

Oct. 30, 1928.

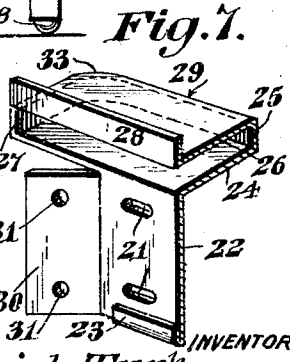
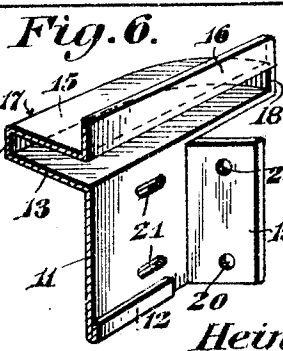
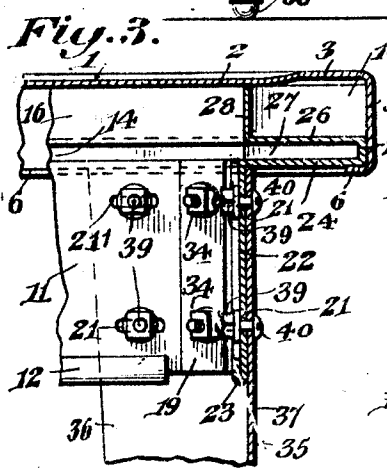
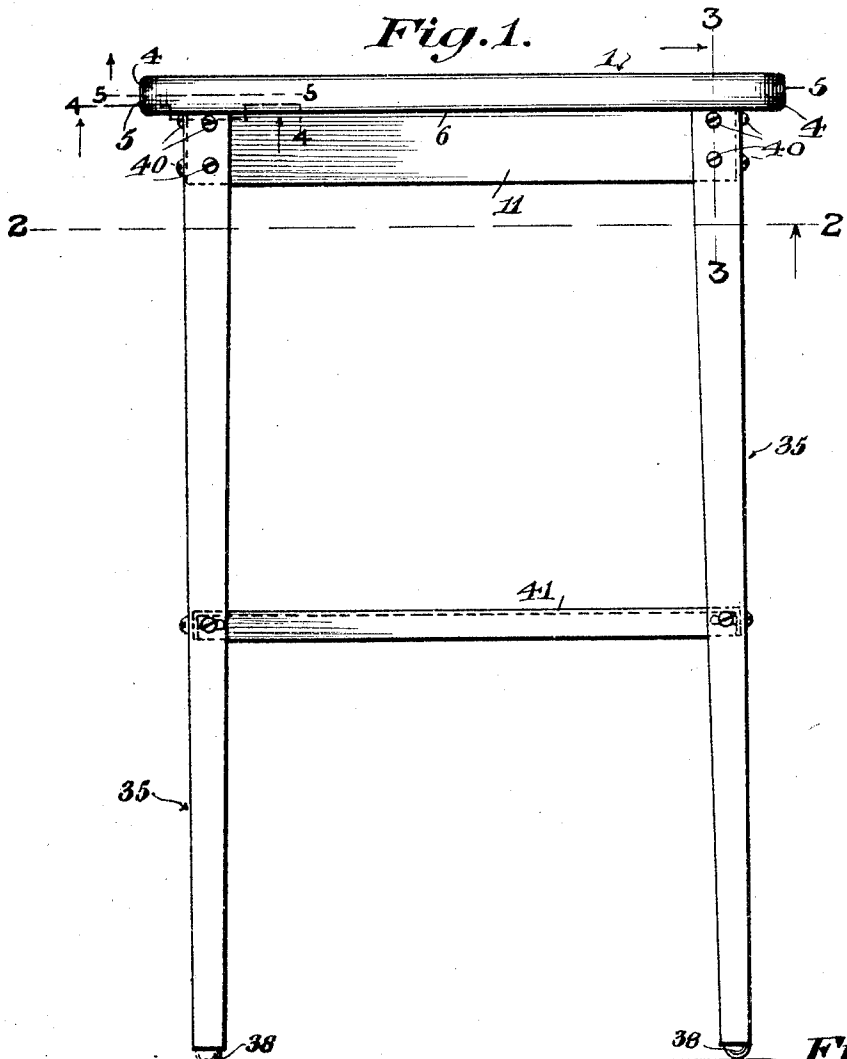
1,689,645

H. TURK

TABLE

Filed Aug. 25, 1926

2 Sheets-Sheet 1



By *Geo. Kimmel* ATTORNEY.

