

March 25, 1941.

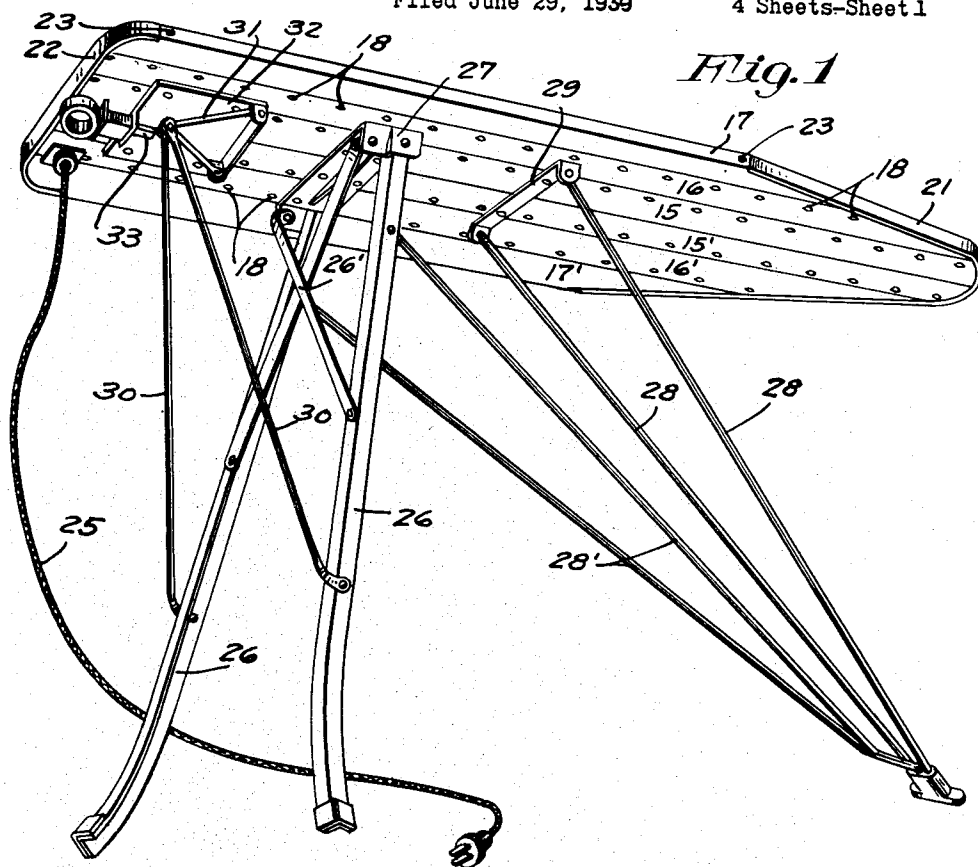
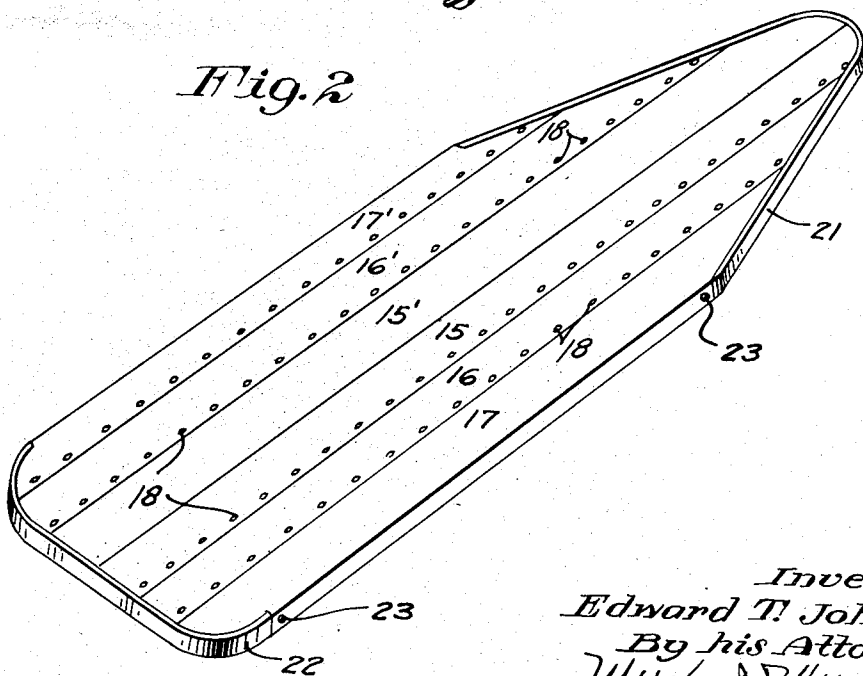
E. T. JOHN

