Aug. 14, 1934. R. N. ZEMAITIS 1,970,410

EXTENSION TABLE

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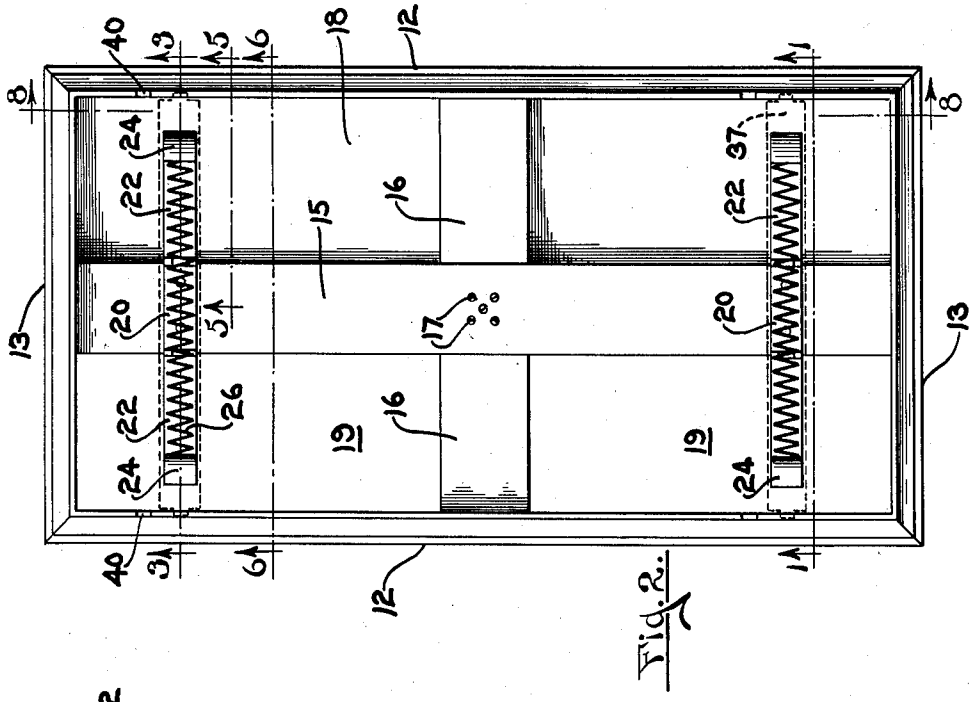


Fig. 2.

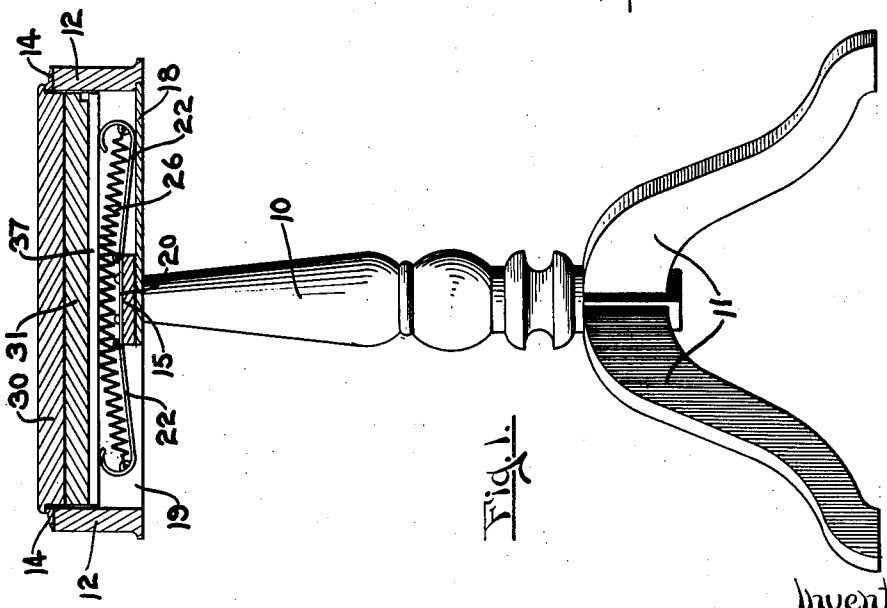


Fig. 1.