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1,689,645

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TABLE

Filed Aug. 25, 1926

2 Sheets-Sheet 2

Fig. 2.

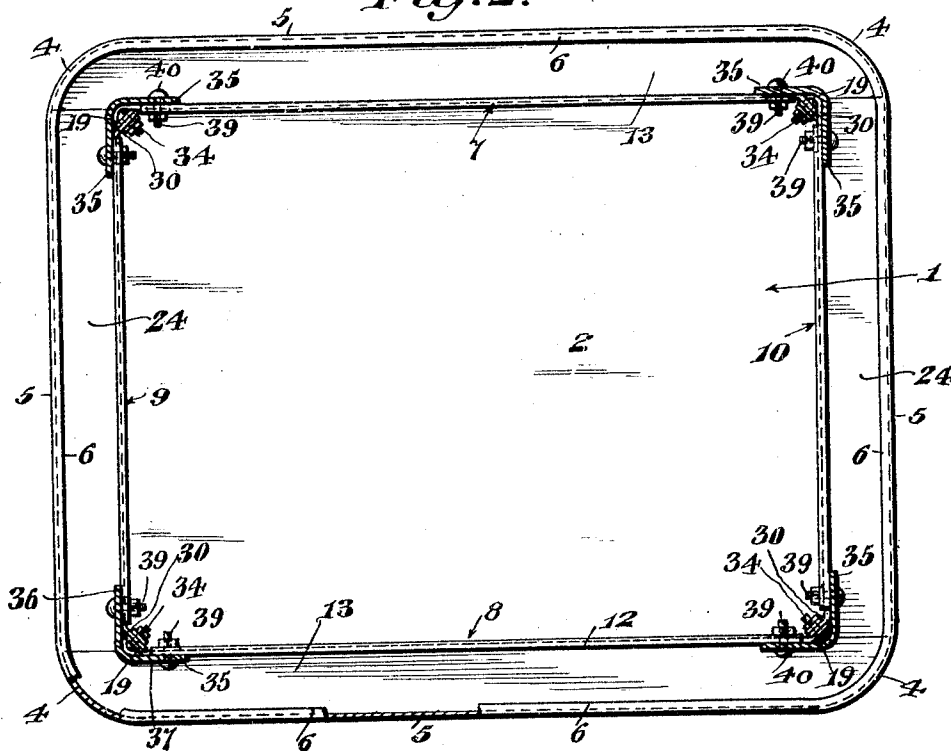


Fig. 4.

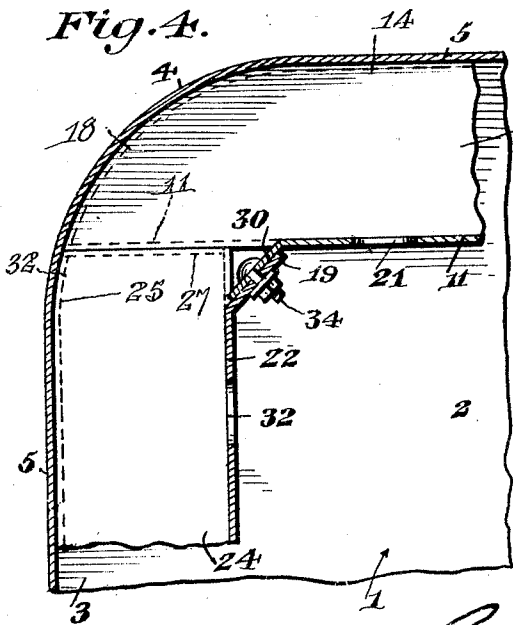
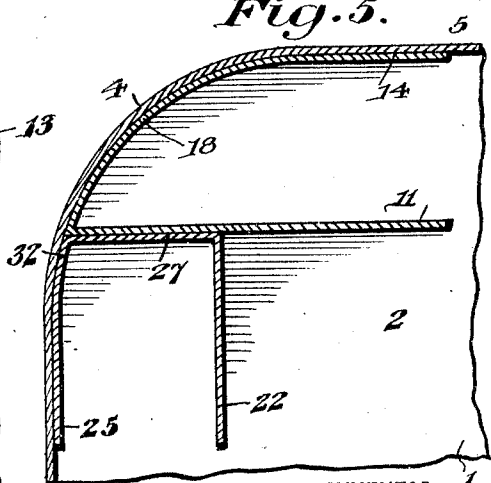


