Dec. 26, 1967 H. MUTCHNIK ETAL 3,360,307

EXTENSION TABLE SLIDE ASSEMBLIES

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Fig. 1.

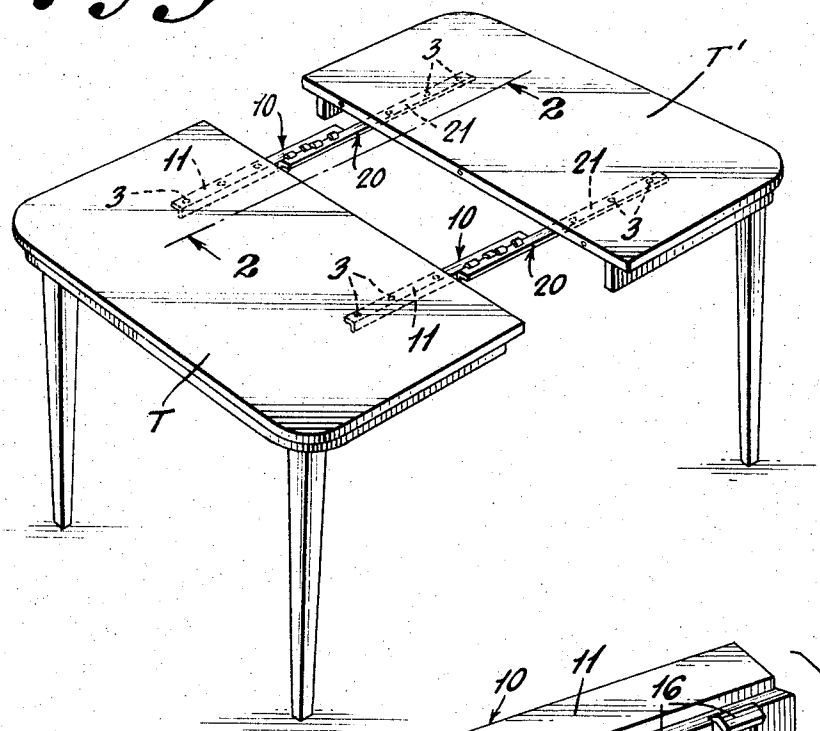


Fig. 8.

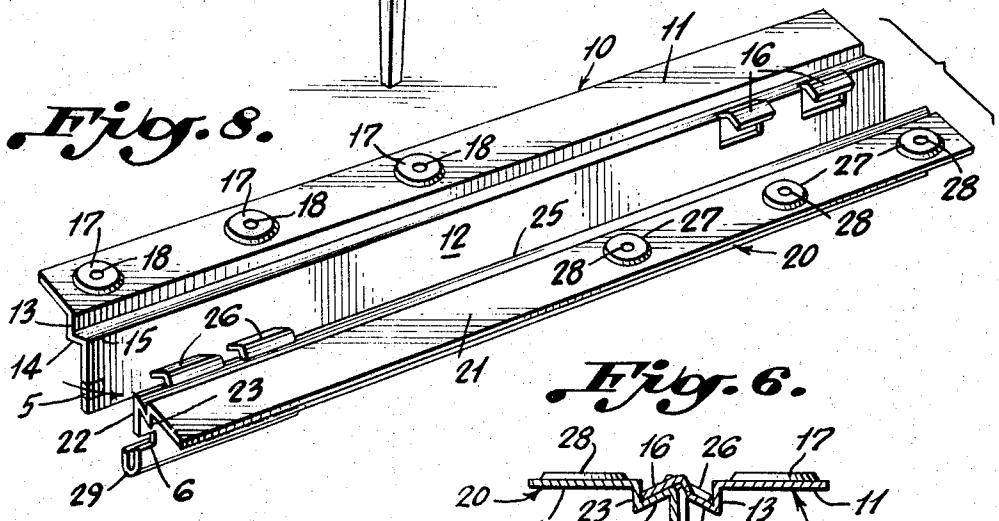


Fig. 6.

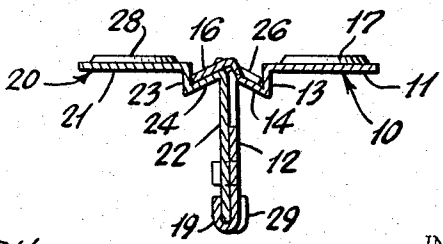
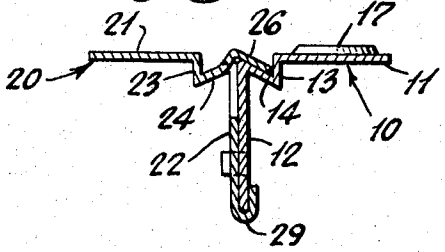


Fig. 7.



