United States Patent [19]

Olson

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[54] **SUPPORTING FRAME FOR A TABLE**

[75] Inventor: **Ogden R. Olson,** Columbus, Ohio

[73] Assignee: **Cosco, Inc.,** Columbus, Ind.

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[52] **U.S. Cl.** **248/188.1,** 108/153, 211/182, 248/163, D6/177

[51] **Int. Cl.** **A47b 13/06**

[58] **Field of Search** 248/188.1, 188.7, 163, 248/165; 211/177, 182; 108/153, 156; D6/177

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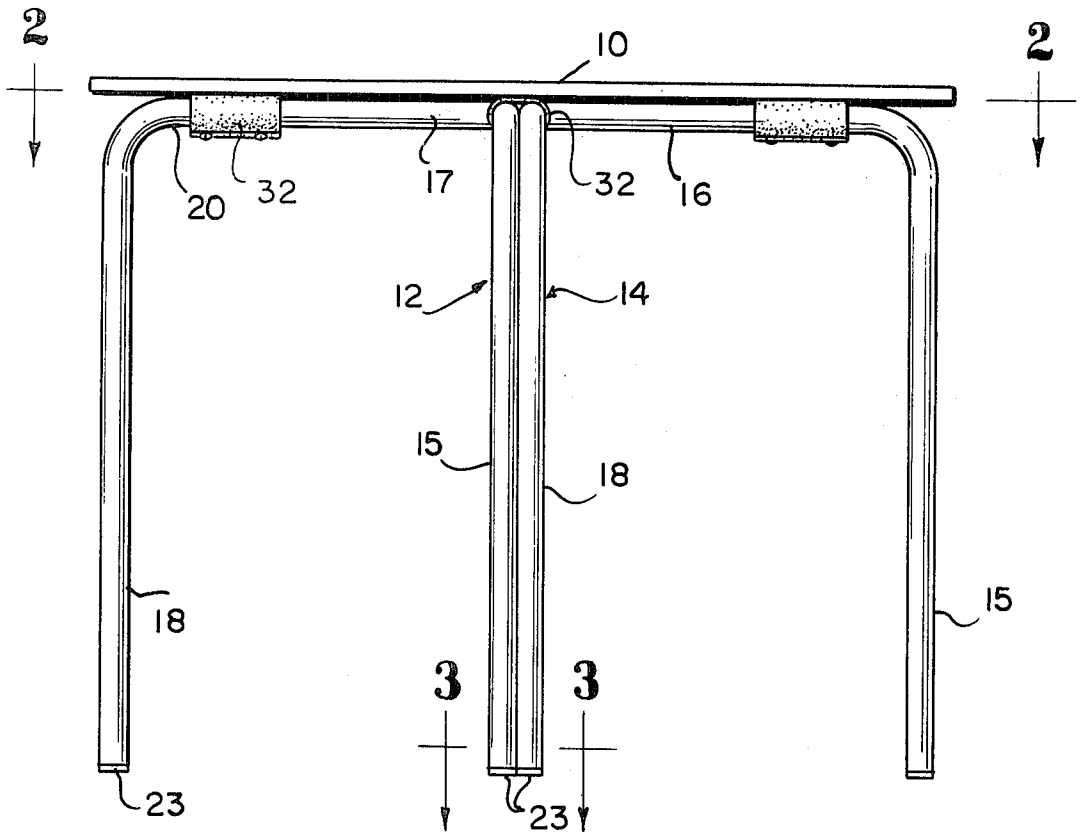
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Primary Examiner—Roy D. Frazier
Assistant Examiner—Robert W. Gibson, Jr.
Attorney, Agent, or Firm—Trash, Jenkins & Hanley

[57] **ABSTRACT**

A supporting frame for a table in which a first set of leg frames is provided with each frame having a leg and a pair of horizontal arms. A second set of frames is also provided with each frame in said second set having a leg connected to a leg on one of said first frames and a horizontal arm connected to one of the arms on another one of said first frames. Thus, the frames in said first and second sets are interconnected with their arms forming a supporting surface for a table top and their legs supporting said surface in an elevated position above the floor.

