Nov. 28, 1933. C. T. OSTERBERG 1,936,969

FOLDING TABLE WITH SEATS

Filed Aug. 23, 1928 2 Sheets-Sheet 1

FIG. 4.

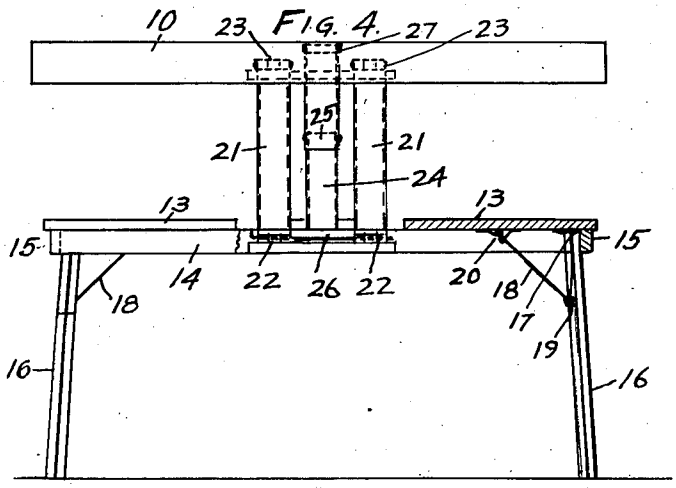


FIG. 1.

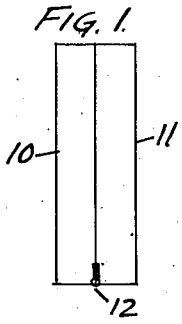


FIG. 3.

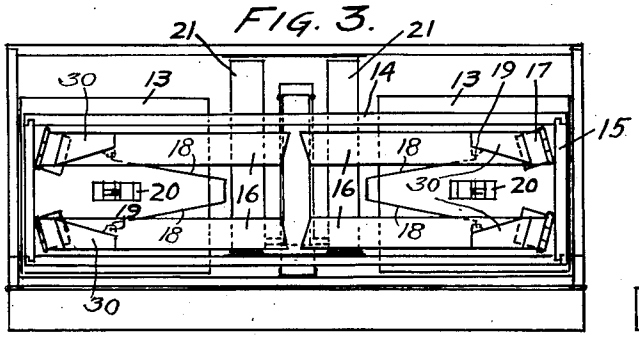
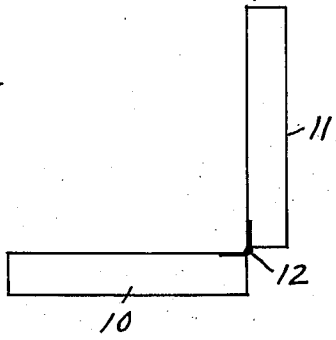


FIG. 2.



C. THEO. OSTERBERG
INVENTOR

BY Brumm, Wheeler & Woodard
ATTORNEYS.

