Aug. 1, 1933. F. MALINOWSKI 1,920,577

FOLDING TABLE

Filed Oct. 24, 1931 2 Sheets-Sheet 1

Fig. 1

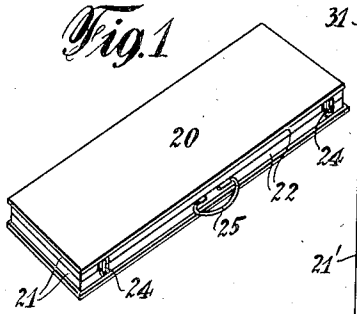


Fig. 3.

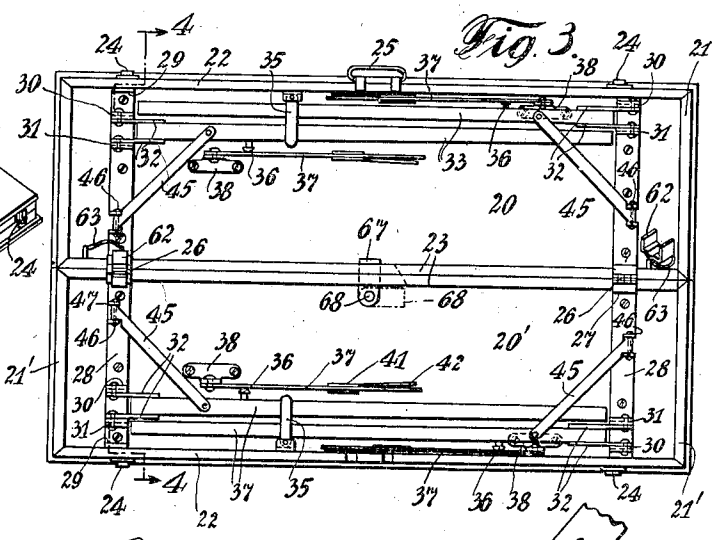


Fig. 2.

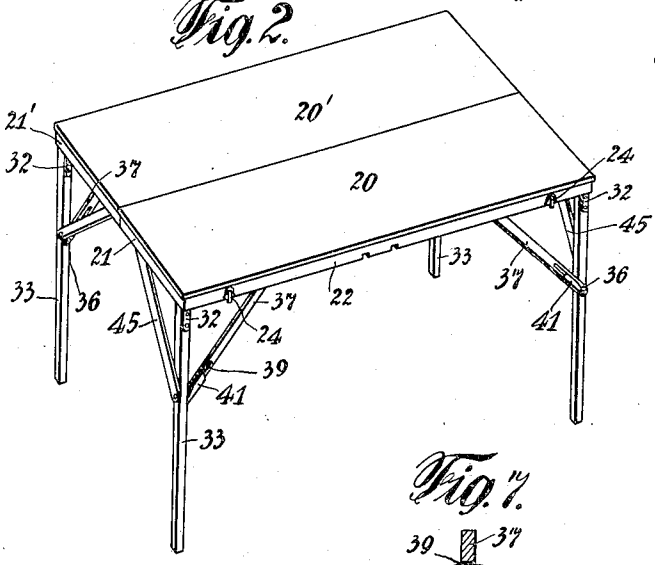


Fig. 5.

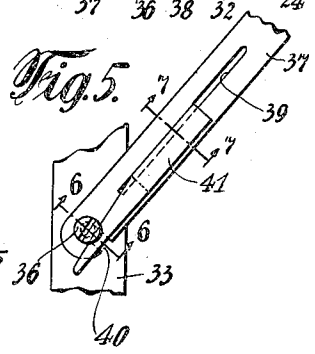


Fig. 6.

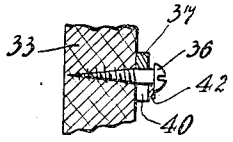


Fig. 7.

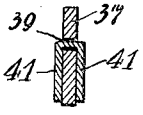
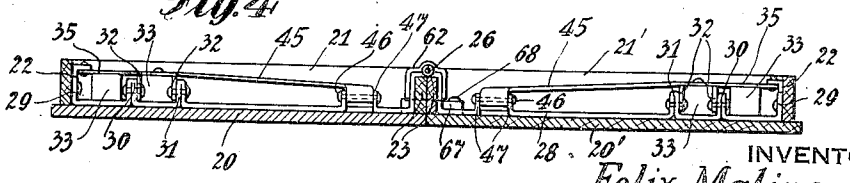


Fig. 4



INVENTOR

Felix Malinowski

BY HIS ATTORNEY

Warren E. Willis.

