Dec. 28, 1948. L. E. STEINBERGER 2,457,411

SET OF KNOCKDOWN FURNITURE

Filed Oct. 21, 1946

Fig. 1.

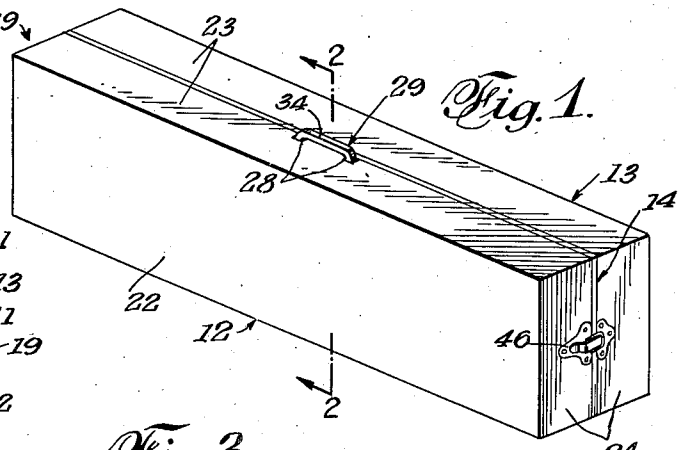


Fig. 2.

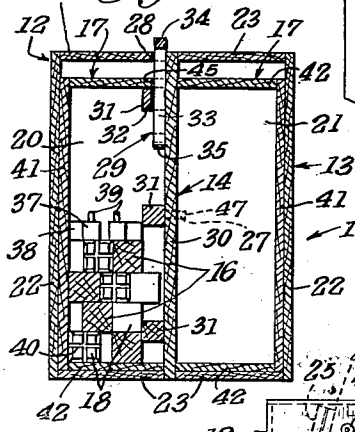


Fig. 3

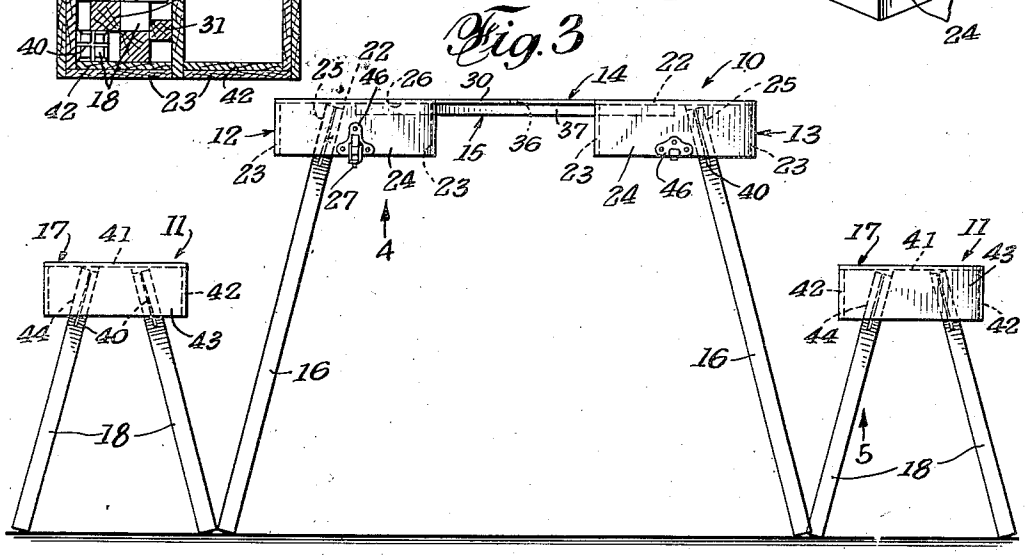


Fig. 4.