Nov. 28, 1933. C. T. OSTERBERG 1,936,969

FOLDING TABLE WITH SEATS

Filed Aug. 23, 1928 2 Sheets-Sheet 2

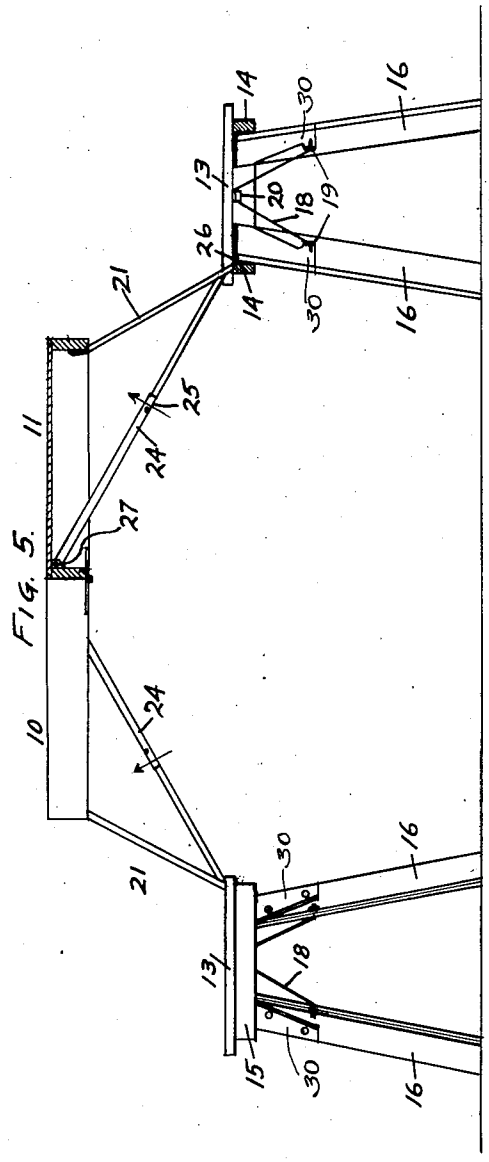


FIG. 5.

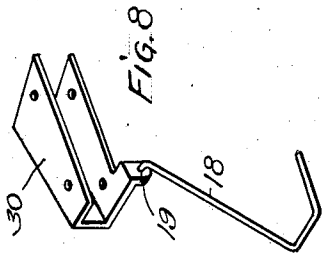


FIG. 8

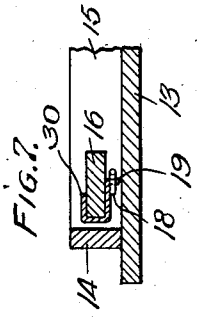


FIG. 7.

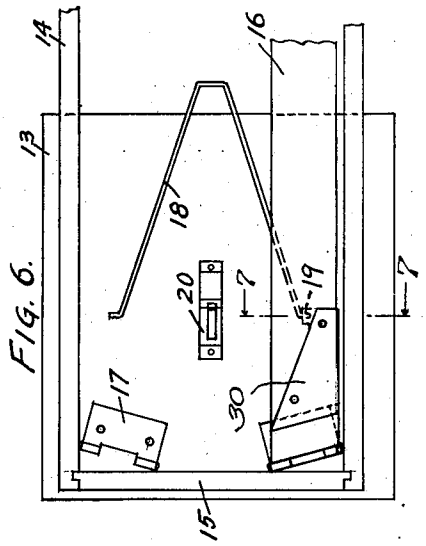


FIG. 6.

C. THEO. OSTERBERG
INVENTOR

BY Quinn, Wheeler & Woodard
ATTORNEYS.

Patented Nov. 28, 1933 1,936,969

UNITED STATES PATENT OFFICE

1,936,969

FOLDING TABLE WITH SEATS

Carl T. Osterberg, Milwaukee, Wis., assignor to Handy Table Set Co., Milwaukee, Wis., a corporation of Wisconsin

Application August 23, 1923. Serial No. 301,462

6 Claims. (Cl. 155—124)

The invention relates to camping equipment, and is designed primarily for the use of tourists.

The object of the invention is to provide a folding table having connected seats, the seats and their supports being constructed and articulated so as to be folded compactly into two shallow receptacles which are hinged together in such manner that when opened the outer sides of the receptacles constitute the top of the table.

The invention resides in a unitary construction composed of two shallow receptacles which are hinged together and adapted to fold upon each other, making a compact closure of minimum dimensions, in which the seats together with their supports and the supports for the table are completely enclosed. By this construction a readily portable device is produced, which, by reason of its small bulk, will require but little space for its storage during transportation. The device is so constructed as to be easily set up for service, or collapsed for transportation.

In the construction, special attention has been given to the feature of making the seats and their supporting legs as sturdy structures, capable of sustaining the weight of persons seated at the table.

