Oct. 4, 1927. 1,643,947

A. E. HILL

FOLDING TABLE AND BENCH

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Fig. 1.

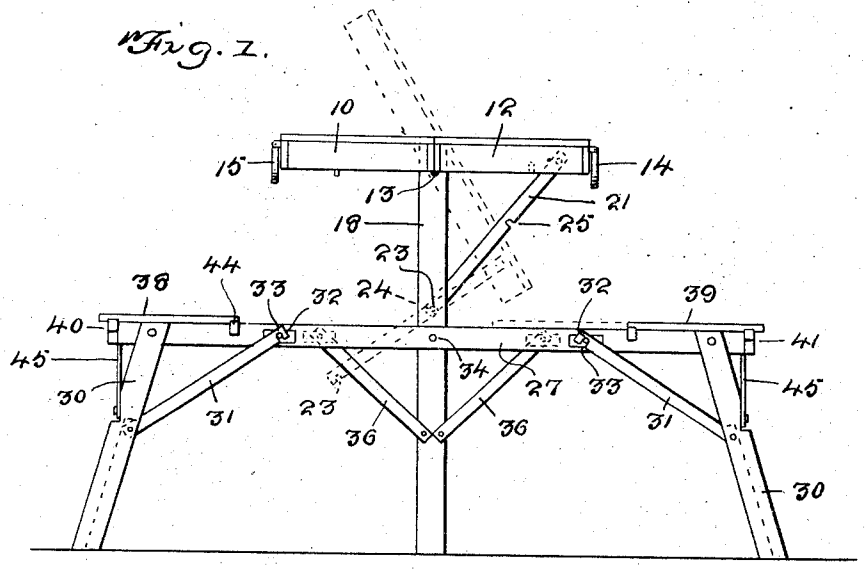
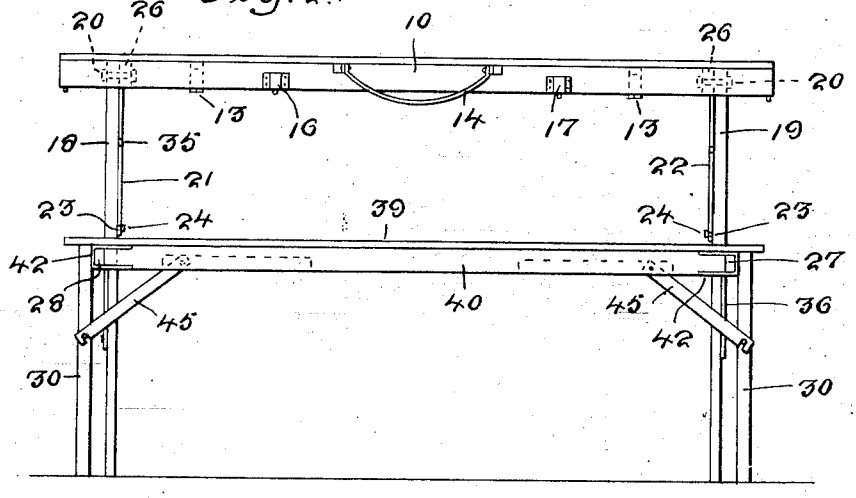


Fig. 2.



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Fig. 3.

