June 18, 1940. W. C. RASTETTER 2,205,274

EXTENSION TABLE

Filed May 12, 1938 2 Sheets-Sheet 1

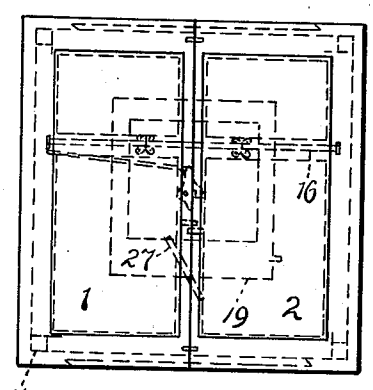


Fig. 1.

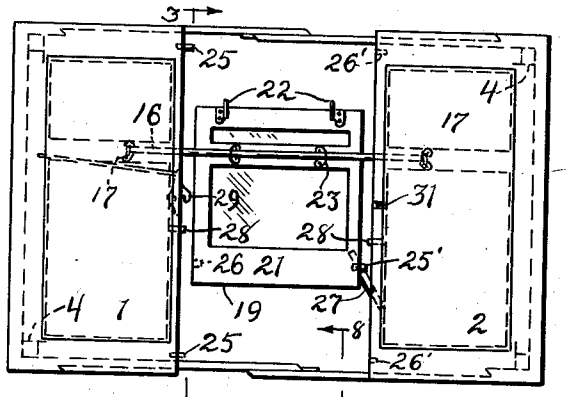


Fig. 2.

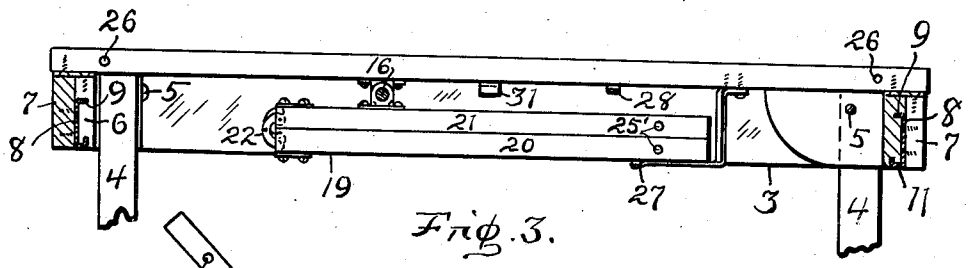


Fig. 3.

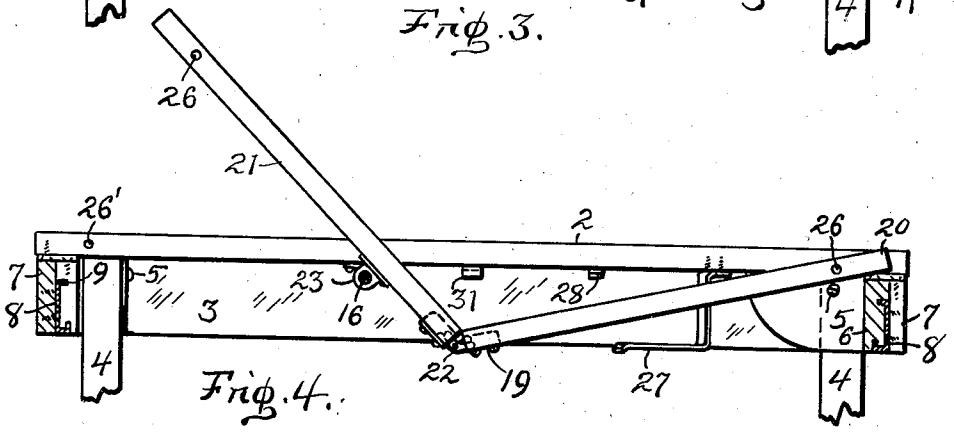


Fig. 4.

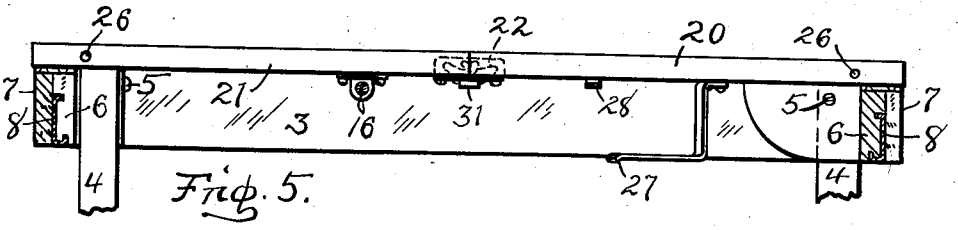


Fig. 5.

