

Feb. 24, 1948.

G. H. REPKE

2,436,730

FOLDING TABLE AND BENCHES

Filed March 18, 1946

3 Sheets-Sheet 1

Fig. 1.

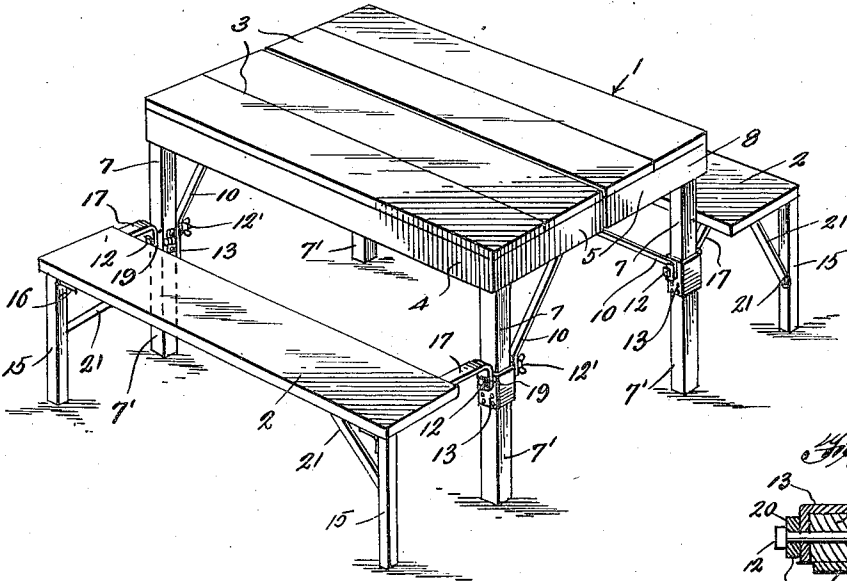


Fig. 2.

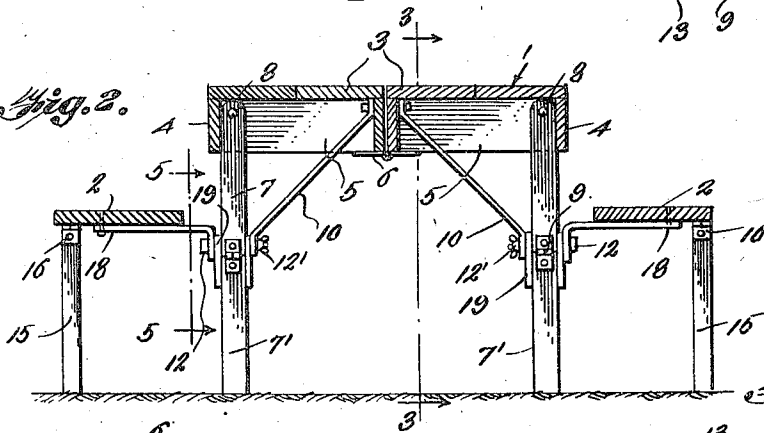


Fig. 7.

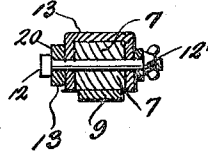


Fig. 8.

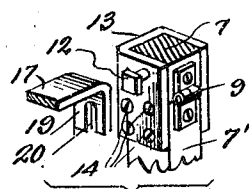


Fig. 5.

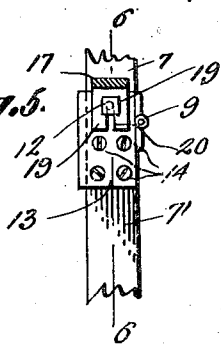
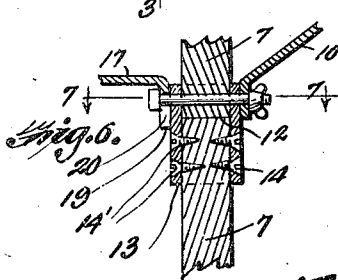


Fig. 6.



INVENTOR
GEORGE H. REPKE

BY *Raymond Woodward*
ATTORNEY

Feb. 24, 1948.

G. H. REPKE

2,436,730

FOLDING TABLE AND BENCHES

Filed March 18, 1946

3 Sheets-Sheet 2

Fig. 3.

