June 10, 1930. C. A. BRANTINGHAM 1,763,341

TABLE

Filed April 7, 1927

Fig 1

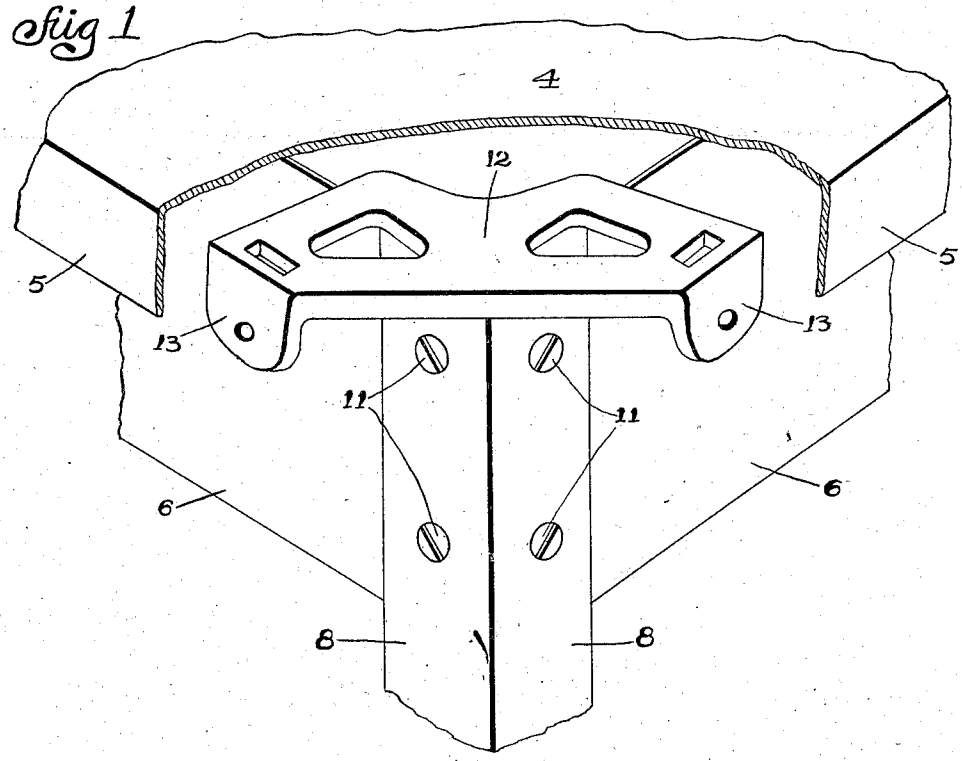


Fig 3

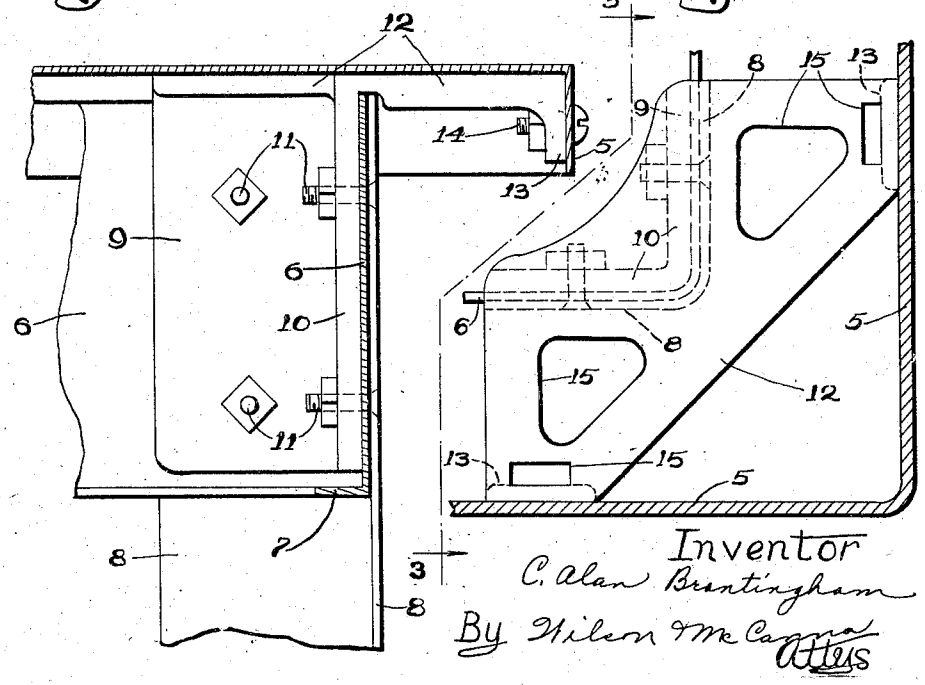


Fig 2

Inventor
C. Alan Brantingham
By Wilson McCarthy
Attys

Patented June 10, 1930 1,763,341

UNITED STATES PATENT OFFICE

CHARLES ALAN BRANTINGHAM, OF ROCKFORD, ILLINOIS, ASSIGNOR TO EMERSON-BRANTINGHAM CORPORATION, OF ROCKFORD, ILLINOIS, A CORPORATION OF ILLINOIS

TABLE

Application filed April 7, 1927. Serial No. 181,735.

This invention relates in general to furniture and has more particular reference to tables or stands for general use. My invention is however especially adapted for kitchen tables or tables of this general type.

The primary purpose of the present invention is to provide an all-metal table of this character, so designed and constructed as to be strong and durable and to enable production at a comparatively low cost. To this end I have aimed to construct the principal parts, such as the top, side rails, and legs, of sheet metal, so that they may be stamped or pressed to shape, or formed by a simple bending operation. Parts formed in this manner may be punched to provide bolt or screw holes and to provide the requisite openings for sliding drawers if such are desired, thus to facilitate and reduce the cost of manufacture. To further promote said general object I have provided a single coupling bracket for each corner of the table, preferably in the form of a casting, shaped for attachment to the top, side rails, and leg and rigidly holding these parts in fixed operative relation. Said parts are associated and connected in a novel manner with the corner brackets so as to facilitate assembling, produce a neat and trim outward appearance, and reinforce and strengthen the corner structure.

Another object is to so design the sheet metal structure that the side rails may be made as a single unit and this unit as well as the legs may be independently finished. My improvements also enable independent construction and finish of the table top as a unit, it being desirable for certain classes of tables to finish the table top by a baked enamel process in order to give it a clearer luster and a more lasting and serviceable finish than the side rails and legs, the finish of which is less expensive.

Other objects and attendant advantages will be appreciated by those who are skilled in this art as the invention becomes better understood by reference to the following description when considered in connection with the accompanying drawings, in which

Figure 1 is a fragmentary perspective view of one corner of a table, embodying my invention;

Fig. 2 is a plan section in a plane along the top of the coupling bracket, showing the assembly of parts at the corner; and

Fig. 3 is a vertical section taken on the line 3—3 of Fig. 2.

