H. N. SMITH.

EXTENSION TABLE SLIDE.

APPLICATION FILED JULY 26, 1921.

1,422,142.

Patented July 11, 1922.

2 SHEETS—SHEET 1.

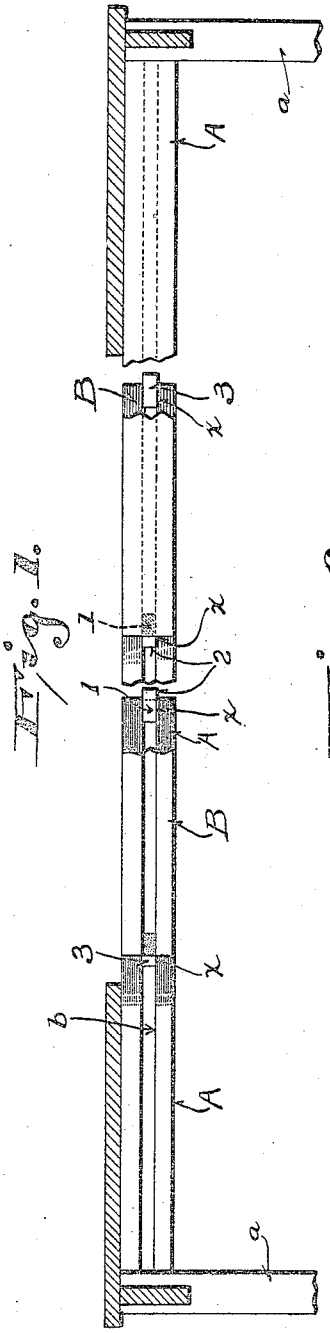


Fig. 1.

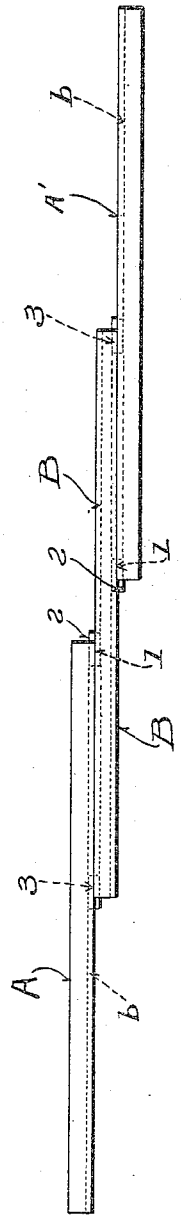


Fig. 2.

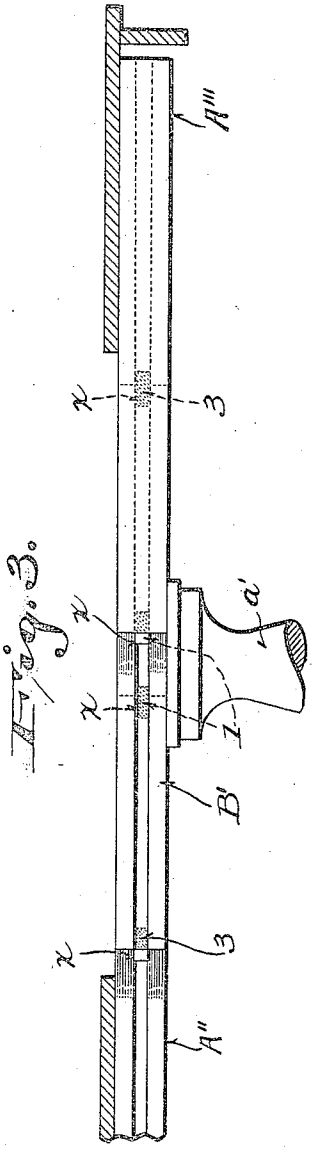


Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 4.