10 Claims, 4 Drawing Figures



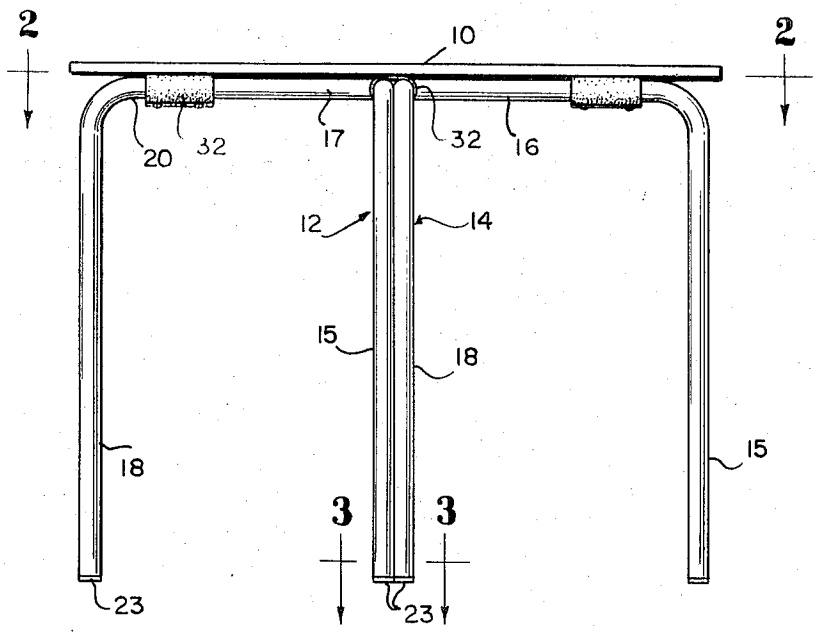


Fig. 1

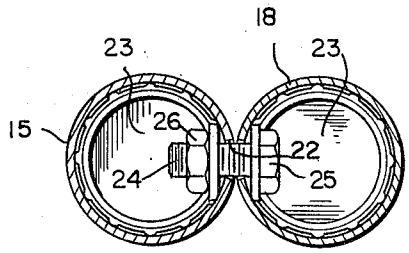


Fig. 3

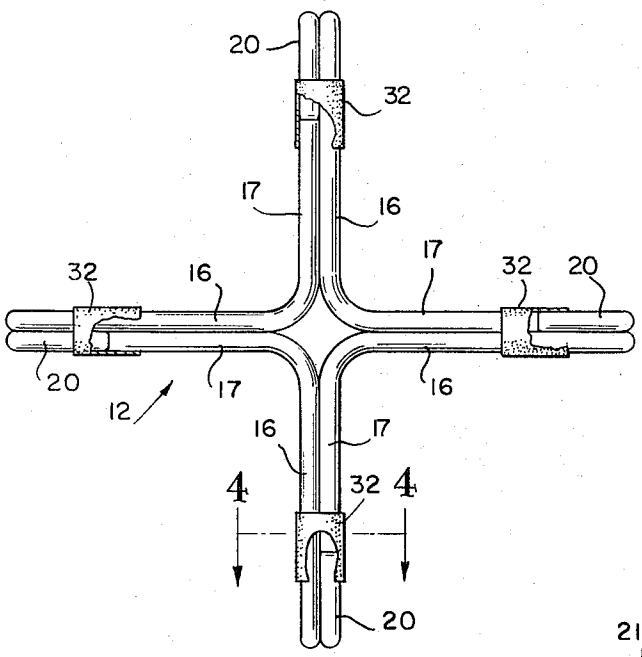


Fig. 2

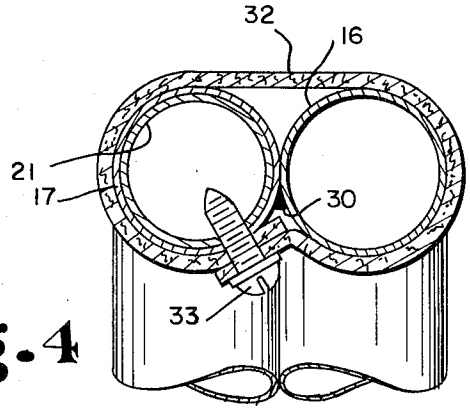


Fig. 4

SUPPORTING FRAME FOR A TABLE

SUMMARY OF THE INVENTION

In accordance with the preferred form of the invention, there is provided a first set of leg frames each having a vertical leg joined at its upper end to a first horizontal arm which in turn is joined at an angle to a second horizontal arm. There is also provided a second set of leg frames each having a vertical leg and a third horizontal arm.

The frames in the two sets of frames are interconnected with the leg on each of the first frames being connected to the leg on one of the second frames and its second arm being connected to the third arm on another one of said second frames. The first arm on each of said first frames is also welded to the second and third arms on adjacent first and second frames. Thus, the several frames are interconnected in a continuous manner with their legs supporting their first, second and third arms in a horizontal plane for supporting a table surface thereon.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings illustrate the invention. In such drawings:

FIG. 1 is a side elevation of a table embodying the invention;

FIG. 2 is a vertical section taken on the line 2—2 with portions thereof being broken away;

FIG. 3 is an enlarged horizontal section taken on the line 3—3 of FIG. 1; and

FIG. 4 is an enlarged vertical section taken on the line 4—4 of FIG. 2.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

As illustrated in the drawings the frame assembly forming the subject matter of the invention is adapted to support a table top **10** in an elevated position above the floor. As shown, the frame assembly is formed from two sets of leg frames **12** and **14**. Each of said frames is formed from a length of metal tubing, and each of the frames in each set is identical with the other frames in the set.

Each of the frames **12** comprises a vertically extending leg **15** integrally joined at its upper end to a horizontally extending first arm **16**. The arm **16**, which extends inwardly from the upper end of leg **15**, is integrally joined at its inner end to a horizontally extending second arm **17**. In the embodiment illustrated, there are four frames **12**, and each of the pairs of arms **16** and **17** are disposed at an angle of 90° with respect to each other.