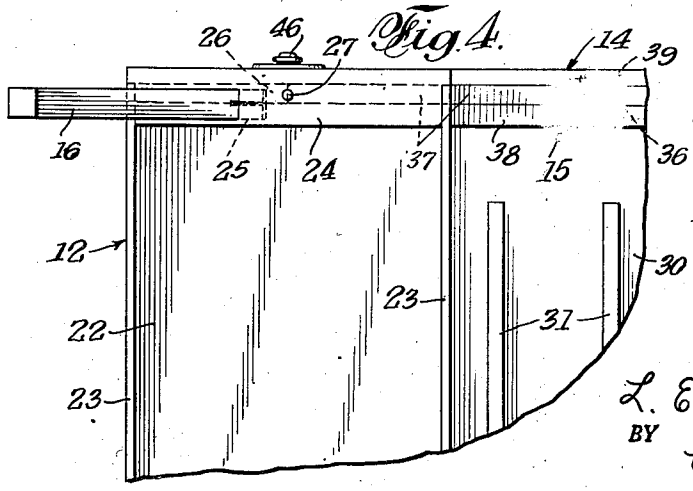
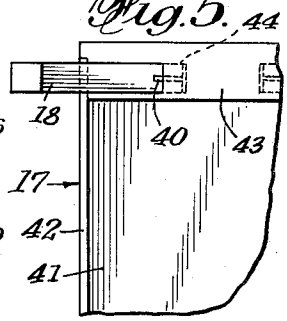


Fig. 5.



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SET OF KNOCKDOWN FURNITURE

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10 Claims. (Cl. 155—123)

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This invention relates to knockdown furniture and has for its primary object to provide a knockdown set of table and benches adapted to be arranged as a rectangular case of relatively small dimensions whereby the relatively bulky and space occupying table and benches are compactly rearranged for easy and convenient transportation.

Another object of the invention is to provide a set of tables and benches adapted for use at outings and picnics, the elements of which are knockdown for rearrangement into a compact easily carried case having a suitable carrying handle.

My invention also has for its objects to provide such means that are positive in operation, convenient in use, easily installed in a working position and easily disconnected therefrom, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawings merely show and the following description merely describes one embodiment of the present invention, which is given by way of illustration or example only.

In the drawings, like reference characters designate similar parts in the several views.

Fig. 1 is a perspective view of a case formed by the elements of a knockdown table and benches according to this invention.

Fig. 2 is an enlarged cross-sectional view thereof as taken on the line 2—2 of Fig. 1.

Fig. 3 is an end elevational view of the table and benches as erected for use at outings, picnics, etc.

Fig. 4 is an enlarged fragmentary view as seen in the direction of the arrow 4 of Fig. 3.

Fig. 5 is a similar view as seen in the direction of the arrow 5 of Fig. 3.

As illustrated in Fig. 3, the articles of furniture comprise a table 10 and two similar benches 11. The table 10 is composed of similar but opposite table tops 12 and 13, a table leaf 14 arranged therebetween, a pair of leaf supports 15 spanning between the table tops 12 and 13, and four similar table legs 16 connected to said table tops. Each bench 11 is composed of a bench top 17 and four bench legs 18. As seen in Figs. 1 and 2, the table tops 12 and 13 form similar opposed portions of a carrying case 19 which sandwich between them the table leaf 14 to divide the case into similar compartments 20 and 21. Said compartments serve to house the bench tops 17, one

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in each compartment, the table and hence legs 16 and 18, and the leaf supports 15.

Each table top 12 and 13 is formed as a generally elongated rectangular structure of suitable materials such as wood and plywood. Each top comprises a top panel 22, side panels 23 which form the top and bottom walls of the case 19, and end walls 24. The panels 22 and 23 and the end walls 24 are assembled and joined to form the mentioned hollows or compartments 20 and 21 of the table tops 12 and 13.