Fig. 5.



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TABLE.

Application filed August 25, 1926. Serial No. 131,413.

This invention relates to tables, more particularly to tables constructed from sheet metal, and has for its object to provide, in a manner as hereinafter set forth a table including a smooth, imperforate, flanged top capable of being expeditiously coupled with a supporting structure therefor without the employment of any particular type of tool or tools.

A further object of the invention is to provide, in a manner as hereinafter set forth a table including a flanged or rimmed sheet metal top and a plurality of rail members including means for coupling the top therewith and further for bracing the corners and horizontal surface of said top.

A further object of the invention is to provide, in a manner as hereinafter set forth, a table including a flanged or rimmed sheet metal top having rounded corners, and rail members positioned below the top and having integral spring means for not only coupling the top therewith but further for bracing the rounded corners of the top throughout.

A further object of the invention is to provide, in a manner as hereinafter set forth, a table including a flanged or rimmed sheet metal top and a plurality of rails having integral means for coupling the top therewith and further whereby the rail members are detachably connected together independently of the supporting legs for the table.

A further object is to provide in a manner as hereinafter set forth, a table, including a flanged sheet metal top, and a plurality of rail members so constructed as to give the top of said table the appearance of having a thickness approximately the same as the width of the depending rim thereof, and having integral spring means for interlocking the top of said sheet metal table with the rail elements thereof at a point approximately on a horizontal plane with the lowest edge of said depending rim and to provide supports for said rim and said rail elements at a point on said plane.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a table constructed of sheet metal, and which is simple in its construction and arrangement, strong, durable, compact, conveniently assembled, thoroughly efficient in its use and comparatively inexpensive to manufacture.

With the foregoing and other objects in

view the invention consists of the novel construction combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is a side elevation of a table constructed in accordance with a preferred embodiment of the invention.

Figure 2 is a horizontal section on line 2—2 Figure 1 looking in the direction of the arrows.

Figure 3 is a vertical section on line 3—3 Figure 1 looking in the direction of the arrows.

Figure 4 is a horizontal section on line 4—4 Figure 1 looking in the direction of the arrows.

Figure 5 is a horizontal section on line 5—5 Figure 1 looking in the direction of the arrows.

Figure 6 is a fragmentary view in perspective of an end terminal portion of one of the side rail members or elements.

Figure 7 is a fragmentary view in perspective illustrating one of the end terminal portions of an end rail element.

The several elements of a table, in accordance with this invention are constructed of sheet metal, and are detachably connected together. The table includes a top element, a pair of side rail elements, a pair of end rail elements, a plurality of supporting legs, four in number, and a tray element detachably connected with the supporting legs. The rail elements have inherent means for coupling the top element therewith, as well as bracing said top element and means independent of the leg elements are employed for detachably connecting the rail elements together. The rail elements are detachably connected to the leg elements after the rail elements are connected together and with the rail elements in position to couple the top element therewith, as well as to brace the latter at the corners thereof.

