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944,085.

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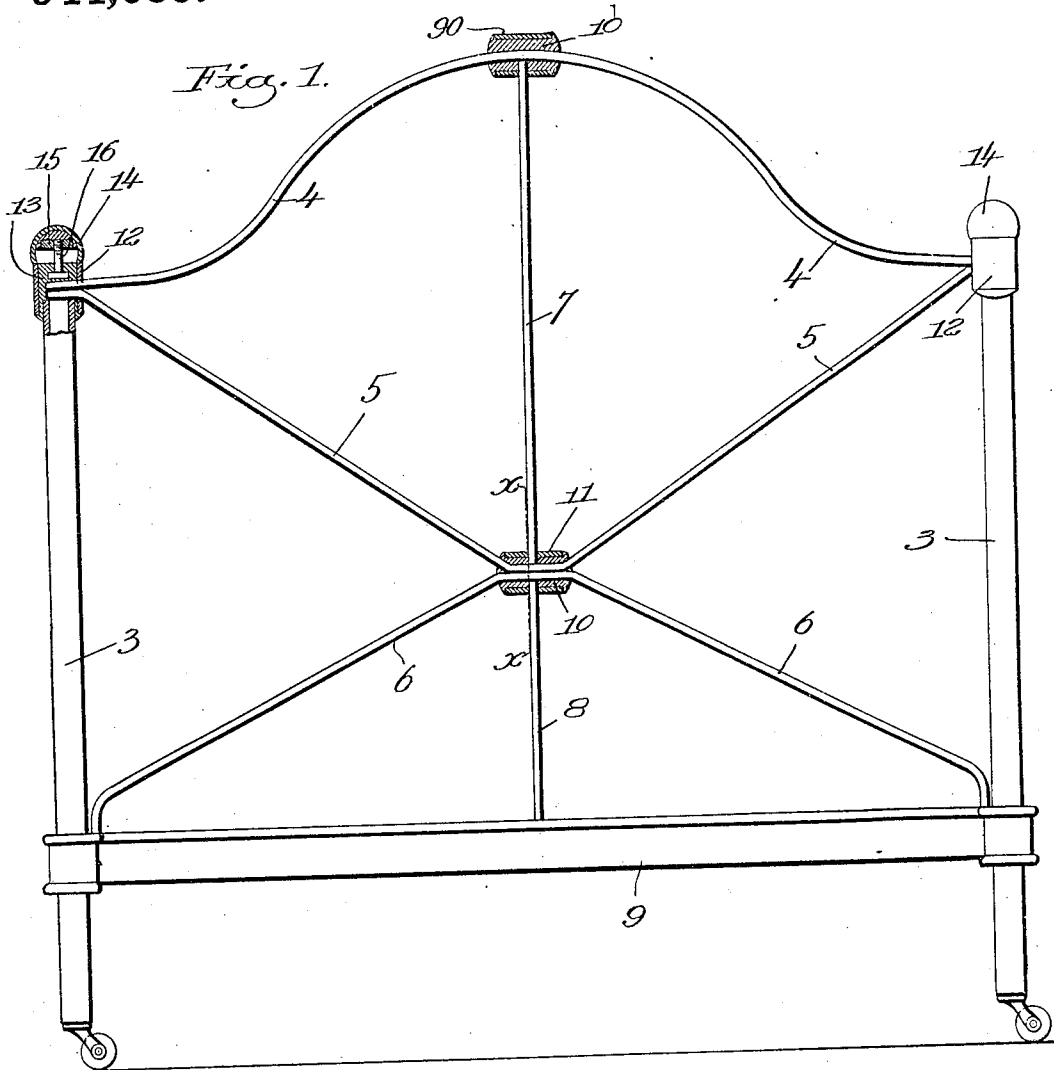
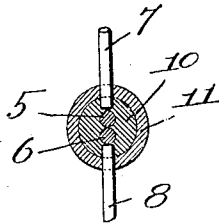


Fig. 2.



witnesses:

Fred. S. Grumbaf.
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Inverdon.
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UNITED STATES PATENT OFFICE.

FRANCIS G. GALE, OF WATERVILLE, QUEBEC, CANADA.

BED-FRAME.

944,085.

Specification of Letters Patent.

Patented Dec. 21, 1909.

Application filed March 3, 1909. Serial No. 481,886.

To all whom it may concern:

Be it known that I, FRANCIS G. GALE, a subject of the King of Great Britain, residing at Waterville, Province of Quebec, Dominion of Canada, have invented an Improvement in Bed-Frames, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

In the manufacture of end frames for iron bedsteads, it is customary to connect together the members which form the end frame by means of "chills" which are cast about said members at their meeting points. While chills of this nature serve to unite the members of the end frame, yet it sometimes happens that during the handling or shipment of beds, one or more of the chills becomes broken and when this occurs, the means of uniting or connecting the members at this point is destroyed.

