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H. W. GILBERT ET AL
SECTIONAL CUTTING TABLE

2,484,283

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2 Sheets-Sheet 1

FIG. 4.

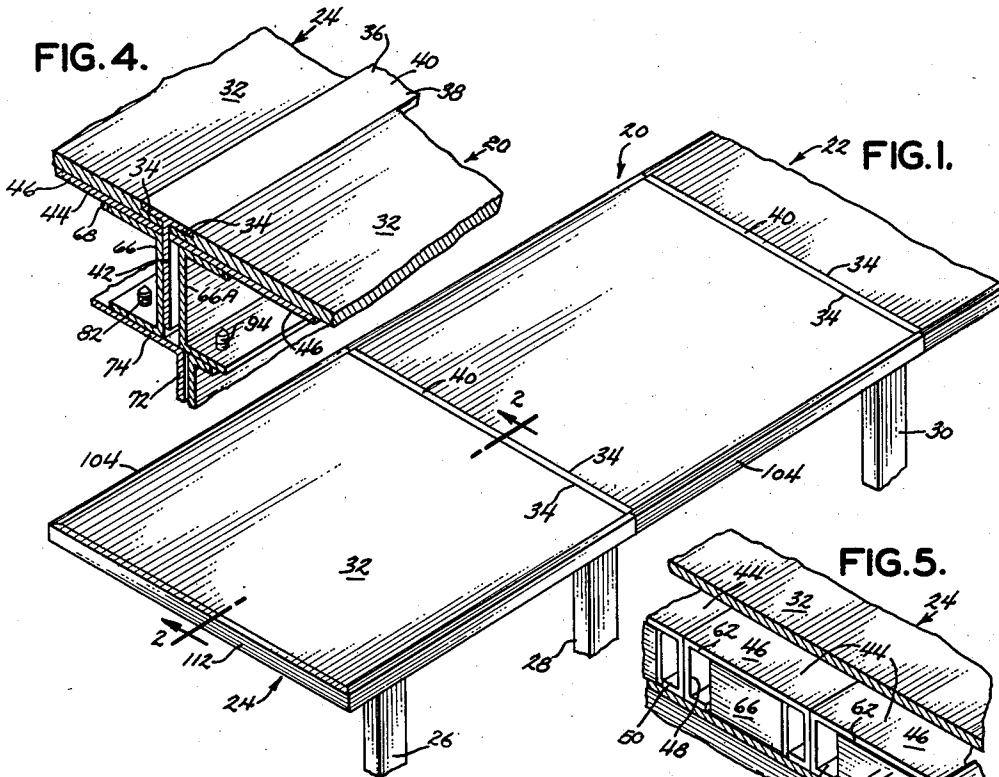
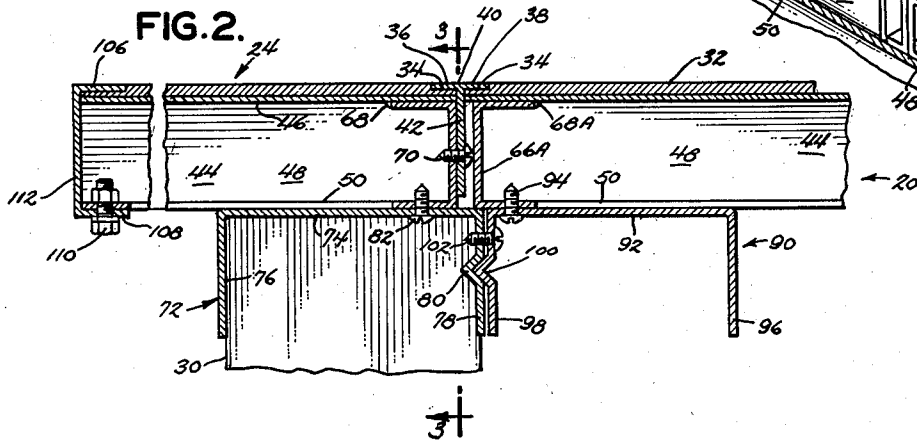


FIG. 1.

