United States Patent

Weagle

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[54] **FOLDING TABLE LEG**

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[52] **U.S. Cl.**.....**248/188.6,** 108/132

[51] **Int. Cl.**.....**A17b 3/00,** F16m 11/38

[58] **Field of Search**.....108/127, 129, 131, 132; 248/188.6

[56] **References Cited**

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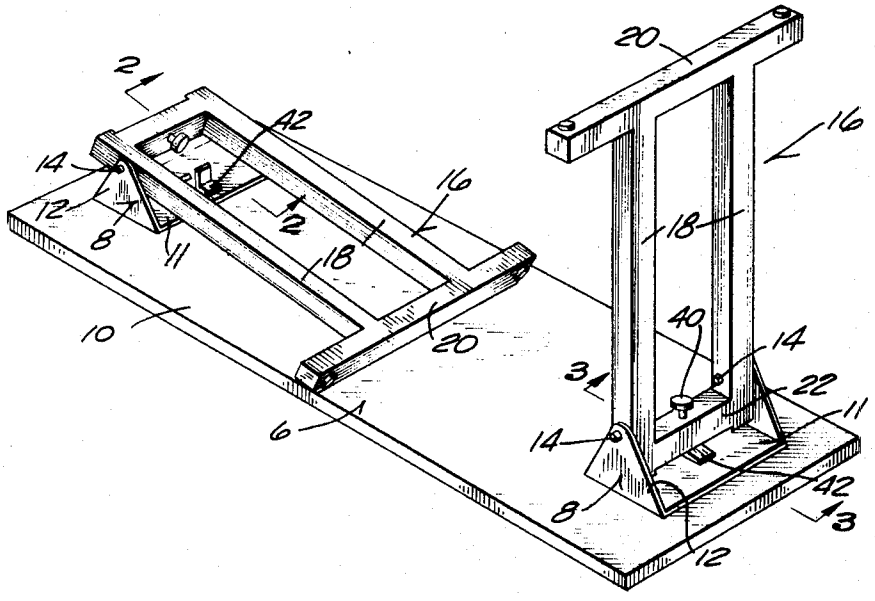
[57] **ABSTRACT**

Each of two folding leg standards constituting supports for a table is pivoted to its own bracket on the under side of the table and folds between upright and generally horizontal positions. A stop connected to the bracket defines the upright position while at the same time a dog slidable in a portion of the standard becomes engaged with a detent to hold the standard erect. When it is desired to fold the standard against the table, a single handle connected with the dog retracts the dog against pressure of a spring to release it from the detent.

