May 13, 1930. C. J. SCHMITT 1,758,856

FOLDING TABLE

Filed March 5, 1928

Fig. 1.

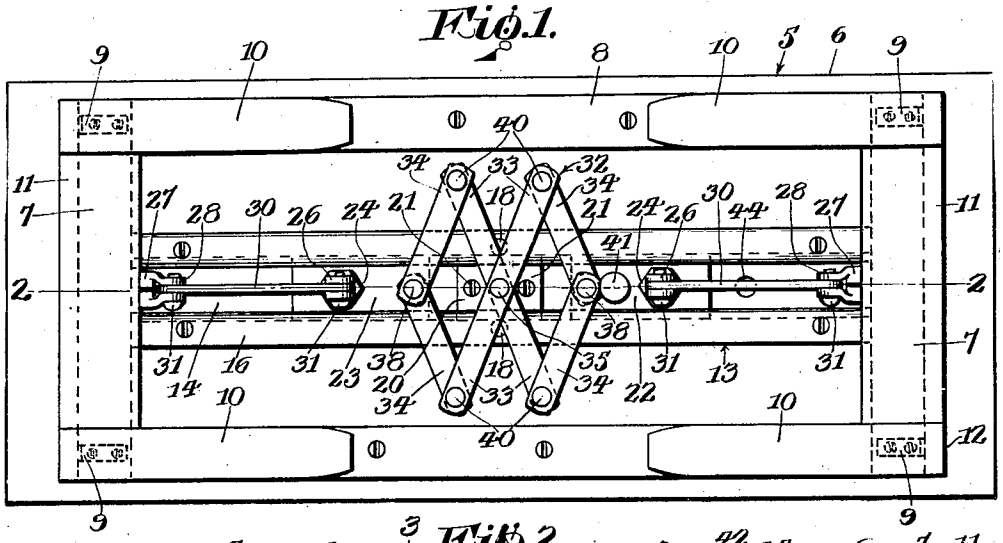


Fig. 2.

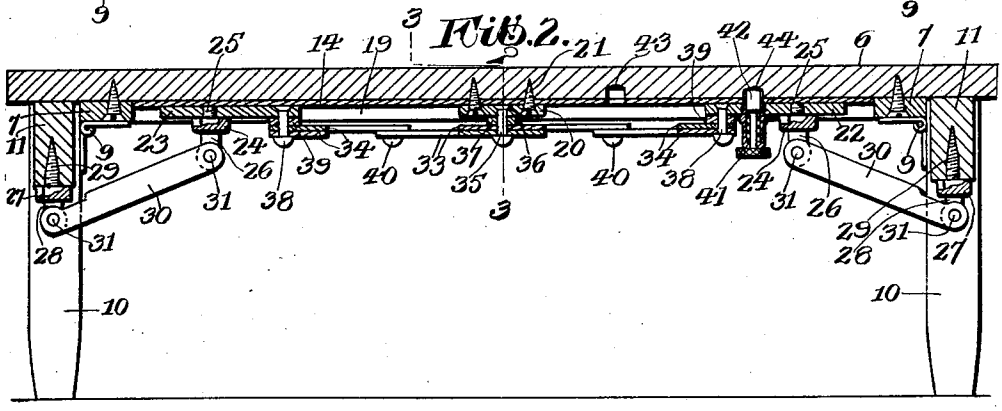
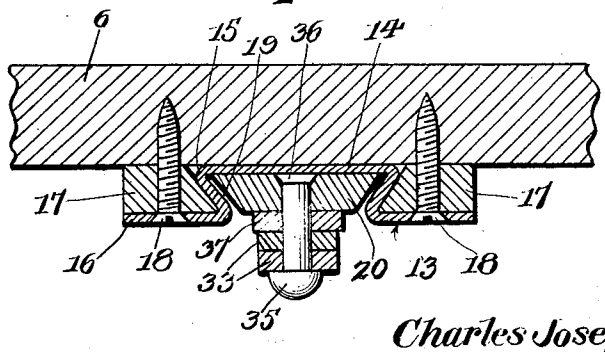


Fig. 3.



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FOLDING TABLE

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This invention relates to folding tables and has for its primary object to provide, in a manner as hereinafter set forth, a table of such class having two pairs of legs, and means for opening and closing the same simultaneously.

A further object is to provide a table of the above mentioned character, embodying a guide extending longitudinally of the table, beneath the top thereof, and an element connected with each pair of legs and slidable in the guide.