2,235,882

METALLIC TABLE TOP WITH OPEN CHAMBERS

Filed June 29, 1939

4 Sheets-Sheet 1



Inventor
Edward T. John
By his Attorneys
Wichard & Wichard

March 25, 1941.

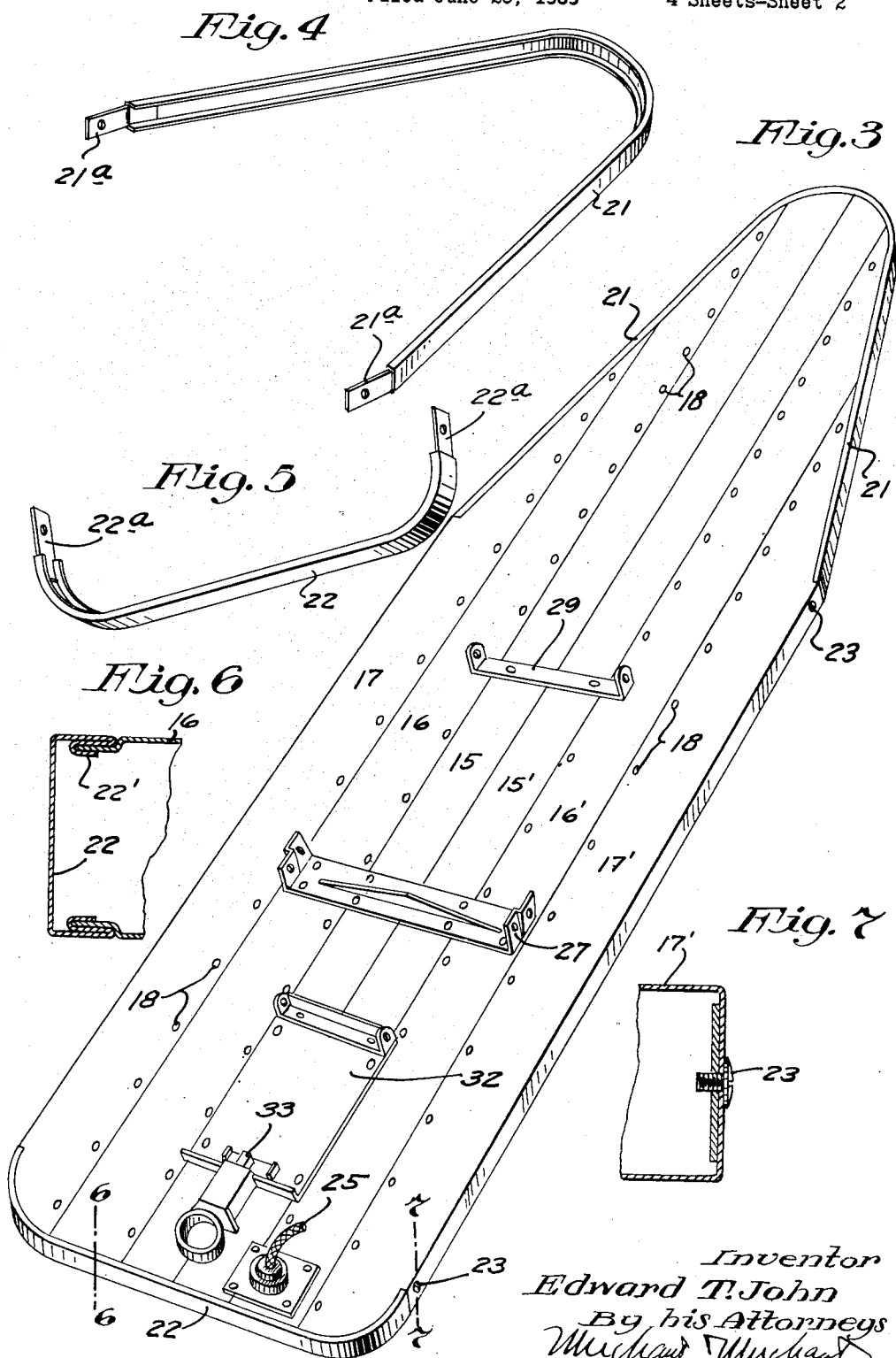
E. T. JOHN

2,235,882

METALLIC TABLE TOP WITH OPEN CHAMBERS

Filed June 29, 1939