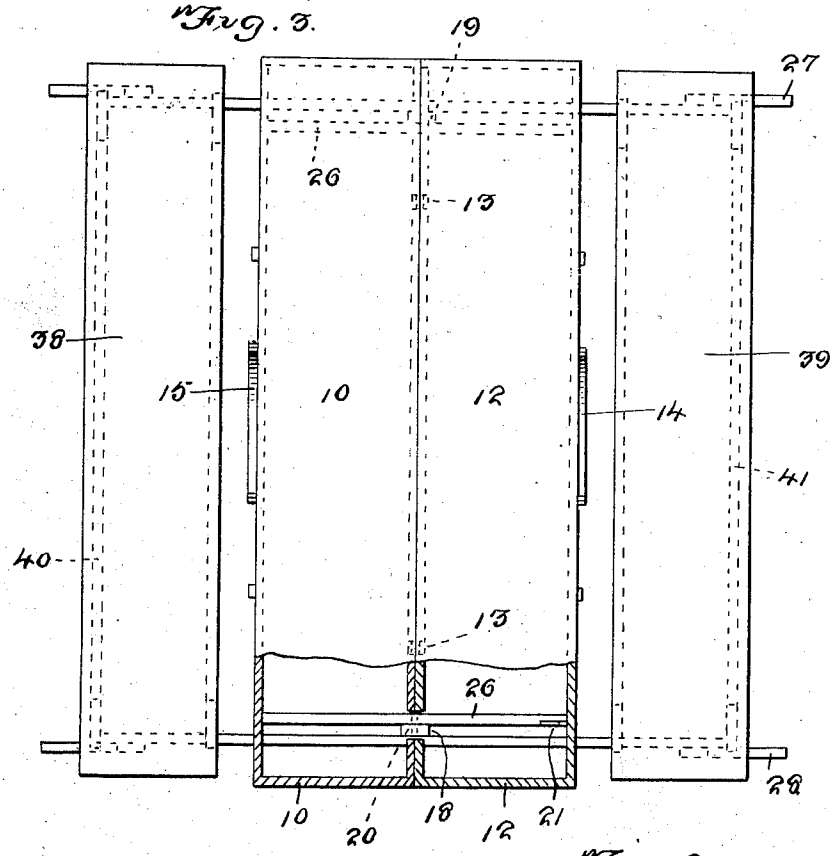
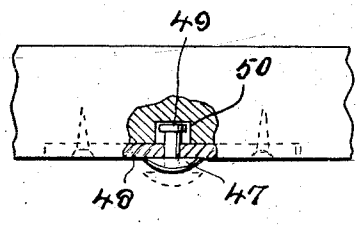
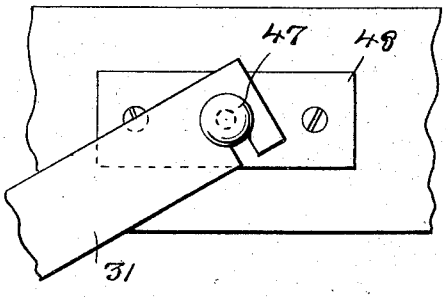


Fig. 9.

Fig. 8.





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Fig. 4.

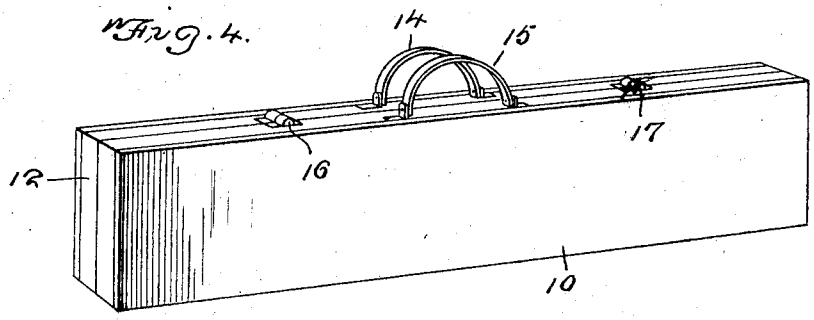


Fig. 5.