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EXTENSION TABLE SLIDE ASSEMBLIES

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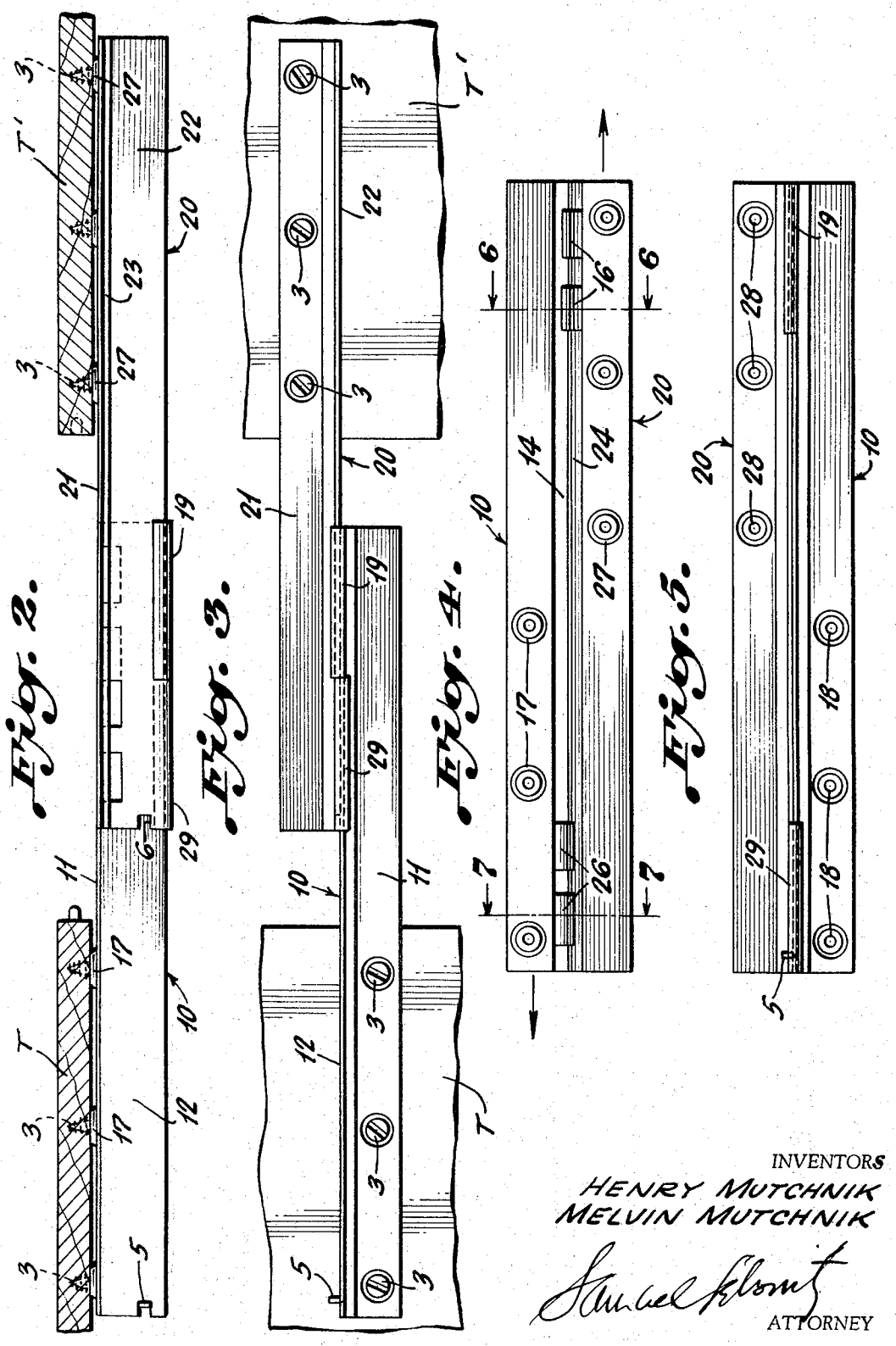


Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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United States Patent Office 3,360,307
Patented Dec. 26, 1967

3,360,307

EXTENSION TABLE SLIDE ASSEMBLIES

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Filed June 25, 1965, Ser. No. 466,970
3 Claims. (Cl. 308—3.6)

ABSTRACT OF THE DISCLOSURE

The invention is concerned with a slide assembly adapted to be affixed to the underside of an extension table to permit one or more additional table leaves to be inserted between the extensible sides of the table for support on at least a pair of laterally displaced side assemblies. Each slide assembly is formed solely of two identical reciprocable sheet metal slides in congruous relation, with each slide having a horizontal flange adapted to have one end thereof affixed to the underside of one of the table-top sections, a vertical web extending downwardly therefrom and a Z-shaped channel between the flange and web. Each channel serves as a guide track for one or more tongues stamped from the free end of each slide adjacent to the top thereof. An additional J-shaped guide track is bent from each vertical web below the guiding tongues for guiding the bottom edge of the web of the companion slide.

