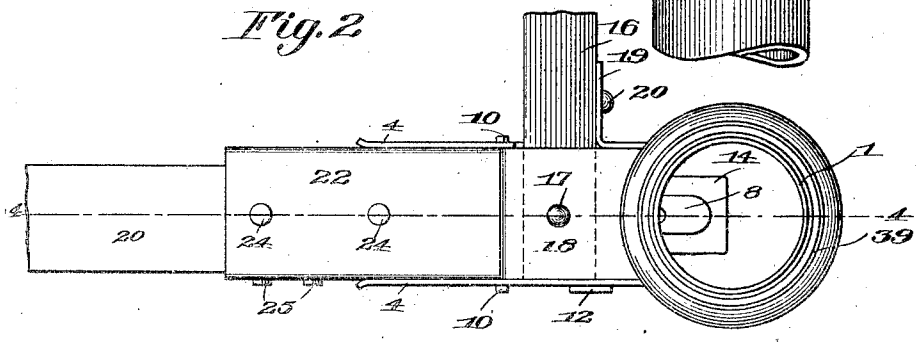
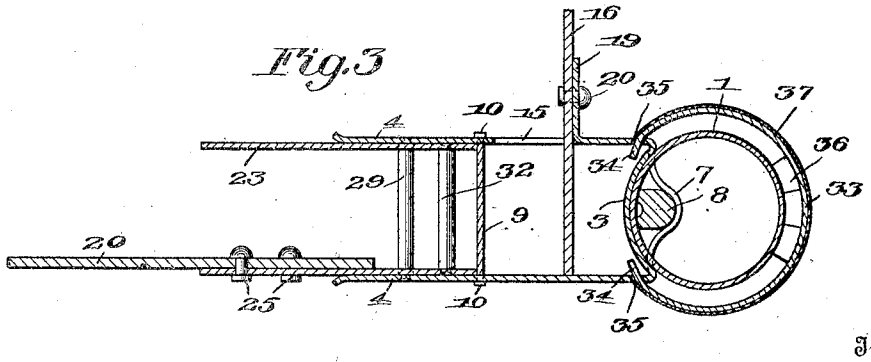


Fig. 3



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2 SHEETS—SHEET 2.

