United States Patent [19]

Barron

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[54] **WHEELCHAIR TABLE**

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[73] Assignee: **Lawrence Peska Associates, Inc.,** New York, N.Y. ; a part interest

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[52] **U.S. Cl.** **108/144;** 108/146; 248/188.5

[51] **Int. Cl.²** **A47B 9/00**

[58] **Field of Search** 108/144, 146; 248/188.5

[56] **References Cited**

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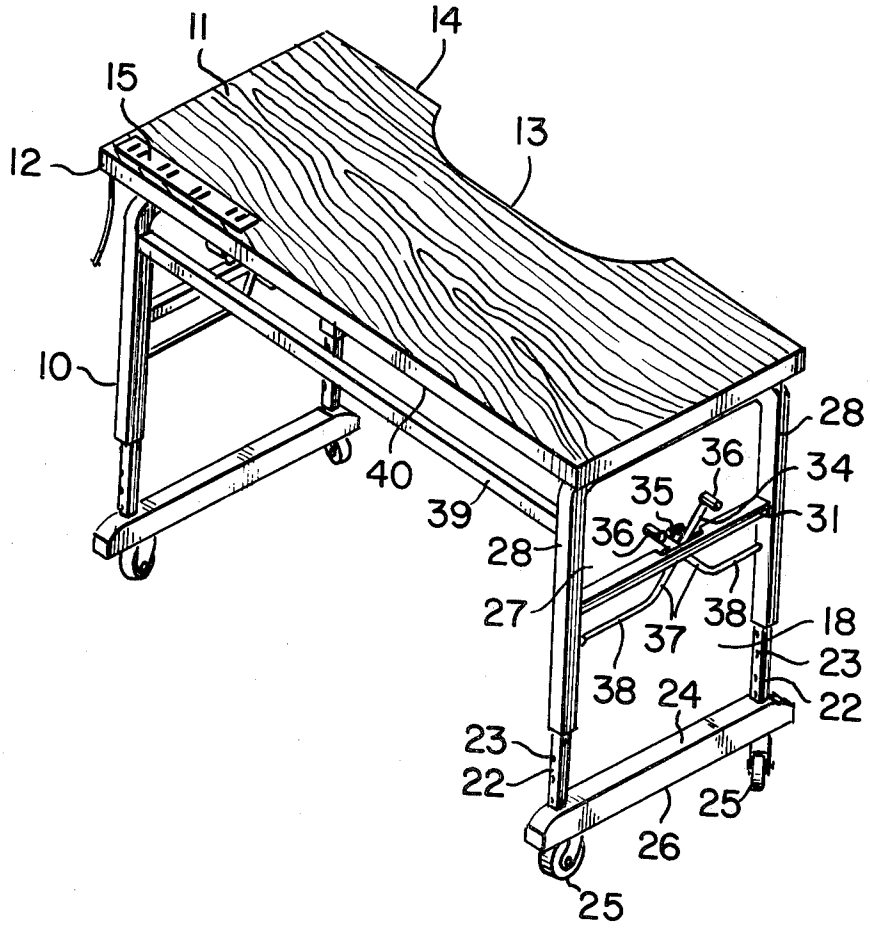
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Attorney, Agent, or Firm—Richard E. Nanfeldt

[57] **ABSTRACT**

A telescoping support assembly with positive locking mechanism for a table designed to stradle a wheelchair enabling a person confined to the wheelchair to position the table in the desired position for feeding, writing or other functions normally performed on a table. The two legged membered telescoping support assemblies are mounted transversely to the ends of the planar table top. For each two legged membered telescoping support assembly a positive lever type locking mechanism is provided.

