April 29, 1941. A. W. STONE ET AL 2,240,024

FOLDING TABLE

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FIG. 1.

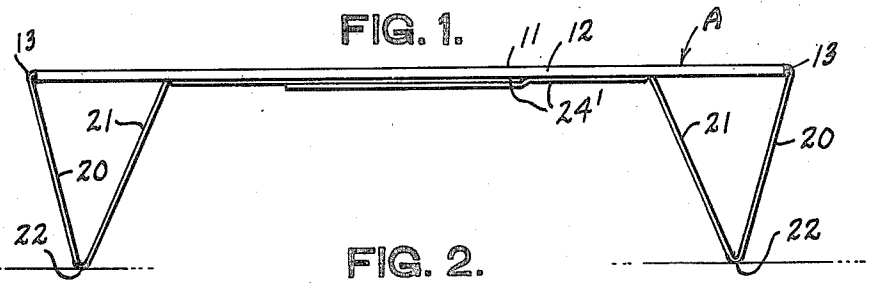


FIG. 2.

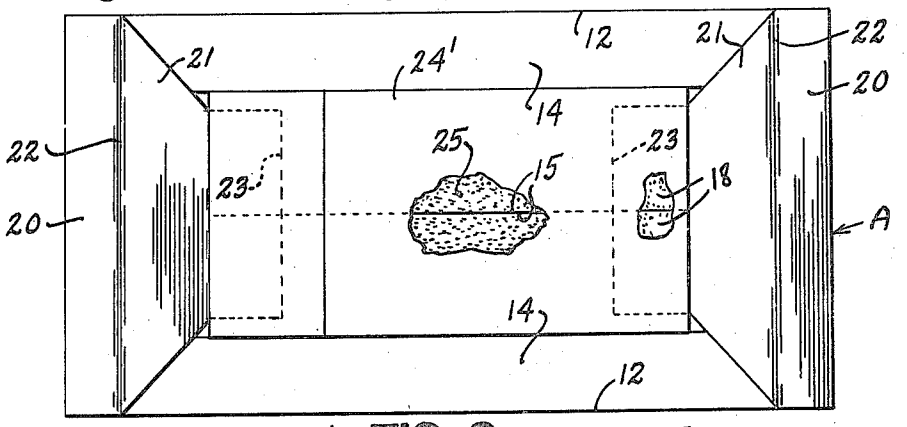


FIG. 3.

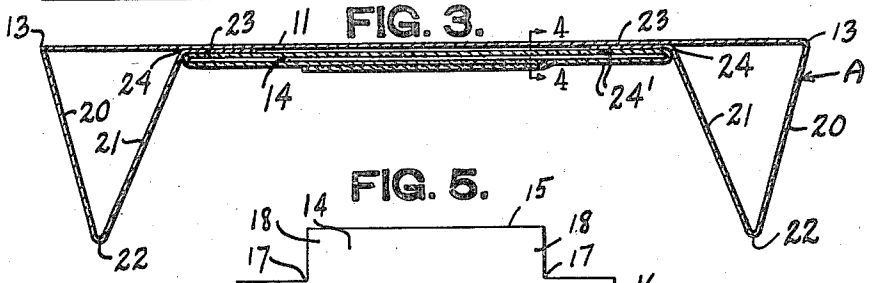


FIG. 5.

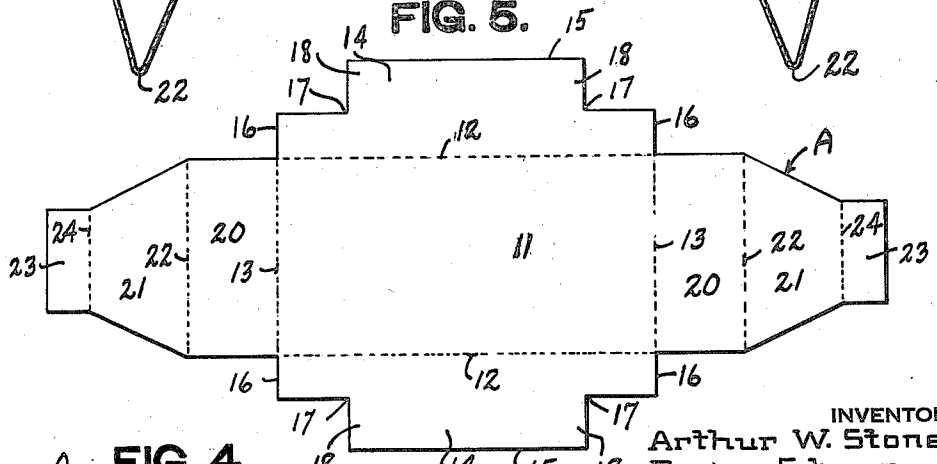
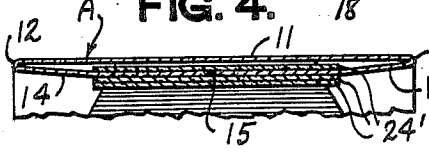


FIG. 4.



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FIG. 6.

