Jan. 17, 1956 W. A. DUNCAN 2,731,317

METAL SLIDE SUPPORT FOR TABLE DROP LEAF

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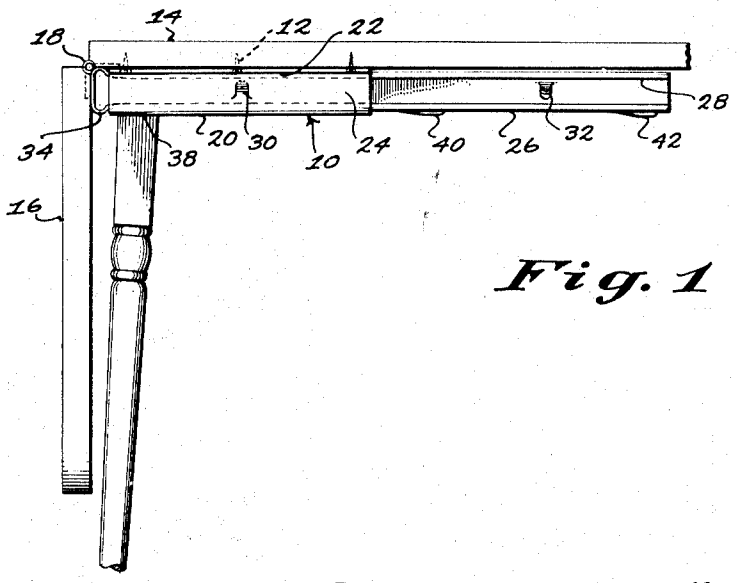


Fig. 1

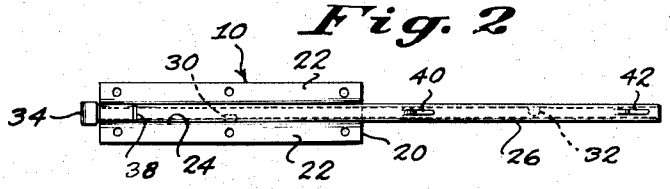


Fig. 2

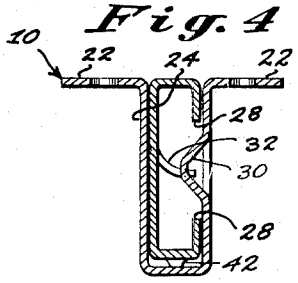


Fig. 4

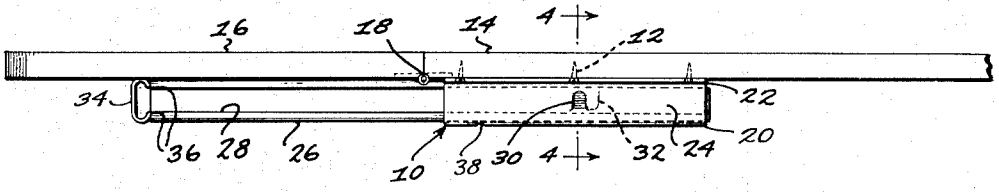


Fig. 3

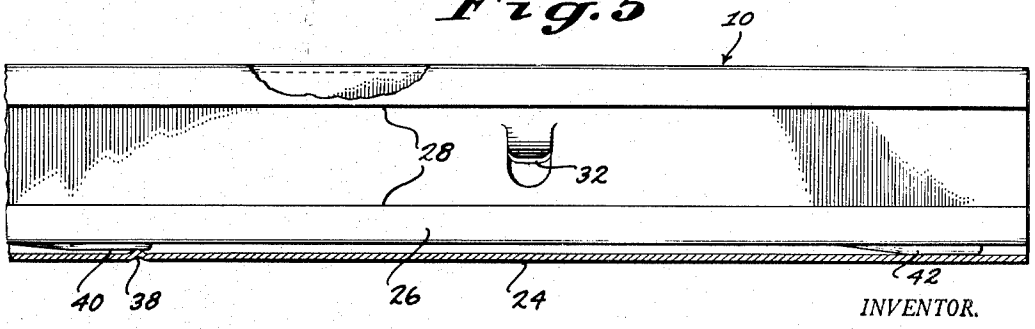


Fig. 5

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METAL SLIDE SUPPORT FOR TABLE DROP LEAF

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4 Claims. (Cl. 311—61)

This invention relates generally to drop leaf table constructions of the type in which one or more drop leaves are hinged at the edge of a main table surface member, and more particularly to an improved means for supporting such drop leaves in raised position when desired.

