March 30, 1954 A. M. BEASLEY 2,673,772

TABLE LEG MOUNTING AND STORING CLEAT

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Fig. 1.

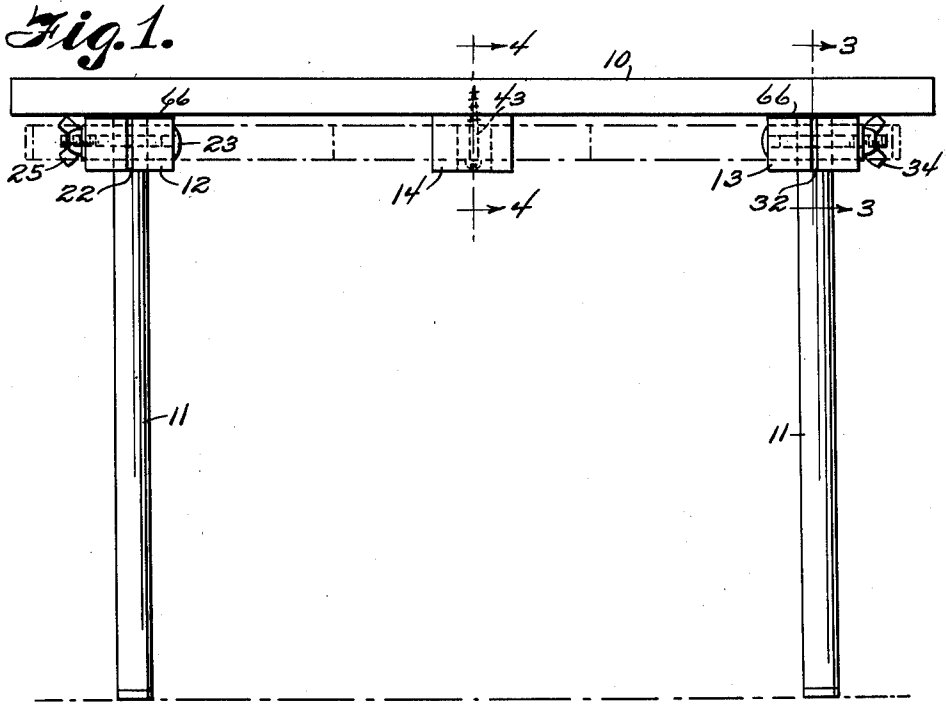

Fig. 2.

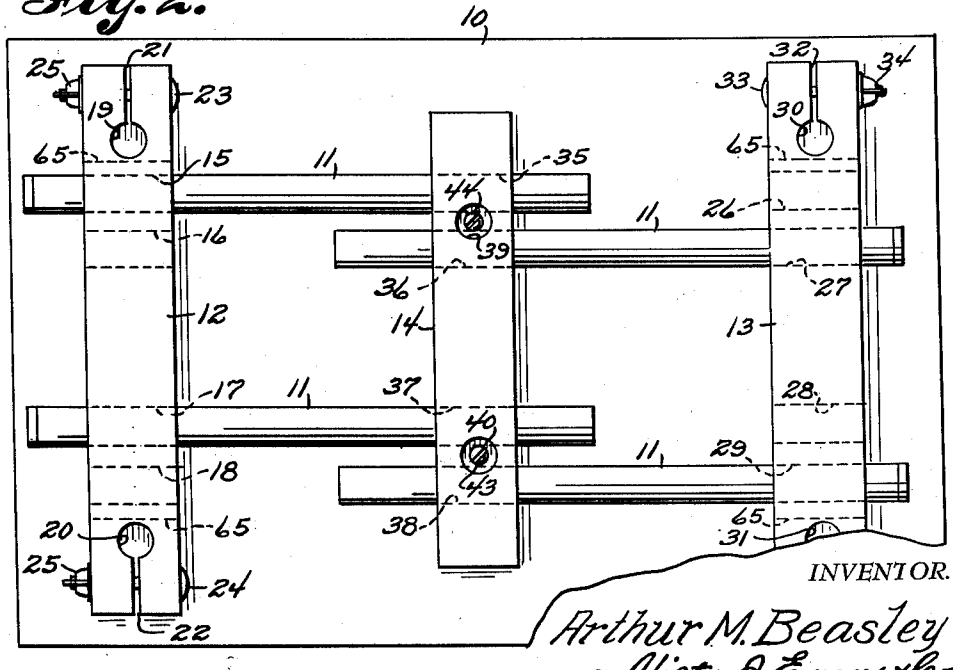

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Fig. 3.