Fig. 4

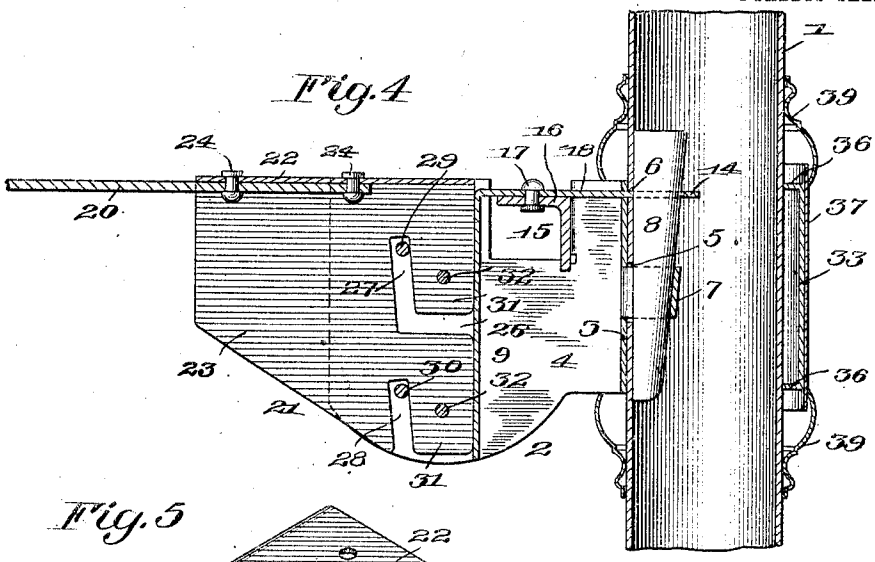


Fig. 5

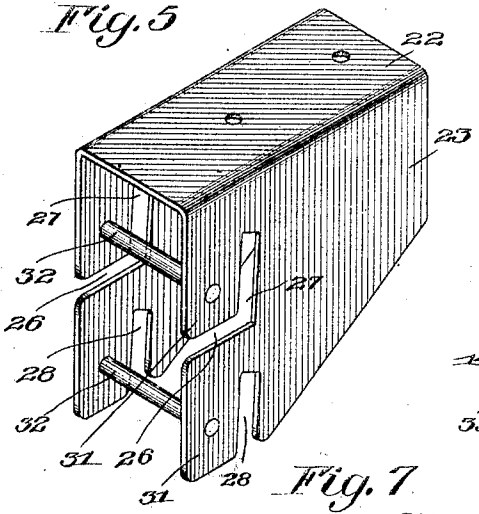


Fig. 6

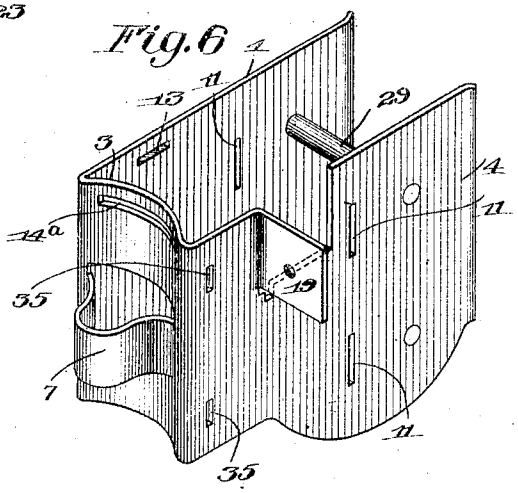
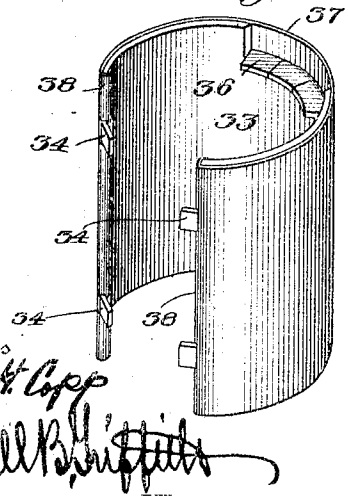


Fig. 7



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UNITED STATES PATENT OFFICE.

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BED-JOINT.

1,099,600. Specification of Letters Patent. Patented June 9, 1914.

Application filed June 19, 1913. Serial No. 774,601.

To all whom it may concern:

Be it known that we, OTTO P. HILLER and GEORGE A. HILLER, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Bed-Joints; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

Our present invention relates to furniture and more particularly to beds, and it has for its object to provide a simple, cheap and efficient joint for detachably securing the side rails to the head or foot posts and for securing the head or foot rails to the posts.

It is a further object of our invention to provide a joint of this character that will be neat and sightly in appearance and light in weight and will more particularly lend itself to construction from sheet material.

To these and other ends the invention consists in certain improvements and combinations of parts all as will hereinafter be more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a side elevation of a bed joint constructed in accordance with and illustrating one embodiment of our invention, the view comprising only fragmentary portions of a bed post and an adjacent side rail; Fig. 2 is a top plan view of the joint; Fig. 3 is a horizontal section taken substantially on the line 3—3 of Fig. 1; Fig. 4 is a vertical section taken substantially on the line 4—4 of Fig. 2; Fig. 5 is a detail perspective view of the head piece for the side rail; Fig. 6 is a detail perspective view of the socket piece for the post, and Fig. 7 is a detail perspective view of the covering tube or "mount."

Similar reference numerals throughout the several figures indicate the same parts.

Our improvements are more particularly applicable to metal beds such as the tubular brass bed in common use and we have illustrated it in the present embodiment of the invention in this connection. It may be said at the outset that the joint is applicable for use at all four corners of the bed, that is, in connection with the head posts as well as the foot posts and consequently in connection with either the head rails or side rails and these terms may, therefore, be considered synonymous throughout the description.

Referring more particularly to the drawings, 1 indicates the tubular bed post, and 2 indicates generally a socket member secured thereto. This socket member we preferably form of sheet material comprising a yoke-shaped piece having an intermediate portion 3 disposed against and shaped to conform to an outer wall of the post and arms 4 extending outwardly therefrom in parallel vertically disposed spaced plates. The post 1 is apertured at 5 and again at 6. A portion of the connecting portion 3 is looped outwardly to form a strap 7 that extends through the aperture 5 into the interior of the post and a vertically disposed wedge 8 driven through the strap and otherwise connected as will later appear, secures the socket piece as a whole to the post.

