

Dec. 11, 1928.

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P. E. HUETTEN

FRAMING FOR METAL FURNITURE

Filed Oct. 1, 1923

2 Sheets-Sheet 1

Fig. 1.

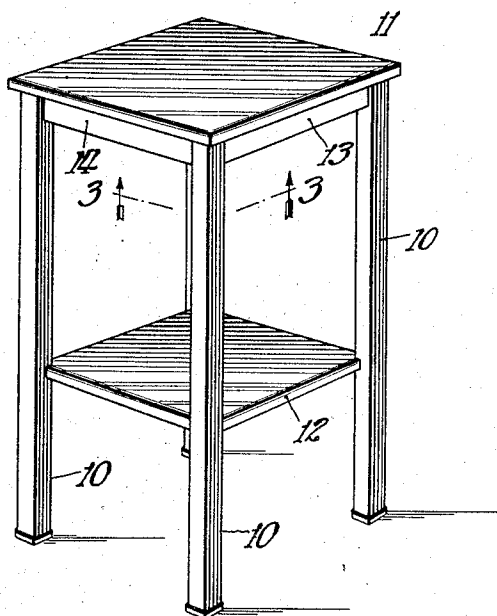
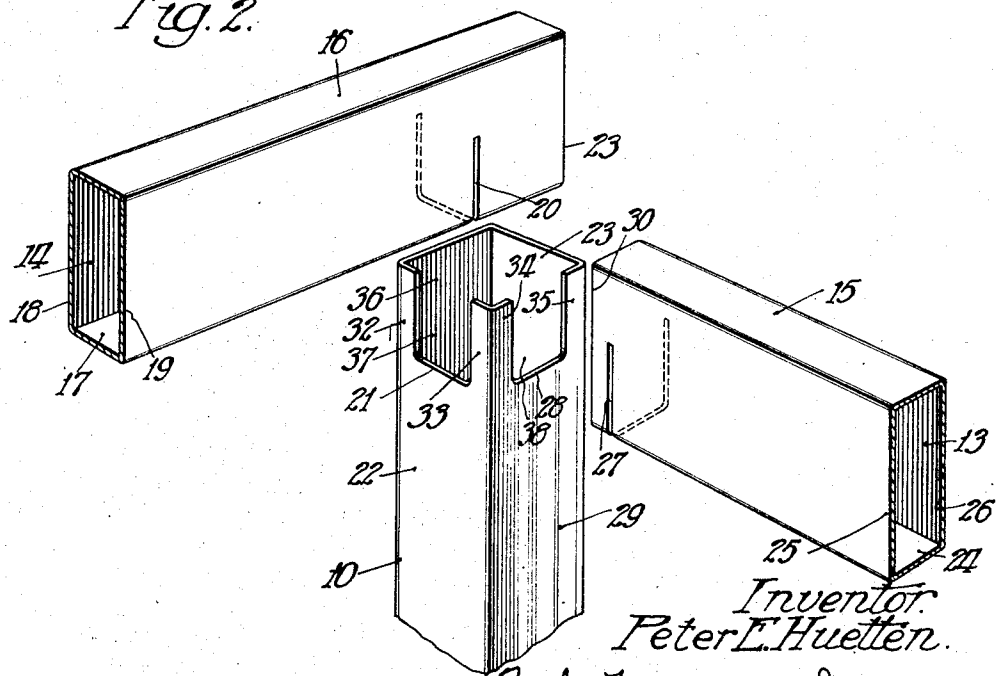


Fig. 2.



Inventor.
Peter E. Huettén.

Fisher, Towle, Clapp & Soans, Attys.

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Fig. 5.

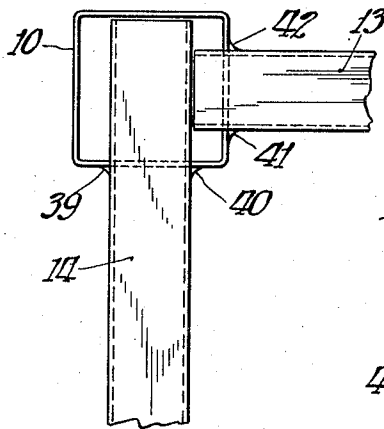


Fig. 3.