The top element, which is the table top, is illustrated by way of example, as of rectangular contour, but said top element can be of

any polygonal shape, other than rectangular, but with the rail elements corresponding in number to the number of sides of the top element and with the leg elements corresponding in number to the number of the rail elements. The top element or table top is constructed from a sheet of metallic material of the desired gage and shaped to provide a body portion referred to generally by the reference character 1. The body portion 1 is preferably depressed as at 2 and formed with a marginal portion 3, which is coextensive with the body portion 1 and is arranged above the bottom of the depressed part or portion 2, as well as entirely surrounds said portion 2. The body portion 1 may be provided with rounded corners as indicated at 4. The marginal portion 3 terminates in a depending rim 5 which is coextensive or integral with the body portion 1 and has its corners rounded to form a depending continuation of the corners 4. In cross section the rim 5 is or may be vertically disposed. The lower end of the rim 5 is formed with an inwardly extending flange 6, constituting a horizontal prolongation of the rim and which is preferably of a width materially less than the height of the rim. The rim 5 can be of any appropriate or desired height.

As the table top or body portion 1 is of rectangular contour, but four rail elements are employed and as the table top is of rectangular contour, two of the rail elements are termed side rail elements and the other two end rail elements. The rail elements are so constructed as to support the body portion 1, as well as to brace the flange or rim 5 and the rounded corners of the latter. Each rail element includes integral means for coupling it with the body portion or table top.

The side rail elements are indicated at 7, 8 and the end rail elements at 9, 10. The side rail elements are of greater length than the end rail elements and coact with the sides of the rim 5. The end rail elements coact with the ends of the flange or rim 5. The integral means of the rail elements which couples the table top with said elements, as well as bracing and supporting the table top 1 and bracing the flange or rim 5 is resilient and its normal tendency is to bind against the lower face of the table top, see Figures 3, 6 and 7.

As each side rail element is of the same construction, but one will be described, as the description of one will apply to the others. Each side rail element comprises a vertically disposed rail member or flange 11, having its lower portion bent inwardly as at 12 for reinforcing purposes, and its upper end formed with a right angularly disposed combined bracing and coupling portion which is of greater length than the length of a rail member and projects from each end of the latter. The combined coupling and bracing portion of a side rail element consists of a bottom

wall 13 formed integrally with and extending at right angles to the portion 11, an integral vertically disposed outer side wall 14, an integral inwardly extending top wall 15, substantially parallel to the wall 13, and terminating in an integral vertically disposed flange 16 which is arranged in vertical alignment with the wall forming member 11. The forward side wall 14 connects the bottom and top walls 15 together and is formed integrally with the same. The combined coupling and bracing portion of each side rail element, and which is referred to generally by the reference character 17 (Fig. 6) has rounded closed ends, referred to generally by the reference character 18 and which conform in contour to the rounded corners 4 of the flange 5 of the table top. The wall forming member 11 is provided at each end with an angularly disposed flange 19 preferably formed integral with the side flange 11 and with a pair of superposed openings 20. The side flange 11 in proximity to each end thereof is provided with a pair of apertures or slots 21. The purpose of the openings 20 and slots 21 will be presently referred to.

Each end rail element is constructed in the same manner as a side rail element, with this exception that each end of an end rail element is squared from its inner side to a point in close proximity to its outer side. Each end rail element comprises a wall-forming member or end flange 22 inturned at its lower portion, as at 23 for reinforcing purposes and said flange 22 at its upper end terminates in a right angularly disposed combined anchoring and bracing portion comprising a horizontally disposed bottom wall 24, a vertically projecting forward outer wall 25, a top wall 26, a pair of end walls 27 and a vertically disposed flange 28 which is preferably formed integral with the top wall 26 and arranged at the inner side thereof. The flange 28 is in vertical alignment with respect to the rail-forming member or end flange 22. The member 22 is of less length than the combined coupling and bracing portion referred to generally by the reference character 29 (Fig. 7). Said portion 29 projects from each end of the rail-forming member or end flange 22 and the latter at each end is formed with an angularly disposed flange 30 provided with a pair of superposed spaced openings 31. The rail-forming member 22 in proximity to each end thereof is formed with a pair of superposed slots 21^a. The function of the openings 31 and slots 21^a will be presently referred to. The slightly rounded outer corner, at each end of the portion 29, are indicated at 33. As before stated the end rail elements are of less length than the side rail elements.