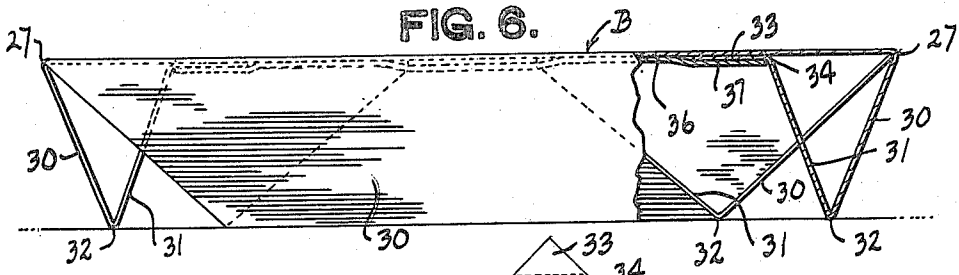


FIG. 8.

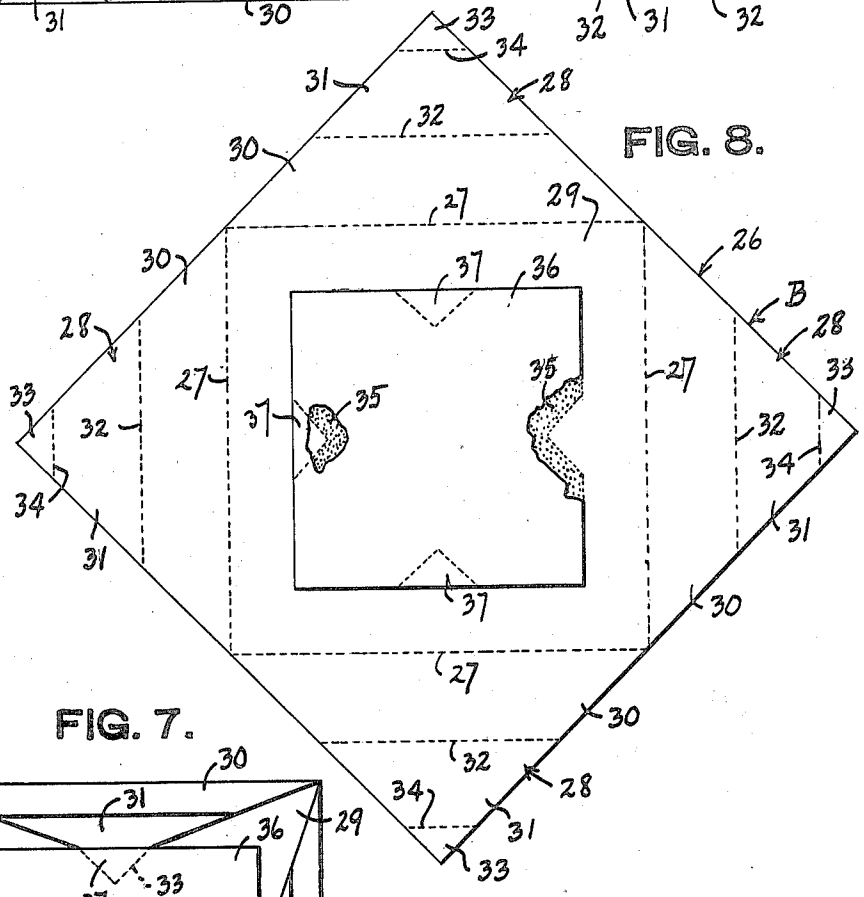
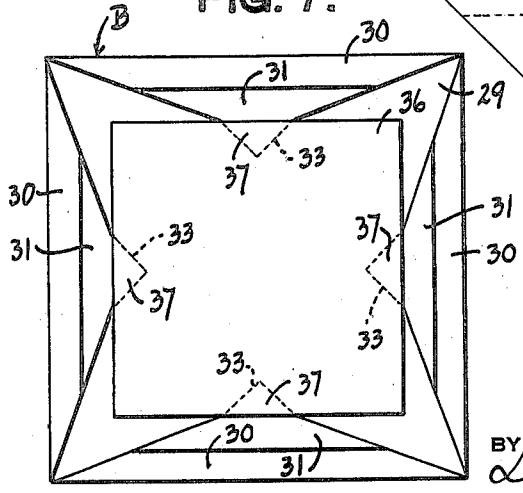


FIG. 7.



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UNITED STATES PATENT OFFICE

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FOLDING TABLE

Arthur W. Stone and Page Stone, New York, N. Y.

Application December 2, 1938, Serial No. 243,629

1 Claim. (Cl. 311—35)

The present invention relates to improvements in folding tables, such as bed tables and beach tables, and the primary object of the invention is to provide a table formed of corrugated board, cardboard or similar material and which is light, cheap and strong.

Another object of the invention resides in the provision of a table which may be folded flat for shipment or storage.

A further object of the invention is to provide a folding table which may be readily set up for use.

Yet another object is to provide tables formed of sheet material and which may be produced from blanks so shaped as to utilize substantially all of the sheet material.

A still further object of the invention is to provide a table top having a reinforcing under ply which also serves to releasably secure the folding parts of the table against collapse.

