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1,966,944

FOLDING TABLE

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FIG. 1

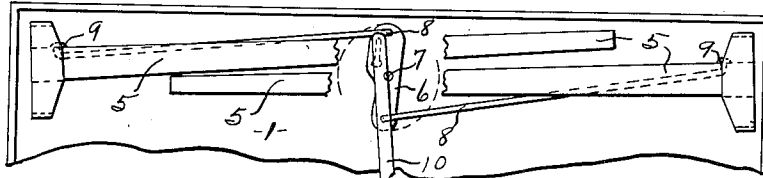


FIG. 1.A.

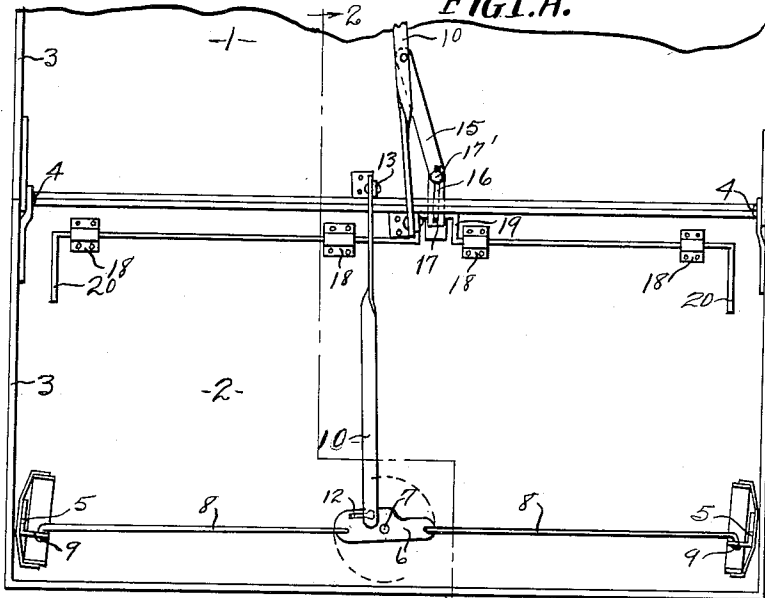


FIG. 2

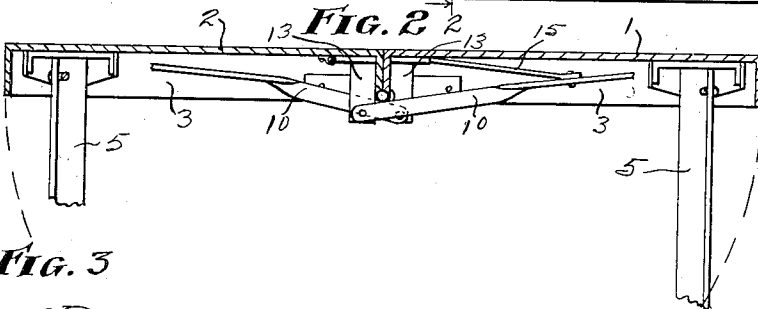


FIG. 3

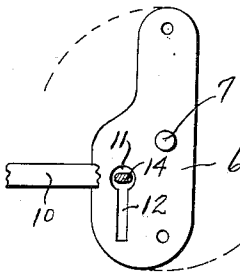
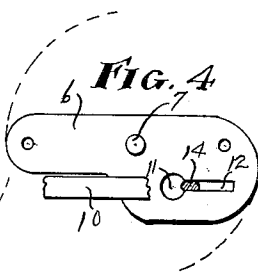


FIG. 4



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FOLDING TABLE

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Application July 29, 1932, Serial No. 625,921

4 Claims. (Cl. 45—116)

My invention relates to folding tables.

The object of my invention is to provide a folding table having a top in two members, hingedly connected and adapted to rock to a folded position, and the legs thereof to automatically fold within the top and unfold when the top is opened.

A further object of my invention is to provide a locking means to avoid premature folding of the table.

A still further object of my invention is to construct a folding table inexpensive and simple to operate with respect to folding and unfolding the same. These and other objects will hereinafter be more fully explained, reference being had to the accompanying drawing forming a part of this specification, and in which like references will apply to like parts in the different views.

Referring to the drawing:—

Fig. 1 is a fragmentary portion of the table top section inverted showing the position of the legs when folded, parts removed for convenience of illustration.

Fig. 1—A is an inverted plan view of the table top, parts removed for convenience of illustration.

Fig. 2 is a sectional view thru the table top, parts removed for convenience of illustration.

Fig. 3 is an enlarged plan view of the leg collapsing lever, as positioned when the legs are erect.

Fig. 4 is a similar view showing the position when the legs are folded, and the top members partially closed.

My invention herein disclosed consists of a table top comprising a section 1 and a section 2, having side rails 3 extending around each section, the said section being hingedly connected as shown at 4, by which means the said top section when folded together has depth enough within the rails to conceal the legs and operative mechanism collapsing the same. At each outer corner of the two top sections is a leg 5 hingedly connected and adapted to rock toward each other interlapping to a folded position as shown in section 1 of the top.