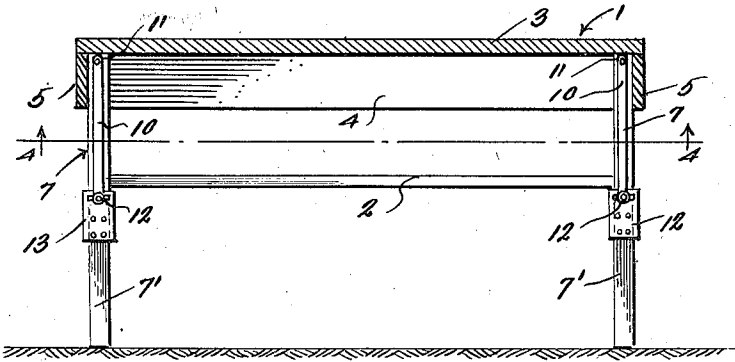


Fig. 4.

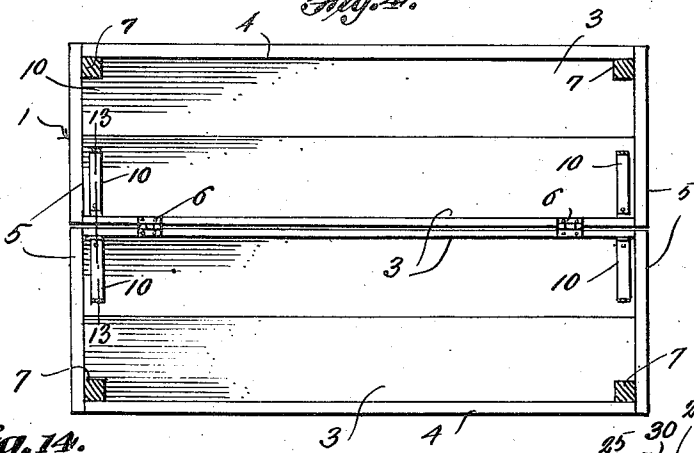


Fig. 14.

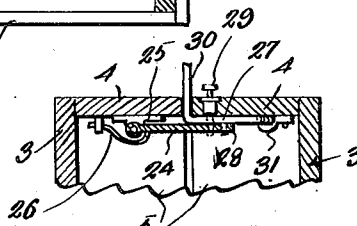
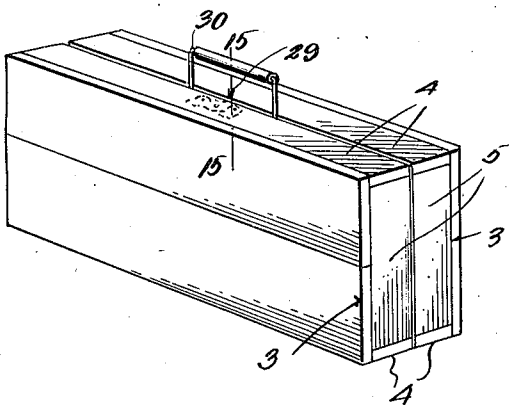


Fig. 15.

INVENTOR
GEORGE H. REPKE

BY

Paul J. Woodworth
ATTORNEY

Feb. 24, 1948.

