O. M. OTTE.

FOLDING TABLE.

APPLICATION FILED NOV. 5, 1918.

1,289,245. Patented Dec. 31, 1918.

Fig. 1.

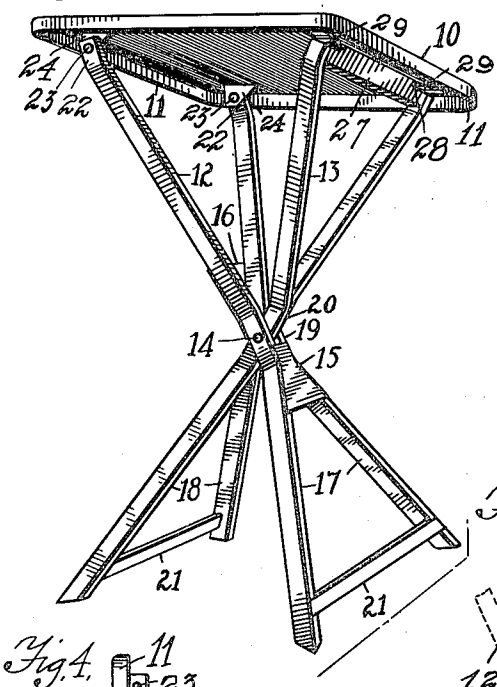


Fig. 2.

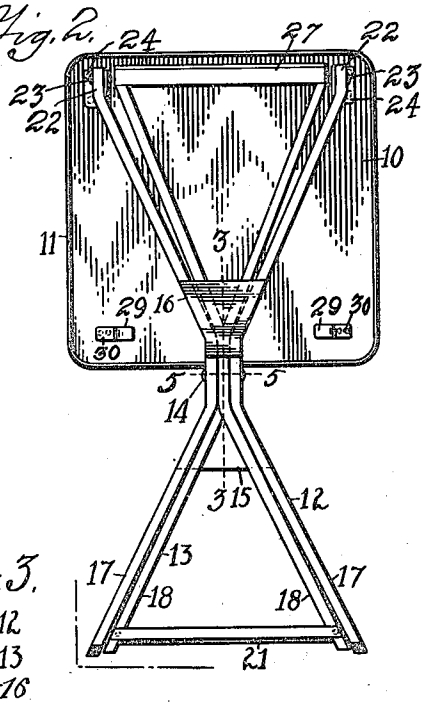


Fig. 3.

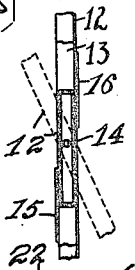


Fig. 4.

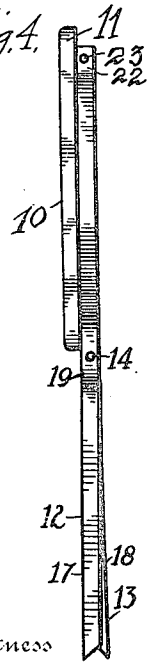


Fig. 5.

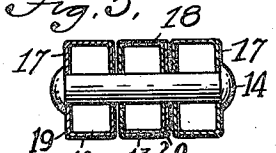


Fig. 6.

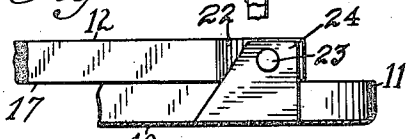


Fig. 7.

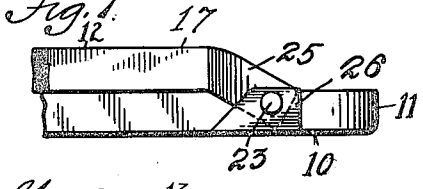


Fig. 8.

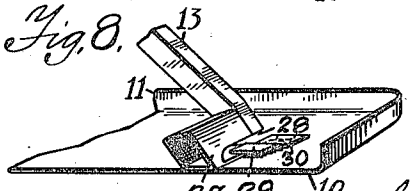
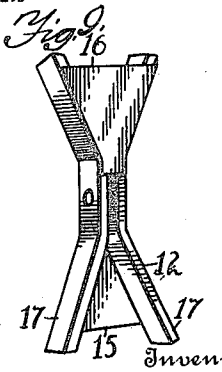


Fig. 9.