As a folding and unfolding means for the legs, I have centrally positioned between each pair of the legs a lever 6 pivotally mounted as at 7, and to each end is a rod 8 pivotally attached, the opposite end of each rod pivotally engages on their respective legs as shown at 9, and to actuate the movement required to rock the legs a bar 10 pivotally engages in an aperture 11

communicating with a slot 12 radially extending therefrom, as shown more clearly in Figs. 3 and 4, and later described more fully. The other end of the bar pivotally engages on the outer end of a bracket 13, that is secured in close proximity to the center rail of the adjacent top section, and moves therewith as turning means for the lever on the other section.

To acquire a quick movement for the rock of the legs when opening or closing the top, I have placed the pivot connection of the bar near the pivot point of the lever, and the sweep thereof not being sufficient to accommodate for the longitudinal movement of the bar as arranged and actuated by the bracket previously described, the flattened pin 14 is free to enter the slot previously described, and idly moves longitudinally therein with respect to further rotation of the lever, and recedes in like manner to the aperture, when the top is being opened, the idle movement also provides ample time for separation of the section pair of legs to clear each other prior to rocking the same to an erect position.

It will be understood that the said rods 8 will function as a bracing means for their respective legs in one direction, and the hinge element for each leg being of considerable length will brace transversely to the rods, therefor the said legs are rigidly maintained in their supporting position.

The said pin 14 being flat as previously described is a means to retain the same in the aperture until the slot 12 aligns with the flattened feature of the pin, at which time it is free to enter the slot, but the lever will have completed its rotation at the time of entry, as shown in Fig. 4.

To retain the top section when opened to a common plane, I have arranged a leaf spring 15 carried by one of the bars, as shown in Fig. 1, the free end of which has a slot 16 positioned therein, and being in parallelism with the bar. The slotted portion extends through the adjacent rails of the top, the extreme end being beveled or turned upward slightly for cam movement, as the end thereof passes over the top of a pin 17 functioning as a detent. The said pin being secured to the top section as shown, and is brought to engagement, when the table top is aligned, as shown in Fig. 2 locking the section firmly together in such position, the spring being guided by pin 17.

As a means to release the lock, I have arranged a crank consisting of a rod aligned and

trunnioned in bearings 18; centrally positioned in the rod is a U bend 19 positioned between the slotted end portion and the top, as disengaging means for the slotted portion from the pin when
 5 rocked outward from the top by manipulation of a right angle bent portion 20 at each outer end of the rod, said bent portion obliquely angling outward from the top, and movable there toward. It is now readily shown how the lock
 10 may be disengaged from opposite sides at the time of closing the top. Such modification may be employed, as lie within the scope of the appended claims, having fully described my invention, what I claim as new, and desire to secure
 15 by Letters Patent is:—

1. In folding tables, a table top having two sections hingedly connected to fold together, a leg in each outer corner of each section, and being hinged to rock toward each other in
 20 parallelism, a pivotally mounted lever centrally positioned to the legs of each top section with respect to their respective top section, a rod pivotally connecting each leg with its respective end of the lever as rocking means therefor to
 25 an open and closed position, and means to turn the levers when the top sections are rocked to and from each other.

2. In folding tables, a pair of table top sections, each having a side rail extending there-
 30 around, and hinged to rock the side rails to engagement for an enclosure, legs hingedly connected to each top member to fold within the side rails, a pivotally mounted lever to each top section, and a rod pivotally connecting each end
 35 of the lever with its respective leg as rocking means for each lever, the inner end of each bar pivotally carried by the opposite top section, as actuating means for the legs controlled by the
 40 other end of the bar, means to lock the top in its normally open position, and means to disengage the lock from opposite sides of the table.

3. In folding tables, of the class described,

comprising, a pair of top sections with side rails extending around each, the tops hingedly connected at the outer edge of the rails, a leg hinged in the outer corner of each section and adapted to fold within the side rails, a lever
 80 pivotally mounted at the center thereof to the top of each section in working relation to their respective legs, and a rod connecting each leg to the free end of their lever respectively, the lever having an aperture and a slot communi-
 85 cating therewith, and the slot extending longitudinal of the lever, a bar having one end pivotally carried by the adjacent top section to actuate the movement of the legs in the other
 90 section, a flattened pin in the other end of the bar to rotate in the aperture as turning means for the lever, and to slidably engage in the slot at the completion of the lever rotation, for the purpose specified, a leaf spring carried by the
 95 bar in one top section, and a pin secured in the other top section, the leaf spring having a slot and a pin to guide the same, means to disengage the leaf spring from the first said pin.

4. In folding tables of the class described, comprising, a pair of top sections having a side
 100 rail around each, and laterally extending and being hinged together at the outer extension of the corresponding sides and when folded will form an enclosure, a pair of legs for each section and hingedly connected to rock toward
 105 each other, a bar pivotally connected to one section adjacent the hinged joint and extending into the other section, there being two bars oppositely positioned, lever and rod connecting means at the other end of each bar and being
 110 actuated thereby to rock the legs to and from their respective top sections, and a lock element carried by one of the bars for the open position of the top sections, and means to disengage the lock to fold the table.

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