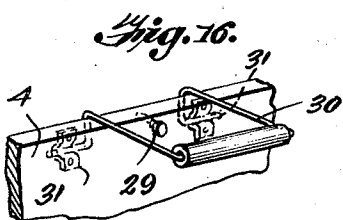
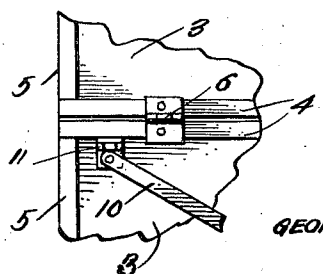
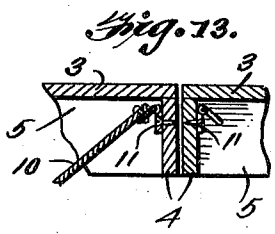
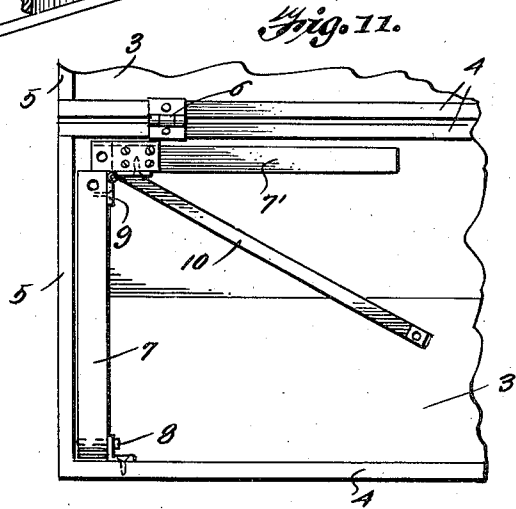
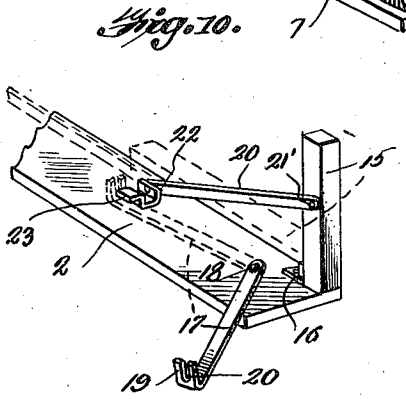
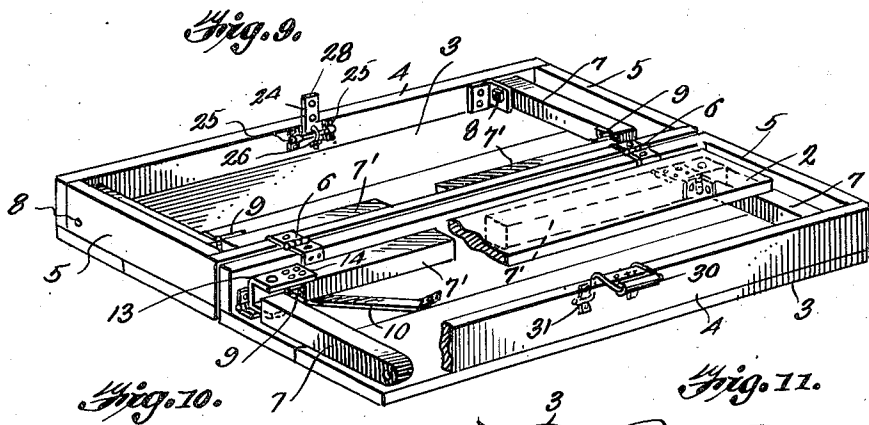
G. H. REPKE

2,436,730

FOLDING TABLE AND BENCHES

Filed March 18, 1946

3 Sheets-Sheet 3



Inventor
GEORGE H. REPKE

By *Ray J. Woodward*
Attorneys

UNITED STATES PATENT OFFICE

2,436,730

FOLDING TABLE AND BENCHES

George H. Repke, Flint, Mich.

Application March 18, 1946, Serial No. 655,121

3 Claims. (Cl. 155-124)

1

This invention relates to a foldable table and benches and it is one object of the invention to provide a table and companion benches which are so constructed and so related to each other that they may be reduced to a compact mass and readily transported to a place where the table and the benches are to be set up for use.

Another object of the invention is to so form the table that when it is folded its body forms a box in which its legs and the benches and legs of the benches are housed and thus prevented from becoming misplaced and lost while not in use.

Another object of the invention is to provide a table having its legs formed of upper and lower sections which are hinged to each other for movement from an extended position for use to a folded position, the upper sections having their upper ends pivoted to the table top for movement to a folded position close against the under faces of sections of the table top and being held in a lowered or extended position to support the table top by braces which are releasably secured to brackets under the table top.

Another object of the invention is to provide a table and benches having the benches provided with foldable legs at ends of their outer side edges and arms which are mounted for swinging movement from a folded position under a bench to an extended position in which feet at their outer ends may be engaged in sleeves carried by the legs of the table and hold the benches in position along sides of the table as well as preventing the legs of the table from accidentally moving out of position to support the table top.

Another object of the invention is to provide a combined table and benches which is particularly adapted for use at picnic grounds or by camping parties and is very strong and durable and capable of being manufactured at low cost.

The invention is illustrated in the accompanying drawings wherein:

Fig. 1 is a perspective view showing the table and benches set up in position for use.

Fig. 2 is a sectional view taken transversely through the table and benches in a vertical plane.

Fig. 3 is a sectional view taken along the line 3-3 of Figure 2.

Fig. 4 is a view taken along the line 4-4 of Figure 3 looking upwardly at the table top.

Fig. 5 is a fragmentary view taken along the line 5-5 of Figure 2 and looking towards the leg of the table.