4 Sheets-Sheet 2



Inventor
Edward T. John
By his Attorneys
Muehler & Muehler

March 25, 1941.

E. T. JOHN

2,235,882

METALLIC TABLE TOP WITH OPEN CHAMBERS

Filed June 29, 1939

4 Sheets-Sheet 3

Fig. 8

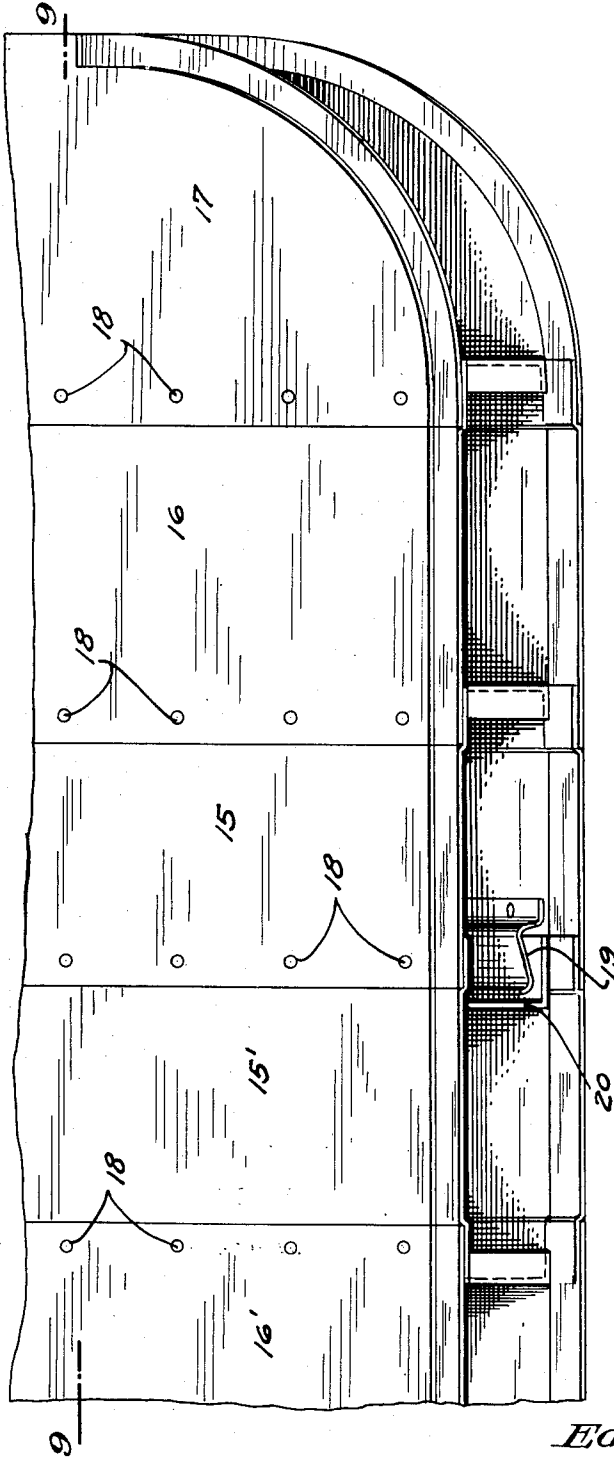
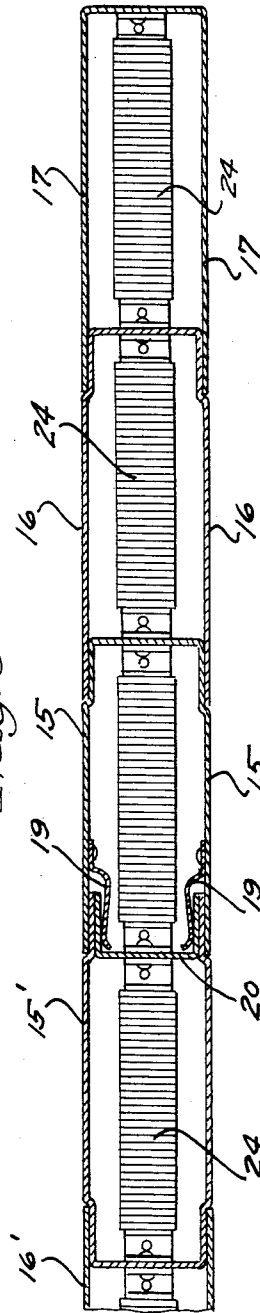


