United States Patent [19]

Dupuis

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[54] **FOLDING TWO-LEVEL TABLE, BENCH OR THE LIKE**

[76] Inventor: **Emanuel F. Dupuis,** 12 Parkview Rd., St. Catharines, Ontario, Canada

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 106,821, Jan. 15, 1971, abandoned.

[52] **U.S. Cl.** **108/19,** 108/35

[51] **Int. Cl.** **A47b 3/08,** A47b 9/18

[58] **Field of Search** 108/12, 19, 35, 36, 108/116

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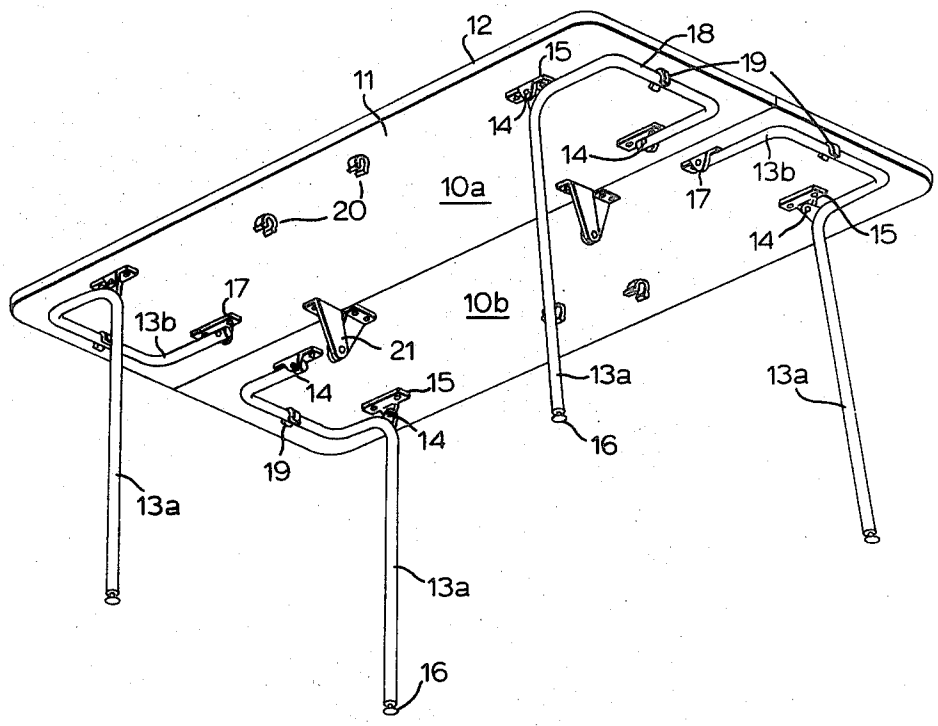
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Primary Examiner—Francis K. Zugel
Attorney—Stanley J. Rogers

[57] **ABSTRACT**

A two-level foldable table, bench or the like comprises a top divided into two parts with the parts hinged together. Four individual leg assemblies are provided, two to each top part, each of which has one long leg and one short leg. The assemblies are pivotally mounted to the underside of the top at the junction of the two legs, so that with the short legs vertical the long legs extend along the underside of the top, and vice versa when the long legs are vertical, thus providing a fully supported top at two different selected levels. Catches are provided to hold the legs in their selected positions. When the top is folded the short legs engage each other so that the table etc. forms a compact, solid package suitable for storage and/or carrying.