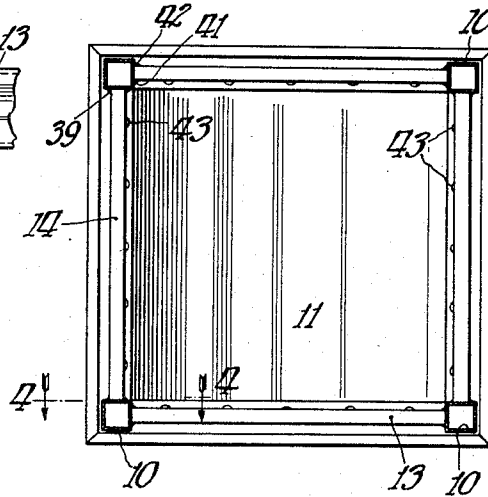
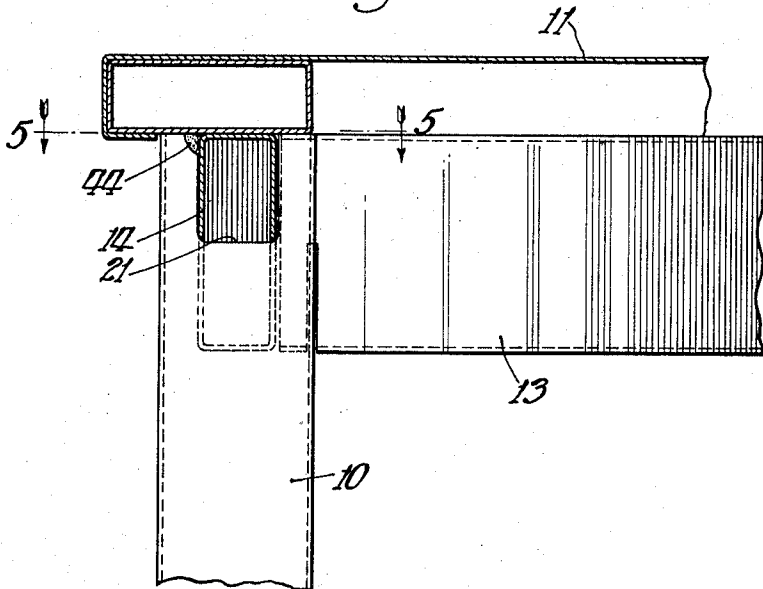


Fig. 4.



Inventor.
Peter E. Huetten.

Fisher, Towle, Clapp & Soane, Attys.

UNITED STATES PATENT OFFICE.

PETER E. HUETTEN, OF KENOSHA, WISCONSIN, ASSIGNOR TO SIMMONS COMPANY, OF KENOSHA, WISCONSIN, A CORPORATION OF DELAWARE.

FRAMING FOR METAL FURNITURE.

Application filed October 1, 1923. Serial No. 685,752.

My invention relates to the framing of metal furniture and although capable of extended application is of particular value in connection with corner joints between two members located in a common plane and a third member extending at an angle therefrom or perpendicular to said frame.

The principal objects of the invention are to provide a construction of the character referred to in which bars, posts or analogous members constituting the framing are made of sheet or tubular metal; to provide a construction in which such members may be economically and rapidly assembled and united together; to provide a construction in which the assembling and subsequent permanent uniting together of the members constituting the joint can be effected without the aid of preliminary assembling jigs or analogous equipment; to provide a construction which shall be neat in appearance, economical to produce and rugged and efficient in service, and in general, to provide an improved construction of the character referred to.

In the drawings, which illustrate my invention as applied to the framing of a bedside table:

Fig. 1 is a perspective view of the finished table;

Fig. 2 is a perspective view showing the members of the joint framing separated so as to show the detailed construction of each of said members;

Fig. 3 is an underside sectional plan view taken on the line 3—3 of Fig. 1;

Fig. 4 is a section taken on the line 4—4 of Fig. 3; and

Fig. 5 is a plan view of the joint looking in the direction of the arrows 5—5 of Fig. 4, before the table or top member of the piece is assembled.

Referring to the drawings, it will be observed that I have shown my invention as applied to a bedside table of conventional appearance, but in which all of the parts are made of metal, said parts comprising a set of four post members 10, a top member 11 and a shelf member 12. The framing upon which the top member 11 is supported and secured also includes a pair of end bars 13 and a pair of side bars 14.

As shown best in Fig. 2, each of the post members 10 comprises a tube of metal, in the present case, steel, and of substantially rec-

tangular cross section. In the present instance I have indicated said post as being square. The bars 13 and 14 are also constructed of sheet or tubular metal and in the present instance are substantially rectangular in cross section and are located with their upper walls 15 and 16 in substantially the same horizontal plane so that when the top 11 is applied to the framing, as in Fig. 4, there will be no space or crevice between said top and either of said bars 13 and 14.

Before the metal top 11 is applied to the supporting frame work, said frame work is assembled and united together, one corner of the frame being shown in plan in Fig. 5. As best shown in Fig. 2, the bar 14 is sawn transversely and upwardly through its bottom wall 17 and portions of its side walls 18 and 19 so as to form a transverse kerf 20, said kerf being of suitable width snugly to receive the edge or end 21 of the wall 22 of said post. The distance between the vertical kerf 20 and the end edge 23 of the bar 14 is such as to fit snugly in the space between the wall 22 and the opposite wall 23 of the post, the end of said bar 14 being cut square across in order to butt up against the interior surface of said wall 23.

In a similar manner the bottom wall 24 and portions of the side walls 25 and 26 of the bar 13 are sawn to provide a transversely and vertically extending kerf of proper width snugly to receive and drop down over the end 28 of the wall 29 of said post 10. The space between the kerf 27 and the end edge 30 of the bar 13 is such that when the bar 14 is located in the correct position in the post 10, the square cut end of the bar 13 will engage and abut against the side 19 of said bar 14.