Aug. 1, 1933. F. MALINOWSKI 1,920,577

FOLDING TABLE

Filed Oct. 24, 1931 2 Sheets-Sheet 2

Fig. 8.

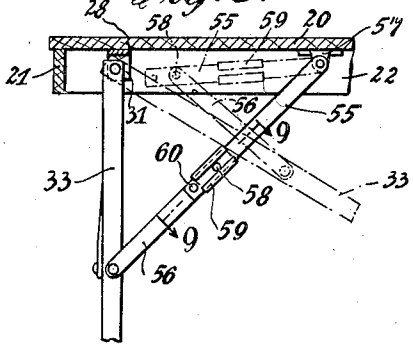


Fig. 9.

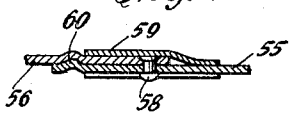


Fig. 10.

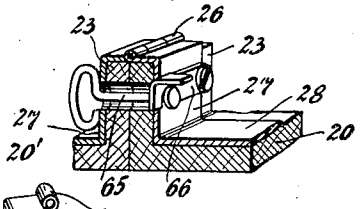


Fig. 11.

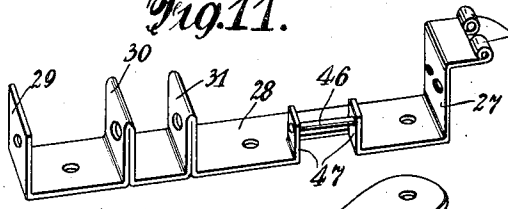


Fig. 12.

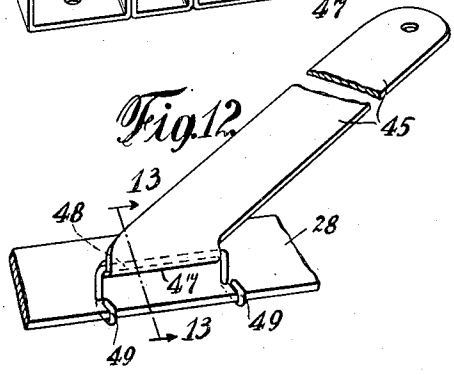


Fig. 14.

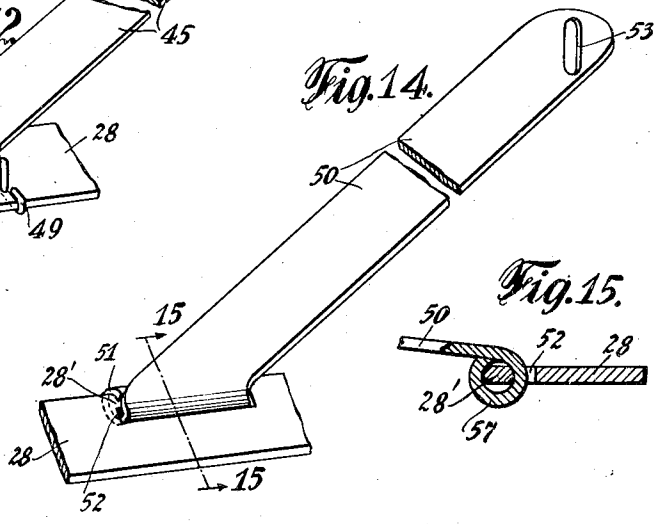
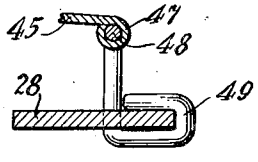


Fig. 15.

Fig. 13.



INVENTOR

Felix Malinowski

BY HIS ATTORNEY

Warren E. Willis.

Patented Aug. 1, 1933 1,920,577

UNITED STATES PATENT OFFICE

1,920,577

FOLDING TABLE

Felix Malinowski, Brooklyn, N. Y.

Application October 24, 1931. Serial No. 570,856

4 Claims. (Cl. 45—116)

This invention relates to tables, and more particularly to tables of moderate size and portable types, capable of being folded compactly for convenience in storage and transportation.