Witness

J. E. Nordstrom

N. A. Landberg

Inventor

Otto M. Otte.

By J. Arthur Baldwin

Attorney

UNITED STATES PATENT OFFICE.

OTHO M. OTTE, OF JAMESTOWN, NEW YORK.

FOLDING TABLE.

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To all whom it may concern:

Be it known that I, OTHO M. OTTE, a citizen of the United States, residing at the city of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Folding Tables, of which the following, taken in connection with the accompanying drawings, is a specification.

The invention relates to collapsible or folding tables; and the improvement consists in providing a two part or double section axially hinged support, in which one section or frame folds within the other, stops being provided on both sides of the outer section to hold the inner section in line therewith when in the folded position, the top being so hinged as to fold into perfect alinement with said sections; and the invention consists in the novel features and combinations hereinafter set forth and claimed.

In the drawings, Figure 1 is a perspective view of the set up table showing the under side of the top and the pivotal attachment thereto of one section or frame and the interlocking attachment thereto of the other section or frame. Fig. 2 is a side elevation of the table in the collapsed or folded position showing the interfitting arrangement of the two hour-glass shaped sections or frames on one bolt. Fig. 3 is a sectional view at line 3—3 in Fig. 2 showing the construction and arrangement of the central portion or axial joint between the two interfolding sections. Fig. 4 is an edgewise elevation of the table in the folded position. Fig. 5 is a crosswise sectional view of the axial joint at line 5—5 in Fig. 2. Fig. 6 is a sectional view of a portion of the top showing in elevation the preferred form of the attaching bracket and upper end of the leg or frame section. Fig. 7 is a similar view of a slight modification of the construction shown in Fig. 6. Fig. 8 is a perspective view of the under side of a corner of the table top showing the manner of locking the upper end of the interfolding frame to hold the same firmly in the set up position. Fig. 9 is a perspective view of the central portion of the outer frame showing the stops for the inner folding frame on the opposite sides of said outer frame.

Like characters of reference refer to corresponding parts in the several views.

The folding table is preferably made of sheet metal though it may be made of wood or other materials. The sheet metal however is more adaptable to this form of construction. It may be made in different sizes from a small stand to a large table, the sheet metal rendering it possible to hygienically coat the parts with vitreous or heat hardened enamel thereby making a simple and exceedingly durable and convenient table for hospitals and similar uses.

The numeral 10 designates the top which is preferably struck up by suitable dies from the sheet metal with a downwardly projecting flange 11 surrounding the same to thereby give a smooth and pleasing finish to the table top edge.

The top 10 is supported by two hour-glass shaped sections or frames 12 and 13 that is enlarging toward each end, which shape provides four triangular shaped braced portions axially hinged by a king bolt 14 through their contracted central portions. The sections 12 and 13 are preferably made of sheet metal tubing preferably rectangular shaped as shown; though said tubing may be made in other shapes however without departing from my invention or, the frames 12 and 13 may be made of solid bars. The tubing is preferred on account of its light weight and strength.

Each of the sections 12 and 13 consist of two braced and connected tubular legs connected at their contracted portions. The legs of the outer section 12 are connected by the stop plates 15 and 16 on opposite sides thereof and extending each way from the axis to hold the two leg portions 17 in spaced relation to receive the inner section 13 therebetween. The leg portions 18 of the inner section 13 are reduced to a single tube by interfitting into one another, as shown in section in Fig. 5, the side of one of the legs 18 being cut away for the length of the straight interfitting central portion, the opposite leg fitting thereinto and being welded thereto, thereby making a strong central contracted connection for the frame 13, a hole extending through the straight central portions 19 and 20 to receive the king bolt 14 therethrough.