There are also four of the frames **14**, each comprising a vertically extending leg **18** having a length equal to the length of the legs **15**. Desirably, the lower ends of the legs **18**, as well as the lower ends of the legs **15**, are closed by end caps **23** bindingly retained in said legs and preventing them from scratching the floor. The leg **18** on each of the frames **14** is integrally joined at its upper end to a third horizontally extending arm **20** extending inwardly from the upper end of said leg and adapted to lie in the same horizontal plane as the frame arms **16** and **17**. For reasons that will become more apparent hereinafter, the inner end of each of the arms **20** is necked downwardly to a reduced diameter, as at **21**.

The leg frames **12** and **14** are interconnected in a continuous manner. Thus, each of the frames **12** is connected to an adjacent pair of the frames **14**. And by the same token, each of the frames **14** is connected to an adjacent pair of the frames **12**. As best shown in FIGS. **2** and **3**, the leg **15** on each frame **12** is in parallel abutting relationship with the leg **18** on one of the frames **14**. The legs **15** and **18** have aligned openings **22** adjacent their lower ends, and a bolt **24** extends through said openings with its head **25** carried in the leg **18** and its associated nut **26** carried in the leg **15**. Conveniently, lock washers **27** are carried on the bolt in each of said legs. Thus, as shown in FIG. **3**, the connection between each pair of adjacent legs **15** and **18** is completely hidden from view.

The interconnections between the pairs of arms **17** and **20** are best illustrated in FIGS. **2** and **4**. As shown, the reduced diameter end **21** on the arm **20** is press-fit into the adjacent end of the arm **17** on an adjacent frame **12**. The frames are arranged so that the arm **16** on each frame **12** is in parallel abutting relationship with the arms **17** and **20** on a pair of adjacent frames **12** and **14**. The three adjacent arms **16**, **17** and **20** on each set of the three adjacent frames are rigidly interconnected by a weld **30**. As shown, the welds **30** extend along each of the sets of adjacent arms **16**, **17** and **20** to overlap the junctures of the interconnections between the arms **17** and **20**.