FIG. 5.



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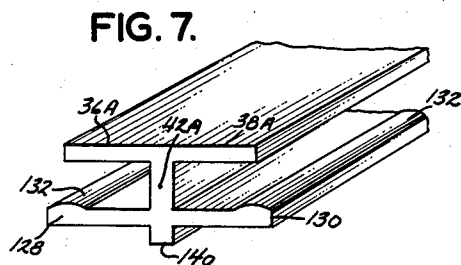
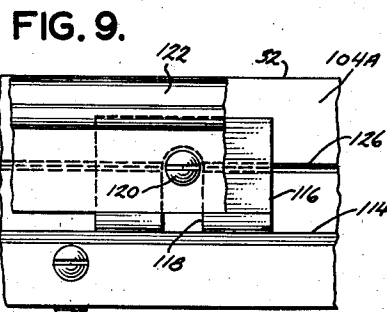
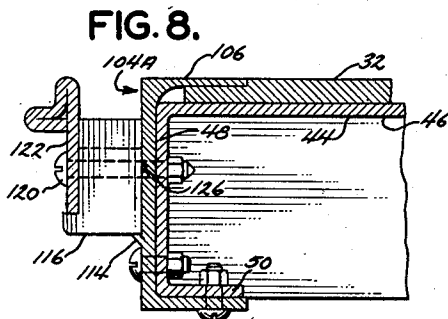
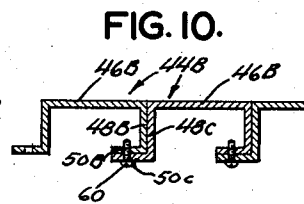
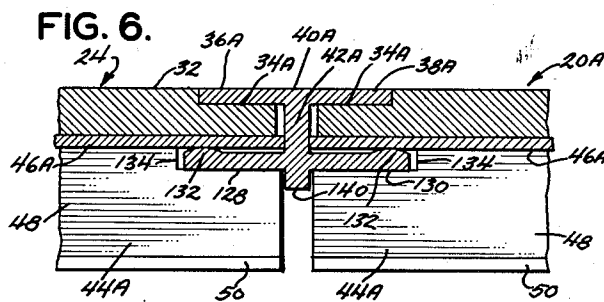
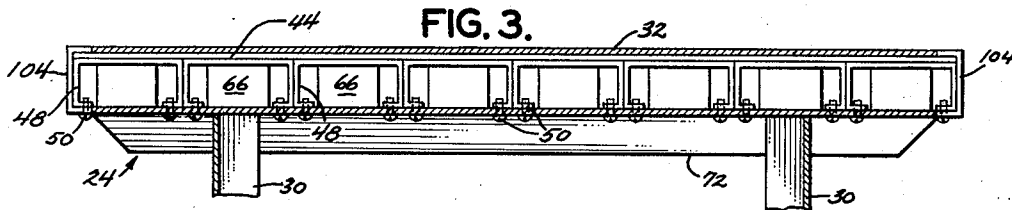
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SECTIONAL CUTTING TABLE

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Application August 10, 1948, Serial No. 43,455

4 Claims. (Cl. 311—4)

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This invention relates to tables formed of a number of sections, and adapted for use as cutting tables.

An object of the invention is to provide an improved construction for a table of the class described having a number of sections which are adapted to fit together to form the complete table.

Another object of the invention is to provide a sectional table of the class described the inter-fitting parts of which are characterized by considerable novelty, so that the desired length of table may be assembled quickly and easily and without the use of special tools, and as readily disassembled.

A further object of the invention is to provide a sectional table comprising a number of sectional elements, including end elements and intermediate elements, and having novel joint means for providing at the points of intersection of the adjacent elements of the table, smooth interconnection so that the entire length of the table top remains plane.

Still another object of the invention is to provide a highly improved cloth laying up table for use in cutting rooms and the like, which may be made as long or as short as desired, by merely assembling sufficient sectional elements of the table together, and having a smooth table top formed of sheet material which is securely fastened down particularly well at the joints between adjacent table sections.