The end walls 24 are relatively thick and each is provided with a substantially square seat 25 extending angularly through from top to bottom of said wall. The angular disposition of each seat is such that a leg 16 telescoped thereinto will have a downward and outward direction when the table is erected as in Fig. 3. A rectangular horizontal seat 26 extends into each wall 24 and through the ends of one of the panels 23 to receive the ends of the leaf supports 15 as best seen in Fig. 4. An aligning pin 27 extends outwardly from the bottom of each end wall 24 of one table top, say the top 13, to hold the table leaf 14 in position when the elements are arranged as in Fig. 1. One of the side panels 23 of one of the table tops is formed with a pair of spaced centrally located notches 28 to accommodate a carrying handle 29 for the case 19, said handle being mounted on the table leaf 14.

The table leaf 14 comprises a rectangular top 30 having length and width dimensions similar to those of the table tops 12 and 13. Said leaf is stiffened by a suitable number of longitudinal cleats 31. One outer face of said cleats is provided with a pair of notches 32 generally aligned with the mentioned notches 28 for loosely holding the handle 29. The latter is formed of metal or the like with sides 33 extending through notches 32 and adapted to similarly extend through notches 28, with an integral connecting bail 34 at the outer ends of the sides 33, and with outwardly bent feet 35 at the other ends of said sides. The handle is thereby loosely connected to the table leaf, serves as the carrying means for the case 19, and is of the disappearing type as indicated. Suitable holes 36 at each end of the top 30 receive the mentioned aligning pins 27 as hereinbefore described.

As seen in Fig. 3, the table tops 12 and 13 and the table leaf 14 are arranged to provide a continuous uninterrupted table surface with the leaf between the tops 12 and 13. The leaf supports 15 are provided to connect the parts and support the leaf 14. A support 15 is provided for each

end of the leaf and spans between the table tops as shown. Each support 15 comprises a rectangular preferably wooden bar 37 of suitable length to enter and fit into opposed and aligned seats 26 of the table tops, and a bar 38 secured centrally to each bar 37 to serve as a spacer for the table tops and whose length, therefore, is the same as the width of the table leaf 14. A pin or dowel 39 extends upwardly from each support 15 to enter the holes 36 in the leaf and thereby hold the latter against inadvertent endwise displacement.

The knockdown table 10 is completed by inserting the legs 16 into the seats 25 provided therefor. To insure firm, non-wobbly assembly of said legs, their upper ends are preferably slitted as at 40 and their sectional dimensions made somewhat larger than that of the seats 25. The legs 16 can then be firmly yet removably forced into said seats with resulting rigidity of the completed table.

The bench tops 17 are similar. Each comprises a top panel 41, side panels 42, and end walls 43 to form a structure similar to the table tops 12 and 13. Each end wall 43 of each bench top is provided with a pair of substantially square seats 44 which are angularly opposed and extend angularly outward from the top to the bottom of said end wall. Said seats 44 receive the ends of the bench legs 18 which are slitted in a manner similar to the table legs for firm fit as described. One side panel 42 of one of the bench tops is formed with notches 45 to clear the handle 29.

It should be clear without further description how the above-described elements are assembled to provide a table 10 and a pair of benches 11 as illustrated in Fig. 3. The table and benches are knocked down by withdrawing the legs 16 and 18 from their respective seats, removing the table leaf 14 from its supports 15, and dis-associating the latter from the table tops 12 and 13. By laying the table top 12 with its compartment 20 face upward; nesting one bench top 17, which has the notches 45, into said compartment and registering said notches with the notches 28 in said top 12; placing the four table legs 16, the eight bench legs 18 and the two leaf supports 15 in the hollow of said bench top; positioning the table leaf 14 on the pins or dowels 27 with the cleats 31 directed toward the compartment 20 so that the handle sides 33 pass through said registered notches 45 and 28; and then applying the open side of the table top 13, with the other bench top 17 nested therein, against the exposed face of the table leaf, the elements of the described furniture are compactly arranged to form the case 19. The outer members of the case 12 and 13 are separably joined by suitable latches 46 arranged as mating pairs on the end walls 24 of said outer members. By grasping the handle 29, the otherwise bulky furniture can be easily and conveniently carried as contemplated. To insure non-displaceable connection between the members 12 and 13, the pins 27 are made sufficiently long to fit into seats 47 in the end walls of the member 12.

