

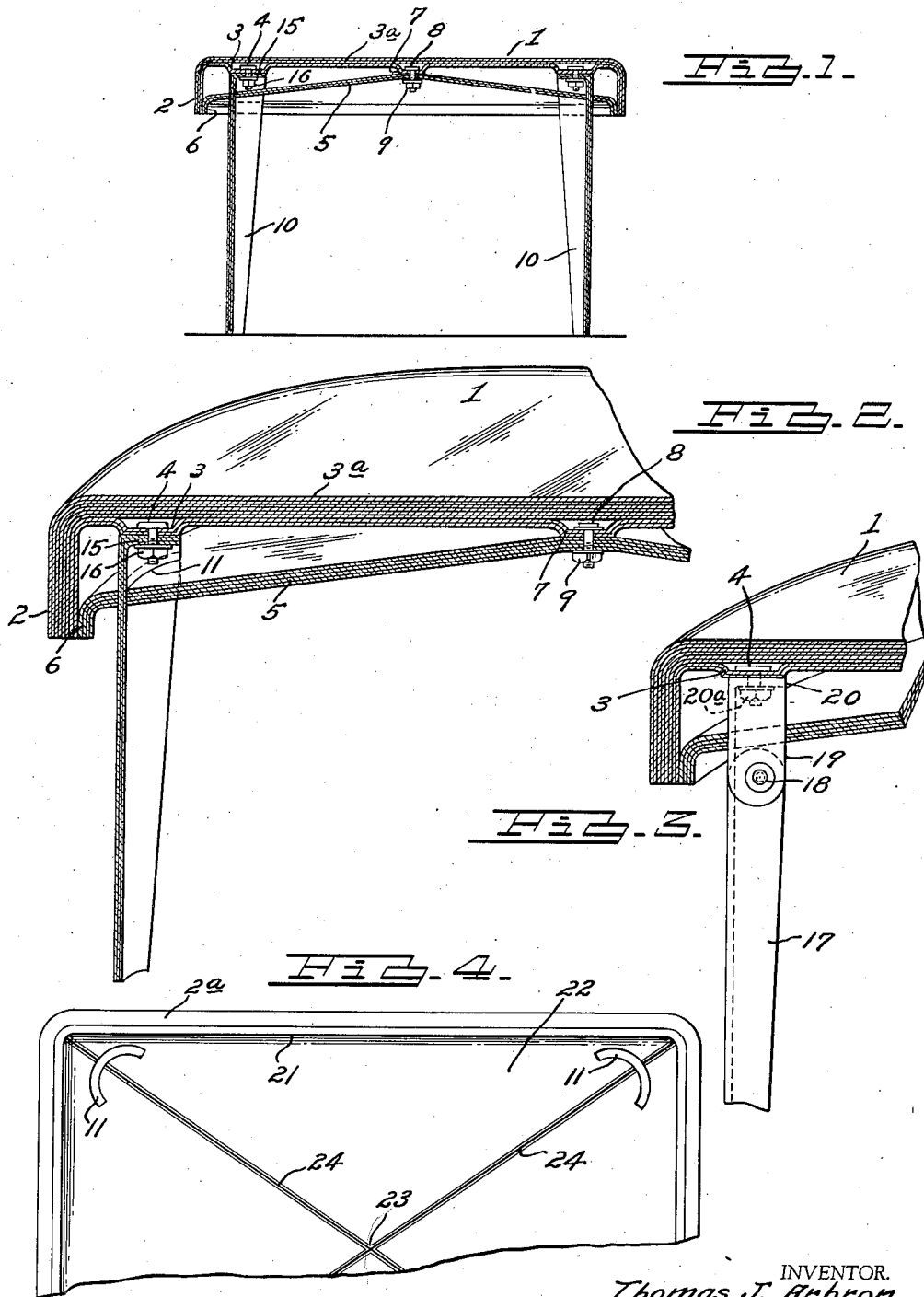
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TABLE

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TABLE

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This invention relates to table construction the object being to provide a new and improved table having legs for the support thereof and a top comprising a flat body portion including a rim formed of a plastic material and a truss sheet of plastic material, likewise having a rim, attached to the rim of the body portion and spaced from the body at the rim and in contact with the body at the center and providing a structure that is resistant to torsional strains tending to deflect the body in its plane.