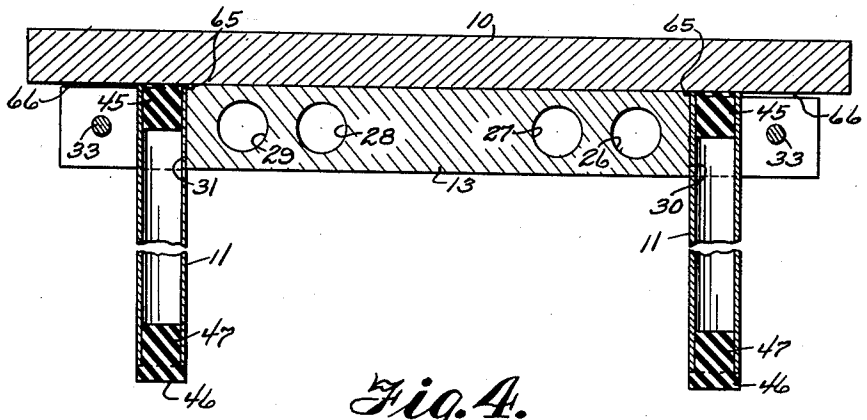

Fig. 4.

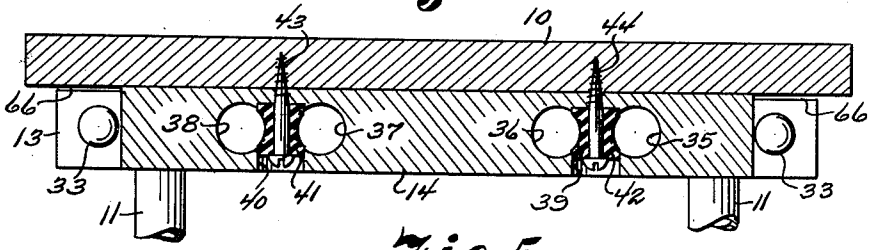

Fig. 5.

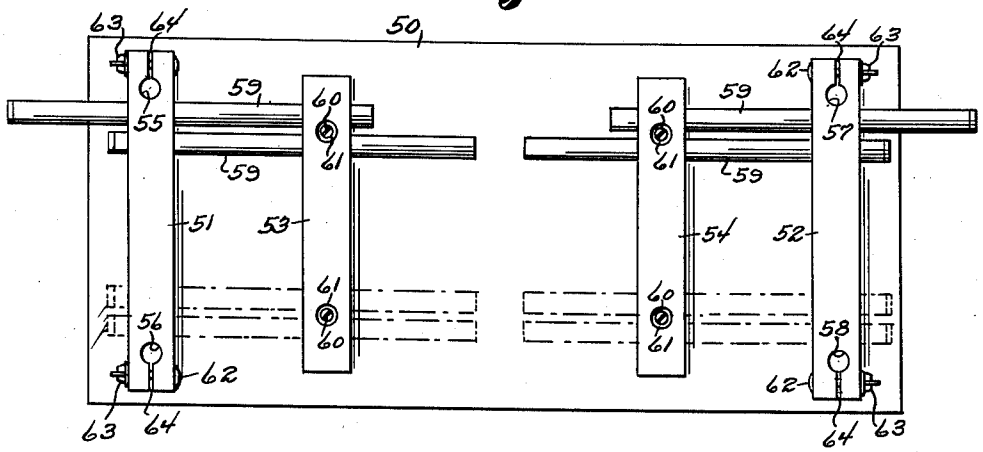

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TABLE LEG MOUNTING AND STORING CLEAT

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3 Claims. (Cl. 311—35)

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This invention relates to collapsible or folding tables of the type wherein legs are clamped in cleats on the under surface of a table top, and in particular a table top having cleats on the under surface with horizontally disposed leg receiving openings extended through the cleats for retaining legs for storage and shipping and in which the cleats are also provided with vertically disposed openings for retaining legs in upright positions, and tubular legs adapted to be positioned in the said vertical and horizontally disposed openings of the cleats.

The purpose of this invention is to provide means for retaining the legs of a table in upright position for supporting the table and also in nested positions against the under surface of a table top without hinges or other similar attaching elements and wherein the legs are adapted to be clamped in both upright and collapsed positions.

Various attempts have been made to hinge, or otherwise pivotally attach legs to table tops to provide folding or collapsible tables, however, it is difficult to provide connecting means to hinge or pivotally connect legs to a table top with sufficient rigidity for use on a library or dining room table. With this thought in mind this invention contemplates an improved method of mounting the table legs on the under surface of a table top whereby the legs are rigidly clamped in upright positions for supporting the table and wherein the legs may also be clamped in folded or inoperative positions.