One object of my invention is to provide a novel construction by which an inexpensive bed can be made wherein the chills are protected so that there will be no danger that any of them can become broken by a blow such as the bed frame might receive during shipment. In carrying out this feature of my invention I propose to protect the chills by means of short lengths of tubing which encircle the members at the points where they are to be united and within which the cast iron constituting the chill is poured.

Another object of my invention is to provide a simple and inexpensive way of making a brass or other ornamental knob for the top of the pillars.

I will first describe one embodiment of my invention and then point out the novel features thereof in the appended claims.

In the drawings, Figure 1 shows an end frame of an iron bedstead embodying my invention with parts thereof in section to better show the construction; Fig. 2 is a section on the line $x-x$, Fig. 1.

My improvement can be used in connection with bedsteads of any type or shape. That herein shown comprises the usual pillars or posts 3 and the members 4, 5 and 6 which extend from one post to the other. The end frame also includes the vertical rods 7 and 8 which are situated in line with each other and one of which extends between the two members 4 and 5, and the other of which

extends between the member 6 and the cross rail 9 of the bed frame.

According to my improvements, I place a protecting member 90 in the form of a short length of tube about the member 4 and provide said member with an opening through which the end of the member or rod 7 is extended. Thereafter the cast metal forming the chill 10 is poured into the protecting tube, as shown clearly in Fig. 1, said cast metal serving as a means to rigidly unite the rods 4 and 7. Similarly at the points where the rods 5, 6, 7 and 8 meet, I place another protecting tube 11 through which the rods 5 and 6 extend and into apertures in which the ends of the rods 7 and 8 extend, and I pour cast metal 10 into the protecting tube 11, thereby forming the chill which serves to unite the four rods at this point.

For connecting the rods 4 and 5 to the pillars, I propose to place over the end of the pillar a protecting sleeve 12 into an aperture in which the ends of the rods 4 and 5 enter, and then to pour molten metal into the space between the protecting sleeve 12 and the pillar 3, thereby to form a chill 13 which secures the rods 4 and 5 to the pillar.

The same invention may be used on bedsteads having other designs than that herein shown simply by inclosing the portions of the members (whether they be in the form of rods or in the form of tubes) which are connected to other members in a protecting shell and filling said shell with the molten metal thereby forming the chill. From this it will be seen that while the members constituting the end frame are connected by chills in usual manner, yet said chills are completely protected by the protecting members, and, therefore, there is no danger of said chills becoming broken during shipment of the bed frames or during their use.

In a factory manufacturing iron bed frames there is constantly going to waste a considerable quantity of tubing in short lengths, and, therefore, the use of such short lengths of tubing for the protecting members as above described involves no extra expense in the manufacture of the bed. In fact the bed frame herein illustrated can be manufactured as inexpensively as a bed frame in which the chills are cast in the way heretofore commonly adopted. In pouring the chills I propose to arrange suitable molds so that the cast metal will bulge outwardly

slightly at the ends, of the protecting members, thus forming a neat appearance and suitable finish, as clearly shown in the drawings.

- 5 In order to make an inexpensive but ornamental knob or cap for the pillar, I propose to take a sheet of brass or similar material and bend it into the shape desired for the cap 14. Into this sheet metal cap I braze
10 or otherwise secure a nut 15 which is adapted to be screw-threaded onto the screw-threaded end of a bolt 16 that is secured in the pillar. This bolt may conveniently be anchored in the chill 13, or it may be fastened in the pillar in any other suitable way. This construction is comparatively inexpensive because the cap can be made of sheet metal by means of suitable dies and a knob or cap made in this way has all the appearance of
20 a solid brass knob.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

- 25 1. In a bedstead, the combination with pillars or posts, of rods connecting said posts, and other rods connecting the first-named rods, chills connecting the meeting portions of the rods, and a protecting member inclosing and protecting each chill and within
30 which said chill is formed.

2. In a bedstead, the combination with pillars or posts, of rods connecting said posts, other rods connecting the first-named rods, a tubular protecting member inclosing the rods at the points where they meet,
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and a chill connecting the rods at their meeting points and inclosed in and filling said protecting member.

3. In a bedstead, the combination with pillars or posts, of a rod connecting said
40 posts, a tubular protecting member encircling each post at the point where said rod meets the same, and a chill filling the space between said tubular protecting member and post and uniting the rod thereto. 45

4. In a bedstead, the combination with meeting members extending at an angle to each other and forming part of a bed frame, of a chill connecting said members at the meeting point, and a protecting member inclosing the chill and within which the chill is formed. 50

5. In a bedstead, the combination with meeting members extending at an angle to each other and forming part of a bed frame,
55 of a tubular protecting member through which one of said first-named members extends, said protecting member having an aperture in one end through which the end of the other of said first-named members is inserted, and a chill formed in the protecting member and uniting the first-named members together. 60

In testimony whereof, I have signed my name to this specification, in the presence of
65 two subscribing witnesses.

FRANCIS G. GALE.

Witnesses:

AMY E. ARMSTRONG,
E. B. HUNTINGTON.