The use of such tables for camping, lawn lunching and picknicking, as well as card and other game playing, is well recognized; therefore one of the objects of the invention is to provide a sectional table having infoldable legs held snugly against the underside of the table top when not in use, and when extended to be rigidly retained in operative position.

Another feature is in the provision of means for rendering the main top sections level, firm and unyielding when operatively disposed, but capable of folding to present an inner chamber for the inturned legs, other parts of the assembly, and such articles as may be conveniently disposed therein.

A further purpose is to produce a table adapted to withstand severe service when spread, and to be carried about in the manner of an ordinary suit case when folded.

These and other advantageous aims, purposes and objects, which will become apparent as the description progresses, are accomplished by the novel design, construction and combination of few and simple parts, as hereinafter fully described and shown in the accompanying drawings, constituting a material component of this disclosure; and in which:—

Figure 1 is a perspective view of the table as folded when not in use.

Figure 2 is a perspective view of the same as erected and spread for service.

Figure 3 is a bottom plan view of the table, shown in a spread condition with the legs folded inwardly.

Figure 4 is a transverse sectional view taken on line 4—4 of Figure 3 and drawn to an enlarged scale.

Figure 5 is a fragmentary side view showing a leg brace in operative position.

Figure 6 is a transverse sectional view taken on line 6—6 of Figure 5.

Figure 7 is a similar sectional view taken on line 7—7 of Figure 5.

Figure 8 is a partial sectional view of the table showing a modified form of leg brace attachment.

Figure 9 is a fragmentary sectional view taken on line 9—9 of Figure 8.

Figure 10 is a partial sectional view of the table top sections showing a modification in the clamping means to secure rigidity.

Figure 11 is a perspective view of one of the members of the strap hinge used in connecting the sections of the table top, legs and braces.

Figure 12 is a fragmentary perspective view showing the connection of a folding brace to the leg.

Figure 13 is a transverse sectional view taken on line 13—13 of Figure 12.

Figure 14 is a fragmentary sectional view, similar to Figure 12, but showing a modified brace connecting means.

Figure 15 is a transverse sectional view taken on line 15—15 of Figure 14.

As plainly shown in the drawings the table consists of two similar flat plate sections 20—20', oblong rectangles in shape and of equal width, length and thickness, which together constitute a top when the table is in position for service.

Fixed on the under sides of each section are marginal frames having end elements 21—21' and outer longitudinal elements 22, inset from the corresponding edges, while on their opposite, extreme inner edges are longitudinal elements 23, making intimate contact along their adjacent faces when the table is spread, as in Figures 2 and 3, and forming the bottom of the device when the table is folded, as seen in Figure 1, in which position the two sections may be held in juxtaposition by catches 24 and are provided with a carrying handle 25.

The table top sections are connected by pairs of strap hinges having their joint pins carried in loop coils 26 disposed in the plane of the junction of the frame elements 23, the hinge strap passing over their edges, thence bent at right angles, as at 27, to extend along the inner sides of these elements to reach the under side of the table top sections, where they are turned outwardly to constitute cleat bars 28, terminating in flanges 29 disposed against the inner sides of the frame elements 22.

These metal straps are fastened at intervals to the sections 20—20' and frame elements 22—23, securing the parts as a unit and affording a rigid support to the table top sections.

At suitable distances inwardly from the flanges 29 the straps are folded tightly upon themselves to form pairs of spaced loops 30—31 and pivotally connected between these rigid lug-like loops are plates 32 fixed on opposite sides of legs 33 near each corner of the table, the connections being such as to permit the legs to be extended at right angles with the table top or to fold against its under side within the confines of the frames, below their exposed edges.

When the legs are infolded they may be retained by spring clips 35 pivoted on blocks fixed on the underside of the tops 20—20' adjacent the side frame members 22, as seen in Figure 3.

Set in the legs 33 are headed screws 36 engageable by latch bars 37 pivoted on brackets 38 fastened at appropriate points to the under surface of the table top; these bars are provided with longitudinal slots 39 centrally in their width, near the notches 40 in their free ends which engage the bodies of the screws 36.

Slidable in the slots 39 are channel shaped keepers 41, one of their members 42 being tapered and extensible to pass over the outer surface of the bars 37, covering the notches and lockingly engage under the heads of the screws 36, firmly securing the bars in operative position to retain the legs rigid when extended by turning outwardly on their pivotal supports.