5 Claims, 4 Drawing Figures



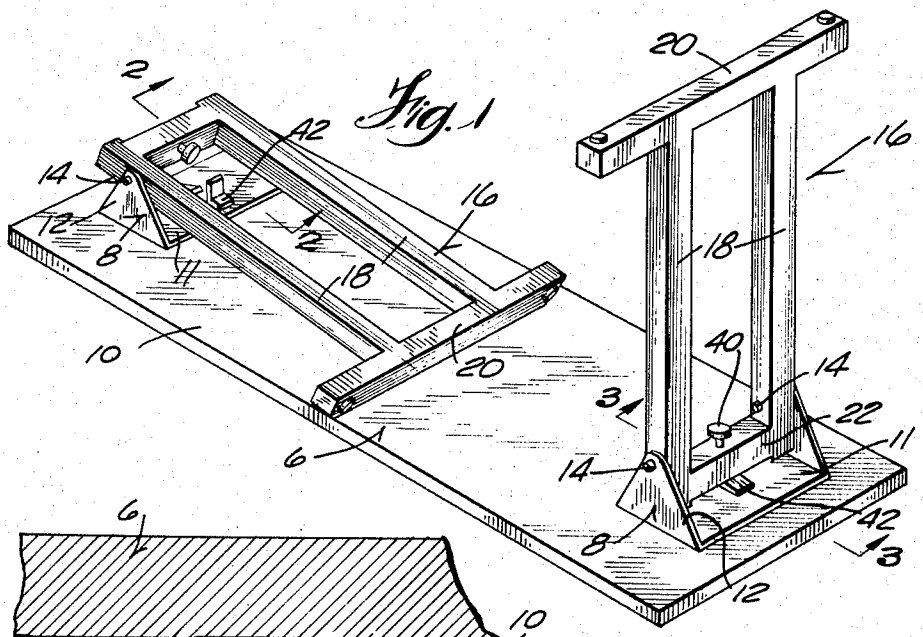


Fig. 1

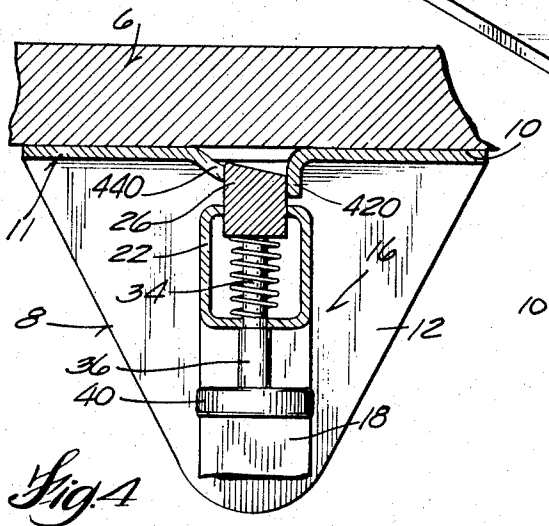


Fig. 4

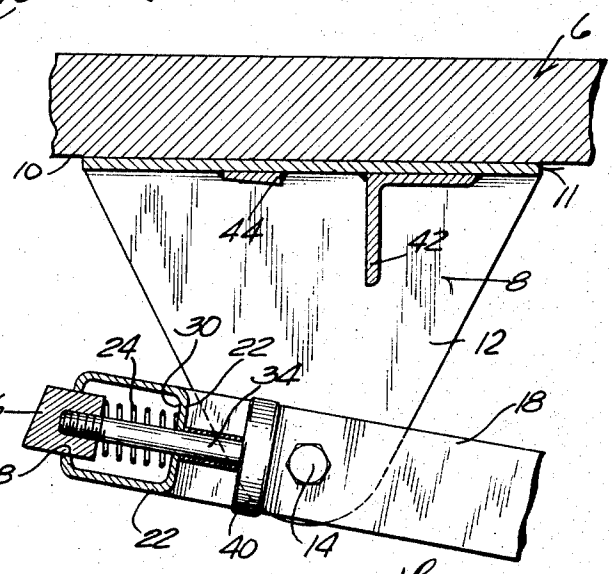


Fig. 2

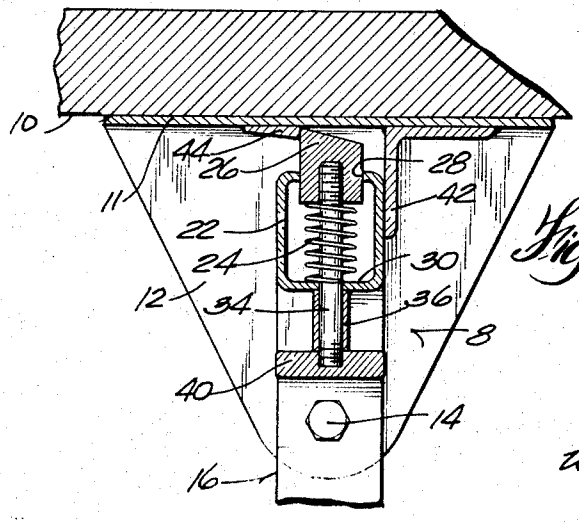


Fig. 3

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FOLDING TABLE LEG

BACKGROUND OF INVENTION

Various releasable catches have previously been applied to hold table legs in upright positions for table usage. The instant device is simple and effective and inexpensive and differs from others in the respects which make it effective for these purposes.

SUMMARY OF INVENTION

At each end of the table is a bracket having arms spaced laterally of the table and between which a table-supporting leg standard is pivoted. Centrally between the pivotal supports there is a stop which is either formed integrally from the bracket or welded thereto and which is abutted by the standard when the latter is pivoted to an upright position. In the upright position of the leg standard, a pawl or dog reciprocably mounted in the leg standard engages a detent near the center of the bracket to hold the leg erect. The dog is biased to detent engagement by a spring and is beveled to compress the spring as it slides over the detent to locking position. A handle on the dog permits retraction of the dog against the bias of the spring to clear the detent for collapse of the leg standard. Only a single moving part is required.

