United States Patent

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[54] **KNOCKDOWN TABLE**
2 Claims, 8 Drawing Figs.

[52] **U.S. Cl.** **108/115,** 108/153, 297/440
[51] **Int. Cl.** **A47b 3/06**
[50] **Field of Search** 108/111, 115, 154; 211/135, 73; 248/459, 174, 152; 297/442, 457

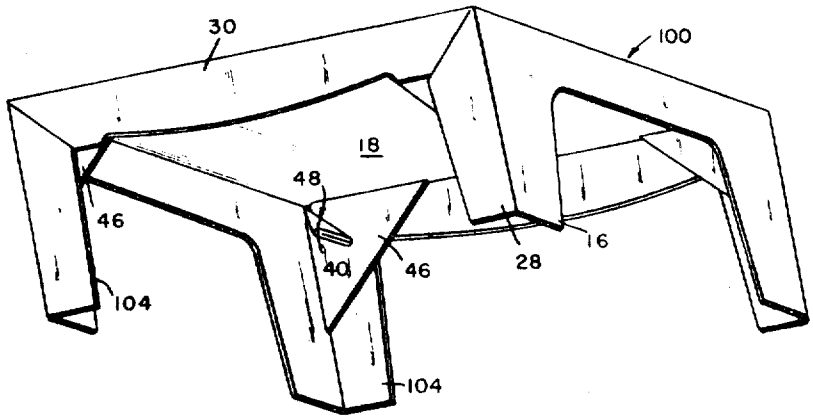
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ABSTRACT: A knockdown table formed of a cardboard blank which has been adapted by means of a plurality of fold lines and score lines in such a way that when the blank is folded along said fold lines a table having an imperforate top will be defined thereby, the score lines defining removable sections which, when removed, are effective to form the legs of the table, and are further adapted to be delineated into corner locking and supporting members which will underlie and act as support for the resulting standing table structure.