While I have illustrated and described what I now regard as the preferred embodiment of my invention, the construction is, of course, subject to modifications without departing from the spirit and scope of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications that may fall within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A set of knockdown furniture comprising a pair of similar table top members, a pair of similar bench top members, a table leaf member, and at least supports for the table top and bench top members, said table top members being each formed with a hollow compartment for nesting one of the bench top members and for storing said supports, and means separably connecting the table top members with the table leaf member therebetween to form a case in which said table top members comprise the outer portions of the case.

2. A set of knockdown furniture comprising a pair of similar table top members, a pair of similar bench top members, a table leaf member, and at least supports for the table top and bench top members, said table top members being each formed with a hollow compartment for nesting one of the bench top members and for storing said supports, and means separably connecting the table top members with the table leaf member therebetween to form a case in which said table top members comprise the outer portions of the case, said table leaf member being provided with a handle accessible through one pair of aligned walls of the table top members to form carrying means for the set of furniture when formed as a case.

3. A set of knockdown furniture comprising a pair of similar table top members, a pair of similar bench top members, a table leaf member, supports for said leaf, and support legs for the table top and bench top members, said table top members being each formed with a hollow compartment for nesting one of the bench top members and for storing said leaf supports and support legs, and means separably connecting the table top members with the table leaf member therebetween to form a case in which said table top members comprise the outer portions of the case.

4. A set of knockdown furniture comprising a pair of similar table top members, a pair of similar bench top members, a table leaf member, supports for said leaf, and support legs for the table top and bench top members, said table top members being each formed with a hollow compartment for nesting one of the bench top members and for storing said leaf supports and support legs, and means separably connecting the table top members with the table leaf member therebetween to form a case in which said table top members comprise the outer portions of the case, said table leaf member being provided with a handle accessible through one pair of aligned walls of the table top members to form carrying means for the set of furniture when formed as a case.

5. A set of knockdown furniture comprising a table and a pair of similar benches, said table comprising a pair of top members each formed with a hollow compartment, a table leaf between the members, means connecting said members and supporting said table leaf, and separable support legs for said members, each bench comprising a top adapted to be nested in the hollow of each table top member, and separable support legs for the bench tops also adapted to be stored in one of said hollow compartments, and means separably connecting the table top members with the table leaf therebetween to form a case in which said table top members comprise the outer portions of the case.

6. A set of knockdown furniture comprising a table and a pair of similar benches, said table comprising a pair of top members each formed with a hollow compartment, a table leaf between the members, means connecting said members and supporting said table leaf, and separable support legs for said members, each bench comprising a top adapted to be nested in the hollow of each table top member, and separable support legs for the bench tops also adapted to be stored in one of said hollow compartments, means separably connecting the table top members with the table leaf therebetween to form a case in which said table top members comprise the outer portions of the case, and means aligning and interlocking the table leaf and the table top members.

7. In a knockdown set of furniture comprising a table and a pair of benches, said table including a pair of similar table top members, means for separably connecting said table tops to form a hollow carrying case for the knockdown elements of said set of furniture.

8. In a knockdown set of furniture comprising a table and a pair of benches, said table including a pair of similar table top members, means for separably connecting said table tops to form a hollow carrying case for the knockdown elements of said set of furniture, and handle means on one of said elements and projecting through the case formed by the table tops for carrying said case.

9. In a knockdown set of furniture comprising a table and a pair of benches, said table including a pair of similar table top members, and a table leaf, means for separably connecting said table tops with the table leaf therebetween to form a carrying case for the knockdown elements of said set of furniture.

10. In a knockdown set of furniture comprising a table and a pair of benches, said table including a pair of similar table top members, and a table leaf, means for separably connecting said table tops with the table leaf therebetween to form a carrying case for the knockdown elements of said set of furniture, and handle means on said table leaf and projecting through the case thus formed for carrying said case.

LAUREL EUGENE STEINBERGER.

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