2 Claims, 3 Drawing Figures



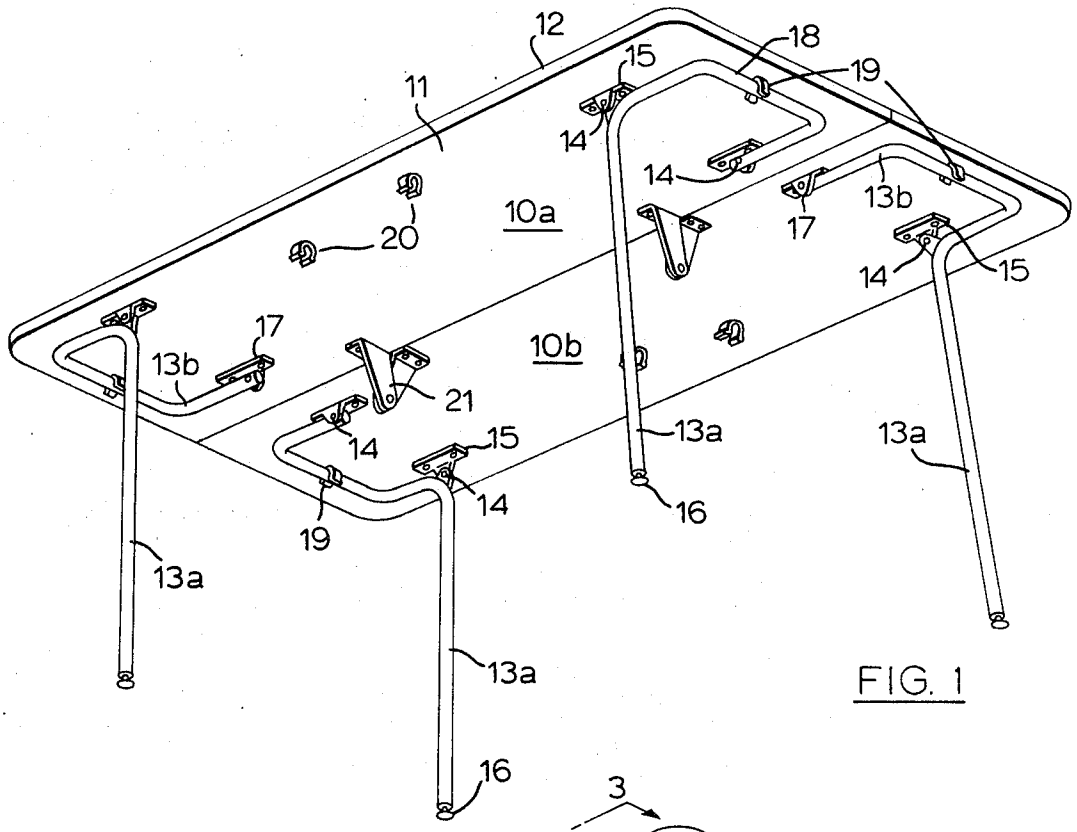


FIG. 1

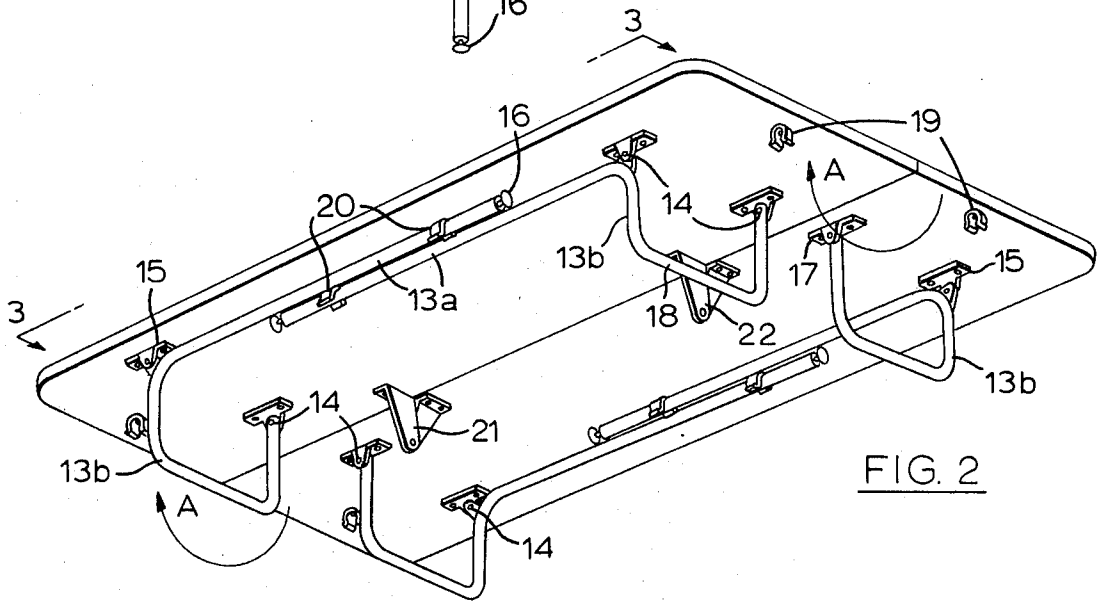


FIG. 2

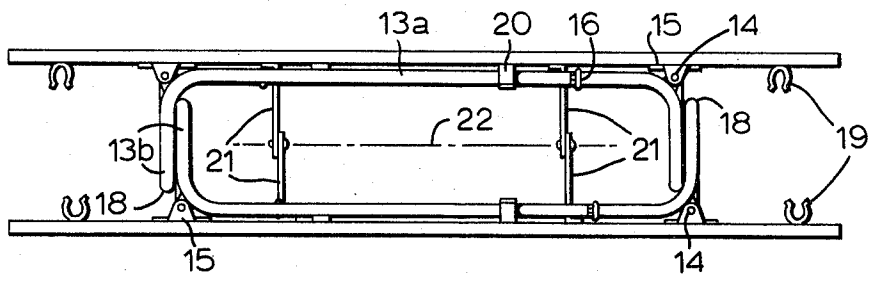


FIG. 3

FOLDING TWO-LEVEL TABLE, BENCH OR THE LIKE

CROSS-REFERENCE TO RELATED APPLICATION

This present application is a continuation-in-part of my application Ser. No. 106,821, filed Jan. 15, 1971 now abandoned.

FIELD OF THE INVENTION

This invention is concerned with improvements in or relating to tables, benches or like articles of furniture.

DESCRIPTION OF THE PRIOR ART

Tables and benches with which the legs fold to a stored position are well known and widely employed because of their convenience for many occasions and their comparative ease of storage. However, with the modern trend to smaller houses and to apartment living, the need arises for articles of furniture which are flexible in their application, and which if possible can be used for more than one purpose in the house. It is also known to provide tables with which the top can be set at different levels by means of sets of legs comprising both short and long legs, the appropriate length of leg being selectable as required, but such a table is difficult to store and carry because of the protruding legs.

DEFINITION OF THE INVENTION

It is an object of the present invention to provide a table, bench or the like which can readily be set at different selected heights as required and which can also be folded to provide a package for storage and/or carriage.

In accordance with the present invention there is provided a folding two-level table, bench or the like comprising a top having a top side and an underside and constituted by two top parts hinged to one another by hinge means along immediately adjacent edges thereof to be movable alternatively to one