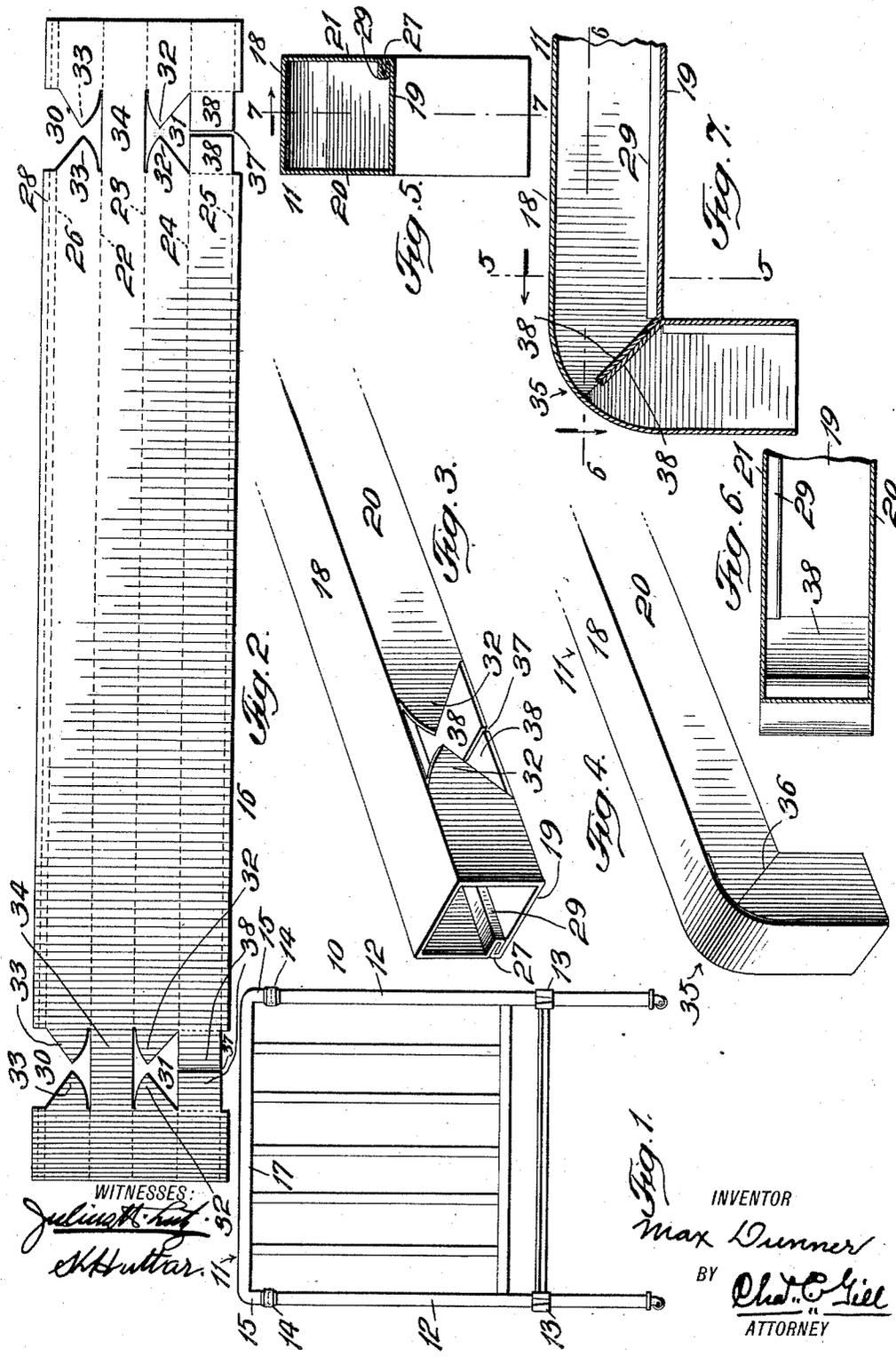


M. DUNNER.
METAL BEDSTEAD.

APPLICATION FILED AUG. 6, 1913.

1,076,964.

Patented Oct. 28, 1913.



UNITED STATES PATENT OFFICE.

MAX DUNNER, OF BROOKLYN, NEW YORK, ASSIGNOR TO GREENPOINT METALLIC BED COMPANY, OF BROOKLYN, NEW YORK, A FIRM COMPOSED OF DAVID FRANK AND WILLIAM LIES, OF BROOKLYN, NEW YORK, AND JOHN TROUNSTINE, OF NEW YORK, N. Y.

METAL BEDSTEAD.

1,076,964.

Specification of Letters Patent.

Patented Oct. 28, 1913.

Application filed August 6, 1913. Serial No. 783,264.

To all whom it may concern:

Be it known that I, MAX DUNNER, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Metal Bedsteads, of which the following is a specification.