Other objects and advantages of the invention will become apparent during the course of the following detailed description, taken in connection with the accompanying drawings, forming a part of this specification, and in which drawings—

Figure 1 is a view in side elevation of a bed table constructed in accordance with the invention.

Figure 2 is an inverted plan view of the bed table.

Figure 3 is a longitudinal vertical sectional view of the bed table.

Figure 4 is a cross sectional view taken on the line 4—4 of Figure 3.

Figure 5 is a plan view of a blank of sheet material employed to form the bed table.

Figure 6 is a view partly in side elevation and partly in vertical section of a beach table constructed in accordance with the invention.

Figure 7 is an inverted plan view of the beach table.

Figure 8 is an inverted plan view of the assembled blanks employed to form the beach table, portions being broken away to illustrate details of construction.

In the drawings, which show preferred and modified forms of the invention, and wherein similar reference characters denote corresponding parts throughout the several views, the letter A designates the bed table and B, the beach table.

Referring first to the bed table A, shown in Figures 1–5, inclusive, the same comprises a sheet 10 including a rectangular section 11 defined by opposite sides 12 and ends 13. Foldably joined to the sides 12 are flaps 14 including sides 15 and ends 16 notched as at 17 to provide marginal end portions 18. Formed integrally with the rectangular section 11 are wings, each including a leaf section 20 foldably joined to an end 13 of the rectangular section, a brace section 21 foldably joined to the leaf section at its end 22, and a tab section 23 foldably joined to the brace section at its end 24. The brace section 21 preferably is reduced in width between the leaf section 20 and the tab section 23. The rectangular section 11 constitutes an upper ply of the table top and the flaps 14, when folded beneath the rectangular section and united with the sides 15 in substantial abutment, constitute a lower ply of the table top. In order to so unite the flaps 14, a strip 24' of paper, cloth or the like may be secured in encircling relation about the marginal end portions 18 of the flaps, as by adhesive 25. In this manner, the lower ply of the table, formed by the flaps 14, includes marginal end portions 18 disposed intra-marginally of the opposite ends of the upper ply, these marginal end portions being unattached to the upper ply, so that the tab sections 23 may be inserted therebetween.

To set up the table, it is only necessary to insert these tabs 23 between the rectangular section or upper ply 11 and the adjacent marginal end portions 18, as this operation swings the sections 20 and 21, constituting supports for the table top, into a proper dihedral angular relation beneath the opposite ends of the table top. In the example shown, the lengths of the sections 20 and 21 are substantially the same. For stability and freedom from collapse, the square of the length of either section should be less than the square root of the sum of the squares of the length of the other section and a length equal to the intra-marginal distance between the end portions 18 and the ends 13 of the upper ply. In other words, the dihedral angle formed between the leaf section 20 or 21 and the rectangular section 11 constituting the upper ply of the able top, should be measured by an angle less than a right angle, so that the tab 23 will tend to remain in place and thereby prevent collapse of the table.

Referring now to Figures 6–8 of the drawings, the beach table B is produced from a square sheet 26 folded as at 27 to form four triangular corner portions 28 and a square central portion 29 bounded by the corner portions. Each corner portion 28 is subdivided, as by scoring or creas-

ing, to provide a leaf section 30 foldable relative to the square central portion 29 along a line 27, a brace section 31 foldable relative to the leaf section along a line 32, and a tab section 33 foldable relative to the brace section along a line 34. Secured, as by adhesive 35, intra-marginally of the square central portion 29 is a square reinforcing sheet 36 having marginal portions 37 unattached to the central portion 29, the adhesive 35 being omitted from the zone of contact of these portions 37 with the square central portion 29, as clearly shown in Figure 8. The square central portion 29 constitutes an upper ply of the table top, and the sheet 36 forms a lower ply of the table top, the triangular corner portions 28 constituting foldable supports for the top.

Upon the insertion of the tabs 33 between the upper ply 29 and the portions 37 of the lower ply, the sections 30—31 will be brought into proper dihedral angular supporting relation beneath the marginal end portions of the table top, in a manner similar to that already described in connection with the supports 20—21 of the bed table A. As the beach table is formed of square sheets 26 and 36, there is little or no loss of material in the fabrication of the table from sheet material.

Because of their low cost and light weight when formed of corrugated board or similar material, the tables A and B are particularly well adapted for their respective uses in hospitals and on the beach.

Various changes may be made in the forms of the invention herein shown and described, without departing from the spirit of the invention or the scope of the following claim.

We claim:

In a folding table construction a sheet including a rectangular section forming an upper ply of the table top, flaps foldably joined to opposite sides of the rectangular section and forming a lower ply of the table top, said lower ply including marginal end portions disposed intra-marginally of the opposite ends of the rectangular section, and wings foldably joined to opposite ends of the rectangular section and forming supports for the table top, each wing including a leaf section foldably joined to an end of the rectangular section, a brace section foldably joined to the leaf section, and a tab section foldably joined to the brace section, said tab section being insertible between the upper ply and a marginal end portion of the lower ply.

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