A further feature and object of the invention is to provide legs, the upper ends of which are attached to the under side of the top and extend through apertures provided in the truss sheet whereby the said legs are braced, the whole providing a light weight, rigid construction adapting the same for various uses as for instance, card tables either of a round or rectangular form and that is inexpensive in construction.

These and various other objects and novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction of a table embodying my invention is shown in the accompanying drawing in which—

Fig. 1 is a vertical section showing the top and truss sheet forming a part thereof.

Fig. 2 is a fragmentary section through the table top showing the construction thereof and the manner of securing legs thereto.

Fig. 3 is a similar view showing a foldable leg secured to the top.

Fig. 4 is a view of the under side of the table top of rectangular form.

The table, whether of round or rectangular form, is of light construction particularly in respect to the top 1, it being preferably formed of a plurality of superimposed paper-like sheets impregnated with a resin of either the thermo-setting or thermo-plastic type. The sheets are first thoroughly impregnated and coated with the resin, or other material adaptable for the purpose, and are shaped under heat and pressure to form a depending peripheral rim 2 and a flat body portion 3, as shown more clearly in Fig. 2. In the formation of the top several of the layers or plies are depressed inwardly of the under side of the top, at the points to which the legs are to be attached, to form a seat 3 and, after a certain number of layers have been positioned in the form and shaped at the points required to form the seats 3, a headed screw 4 is passed there-through and projects to below the seat. The remainder of the resin impregnated and coated

sheets are then positioned thereover and the whole then positioned in a mold and pressed thereinto under heat and pressure to shape the same and set the resin. The plies may be of greater or less number depending somewhat upon the peripheral dimensions of the table but the top, as so far described, may tend to warp under torsional strains that may be resident in the top member and further is of such light weight as to be readily distorted.

To prevent distortion of the body portion 3 of the table top, I provide a truss sheet 5 formed of the same material but usually with a less number of superimposed sheets than is utilized in the formation of the body portion 3a. The truss member or sheet 5 has a flange 6 secured to the lower edge of the flange 2 and is of a cone like form in the round table and is attached at the center to the center of the under side of the body portion 3 of the said top. In tables of the small diameter, suitable for use as a card table for instance, the truss sheet 5 may be secured at its center to the center of the portion 3 of the top by the resin itself and I have found this arrangement sufficiently strong and durable as to be commercially satisfactory. However, the top may be provided with a seat 7 at the under side of its center and a screw bolt 8 extending therethrough and through the center of the sheet 5. A nut 9 is provided for clamping the sheet 5 to the said seat 7. The legs 10 may be of any desired form such as the sheet metal form shown and the sheet 5 at the several points through which legs are to extend is formed with a slit or aperture 11, shown in Fig. 4, of a shape corresponding to the shape of the legs in cross section in the plane of the truss sheet. The legs are first fastened with their bases 15 engaging the seats 3 subsequent to the formation of the top 3a. The bases are apertured to receive the screw or bolt 4 and the nut 16 is then tightened up to fix the legs to the seat.

The apertured truss sheet 5 is then passed over the free ends of the legs to the position shown in Fig. 2 with the rim 6 of the truss sheet secured to the rim 2 of the top and the bolt 8 extends through a central aperture of the truss sheet and the nut 9 then tightened up. Preferably the truss sheet at its points of contact with the table top at the center and rim are placed under heat and pressure to firmly unite the truss sheet and top at said points.

It is also to be understood that the truss sheet 5 is assembled with the body portion 3a, by heat and pressure, to form with the said portion a

table top of great strength and non-warpable under normal conditions of use.

The sheets to be used in the formation of the body portion and the truss sheet may be of any type that will readily absorb the resin in liquid condition and I have found that a suitable sheet is the commercially known "Kraft" brown paper. In the small tables, at least, the body portion of the top need not be more than one-sixteenth of an inch in thickness. As the resin sets hard it forms a smooth surface to which a surface color may be applied if desired or the resin may contain a suitable color. Although the top portion 3a is quite thin, the truss sheet 5 associated therewith, as stated, provides a top structure so resistant to torsional strain or deflections of the body portion in its place that one may not deflect the same by manual stresses to which the top may be submitted in its normal use.

