March 10, 1936. F. S. LAPEYRE 2,033,528

BRIDGE TABLE

Filed Oct. 25, 1935 2 Sheets-Sheet 1

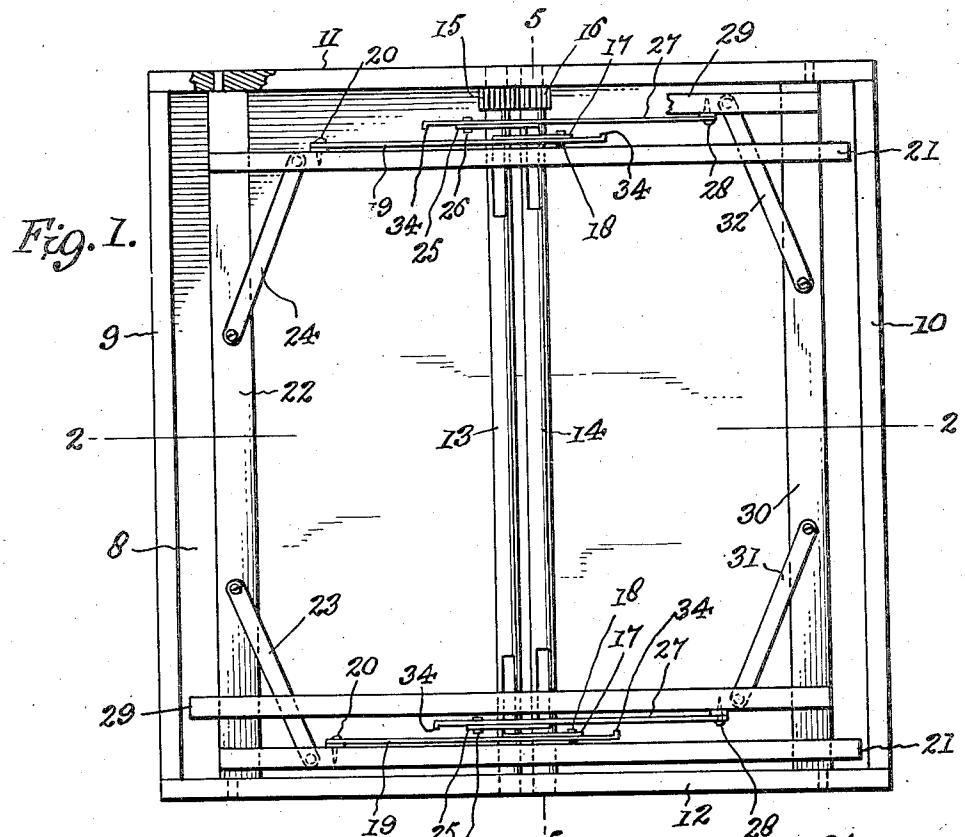


Fig. 1.

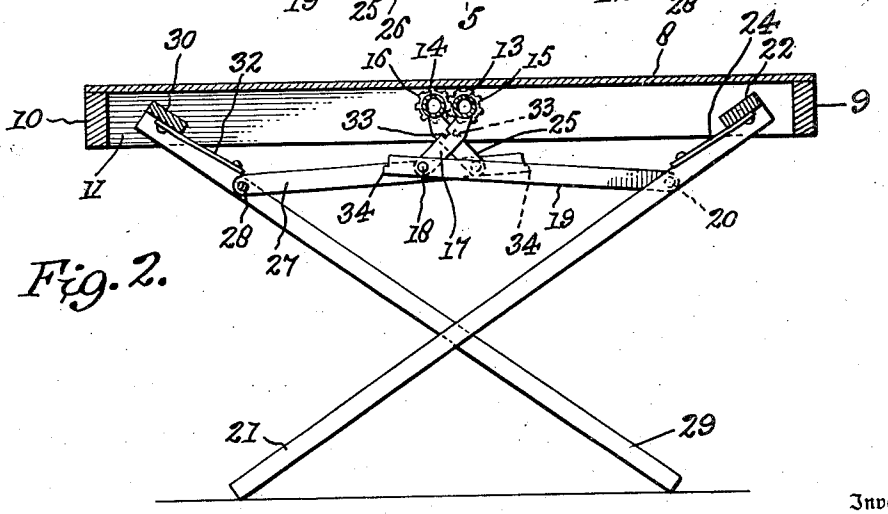


Fig. 2.

Inventor

F. S. Lapeyre

By Wilkinson & Mawhinney

Attorneys.

March 10, 1936. F. S. LAPEYRE 2,033,528

BRIDGE TABLE

Filed Oct. 25, 1935 2 Sheets-Sheet 2

Fig. 3.