The table top itself rises above and is supported in a novel manner from the seats, which are arranged at opposite sides of the table. The arrangement of the table top supports is such that persons are enabled to move freely into and out of the seats, without obstruction by any part of the structure. This manner of supporting the lighter superstructure permits the production of an article of less weight than prior articles of the same class, and dispenses with the usual legs for supporting the table, thus leaving an entirely clear and unobstructed area beneath the table.

Having thus outlined the nature and purposes of my invention, I will now describe the same specifically, and point out the novelty of the invention in the appended claims.

In the accompanying drawings:

Figure 1 is an end view of the invention showing the two compartments as folded together, and ready for transportation.

Figure 2 is a like view, showing the compartments as opened, preliminary to withdrawing the elements folded therein.

Figure 3 is a view in elevation, looking from the left of Fig. 2, and showing the seats and their supports in folded position in one of the compartments.

Figure 4 is a view in side elevation, partly broken out, and showing the table and its seats erected for use.

Figure 5 is a similar view in end elevation, partly broken out.

Fig. 6 is an enlarged underside plan view of one of the seats, showing some details of construction, with one of the legs omitted.

Figure 7 is a fragmentary sectional view taken on line 7—7 of Figure 6.

Figure 8 is a perspective view of one of the leg encasing brackets 30 and an associated brace 18.

In the drawings, the numerals 10 and 11 indicate two shallow or tray-like rectangular receptacles having the same structure, each having a length of approximately 36 inches, with a width of approximately 18 inches, and a depth of 2 inches, the said receptacles 10 and 11 being hinged at one side of their longer dimension, as at 12, to form a closure when folded toward each other. The hinge 12 permits the receptacles 10 and 11 to be opened away from each other, and the flat bottoms thereof brought into a common plane, so as to form the top of a substantially square table, as indicated in Figs. 4 and 5. The dimensions given are merely relative, and are of course susceptible of variation, as desired.

The construction is provided with four seats 13, the two at each side being adapted to be folded within the contiguous shallow receptacle. Each pair of seats is supported upon a box frame composed of two parallel side pieces 14 and connecting end pieces 15, the seats being arranged one at each end of the box frame and secured thereto. Legs 16 are hinged to the under side of the seats, as at 17, two at each end of the box, and are adapted to be folded into the latter, so as to lie against the under side of the seat. Wire braces 18 of V-shape are pivoted at their ends, as at 19, to the legs. The upper or hinged ends of the legs are encased on three sides by metal brackets 30 which not only reinforce the legs but are provided with projecting ears 19 having elbowed and apertured end portions in which horizontal extensions of the brace arms 18 are engaged as best shown in Figures 7 and 8. It will be obvious that these brace arms are pressed inwardly when the legs are folded as shown in Figure 3. The legs diverge when unfolded to supporting position and the brace arms 18 are therefore more divergent from each other in the unfolded position than they are in the folded position. The points of the V-braces 18 are adapted to engage catches 20, secured at the underside of the seats, and engage the catches so as to maintain the legs 16 in distended, stable position, to

firmly support the seats. When the braces 18 are disengaged from the catches 20, the braces may be turned on their pivots, and folded with the legs so as to lie parallel within the box. The arrangement is the same in the seat at each side of the table. In this manner, the seats are erected, and possess sufficient stability for their purpose.

It is preferred that when the seats are erected by pulling the pivoted legs 16 out of the receptacles, that the legs stand in diverging relation, as shown, so as to brace the seats against side strains. This result is secured by cutting the ends of the legs upon an angular line, and setting the hinges at an angle, as shown in Fig. 6.

Viewing Fig. 4, it will be observed that the table composed of the receptacles 10 and 11, when opened, is supported from the seats at opposite sides, by means extending from the side bars 14 to the table at the middle of the sides of the latter, the usual legs for supporting the table being dispensed with. This feature of the construction provides a clearance which permits persons to be easily seated at the table without interference by the seats, or other parts of the structure, and contributes greatly to the convenience of persons using the table. By supporting the table from the seats which are disposed some distance from the sides thereof, a wholly clear and unobstructed area beneath the table is provided, so that persons occupying the seats at the table will find no interference with the free movement of their feet and legs.