In my copending application Serial No. 434,506, filed June 4, 1954, now U. S. Patent No. 2,685,488, issued August 3, 1954, a similar supporting means is disclosed that operates in relation to a contact plate on the under side of the drop leaf to provide for wedging the drop leaf to a level disposition when it is supported in raised position.

According to the present invention provision is made for wedging the drop leaf level by operation of the supporting means itself as it is extended in supporting relation, so that the supporting means may be arranged as an entirely self-contained unit; as described in detail below in connection with the accompanying drawings, in which:

Fig. 1 is a fragmentary side elevation illustrating the arrangement of a drop leaf table top with a drop leaf thereon in lowered position and with supporting means therefor installed in accordance with the present invention;

Fig. 2 is a bottom plan view of the drop leaf supporting means shown in Fig. 1;

Fig. 3 is a further fragmentary side elevation showing the table drop leaf illustrated in Fig. 1 raised with the supporting means extended thereunder;

Fig. 4 is a sectional detail taken substantially on the line 4—4 in Fig. 3; and

Fig. 5 is a fragmentary longitudinal section detail of the supporting means of the present invention in extended position.

Referring now in detail to the drawings, the illustrated embodiment of the table drop leaf supporting means of the present invention is indicated generally by the reference numeral **10**, and Fig. 1 shows the supporting means **10** installed by attaching screws **12** at the underside or bottom face of a main table surface **14** adjacent a drop leaf **16** associated therewith by hinges **18**.

The supporting means **10** comprises a bracket member **20** having flanges **22** formed with suitable apertures for engagement by the above noted attaching screws **12**, and having an intermediate channel-shaped portion **24** in which a slide member **26** is slidably assembled in telescoped relation. When the bracket member **20** is installed, the channel-shaped portion **24** thereof forms an inverted rectangular channel (see Fig. 4), and the slide member **26** is of corresponding rectangular cross section, although of lesser height for a purpose that will be explained further presently, with a longitudinal slot **28** arranged in one side face to clear an abutment lug **30** slit inwardly from the adjacent side face of the bracket member **20** for disposition in the path of an abutment ear **32** slit inwardly from the opposite side face of the slide member **26** so as to form means for limiting the extension of the slide member **26** at a desired length.

The extending end of the slide member **26** is fitted with

a manipulating loop element **34** having the legs thereof disposed at the inner top and bottom slide member faces and fixed in place by clinching the adjacent edges of the longitudinal slot **28** thereover as at **36** (see Fig. 3). The remaining portion of the loop element **34** is strap-like in form and of greater width than the slide member **26** so as to serve as means for limiting the retraction of the slide member **26** at an accessible position (see Fig. 2).

In addition, the supporting means **10** is further characterized by an inwardly formed transverse ridge **38** in the bottom face of the bracket member **20** spaced adjacent the forward end thereof, and first and second outwardly formed longitudinal bosses **40** and **42** in the bottom face of the slide member **26**. It would be possible to arrange the supporting means **10** for operation according to the present invention with only the first of these bosses **40**, but substantially smoother operation is obtained when both bosses **40** and **42** are provided.