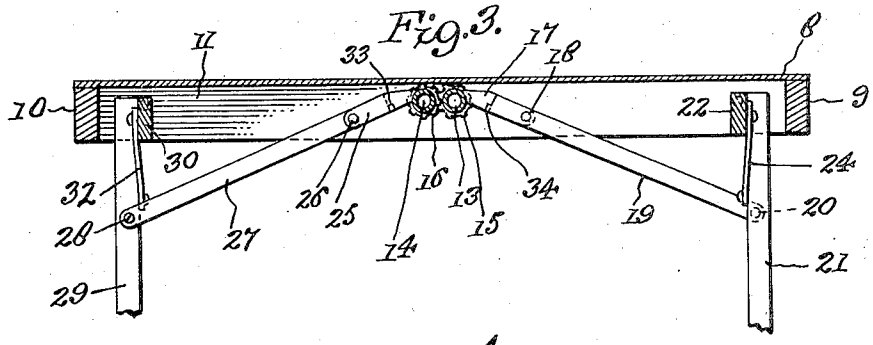


Fig. 4.

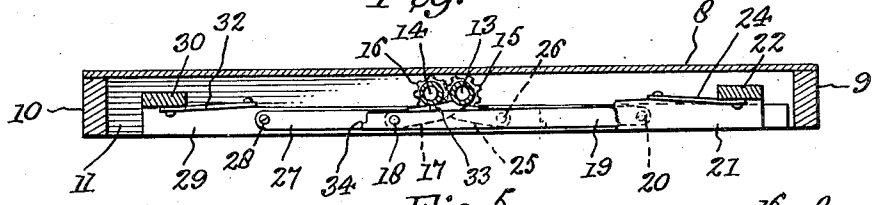
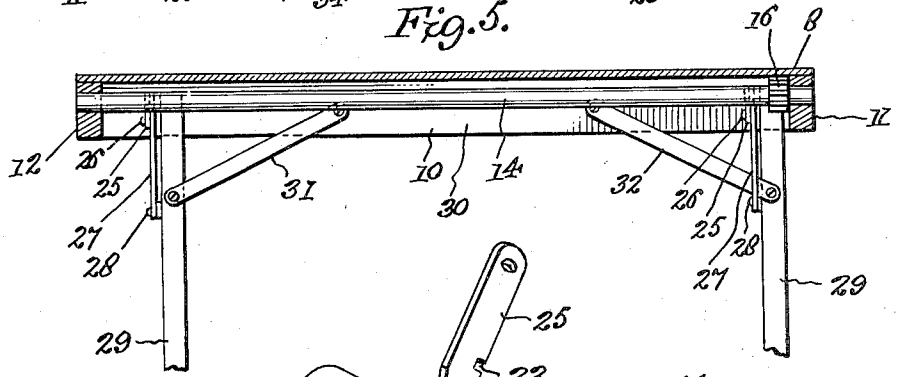


Fig. 5.



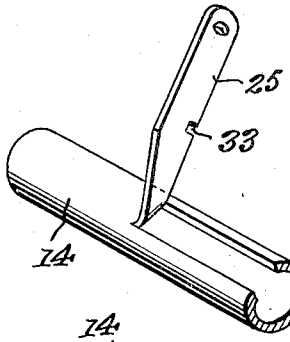


Fig. 7.

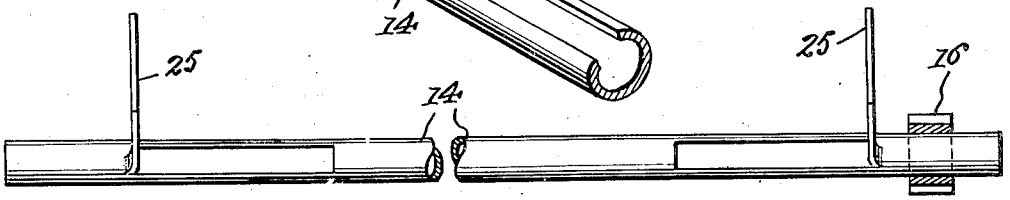


Fig. 6.

Inventor

F. S. Lapeyre

By Wilkinson & Mawhinney

Attorneys.

Patented Mar. 10, 1936 2,033,528

UNITED STATES PATENT OFFICE

2,033,528

BRIDGE TABLE

Fernand Stephen Lapeyre, New Orleans, La.

Application October 25, 1935, Serial No. 46,812

4 Claims. (Cl. 311—85)

The present invention relates to improvements in bridge tables, and has for an object to provide a collapsible leg construction of simple and novel form in which the legs are all required to move in unison.

I am aware that the above general purpose has been attempted in prior patents notably in the Paul Patent No. 1,976,140 and in the Smith Patent No. 1,534,470, but all prior constructions have been prohibitive commercially and I aim to provide a more facile, economical and efficient construction enabling the device to be sold profitably at a relatively small price.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a bottom plan view of a bridge table constructed in accordance with the present invention and showing the legs in the collapsed position.

Figure 2 is a vertical section taken on the line 2—2 in Figure 1 with the legs partially opened out.

Figure 3 is a similar view with the legs partially broken away and illustrated in the fully open position.

Figure 4 is also a sectional view taken on the line 2—2 in Figure 1 and showing the completely collapsed position on the leg structure.