Fig. 6 is a sectional view taken along the line 6-6 of Figure 5.

2

Fig. 7 is a perspective view taken along the line 7-7 of Figure 6.

Fig. 8 is a perspective view showing the attaching arm of the bench detached from the table leg.

Fig. 9 is a perspective view showing the table inverted with the legs folded.

Fig. 10 is a perspective view showing one end portion of a bench inverted.

Fig. 11 is a view upon an enlarged scale looking down upon a portion of the inverted table.

Figure 12 is a view similar to Figure 11 with the leg moved out of the way.

Fig. 13 is a fragmentary sectional view taken along the line 13-13 of Figure 4.

Fig. 14 is a perspective view showing the table folded, the benches being inside the table.

Fig. 15 is a fragmentary sectional view taken along line 15-15 of Figure 14.

Fig. 16 is a perspective view showing a fragment of the table and the handle for carrying the folded table.

This improved table 1 and companion benches 2 which may be formed of wood, metal, plastic, or other suitable materials, are particularly adapted for use by campers and persons who desire to have lunch or supper at a picnic ground and are readily transportable from one place to another. The table consists of companion sections 3 and each of the table sections has strips 4 and 5 along its sides and ends, the two sections being connected by hinges 6 so that they may be extended to form the top for the table as shown in Figure 1, or moved to a closed or folded position in which they form a container shown in Figure 14. The legs 7 of the table have their upper ends pivoted at corners of the top sections by pins 8 in order that they may be swung from the extended position for use to the folded position close against under faces of the top sections and each leg has a lower section 7' connected with the companion top section of the leg by a hinge 9 so that the lower portions of the legs may be folded and extend at right angles to the upper portions as shown in Figures 9 and 11 when the table is in its collapsed or folded condition. Braces 10 which are pivotally connected with the inner side strips 4 of the top sections by hinges 11 are connected with the legs by means of bolt 12 carrying wing nuts 12' and serve to secure the legs in an extended position. In order to retain the lower leg sections 7' in alignment with the upper portions of the legs there have been provided sleeves 13 which are formed of sheet metal and secured to the lower leg sections

3

by screws 14. These sleeves are each open along their inner sides and are formed with openings to receive the bolts 12 which are passed through openings formed through the upper leg sections and provided with the wing nuts 12' so that they may be easily removed when the legs are to be folded. The sleeves are of such dimensions that they fit closely against three sides of the legs and holes are formed through the upper portions of the sleeves to permit insertion of bolts 13 when setting up the table for use. When the bolts 13 are in place the lower leg sections will be firmly held in alignment with the upper leg sections and since ends of the leg sections have abutting engagement with each other the legs will firmly support the table and will not be liable to collapse.

The benches 2 consist of boards of such length that they may fit within the top sections as shown in Figure 9. Legs 15 are mounted upon the benches by hinges 16 so that they may be moved from an extended position for use to a folded position flat against the under faces of the benches when the benches are placed within the top sections 3. Each bench carries a bar or bracket 17 which is formed of strong metal and the bars are connected with the benches by screws, or equivalent fasteners 18, so that the bars may be swung about the fasteners from a retracted position in which they extend longitudinally of the benches to an extending position in which they extend transversely of the benches and project from the inner side edges thereof. The free ends of the bars are bent to form feet 19 which extend downwardly from the bars and are formed with slots 20 so that when the feet are thrust downwardly they straddle the bolts 12 between the sleeves 13 and the heads of the bolts. Since the bolts engage in the slots 20 they will limit downward movement of the feet as well as causing the feet to be held gripped when the nuts 12' of the bolts are tightened. When the benches are mounted along opposite sides of the table they assist in holding the legs 7 of the table in a vertical position and since the bars 17 are connected with the table legs, the benches will be firmly supported in a horizontal position. Braces 21 which are pivoted to brackets 22 and are detachably engaged with the pins 21' carried by the legs 15 hold the legs in an extended position and since each bracket is formed with a tongue 23 the bars 17 may be engaged under the tongues and secured in the folded position. When the table and the benches are to be packed it is merely necessary to release braces 14 from the legs and loosen the bolts 13 and the bars 17 may then be swung inwardly under the benches and engaged under tongues 14b and the legs 15 swung upwardly against under faces of the benches. The legs of the table will then be folded against under faces of the top sections of the table as shown in Figure 9 and the benches placed in the top section which will be closed as shown in Figure 14. When the top sections are closed they are releasably held closed by a latch 24 consisting of a metal strip pivotally mounted at one end between bearing brackets 25 secured against the inner surface of the outer side strip of one table section. This latch strip 24 extends under the outer side strip of the second table section, as shown in Figure 15 and is yieldably held in the position shown by a spring 26 so that when the two sections 3 are closed the latch strip will be urged upwardly and the sections held closed by engagement of