Still another object of the invention is to provide an improved construction for a sectional cloth laying up table which has an all aluminum construction and is therefore light in weight yet strong in its ability to support the weights to be disposed thereupon, and which has a sectional plane top made of fibrous sheet material such as "Masonite" pressed wood and the like.

A further object of the invention is to provide an improved sectional cloth laying up table which is simple in design, inexpensive to construct, and easily and quickly assembled and disassembled without special tools other than for example a screw driver and pliers.

Other objects and advantages of the invention will become apparent from the following description of a preferred embodiment thereof as illustrated in the accompanying drawings, and in which:

Fig. 1 is a perspective assembled view of a portion of the sectional table of our invention;

Fig. 2 is an enlarged sectional view taken substantially along the line 2—2 of Figure 1;

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Fig. 3 is a sectional view taken substantially along the line 3—3 of Fig. 2, but of reduced size;

Fig. 4 is a fragmentary sectional perspective view of a portion of the table construction shown in Fig. 2;

Fig. 5 is a fragmentary sectional perspective view of a portion of the table construction shown in Fig. 3, with a part of the table top sheet being cut back;

Fig. 6 is a fragmentary sectional view taken on the same plane as Fig. 2, but showing a modified form of joint;

Fig. 7 is a fragmentary perspective view showing the H shaped channel joint member of Fig. 6 apart from the associated parts shown in Fig. 6;

Fig. 8 is an enlarged sectional view of a portion of the table shown in Fig. 2 but embodying a modified form of edge molding to facilitate the mounting of a track thereon;

Fig. 9 is a fragmentary elevational view looking to the right at the structure shown in Fig. 8, and

Fig. 10 is a fragmentary sectional elevation similar to that of Fig. 3, but showing a modified form of table top construction.

The present invention discloses a novel form of cloth laying up table adapted for use as a cutting table or for other desired purposes, which is made up of a number of sections, each section being small enough to be handled conveniently by one or two men, and which are designed to be assembled together with the greatest of ease and convenience, to form a sturdy table of the desired length.

In order to understand clearly the nature of the invention and the best means for carrying it out, reference may now be had to the drawings, in which like numerals denote similar parts throughout the several views.

As shown best in Figs. 1 through 5, the table is formed of a number of intermediate table sections such as those generally indicated at 20 and 22, and two end table sections one of which is generally indicated at 24. It is apparent that a table of any desired length may be formed by assembling a number of intermediate table sections like those shown at 20 and 22 to each other and between two table end sections, the left end one of which is shown at 24.

The table is supported upon any suitable type vertical legs such as those shown at 26 and 30, these being disposed at intervals along opposite edges of the table to maintain the elevation of the table top 32 above the floor. The table top 32 of each section is preferably formed of suit-

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able sheet material, such as fibrous sheets of "Masonite" pressed wood, which is made of fibres of wood and the like held together by adhesive and pressed into sheets.

The adjacent edges of adjacent sections of the pressed wood table top 32 are slightly recessed along their margins extending laterally across the width of the table, to form marginal groove-like recesses or seats 34 shown in Figs. 1 through 5, and numbered 34A in Figure 6. Seated in these marginal recesses 34 are the opposite top flanges 36 and 38 of the T-shaped channel member 40 made of aluminum or other suitable material, which extends right across the joint between adjacent sections of the table top 32, two of these T-shaped channel members 40 being shown in Fig. 1.

The T-shaped channel member 40 has a vertical web 42 which extends downward between the remaining edges of the sections of the table top 32, as seen best in Figs. 2 and 4, so as to have the top flanges 36 and 38 overlie these remaining edges. As seen best in Figures 4 and 5, the table top 32 lies upon the top walls 46 of a number of longitudinal support channels 44 which are disposed thereunder in side by side relation, the side walls 48 of adjacent support channels being in mutual contact, and the bottoms of the side walls 48 being turned inward toward each other to form bottom flanges 50.