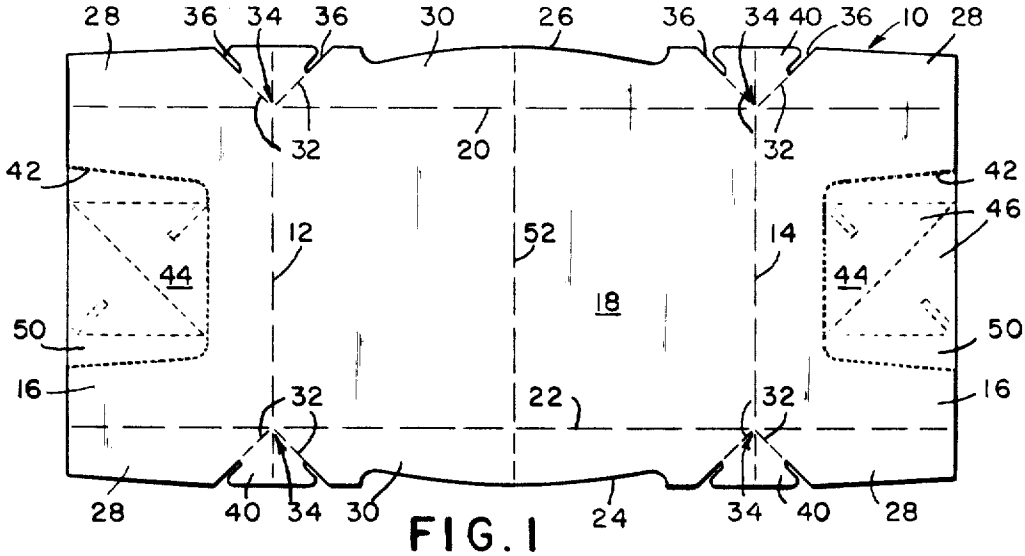


FIG. 1

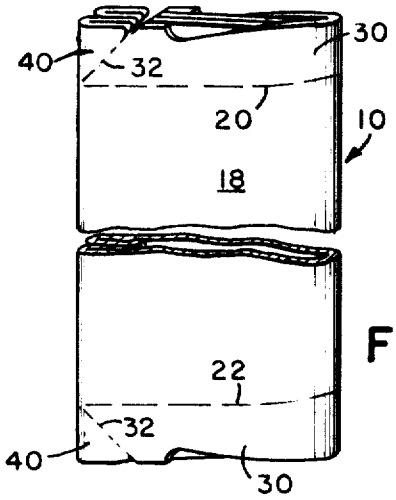


FIG. 2

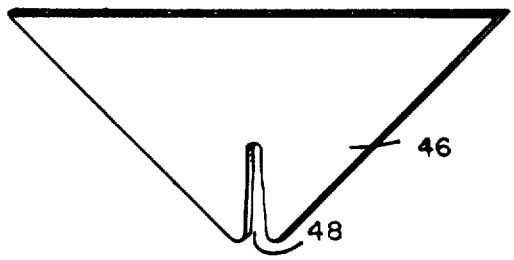


FIG. 3

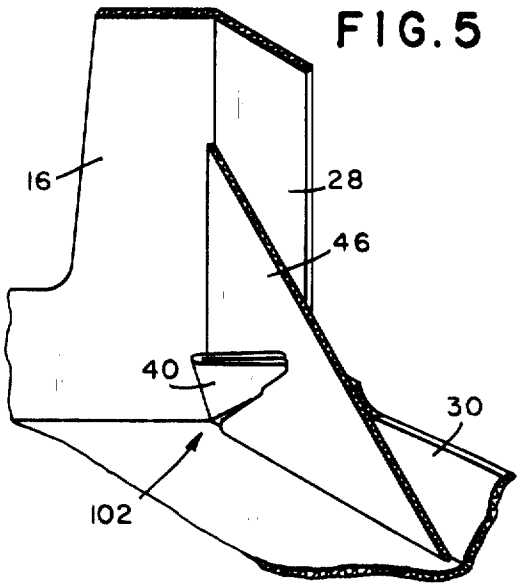


FIG. 5

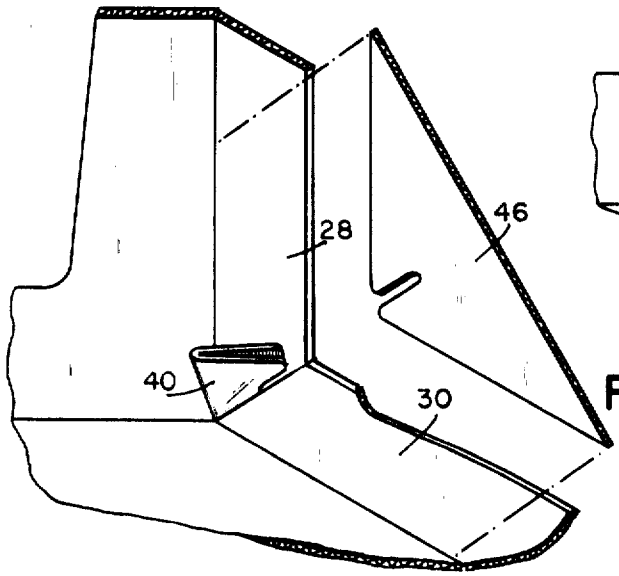


FIG. 4

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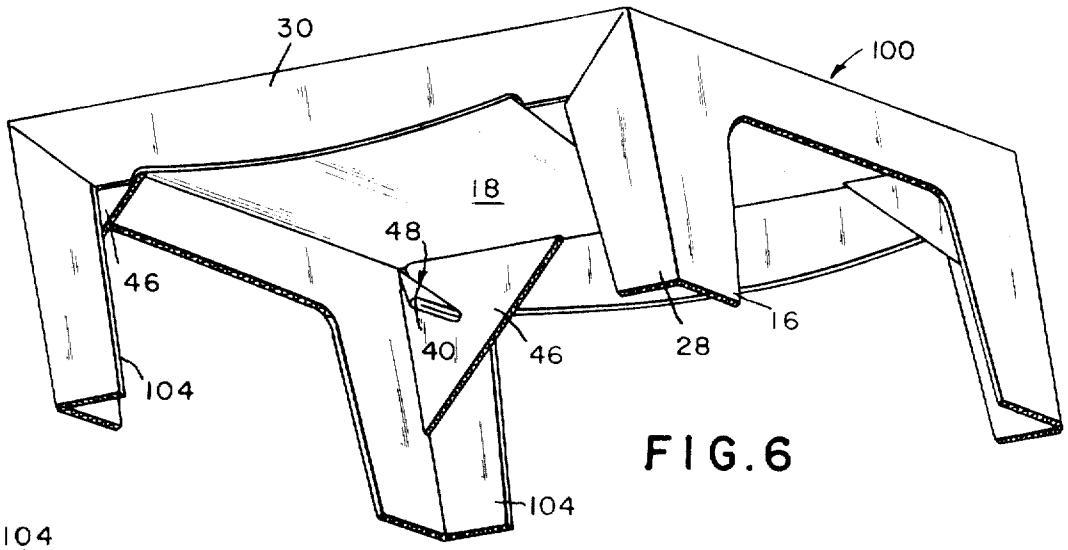


