Feb. 26, 1924. 1,484,858

E. ALEXANDER

PORTABLE TABLE

Filed Jan. 6, 1923

Fig. 1

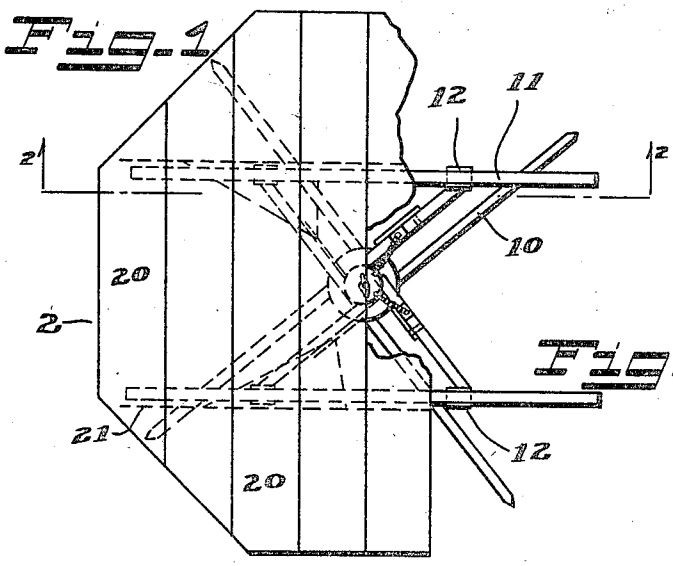


Fig. 4.

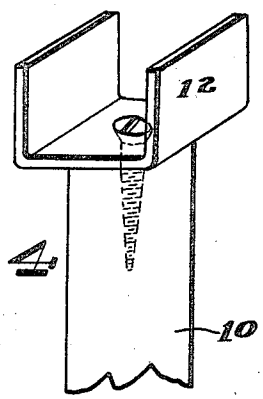


Fig. 2

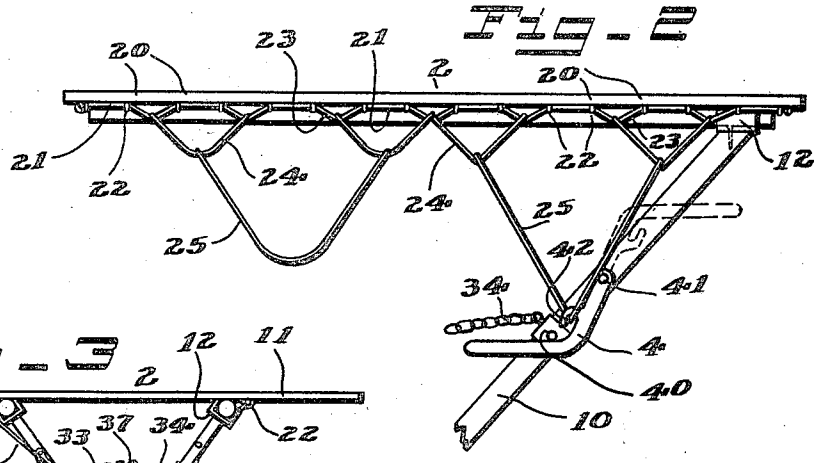
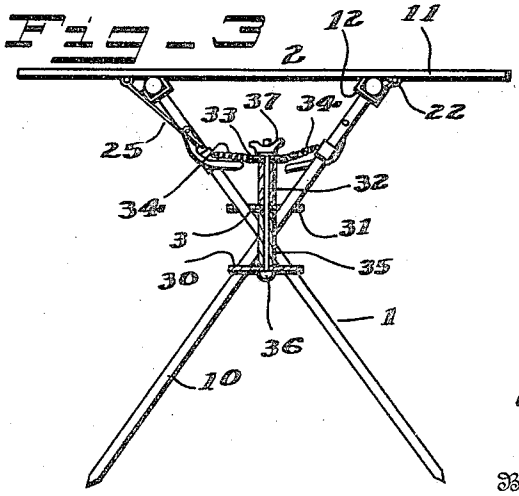


Fig. 3



Inventor

Edward Alexander

By H. L. & C. L. Reynolds

Attorney

Patented Feb. 26, 1924. 1,484,858

UNITED STATES PATENT OFFICE.

EDWARD ALEXANDER, OF SEATTLE, WASHINGTON.

PORTABLE TABLE.

Application filed January 6, 1923. Serial No. 611,005.

To all whom it may concern:

Be it known that I, EDWARD ALEXANDER, a citizen of the United States of America, and resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Portable Tables, of which the following is a specification.

My invention relates to folding tables of the type which employ a foldable top and a foldable support therefor.

It is a particular object of my invention to make such a table which will be readily portable and yet formed of a small number of separable pieces, to the end that the possibility of loss of the pieces is diminished.

A further object is the provision of means whereby a top composed of a number of strips of board may be so formed that it will easily roll or fold into a small compass, and which, by the operation of clamping it upon a support, may be drawn into a single rigid surface.

A further object is the provision of means for trussing and strengthening, in a simple manner, the support for such a folding table.

Other objects may be ascertained from a study of the following specification, of the drawings attached hereto, and of the claims.

My invention comprises those novel parts and combinations thereof which are shown in the accompanying drawings, described in the specification, and particularly defined by the claims terminating the same.

In the accompanying drawings I have shown my invention in the form which is now preferred by me.

Figure 1 is a plan view of my table assembled, a part of the top being broken away.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is a side elevation of the table, a part being shown in section.

Figure 4 is a perspective showing a detail of construction.

