

(No Model.)

E. PLEUKHARP.
SLIDE FOR EXTENSION TABLES.

No. 474,186.

Patented May 3, 1892.

Fig. I.

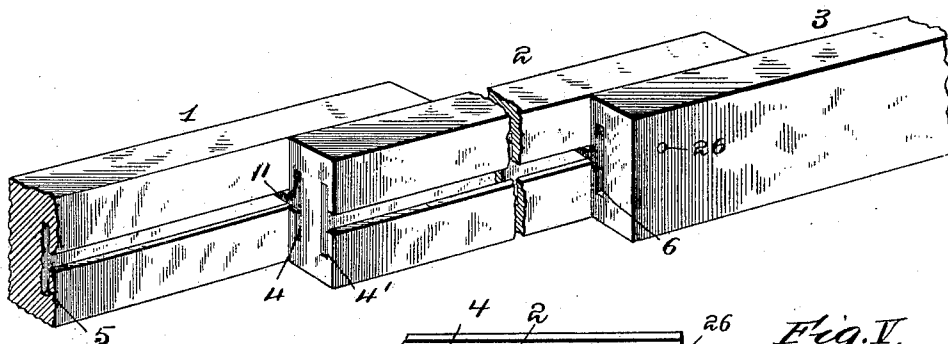


Fig. II.

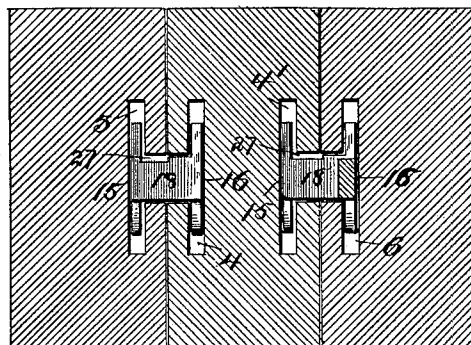
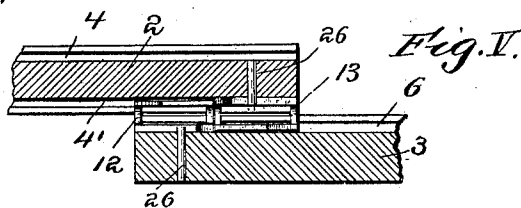
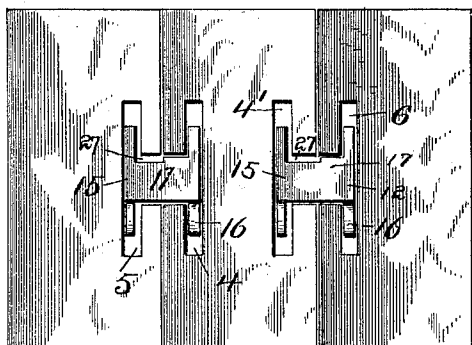


Fig. VII.

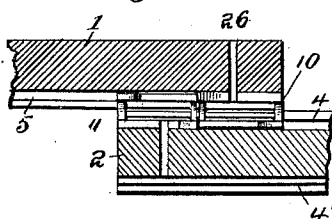


Fig. IV.

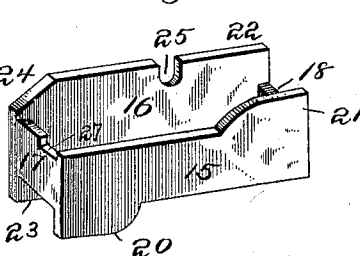
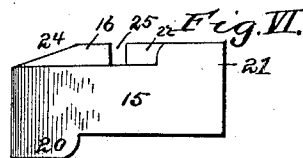


Fig. III.



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UNITED STATES PATENT OFFICE.

EZRA PLEUKHARP, OF ROCKFORD, ILLINOIS, ASSIGNOR TO JOSHUA E. LAHMAN AND EDGAR R. LAHMAN, OF SAME PLACE.

SLIDE FOR EXTENSION-TABLES.