position in which they lie in the same plane and another position in which they lie in spaced parallel planes, two pairs of spaced leg assemblies, each pair being movably mounted to the underside of a respective top part to be movable alternatively to one or other of two operative positions, each leg assembly comprising a length of tube-like material bent to a general L-shape to provide a longer leg and a shorter leg disposed at least approximately at right angles to one another with one of the arms of the L-shape bent to a general U-shape to form the said shorter leg, in one of said operative positions the longer legs of the four assemblies being operative to support the top from the floor at a higher level, and in the other of which operative positions the shorter legs are operative to support the top from the floor at a lower level, with each longer leg in its said operative position the U-shaped shorter leg is engaged with the underside of the top to brace the respective longer leg in the said operative position, the said top parts being movable to the said another position with the leg assemblies in the said other position to provide a corresponding package in which the leg assemblies are enclosed between the two top parts with the said longer legs extending parallel to and braced against the undersides of the top parts, and with the said shorter legs in nesting engagement with one another to fix the said another parallel position of the top parts.

DESCRIPTION OF THE DRAWINGS

A table which is a particular preferred embodiment of the invention will now be described, by way of example, with reference to the accompanying diagrammatic drawing wherein:

FIG. 1 is a perspective view from below and to one side of the embodiment with its leg assemblies operative to support it at a higher level.