William C. Rastetter INVENTOR.

BY

H. G. Burns ATTORNEY.

June 18, 1940. W. C. RASTETTER 2,205,274

EXTENSION TABLE

Filed May 12, 1938 2 Sheets-Sheet 2

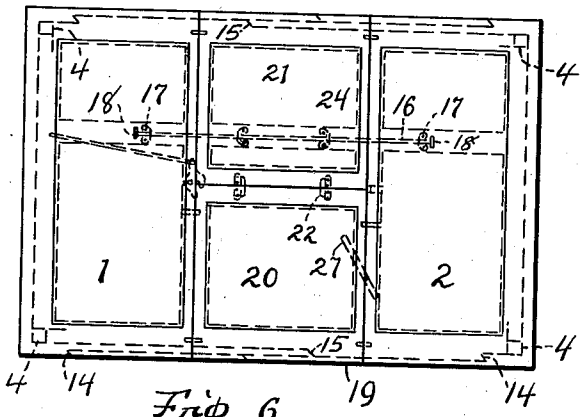
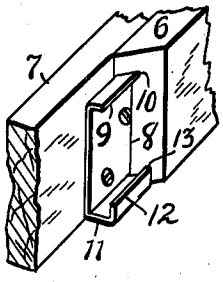


Fig. 6.

Fig. 8.



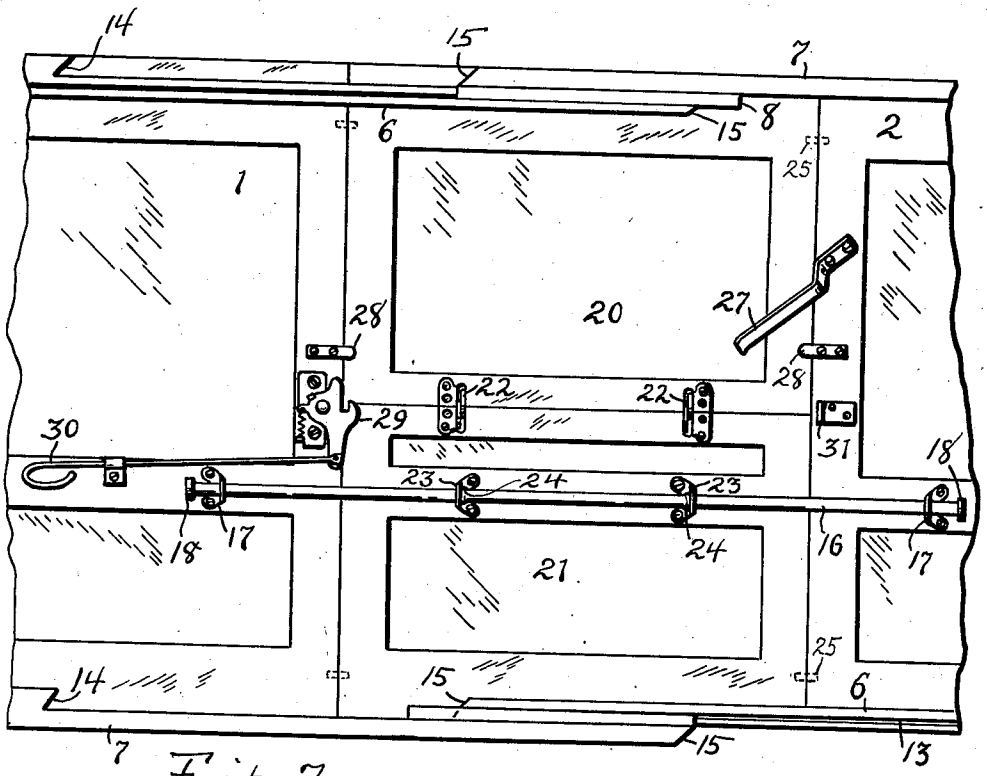


Fig. 7.

William C. Rastetter INVENTOR.

BY

H. G. Burns ATTORNEY.

Patented June 18, 1940 2,205,274

UNITED STATES PATENT OFFICE

2,205,274

EXTENSION TABLE

William C. Rastetter, Fort Wayne, Ind.

Application May 12, 1938, Serial No. 207,554

1 Claim. (Cl. 311—42)

This invention relates to extension tables of that type in which the length of the table is increased by positioning an additional top section or leaf between the main top sections of the table, and concealing the leaf when not in use beneath the main top sections.