The object of this invention is, therefore, to provide an improved table top in which cleats are rigidly secured to the under surface and in which the cleats are provided with openings in which table legs may be rigidly clamped so that with the legs set upright a comparatively solid table is provided.

Another object of the invention to is to provide an improved mounting for connecting table legs to a table top whereby the legs may be removed and placed in nested positions against the under surface of the table top for storage and wherein some of the legs may be extended, in the nested positions, to provide handles at the ends of the table top.

Another object of the invention is to provide an improved method for rigidly connecting legs to a table top which provides a collapsible table and in which unobstructed leg room is provided below the table.

A further object of the invention is to provide an improved collapsible table wherein legs are

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clamped in upright positions and also in nested positions below a table top in which a table of a simple and economical construction is provided.

Other features and advantages of the invention will appear from the following description taken in connection with the drawings wherein:

Figure 1 is a side elevational view of the table showing the table with the legs thereof in upright positions, said figure also showing the legs in nested positions in dotted lines.

Figure 2 is a view looking upwardly toward the under surface of the table top showing the legs in nested positions and showing the corner of the table top broken away.

Figure 3 is a cross section through the table top taken on line 3—3 of Fig. 1.

Figure 4 is also a cross section through the table top taken on line 4—4 of Fig. 1 and illustrating the means for clamping the table legs in nested positions.

Figure 5 is a view looking upwardly toward the under surface of the table top, similar to the table top shown in Fig. 2, and illustrating a modification wherein the mounting elements are used on a comparatively long table and intermediate cleats are provided at each end of the table for retaining the legs in nested positions. This figure also shows legs extended from the ends of the table top to provide handles.

Referring now to the drawings wherein like reference characters denote corresponding parts the improved collapsible table of this invention includes a table top 10 having legs 11 clamped to the under surface with cleats 12 and 13 at the ends and also, with the legs in nested positions, with the cleats 14 at the center.

The cleat 12 is provided with leg receiving openings 15 and 16 at one end and 17 and 18 at the other, which openings are in a plane parallel to the table top, and also openings 19 and 20 which are positioned perpendicular to the table top.

The ends of the cleats are provided with slots 21 and 22 which extend from the openings 19 and 20, respectively, to the adjacent ends of the cleats and bolts 23 and 24 with thumb nuts 25 thereon extend through the ends of the cleat, passing through the slots 21 and 22, thereby providing means for clamping the legs of the table in the cleat.

The cleat 13 is provided with similar openings 26 and 27, aligned with the openings 15 and 16, openings 28 and 29 aligned with the openings 17 and 18, and vertically disposed openings 30 and 31, similar to the openings 19 and 20. The ends

of the cleats 13 are also provided with slots 32 and bolts 33 with thumb nuts 34 thereon extend through the ends of the cleat and pass through the slots providing clamping means for securing table legs in the openings 30 and 31.

The cleat 14 is provided with openings 35 and 36 at one end and 37 and 38 at the other, which openings correspond with openings in the cleats 12 and 13, and this cleat is also provided with perpendicularly disposed openings 39 and 40 in which grommets 41 and 42 which are formed of resilient material are positioned and which are held by screws 43 and 44, respectively which are threaded through the cleat and into the table top as shown in Fig. 4 and by this means the legs 11 may be clamped in nested positions.

It will be understood that the legs 11 may be of any suitable shape and may be formed in any manner, however, in the design shown the legs are tubular and plugs 45, of resilient material are provided in the upper ends. Similar plugs also of resilient material and having heads 46 with shanks 47 are positioned in the lower ends of the legs and by this means the intermediate parts of the legs are closed or sealed.

In the modification illustrated in Fig. 5 a table top 50 is provided with cleats 51 and 52 spaced from the ends and intermediate cleats 53 and 54 which are spaced from the cleats 51 and 52, respectively.

The cleat 51 is provided with perpendicularly disposed openings 55 and 56 for holding the table legs in set up or upright positions and similar openings 57 and 58 are provided in the ends of the cleat 52.

The cleats 51 and 52 and also the cleats 53 and 54 are provided with horizontally disposed openings similar to the cleats 12, 13 and 14 and legs, as indicated by the numeral 59, and which are similar to the legs 11 are positioned in the horizontally disposed openings with the table in the collapsed position whereby the legs are nested against the under surface. The legs are clamped in the nested position by screws 60, similar to the screws 43 and 44, and grommet 61, similar to the grommets 41 and 42.