When the rail elements are mounted in position, the portion 17 of the side rail elements and the portion 33 of the end rail elements are seated upon the upper face of the flange 6,

see Figure 3, and the flanges 16 and 28 of said portions 17 and 29 abut against the lower face of the body portion 1 of the table top, see Figure 3. When the rail elements are arranged in the manner as aforesaid, the rail-forming members 11 of the side rail elements oppose each other and the rail forming members 22 of the end rail elements oppose each other, but the said members 22 are disposed at right angles with respect to the members 11. When the rail elements are coupled with the table top, the rail elements 9 and 10 are arranged between the elements 7 and 8 and the ends of the elements 9 and 10 abut against the inner sides of the elements 7 and 8 at the ends thereof, see Figure 2.

When the rail elements are coupled with the table top, the flanges 30 of the rail-forming members 22 are overlapped by the flanges 19 of the rail-forming members 11, and when said flanges are in overlapping position the openings 20 register with the openings 31 and extending through the registering openings are suitable fastening members, such as stove bolts 34 for detachably connecting the side rail elements to the end rail elements.

The leg elements or supports are indicated at 35 and are of appropriate or desired height. Each supporting leg is preferably angular in cross section, see Figure 2, thereby providing a pair of portions 36, 37 which extend at right angles with respect to each other. Each of said portions gradually decrease in width upwardly and each of the legs may have removably secured to inturned integral bottom flange portions thereof, if desired, a caster or anti-slipping resilient pad 38. The legs 35 at their upper ends are arranged preferably exteriorly of the rail elements and the portions 37 of the legs are arranged against the outer face of the side rail elements and the portions 36 of the legs against the outer face of the end rail elements. Each of the angularly extending portions or flanges of each leg at the upper end thereof, is provided with a pair of superposed openings 39 and which are adapted to register with the slots or apertures 21 and 21^a formed in the side and end flanges 11 and 22 of the side and end rail members. The openings formed in the portions 37 of the leg register with the slots 21 and the openings formed in the portions 36 of the legs register with the slots 21^a. Extending through said registering openings and slots are suitable fastening devices such as stove bolts 40 for detachably connecting the leg to the rail-forming members 11 and 22.

Detachably connected to the legs 35, as well as arranged therebetween, is a tray element or shelf 41. In the present embodiment the shelf 41 is constituted of an integral sheet metal member having depending side and end flanges 42 provided adjacent their ends with suitable perforations registering with corre-

sponding perforations in the leg members, 65 by means of which the shelf 41 is removably secured in position to firmly brace the structure, by means of fastening devices such as stove bolts 43.

The side and end rail elements 7, 8, 9 and 10 when coupled with the table top, are detachably connected together and maintained in such position, independent of the legs 35, or in other words, the legs 35 are not employed for connecting the rail forming elements together when said elements are arranged in coupling and bracing position with respect to the table top. The rail-forming elements coact with each other to maintain them in abutting position with respect to the table top as the elements 9 and 10 abut against the elements 7 and 8, see Figure 2 and maintain said elements 7 and 8 in abutting engagement with respect to the depending flange 5. When the rail forming members are connected together, the end rail elements are maintained in abutting position and clamped against the depending flange 5. The rail-forming elements, that is more particularly the side rail forming elements prevent any possibility of bending in of the rounded corners of the table top, then furthermore the flanges 16 and 28 act to prevent the depressing of the body portion 1 of the table top as said flanges 16 and 28 act as supports therefor. The rail-forming elements can be expeditiously connected with the table top and further connected together, and after which the legs can be quickly secured in position with respect to the rail elements as the slots 21 are of sufficient length to permit of the quick positioning of the fastening devices 40.