Each of the sets of the three arms **16**, **17** and **20** is also interconnected by a leather strap **32** extending around said arms at the interconnection of the arms **17** and **20** and held in place by a pair of screws **33** received in the interfitting arms **17** and **20**. Desirably, the straps **32** have a length longer than the welds **30** to thus conceal said welds from view. In addition, said straps serve as cushioning surfaces for supporting the table top **10** on the frame assembly. This prevents said top from being scratched or marred by any metal surface should the top be formed of glass.

As shown in the illustrated embodiment, the interconnected leg sets **15** and **18** provide four pairs of vertically extending legs equally spaced around the assembly with the legs in each pair disposed in abutting relationship. As seen in FIG. **2**, the arms **16**, **17** and **20** on the four frames lie in a common horizontal plane and radiate outwardly from the center of the assembly like a plurality of spokes.

While the illustrated embodiment employs four of each of the frames **12** and **14**, it is to be understood, of course, that three or more of such frames can be employed bearing in mind that the same number of frames must be employed in each set. Of course, when the number of frames in each set is different than four, the angle between the arms **16** and **17** will be different than 90°. Thus, if three frames are employed in each set the angle between the arms **16** and **17** on each frame **12** will be 120°.

I claim:

1. A supporting frame assembly for a table top, comprising a set of first frames each having a vertically extending leg and first and second horizontally extending arms, said first arm being integrally joined at its opposed ends to said leg and second arm and said second arm being angularly disposed with respect to said first arm, a set of second leg frames each having a vertically extending leg integrally joined to a horizontally extending third arm, each of said first frames having its leg

connected to a leg on an adjacent one of said second frames and its second arm connected to the third arm on another one of said adjacent second frames, whereby each of the frames in each set of frames is connected to a pair of frames in the other set.

2. A supporting frame assembly as set forth in claim **1** in which the leg on each first frame is in parallel abutting relationship with the leg on an adjacent one of said second frames.

3. A supporting frame assembly as set forth in claim **1** in which the second arm on each first frame is press-fit over the end of the third arm on an adjacent one of the second frames.

4. A supporting frame assembly as set forth in claim **1** in which the first arm on each first frame is in parallel abutting relationship with and connected to the second arm on another first frame and the third arm on one of said second frames.

5. A supporting frame assembly as set forth in claim **1** in which the first arm on each first frame is in parallel abutting relationship with and connected to the second arm on another first frame and the third arm on one of said second frames, said first arm being connected to said second and third arms by a weld extending therebetween.

6. A supporting frame assembly as set forth in claim **1** in which the first arm on each first frame is in parallel abutting relationship with and connected to the second arm on another first frame and the third arm on one of said second frames, said first arm being connected to said second and third arms by a strap extending around said first, second and third arms and fastened to said first arm.

7. A supporting frame assembly as set forth in claim **1** in which the first arm on each first frame is in parallel abutting relationship with and connected to the second arm on another first frame and the third arm on one of said second frames, said first arm being connected to said second and third arms by a weld extending therebetween and by a strap extending around said first, second and third arms and fastened to said first arm.

8. A supporting frame assembly as set forth in claim **7** in which said strap has a length longer than said weld.

9. A supporting frame assembly for a table top, comprising a set of first frames each having a vertically extending leg and first and second horizontally extending arms; said first arm being integrally joined at its opposed ends to said leg and second arm and said second arm being angularly disposed with respect to said first arm; a set of second leg frames each having a vertically extending leg integrally joined to a horizontally extending third arm; each of said first frames having its leg connected to a leg on an adjacent one of said second frames, its second arm connected to the third arm on an another adjacent one of said second frames, and its first arm abutting and connected to the second arm on an adjacent first frame and third arm on said adjacent one of said second frames, whereby each of the second frames is connected to a pair of first frames and each of said first frames is connected to a pair of said second frames and another first frame.

10. A supporting frame assembly as set forth in claim **9** in which there are four frames in each set of frames, and the angle between the first and second arms on each first frame is 90°.

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