

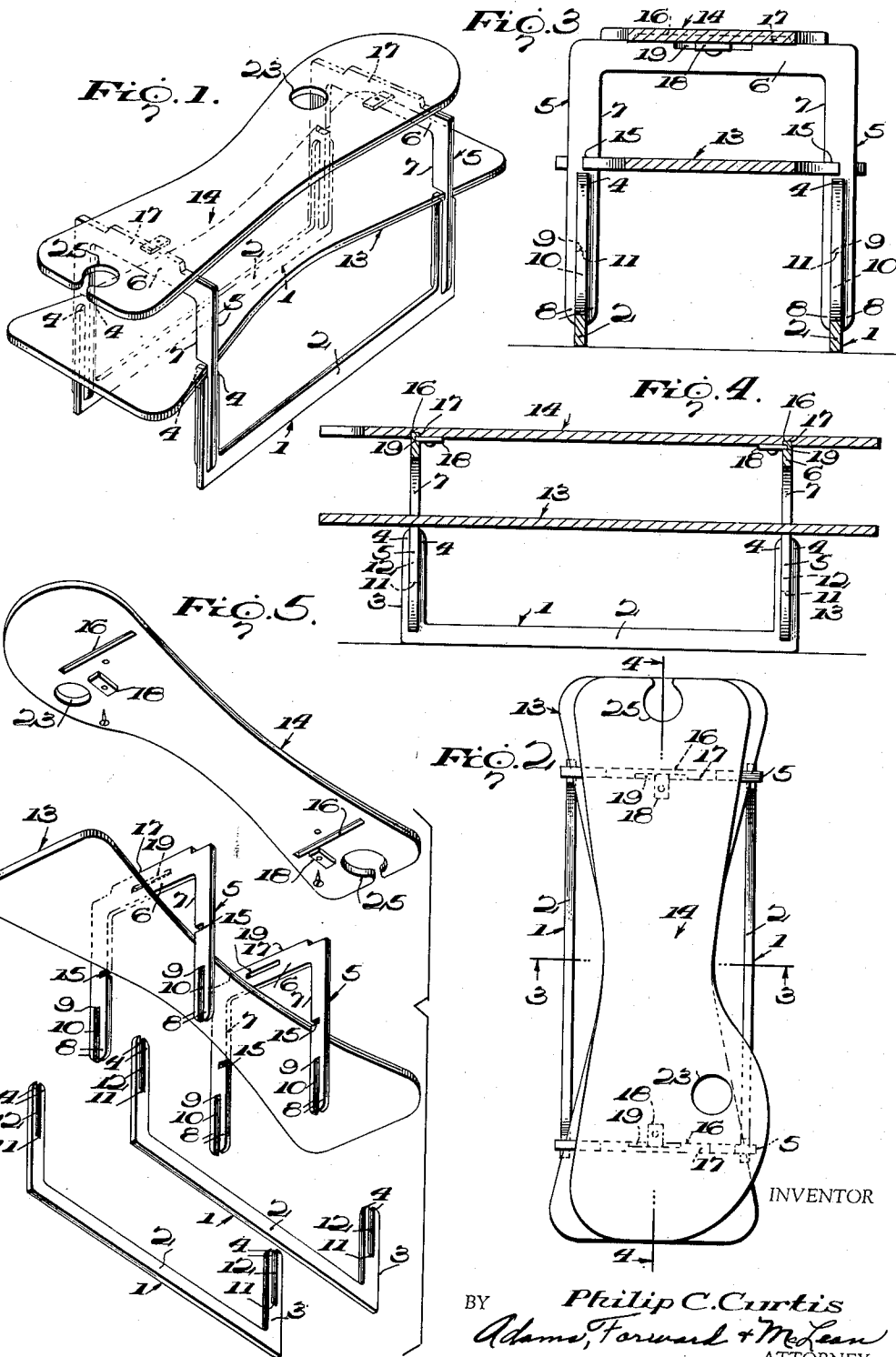
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KNOCKDOWN SHELVING

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KNOCKDOWN SHELVING

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2 Claims. (Cl. 211—148)

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This invention relates to the construction of household furniture and the like. More particularly it is concerned with providing a novel knock-down table having one or more shelves, and a unique table top, wherein the several component parts of the table can be easily and cheaply manufactured and which are so fabricated that they can be easily and quickly assembled together without the use of external fastening elements such as nails, screws, glue, bolts, or the like.

In the past the several efforts that have been made to produce inexpensive, simply constructed knockdown, shelved tables wherein the use of external fastening elements such as nails, bolts, screws, etc. is eliminated, have not met with success for one or more reasons.

For example, certain of the tables that were developed, were not of sufficient rigidity or strength to withstand normal abuse and wear and consequently were impractical.

Other tables had sections which were of such an intricate and complex design, that they did not quickly lend themselves to easy and cheap methods of fabrication. The design of these sections also required special tools to assemble the parts together, or special skill on the part of those charged with arranging the several elements together to make the finished product.