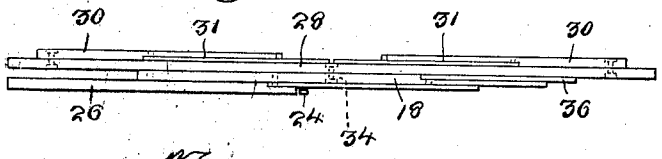


Fig. 6

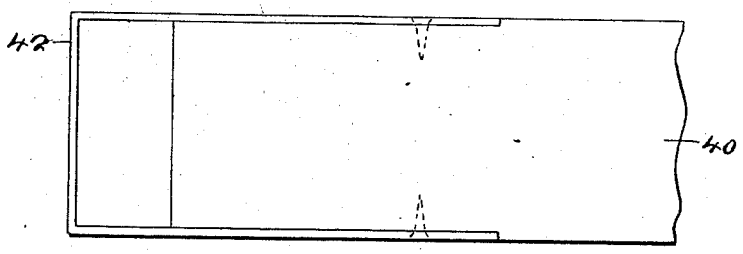
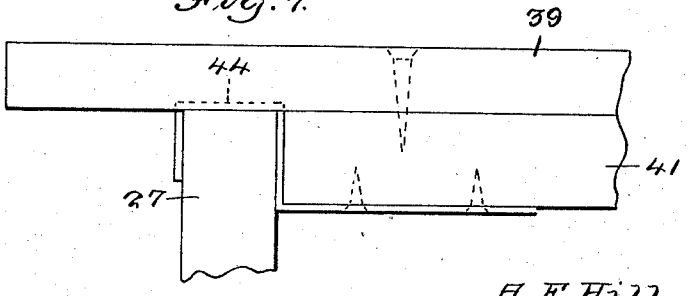


Fig. 7.



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Patented Oct. 4, 1927. 1,643,947

UNITED STATES PATENT OFFICE.

ALBERT E. HILL, OF PEORIA, ILLINOIS.

FOLDING TABLE AND BENCH.

Application filed April 3, 1926. Serial No. 99,614.

The object of this invention is to provide an article which may be folded into the shape of a suitcase, thereby permitting easy transportation by hand, and which may be set up as a table, with benches on each side thereof, and forming a part of the main structure, so that the article as a whole, is well adapted for use by campers, and others desiring facilities for enjoying an out-door meal.

A further object is to provide a table which shall include the collapsible or foldable elements of the case, with supporting means for the table, and means connected with said supporting means for mounting benches at the sides of the table.

A still further object is to provide special bracing and connecting devices, as hereinafter disclosed.

With the foregoing and other objects in view, the invention consists in the construction and arrangement of elements described, illustrated and claimed, it being understood that modifications may be made within the scope of the claims, without departing from the spirit of the invention.

In the drawings forming part of this application,

Figure 1 shows the device in elevation, and in operative position.

Figure 2 is an elevation from another angle.

Figure 3 is a top plan view with parts broken away.

Figure 4 is a perspective view, showing the case, which when opened is adapted to form the table top.

Figure 5 is a view showing certain of the elements of the preceding views in folded position.

Figures 6 and 7 are details of construction described below.

Figure 8 shows the manner of mounting one of the headed securing devices, permitting movement outwardly with reference to the mounting element.

Figure 9 shows the construction of Figure 8, and also shows the engagement of the headed element by a brace having a slotted end portion.

The case is formed of two box-shaped sections 10 and 12, hinged at 13 and provided with handles such as 14 and 15, securing devices being illustrated conventionally at 16 and 17.

The case thus formed is adapted to be opened to form the table top of Figures 1 and 3, being supported by uprights 18 and 19 to which the top is secured by bolts or other engaging devices such as those shown at 20 forming a fixed pivot upon which the table top may rotate. Braces 21 and 22 are adapted to retain the top in horizontal position, and are provided with end portions 23 of hook form adapted to engage the headed devices 24 by means of which said braces are retained in position. The braces just referred to may also be slotted at 25, so that the top may be retained in an inclined position as illustrated in dotted lines in Figure 1, and when in this position, the top serves as a back for one of the benches referred to below, as will be further described.

The sections 10 and 12 of the top are retained in the same plane by transverse bars such as 26, the securing devices 20 passing thru these bars, in order to effect substantial connection between the top and the uprights 18 and 19, the latter being secured to the end bars 27 and 28 of the main frame.

Bars 27 and 28 are mounted on pivoted legs such as 30, the legs being braced when in operative position by means of arms or braces 31, each having a hook portion such as 32 for engagement with a pin 33, on the adjacent side bar. Connection is made at 34 between the uprights and each of the end bars 27 and 28, and the uprights also serve as leg members, being retained in vertical position by means of arms or braces 36, each pivoted at one end and provided with hook portion at the opposite end.