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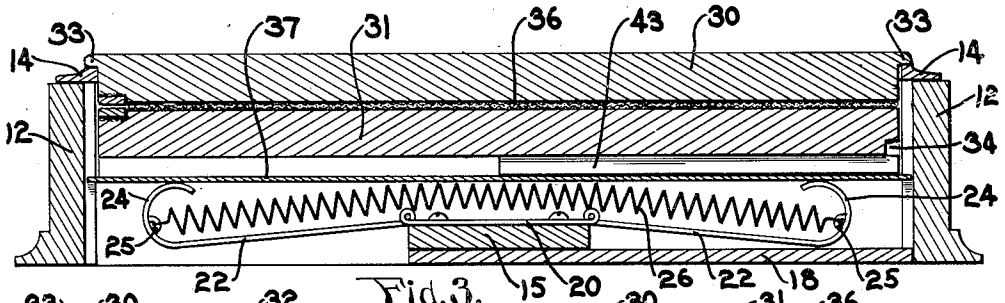


Fig. 3.

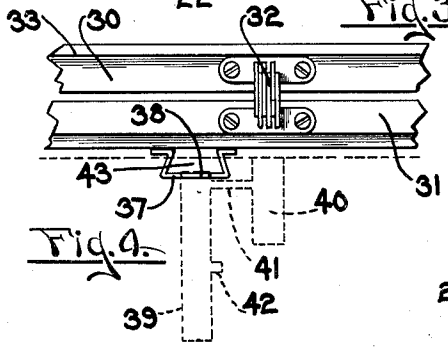


Fig. 4.

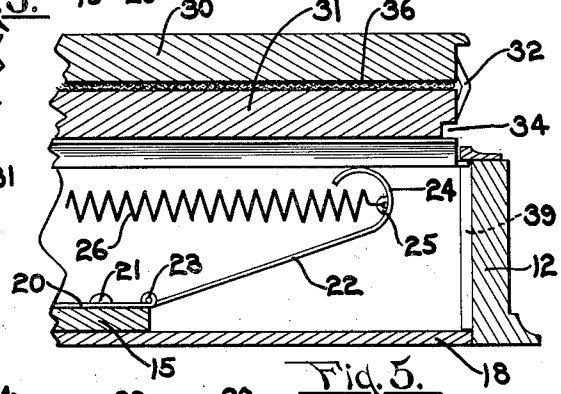


Fig. 5.

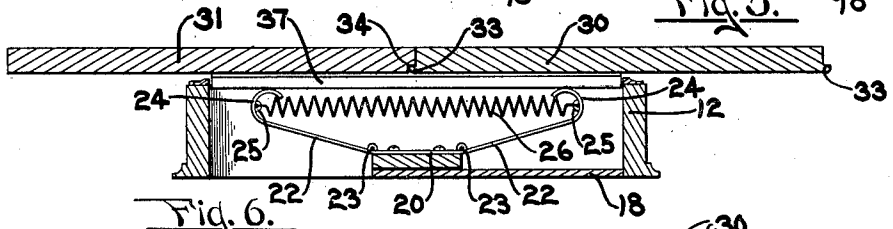


Fig. 6.

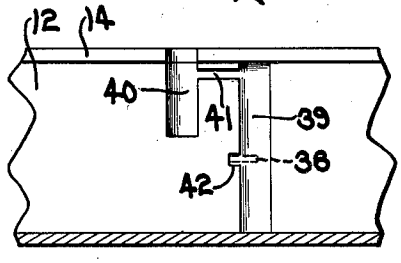


Fig. 7.

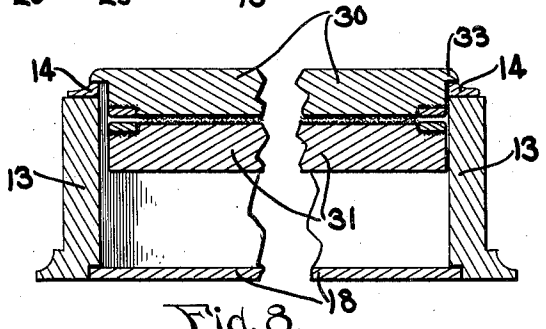


Fig. 8.