These adjacent support channel members 44 may be secured together in any suitable manner, as by screws, bolts, welding or otherwise as desired, such as for example, by the screws 82 attached to the underlying cross channel 72, as shown in Fig. 2, and which will be hereinafter more fully described. Fig. 10 shows a modified form of construction of the support channel members 44B, it being seen that each channel has a top 46B, one side wall 48B with inturned flange 50B, and an opposite side wall 48C the lower edge of which extends slightly lower down than side wall 48B, so as to allow its outwardly extended flange 50C to underlie the inturned flange 50B of the adjacent channel, so as to be secured thereto and to the underlying channel by means of a single screw or bolt 60 instead of two screws 82 as in the Figs. 1 through 5 form.

It will thus be seen that the vertical web 42 of the T-shaped member 40 also spaces adjacent edges 62 of the adjacent table sections, so that the undercut edges of the table top sheets 32 are pushed in between the under surfaces of the flanges 36 and 38 and the underlying tops 46 of the support channels 44.

Facing plates 66 having upper and lower inturned flanges connected by their faces, as seen best in Figs. 2, 4 and 5, are spot welded at 68 to the under surface of top walls 46 of the channel support members 44 on the left as seen in Figs. 2 and 4 to bring their faces flush with the right edges 62 of the channel support members shown on the left of Fig. 2, and are secured to the web 42 of the T-shaped joint member 40 by means of a screw 70 extending through the web 42 and the face of the face plates 66, as seen best in Fig. 2. To the support channels on the right side of Figs. 2 and 4 are secured similar face plates 66A by spot welding as at 68A, these face plates not being brought all the way over to the left edge of the right support channels of the view since it is necessary that they allow room for clearance of the screw head of screw 70.

The left hand table section 24 of Figs. 2 and 4 is provided with an underlying cross channel 72

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having a top wall 74, one depending outer flange 76, and another inner depending flange 78 which is cam grooved at 80, in a substantially V-shaped cross-sectional contour. A screw 82 holds the cross channel 72 in position as shown, and integral legs such as at 30 depend from opposite ends of the cross channel to support the table.

The right hand table section 20 of Fig. 2 also has an underlying cross channel 90 with its top 92 secured to the bottom flange of the face plate 66A by screw 94 as shown, and having an outer flange 96 and an inner flange 98 which is provided with an outward ridge 100 corresponding to the groove 80. It will be seen from Fig. 2 that the right hand edge of the cross channel 72 extends further to the right to partly underlie the bottom flange of face plate 66A, and that the left hand edge of the cross channel 90 is offset to the right to allow for this overlap. In addition, the centerline of the projecting ridge 100 is slightly higher than that of the left hand groove 80 so that when drawn together by the screw 102 during assembly, a cam action arises drawing the table section 20 downwardly or upwardly with respect to the table section 24 which makes for a more secure, rigid and level assembly.

In accordance with our invention, all the edges of the intermediate table sections except the edges adjacent the joint member 40 are covered with edge channel moldings 104 formed of aluminum or other material, with their upper flanges 106 extending into marginal recesses formed by undercutting the pressed wood table top 32. Their bottom flanges 108 are secured to the lower flanges 50 of the channel support members 44 by means of bolts 110. (See Fig. 2.) Similar edge molding 112 is secured to the end edges of the end sections 24.

Figs. 8 and 9 show a modified form of edge molding 104A for the intermediate table sections and end sections, having a ledge 114 forming a seat for the rail supporting chairs or brackets 116 disposed therealong. The chairs 116 have downwardly open slots 118 formed therein to receive therethrough bolts 120, the said bolts 120 extending also through the longitudinal track 122 which is adapted to support the traction wheels of the cloth laying machine described further in the co-pending patent application No. 787,240 filed November 20, 1947, by the same inventors, which will not be otherwise described in detail herein, reference being had to that patent for details thereof.

