Dec. 25, 1934. O. A. RAPHAEL 1,985,620

REFECTORY TABLE

Filed Sept. 12, 1933

Fig. 6.

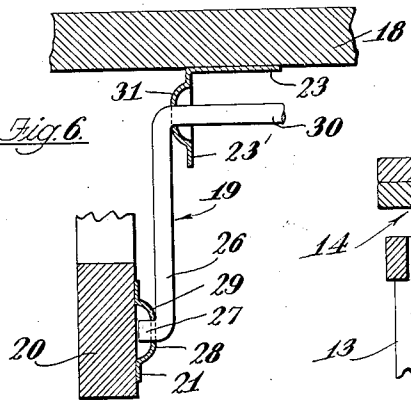



Fig. 1.

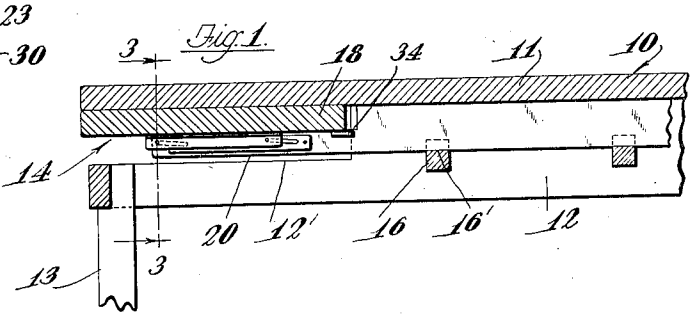



Fig. 2.

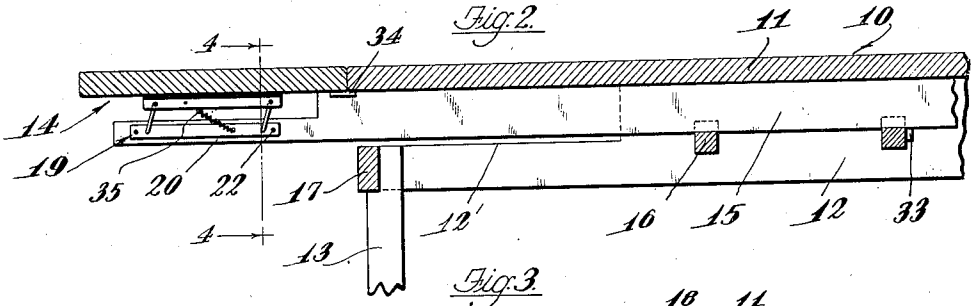



Fig. 3.

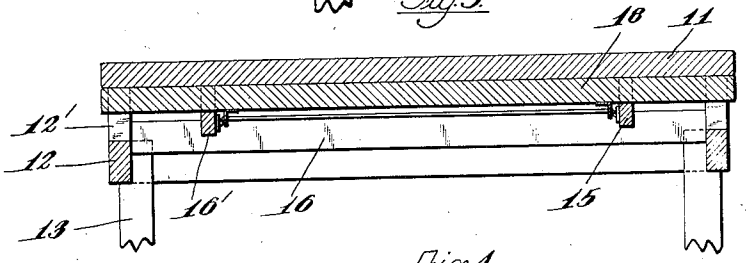



Fig. 4.

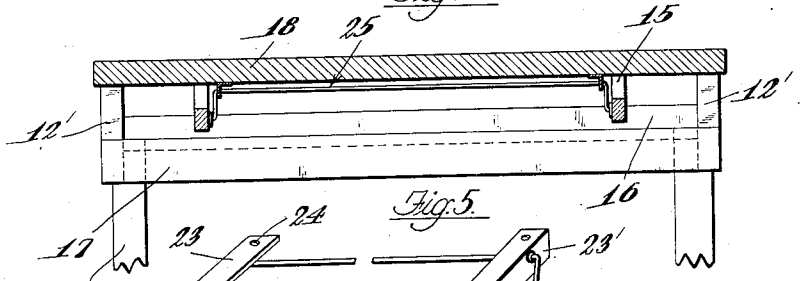
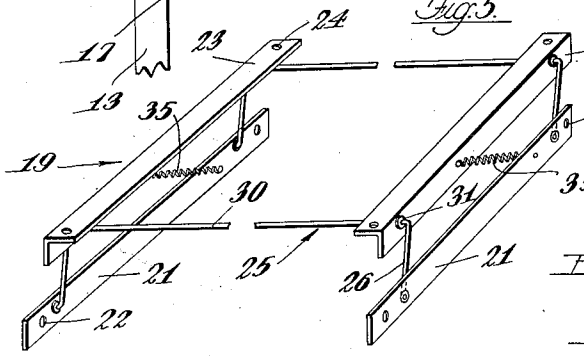



Fig. 5.




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# UNITED STATES PATENT OFFICE

1,985,620

## REFECTORY TABLE

Olivius A. Raphael, Los Angeles, Calif.

Application September 12, 1933, Serial No. 689,059

3 Claims. (Cl. 311—58)

My invention relates to a class of tables known in the trade as refectory tables in which a table leaf is arranged below the table top and may be moved into operative position to form an extension with the table top at one end thereof.

It is an object of this invention to provide a refectory table in which the extension leaf may be easily and quickly moved into position by a parallel link mechanism and when not in use can be quickly and easily placed into a recess immediately below the end of the table.

With the above and other objects in view, which will appear as the description proceeds, my invention consists in the construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawing, which forms a part of the specification, I have illustrated a preferred embodiment of my invention, and in which:

Fig. 1 is a vertical cross section of a part of a table to which my invention is applied, the table leaf being shown in its inoperative position folded in its compartment below the table top.