In order to brace the legs laterally of the table other bars 45 are pivoted to the legs, at right angles to the bars 37, their opposite ends being coiled to engage pins 46 fixed at their ends in lugs 47 integrally formed on the hinge straps 28, thus permitting the legs to be folded or extended, the braces swinging freely on the pins as indicated in Figure 11.

In the modification, shown in Figures 12 and 13, the strap 28 is perforated to receive a wire bracket support having a pivot member 48, raised from the strap, the wire passing through the perforations, after which the ends are looped, as at 49, to be firmly fixed in the strap.

A similar but simpler arrangement is seen in Figures 14 and 15, in which the brace 50 is coiled, as at 51, the coil engaging around a bar portion 28' of the strap separated by a slot 52.

In the other end of the brace is a slot 53, through which screws are passed to secure the braces to the legs.

In Figures 8 and 9 another type of leg brace is disclosed consisting of two elements 55—56, the former being pivotally attached to a bracket 57 fixed below the table top, and the latter pivoted to the leg direct.

The brace members 55—56 are connected by a pivot 58 and the joint controlled by a keeper slide 59 limited by a stop 60; this type of joint in the brace members permits of close folding as will be apparent.

In order to maintain the sections of the table top firm and rigid when spread, metal clamps 62 are shaped and adapted to be firmly pressed over the hinge elements 27, as seen in Figures 3 and 4, preventing the joint from breaking, or the hinges from being closed, a suitable attaching means, as a cord or chain 63 retaining the clamp from loss when not in operative engagement.

Another device for the same purpose is shown in Figure 10, the same consisting of a double headed bolt 65 passed through openings in the frame elements 23 and strap members 27, the lesser head being engaged by a latch 66 pivoted to swing into position to retain the bolt in operative position or to release it at will.

A further re-enforcement is provided for the table top sections as indicated in Figure 3, the same consisting of a leaf 67 pivoted at 68 to one of the sections and movable to contact the other section when swung through an opening in the frame members 23, and obviously more than one of these leaves may be used.

From the foregoing it will be seen that a simple device for this purpose has been disclosed in the preferred form of its embodiment, but it is not desired to restrict the details to the exact construction shown, it being obvious that changes, not involving the exercise of invention, may be made without conflicting with the scope of the appended claims.

Having thus described the invention, what is claimed as new and desired to secure by Letters Patent, is:—

1. A table comprising two elongated rectangular plates, inset flanges adjacent the ends and one side edge of each plate, flanges on the extreme edge of the opposite side of said plates, all of said flanges extending uniformly to form a chamber between said plates when juxtaposed, transverse straps having hinges connecting said plates to extend over the last named flanges, and entirely across said plates, means to bolt said hinges when the plates are extended in operative positions, foldable legs pivotally engaged at the outer ends of said straps, means for locking said legs when extended at right angles from said supports, and a handle on one of said inset flanges.

2. In a foldable table, a top composed of two equal sections having flanges at their edges, metallic straps secured to the under sides of each section to extend the full width thereof, said straps having integral lugs at their outer ends fastened to the inner sides of both flanges of each section, hinge elements formed on the inner ends of said straps at the junction between the table top sections, pairs of spaced integral lugs near the outer ends of said straps, and legs pivoted in the spaces between said pairs of lugs.

3. In a foldable table, a top composed of two equal sections having flanges at their edges, unitary metallic straps secured in full width contact with the under side of said sections and inner surfaces of the flanges thereon, raised hinge elements connecting said straps in pairs, said hinge elements being disposed at the joint between said sections, pairs of spaced lugs integral with said straps near their outer ends, legs pivoted between each pair of said lugs, double headed bolts having one of their ends to pass through said hinge elements and table top flanges, a clip to engage said bolts when in operative position thereby rigidly clamping the hinges when the sections are extended, and braces pivotally secured to said straps at one end and to said legs at their opposite ends.

4. In a folding table composed of two equal longitudinal sections, strap hinges extending coincident with the full width of each section, said sections having raised marginal flanges, double headed bolts enterable through openings in the flanges and raised portion of the hinges, one of the bolt heads being adapted to pass through the openings and the other not, and pivoted latches adapted to engage the passed heads when extended through the hinges.

FELIX MALINOWSKI.