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2,187,067

EXTENSION TABLE

Original Filed April 22, 1935

Fig. 1.

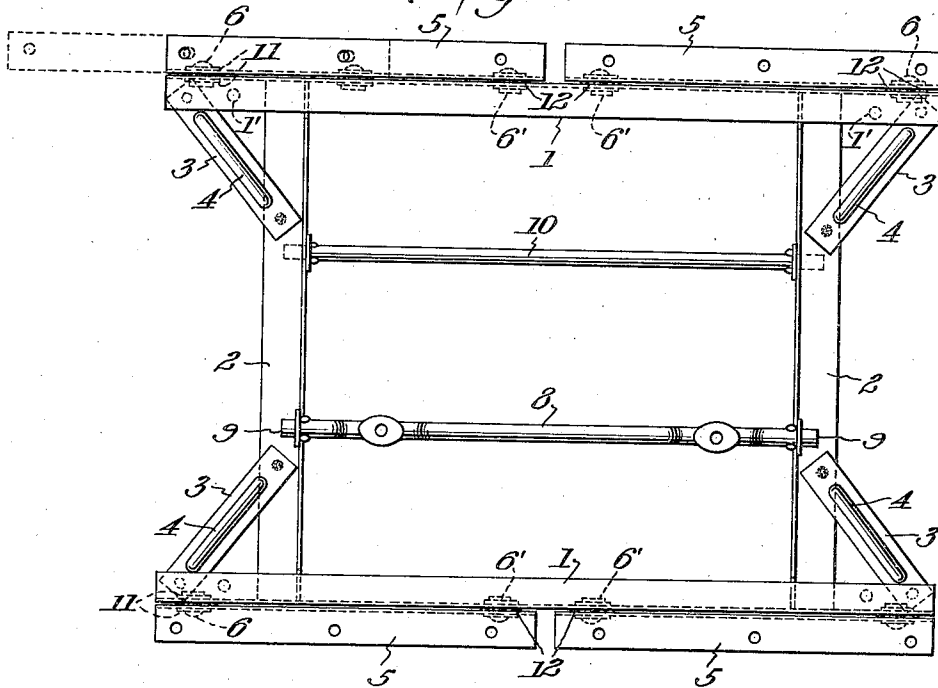


Fig. 2.

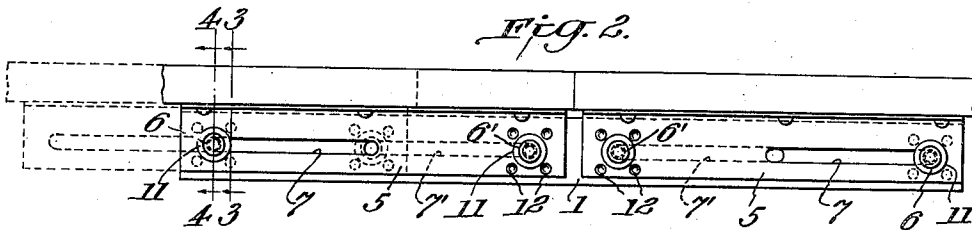
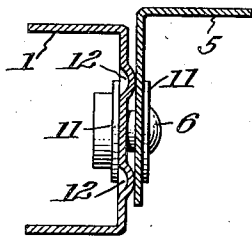


Fig. 3.

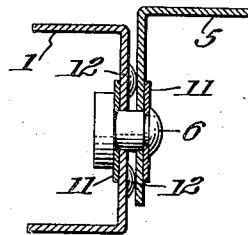


Fig. 4.

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UNITED STATES PATENT OFFICE

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EXTENSION TABLE

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Original application April 22, 1935, Serial No.
17,730, now Patent No. 2,029,280, dated January
28, 1936. Divided and this application January
18, 1936, Serial No. 59,761

6 Claims. (Cl. 311—71)

This invention relates to extension tables and particularly to metal slide mechanisms for extension tables, and is applicable both to extension tables of the type wherein the sections of the top are movable upon a supporting frame common to both sections and to extension tables of the type wherein the top sections are attached to separable supporting frames.