This invention relates to an extension table slide assembly and is particularly concerned with the fabrication of a compact and reliable assembly formed of sheet metal, which may be mass-produced and assembled at low cost.

It is the object of the present invention to provide an all-metal slide assembly which is adapted to be affixed to the underside of table tops to permit the extension thereof for the accommodation of additional table-top leaves and which may be retracted easily following the removal of the latter.

It is another object of the invention to provide a slide assembly formed of a pair of sheet metal slide components of identical construction which may be produced in any desired lengths, to adapt the units to extension tables of all sizes. The slide components may be assembled in congruous relation for operative functioning, and their disassembly may be blocked by forming a stop lug in one of the slides which cooperates with the other one.

The invention proceeds upon the principle of interengaging the pair of component slides with only means stamped from the respective slides for cooperation with the other one, without need for any extraneous loops, frames or other retaining means. In the preferred embodiment of the invention, Z-shaped channels are formed at the junction of the horizontal flange and vertical web of each slide, and tongue members are pressed from the vertical web of each slide for engagement with the Z-shaped channel of the companion slide. In addition, a guide track is pressed from the bottom edge of the vertical web of each slide below the tongue members for guiding the bottom edge of the vertical web of the other component slide in the course of the relative reciprocating movement between the slides.

Other objects and purposes will appear from the detailed description of the invention following hereinafter, taken in conjunction with the accompanying drawings, wherein

FIG. 1 is a perspective view of an extension table illustrating the application thereto to a pair of the slide assemblies in accordance with the invention;

FIG. 2 is a vertical sectional view along line 2—2 of FIG. 1;

FIG. 3 is a bottom view of FIG. 2;

FIG. 4 is a top plan view of the slide assembly in accordance with the invention, in collapsed condition;

FIG. 5 is a bottom view of FIG. 4;

FIG. 6 is a vertical sectional view along line 6—6 of FIG. 4;

FIG. 7 is a vertical sectional view along line 7—7 of FIG. 4; and

FIG. 8 is an exploded perspective view of the slide components of identical construction prior to their interengagement.

In FIG. 1 is shown an extension table composed of the companion table top sections T and T', which may be extended for the accommodation of one or more supplementary table leaves therebetween. These leaves are adapted to be supported by the slide assemblies in accordance with the invention, two of which are illustrated, in order to provide a stable support for the supplementary leaves adjacent to the opposite ends thereof, as is well known in the art. In view of the fact that each of the slide assemblies shown in FIG. 1 are of identical construction, only one is illustrated in detail in the other figures of the drawing.

Each slide assembly is composed of a pair of sheet metal slides **10** and **20**, of generally rectangular section, and each is of identical construction. One of the metallic slides **10** is provided with a plurality of openings **18** for receiving screw or other fasteners to affix the slide **10** to the underside of the table top T. The companion slide **20**, with its horizontal flange **21** is likewise provided with openings **28** for receiving screw fasteners **3** to affix the slide member **20** to the underside of the table top section T'.

The vertical webs **12** and **22** of slides **10** and **20**, respectively, are disposed in juxtaposed relation, as clearly shown in the several figures of the drawings, and particularly FIGS. 6 and 7, and are maintained in such relation by virtue of the special interengaging means formed in the slide members alone, without any extraneous retaining means. In order to effect this, an inset Z-shaped channel is formed at the junction of the horizontal flange and vertical web in each slide member. This channel is formed in slide **10** by the vertical flange **13** extending downwardly from the inner edge of the flange **11**, the upper portion of the vertical web **12** terminating in edge **15**, and the inclined base **14** extending from the lower edge of flange **13** to the upper edge **15** of the vertical web **12**.

Similarly a Z-shaped channel is formed at the junction of the horizontal flange **21** and vertical web **22** of the companion slide **20** by the vertical flange **23**, the upper portion of the vertical web **22** bounded by the upper edge **25**, and the inclined base extending from the lower edge of flange **23** to the top edge **25** of the vertical web **22**.

A pair of tongues **16** (FIG. 8) are pressed from the vertical web **12** remote from the openings **18** and are adapted to overlie the base **24** of the Z-shaped channel in slide member **20**. Likewise, a pair of tongue members **26** are adapted to be pressed from the vertical web **22** and are bent into overlying relation with the Z-shaped channel in slide **10** above the inclined base **14** therein (FIG. 7).