The parts of such tables were also ordinarily made of metal, since other materials such as wood and particularly plywood were not considered to have the inherent strength and rigidity to supply satisfactory and strong interlocking parts, thereby obviating the necessity of using external fastening elements.

These are but a few of the factors which previously have made extensive manufacture and sale of tables put together without the use of nails, bolts, screws, glue or the like impractical.

It has been found, however, that by uniquely designing the several parts of the table so that each part will suitably interfit with an adjacent part or element while simultaneously providing a strong and rigid joint therebetween, that a rigid and exceptionally strong shelved table may be provided, and one which can be quickly and conveniently manufactured and cheaply sold.

In addition, the shelved table of the instant invention is made up of sections which are so easy to assemble that even a child is capable of arranging them together in their proper relationship. The table is also made from a minimum amount of parts.

The overall table design of the instant invention also possesses such inherent strength and rigidity

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that the several parts thereof can all be made of wood, and particularly thin plywood, without any sacrifice in structural strength.

The simplicity in design of each component part or section of the table is unique and provides for easy and quick assembly. These parts before assembly and after dismantlement can be easily stored in a minimum amount of space, and never at any time need one be concerned about the use of nails, bolts, screws or the like, nor is one required to have special tools during assembly or dismantlement of the sections.

The table is also provided with a novel table top having apertures therein especially designed to hold articles such as vases firmly anchored to the table whereby when the table is accidentally jarred or bumped an article like a vase will not be upset.

It is a primary object of this invention, therefore, to provide a novel knockdown shelved table having interlocking parts, which supply their own fastening elements in and of themselves.

Another object of the invention is to provide a novel knockdown shelved table of exceptional strength and rigidity while being manufactured from a minimum amount of parts.

A further object of the instant invention is to provide a novel table assembly having simple parts which can be cheaply and readily manufactured.

Another object of this invention is to provide a novel shelved table assembly having parts which are so made that they can be quickly and easily assembled without the need of special tools or special skill on the part of the person assembling the table.

A further object of the invention is to provide a novel shelved table having parts which before assemblage or after dismantlement can be placed in a small package or container for the purposes of storage or shipment from one place to another.

Another object of this invention is to provide a novel shelved table, wherein the use of external fastening elements such as glue, nails, bolts, screws, etc. can be dispensed with.

A final object of this invention is to provide a novel table top having specially designed apertures therein for anchoring articles such as vases to the table whereby when the table is inadvertently shaken or jarred, such articles will not be upset.

These and other objects will be more apparent by reference to the following detailed description

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when taken in conjunction with the appended drawings wherein:

Figure 1 is a perspective view of the unique shelved table of the instant invention;

Figure 2 is a top plan view of the table shown in Figure 1;

Figure 3 is an elevational sectional view of the table when taken along lines 3—3 of Figure 2;

Figure 4 is an elevational sectional view of the table taken along lines 4—4 of Figure 2; and

Figure 5 is an exploded view of the table of the instant invention showing the relationship of the several parts immediately prior to assembly.

By referring to the drawings it will be observed that the shelved table of the instant invention is comprised of a pair of side base members 1. Each of these base members is so formed from a single piece of material such as thin plywood as to include an elongated floor engaging web portion 2 and leg elements 3 which project vertically upward from each extremity thereof. Each leg element 3 is provided with a plurality of upwardly projecting spaced fingers 4 at the free ends thereof. Each leg 3 is thus suitably reinforced through the medium of the web 2, and any upward thrust upon the legs 3 is equally distributed by the web on each leg. The function of fingers 4 will be discussed later.

The table is also provided with a pair of end frames 5. Each end frame which is likewise preferably made from a single piece of relatively thin plywood includes a web portion 6 and leg elements 7, which project downwardly from each end thereof, these leg elements being reinforced by web 6 in the same manner as the leg elements 3 are reinforced by the web 2 on each base member. In addition, web 6 serves to distribute any downward thrust upon legs 7 equally upon each leg.

The several leg elements 7 are also provided at the free ends thereof with a plurality of downwardly projecting spaced fingers 8.

These latter fingers 8 on leg elements 7 of the end frames as indicated in Figures 1 and 5 are adapted to interlock at a transverse angle with the upwardly projecting fingers 4 on the legs 3 of the side base members, when fingers 8 are thrust downward between fingers 4 until the base 9 of the elongated slot 10 in each leg 7 of an end frame comes into contact with the base 11 of the elongated slot 12 in each leg 3 of a side base frame.

This interlocking of the base members and end frames can be simply done and when interlocked these members form a strong foundation for a shelf 13 and a table top 14.

The shelf 13 of the table is mounted thereon by means of slots 15 in each of the leg elements 7 of the end frames. By referring to Figures 1 and 5 it will be noted that these slots are located on the inner margins of leg elements 7 intermediate the ends thereof. If desired, shelf 13 may also be provided on its outer margins with similar slots at the points where it is engaged by the slots 15 of leg elements 7 to further insure a rigid joinder of the shelf and each leg element 7, when the base of the slot in the shelf is brought into contact with the base of a coacting slot 15 in each leg element 7.