FIG. 6

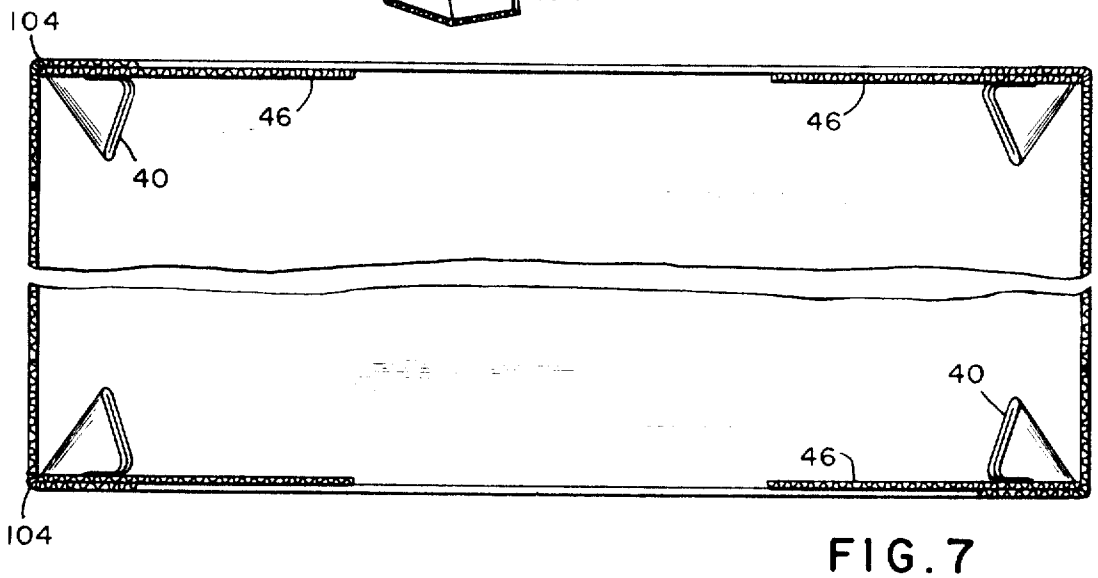


FIG. 7

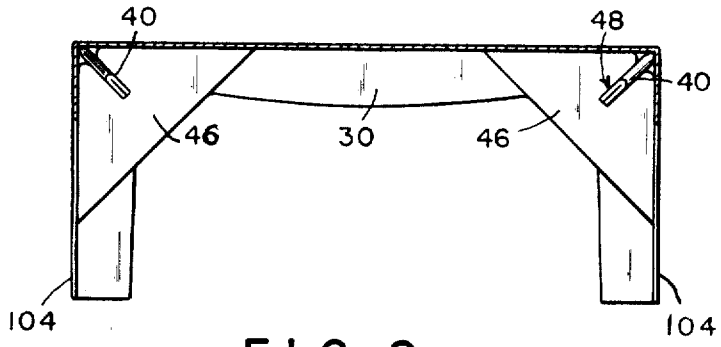


FIG. 8

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KNOCKDOWN TABLE

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to a knockdown construction, and more particularly, to a foldably constructible table formed of a suitably adapted cardboard blank.