SPECIFICATION forming part of Letters Patent No. 474,186, dated May 3, 1892.

Application filed September 9, 1891. Serial No. 405,191. (No model.)

To all whom it may concern:

Be it known that I, EZRA PLEUKHARP, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Slides for Extension-Tables; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to improvements in slides for extension-tables; and the object of the invention is to provide means whereby the upper surface or edge of the sections of the slide is maintained in a true horizontal position to obviate the objection of the slide sagging in the middle; and a further object is to insure the easy movement of the sections and prevent the same from binding when extending or folding the sections.

With these ends in view my invention consists in the combination, with the sections, each having a longitudinal T-shaped groove, of the connecting casting or iron between the adjacent sections, said casting or iron being rigidly secured at one side to one section and having its other side joined to the fixed side by transverse connecting-webs, which are arranged in the same horizontal plane and which are fitted and operate in the reduced portions of the grooves, said webs forming bearings for the movable section of the slide and operating to keep the sections in their proper relative positions, so that sagging is avoided. The transverse webs are further provided in their upper edges with grooves or recesses to receive the upper flange on the movable section of the slide, and the movable side of the casting or iron is made thin, so that the slide member or section can move freely without any tendency to bind, all as will be hereinafter more fully described and pointed out.

I have illustrated my improvement in the accompanying drawings, applied to and used in connection with a slide consisting of three sections and a proper number of connecting castings or irons, and in the drawings—

Figure I is a perspective view of my improved slide, showing the same extended. Fig. II is an end view showing the slide folded.

Fig. III is a vertical transverse section through the sections or members and the irons in the position indicated in Fig. II. Fig. IV is a detail perspective view of the casting or iron removed from the members of the slide. Fig. V is a horizontal sectional view taken longitudinally through a portion of two members 2 3 of a table-slide, showing the castings or irons in elevation. Fig. VI is an elevation of the casting or iron, taken from the narrow side thereof. Fig. VII is a horizontal sectional view similar to Fig. V, taken longitudinally through the contiguous ends of the members 1 2 of the slide to show the castings or irons 10 11, which connect said members.

Like numerals of reference denote corresponding parts in all the figures of the drawings, referring to which—

1, 2, and 3 designate the sections or members of my improved table-slide. The middle member or section 2 of the slide is provided in its vertical faces with the T-shaped grooves 4 4', one on each side, while the outer members 1 3 are each provided with a single groove 5 6, respectively, the grooves being on the inner faces of the member and arranged to align or coincide with the grooves on the faces of the middle section or member, as indicated very clearly in Figs. II and III.

The member 1 of the slide is connected at one end to the middle member 2 by means of a casting or iron 10, which is fixed or secured in groove 5 of the member 1 and works or slides freely in the groove 4 of the member 2, while the other end of the members 1 2 are connected by means of a similar casting 11, which is fixed in the groove 4 of the member 2 and slides freely in the groove 5 of the member 1. The other outside member 3 and the middle member 2 are similarly connected together by means of the irons or castings 12 13, the former casting 12 being secured in the groove 6 of the member 3 and working freely in the groove 4' of the middle member 2 at one end and the other casting 13 being secured in the groove 4' of the member 2 and working freely in the groove 6 of the outside member 3. The castings are similar in construction and secured to the members or sections of the slide in a similar manner, and I will now proceed to describe in detail the

casting, its method of securement, and its operation.

The casting consists of the vertical plates 15 16 and the horizontal transverse webs 17 18, all of which are cast or formed of a single piece of metal. The two vertical plates are arranged parallel with each other, and they are joined at the ends by the transverse integral webs. The two webs are arranged in the same horizontal plane—that is to say, the upper edges of the webs are in the same plane and the lower edges of the webs are likewise aligned; but the vertical plates are not aligned throughout their length.