It will also be noticed by referring particularly to Figures 3, 4 and 5 that the table top 14 is provided on the underside thereof with an elongated recessed portion 16, at each end thereof, within which the top part of an end frame 5 such as a shoulder portion 17 is adapted to be inserted.

If desired, and to further anchor the table top 14 to each end frame, suitable latching lugs 18,

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which may be advantageously made from plywood scraps can be pivotally attached to the undersurface of the table top at points spaced inwardly from the recessed portions 16, and they are adapted to be pivotally inserted within a coacting elongated recessed portion or groove 19 located on the inner face of the web 6 of each end frame.

When disassembling the table the latching lugs 18 are moved out of engagement with grooves 19 and the top 14 lifted off of the end frames by disengaging shoulders 17 from grooves 16 in the bottom of the table. The shelf 13 can then be disengaged from the end frames, after their removal from the side base members.

By using the aforesaid interlocking arrangement as the means for joining the several members of the table together it will be noted that each member serves to reinforce and strengthen its adjacent member, and a compact strong and rigid shelved table is provided. Each of the several slots in the leg members 3 and 7 are only of sufficient width to provide a snug fit for the elements or parts which are receivable therein.

The top of the table, as will be noted by referring to Figures 1, 2 and 5, is provided with a hole 23 within which a vase or container for flowers may be inserted and when anchored therein, the vase will not become dislodged or knocked off of the table when it is jarred or bumped.

A keyway or cutout 25 may likewise be provided in one end of the top 14 so as to serve as a second holder for another vase or the like. This latter cutout section may also be advantageously employed for holding or retaining the stems of flowers and the like located in a container which rests on shelf 13.

Although the preferred embodiment of the invention contemplates that the several parts of the table be made from plywood which lends itself to simple and easy fabrication, it is obvious that other materials can also be used.

However, plywood is most advantageously suited for such a table construction because of its low cost, availability and the ease with which it can be worked.

Furthermore, although plywood having a thickness of about $\frac{3}{4}$ of an inch is the usual size of plywood employed in the making of furniture of this kind, it has been found that because of the inherent strength and rigidity afforded the table because of the interlocking arrangement of the several parts or sections of the table of the instant invention, and the web portions provided for the end frames and side base members, that plywood having a thickness within the range of $\frac{3}{8}$ to $\frac{5}{8}$ of an inch can also be used with excellent results for all the parts. In practice, plywood of $\frac{1}{2}$ an inch thickness has been found advantageous. This savings in material is obvious and can in turn be passed on to the consumer.

Instead of one shelf, a plurality of shelves could be used for the table.

Various other changes and modifications can be made in the invention without departing from the spirit and scope thereof as defined by the appended claims, wherein:

What is claimed is:

1. A knockdown table assembly of the type described comprising the combination of a pair of side base members, each of said side base members being comprised of a floor engaging elongated web portion and leg elements projecting upwardly from each end of said web portion, each

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of said leg elements in turn being provided with a plurality of upwardly projecting spaced fingers at the free ends thereof, a pair of end frames, each of said end frames being comprised of a web portion and leg elements projecting downwardly from each end thereof and at a transverse angle to the upwardly projecting legs of the said side base members, each of said downwardly projecting leg elements on said end frames also being provided with a slot on its inner marginal edge intermediate the ends thereof and a plurality of spaced downwardly projecting fingers at the free ends thereof which are adapted to interlock at an angle with the upwardly projecting fingers on the legs of the said side base members, a flat shelf member adapted to be engaged adjacent the corners thereof by the said slots located in the legs of the said end frames intermediate the ends of the said legs, and a table top provided with transverse elongated recessed portions on the underside thereof adjacent the ends thereof, mounted upon the webs of said end frames in super-imposed relationship to said shelf, the tops of said webs of the end frames being receivable within the said recessed portions on the underside of said table top.

2. A knockdown table assembly of the type described comprising the combination of a pair of side base members, each of said base members being comprised of a floor engaging elongated web portion and leg elements projecting upwardly from each end of said web portion, each of said leg elements in turn being provided with a plurality of upwardly projecting spaced fingers at the free ends thereof, a pair of end frames, each of said end frames being comprised of a web portion having an elongated recess on the inner face thereof and leg elements projecting downwardly from each end of said web and at a transverse angle to the upwardly projecting legs

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on the said side base members, each of said downwardly projecting leg elements on said end frames also being provided with a slot on its inner marginal edge intermediate the ends thereof and a plurality of spaced downwardly projecting fingers at the free ends thereof which are adapted to interlock at an angle with the upwardly projecting fingers on the legs of the said side base members, a flat shelf member receivable between the legs of the end frames and adapted to be engaged adjacent the corners thereof by the said slots located in the said intermediate portions of the legs on said end frames, and a table top mounted upon the webs of said end frames, said table top also being provided with elongated recessed portions on the underside thereof adjacent the ends thereof and a plurality of latching lugs also pivotally attached to the underside thereof in spaced relationship to said recessed portions, said latching lugs being insertable within the recessed portions on the inner face of the webs of said end frames, when the tops of said last-mentioned webs are inserted within the recesses in the underside of said table top.

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