The table top, in case of a four-legged table, is rectangular in shape and preferably formed of a single piece of sheet metal shaped to provide a top proper, designated by 4, and depending marginal flanges 5. The side rails, of which there are four in the case of a rectangular table, are designated generally by 6. These side rails are likewise preferably formed from a single piece of sheet metal bent to rectangular shape and united at the ends as by welding, in this case the bottom edge of each side rail being turned inwardly to provide a strengthening flange 7. In Fig. 2 is shown the continuity of the side rails at the bend or corner. In the event that the table is to be equipped with a sliding drawer an opening will be punched in one of these side rails for the reception of the drawer and suitable drawer slides or guides will be mounted upon and between the opposed side rails. The legs are likewise preferably formed of sheet metal, each leg being formed angular in cross-section, providing leg flanges 8 in angular relation.

In order to connect and hold the above described parts in fixed relation and with the rigidity necessary for said metal construction I have devised a single coupling bracket for each corner of the table, these brackets being preferably cast to shape. Each bracket has two vertical parts or flanges 9 and 10 in the same angular relation as the corner portion of the side rails and the angle of the legs so that these bracket flanges may fit in any corner of the side rails flat against the sides thereof as shown in Figs. 2 and 3. These flanges provide broad pads against which the side rails are adapted to be clamped and which serve to reinforce the corner structure and to prevent distortion thereof. After the coupling bracket has been positioned in a corner of the side

rails as described, a leg may be fitted against the corner at the outer side thereof and the entire structure, namely the bracket flanges 9 and 10, the side rails 6, and the leg flanges 8 may be rigidly secured or clamped together as by means of bolts 11. This gives a laminated, reinforced corner structure in which the side rails are strengthened and held from distortion by the joint action of the coupling brackets and the table top which will be presently described, and in which the table top in turn is reinforced by the corner structure. Each coupling bracket is also shaped to provide a horizontal top portion 12 which provides a broad flat pad or supporting surface on which the flat table top is adapted to rest. As shown in Fig. 2 this supporting pad 12 extends outwardly beyond the angular flanges 9 and 10 and terminates at opposite ends in downwardly turned flanges 13 adapted to be secured or clamped as by means of bolts 14 to the down-turned flanges 5 of the table top. This bracket structure serves, therefore, not only to support the table top but to reinforce it across the corner and to provide a quick and easy means of attachment. In the present form of the bracket the top part is cored out or cut away at 15 merely to lighten it.