An object of the invention is to construct a table having main top sections provided with a supporting structure therefor, adapted to be extended, and an additional top section or leaf having foldable parts, said leaf being pivotally supported in connection with the main sections and movable into operating position between the main top sections when the latter are extended, or folded and supported in a plane beneath the top of the main sections to permit contraction of the main sections thereby to conceal the folded leaf.

Another object of the invention is to provide an easily operated locking means for securing together the main top sections after the additional leaf is in folded position and the main top sections are contracted.

And a further object of the invention is to construct the side frame members of the supporting structure for the main table top sections so as to constitute sliding connections for the two main sections whereby to permit said sections to be extended.

Other objects and advantages of the invention appear in the following description.

An illustrative embodiment of the invention is shown in the accompanying drawings, in which:

Fig. 1 is a top plan view of a table embodying the invention as it appears in contracted position;

Fig. 2 is a similar view with the main top sections fully extended and the additional folding top section in folded position;

Fig. 3 is a fragmentary view showing a vertical section on the line 3—3 of Fig. 2;

Fig. 4 is a similar view showing the additional top section partially folded;

Fig. 5 is another similar view with the additional top section fully unfolded and in position for use;

Fig. 6 is a top plan view of the table showing the additional top section positioned between the main top sections;

Fig. 7 is a fragmentary bottom plan view of the main and additional top sections in operative position, showing also the means for limiting the extending movement of the main sections and for supporting the additional top section, and also showing the mechanism for locking the main sections together when in contracted position; and

Fig. 8 is a detail perspective view showing the overlapping side members and their connecting slide, the transverse section being on the line 8—8 of Fig. 2.

Figs. 3, 4, 5, 7 and 8 are drawn to comparatively larger scale than the other figures.

Extensible table sections

The illustrative embodiment of the invention consists of two extensible main top sections 1 and 2 including a supporting structure constituted of a frame 3 provided with legs 4 that preferably are secured to said frame at their upper ends upon pivots 5 to permit folding of the legs within the frame. The sides of the frame are formed of overlapping inner and outer side members 6 and 7 respectively that overlap each other and have relative sliding movement. Upon the inner face of each outer side member adjacent its innermost end is secured a corresponding guide-plate 8, the upper edge of which has an inturned horizontal flange 9 that has sliding movement in a longitudinal groove 10 made in the outer face of the corresponding inner side member 6. The lower portion of the guide 8 has an extension 11 that underlies the lower face of the inner side member 6 and is provided with an upstanding flange 12 that has sliding movement in a longitudinal groove 13 made in the bottom of the inner side member 6. The upper flange 9 when positioned in the groove 10 prevents relative vertical play of the side members while the flange 12 prevents lateral play thereof. Thus, the side members are permitted to have relative longitudinal movement and are held in proper operating position throughout their sliding movements.

Each side frame member has near its outermost end an undercut shoulder 14, and the opposite or extending end of each side member presents a slanting face 15 that, when the main sections are moved to contracted position, fits behind the corresponding shoulder 14 on the other member whereby the adjacent side members are held snugly and firmly together with their exposed outer faces flush.

Folding top section

The main sections 1 and 2 are connected together by means of a coupling rod 16 that extends loosely through brackets 17 secured respectively upon the under faces of the panels forming the tops of said main sections, and has longitudinal sliding movement in said brackets limited by stops 18 on the ends of said rod which have contact with the corresponding brackets when the main sections are fully extended.

Upon the coupling rod 16 is pivotally mounted an additional top section 19 constituted of a leaf formed of two parts 20 and 21 connected together by hinges 22. Upon the undersurface of the section 21 are secured brackets 23 through which the coupling rod 16 loosely extends. The leaf has pivotal movement upon the coupling rod and is

prevented from having longitudinal movement relative thereto by shoulders **24** on the rod that abut the adjacent faces of the brackets **23** in opposite directions. Thus, when the main sections are parted to the fullest extent permitted, by contact of the stops **18** with the brackets **17**, the leaf is then held midway between and spaced apart from the inner edges of the tops of the main sections. The space between the inner edges of the main top sections, when the sections are thus positioned, is sufficiently wide as to permit free tilting movement of the folding leaf upon the coupling rod without interference or contact with the tops of the main sections.

Dowel pins **25** that project from the inner edge of the section **1** are arranged to be received in corresponding sockets **26** in the adjacent edges of the folding leaf **19**, and corresponding dowel pins **25'** that project from the opposite side of the folding leaf are arranged to be received in corresponding sockets **26'** in the adjacent edge of the main section **2**, when the top sections are all alined in a common plane and contracted into compact operating position, thus to maintain an uniform top surface for the table.