The invention pertains more particularly to a novel construction of the corners of the upper ends of the end frames of metal bedsteads whereby the upper end of said end frames may be formed of rectangular tubing and have its end portions properly bent downwardly at right angles to join the corner posts of the end frames. It is desirable in many instances that the corner posts and transverse rails of the end frames of metal bedsteads be of rectangular formation in cross-section, and great difficulty has existed in so shaping the ends of the upper transverse bars of the end frames as to present a desirable appearance. It is extremely difficult to bend a piece of rectangular tubing on curved lines, and especially so in attempting to bend the ends of the tubing on the short curves that are required for the upper corners of end frames of metal bedsteads of customary size.

The object of my invention is to provide a construction whereby the ends of a piece of tubing, rectangular in cross-section, may be bent downwardly on graceful curved lines and thereafter be used as the top rail or member of the end frame, either head or foot, of a metal bedstead, the piece of tubing having its ends thus bent downwardly being adapted for connection with the usual corner posts for the bedstead, said corner posts also being rectangular in cross-section and corresponding in diameter with the said top rail or upper member.

In carrying out my invention I form the top member or upper rail of the frame from a sheet of metal and cut out the same at its end portions in a special manner to constitute the whole sheet as a blank from which the said upper member and downwardly extended outer portions are to be formed, and said invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawing, in which:

Figure 1 is an elevation of the end frame of a metal bedstead embodying my inven-

tion, the same being shown on a small scale; 55
Fig. 2 is a top view of the blank, also shown on a small scale, from which the upper member or top rail of the end frame and the corners thereof are formed; Fig. 3 is a perspective view of one portion of the upper 60
member or rail of the end frame as formed from the blank shown in Fig. 2 but in the stage it presents prior to the end portion of the tubular member being bent downwardly to form the corner of the said end frame; 65
Fig. 4 is a corresponding perspective view of one end portion of the upper rail or tubular member after the end portion thereof has been bent downwardly in the formation of a corner of the end frame; Fig. 5 is a 70
vertical section through a portion of the upper member or rail of the end frame after the latter has reached its completed condition, the section being on the dotted line 5—5 of Fig. 7; Fig. 6 is a horizontal section 75
through a portion of the completed upper member or rail of the end frame taken on the dotted line 6—6 of Fig. 7, and Fig. 7 is a vertical section through a portion of the upper rail or member taken on the dotted 80
line 7—7 of Fig. 6.

In the drawings, 10 designates the end frame, either head or foot, of a metal bedstead, which with the exception of the presence of my invention in the upper member or rail 11 thereof, is of customary construction, the corner posts being designated by the numeral 12 and the sockets for receiving the side rails of the bed by the numeral 13. The upper member or rail 11 is rectangular in cross-section and is connected with the corner posts 12 by means of castings, commonly called chills, 14. My invention resides wholly in the formation of the upper member or rail 11, and particularly in the construction of the end portions of said member whereby downwardly extending ends 15 may be formed thereon to match the upper ends of the corner posts 12 and be connected therewith by the chills 14. 100

The upper member 11 of the end frame is formed from a sheet metal blank 16 shown in detail in Fig. 2, said blank in carrying out my invention being bent to constitute the transverse bar 17 and the said downwardly extending ends 15. I indicate by dotted lines in Fig. 2 the lines on which the blank 16 is to be folded to create the rectangular 105

member 11 shown in Fig. 4, which has an outer face 18, an inner face 19, and two side faces 20, 21. The dotted lines 22, 23 in Fig. 2, define the panel from which the outer face of the bed member 11 is formed, and said dotted line 23 with the dotted line 24 defines the panel for the side 20 of the bed member 11, while said dotted line 24 and the dotted line 25 define the panel for the inner face 19 of said bed member 11, and the dotted line 22 with the dotted line 26 defines the panel from which the other side 21 of the bed member 11 is formed. The dotted lines 22, 23, 24, 25 and 26, while broken at the spaces cut in the blank adjacent to the ends thereof, extend to the extreme ends of the blank, except at such cut-away portions, and therefore the outer and inner and side panels of the bed member 11 are present finally in not only the transverse horizontal bar 17 but in the end portions 15 of said bar. Outwardly from the dotted line 25 and between said line and the extreme adjacent edge of the blank 16, the metal is bent inwardly, as at 27, to form a flange extending lengthwise of one edge of the inner panel 19 of the bed member 11, and between the dotted line 26 and the extreme adjacent edge of the blank 16 the metal of the blank 16 is bent inwardly on the dotted line 28 and then outwardly to form a pocket 29 extending lengthwise of the bed member 11 to receive the aforesaid flange 27, as shown in Figs. 3 and 5, the pocket 29 being disposed within the outline of the bed member 11 so as not to disfigure the same and in use cooperating with the flange 27 to lock the blank in its rectangular formation. I preferably apply solder to the joint between the flange 27 and pocket 29 so that even with rough usage there may be no danger of the seam in the adjacent edges of the bed member 11 formed from the blank 16 opening. The turning inwardly of the flange 27 and pocket 29 leaves the face 21 of the bed member 11 substantially smooth and uniform throughout.