2. Description of the Prior Art

Knockdown boxes of cardboard construction are of course well known. They are formed of a cardboard blank which has been suitably adapted with fold lines, cut lines or score lines, in a particular sequence, in such a way that when folded a box will be formed having the desired characteristics. One of the advantages of this knockdown-type construction is that the boxes may be stored in the flat, unfolded blank condition, ready for quick assembly into a box when needed.

It would be equally desirable and advantageous, if a knockdown construction could be provided which would fold into a table. However, a table of this type would, of necessity, have to be of sturdy construction, since it is of relatively flimsy cardboard construction.

SUMMARY OF THE INVENTION

It is, therefore, among one of the principal objectives of the invention to provide not only a knockdown table formed of a suitably adapted cardboard blank, but also a table which, when assembled, is of sturdy construction.

In accord with the invention, a foldably constructible table, i.e. knockdown table is provided, formed of a cardboard blank, which has been adapted by means of a plurality of fold lines and score lines, in such a way that when the blank is folded along said fold lines a table having an imperforate top will be defined thereby, the score lines defining a pair of opposing removable sections which, when removed, are effective to form the legs of the table and which, removable sections, are further adapted to be delineated into corner locking and supporting members which will underlie and act as support for the resulting standing table structure.

BRIEF DESCRIPTION OF THE DRAWING

The invention will be hereinafter more fully described with reference to the accompanying drawing, in which:

FIG. 1 is a plan view of a blank utilized in the assembly of a table pursuant to the present invention;

FIG. 2 is a fragmented, front view, showing the blank of FIG. 1 in the folded, compact shipping condition;

FIG. 3 is a top plan view of a corner-supporting member for the invention table;

FIG. 4 is a fragmented, exploded view, in perspective, of a corner-supporting member and its associated table corner to be supported;

FIG. 5 is a view, similar to FIG. 4, except as here shown the corner-supporting member is in the attached position;

FIG. 6 is a view in perspective of the table formed from the blank of FIG. 1;

FIG. 7 is a top plan, fragmented, partially sectional view of table shown in FIG. 6; and

FIG. 8 is a front view of the table looking towards a pair of supported corners from within the interior of the table.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the figures of the drawing, FIG. 1 illustrates a blank **10** of fluted cardboard of conventional construction, the blank as here shown being essentially rectangular in configuration. The blank **10** is provided with a pair of parallel opposing transversely oriented first and second fold lines **12** and **14**, respectively, which, in turn, define a pair of parallel opposing leg-forming panels **16**, and an intermediate imperforate tabletop panel **18** therebetween. The blank **10** is also provided with a pair of parallel opposing longitudinally oriented third and fourth fold lines **20** and **22**, respectively,

said third and fourth fold lines being inwardly directed from and adjacent to the parallel opposing longitudinal edges **24** and **26** of the blank, and defining, in turn, corner-forming flaps **28** and **30**. Each corner-forming flap **30** is intermediate a pair of corner-forming flaps **28**, so that corner-forming flaps **30** bound tabletop **18** or its two longitudinal sides formed by fold lines **20** and **22** and corner-forming flaps **28** bound each leg-forming panel **16** on its two extensions of longitudinal fold lines **20** and **22**. Each corner-forming flap **28** and **30** is foldable, along the respective portion of the longitudinal fold line it bounds, into cooperating positions with the leg-forming panels **16** and table top panel **18** so as to form corners for the table as will be subsequently more fully shown.

A cooperating pair of outwardly diverging fold lines **32** are provided at each of the intersections **34** of the first, second, third and fourth fold lines **12**, **14**, **20** and **22**, each fold line **32** terminating in a slot **36** in linear relation therewith, slots **36** being cut into the longitudinal edges **24** and **26** of the blank **10**. Thus, fold lines **32** and slots **36** define four triangular tuck-in flaps **40**.

In each leg panel **16** there is provided a generally U-shaped score line **42** which defines a removable section **44**, the removal of which will define legs for the table, as will be seen. Each section **44**, in turn defines a pair of tabs **46**, bounded by regular (as opposed to irregular) score lines, which will ultimately form the corner supports for the table as will be also seen. Each tab **46** is generally triangular-shaped, and at the apex of each is provided an inwardly directed notch **48** defined by suitable score lines. In other words, when tabs **46** are removed from the blank along their respective score lines on the blank, they will appear as at FIG. 3. Selvage pieces **50** are also provided in removable section **44** immediately alongside tabs **46**; however, these are not necessary to the invention and could be omitted from removable section **44**.