A principal purpose of the invention is to provide a simple, rugged assembly adapted to permit the smooth opening of movable top sections of a table for the insertion of extra leaves or sections therebetween. A further purpose of the invention is to provide a complete assembly of slide mechanism for extension tables which may be attached to the top and supporting parts of such tables as a unit.

Another purpose is to provide an assembly of slide mechanism for extension tables including supporting or carrying means for folded filler leaves.

A further purpose is to provide a non-warpable, non-binding unitary slide assembly for extension tables.

Other purposes and objects of the invention will appear from the following description of an illustrative embodiment of the invention with particular reference to the accompanying drawing in which:

Fig. 1 is a plan view of the extension slide assembly in a form adapted for tables of relatively short extension;

Fig. 2 is a fragmentary side elevation of a table top and the assembly of Fig. 1; and

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

In the embodiment of the invention shown in Figs. 1 and 2, 1 are paired channel members forming stationary rails. Rail members 1 are rigidly connected in parallel spaced relation by cross members 2 preferably of angle section. The connections between rail members 1 and cross members 2 are strengthened by means of brace members 3 which are preferably impressed with a dished portion 4 in the web thereof for greater stiffness. The webs of the channels 1 are vertically arranged and form the outer walls of the rigid frame on which the slide members are mounted.

Associated with each of rail members 1 are slide members 5, of inverted L or angle section, slidably connected to the rail members by means of pin members 6 fixed in rail members 1 and engaging horizontal slots 7 in the vertical portions of the slide members 5 that are parallel to the

webs of rail members 1, and pin members 6' fixed in slide members 5 and engaging horizontal slots 7' in the webs of rail members 1. It will be noted that the horizontal flanges of the slide members 5 are flat for full surface contact with the tops and are located slightly above the upper flanges of the rail members 1, see Figs. 3 and 4. The slide members 5 of each pair are longitudinally aligned at the outer side of the associated rail member 1 and the aggregate length of the two slide members is approximately equal to the length of the rail member.

Top sections of the table may be attached to corresponding slide members on each side of the assembly by means of screws passing through holes in the horizontal web of the slide members into the wood of the top sections. The supporting frame and legs of the table may be attached, for example, at the juncture of rail members 1 and cross members 2 by suitable means such as screws or bolts that are passed through openings 1' in the lower flange of the rail members 1, or if a separable supporting frame is used, each half thereof may be fastened in any convenient way to the corresponding section of the top.

It will be seen that the assembly just described permits easy and smooth separation of the table sections to a degree defined by the length of the slots (being twice the length of a single slot in this form) and predetermined by the width of the extra leaf or leaves provided with the table. Due to the fact that the rail members 1 are rigidly and permanently fixed in parallel spaced relation before the assembly is attached to the wooden portions of the table, the operation of the sliding mechanism cannot be affected by warping of the wooden parts, while the attachment of the wooden parts is very much simplified.

A further advantage of the invention is that means for carrying and supporting a folding leaf section may advantageously be provided as part of the unitary assembly. For example, as shown in Fig. 1, a leaf carrying member 8 may be pivotally attached to cross members 2 at 9, while a supporting member 10 may be fixed to cross members 2 in a position adapted to support the leaf section in its folded position. By this construction, all of the metal parts desirable for a strong smoothly operating extension mechanism and folding leaf support are incorporated in a simple, unitary, non-warpable assembly.