Extending transversely between the plates 4 is a vertically arranged jam plate 9 having tongues 10 at its lateral edges extending through apertures 11 in the plates 4 and headed to rigidly secure these parts together. At its upper edge this plate 9 is extended horizonally at 18 though still disposed between the plates 4, being further provided with a tongue 12 extending through an aperture 13 in one of the plates 4 and finally terminates in a perforated tongue 14 that extends through an aperture 14ª in the intermediate portion 3 of the socket yoke and through the aperture 6 in the post with which the first mentioned aperture coincides and on the interior of the post the wedge 8, previously described, also passes through this tongue 14 as a further securing means.

One of the plates 4 has an opening or cutaway portion 15 formed therein through which extends the head or foot rail 16, as the case may be. This rail is preferably in the form of an angle iron one side of which is riveted or otherwise secured at 17 to the horizontal plate 18, while the other side is similarly secured at 20 to an outstanding flange 19 on the said plate 4 adjacent to the opening 15 and which may be conveniently provided by the material bent out to form this opening 15.

The side rail 20 of the bed may also be made of angle iron and secured thereto is a head piece indicated generally by 21 and which preferably comprises also a yoke-shaped integral piece of sheet material hav-

ing an intermediate portion 22 and the arms of which form parallel spaced vertical plates 23. One face of the angle iron 20 is riveted or secured to the intermediate portion 22 as at 24 while the other face is similarly secured as at 25 to one of the plates 23. These latter are formed with intersecting horizontal and vertically inclined slots 26 and 27 and with a vertically inclined slot 28 adapted to receive and engage over a pair of transverse bars 29 and 30 extending between and secured to the socket plates 4 in spaced relation to the jam plate 9. The bar 29 is received within the head 21 first by a horizontal or endwise movement of the latter to carry the bar through the horizontal slot 26 and then a downward movement that carries it up into the slot 27, the bar 30 at the same time passing into the slot 28. These slots 27 and 28 are at such an inclination and so placed that the bars do not rest in the bottoms of them but wedge against their inclined sides and force the end of the head up against the jam plate 9 so that a rigid and non-yielding connection is assured by these interlocking devices.

The portions 31 of the head plates 23 which are partially detached as a result of the formation of the slots 26, 27 and 28, we preferably reinforce by brace rods 32 which prevents them from becoming distorted from any cause and preventing the head 21 from accurately fitting the socket 2.

In order to produce what is known as a "full mounted" bed and more specifically to conceal and provide for the ornamentation thereof and of the joint, we encircle the post 1 with a longitudinally split tube 33. The edges formed by splitting this tube are provided with tongues 34 which engage within apertures 35 in the walls 4 of the socket piece 2 and may be there headed over or simply retained in engagement by the spring of the tube to support the latter in position. At the upper and lower edges, ears 36 are turned over in an inward and radial direction to engage the outer surface of the post and space the tube therefrom, while a sleeve 37 of brass or other preferably ornamental material surrounds the tube itself, being clenched at the edges of the split portion as at 38 and this sleeve conceals the ears 36 and also receives at its ends the ornamental brass collars 39 that are slipped over the post at either end. Of course, the post 1, in common practice, would be formed of an iron tube covered with a thin brass sleeve and this, together with the collars 39 and sleeve 37 completes a continuous brass surface that is readily assembled and which covers in a neat and attractive manner the joint section of the post as will be seen from an inspection of Fig. 1.

It will be seen that a bed joint constructed in accordance with our invention may be made entirely of sheet material such as die-formed steel possessing a maximum of strength with a minimum of weight and naturally having a smooth and well finished exterior surface, while both the connection of the socket piece 2 with the post and that of the head with the socket piece is strong and rigid at the same time being capable of being easily assembled.

We claim as our invention:

1. In a bed joint, the combination with a post and a side rail, of a socket piece on one of said parts comprising a pair of spaced parallel plates, a head piece on the other comprising a pair of spaced parallel plates fitting within and between the first named plates and coöperating interlocking devices on the socket and head, respectively.

2. In a bed joint, the combination with a post and a side rail, of a socket piece on one of said parts comprising in a single piece yoke-shaped member forming a pair of spaced parallel plates, a head piece on the other part comprising in a single piece a yoke-shaped member forming a pair of spaced parallel plates fitting within and between the first named plates and coöperating interlocking devices on the socket and head, respectively.

3. In a bed joint, the combination with a post and a side rail, of a socket piece comprising a yoke shaped member formed of sheet material having its intermediate portion secured against the post and its arms projecting outwardly therefrom to constitute a pair of parallel plates, a head on the side rail fitting between the plates and coöperating interlocking devices on the socket and head, respectively.