Figure 5 is a vertical sectional view taken on the line 5—5 in Figure 1.

Figure 6 is a side view, with parts broken away and parts shown in section, of a modified form of metal shaft, and

Figure 7 is a fragmentary perspective view of the shaft showing a method of producing the arm therefrom.

Referring more particularly to the drawings 8 represents the table top which is supported in the usual manner on the rectangular open frame composed of the front and rear members 9 and 10 and the side members 11 and 12.

In the side members 11 and 12 at a central position and parallel to one another there are journaled a pair of operating shafts 13 and 14 geared together by the pinions 15 and 16 for conjoint rotation in opposite directions. The shaft 13 carries a pair of arms 17 affixed thereto, one arm being located adjacent each end thereof.

These arms 17 are pivoted at their outer ends 18 to links 19 which are also pivoted in turn at 20 to the legs 21 at one side of the table. The legs 21 are carried by a cross bar 22 suitably journaled for rotation in the side members 11 and 12. Diagonal braces 23 and 24 extend between the cross bar 22 and the legs 21.

In a similar way the companion shaft 14 carries fixedly thereon arms 25 pivoted at 26 to links 27 which are in turn pivoted at 28 to the opposite pair of legs 29. These legs 29 are both carried by a cross bar 30 journaled in the side members 11 and 12. The legs are also braced by the diagonal braces 31 and 32.

In each arm 17, 25 is a notch 33 adapted to be occupied by a projection 34 on the adjacent end of the link 19 or 27.

Of course the device may be made out of any material desired but it is preferred that the two shafts or rollers 13 and 14 may be of tubular metal as illustrated more particularly in Figures 6 and 7. The steel tubing 14 may be provided with a lip turned on each end and the gear 16 stamped therein.

The arms 25 may be punched out of the tube and struck up therefrom at substantially right angles to the axis of the tube. This construction affords a very cheap, simple and rigid arrangement.

In operation it will be understood that all four legs of the table are compelled to move in unison. Only one leg need be grasped to close or collapse the table and in a similar way the operation is simplified in the opening of the table by the fact that the operator need have recourse to only one of the legs for operation while the other hand is engaged in holding the table by one of the side members. The leg operated will through its link and connected arm cause rotation of the entrained shaft which through the gears will communicate its movement to the companion shaft causing simultaneous angular movement of all of the four arms with accompanying operation of the links and the four legs.

When the legs are opened out to the full extent the projections 34 will fall just short of entering the notches 33, this final movement being made necessary by the direct action of the operator as by pushing down upon one of the links when the table is in inverted position. This movement will be communicated to all of the arms causing all of the projections 34 to simultaneously enter their respective notches 33.

In this position a toggle lock is formed in which the pivots 18 and 20 on the one side and 26 and 28 on the other side will be substantially in alinement with the axes of their respective shafts or

slightly beyond this point of alinement whereby no force applied to the table legs will be able to move those legs even in the slightest degree. The toggle lock must be broken by act of the operator. This is a very simple operation however as it is only necessary to lift up upon one of the links preferably near the pivot point with the arm which will require only a very slight exercise of force. Due to the intergeared arrangement all of the toggle locks will be simultaneously disengaged and the entire leg structure may then be folded and collapsed within the confines of the table frame.

Although the invention has been described in connection with a so-called bridge table, it will be understood that the improved construction is applicable to other types of tables or furniture and particularly to collapsible tables.

It will be understood that for illustrative purposes the drawings and description only disclose a single form of which the invention is susceptible and I reserve the right to make such changes and modifications as fall within the scope of the following claims.

What is claimed is:

1. An improved bridge table comprising a table top and frame, legs pivoted to the frame, links pivoted to the legs, shafts journaled in the frame and geared together for conjoint rotation, arms on the shafts pivoted to the links, said links and arms having locking means for engagement when the legs are moved to the fully open position.

2. An improved bridge table comprising a table top and frame, legs pivoted to the frame, links pivoted to the legs, shafts journaled in the frame and geared together for conjoint rotation, arms on the shafts pivoted to the links, said links and arms having mating notches and projections for locking engagement when the legs are in the fully open position.

3. An improved bridge table comprising a table top and frame, legs pivoted to the frame, links pivoted to the legs, shafts journaled in the frame and geared together for conjoint rotation, arms on the shafts pivoted to the links, said arms having notches therein, said links having end portions overlapping the pivotal connection with said arms, said overlapping portions of the links having projections at substantially right angles therefrom to enter said notches when the legs are in the fully open position.

4. An improved bridge table comprising a table top and frame, tubular metal shafts having end portions journaled in the frame in parallel side by side relation, intermeshing gears on said shafts, arms on said hollow shafts, said arms having notches therein, links pivoted to the arms, legs foldably connected with the table and pivoted to said links, said links having end portions overlapping the pivotal connection with the arms, such overlapping portions having projections at right angles therefrom and positioned to enter the notches when the two pivots of the link are in alinement with the axis of the connected shaft.

FERNAND STEPHEN LAPEYRE.