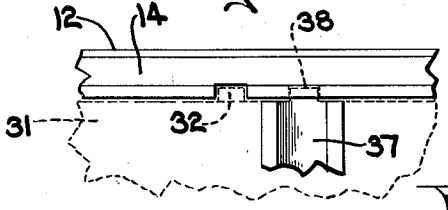


Fig. 9.

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Patented Aug. 14, 1934

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UNITED STATES PATENT OFFICE

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EXTENSION TABLE

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Application October 16, 1933, Serial No. 693,736

6 Claims. (Cl. 45—9)

This invention relates generally to tables and more particularly to an extensible table.

Briefly described, my invention consists of a rectangularly supporting frame having a plurality of leaves nested therein, the uppermost leaf forming a table top before the leaves are unfolded and the plurality of leaves being easily movable upwardly and then being unfolded to form a table of the desired dimensions.

One advantage of my construction is that it can be very quickly and expediently changed from a small table to a larger table. For example, a small end table may be easily changed into a card table.

Also, another advantage of my construction is, that it can be built into different types of tables such as dinette tables, kitchen tables, small living room tables, etc. to form larger tables.

Another advantage lies in the particular spring means for lifting the leaves to an upper position whereby they are easily unfolded.

Still another advantage resides in the simplicity of my device, this making for economical manufacture.

Other advantages will become apparent as the invention is understood.

In the drawings:

Fig. 1 is a vertical transverse section of an extension table, made in accordance with my invention, taken along line 1—1 of Fig. 2.

Fig. 2 is a plan view of the table, the top being removed therefrom in order to expedite the showing.

Fig. 3 is a vertical transverse section taken along line 3—3 of Fig. 2 showing the extension top in closed position.

Fig. 4 is a fragmentary edge view of the folded top showing the disappearing hinge thereon and also showing, in dotted lines, the guide slots in the side rail of the table.

Fig. 5 is a fragmentary vertical section taken along the line 5—5 of Fig. 2 showing the top in raised position but not extended.

Fig. 6 is a fragmentary vertical transverse section taken along line 6—6 of Fig. 2 showing the top in raised, extended and unfolded position.

Fig. 7 is a fragmentary elevation of the side rail, looking from the inside, showing the guide slots for the hinge and the guideway or track.

Fig. 8 is a fragmentary longitudinal section of the top taken along the line 8—8 of Fig. 2.

Fig. 9 is a plan view of a fragment of one side rail showing the guideway or track in connection therewith and also showing a portion of the top in dotted lines.

Like numerals indicate like parts throughout the several views.

Referring to Fig. 1, numeral 10 designates the pedestal of a table, this being supported by legs 11.

The table proper, see particularly Fig. 2, consists of side members 12 and end members 13. A trim strip 14 extends entirely around the upper side of the frame. Cross members 15 and 16, see Fig. 2, extend at right angles to each other interiorly of the frame and connect onto the pedestal 10 as indicated at 17, these cross members having their ends rigidly attached to the inner side of the frame whereby the same is supported. A panel member 18, see particularly Fig. 3, extends partly across the underside of the frame and provides a shelf interiorly of the table, this shelf being accessible not only when the table is fully extended but also accessible by reaching upwardly underneath the table through the open space 19.

As clearly shown in Figs. 2, 3 and 6, metal base plates 20 are fastened to the longitudinal cross member 15 by fastening means 21 and arms 22 are hinged at each end of each of these base plates as indicated at 23. The arms 22 are curved upwardly and inwardly at their outer ends as indicated at 24 and an ear 25 extends from each curved portion 24. Springs 26, under considerable tension, are attached to the opposed ears and tend to pull the arms 22 inwardly toward one another, the purpose of which will be later described.

The table top consists of an upper leaf 30 and a lower leaf 31, these leaves being hinged together as indicated at 32. The upper leaf 30 has a bead 33 extending entirely therearound, this bead resting upon the trim 14 when the table is in its folded and lower position. See Figs. 1 and 8. The lower leaf 31 has a groove along one of its lower edges as indicated at 34, see Figs. 3 and 5, and this groove receives the bead 33 along one of the edges when the table is in fully extended position. This is shown at the central portion of Fig. 6. A fabric cover 36 is provided for the top of the table.