More or less than two tongue members may be pressed from the vertical webs of the cooperating slide members for interengagement with the Z-shaped channel in the companion member, and, in effect, function as integral dove-tailed interengaging members, as have been known in this art for many years. In order to prevent any binding of the tongue members **16** as they travel in the inset channels, protuberances **17** may be formed in the horizontal flange **11** and protuberances **27** in the horizontal flange **21** for the purpose of providing a slight spacing between the underside of the table top panels and the slide com-

ponents at the points of fastening of the slides, as clearly illustrated in FIG. 2.

In supplement to the guiding effect afforded by the tongue members **16** and **26** in the respective Z-shaped channels of the component slides, a track **19**, of small length, may be bent from the vertical web **12** below the tongue members **16**, and in the same lateral direction as the latter, for guiding the bottom edge of the vertical web **22** of the component slide. Similarly, a track **29** may be bent from the vertical web **22** below the tongue members **26** and in the same lateral direction as the latter, for the purpose of guiding the bottom edge of the vertical edge **12** of the companion slide. The drawings illustrate the tracks **19** and **29** as being of J-shaped formation, but the guiding effect afforded by these tracks may be attained with variations of this curvature at the base, as long as some support is given to the bottom edge of the vertical webs of the companion slides.

As illustrated in FIG. 8, the component slide members **10** and **20** are of identical construction and are disposed in congruous relation preparatory to the sliding of one into cooperating relation with the other, with the vertical webs in juxtaposition to each other. The limits of their extension are controlled by the abutment of the inner edges of the tracks **19** and **29** against each other, as indicated in FIGS. 2 and 3, which may coincide with the abutment of the innermost tongues **16** and **26** against each other at the top of the extension slides, as illustrated in FIG. 1. Of course, the contraction of the extension slides is limited by the abutment of the table tops against each other. However, if desired, the component slide assemblies may be assembled at the point of manufacture and their disassembly may be prevented by the provision of a stop-lug **5** in the vertical web of slide **10** engaging within an opening **6** in the vertical web **22** of the slide **20** so that the complete withdrawal of the slides from each other following their initial assembly is prevented, even before these assemblies are affixed to the undersides of the table top sections.

The slides may be manufactured in any desired lengths, and the gauge of the sheet metal may be varied in dependence upon the loadings adapted to be imposed on the slide assemblies.

While we have described our invention as embodied in a specific form and as operating in a specific manner for purposes of illustration, it should be understood that we do not limit our invention thereto, since various modifications will suggest themselves to those skilled in the art without departing from the spirit of our invention, the scope of which is set forth in the annexed claims.

We claim:

1. A metallic slide assembly for an extension table comprising a pair of juxtaposed sheet metal slides of identical construction, each one of said slides having a horizontal flange adapted to be affixed at one end thereof to the bottom of a table-stop section, with the ends adapted to be fixed disposed remotely from each other, integral vertical webs extending from said horizointal flanges through the intermediary of inset Z-shaped channels, each channel being formed by the upper portion of the vertical web, a vertical flange extending downwardly from the inner edge of the corresponding horizontal flange adjacent to said last-mentioned web and an inclined base extending from the base of said vertical flange to the top of said web, and at least one tongue member stamped from a portion of the upper part of each vertical web remote from the end of the respective slides adapted to be fixed, said tongue member being bent into nesting position in the Z-shaped channel of the other sheet metal slide, for guiding the relative reciprocable movement between said slides.

2. A metallic slide assembly for an extension table comprising a pair of juxtaposed sheet metal slides of identical construction, each one of said slides having a horizontal flange adapted to be affixed at one end thereof to the bottom of a table-top section, with the ends adapted to be fixed disposed remotely from each other, integral vertical webs extending from said horizontal flanges through the intermediary of inset Z-shaped channels, each channel being formed by the upper portion of the vertical web, a vertical flange extending downwardly from the inner edge of the corresponding horizontal flange adjacent to said last-mentioned web, and an inclined base extending from the base of said vertical flange to the top of said web, at least one tongue member stamped from a portion of the upper part of each vertical web remote from the end of the respective slides adapted to be fixed, said tongue member being bent into nesting position in the Z-shaped channel of the other sheet metal slide, and a J-shaped track bent from the bottom portion of the vertical web of each sheet metal slide below the tongue member therein for receiving the lower edge of the vertical web of the other slide for guiding the relative reciprocating movements thereof.

3. An assembly as set forth in claim **2** wherein the horizontal flange of each slide is provided with openings adjacent to one end thereof for receiving screw fasteners to affix the slide to the underside of a table-top, and protuberances on said flange at said openings to provide a small clearance space below the underside of the table-top for the movement of said tongue members within said Z-shaped channels.

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