Parallel links 21, hinged at their lower ends at 22 to one of the side bars 14 near the middle of the latter and at their upper ends as at 23 to the under side of the table, support the table in horizontal position. Toggle links 24 arranged between the parallel links 21, and having a rule-joint 25 intermediate their ends, are hinged at their lower ends to one of the side bars 14, as at 26, and at their upper ends to the under side of the table, as at 27. By straightening the links 24, the said links act to brace the table. By breaking the links 24, the said links and the links 21 may be folded within the compartment, together with the seats and their supporting legs.

The receptacles constituting the closure will be provided on the sides opposite the line of hinges 12 with suitable loops or handles, whereby, when folded into compact form, the structure may be lifted and carried.

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

1. A legless table comprising two hinged receptacles forming a closure when folded together and a table top when opened, foldable units composed of seats and legs for the seats at opposite sides of the table and hinged connections extending from the middle of the seats to the receptacles to support the table top from the seats and afford uninterrupted access to the seats from either of their ends, the units as described being adapted to be folded one into each of the receptacles, and the latter then brought into closed relation.

2. A legless table comprising two hinged receptacles forming a closure when folded together and a table top when opened, and foldable units each composed of a seat and legs for the seat hingedly connected to the adjacent receptacle, the connections between the respective sides and their associated table top members comprising sets of flat intermediately toggle jointed long bars and unjointed short bars respectively hinged to the central portions of the inner and outer side margins of the table top members and to the inner side margins of their associated seats, said bars, when swung upon their hinges, being foldable to transverse positions within their associated table top members and interposed between such top members and the seat frame.

3. A legless table comprising two hinged receptacles forming a closure when folded together and a table top when opened, and supporting means for the table top residing in units composed of oppositely arranged seats and legs for the seats and hinged connections extending between the seats and the outer edge of the adjacent receptacle, with a toggle connection between the seat and the inner edge of the said receptacle to stabilize the structure; one unit of the said seats and legs and connections and toggle being foldable into each of the receptacles and contained therein when the latter are closed.

4. A structure of the character described, comprising two foldable members, having plane outer surfaces, hinged at one side and adapted when opened to form with their supporting means a legless table, and means for supporting the table top from its sides to provide an entirely clear and unobstructed area beneath the same; the said supporting means residing in foldable units composed of oppositely positioned seats with legs therefor and hinged connections from the seats to the adjacent table member, the said connections being arranged intermediately of the ends of the seats to afford free access to the seats from their ends and to the area beneath the table, and such units as described being adapted to be disposed oppositely with relation to each other in the space between the table members and retained therein when the latter are folded.

5. A table and seat assembly comprising the combination with spaced seats connected with each other in opposite pairs, with supports for the seats, and a legless, foldable, table top wholly supported from the seats, the supports for each pair of seats comprising a frame provided with folding legs, and the table top supporting connections comprising bars hinged to the seat frame between the seats of each pair and respectively hinged to the inner and outer side margins of their associated foldable table top members, said hinges being adapted to permit the supporting bars to fold transversely between said associated top member and the seat frame when the latter is folded into the top member.

6. A table and seat assembly comprising the combination of spaced seats connected with each other in pairs by seat frames and a legless table top comprising a pair of hinged members wholly supported from the seat frames by folding braces extending convergently from the side margins of the respective top members to the inner side margins of the associated seat frames, said braces being hinged to allow them to be folded between the seats and top members and provided with hinge members and pintles elongated along lines parallel with the seat frames to adapt them to securely support the table top against end thrust pressures, each pair of seats, their connections and top supports being foldable underneath the associated half of the top and the top being foldable to enclose the folded seats, supports and connections.

C. THEO. OSTERBERG.