Fig. 9



Inventor
Edward T. John
By his Attorneys
Muehler & Muehler

March 25, 1941.

E. T. JOHN

2,235,882

METALLIC TABLE TOP WITH OPEN CHAMBERS

Filed June 29, 1939

4 Sheets-Sheet 4

Fig. 11

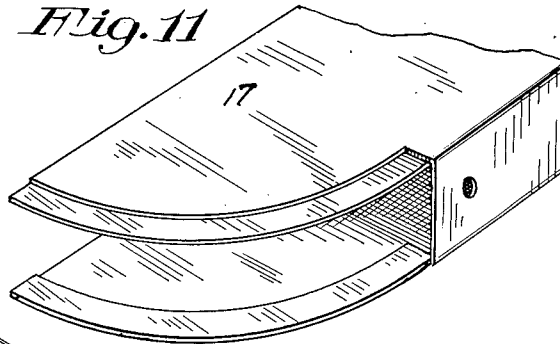
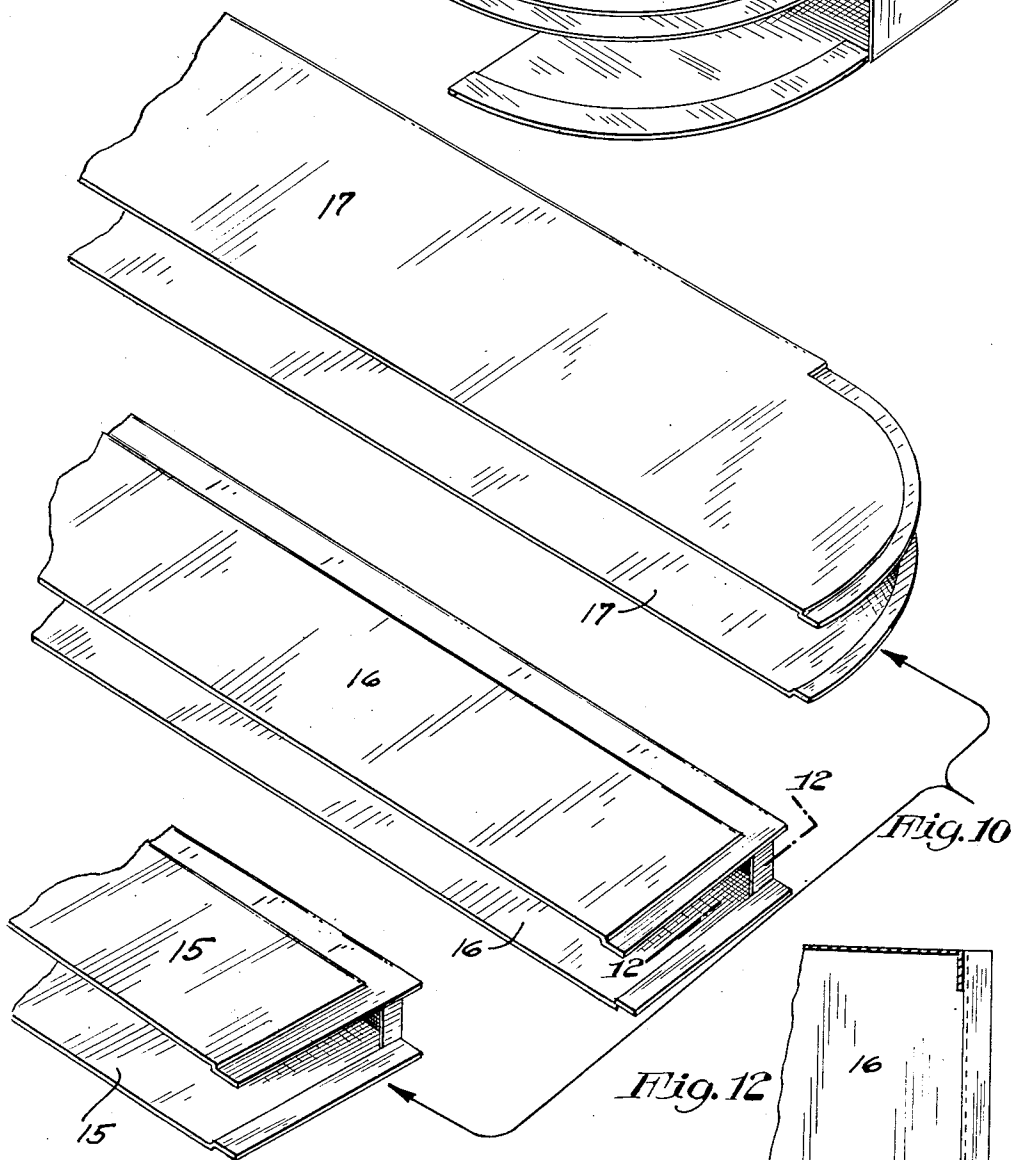
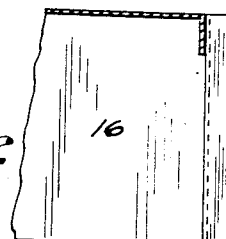