FIG. 2 is a similar view to FIG. 1 with the leg assemblies operative to support it at a lower level, and

FIG. 3 is a side elevation taken in the direction of the arrows 3—3 of FIG. 2 and showing the table top in folded condition.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The table comprises a top formed by two top parts **10***a* and **10***b*, each part having an underside **11** and a top **12**. Four leg assemblies, each comprising an L-shaped member **13**, providing a longer leg **13***a* and a shorter leg **13***b*, are pivotally mounted to the underside of the bench top about respective pivots **14** by means of respective brackets **15**, each top part being provided with two of the assemblies. The two legs are rigidly connected together at their common junction and are inclined approximately at a right angle to one another, the ends of the longer legs **13***a* being provided with feet **16**.

Each leg assembly is formed as an integral member by bending a single length of hollow metal tubing to a general L-shape. Thus, each length is bent at a position along its length to provide the said longer and shorter legs with the bend constituting an integral common junction. Each shorter leg **13***b* comprises one of the arms of the L-shape bent to a general U-shape with the two ends of the U-shape pivotally connected to the respective top part by the bracket **15** and another bracket **17**.

If the top is to be supported at the higher of its two selectable levels then the leg assemblies are swung to the operative position shown in FIG. **1**, in which the shorter leg members extend generally parallel to the underside of the top, the cross piece **18** of each shorter leg being engaged by a spring clip mechanical catch **19**. It will be seen that in this position the U-shaped portions of the shorter leg members form braces for the longer legs against the underside of the top and, if the angle between the leg members is even slightly less than 90°, then the effect of any weight on the top is to force the shorter leg assemblies against the underside, rendering the table or bench even more stable.

Similarly, if the top is to be set at the lower of the two selectable levels, then the leg assemblies are swung to the other operative position shown in FIG. **2**, in which the longer leg members are engaged in spring clips **20**. The shorter leg members now extend substantially vertically and the cross pieces engage the floor. A similar bracing effect is now obtained for the shorter leg members with the longer leg member engaging the underside **11**.

The two top parts are connected together by hinge means **21** constituted by a pair of hinges, the parts being movable about axis **22** between the operative position shown in FIGS. **1** and **2**, in which they are in the same plane, and the storage position shown in FIG. **3**, in which they are disposed in spaced parallel planes

with the leg assemblies disposed between them. The arms of the hinges are made sufficiently long that in the stored position the shorter leg members rest snugly against one another to provide a firm flat narrow package that can easily be carried. Moreover, the leg assemblies lie fully within the confines of the space bounded by the two top parts, so that the resultant package is smooth-surfaced with no protruding parts, again making for easy carriage, and also for easy storage.

Although a table has been described as a particular embodiment of the invention, it will be apparent that it is also applicable to benches, work-benches and other articles of furniture which it is desired to be able to store and carry and also to set at different levels. For example, the table described may serve as a kitchen or dining table when in the position shown in FIG. **1**, while in the position shown in FIG. **2** it may serve as a low coffee table. Other applications of a table, bench or the like in accordance with the invention will be apparent to those skilled in the art.

I claim:

1. A folding two-level table, bench or the like comprising a top having a top side and an underside and constituted by two top parts hinged to one another by hinge means along immediately adjacent edges thereof to be movable alternatively to one position in which they lie in the same plane and another position in which they lie in spaced parallel planes, two pairs of spaced leg assemblies, each pair being movably mounted to the underside of a respective top part to be movable alternatively to one or other of two operative positions, each leg assembly comprising a length of tube-like material bent to a general L-shape to provide a longer leg and a shorter leg disposed at least approximately at right angles to one another with one of the arms of the L-shape bent to a general U-shape to form the said shorter leg, in one of said operative positions the longer legs of the four assemblies are operative to support the top from the floor at a higher level, and in the other of which operative positions the shorter legs are operative to support the top from the floor at a lower level, with each longer leg in its said operative position the U-shaped shorter leg is engaged with the underside of the top to brace the respective longer leg in the said operative position, the said top parts being movable to the said another position with the leg assemblies in the said other position to provide a corresponding package in which the leg assemblies are enclosed between the two top parts with the said longer legs extending parallel to and braced against the undersides of the top parts, and with the said shorter legs in nesting engagement with one another to fix the said another parallel position of the top parts.

2. The invention as claimed in claim **1**, and including two different sets of catch means, each set retaining the leg assemblies in a different operative position.

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