4 Claims, 3 Drawing Figures



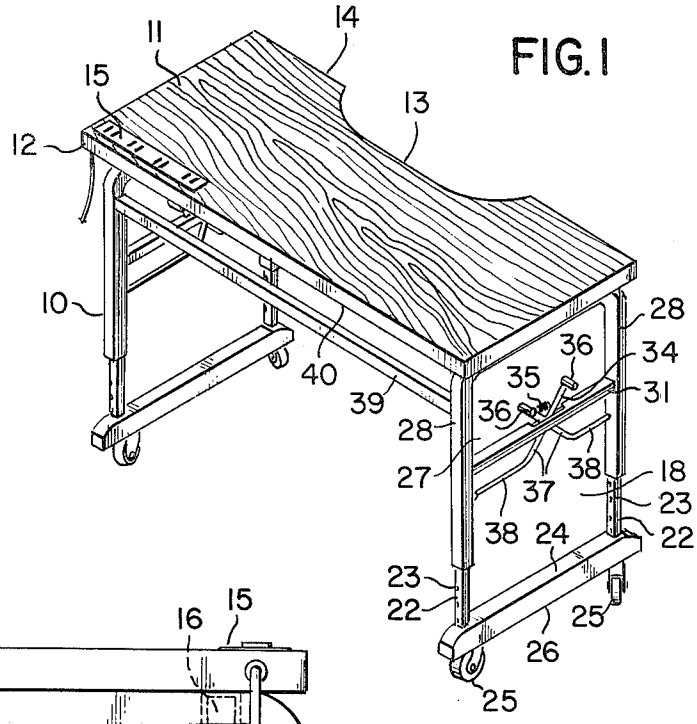


FIG. 1

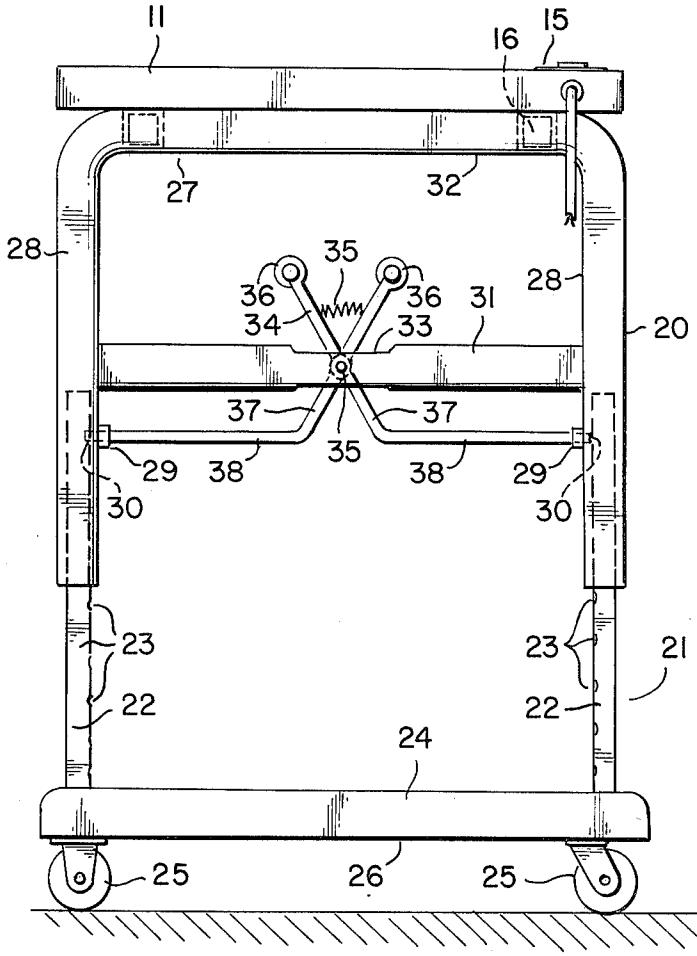


FIG. 2

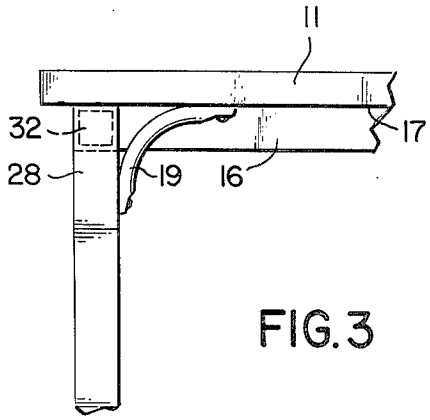


FIG. 3

WHEELCHAIR TABLE

SUMMARY OF THE INVENTION

My invention relates to a unique and novel concept of a vertical telescoping support assembly with positive rod type locking mechanism for a table designed to straddle a wheelchair enabling a person confined to the wheelchair to position the table in a desired position for feeding, writing, or other functions normally performed on a table top.

It is known from U.S. Pat. Nos. **2,749,197; 2,875,007; 3,080,835;** and **3,682,112** that vertical telescoping support assemblies have been mounted onto tables, but these telescoping assemblies are not designed to straddle a wheelchair nor do these assemblies have a positive rod type locking mechanism. Furthermore, these previously proposed telescoping support assemblies fail to provide lateral stabilization to the table top as does our present invention.

A major advantage of my invention is that the vertical telescoping support assembly with positive locking mechanism provide a means of easily and safely adjusting the table top for different vertical heights while providing lateral stabilization to the table top.

A rectangular shaped planar table top is mounted transversely on each end onto a pair of two legged membered vertical telescoping support assemblies. Each telescoping support assembly is formed from an upper and lower section. The upper section comprises an open ended U-shaped hollow tubular member with a cross brace member affixed across the legs of the U-shaped member. A scissor type member is mounted within a vertical slot aperature of the cross brace member. Horizontal extension rods extend outward from the legs of the scissor shaped member and insert into a cylinder sleeve contained in a aperature of each leg of the U-shaped member.