As shown in Fig. 4, guideways or tracks 37 are formed with a channel shape and the ends 38 of these members engage in grooves 39 at opposite sides of the side frames 12. In the particular construction shown, there are two of these vertically moving track members 37 and each is of identical construction but it is to be understood that more than two may be utilized if desired.

Fig. 7 shows the vertical slot 39 which receives the end 38 of the track member 37 and 40 indi-

cates a second slot which receives the hinge member 32. A connecting slot 41 provides for the disassembly of the leaves from the frame in which they are normally positioned as will later be described and a small recess 42 provides means for receiving the extension 38 to hold the table in its lowered position.

The lower leaf 31 of the table top has a guide 43 which extends partly thereacross, see Fig. 3, and which snugly engages the track member 37, see Fig. 4.

The operation

The extending and closing movements of my table are easily understood. Assuming that the several parts are located as shown in Fig. 1, it will be understood that the spring 26, under tension, tends to pull the arms 22 inwardly and outwardly but this movement has little effect against the weight of the top as its leverage arm is small. As a matter of fact, it is not strong enough to raise the top and the top remains as shown in Figs. 1 and 3. Furthermore, the entire top assembly may be slid longitudinally a slight distance so that the extensions 38 of the track members 37 assume a position within the recesses 42, see Fig. 7, and thus positively prevent upward movement of the top. Fig. 8 shows a longitudinal section and indicates the clearance necessary for endwise movement whereby the aforesaid locking arrangement is had.

After the table has been shifted endwise to an unlocked position, the person utilizing the same lifts slightly upon the top leaf 30 by contacting his fingers against the bead 33 and this upward inclination causes both the leaves 30 and 31, to raise upwardly, the tension spring 26 becoming more effective as upward movement is had. The parts assume a position as shown in Fig. 5.

Next, the leaves 30 and 31 may be shifted laterally to the left from the position as indicated in Fig. 5, the extension 43 sliding along the guideway 37 until it abuts against the side member 12, and then the upper leaf 30 is turned about the hinge 32 to an unfolded position. This is shown in Fig. 6 and in this position the bead 33 passes into the groove 34 and the leaf 30 firmly rests upon the guideway 37. The table is now ready for use.

The invention is described in the appended claims and is to be considered comprehensive of all forms of structure coming within their scope.

I claim:

1. In combination, a frame, a table top including two hinged leaves located within said frame, the length of the leaves being substantially equal to the length of frame and one of the leaves serving as the table top, the lower leaf having a projection thereon, means slidably receiving said projection, means for mounting the first mentioned means for vertical movement and spring means for raising the said hinged leaves.

2. A table as set forth in claim 1 in which the spring means includes an arm camming against the underside of the first mentioned means, said arm being pivoted at one end and having spring means tending to raise its other end.

3. In combination, a frame, a top including two leaves hinged together at one side, said frame having spaced grooves adjacent the inner portion of one of its side members, one of said grooves receiving the said hinge members, a projection on the said top member, a U-shaped member for receiving said projection having one end located in said other groove whereby the top may be moved vertically.

4. An extensible table of the class described comprising, a rectangular frame, means for supporting the frame in a horizontal plane, a top comprising two hinged leaves, said leaves being mounted for vertical movement within the said frame, an extension on the lower side of the lower leaf, a track receiving said extension, said track being mounted for vertical movement within the said frame, a stationary base plate, arms pivoted at each end of said base plate and spring means extending between the free ends of the arms for the purpose described.

5. In combination, a frame, a top including two leaves stacked one upon the other, the uppermost leaf being substantially co-extensive with the frame, means for positively maintaining the top of the uppermost leaf in a predetermined relationship with respect to the top edge of the frame whereby it serves as a table top, spring means for urging the leaves upwardly and means for slidably carrying said lower leaf for the purpose described.

6. A combination of elements as set forth in claim 5 in which the leaves are pivotally connected together at their longer sides.

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