The cleats 51 and 52 are provided with clamping elements, such as bolts 62 with thumb nuts 63 thereon and the bolts pass through slots 64, similar to corresponding elements in the cleats 12 and 13.

By this means the legs may be clamped in set up or upright positions for supporting the table top in a horizontally disposed position and the legs may also be removed and inserted in the horizontally disposed openings in which the legs may be clamped for storage and shipping.

Also as illustrated in Fig. 5 the ends of two of the legs may be extended to provide handles and it will be understood that the handles may extend from one side, as shown, whereby the table may be carried with the top in a vertically disposed position, or the handles may be extended from both sides whereby the table may be carried in a horizontally disposed position.

The surfaces of the end cleats in which the clamping elements are provided are relieved, as illustrated in Fig. 3 from points 65 to the ends of the cleats, providing slots 66 between the under surface of the table top and wings formed at the ends of the cleats by the slots extended inwardly to the leg holding openings whereby the upper edges of the wings are free so that they may readily be drawn together by the thumb nuts and bolts.

With the parts arranged in this manner an improved collapsible table is provided wherein the legs of a table are rigidly clamped in set up or upright positions and wherein, when it is desired to take the table down for storing or shipping the legs are removed and inserted in horizontally disposed openings in cleats on the under surface of the table top whereby the legs are nested against the under surface and wherein means are provided for clamping the legs in nested positions.

It will be understood that other modifications may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

1. In a table, the combination which comprises a table top, a cleat having leg receiving openings therein mounted on the under surface of the table top and spaced from one end thereof, some of said openings of the cleat being positioned with the axes thereof parallel to the table top and some of the openings being positioned with the axes thereof perpendicular to the table top, table legs positioned in certain of said openings of the cleats, the ends of said cleats being split from the openings positioned with the axis thereof perpendicular to the table top to the end surfaces thereof, bolts extended through the cleats and positioned between the openings positioned perpendicular to the table top and ends of the cleats for clamping the table legs in said openings, and intermediate cleats spaced from the former cleats and parallel thereto, said intermediate cleats having openings extended therethrough with the axes thereof positioned parallel to the table top and in alignment with the openings of the former cleats, the axes of which are positioned parallel to the table top.

2. In a table, the combination which comprises a table top, a cleat having leg receiving openings therein mounted on the under surface of the table top and spaced from one end thereof, some of said openings of the cleat being positioned with the axes thereof parallel to the table top and some of the openings being positioned with the axes thereof perpendicular to the table top, table legs positioned in certain of said opening of the cleats, the ends of said cleats being split from the openings positioned with the axes thereof perpendicular to the table top to the end surfaces thereof, bolts extended through the cleats and positioned between the openings positioned perpendicular to the table top and ends of the cleats for clamping the table legs in said openings, intermediate cleats spaced from the former cleats and parallel thereto, said intermediate cleats having openings extended therethrough with the axes thereof positioned parallel to the table top and in alignment with the openings of the former cleats, the axes of which are positioned parallel to the table top, said openings of the cleats positioned with the axes thereof parallel to the table top being positioned in pairs and grommets of resilient material mounted in the intermediate cleat and positioned between the openings of the pairs for frictionally retaining table legs in said openings.

3. In a table, the combination which comprises a table top, a cleat having leg receiving openings therein mounted on the under surface of the table top and spaced from one end thereof, some of said openings of the cleat being positioned with the axes thereof parallel to the table top and some of the openings being positioned with the

axes thereof perpendicular to the table top, tubular table legs having plugs of resilient material in the ends positioned in certain of said openings of the cleats, the plugs in one of the ends of the legs extended beyond the ends of the legs for frictionally gripping a surface upon which a table on which the legs are positioned is resting, the ends of said cleats being split from the openings positioned with the axes thereof perpendicular to the table top to the end surfaces thereof, bolts extended through the cleats and positioned between the openings positioned perpendicular to the table top and ends of the cleats for clamping the table legs in said openings, intermediate cleats spaced from the former cleats and parallel thereto, said intermediate cleats having openings extended therethrough with the axes thereof positioned parallel to the table top and in alignment with the openings of the former cleats, the axes of which are positioned parallel to the table top, said openings of the cleats positioned with the axes thereof parallel to the table top being positioned in pairs and grommets of resilient material mounted in the intermediate cleat and positioned between the openings of the pairs for frictionally retaining table legs in said openings.

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