Fig. 12



Inventor
Edward T. John
By his Attorneys
Mitchell Mitchell

UNITED STATES PATENT OFFICE

2,235,882

METALLIC TABLE TOP WITH OPEN CHAMBERS

Edward T. John, Minneapolis, Minn., assignor to
J. R. Clark Company, Minneapolis, Minn., a corporation of Minnesota

Application June 29, 1939, Serial No. 281,833

4 Claims. (Cl. 38—137)

My present invention relates to ironing tables and is particularly directed to the improvement of metallic table tops capable of being electrically heated. The advantage of hot or heated table tops is that very damp clothes such as come from the ordinary wringer may be quickly ironed by the co-operative use of a hot iron. Metallic table tops must be strong and not of great weight, and to accomplish this by the use of very thin metallic sheets, is one of the important objects of this invention.

The metallic table top suitable for electric heating is here shown as equipped with supporting legs of a specific form, but it will be understood that the table top may be supported in any suitable way.

The preferred form of the table top is shown in the accompanying drawings wherein like characters indicate like parts throughout the several views:

Referring to the drawings:

Fig. 1 is a view in perspective showing the table top supported by the leg structure looking upward at the bottom of the board;

Fig. 2 is a view in perspective looking at the upper surface of the improved table top.

Fig. 3 is a view in perspective looking at the bottom side of the table top with the supporting leg removed;

Fig. 4 is a perspective showing the channel-shaped metallic binding strip for the tapered front end of the table top;

Fig. 5 is a perspective showing the channel-shaped metallic binding strip for the rear end of the table top;

Fig. 6 is a fragmentary section taken on the line 6—6 of Fig. 3;

Fig. 7 is a fragmentary section taken on the line 7—7 of Fig. 3;

Fig. 8 is a perspective with parts broken away looking at the rear end of the table top with the rear end binding strip removed;

Fig. 9 is a section taken on the line 9—9 of Fig. 8;

Fig. 10 is a perspective with parts broken away looking at three of the metallic sections of the table top, said sections being separated;

Fig. 11 is a fragmentary perspective of one of the outside sections shown in Fig. 10 and various other views; and

Fig. 12 is a fragmentary section taken on the line 12—12 of Fig. 10.

This improved metallic table top in its preferred form is made up of a plurality of thin sheet steel sections which, in transverse section, are substantially rectangular U-shaped structures that have flat parallel top and bottom plates but are open at one side. In the drawings the said table top is shown as made up of six of the said sections herein specifically designated

at 15, 16, 17, 15', 16' and 17'. The sections 17 and 17' are duplicate structures; sections 16 and 16' are duplicate structures; and the sections 15 and 15' are duplicates except that the edge flanges of the section 15' are vertically offset so that when the sections are assembled, as shown in the drawings, the flat top and bottom plates of the said sections 15 and 15' will be in the same plane; and for the same reason the closed sides of the sections 15 and 16 are vertically offset so that the top and bottom plates of all of the sections will be in the same plane and smooth, flat surfaces will be provided on the upper and lower faces of the table top.