The first boss **40** is spaced for riding the transverse bracket member ridge **38** when the slide member **26** is at fully extended position, and the second boss **42** is spaced rearwardly of the first boss **40** at a distance less than the spacing of the transverse ridge **38** from the rear end of the bracket member **20**, both bosses **40** and **42** being gradually inclined at the forward ends thereof for riding, respectively, onto the transverse ridge **38** and over the rear bottom face edge of the bracket member **20**. The transverse ridge **38** and first boss **40** are formed to be substantially equal in height and to have a total height substantially equal to the difference in height of the bracket member **20** and slide member **26**; and the second boss **42** is formed to have a height substantially twice that of the first boss **40**.

By this arrangement the slide member **26** is caused to rise in the bracket member **20** as it reaches fully extended position and assumes a flush disposition at the top of bracket member **20**. This rise is effected first as the second boss **42** rides over the rear bottom face edge of the bracket member **20** and then as the first boss **40** rides onto the transverse ridge **38**, so that the extending end of the slide member **26** is given a delayed upwardly swinging motion as the rise takes place, which motion serves to apply the rising slide member **26** to the best advantage against the bottom face of the drop leaf **16** to wedge it properly at a level disposition in extending the supporting means **10** to hold the drop leaf in raised position.

The present invention has been described in detail above for purposes of illustration only and is not intended to be limited by this description or otherwise except as defined in the appended claims.

I claim:

1. A supporting means for a table drop leaf, said means comprising a bracket member attachable in the form of an inverted channel to the underside of a main table surface adjacent a drop leaf hinged thereon, and a slide member supported within the channel formed by said bracket member for extension therefrom in supporting relation beneath said drop leaf when raised, said slide member and bracket member having cooperating abutment elements thereon limiting the extension of said slide member at a desired length beneath said drop leaf, said bracket member having an inwardly formed transverse ridge in its bottom face spaced adjacent the forward end thereof, and said slide member being of less height than that of the channel formed by said bracket member and having an outwardly formed longitudinal boss in its bottom face shaped with a substantial lengthwise portion of uniform height spaced from the rear slide member end for riding said bracket member ridge and thereby raising said slide member when fully extended from said bracket member to support said drop leaf at a level disposition.

2. A supporting means for a table drop leaf as defined

in claim 1 and further characterized in that a second outwardly formed longitudinal boss having a substantial lengthwise portion of uniform height is spaced in the bottom face of said slide member rearwardly of said first mentioned longitudinal boss at a distance less than the spacing of said transverse ridge from the rear end of said bracket member, the height of said second boss is substantially equal to the difference in height of said bracket member and slide member, and the total height of said transverse ridge and first mentioned longitudinal boss is substantially equal to the height of said second boss.

3. A supporting means for a table drop leaf as defined in claim 2 and further characterized in that both of said first mentioned and second longitudinal bosses are gradually inclined at the forward ends thereof to said lengthwise portions of uniform height for riding, respectively, onto said transverse ridge and over the rear bottom face edge of said bracket member.

4. A supporting means for a table drop leaf, said means being formed of metal and comprising a bracket member attachable in the form of an inverted rectangular channel to the underside of a main table surface adjacent a drop leaf hinged thereon, a slide member of corresponding rectangular cross section supported in telescoping relation by said bracket for extension therefrom in supporting relation beneath said drop leaf when raised, means for limiting the extension of said slide member at a desired length beneath said drop leaf, and means for limiting the retraction of said slide member at an accessible position beneath said main table surface, said

bracket member having an inwardly formed transverse ridge in its bottom face spaced adjacent the forward end thereof, and said slide member being of less height than that of the channel form of said bracket member and having first and second outwardly formed longitudinal bosses in the bottom face thereof, both of said bosses having substantial lengthwise portions of uniform height, the first of said bosses being spaced for riding said transverse ridge at said portion of uniform height when said slide member is fully extended and the second boss being spaced rearwardly of the first boss at a distance less than the spacing of said transverse ridge from the rear end of said bracket member, the height of said first boss and said transverse ridge being substantially equal and having a total height substantially equal to the difference in height of said bracket member and slide member, and the height of said second boss being substantially twice that of said first boss.

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