Seat members 38 and 39 provide benches, or the top portions thereof, and are mounted on the main frame, or in a sense, form a part thereof, constituting the side members as shown in the plan view designated Figure 3. The side rails 40 and 41 have their end portions provided with U-shaped brackets 42, and these brackets are designed to receive, in the middle part of the U element, the end bars 27 and 28 of the frame, so that the parts are readily assembled and detached, but when connected, a substantial structure is provided. On the under sides of seat members 38 and 39, I mount brackets of the form shown in Figure 7, and each including a loop portion 44 adapted to fit over the end bars 27 and 28, so that member 38 may be moved to the dotted position shown in Fig. 1, whereupon the seat members together form a broad seat for the bench, the

sections 10 and 12 being turned to the inclined position to form a back for the bench. Additional braces are shown at 45, and any or all of the braces or pivoted arms designed to strengthen the structure and retain the several elements in operative position may engage headed devices mounted as shown in Figure 8, and adapted for movement inwardly and outwardly with reference to the element in which they are mounted. In Figure 8, one of the headed devices 47 includes a shank portion slidable thru an aperture in plate 48, and provided with an enlargement at 49 movable with reference to the recess 50, the enlargement preventing the displacement of the securing device but permitting the slight movement indicated, in order that the heads 47 may not interfere with packing the several structural parts of the device in the case. The folded position of the end elements and their connected members, is shown in Figure 5, and all of the parts may be carried within the case shown in Figure 4.

Having thus described the invention, what is claimed as new, is:

1. In a device of the class described, a top comprising a plurality of hingedly connected elements, bars adapted to extend across said elements and maintain them in the same plane with each other during tilting movement and while in horizontal position, uprights pivotally connected with the central portion of the bars, permitting the tilting of the bars and sections in reverse directions, horizontally extending bars connected with the uprights, side rails connected with the outer portions of the horizontal bars, and pivoted leg members connected with said horizontal bars, and devices extending across the horizontal bars, beyond the sides of the top, for forming benches.

2. In a device of the class described, a frame comprising end bars and side rails detachably connected with the end bars, legs pivoted on said end bars, braces extending between the legs and bars, uprights connected with the bars, intermediate of the ends thereof, seats carried by the outer ends of the end bars and detachably connected therewith, and a device mounted intermediate of the seats and above the latter, said device being tiltable from a position in which it extends upwardly and rearwardly with reference to either seat to an inclined position.

3. In a device of the class described, a frame including end bars and side rails, the rails each including U-shaped elements projecting beyond the ends thereof for receiving end portions of the bars, legs pivotally mounted on the bars, braces extending between the bars and legs, seats mounted on the bars and detachably connected therewith near the outer portions of said bars, uprights connected with the bars and extending above the seats, a device comprising a plurality of hingedly connected sections mounted on the uprights and pivoted thereto, means for maintaining the hingedly connected sections in the same plane, and means for maintaining the angular position of said sections with reference to the seats, and adapted to retain said sections in horizontal position.

4. In a device of the class described, a collapsible frame, a seat member supported by said frame to form therewith a bench, a plurality of sections hinged together and adapted to contain said frame when collapsed, means securing said sections to said frame while permitting said sections to be rotated about said means, means for maintaining said sections in a common plane, and selective means for positively maintaining said sections horizontal to form a table top, and for positively maintaining said sections in a position to form a back for said bench.

5. In a device of the class described, a collapsible frame, a pair of detachable seat members carried by said frame to form benches, a pair of sections adapted to cooperate to form a container for said frame and said seat members, means securing said sections to said frame while permitting said sections to be rotated about said means, and selective means for maintaining said sections in a common horizontal plane to form a table top, and for maintaining said sections in a common inclined plane to form a back for one of said benches.

6. In a device of the class described, a collapsible frame, a seat member supported by said frame to form therewith a bench, a top member having a plane face and pivotally secured to said frame to permit said top member to be rotated, a pin fixed to said frame, a brace secured to said top member and having a plurality of notches adapted to engage said pin to maintain said top member horizontal to form a table top in convenient relation to said bench, and to maintain said top member in a position inclined to the vertical to form a back for said bench.

In testimony whereof I affix my signature.

ALBERT E. HILL.