In the illustrated construction, the leg standard is made up of square tubing, the dog and its stem being reciprocable through opposing walls of the tube which forms the top cross member of the standard; the compression spring being housed within the tube.

The latch is self-engaging when the leg standard is erected and only a single simple movement is required to effect disengagement thereof when it is desired to collapse the standard.

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a view in perspective showing the inverted table with one leg standard collapsed and one erected.

FIG. 2 is an enlarged fragmentary detail view taken in section on the line 2—2 of FIG. 1.

FIG. 3 is a similar view taken on the line 3—3 of FIG. 1.

FIG. 4 is a view similar to FIG. 3 showing a modified embodiment.

DETAILED DESCRIPTION

The table top **6** is provided with a pair of similar brackets **8** near the opposite ends of its lower surface **10**. Each bracket comprises a mounting plate **11** having laterally spaced arms **12** to which a table-supporting leg standard is pivoted by means of pintle bolts **14**. In the preferred construction, the table leg standard **16** unitarily comprises laterally spaced legs **18** mounted on a transversely elongated foot **20** which gives stability to the table. At their upper ends, the legs **18** are connected by a top bar **22**. The legs and foot and top bar of the support are preferably all fabricated of hollow bar stock of square or rectangular cross section as shown in FIGS. **2** and **3**.

Housed within the top member **22** in the pivoted end of the support is a compression spring **24** which seats against a dog **26** slidable through an opening **28**. The opposite end of the spring seats against the interior surface **30** of the opposite wall of top cross member **22** of the support, whereby the dog is biased outwardly. A stem **34** connected with the dog slides through a tubular member **36** abutting the bottom surface of the member **22**. This constitutes a stop for the dog, being engaged by handle **40** with which the stem **34** is provided. Member **36** can also be an integral part of **40**.

The upright position of the support is defined as shown in FIG. **2** and FIG. **3** by a stop member **42** engaged by some portion of the support such as bar **22** or dog **26**. The stop may be prefabricated and held to the bracket **12** by welds as shown in FIGS. **2** and **3** or may be formed integrally with bracket **12** as shown at **420** in FIG. **4**.

The support is releasably held in upright position by engagement of the dog **26** with a detent **44** which may either be welded to the bracket **12** as shown in FIGS. **2** and **3** or may be formed integrally with the bracket as shown at **440** in FIG. **4**.

In the latter case, both the stop **420** and the detent **440** may be made of the material of the bracket by being deformed out of the plane of base plate **11**.

It will be observed that there is only one moving part for each latch, the construction being simple and inexpensive and very easily manipulated while, at the same time, holding the leg standard rigidly in its erected position when the table is in use. The extent of the foot portion **20** of the leg standard is such that great lateral stability is provided as well as the longitudinal stability which results from the latch structure described.

I claim:

1. A support for a collapsible table having a top, said support comprising a bracket having a planiform base plate with an upstanding detent and stop, said bracket being connected with an under surface of the table top and having spaced arms, a leg standard having spaced leg portions directly pivotally connected with said arms and also having a foot and top bar connecting said leg portions and extending at right angles with respect to said leg portions, said top bar and the leg portions connected to said top bar being movable between said bracket arms and spaced from a base plate to provide clearance of the adjacent surface of said top bar with said detent and stop, a dog reciprocable transversely with reference to the top bar, and engageable with said detent and stop to define said upright position of the support.

2. A collapsible table support according to claim **1** in which the said top bar is hollow and the dog is partially within the hollow top bar, spring means biasing the dog outwardly from said bar, and a handle connected with the dog and constituting means for retracting the dog against the bias of the spring means, said handle being spaced from said top bar to facilitate gripping of said handle.

3. A collapsible tale support according to claim **1** in which the dog and detent have cooperating surfaces for camming the dog over the detent to a position for engagement therewith.

4. A collapsible table support according to claim **2** in which said dog has a stem reciprocable through said top bar, said handle being located at the outer end of said stem, and a tubular member on said stem between said handle and said top bar to limit movement of said dog into an extended position.

5. A support according to claim 4 in which the stop and detent are both struck from the plane of said planiform base plate into the path of movement said dog.

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