A medial transverse fold line **52** is also provided on blank **10**, for a reason now to be discussed. When it is desirous to store or ship the table blanks **10** in folded, compact condition, what is done is to first fold the opposing leg-forming panels **16** and their respective corner flaps **28** inwardly upon themselves along fold lines **12** and **14**, and then the blank is folded inwardly again along fold line **52** to yield the flat compact folded blank of FIG. 2. This also serves to protect the removable sections **44** and keep the tabs **46** in a flat condition, since it is an important feature of the invention that the tabs **46** be not bent out of shape.

Describing now the assembly of the table **100** of the invention, and with reference specifically to FIGS. 1, and 3—8, inclusive, with the blank in the condition as shown in FIG. 1, the removable sections **44** are removed from the blank **10** forming tabs **46** with the pieces of selvage **50** being discarded. As mentioned, tabs **46** are triangular in shape and have an inwardly directed notch **48** provided at the apex of the triangle along the perpendicular bisector thereof (not shown). Also as mentioned, it is important that tabs **46** not be bent out of shape; this is assured by taking the tab **46** from flat removable section **44**.

The table **100** is then formed by folding the blank along the various fold lines (except fold line **52**). To wit, the blank **10** is folded inwardly along longitudinal fold lines **20** and **22** at about 90° angles. Next, in sequence, each tuck-in flap **40** is pushed inwardly, i.e. towards what will be the interior of the table, until the corner-forming flaps **28** and **30** are in edge-to-edge abutment. While the flaps **28** and **30**, with tuck-in flap **40** inwardly projected therebetween, are so related and held in place, the tab **46**, via notch **48** being slidingly fitted over tuck-in flap **40**, locks the corner **102** in position. By virtue of the regular triangular shape of tab **46**, the regular edges of two of the sides of the triangle abut and underlie the respective corner which it is locking and thus tab **46** acts as a corner-supporting member for the standing table. It can now be seen why it is important that tab **46** be maintained in a flat condition, and that is to assure a secure locking of tuck-in flaps **40** as well as furnishing support to each corner and the table thereby by

the edgewise abutment described hereinabove. It is to be noted that when assembled, corner-forming flaps **28** and leg-forming panels **16** form the four legs **104** of the table, mentioned earlier.

Thus, in accordance with the invention, a foldably constructible table is provided which is not only easily assembled but is also of a sturdy construction by virtue of the feature of the corner-locking tab **46** which also acts as a supporting member for the standing table. The invention knockdown table is particularly suitable for picnics, camping trips, for children's games, for card playing on commuter trains; in other words, in any situation where a temporary table of light but strong construction is required.

What I claim is:

1. A foldably constructible table comprising a construction blank fabricated of cardboard having an elongated, rectangular shape, at least two transversely oriented first and second fold lines in said blank delineating two leg-forming panels at opposite ends thereof and an intermediate imperforate tabletop panel, at least two longitudinally oriented third and fourth fold lines respectively located in said blank adjacent each longitudinal edge thereof delineating corner-forming flaps foldable along each of said fold lines into cooperating positions with said leg-forming and tabletop panels so as to form corners along each of the longitudinal extents of said panels, a cooperating pair of outwardly diverging fold lines in said blank at each of the four intersections of said first, second, third and fourth fold lines and delineating a separate one of four triangular tuck-in flaps operatively effective to be projected to the interior of the volume bounded by said table following the folding construction thereof, and in each said leg-forming panel a shaped centrally located score line delineating a removable section effective to form legs therein upon said removal therefrom, at least one said removable section being delineated into plural tabs each having regular sides and each having a notch therein of an extent adapted to accommodate one said inwardly projected tuck-in flap so as to maintain said inwardly projected position thereof, whereby said table is foldably constructible from said blank.

2. A blank for a foldably constructible table as defined in claim 1 wherein each of said pair of outwardly diverging lines terminates in slots extending inwardly into said construction blank from the longitudinal edges thereof.