It is thought that the many advantages of a table, constructed of sheet metal, in accordance with this invention, can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be made which will fall within the scope of the invention as claimed.

What I claim is:

1. In a table, a top consisting of a body portion formed throughout with a depending rim having an inwardly extending flange at the bottom thereof, a series of rail-forming members arranged at right angles with respect to each other and each provided with an outwardly extending right angularly disposed combined anchoring and bracing portion seating on said flange and abutting against the inner face of said rim, each of said portions formed with a lengthwise extending vertically disposed flange abutting against the lower face of said body portion, each of said members formed with vertically disposed end flanges arranged at an angle with respect thereto, the flanges of said mem-

bers overlapping each other, and hold fast devices for connecting said overlapping flanges together thereby coupling said rail forming members together.

5 2. In a table, a top having rounded corners and consisting of a body portion formed throughout with a depending rim having its bottom formed with an inwardly extending flange, a series of vertically disposed rail-
10 forming members disposed at right angles with respect to each other and each provided with an outwardly extending right angularly disposed combined top anchoring and bracing portion seating on the flange of and abutting
15 against the inner face of said rim and further bracing throughout the rounded corners of said top, each of said portions formed with a vertically extending lengthwise disposed flange abutting against the lower face
20 of said body portion, each of said members formed with vertically extending end flanges disposed at an angle with respect thereto, the flanges of said members overlapping each other, and hold fast devices connecting said
25 overlapping flanges together thereby coupling said rail members together.

3. A table comprising a top including a depending flanged rim, the flange of the rim extending inwardly, vertical rails arranged
30 below and spaced from said top, top coupling and rim bracing means of greater length than, projecting outwardly from the upper end of and formed integral with each of said rails, the means carried by one rail abutting
35 against the said means carried by an adjacent rail, said rails formed with end flanges, said end flanges overlapping, and means for detachably connecting the flanges together, thereby coupling the rails together.

40 4. In a table, a top comprising a central portion formed with a peripheral depending rim having an inwardly extending flange at the bottom thereof, two pairs of side and end members adapted to be coupled to said
45 top, the ends of one pair arranged between and abutting against the inner sides of the ends of the other pair, said members being seated on said inwardly extending flange and abutting against the inner face of the rim,
50 each of said members having an upstanding flange spaced from the rim and abutting against the under face of the top, a plurality of supporting legs adapted to be secured to said members, means for detachably connect-
55 ing said members together independently of

said supporting legs, and means for detachably connecting said legs to said assembled means.

5. In a table, the combination with a top having a depending rim terminating in an inwardly extending flanged portion, vertically disposed sheet metal side and end members engaging said top, each of said members having integrally formed projections thereon
60 contacting with said depending rim and top for reinforcing said top and coupling the same to said members, and means for removably securing said members together to lock the same in firm engagement with the top.

6. A table, having in combination: a top
70 having a depending rim terminating in an inwardly extending flanged portion, vertically disposed sheet metal side and end members engaging said top, each of said members having integrally formed projections there-
75 on contacting with said depending rim and top for reinforcing said top and coupling the same to said members, means for removably securing said members together to lock the same in firm engagement with the top, a
80 plurality of leg supports, and means for removably securing said leg supports to said assembled side and end members.

7. In a table, the combination with a top having a depending rim terminating in an
85 inwardly extending flanged portion, vertically disposed sheet metal side and end members engaging said top, each of said members having integrally formed projections thereon contacting with said depending rim and
90 top for reinforcing said top and coupling the same to said members, the ends of each pair of members having projecting flanges overlapping one another, and means for securing
95 said flanges together to firmly couple said assembled side and end members to said table top.

8. In a table the combination of a sheet metal top having a depending and inwardly
100 turned flange, a plurality of separate sheet metal vertical members each having an integral flange extending outwardly to engage above the inwardly turned flange of the top, said integral flange thence extending upwardly and contacting with the under surface of
105 the top, and means securing said vertical members each to the other.

In testimony whereof, I affix my signature hereto.

HEINRICH TURK.