I claim:

1. In a table or similar construction comprising a one-piece sheet metal side rail bent to form corners, sheet metal legs of angular cross-section fitting the outside of said corners, and a sheet metal top overhanging the side rails marginally and having a down-turned marginal flange, brackets for the corners, each of said brackets being in the form of a heavy casting providing a vertical body portion of angular cross-section fitting the inside of the corners of said rails and a horizontal top portion overhanging the outside of the body portion and having down-turned flanges on the outer edges thereof presented in vertical planes substantially at right angles to one another, each of said legs having the flanges thereof arranged to bolt to the flanges of the body portion of said brackets whereby in the drawing together of said angular parts the side rail therebetween has the corners thereof trued up and positively held to the desired shape as well as reinforced, the top being also arranged to have the down-turned marginal flange thereof bolted at the corners to the down-turned flanges on the top portion of said brackets whereby firmly to secure the top to the side rail and legs in proper relation thereto.

2. In a table or similar construction comprising side rails, sheet metal legs of angular cross-section to fit the corners formed by the side rails, and a sheet metal top overhanging the side rails marginally and having a down-turned marginal flange, brackets for the corners to serve not only as a means to which to join the side rails, legs, and top, and thereby secure the said parts together, but also as a means to reinforce and stiffen the corners to keep the same from becoming wabbly, each of said brackets being of heavy metal construction for rigidity and providing a vertical body portion of angular cross-section and a horizontal top portion reaching laterally from the outside of said body portion and having down-turned flanges on the outer edges thereof in vertical planes at angles to one another, each of said brackets being adapted to have the body portion thereof fit a corner and have the side rails and leg secured thereto whereby the latter parts are firmly jointed together and reinforced at the same time, the top portion of the brackets being adapted to react laterally from the top of the side rails and receive a corner of the top thereon and the down-turned flanges on said top portion being adapted to have the marginal flange of the top secured thereto.

3. In a table or similar construction, the combination of sheet metal side rails, sheet metal legs of angular cross-section to fit the corners formed by the side rails, a top overlying the side rails and having the marginal portion thereof extending outwardly beyond the same, and brackets for the corners to serve not only as a means to which to join the side rails, legs, and top, and thereby secure the said parts together, but also as a means to reinforce and stiffen the corners to keep the same from becoming wabbly, each of said brackets being of heavy metal construction for rigidity and providing a vertical body portion of angular cross-section, like the legs, to fit the corners formed by the side rails, and a horizontal top portion reaching laterally from the body portion so as to fit under the marginal portion of the top, each of said brackets being arranged to cooperate with a leg at a corner of the table to join the leg and side rails rigidly together, the bracket and leg serving by the one fitting inside the corner formed by the side rails and the other fitting outside the corner to firmly join the leg and side rails together and reinforce the connection at the same time, the top portion of each of the brackets being adapted after the joining of the legs and side rails to have the top fastened thereto.

4. In an article of sheet metal furniture, the combination of sheet metal side rails forming an angle or corner, a sheet metal leg of angular cross-section fitting on the outside of the corner with the flanges thereof abutting the rails, an angular bracket of heavy metal construction fitting on the inside of said corner in abutment with said rails, means passing through the flanges of the leg and through the rails for fastening

the leg to the bracket with the rails clamped firmly therebetween, the bracket having a horizontal top portion, and a top member resting on the top portion of the bracket and secured thereto.

5. In an article of sheet metal furniture, the combination of sheet metal side rails forming an angle or corner, a sheet metal leg of angular cross-section fitting on the corner with the flanges thereof abutting the rails, an angular bracket of heavy metal construction also arranged to fit the corner in abutment with said rails, the leg and bracket being arranged to cooperate with one another by the one member fitting on the inside of the corner and the other member fitting on the outside thereof to secure the side rails to the leg, there being fastening means passing through the rails from the one member to the other to draw the members together and clamp the side rails rigidly therebetween, said bracket having a flat horizontal top portion, and a top resting on the latter and secured thereto.

In witness of the foregoing I affix my signature.

C. ALAN BRANTINGHAM.