4. In a bed joint, the combination with a post and a side rail, of a socket piece comprising a yoke shaped member formed of sheet material having its intermediate portion disposed against the post and its arms projecting outwardly therefrom to constitute a pair of parallel plates, a jam plate extending transversely between the first mentioned plates and secured thereto, a head on the side rail fitting between the plates and interlocking devices on the socket piece and head piece, respectively, coöperating with each other with a wedging action which tends to force the head against the jam plate.

5. In a bed joint, the combination with a tubular post having an aperture therein, and a side rail, of a socket piece comprising a yoke-shaped member formed of sheet material having its intermediate portion disposed against the post and its arms projecting outwardly therefrom to constitute a pair of parallel plates, said intermediate portion being provided with an aperture registering with that in the post, a plate

extending transversely between the first mentioned plates and secured thereto, said transverse plate having a perforated tongue extending through the apertures in the yoke and post, a wedge on the inside of the post extending through the tongue, a head on the side rail fitting between the parallel plates and coöperating interlocking devices on the socket piece and head, respectively.

6. In a bed joint, the combination with a tubular post having an aperture therein, and a side rail, of a socket piece comprising a yoke-shaped member formed of sheet material having its intermediate portion disposed against the post and its arms projecting outwardly therefrom to constitute a pair of parallel plates, said intermediate portion being provided with an aperture registering with that in the post, a vertical jam plate extending transversey between the first mentioned plates and secured thereto, said jam plate being provided with a horizontal extension having a perforated tongue extending through the apertures in the yoke and post, a wedge on the inside of the post extending through the tongue, a head piece on the side rail fitting between the socket plates and interlocking devices on the socket piece and head piece, respectively, coöperating with each other with a wedging action which tends to force the head against the jam plate.

7. In a bed joint, the combination with a post having an aperture therein, of a socket member comprising a pair of parallel vertical plates, a horizontal plate extending between the vertical plates and secured thereto, said horizontal plate being provided with a perforated tongue extending through the aperture in the post, a wedge in the post extending through the tongue and a head rail secured to the horizontal transverse plate.

8. In a bed joint, the combination with a post having an aperture therein, of a socket member comprising a pair of parallel vertical plates, one of which is provided with an opening and an outstanding flange adjacent thereto, a horizontal plate extending between the vertical plates and secured thereto, said horizontal plate being provided with a perforated tongue extending through the aperture in the post, a wedge in the post extending through the tongue and a head rail embodying an angle iron extending through the opening in the vertical plate having one side secured to the adjacent outstanding flange and the other side secured to the horizontal transverse plate.

9. In a bed joint, the combination with a post having a socket piece secured thereto and embodying a pair of spaced vertical plates and an intermediate transverse jam plate, of a bar extending between the said pair of plates at a spaced distance from the jam plate, a side rail and a head on the latter comprising a pair of spaced vertical plates fitting between the socket piece plates, said head plates being provided with inclined slots adapted to engage over the bars and to force the head against the jam plate.

10. In a bed joint, the combination with a post having a socket piece secured thereto and embodying a pair of spaced vertical plates and an intermediate transverse jam plate, of a bar extending between the said pair of plates at a spaced distance from the jam plate, a side rail, a head on the latter comprising a pair of spaced vertical plates fitting between the socket piece plates, said head plates being provided with intersecting horizontal and vertically inclined slots adapted to receive the bar on the socket piece by an inward and then a downward motion whereby the inclined slots tend to force the head against the jam plate, and bracing means extending between the portions of the plates on the head which are left partially detached by the formation of the slots.

11. In a bed joint, the combination with a post and a socket piece mounted thereon, of a head piece comprising a yoke-shaped member composed of sheet material and embodying parallel spaced plates fitting the socket and a connecting portion between the plates, and a side rail secured to the connecting portion of the yoke forming the head.

12. In a bed joint, the combination with a post and a socket piece secured thereto and comprising side walls having apertures therein, of a split tubular covering surrounding the post in the region of the socket piece to cover the joint between the two, the edges at the split portion of the tube being provided with tongues extending into the apertures in the said walls to hold the tube in place.

13. In a bed joint, the combination with a post and a socket piece secured thereto and comprising side walls having apertures therein, of a split tubular covering surrounding the post in the region of the socket piece to conceal the joint between the two, the edges at the split portion of the tube being provided with tongues extending into the apertures in the said walls to hold the tube in place, ears on the tube extending inwardly in a radial direction to space the cylindrical wall of the tube from that of the post, and a sleeve surrounding the tube.

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