

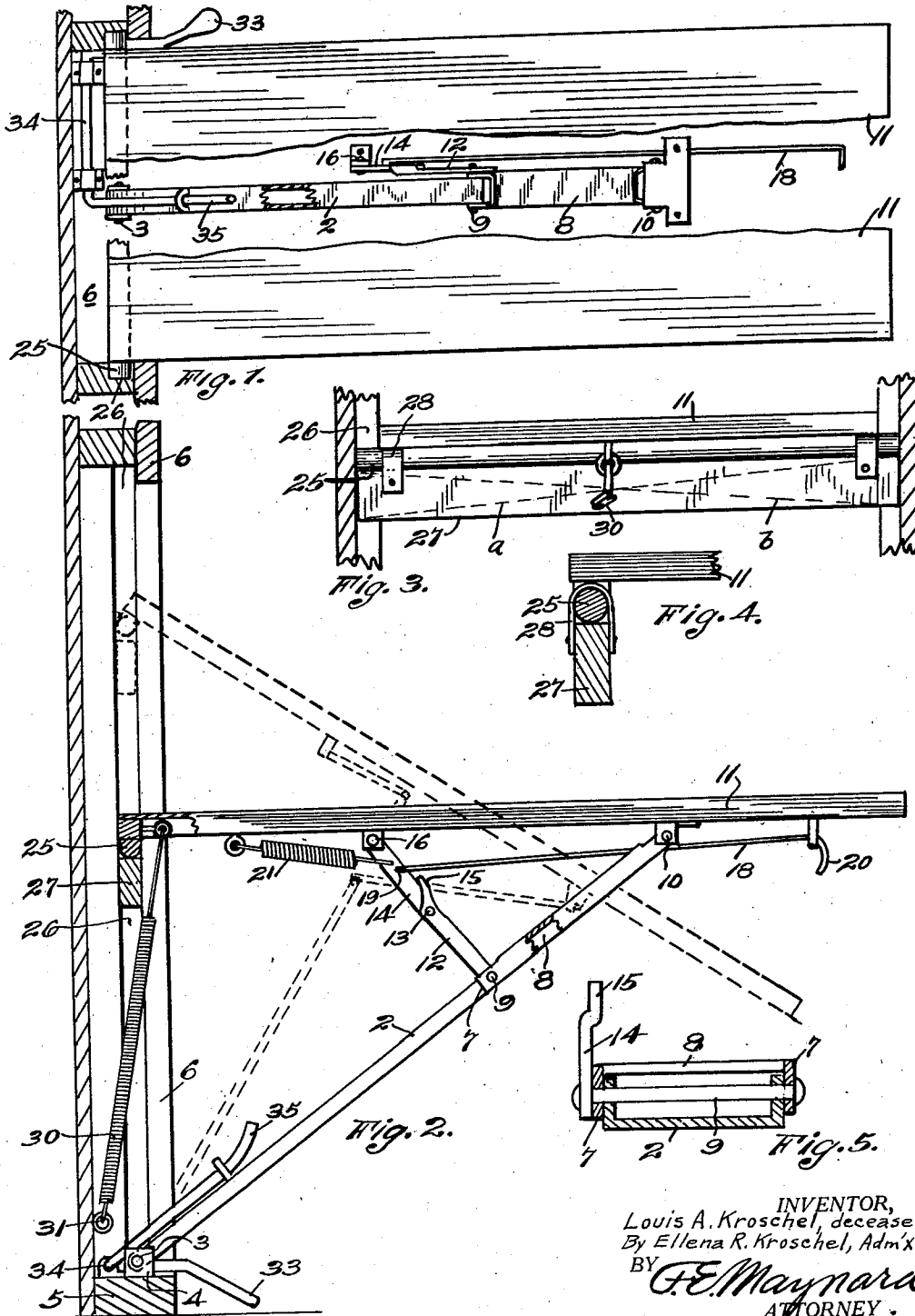
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BUILT-IN FURNITURE

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## UNITED STATES PATENT OFFICE

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## BUILT-IN FURNITURE

Substitute of application Serial No. 107,155, filed May 6, 1926. This application filed May 20, 1929.  
Serial No. 364,668.

This invention relates to wall and built-in furniture and especially to means for foldably connecting a board, table or seat element to a wall or wall cabinet.

An object of the present invention is to provide wall furniture and its hardware, of very simple construction, and of light but substantial, durable parts of low cost.

Another object is to provide a foldable, wall furniture unit embodying a table or board element which, while having but a single central, channel iron, foldable strut, is so stabilized as to be very rigid.

Another object is to provide a wall furniture unit of low cost of installation.

Another object is to provide means facilitating folding and unfolding of the element.

An object is to provide a furniture unit which is self-locking when extended.

Other objects and advantages will be made manifest in the ensuing specification of apparatus embodying one form of the invention; it being understood that modifications, variations and adaptations may be resorted to within the spirit and scope of the invention as it is here claimed.