The bolt 120 also extends through the wall 48 of the channel member 44 as shown, being secured thereto by the nut 124. A groove 126 is formed in the outer surface of the edge molding 104A to serve as a guide for drilling through the parts to receive the bolt 120.

In Figs. 6 and 7 we have shown a modified form of the invention for the table section joints in which the T-shaped channel member 40A has additional lower oppositely extending side flanges 128 and 130, integral with its web 42A, each side flange having a longitudinally extending cam surface 132. In this form of our invention the channel walls 48 are notched out as shown at 134 to receive the side flanges 128 and 130, and it will be seen that when the table top recessed the parts of the table section 20A are pressed into the space between the upper and lower flanges 38A and 130 (as in Fig. 6), the cam action of the portions 132 holds them securely in position, and the depending lower ridge 140 serves as an

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additional spacer to prevent crushing or buckling of the "Masonite" table top.

Although I have described my invention in specific terms, it is to be understood that various changes may be made in size, shape, materials and arrangement without departing from the spirit and scope of the claims.

Having thus described our invention what we claim and desire to secure by Letters Patent is:

1. A longitudinal sectional cutting table comprising a first end section, a second end section, a first intermediate section, a second intermediate section, each of said sections having a rectangular table top comprising a sheet of Masonite or similar plastic material, the said table tops of all of said sections being of the same width whereby opposed parallel edges thereof may be aligned to form the longitudinal edges of the assembled cutting table, the other edges of the said table tops of said sections being transversely disposed with respect to the assembled cutting table, marginal portions adjacent the four edges of each table top being recessed, protective edge members overlying each of said longitudinal parallel edges of each of said sections, protective edge members overlying the transverse outer edges of the table tops of said first and said second end sections, each of said protective edge members having a flange received in said recess in said table top corresponding thereto, means for attaching said protective edge members to said table sections whereby to hold said table tops in place, a first cross member disposed between said first end section and said first intermediate section, a second cross member disposed between said second end section and said second intermediate section, a third cross member disposed between said first and second intermediate sections, said first, second and third cross members being substantially H-shaped in cross-sectional contour and having opposed flange portions received in corresponding transverse recesses of the table tops of said sections, means for attaching said cross members to said table sections whereby to hold the inner transverse edges of the table tops of said sectional table in place, and means for maintaining said table sections in assembled condition to form said cutting table into a unitary structure.

2. A longitudinal sectional cutting table according to claim 1 in which each of said first, second and third cross members comprises a vertical portion disposed between adjacently disposed sections and a second pair of opposed flanges spaced below said first named flange portions and on opposite sides of said vertical portion, thereby forming spaces to receive end portions of said sections between the upper and lower flanges.

3. A longitudinal sectional cutting table accord-

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ing to claim 2 in which the lower flanges of each of said cross members are provided with cam portions on the upper surfaces thereof to frictionally hold said portions of said sections received in said spaces between said upper and lower flanges.

4. A longitudinal sectional cutting table comprising a first end section, a second end section, a first intermediate section, a second intermediate section, each of said sections having a rectangular table top comprising a sheet of Masonite or similar plastic material, the said table tops of all of said sections being of the same width whereby opposed parallel edges thereof may be aligned to form the longitudinal edges of the assembled cutting table, the other edges of the said table tops of said sections being transversely disposed with respect to the assembled cutting table, marginal portions adjacent the transverse edges of the table tops of said intermediate sections being recessed, marginal portions adjacent the inner transverse edges of said first and second end sections being recessed, a first cross member disposed between said first end section and said first intermediate section, a second cross member disposed between said second end section and said second intermediate section, a third cross member disposed between said first and second intermediate sections, said first, second and third cross members being substantially H-shaped in cross-sectional contour and having opposed flange portions received in corresponding transverse recesses of the table tops of said sections, means for attaching said cross members to said table sections whereby to hold the adjacent transverse edges of the table tops of said sectional table in place, and means for maintaining said table sections in assembled condition to form said cutting table into a unitary structure.

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