The vertical depths of the kerfs 20 and 27 are such that when the ends of said kerfs engage the edges 21 and 28 respectively the top walls 15 and 16 of the bars 13 and 14 will be located in substantially the same horizontal plane.

In order properly to support the bars 13 and 14 and to prevent rocking movement of the same in a horizontal plane about their respective axes, the inner walls 22 and 29 are extended upwardly alongside the bars 13 and 14, the wall 22 having extensions 32 and 33 thereon spaced to receive snugly the bar 14 while the wall 29 is made with extensions 34

and 35 for snugly admitting and positioning the bar 13.

Also in order to conceal the ends of the bars 13 and 14, those portions of the ends of bars 13 and 14 which lie within or are intersected by the cross section of the tube 10, I prefer to extend the outer walls 23 and 36 of said tube 10 upwardly a sufficient distance to come flush with the upper walls 15 and 16 of said bars 13 and 14. For the same reason and also for economy in manufacture, the extensions 32, 33, 34 and 35 are carried up to the same level. As a matter of fact in actual manufacture the upper end of the post 10 is cut off square and slots or notches 37 and 38 are punched therein.

After the bars 13 and 14 have been set into position as indicated in Figs. 4 and 5, the members of the framing are rigidly and permanently united together by fused metal joints, preferably by acetylene welding or by brazing, examples of such joints being indicated at 39, 40, 41 and 42. After all four corners of the structure have been so welded or brazed, the table or top 11 which is also of sheet steel construction, is located in proper position with respect to the framing and rigidly united thereto by any suitable means. In the present instance, however, I have shown fused metal joints, for example, brazing at intervals as indicated at 43 in Fig. 3, and 44 in Fig. 4. The intermediate shelf 12 may be secured to the lower portions of the four legs or posts 10 in substantially the same way or any other desired manner.

The described details of construction and operation being merely illustrative of a single application of my invention, it will be understood that the scope of the invention should be determined by reference to the appended claims, said claims being construed as broadly as possible consistent with the state of the art.

I claim as my invention:

1. Framing for metal furniture comprising a tubular metal post member having a wall portion provided at one end with an open ended slot, a tubular metal bar of considerable breadth extending laterally from said post, and disposed at one end in said slot, the breadth of said bar being such as will snugly fit in said slot, said bar having a flat side portion engaging the edge of said wall portion at said notch, and being of sufficient extent to prevent turning of the bar in the notch, and said bar being provided with a transversely extending kerf adapted to snugly receive a portion of the wall of said post at the bottom of said notch so as to prevent lateral movement of the bar relative to the post.

2. In combination, a pair of bars located substantially in the same plane and disposed at an angle to each other, with the end of the first member abutting against the side of the

second member, a tubular post extending laterally from the plane of said bars with its end intersecting said bar ends and having a pair of substantially flat side walls respectively located in planes extending transversely across said bars, said bars being each provided with a transverse kerf snugly receiving the metal of one of said post side walls, the depths of said kerfs being considerably less than the width of said bars, and extensions on said post walls constituting continuations thereof extending beyond said kerfs embracing the sides of said bars and preventing the latter from rocking in said plane about their axes.

3. In combination a pair of bars located substantially in the same plane and disposed at an angle to each other with the end of the first member abutting against a side of the second member, a tubular post positioned perpendicular to said plane with its end intersecting said bar ends, and having a pair of substantially flat side-walls located in planes extending transversely across the line of said bars respectively, said bars being each provided with a transverse kerf snugly receiving the metal of one of said post side-walls, the depths of said kerfs being considerably less than the widths of said bars, and extensions on said post walls and constituting continuations thereof extending beyond said kerfs embracing the sides of said bars and preventing said bars from rocking in said plane about their axes.

4. In combination, a pair of bars located substantially in the same plane and disposed at an angle to each other with the end of the first member abutting against a side of the second member, the end of said latter member extending beyond said abutting end, a tubular post positioned perpendicular to said plane with its end intersecting said bar ends, and having a pair of substantially flat side-walls located in planes extending transversely across the line of said bars respectively, said bars being each provided with a transverse kerf snugly receiving the metal of one of said post side walls, the depths of said kerfs being considerably less than the widths of said bars, and extensions on said post walls and constituting continuations thereof extending beyond said kerfs embracing the sides of said bars and preventing said bars from rocking in said plane about their axes.

5. In combination, a pair of bars located substantially in the same plane and disposed at an angle to each other with the end of the first member abutting against a side of the second member, the end of said latter member extending beyond said abutting end, a tubular post positioned perpendicular to said plane with its end intersecting said bar ends, and having a pair of substantially flat side-walls located in planes extending transversely across the line of said bars respectively,

said bars being each provided with a transverse kerf snugly receiving the metal of one of said post side walls, the depths of said kerfs being considerably less than the widths of said bars, and extensions on said post walls and constituting continuations thereof extending beyond said kerfs embracing the sides of said bars and preventing said bars from rocking in said plane about their axes, the kerf of the first member being spaced 10 from its end so as to bring the end into abutting engagement with the opposite wall of the post.

PETER E. HUETTEN.