Fig. 2 is a view similar to Fig. 1 showing the table leaf in its operative position flush with the surface of the table top.

Figs. 3 and 4 are sections taken on lines 3—3 of Fig. 1 and 4—4 of Fig. 2, respectively.

Fig. 5 is a perspective view of the parallel link mechanism used for moving the table leaf into and out of operative position.

Fig. 6 is a detail view on an enlarged scale showing the bearings in which the links are positioned.

Referring to the drawing, 10 indicates a portion of a table provided with a stationary table top 11, side frame members 12 to which the top is secured, and legs 13 secured to the side frame members. The table leaf with its operating mechanism is indicated as a unity at 14. It consists of a pair of parallel bars 15 which are slidably mounted immediately below the table top 11 in slots 16' provided in a pair of guide rails 16 extending transversely thereto and fastened to the side frame members 12 of the table.

The side frame members 12 and the end frame members 17 are cut away at 12' to form a recess for the accommodation of the table leaf 18 and its link mechanism 19 when the same are in their retracted position, as shown in Fig. 1. The outer ends of the slide bars 15 have their upper portions cut away to form supporting arms 20 for the link mechanism 19 and the table leaf 18.

The link mechanism 19 consists of two bars 21 secured to the inner faces of the supporting arms 20 by suitable fastening means, such as screws 22. On the under side of table leaf 18 a pair of angle irons 23 are fastened by screws 24 and so positioned that the vertical portion 23' of the angle irons 23 are spaced in vertical planes slightly inwardly from the vertical planes of bars 21 for the accommodation of a pair of parallel links 25 having the shape of inverted U's with the ends of the legs 26 terminating in horizontal bearing shafts 27 seated in a bearing 28 made in the bars 21 by forming cup-shaped bosses 29 which are perforated for the accommodation of shafts 27.

The transverse members 30 of the links 25 pass through the vertical portions 23' of the angle irons 23 which are, likewise, provided with cup-shaped bosses 31 to provide suitable bearings for the transverse members 30.

### *Operation*

The table leaf 18 which has the same width as the stationary top 11, when in its inoperative position is retracted to rest upon the supporting arms 20 with the angle irons 23 closely adjacent to bars 21, as shown in Fig. 1. If it is desired to move the table top 18 into operative position, the same is seized by the hands and moved horizontally outward, thereby causing the slide bars 15 to slide in the guide rails 16 until engaged by a stop 33 carried by the slide bars 15. The leaf 18 is now swung upwardly on the parallel link mechanism 19 and inwardly until the inner edge rests upon the outer portion of slide bars 15, as clearly shown in Fig. 2. The position of the stops 33 is so arranged that the leaf 18 will contact the table with the stationary top 11 and form a flush surface therewith. It should be noted in this connection that the supporting arms 20 are somewhat longer than that portion of the leaf 18 resting thereon, as shown in Fig. 1, in order to accommodate for the curvilinear motion of the link mechanism 19 when the leaf 18 is swung upwardly into operative position.

A lock, such as a latch and hook 34, are provided on the under side of the leaf 18 and top 11 to fasten the same together to prevent accidental relative displacement between the table top 11 and the leaf 18.

The parallel link mechanism may be provided with helical tension springs 35 connecting the bars 21 to the angle irons 23. The springs 35 will act, when the extension leaf 18 is in operative position, as shown in Fig. 2, under tension resisting any movement to move the extension leaf toward the left and into inoperative position. If desired,

the hook and latch 34 may be dispensed with. Another function of the springs 35 is to move the extension leaf 18 in close contact with the edge of the stationary table top 11, tending to hold it snugly against the edge.

Various changes in the construction and arrangement of parts may be made by those skilled in the art without departing from the spirit of my invention as claimed.

I claim:

1. A refectory table having a stationary top and legs supporting the top, a pair of bars slidably mounted immediately below the top, guides for the bars, a table leaf, a pair of supporting arms extending outwardly from the bars, stop means limiting the outward sliding movement of the bars and so arranged that when the bars are fully extended the outer portions thereof form a support for the leaf when the latter is in operative position, and a parallel link mechanism connecting the table leaf to the supporting arms whereby the table leaf may be moved upwardly and to rest on the outer portions of the bars.

2. A refectory table having a stationary top and legs supporting the top, a pair of bars slidably mounted immediately below the top, guides for the bars, a table leaf, a pair of supporting arms extending outwardly from the bars, stop means limiting the outward sliding movement of the bars and so arranged that when the bars are fully extended the outer portions thereof form a support for the leaf when the latter is in operative position, a parallel link mechanism connecting the table leaf to the supporting arms whereby the table leaf may be moved upwardly and to rest on the outer portions of the bars, and spring means tending to move the table leaf toward the stationary top when the leaf is in operative position.

3. A refectory table having a stationary top and legs supporting the top, a pair of bars slidably mounted immediately below the top, guides for the bars, a table leaf, a pair of supporting arms extending outwardly from the bars, stop means limiting the outward sliding movement of the bars and so arranged that when the bars are fully extended the outer portions thereof form a support for the leaf when the latter is in operative position, a parallel link mechanism connecting the table leaf to the supporting arms whereby the table leaf may be moved upwardly and to rest on the outer portions of the bars, said parallel link mechanism including a pair of parallel angle irons secured to the underside of the table leaf and a pair of parallel links pivoted to the supporting arms and the angle irons, respectively, and adapted to move the table leaf into and out of operative position, and spring means tending to move the table leaf toward the stationary top when the leaf is in operative position, the table leaf forming a surface flush with the stationary top when in operative position.

O. A. RAPHAEL.