A stationary rest **27** consisting of a bent bar is secured to the undersurface of one of the main top sections, the lower end of said rest being so positioned as to extend beneath the part **20** of the folding leaf thereby to sustain the leaf in a definite position when folded, and also to guide the part **20** of said leaf during its unfolding movement to insure elevation of the outer end of the part **20** sufficiently to clear the tops of the corresponding side members **6** and **7**. Thus, unfolding of the leaf in moving it to its operating position is unobstructed. Also, to the undersurfaces of the tops of the main sections **1** and **2** are secured stationary supports **28** that project sufficiently from the corresponding tops as to underlie the corresponding edges of the part **20** of the leaf when said leaf has been placed in operative position between the main top sections and said sections are contracted against the leaf. When the main sections are moved apart to the extent limited by the stops **18** on the coupling rod **16**, the leaf is held upon the coupling rod midway between the main sections clear of said supports so that folding movement of the leaf is then unobstructed by said supports. The limited parting movement of the main sections is sufficient also as to permit complete withdrawal of the dowel pins from the corresponding sockets in which they engage so that folding of the leaf is unobstructed by said dowel pins.

Locking mechanism

To prevent unintentional extension or parting of the main sections from their contracted position there is provided a spring-restrained latch **29** pivotally supported beneath the inner edge of one of the main top sections, which latch is provided with an operating rod **30** the outer end of which underlies the outer edge of the corresponding main top section where it may conveniently be reached by the operator.

A stationary lug **31** is secured to the underface of the opposite top section, adjacent the inner edge thereof opposite the latch **29**, and becomes engaged by said latch upon folding of the leaf and movement of said top main sections into contracted position, thus securing the main sections together with the inner edges of their tops abutting each other.

Operation

In operating the invention, assuming the main sections are in contracted position and secured together by the latch mechanism, the tops of the main sections then afford a continuous area that extends in a single plane limited to the extent of the upper surfaces of the main sections. When it is desired to increase the top surface of the table the latch is opened by manipulating the operating rod **30** so as to disconnect the latch from the lug **31**, and coincidentally moving the main sections apart to the point limited by engagement of the stops **18** with the brackets **17**, whereupon, the folding leaf supported upon the coupling rod **16** and the stationary rest **27**, is fully exposed between the main top sections with sufficient clearance with respect to the latch **29**, stationary supports **28** and the inner edges of the main top sections, to permit tilting movement of the leaf **19** upon the coupling rod **16**. The operator, then, by applying downward pressure upon the hinged end of the part **21** causes upward movement of the opposite ends of the parts **20** and **21** of the leaf, and the part **20** is guided by the rest **27** upwardly to such extent that it passes over and onto the adjacent side members **6** and **7** (Fig. 4). When the unfolding movement of the leaf is completed it assumes a position between the main top sections in a common plane therewith and then the ends of the two parts of the leaf rest upon the corresponding side members. The main sections then are moved toward each other into position against the sides of the unfolded leaf, whereupon the supports **28** become projected beneath the part **20** of the leaf, and the dowel pins are projected into the corresponding sockets **26'** provided therefor, and the leaf retains its support from the rod **16**. Thus, the unfolded leaf is sustained in operating position with its top surface extending in a common plane with the top surfaces of the main sections. In this manner an enlargement of the useful upper surface of the table is effected.

In order to contract the table, the main sections are first parted to their fullest extent, then the leaf is folded to the position indicated in Fig. 3, and subsequently the main sections are moved into their complete contracted position, whereupon the folded leaf is completely concealed beneath the top of the main sections and is held supported upon the coupling rod **16** and the rest **27**.

Variations from the particular construction above disclosed may readily be made by exercise of engineering skill without departure from the spirit or scope of the invention, and the following claim is intended to be inclusive of such variations.

What I claim is:

In an extension table having opposed main top sections separable for the reception therebetween of an extension leaf, side frame members secured to the undersurfaces of said sections at the sides thereof, each having an undercut shoulder and an extending portion that overlaps the corresponding extending portion of the adjacent side member, the outer end of each side member having a slanting face that fits behind the corresponding shoulder on the adjacent side member when said top sections are moved to contracted position, whereby the adjacent side members are held snugly and firmly together with their exposed outer faces flush, and means to lock said top sections together when in contracted position.

WILLIAM C. RASTETTER.