A further object is to provide a folding table having two pairs of legs, and wherein each pair, by intermediate means, is connected wtih a lazy tong.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a bottom plan view of my improved table, showing the legs therefor in folded position,

Figure 2 is a section taken on the line 2—2 in Figure 1, showing the table in upright position, and with the legs in open position to support the table, and,

Figure 3 is an enlarged, fragmentary section, taken on line 3—3 of Figure 2.

In the accompanying drawings, wherein for the purpose of illustration is shown an embodiment of the invention, the numeral 5 designates, as a whole, my improved table, having a top 6, which is preferably rectangular in shape.

Spaced from, and in proximity to, each end edge of the top, is a cleat 7, the length of which is less than the width of the top. Said cleats 7 are disposed transversely of the top, and, by any suitable means, secured to the under side thereof. Similarly spaced from each side edge of the top, is a cleat 8, which is secured to the underside of the top, and extends lengthwise between the cleats 7, the ends of the cleats 8 abutting the sides of the cleats 7.

Hingedly secured to each of the cleats 7, as indicated at 9, is a pair of legs 10, each pair being connected by means of a brace 11, which is flush with the ends 12 of the legs. When the legs 10 are in folded position, as shown in Figure 1, they extend in alinement with the cleats 8, and when in open position, as shown in Figure 2, the inner sides thereof abut the outer edge faces of the cleats 7, with their ends 12, and the brace 11, abutting the under surface of the top 6, and with the outer sides of the legs, longitudinally of the table, spaced from the ends thereof.

Disposed longitudinally and centrally of the top is a guide 13, with its ends abutting the cleats 7. Said guide, in cross section, comprises a horizontal center portion 14, which lies flat against the under surface of the top 6, and wing portions 15, which are bent inwardly to form an angle of less than 90 degrees with the center portion 14, then offset outwardly and horizontally as shown at 16. Disposed between the offset portion 16 and the under surface of the top 6, is a slab 17, which is formed to fit within the outer angle between the wing portions 15 and 16. The portions 16 and slabs 17 are perforated to receive the screws 18, which extend therethrough and into the top 6, thereby securing the guide 13 in place, and without any screws, or the like, extending into the centrally formed groove 19 of the guide.

Disposed within the groove 19, midway between the ends of the guide 13, is an anchor block 20, the exterior surface of which conforms in contour with the groove 19, and which is secured in place by means of screws 21, which pass therethrough and through perforations in the center portion 14 of the guide, and into the top 6.

Disposed within the groove 19, between the respective ends of the guide 13 and the anchor block 20, are sliding blocks 22 and 23 respectively, which are of the same cross sectional shape as the anchor block 20, and which are freely movable within the groove 19.

Spaced from the outer end of each of the blocks 22 and 23, is a hexagonal lug 24, having a screw threaded stem 25 for engagement with a threaded bore in the respective blocks 22 and 23, and having a pair of apertured ears 26, which extend in a direction opposite to that of the stem 25. A similar lug 27, hav-

ing corresponding apertured ears 28, is secured to each of the braces 11, by means of its screw threaded stem 29; and a link 30, formed with an eye in either end thereof, connects each pair of lugs, 24 and 27, by means of a pivot pin 31, which extends through the respective eyes and apertured ears.

The sliding blocks, 22 and 23, are connected with each other, and each with the anchor block 20, by means of a lazy tong, which is designated as a whole by the numeral 32, and which comprises a pair of center strips 33 and two pairs of end strips 34.

The center strips 33 are secured to the anchor block 20, by means of a pivot pin 35, which has a frusto-conical shaped head 36 fitting in a countersink in the upper surface of the anchor block 20, and which extends through the anchor block and through each of the center strips 33 at the centers thereof. The strips 33 are separately mounted in superposed relation, on the pin 35, to pivot freely thereon, and are separated from the anchor block 20 by means of a washer 37, to prevent binding on the offset wing portions 16 of the guide.

The two pairs of end strips 34 respectively, are secured to the sliding blocks 22 and 23, by means of the pivot pins 38, which are of the same shape as the pivot pin 35, and fit into and through the blocks 22 and 23 in the same manner as the pin 35 fits into and through the anchor block 20. The outer ends of the respective end strips 34 are separately mounted in superposed relation, on the respective pins 38, to pivot freely thereon, and are separated from the wing portions 16 of the guide to prevent binding thereon, by means of the respective washers 39.