The vertical plate 15 is narrower in width than its fellow plate 16, and said plate 15 is provided at one end with a depending flange 20 and at its other end with an upward-extending flange 21, said flanges 20 21 fitting in the groove in one member of the slide and serving to hold one part or side of the casting in the proper slide member. The other plate 16 has a flange 22 on its upper side coincident with the flange 21, and the wide plate 16 is further formed with a fullness at 23 on its lower side below the webs, which lug 23 is of equal length to the lug 20 on the opposite side of the casting, the lug 23 thereby making the plate 16 somewhat wider than the plate 15, whereby the plate 16 serves in a great measure to uphold the sections or prevent them from sagging. The plate 16 being wider than the plate 15, it extends below the lower edge of the plate 15, as shown in Fig. IV, and said lower edge of the plate 16 is beveled or rounded off at 24 at one end beyond the lug 20, and in the center of the wide plate 16 below the plane of the lower edge of the plate 15 is formed a transverse notch 25, which is adapted to receive the fastening pin or dowel 26, which is driven through the slide and into the notch in the plate 16 of the casting.

The casting is designed to be rigidly secured at one side to one section or member of the slide and its other side is designed to move freely in the other fellow section of the slide. To accomplish these ends in a satisfactory and efficient manner, I make the side of the casting which is to be secured to one section quite thick, so as to completely fill the groove therein, while the moving side of the casting is made thinner to enable it to ride freely in the groove of the moving or other section. Thus the plate 16 is made somewhat thicker than the plate 15, and the former plate is fitted tightly in the groove of one section, so as to completely fill the same, while the plate 15 fits somewhat easily in the other groove of the proper section to enable it to have easy movement.

The transverse webs 17 18 are made of such width adjacent to the thick plate 16 as to completely fill the narrow part of the groove in the section or member to which the casting is secured, while a groove or recess 27 is cut in the upper edge of each web to receive

the upper flange formed by the groove in the other section or member of the slide, such grooves 27 27 in the webs being in horizontal alignment and serving to permit a limited play, which insures easy movement of the flange on the moving section of the slide, thus obviating binding between the flanges and the casting.

In fitting my improved slide I thrust the thick side or plate 16 of the casting in the groove at one end of one section and secure the casting in place by the dowel-pin, after which the thin side or plate 15 is fitted in the groove in the adjacent section or member, with the upper flange fitting the aligned recesses 27. The transverse webs of the casting ride on the flanges formed by the grooves in the sections or members of the slide, and said webs serve as bearings to prevent the sections or members from sagging when they are extended, whereby the slide is prevented from sinking or being depressed at the middle under the load or weight imposed on the table.

The operation and advantages of my invention will be readily understood and appreciated by those skilled in the art from the foregoing description, taken in connection with the drawings.

Although I have described and shown only three sections or members as an embodiment of my invention, yet I would have it understood that I do not confine myself to any particular number, and if the number is increased the middle or intermediate sections should be grooved on both sides in the manner similar to the section 2 of the slide herein shown; nor do I limit myself to the exact form and proportion of parts herein shown and described, nor to the details of construction, as I am aware that modifications can be made therein without departing from the spirit of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the slides having on their opposing faces the coincident T-grooves of uniform width, of the metallic connection or casting having its longitudinal side plates 15 16 fitting in the enlarged parts of the grooves in said slides, said casting provided with the integral transverse webs 17 18, having the aligned notches 27 in their upper edges, the lower edges of both webs bearing on the edges of the grooved slides, and the notches 27 in said webs affording a loose bearing for the edge of the moving slide, whereby the slides are held in true relative positions and the moving slide can move freely without binding on the connection or casting, as set forth.

2. In a table-slide, the combination, with the grooved members, of the casting or iron comprising the parallel plates and the transverse webs, each web having a notch or groove 27 in the upper edge thereof, which receives

the flange formed by the groove in one member, and the lower edges of the webs riding on the lower flange of the slide member, substantially as described.

provided with the aligned grooves 27 in their upper edges, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

5 3. In a table-slide, the casting or iron comprising the thick wide plate 16, having a notch, the narrow thin plate 15, parallel with the plate 16, and the transverse webs 17 18, flush with the edges of the thin plate and

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Witnesses:

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