This application is a substitute for application number 107,155, filed May 6, 1926.

Figure 1 is a plan of the extended table element, of a unit, broken away between sides.

Figure 2 is a side elevation of the extended table; the wall cabinet being in section.

Figure 3 is a cross-section showing the stabilizer of the table board in elevation.

Figure 4 is a cross-section of the stabilizer.

Figure 5 is a cross section of the folded and nested link of the main strut.

It has long been the practice to provide a board member or element with trunnions extending from one end and slidable in slots or vertical runways and to support the board in a horizontal position by various braces.

The present invention aims to provide means for stabilizing the extended board while it is supported on a single centrally mounted folding strut or arm.

The new brace comprises a bottom channel-iron link 2 having a cross-pin or pivot 3 in bearing ears 4 fixed on a solid sill or base

5, which is suitably disposed in a cabinet 6 into the front plane of which the board, seat or table, as the case may be, is foldable flush.

The outer end of the link 2 fits between side tongues 7 formed by cutting away the web of the channel link 8 and a pivot pin 9 connects the links 2 and 8 so that the former can be folded close, in nested position, on link 8 as shown in Figure 5, when the links are buckled and swung up to a closed vertical position on the cabinet recess.

The outer end of link 8 is pivoted at 10 to the outer end of an element 11, here shown as a table or ironing board.

When the element 11 is extended in horizontal position it is rigidly braced by means of a secondary truss comprising a knuckle-jointed link having a section 12 hung on pivot pin 9 and pivoted at 13 to the near end of section 14 which is overlapped by a stop finger 15 on section 12, when the sections are opened past center line.

Section 14 is pivoted at 16 on the element 11 and when the latter is folded out the primary two-piece strut 2—8 straightens out and pulls the knuckle-brace 12—14 out straight, and this latter forms a firm support holding the element 11 in given angle as to primary strut 2—8.

When it is desired to break the knuckle truss 12—14 a reach rod 18 connected at 19 to the section 14 is pulled forward in its bearing 20 (under the element 11). This allows the main strut to knuckle up and the outer end of the element 11 swings down.

A spring 21, connecting section 14 and the element 11, tends to automatically lock the knuckle truss in effective position as the element 11 is extended.

It is understood that the element 11 may be foldably related to the cabinet 6 in various ways.

As here shown the rear end of the table element 11 has a transverse trunnion piece 25 whose ends slide snugly in guides 26 at the side of cabinet 6 so that while the inner end of the table 11 may slide up and down it cannot pull forward.

A feature of this invention consists of means to stabilize the horizontal table and

prevent its being tilted down at either side while it is supported only by the narrow, centrally disposed primary linked channels 2—8.

The stabilizer comprises a cross-beam 27 of a length and width to closely run in the guides 26. The beam 27 has bearing straps 28 fitting the rounded trunnion part 25 and swinging thereon when the table is moved. To obtain bracing effect the beam 27 has such depth that it binds endwise against the bottoms of the guides 26 when there is any tilting side pressure applied to the extended table, this binding action being indicated by the dotted lines *a—b*, Fig. 3.

A suitable spring 30, attached at one end to the inner end of the table, and at its lower end of a fixed point 31 back of pivot 3 of the link 2, tends to pull the table, when upright, back against the stop formed by the bearing 4, the point 31 being back of the pivot 3.

A foot-lever 33 is provided on a rock shaft 34 having a presser arm 35 acting against the back of the link 2.

When foot-lever 33 is pressed down it causes lever 35 to press the link 2 out and down and thus aid in starting the table from upright position in the cabinet 6.

The dotted lines in Fig. 2 indicate folding action of the table and links.

The web of the top link 8 is cut back at each end to form side lugs for a pivot pin. Thus the link is fully reversible in assembly of the parts.

What is claimed is:

1. Wall furniture having, in combination, a set of guides, a board having trunnions sliding along in said guides, and a stabilizer connected to the board and having ends running in the guides and preventing side tilting of the board.

2. Wall furniture having, in combination, a set of guides, a board having sliding trunnions in cooperative relation with said guides, and means connected to said trunnion and operating in the guides to prevent tilting of the board sidewise; said means including a cross-bar extending from guide to guide.

3. The combination with a folding table member of single, centrally disposed folding bracket structure comprising a bearing fixed to a sill, a link member having its fulcrum on said bearing, a link section pivoted on the outer end of the link member and alining therewith when extended, said section being pivoted at its outer end to the board member, a knuckle-joint brace one end of which is pivoted on the pivot connecting the brace link and the link section, the opposite end of said knuckle brace being attached to the board member, a spring connected to the board and knuckle brace for opening the knuckle brace into an effective position, a manual pull rod connected to one element of the knuckle brace to break it, and a foot treadle for throwing the brace structure forward into a support-

ing position, including a lever arm slidingly attached to the brace member; said link member, said section, and said knuckle brace all being substantially in a common plane.

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