BRIEF DESCRIPTION OF THE DRAWINGS

The objects and features of the invention may be understood with reference to the following detailed description of an illustrative embodiment of the invention taken together with the accompanying drawing in which:

FIG. **1** illustrates a perspective view of the vertical telescoping leg assembly affixed to the table top;

FIG. **2** illustrates an end elevated view of the vertical telescoping leg assembly affixed to the table top; and

FIG. **3** illustrates a front sectional view of the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning now descriptively to the drawings in which similar reference characters denote similar elements throughout several views, FIGS. **1–3** illustrate a wheelchair table **10** designed to stradle a wheelchair enabling a person confined to a wheelchair to perform given functions on the table **10.** A plastic protective covering **12** forms the top surface of the rectangular shaped planar table top **11** containing a curved cutout portion **13** along one longitudinal edge **14** of the table top **11.** The curved cutout portion **13** of the table top **11** allows the table top **11** to be positioned close to the person confined to the wheelchair. An electrical outlet panel **15** is contained within the table top **11.** A pair of parallel support bars **16** are longitudinally affixed to the bottom

base **17** of the table top **11.** The vertical two legged membered telescoping support assemblies **18** are affixed by curved shaped mounting brackets **19** transversely to the bottom base **17** at each end of the table top **11.** Each telescoping support assembly **18** comprises an upper **20** and lower **21** section. The lower **21** section comprises a pair of vertical support bar members **22** with a plurality of slot apertures **23** contained along the longitudinal interior faces of each bar **22.** Each vertical bar member **22** is mounted to the top surface at the ends of a cross joining beam member **24.** A set of casters **25** are mounted to the bottom surface **26** of the cross joining beam member **24.** The upper section **20** of the telescoping support assembly **18** comprises an open ended U-shaped hollow tubular member **27** mounted onto the bottom base **17** of each end of the table top **11** by curved shaped mounting brackets **19** such that the legs **28** of the U-shaped member **27** radiates downward from the table top **11.** A hollow cylinder **29** is positioned within an aperature **30** contained in the longitudinal interior surface of the legs **28** of the inverted U-shaped member **27.** A horizontal cross brace member **31** is affixed across the legs **28** of the U-shaped member **27** at a point equidistant between the base **32** of the inverted U-shaped member **27** and the aperature **30** in the leg **28.** A vertical slot aperture **32** is contained in the center of the cross brace member **31.** The locking mechanism comprises a vertically placed scissor shaped member **34** mounted on a horizontal rod **35** affixed across aperture **33.** A tension spring **35** is mounted between handles **36** of the scissor shaped member **34.** A pair of horizontal extension rods **38** extend outward from the vertically placed legs **37** of scissor shaped member **34** passing through cylinder sleeve **29** and terminating in the slot aperture **23** of vertical support bars **22.** Vertical support bars **22** insert upward in the open ends of the legs **28** of the inverted U-shaped hollow tubular member **27.** When the handles **36** of the scissor shaped member **34** are compressed together, the horizontal extension rods **38** are retracted from slot apertures **23.** This retracting action of the horizontal extension rods **38** allows the upper section **20** to be moved upward or downward in a vertical direction on the lower section **21.** A cross joining support **39** is affixed between a leg **28** of an inverted U-shaped hollow tubular member **27** and a second leg **28** of a second inverted U-shaped hollow tubular member **27** such that the cross joining support bar **39** is parallel to the non cutout longitudinal edge **40** of the table top **11.**

Since obvious changes may be made in the specific embodiment of the invention described herein, such modifications being within the spirit and scope of the invention claimed, it is indicated that all matter contained herein is intended as illustrative and not as limiting in scope.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent of the Unites States is:

1. A wheelchair table, which comprises:

a. a rectangularly shaped table top having a curved cutout portion along one longitudinal edge thereof;

b. an inverted U-shaped hollow tubular member affixed transversely to a bottom surface of said table top at each end thereof, the open ended legs of each said tubular member extending downwardly,

each said leg having on its interior face an aperture therethrough;

c. a pair of cross brace members having center vertically aligned slot apertures therethrough, each said cross brace member communicating between said pair of said legs of each said tubular member;

d. a hollow cylindrically shaped sleeve in each said aperture of each said leg;

e. a pair of horizontally placed cross joining beams;

f. upwardly extending support bars joined to each end of each said cross joining beam, each said support bar having a plurality of equally spaced horizontally aligned slot apertures therein along one longitudinal surface thereof, each said support bar slidably contained into each said open end of each said leg of each said tubular member;

g. a vertically placed scissor shaped member mounted on a horizontal pin in each said vertical slot aperture of each said cross brace member, the handles of said scissor shaped member extending above said cross brace member and the legs of said scissor shaped member extending below said cross brace member;

h. a horizontal extension rod extending outwardly from a lower free end of each said leg of each said scissor shaped member, each said extension rod slidably extending through one said cylindrically shaped sleeve to engage one said horizontal slot aperture of one said support bar; and

i. tension springs mounted between said handles of each said scissor shaped member.

2. A wheelchair table as recited in claim **1** in which a set of casters are mounted onto a bottom base of said cross joining beam.

3. A wheelchair table according to claim **1,** wherein an electrical outlet panel is contained in said table top.

4. A wheelchair table according to claim **3,** wherein a curved shaped bracket communicates between each said leg and said table top.

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