The inner ends of the respective end strips 34 are pivotally connected to the respective adjacent ends of the center strips 33, by means of the respective pivot pins 40, which extend through perforations formed in the strips, adjacent the ends thereof.

A latch 41, embodying a spring actuated plunger 42, is provided on the sliding block 22, by means of which the block 22 may be locked to hold the legs 10 in folded position as shown in Figure 1, or in open position, as shown in Figure 2. The plunger 42 extends through the block 22 and is in slidable contact, under pressure, with the under surface of the center portion 14 of the guide. A pair of recesses 43 and 44 respectively, are formed through the center portion 14 of the guide, and into the top of the table, for the reception of the puunger 42, when the plunger is brought into alinement with the recesses. In Figure 2, the plunger 42 is clearly shown in engagement with the recess 44, and in Figure 1, it is in engagement with the recess 43, in the latter view, only the head of the latch 41 being visible.

To operate the sliding blocks 22 and 23, for positioning the legs 10 in either folded or open position, as desired, the plunger 42 is removed from engagement with the recess in which it is seated by an outward pull on the head of the latch 41, and any one of the legs 10 is pushed in the desired direction, thereby causing all the legs 10 to move simultaneously, due to the arrangement of the legs in pairs, and the lazy tong, block, and link connection between the pairs of legs. The blocks 22 and 23, slide freely within the groove 19 of the guide, with the end of the plunger 42 pressing against the under surface of the center portion 14 and sliding thereover. When the block 22 advances to a point where the plunger 42 is in alinement with either of the recesses 43 and 44, the plunger enters the recess and the legs are securely held in position.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

What I claim is:

1. A folding table comprising, a top, oppositely disposed legs hinged thereto, a guide secured to the underside of the top and extending lengthwise between the legs, an anchor block fixedly secured in the guide, a pair of blocks slidable in the guide and positioned on opposite sides of the anchor block, means connecting the respective sliding blocks with said oppositely disposed legs, and extensible and contractible means pivotally connected to the sliding blocks and anchor block to provide for the simulaneous shifting of the legs, said extensible and contractible means including a pair of center strips having a common pivotal connection intermediate their ends with said anchor block, a pair of end strips pivotally connected with the center strips respectively and further pivotally connected with one of said sliding blocks, and a similar pair of end strips pivotally connected with the center strips respectively and further pivotally connected to the other of said sliding blocks.

2. A folding table comprising, a top, oppositely disposed legs hinged thereto, a guide secured to the underside of the top and extending lengthwise between the legs, an anchor block fixedly secured in the guide, a pair of blocks slidable in the guide and positioned on opposite sides of the anchor block, means connecting the respective sliding blocks with said oppositely disposed legs, and extensible and contractible means pivotally connected to the sliding blocks and anchor block to provide for the simultaneous shifting of the legs, said extensible and contractible means including a pair of center strips having a common pivotal connection intermediate their

ends with said anchor block, a pair of end strips respectively pivoted at one end to one end of the respective center strips and further pivoted at their opposite end to one of said sliding blocks, and a similar pair of end strips respectively pivoted to the opposite ends of the respective center strips and further pivoted at their opposite ends to the other of said sliding blocks.

3. A folding table comprising, a top, oppositely disposed legs hinged thereto, and means extending between the legs to provide for shifting them simultaneously, said means including a pair of center strips having a common pivotal connection intermediate their ends with the table top, a pair of end strips respectively pivoted at one end to one end of the respective center strips, a similar pair of end strips respectively pivoted at one end to the opposite end of the respective center strips, and means pivotally connecting the opposite ends of said pairs of end strips respectively with said oppositely disposed legs.

4. A folding table comprising, a top, oppositely disposed legs hinged thereto, a guide secured to the underside of the top and extending lengthwise between the legs, an anchor block fixedly secured in the guide, a pair of blocks slidable in the guide and positioned on opposite sides of the anchor block, means connecting the respective sliding blocks with said oppositely disposed legs, extensible and contractible means pivotally connected to the sliding blocks and anchor block to provide for the simultaneous shifting of the legs, said extensible and contractible means including a pair of center strips pivotally connected intermediate their ends with the anchor block, each of said center strips having an end strip pivoted to each end thereof at one end of the end strip, one of the end strips for each of said center strips being pivoted to each of said sliding blocks.

In testimony whereof, I affix my signature hereto.

CHARLES JOSEPH SCHMITT.