4

the pin 27 through the opening 28 in the latch strip. A releasing plunger 29 is slidably mounted through the outer side strip of the section carrying pin 27 and when this plunger is pressed inwardly the latch strip 24 will be swung downwardly out of engagement with the pin and the sections 3 may be swung to the opened position. A handle 30 is pivoted against the inner surface of the strip 24 carrying plunger 29 by brackets 31 and the arms of the handle are bent so that the handle will project outwardly between the closed sections and upwardly from the same a sufficient distance to permit it to be grasped and the closed table lifted and readily carried.

Having thus described the invention, what is claimed is:

1. A foldable table and benches comprising a table having a top formed of sections provided with depending walls along its ends and its inner and outer side edges, hinges carried by the inner walls and mounting the top-sections for pivotal movement from an extended position to a folded position in which the said top-sections form a container, legs for the table pivoted to the end walls at outer corners of the top sections for swinging movement from an extended position to a folded position against the under faces of the top sections, said legs having lower sections hinged to companion top sections for swinging movement from an extended position in alignment therewith to a folded position, braces for holding upper sections of the legs in the extended position pivoted to the top sections of the table, sleeves carried by the lower sections of the legs and projecting upwardly therefrom for overlapping lower ends of the companion upper portions of the legs, removable bolts passing through upper portions of the sleeves and lower ends of the upper sections of the legs for holding the lower sections of the legs extended, said bolts being passed through lower ends of the braces to secure the braces to the legs and brace the legs in the extended position, benches of a length adapting them to be enclosed in the container formed by the folded top-sections, legs hingedly mounted under outer corners of the benches for swinging movement from a lowered position to a folded position against under faces of the benches, brackets carried by the benches, and bars pivotally mounted under end portions of the benches for swinging movement to an extended position in which they project transversely from the benches to a folded position in which they are held under the benches by engagement with the brackets, said bars having their free end portions bent to form downwardly extending spaced feet for fitting about the bolts between the sleeves and heads of bolts, the feet being formed with slots leading from their lower ends and in which the bolts engage.

2. A folding table and benches comprising a table having a top formed of sections having skirts extending along their ends and side edges and being movable from an extended position forming a table top to a folded position for forming a container, legs pivotally mounted under outer corners of the top-sections for swinging movement from an extended position to a folded position against under faces of the top sections, said legs having lower sections pivotally mounted for swinging movement from an extended position to a folded position against side faces of upper sections of the legs, sleeves about the lower sections of the legs having upper portions extend-

5

ing therefrom for overlapping lower portions of the upper sections when the lower sections are extended, removable bolts passed through the sleeves and upper leg sections to hold the lower leg sections extended, benches having legs pivotally mounted under their outer corners for movement from an extended position to a folded position against under faces of the benches, the benches being of dimensions adapting them to be placed within the container formed by the folded top sections, and bars pivotally carried by said benches and movable from a position under the benches to an extended position, said bars having outer end portions bent to form spaced feet extending downwardly for engaging between the sleeves and heads of the bolts and securing the bars in position for supporting the benches at sides of the table.

3. A folding table and benches comprising a table having a top formed of sections movable from an extended position for use to a folded position and when folded forming a container, legs for the table carried by the top sections and movable from an extended position to a folded position adapting them to be enclosed in the container formed by the folded top-sections,

6

sleeves about said legs, bolts passing transversely through the sleeves and the legs, benches having legs movable from an extended position to a folded position against the under faces of the benches, the benches being of dimensions adapting them to fit within a container formed by the folded top-sections, and bars pivotally carried by the benches and movable from a retracted position to an extended position and when extended projecting from inner side edges of the benches, said bars having depending spaced feet at their outer ends formed with slots of dimensions adapting the feet to fit about the bolts and secure the bars when the bolts are tightened.

GEORGE H. REPKE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
406,604	Tittman	July 9, 1889
1,384,695	Gilarski	July 12, 1921
1,641,010	Peterson	Aug. 30, 1927
2,217,576	Weber	Oct. 8, 1940