When the said elements above described are assembled as shown in the drawings, see particularly Fig. 9, they will all be rigidly connected preferably by spot weldings indicated at the various places marked 18. In the manufacture of this table top, the sections 15, 16 and 17 will usually be connected and spot welded together; the sections 15' and 16' and 17' will be likewise connected and welded together and then the two half board portions will be slipped together and spot welded so that the entire table top will become very rigid and well braced, but will also be a comparatively light and strong structure.

In Figs. 8 and 9 the numeral 19 indicates spring clips spot welded to the top and bottom plates of the section 15.

To reinforce the table top structure at the connection between the section 15 and 15', a U-shaped strut or metallic strip 20 is spot welded to the top and bottom plates of the section 15'. When the parts are thus assembled, the spring clips or strips 19 serve to hold the two half top sections properly assembled while they are being spot welded together.

The structure so far described shows an ironing board or top with a plurality of air chambers open at the front and rear ends, but it is desirable that these air chambers be closed at both ends. Hence, I provide a metallic binding strip 21 that is channel-shaped in cross section, and a similar metallic binding strip 22 that is in the form of a yoke with cover ends. The binding strip 21 is adapted to be applied to the tapered front end portions of the several sections, and the binding strip 22 is likewise adapted to be applied to the rear ends of the several metallic sections. By reference to Fig. 6 it will be noted that the channel-shaped yoke 22 has flanges that are set in flush with reduced portions of the top plates of the sections and formed with U-shaped return flanges 22' that telescope on to the reduced ends of the several metallic sections. The binding strip 21 is applied to the reduced front edges of the several sections in substantially the same manner as that illustrated in Fig. 6 so that the upper and lower flanges of the said binding

strips 21 and 22 will be flush with the top and bottom faces of the table top. It is desirable that these binding strips 21 and 22 be readily removable and, hence, the said strips are provided with perforated end lips 21a and 22a that slip inside of the outer walls of the outer sections 17 and 17' and are detachably connected thereto by machine screws 23, see particularly Fig. 7.

The several air chambers formed within the metallic table top afford convenient and desirable places for the insertion of electrical heating elements 24 such as those shown in Fig. 9. These electrical heating elements may take various forms and may be connected either in series or in multiple or parallel and electric current may be afforded therefor in any of the well known ways. However, in Fig. 1 the supply cables are shown as applied through the insulated cable covering 25.

As already stated, the supporting leg structure may be of any approved form; however, in the structure illustrated, the rear legs 26 are pivoted to a transverse metallic anchoring plate or bracket 27 that is spot welded to the bottom of the table top and reinforces the sections thereof. The prongs of the oblique leg 28 are shown as pivoted to a transverse metallic bracket or plate 29 that is also spot welded to the bottom of the composite table top. Numeral 30 indicates a rear leg brace that is connected to a link 31, which latter is pivoted to a tie plate 32 and spot welded to the bottom of the table top. The link 31 is subject to a retractible latch bolt 33 applied to the plate 32.