Those portions of the panels of the blank 16 to constitute the sides 20, 21 of the bed member 11 are cut out as at 30 and 31, at the points which in the transformation of the blank into the bed member 11 will constitute the corner portions of said bed member. The recessing of the blank 16 at 30, 31 is special in that thereby are formed between the dotted lines 23, 24 corresponding facing somewhat triangularly-shaped sections 32 having straight edges on one side and curved edges on the other side, and that thereby are also formed similar sections 33 between the dotted line 22 and the adjacent outer edge of the blank 16. That portion of the blank 16 between the dotted lines 22, 23 extends continuously from one end to the other of the blank, and between the re-

cesses 30, 31 formed in the blank there is created in said part of the blank between the dotted lines 22, 23 sections 34 which are free to be bent over and downwardly, as at 35 (Figs. 4 and 7) to form the outer corners of the bed member 11, the sections 34 being a single piece and flat and adapted to be readily bent on curved lines to create such corners, and it will be seen, on reference to the drawings, that when the sections 34 are bent downwardly, as at 35, to form the outer corners of the bed member 11, the curved edges of the sections 32, 33 fit snugly below the outer edges of such corners, while the other or mitered edges of said sections 32, 33 come together along the line 36 (Fig. 4) and make a proper finish for the side faces of the bed member 11. The sections 34 of the blank 16 are bent over on curved lines, and the curved edges of the sections 32, 33, by fitting within the edges of the said sections 34 when the latter are bent downwardly, serve to strengthen the outer corner portions of the bed member 11 and impart to the article that strength which the upper portion of a head-frame or foot-frame ought to have.

That portion of the blank 16 between the dotted lines 24, 25 instead of being continuous to correspond with that portion of the blank between the dotted lines 22, 23, is slit transversely, as at 37, in line with the transverse center of the recesses 31 to form lips 38 which, in the formation of the bed member 11, may be bent inwardly on the joint-line 36 between the sections 32, 33 and soldered together as in Fig. 7 to additionally secure a rigid formation in the end portions of the bed member 11. In carrying out the invention I not only solder the lips 38 together at each corner of the bed member 11, but also solder the curved edges of the sections 32, 33 to the outer panel of said bed member, so that finally my structure is a very secure and rigid one, capable of withstanding considerable rough usage. After the blank 16 has been folded to form the straight construction shown in Fig. 3, the lips 36, 36 are bent inwardly on corresponding lines for the end portions, and the rectangular structure shown in Fig. 3 is bent downwardly on lines extending transversely of the sections 34 of said blank, thus, with the exception of the proper soldering, completing the entire bed member 11, ready for application to the other portions of the head or foot frame of a bedstead. The bed member 11 produced in accordance with my invention is rectangular in cross-section, of very rigid and durable structure, of uniform cross-section across its transverse bar portion 17 and vertical end portions 15, has a nicely curved outer surface at each corner and at the inner surface of said corners has a definite right-angular formation. The

bed member when completed will be applied to the corner posts 12 by chills or castings 14.

5 What I claim as my invention and desire to secure by Letters-Patent, is:

1. An upper tubular member, rectangular in cross-section, for end frames of metal bedsteads comprising a horizontal transverse portion and vertical end portions integral therewith for connection with the corner posts of said frames, the outer wall of said member being uniform throughout and at the corners thereof on curved lines and the inner wall of said member at its inner corners being on right-angular lines, and the adjacent ends of the sides of said horizontal and vertical portions of said member constituting corresponding projections having outer curved edges fitting said curved corners and inner straight edges engaging each other diagonally at the corners of said bed member.

2. An upper tubular member, rectangular in cross-section, for end frames of metal bedsteads comprising a horizontal transverse portion and vertical end portions integral therewith for connection with the corner posts of said frames, the outer wall of said member being uniform throughout and at the corners thereof on curved lines and the inner wall of said member at its inner corners being on right-angular lines, and the adjacent ends of the sides of said horizontal and vertical portions of said member constituting corresponding projections having outer curved edges fitting said curved corners and inner straight edges engaging each

other diagonally at the corners of said bed member, and the adjacent ends of the lower wall of said horizontal portion and the inner walls of said vertical portions having respectively integral therewith lips bent inwardly and engaging each other. 40

3. An upper tubular member, rectangular in cross-section, for end frames of metal bedsteads comprising a horizontal transverse portion and vertical end portions integral therewith for connection with the corner posts of said frames, the outer wall of said member being uniform throughout and at the corners thereof on curved lines and the inner wall of said member at its inner corners being on right-angular lines, and the adjacent ends of the sides of said horizontal and vertical portions of said member constituting corresponding projections having outer curved edges fitting said curved corners and inner straight edges engaging each other diagonally at the corners of said bed member, and the adjacent ends of the lower wall of said horizontal portion and the inner walls of said vertical portions having respectively integral therewith lips bent inwardly and engaging each other and secured together along the line of the joints between the said straight edges of said projections. 55 60 65

Signed at New York city, in the county of New York and State of New York, this 4th day of August A. D. 1913.

MAX DUNNER.

Witnesses:

ARTHUR MARION,
CHAS. C. GILL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."