The triangular end portions of the section 13 are made to interfit within the similar triangular end portions of the section 12. Each of the lower end portions in the sec-

tions 12 and 13 have the cross bars 21 to hold them firmly in the triangular form and to stiffen the entire structure. The upper ends 22 of the legs 17 in the frame 12 are pivotally attached at 23 to the brackets 24, which brackets 24 are preferably spot welded to the under side of the top 10 and extend down below the flange 11 a sufficient distance so that said upper ends 22 of the legs 17 will fold parallel to the lower edge of the flange 11. A slight modification of this construction is shown in Fig. 7 in which the upper end 25 of the leg 17 is bent to one side sufficiently to permit the bracket 26 being made about the depth of the flange 11 on the top 10. This arrangement pivotally hinges the top 10 to the outer frame 12.

The upper end of the frame 13 is held firmly in the triangular braced form by a cross bar 27 which extends across between the upper ends of the legs 18 and is welded thereto, being preferably made in the hollow tubular form as shown in Figs. 1 and 8. The ends of the tube 27 have the open ended slots 28 to receive therethrough the lugs 29 which are welded at 30 to the under side of the top 10, the bracing position of the two frames 12 and 13 pressing the edge of the slotted end of the tube 27 beneath the raised lugs 29 at each end of said tube 27 thereby firmly interlocking and holding the triangular upper end of the section 13 in the set up position yet permitting the instantaneous folding of the table by the withdrawal of the lug 29 from the slot 28 by simply pressing the two frames 12 and 13 together.

It is apparent that this construction makes a very strong, simple and durable folding table which occupies small space in the folded position and is a very durable construction. The width of the top 10 hanging from the hinging or pivot points 23 in the folded position folds said top against the side of the folded leg sections while stops 15 and 16 each side of the axial bolt 14 holds the two supporting sections 12 and 13 firmly in interfitting alinement. The section 13 threads through the opening formed in the straight central portion 19 of the section 12 by the stop plates 15 and 16 on the opposite sides thereof, said section being preferably threaded thereinto before the last one of said stop plates is attached to the section 12. This arrangement locks the straight portion 20 of the section 13 within said opening in the section 12 with a limited amount of attachment before the pivot bolt 14 is inserted.

I claim as new:—

1. In a folding table, a sheet metal top having a downwardly projecting rim flange, spaced hinge brackets attached to the underside of said top near one side and extending below said rim flange, an hour glass shaped leg frame hinged to said spaced hinge brackets below said rim flange to permit said top folding flat against said leg frame, a second hour glass shaped leg frame threaded through said first hour glass shaped leg frame at its central portion, a pivot bolt through the interthreading portion of said hour glass shaped leg frames to hinge said frames one to another and fold said second hour glass shaped leg frame within the first hour glass shaped leg frame, latching means attached to the opposite under side of said top from said hinge brackets, and interlatching means on said second hour glass shaped frame to engage with said latching means on said top to hold said parts in bracing engagement in the set up position.

2. In a folding table, a sheet metal top having a downwardly projecting rim flange, said top having spaced hinge brackets spot welded to the under side thereof near one side and spaced latching lugs spot welded to the under side thereof near the other side, an hour-glass shaped leg frame composed of two sheet metal tubes connected by a cross bar near their lower ends and by metal stop plates on their opposite sides near the contracted central portion, a second hour-glass shaped leg frame composed of two metallic tubes threaded through said first hour-glass shaped leg frame at its central portion, the outer ends of both of said hour-glass shaped frames spread apart and connected in triangular bracing form, a pivot bolt through the interthreading portion of said hour-glass shaped leg frames to hinge said frames one to another and fold said second hour-glass shaped leg frame within the first hour-glass shaped leg frame, said first hour-glass shaped leg frame hinged at its upper end to said brackets to fold said top parallel with said frame, said second hour-glass shaped frame having slots therein to receive said latching lugs in bracing and holding engagement.

In testimony whereof I have affixed my signature in the presence of two witnesses.

OTHO M. OTTE.

Witnesses:
H. A. SANDBERG,
A. W. MUTT.