Figs. 3 and 4 illustrate novel means for connecting the rail members and the slide members in operative sliding relation without the use of washers or similar elements therebetween. In

these figures, which represent an enlarged sectional view through lines 3—3 and 4—4, respectively, of Fig. 2, 6 is the pin member, 11 are washers between the expanded ends of pin member 6 and the rail and slide members, and the spacers 12 are bosses formed in the vertical web of the rail member 1. Similar bosses 12 are formed on the webs of slide members 5 about the openings which receive the pin members 6, see Fig. 2. This support construction provides a freely sliding connection when the slide and rail members are formed by customary manufacturing processes as the contact engagement of the members is restricted to spaced areas of small size. The proper spaced relation between the rail members and the slide members is maintained by means of bosses 12 struck up out of the vertical web of one of said members. As illustrated, the bosses are formed in the web of rail member 1. It will be seen that the invention provides a simple, rugged and practically foolproof unitary assembly of extension table slide mechanism, including a number of novel and highly advantageous features. It will be apparent that the principles of the invention are not limited to the particular embodiment shown and described for the purpose of illustration and that many modifications may be made therein without departing from the invention.

This application is a division of my copending application Ser. No. 17,739, filed April 22, 1935, issued Jan. 28, 1936 as Patent No. 2,029,280.

I claim:

1. A metal slide assembly for extension tables comprising a pair of slide members each including an angle bar of inverted L cross-section having horizontal flanges for attachment to the end sections of a table and vertically disposed flanges longitudinally alined in the same plane, a rail member having a vertical web parallel to and spaced from the vertically disposed flanges of said slide members and an upper flange positioned below the horizontal plane of the horizontal flanges of said slide members, said rail member having a length approximately equal to the aggregate length of said slide members, and means separate from both said slide and said rail members supporting each slide member on said rail member for longitudinal movement, said supporting means for each slide member including longitudinally spaced means restricting the contact engagement of that slide member and the rail member to spaced areas of small size.

2. A metal slide assembly for extension tables comprising a pair of rail members, means rigidly positioning said rail members in spaced parallel relation for location adjacent and parallel to the edges of a table, a pair of slide members for each rail member and having an aggregate length approximating that of the rail member, each slide member having angularly disposed webs for con-

nection respectively to the table and to a rail member, corresponding webs of the slide members of each pair being longitudinally alined, and means supporting the slide members for longitudinal sliding movement on and with the attaching webs thereof in spaced relationship to the rail members, said supporting means for each slide member including a plurality of members spaced longitudinally from each other and extending between that slide member and the associated rail member.

3. A metal slide assembly as claimed in claim 2, wherein said members which extend between each slide and its associated rail member are separate from both the slide and the rail members.

4. A metal slide assembly for extension tables comprising a flanged rail member adapted to be positioned adjacent and parallel to the edge of a table, a pair of slide members having vertical flanges in longitudinal alinement and flat horizontal flanges for full surface contact with the ends of a table, said horizontal flanges being above the upper surface of said rail member, and means supporting the vertical flanges of said slide members on and spaced from said rail member for longitudinal movement; said supporting means for each slide member including longitudinally spaced members separate from the slide member and extending between said slide and rail member.

5. A metal slide assembly for extension tables comprising a pair of rail members each having a vertical web with flanges extending from the top and bottom edges thereof, means rigidly positioning said rail members in spaced parallel relation for mounting adjacent and parallel to the edges of a table, a pair of slide members longitudinally alined in movable relation at the outer sides of the webs of the respective rail members, each slide member including a vertical flange and a horizontal flange for attachment to a table top, said horizontal flanges of the respective slide members being spaced laterally of the upper flanges of the adjacent rail member, and longitudinally spaced means supporting each slide member for longitudinal movement on and in spaced relation to the web of its rail member.

6. A metal slide assembly as claimed in claim 5, wherein said supporting means comprises, for each slide member, a pair of longitudinally spaced pins, one pin being mounted in the web of the rail member and extending through a slot in the vertical flange of the slide member and the second pin being mounted in the vertical flange of the slide member and extending through a slot in the rail member, and means adjacent each pin for spacing the vertical flange of the slide member from the web of the rail member.

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