The particular type of leg structure here illustrated is not here claimed and, in fact, is that manufactured by the J. R. Clark Company of this city and known to the trade as the Rld-Jid board.

In the leg structure shown 28' is a brace that connects the front end of oblique leg 28 to rear legs 26; and 26' indicates spreader links that connect legs 28 to anchoring plate 27.

It is important to note that the channel-shaped sections that make up the body of the metallic table top are of like formation in their top and bottom plates so that the said sections can be assembled in the board on either side of its longitudinal axis or center line. For example, the sections 17 and 17' are of like form and can be placed on either transverse side of the board. Of course, if placed on the right-hand side, that section would be placed one side up and if placed on the left-hand side, would be turned the other side up.

By the so-called binding strips not only are the compartments of the board closed, but the table top is reinforced and braced thereby. Removal of these binding strips affords convenient access to the interior of the compartments for the application, removal or repair of the heating elements.

After the table top illustrated in the drawings has been completed and its parts assembled, I have found it desirable to dip the same in lacquer or similar coating so as to air-tight seal all of the joints between the sections.

In the use of the metallic table top, it will, in practice, be covered with a heavy padding or insulating fabric, but this latter feature, of course, constitutes no part of the present invention.

The preferred form of the table top illustrated in the drawings and above described in detail is, of course, capable of modifications within the scope of the invention herein disclosed and claimed.

In many instances preferred structures have been described as rigidly connected by electric or spot welding, but it will be understood that in many instances rivets or bolts may be preferred and that such will be within the scope of the invention described and claimed.

From the foregoing it will, of course, be evident that the so-called table top may be supported by any suitable means whether permanently attached thereto or temporarily used as a support therefor.

What I claim is:

1. A fabricated table top of the kind described, made up of a plurality of sections that in cross section are of approximately rectangular U-formation and have overlapping flanges and form a multiplicity of closed compartments, in combination with channel-shaped end binding strips applied to the ends of the sections and closing the compartments thereof, the end portions of said sections being depressed substantially the thickness of the flanges of said binding strips and the flanges of said binding strips being set flush with the upper and lower surfaces of said sections.

2. A fabricated table top of the kind described, made up of a plurality of sections that in cross section are of approximately rectangular U-formation and have overlapping flanges and form a multiplicity of closed compartments, the said sections being of sheet metal and the overlapping parts thereof being rigidly connected, in combination with channel-shaped end binding strips applied to the ends of the sections and closing the compartments thereof, the end portions of said sections being depressed substantially the thickness of the flanges of said binding strips and the flanges of said binding strips being set flush with the upper and lower surfaces of said sections.

3. A fabricated table top of the kind described, made up of a plurality of sections that in cross section are of approximately rectangular U-formation and have overlapping flanges and form a multiplicity of closed compartments, in combination with channel-shaped end binding strips applied to the ends of the sections and closing the compartments thereof, the end portions of said sections being depressed substantially the thickness of the flanges of said binding strips and the flanges of said binding strips being set flush with the upper and lower surfaces of said sections, said binding strips having projecting lip-like end flanges underlapping and rigidly but detachably connected to the outer walls of the outer lateral edge sections of said board.

4. A fabricated table top of the kind described, made up of a plurality of sections that in cross section are of approximately rectangular U-formation and have overlapping flanges and form a multiplicity of closed compartments, in combination with channel-shaped end binding strips applied to the ends of the sections and closing the compartments thereof, the end portions of said sections being depressed substantially the thickness of the flanges of said binding strips and the flanges of said binding strips being set flush with the upper and lower surfaces of said sections, the open sides of the U-shaped sections of each lateral half of the board being set toward the open sides of the other half, in further combination with a U-shaped strut applied to the flanges of one of the inner sections and underlapping with and rigidly secured to flanges of adjacent inner sections.

EDWARD T. JOHN.