My invention is primarily designed for a table, although it will be evident from the following description that the device may be formed of smaller size and may be used as a stool or bench. It comprises, essentially, a support 1 and a top 2, the two being separable and the top being adapted to clamp upon the support, and, by the clamping action, to be made rigid and in effect a single unit.

The top is formed of a plurality of individual sections, these being represented at 20 as strips of board or veneering. They are shown herein as having parallel edges, each strip being adapted to butt its edges against the edges of adjacent strips or sections when the table is clamped in position. In order to hold the sections 20 together I provide a flexible connection between adjacent sections, there being sufficient slack in these connections to permit rolling or folding of the top. As shown in the drawings, particularly in Figure 2, I have provided a single rope 21 which is connected in turn to each of the sections 20, as by means of staples 22. The staples secure the rope to that section 20 into which they are driven so that preferably there is permitted no motion of the rope relative to any of the sections 20. Between sections, however, a slack portion 23 is formed in the rope so that the sections are permitted a limited relative movement or separation. By such means it is possible to fold or roll the top into a small compact bundle for carrying.

I provide means whereby the individual sections 20 may be drawn together. In order to accomplish this I provide loops 24, each loop 24 connecting two of the slack portions 23 in the rope. As there are eight top sections shown in the drawings, there will be four of these loops 24. For convenience in clamping them I provide additional loops 25, these connecting two of the loops 24. This reduces the number of loops 25 to two, and it is a simple matter to provide means for clamping or securing two such loops, 25. It will be understood that I prefer that these clamping means be duplicated at each side of the table, although this is a matter of choice and convenience and is not strictly essential.

As a support for the top which I have described, I provide a plurality of legs 10, four being shown herein. At their upper ends they are provided with suitable means for supporting cross bars 11 which directly support the top 2. I have shown short channel sections 12 which are secured in the upper ends of the legs 10 for this purpose, the bars 11 lying in these channels 12.

In order to maintain the supporting legs rigid I provide a pair of disks 3 and 30, these being provided with apertures 31

through which the legs 10 are passed. A third disk 33 is positioned at one side of the pair of disks, preferably above them, and to this are connected chains 34 which in turn are connected to the legs 10. A spacer sleeve 32 is positioned between the disk 33 and the disk 3, and if desired a second spacer 35 may be positioned between the disks 3 and 30. A bolt 36 is passed through central apertures in the disks 30, 3, and 33, and a nut 37 is secured thereon above the disk 33. By screwing down the nut 37 the disk 33 is forced down, and through the spacer 32 the disk 3 is also forced down toward the disk 30. Approach of the disks 3 and 30 tends to spread the legs 10, but the pressure upon the disk 33 tightens the chains 34 and these serve as tension members to prevent spreading of the legs 10. The whole forms a rigid yet light construction which is very strong.

It is, of course, necessary to clamp the top 2 in some manner upon the support so formed. For this purpose I have shown clamps, comprising levers 4, one pivoted upon each leg at 41 to correspond with the four loops 25, and each having a hook 42 outward of the pivot 41. By engaging the loop 25 beneath the hook 42 when the clamp is in the dotted line position of Figure 2, and by then turning the lever 4 to the full line position of Figure 2, where it is stopped and held by a pin 40, the loops 25 and 24 and slack portions 23 are drawn tight and held so. In this manner when all of the clamps 4 are brought into operation the top sections 20 are drawn together and at the same time the entire top is clamped firmly upon the support. I prefer that the ropes 21 be placed outside of the positions of the bars 11, both for convenience of manipulation and because if they are drawn in towards the center the top is held more firmly in place, but this is not essential.

It will be understood that many changes may be made in the design of my table without departing from the letter or spirit of the appended claims. For instance, the form of clamp 4 may be widely varied. Further, the means for trussing the support 1 may be varied. I do not wish to be limited therefore, only to the exact construction shown or described, but understand my invention to include all forms which may rightfully be considered the equivalents of those shown and described, within the limits defined by the appended claims.

What I claim as my invention is:

1. A collapsible table comprising a top and a support therefor, said top including a plurality of sections relatively foldable one upon another, a flexible member connecting said sections and permitting limited separation thereof, and means for taking up the slack in said flexible member to bring the top sections together and to clamp them upon the support.

2. A collapsible table comprising a top and a support therefor, said top including a plurality of sections relatively foldable one upon another, a rope connecting each section and an adjoining section, and permitting limited separation between adjacent sections, means connected to each of said ropes, and a clamp cooperable with said means to draw together the top sections and to clamp them upon the support.

3. A collapsible table comprising a top and a support therefor, said top including a plurality of sections relatively foldable one upon another, a rope secured to each of said sections and connecting all together, and having slack portions of a length between sections permitting limited separation thereof, a flexible loop connecting two such slack portions, and means operable through said loops to draw together the top sections and to clamp them upon the support.

4. A collapsible table comprising a top and a support therefor, said top including a plurality of sections relatively foldable one upon another, a rope secured to each of said sections and connecting all together, and having slack portions of a length between sections permitting limited separation thereof, a flexible loop connecting two such slack portions, additional loops each connecting two of said first loops, loop-engaging clamps upon the support operable by tightening the loops and slack portions of the rope to draw together the top sections and to clamp them upon the support.

5. A collapsible table support comprising a plurality of crossed legs, a pair of disks apertured to receive said legs respectively above and below their crossing, a third disk positioned above the pair of disks, chains connecting said third disk and each leg above their crossing and above said pair of disks, a spacer between said third disk and the upper disk of the pair, a bolt passing through all of said disks and a nut on the end of said bolt operable to draw all of said disks together to maintain said legs spread apart and to tighten said chains to limit spreading of the legs.

Signed at Seattle, King County, Washington, this 30th day of December 1922.

EDWARD ALEXANDER.