While I have shown a rigid non-flexible leg 10 which is desirable in many instances of use, a foldable leg may be provided as is desirable in card table structure. Such a leg I have illustrated in Fig. 3 at 17. This leg is pivoted at 18 to a bracket member 19 which has a flange 20 at its upper end for securing to the seat 3 by the bolt 4 by means of the nut 20a. The leg may be pivoted in any approved manner and by any approved means now commonly in use.

In Fig. 4 I have shown a table of rectangular form the view being taken from the under side of the table. The table has an outer flange 2a to which is secured, on the inside, a flange 21 of the rectangular truss sheet 22, which is secured at its center 23 to the center of the body portion after the manner hereinbefore described in respect to the truss sheet 5. Due to the truss sheet 22 being of rectangular form, the truss sheet 22 will have valleys 24 as shown by the radial lines. The legs will be attached in the same manner as described in respect to Fig. 2 and extend through the slit 11 of a shape in cross section corresponding to the shape of the leg portion occupying the slit.

The invention is not confined to the use of a thermosetting resin as it may be formed of other hardened cementitious material. The thermosetting type, however, is believed the more durable. It is also to be understood that the leg portions may be secured to the under side of the portion 3a of the table top by means other than that hereinbefore described and that various changes may be made in the structure without departing from the spirit and scope of the invention as set forth in the appended claims.

Having thus briefly described my invention, its utility and mode of operation, what I claim and desire to secure by Letters Patent of the United States is:

1. In a table, a table top comprising a comparatively thin and flexible sheet of material having a rim extending from one side thereof, a truss sheet of coned form attached at its center to the center of the body portion and at its periphery to the inner face of the body rim at its edge and providing a means preventing distortion of the top in its plane, and leg elements extending through the truss sheet adjacent to and spaced from the body rim and attached at the upper ends to the underside of the top.

2. In a table, a table top comprising a flat body portion having a depending peripheral rim, a

truss sheet of a like material of cone form having a rim portion less in depth than the depth of the body rim and secured to the inner face of the body rim at its lower edge and attached at its center to the under side of the body at its center, and providing a means for preventing material distortion of the body in its plane, and leg elements extending through an aperture provided in the truss sheet adjacent the rim and secured at its upper edge to the underside of the table top a distance from the rim of the top.

3. In a table, a table top comprising a flat body portion having a depending peripheral rim, and a truss sheet having the form of a cone attached at its periphery to the free edge of said depending body rim thereby spacing the truss piece at its periphery a distance from the under side of the flat body portion, means having one end embedded in the underside of the body portion and having a projecting end for attaching the truss at its center to the center of the body portion, said truss providing a means for preventing distortion of the body portion in its plane.

4. In a table, a table top comprising a flat body portion having an integral depending peripheral rim and formed of a number of plies of superimposed sheets of material impregnated with a self-hardening cementitious material, a truss sheet attached at its periphery to the inner face of the body rim adjacent its free edge and at its center to the center of the body whereby the said truss sheet at any radial cross section lies at an angle to the plane of the body to support the same from deflection, said truss sheet being formed to permit the leg elements to be introduced therethrough, and means depending from the under side of the table top for securing the upper ends of the legs thereto and providing in association with the truss sheet a means preventing lateral displacement of the legs.

5. In a table, a table top comprising a flat body portion having an integral peripheral rim depending from the under side thereof, a truss sheet of similar form in outline attached at its periphery to the depending edge of the said body rim and at its center to the center of the body, and lying at an angle to the body at any radial section, and legs for the said table, the truss sheet having an aperture through which each leg extends, and means for fastening the end of the leg to the under side of the body portion, the legs fitting the respective aperture in such manner as to provide a brace tending to prevent undue strain being applied to the leg fastening means.

6. In a table, a table top of desired peripheral form, said top being formed of a series of plies of plastic impregnated sheet material and shaped under heat and pressure to provide a peripheral rim on one side thereof, a plastic impregnated truss sheet formed of plies of material and having a rim of less depth than the body rim and attached at its periphery to the inner face of the body rim and spacing the periphery of the truss sheet from the under face of the body portion at the rim, said truss sheet having an aperture for each of the legs to be provided for the table and a metal fastening means on the under side of the body accessible through the said apertures for securing the legs thereto.

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