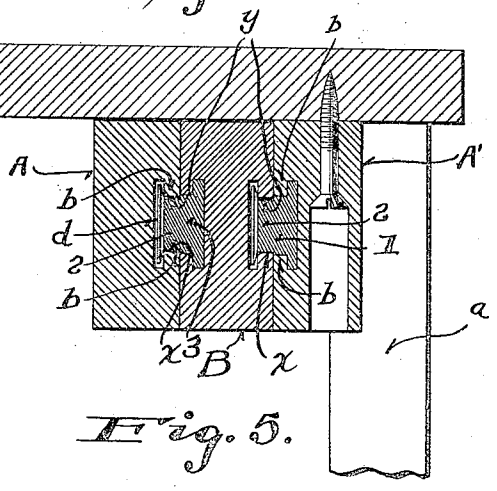


Fig. 5.

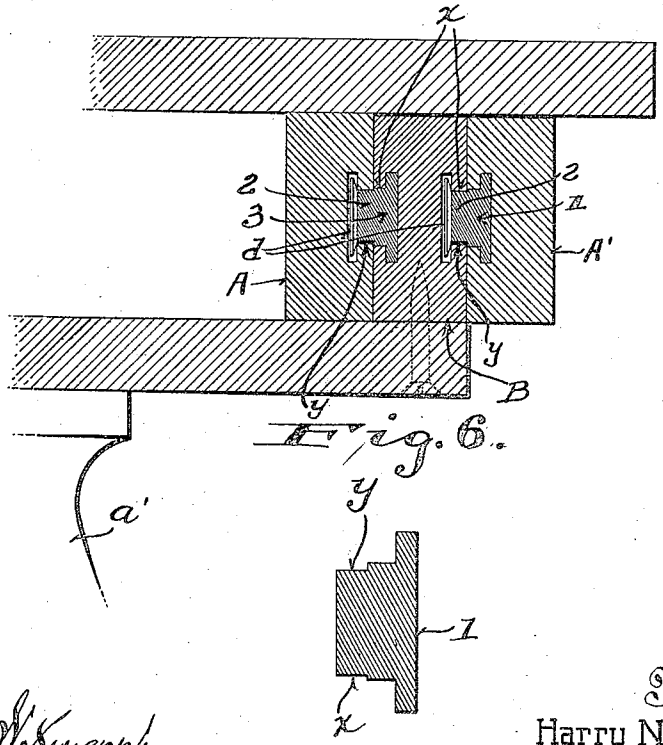


Fig. 6.

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UNITED STATES PATENT OFFICE.

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EXTENSION-TABLE SLIDE.

1,422,142. Specification of Letters Patent. Patented July 11, 1922.

Application filed July 26, 1921. Serial No. 487,664.

To all whom it may concern:

Be it known that I, HARRY N. SMITH, a citizen of the United States, and resident of Watertown, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in Extension-Table Slides; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention refers to extension tables, and particularly to the interlocking bearing blocks for the slide-bars thereof, for example, as described in U. S. Letters Patent No. 626,747, dated June 13, 1899.

The primary object of my invention is to provide means for overcoming the tendency of the slide-bars to sag in either what is known as the center support type of table, or the end support type.

In practice it has been found that under ordinary conditions, where the slide-bars are supported at the center, the end or floating slide-bars associated therewith, have a tendency to sag downward, whereby an arc is developed from end to end of the table surface, thereby causing the leaves or fillers to break at their joints and produce an uneven surface, which is not only unsightly, but uneven.

Under the same conditions, when the table is supported at its ends, the floating unsupported intermediate slide-bars will tend to sag downwardly, thereby producing a concave surface from end to end of the table for the support of the leaves, whereby the leaves will bind and in the aggregate, develop a series of planes upon slightly different angles.

My invention is, therefore, primarily designed to overcome the tendency for the leaves to assume a convex plane, or a concave plane with respect to their upper surfaces, and to prevent dragging contact of the leaves upon the top surface of the slide-bars.

In solving the problem, as set forth above, the specific object of my invention is to provide a standard interlocking bearing block, having a high bearing face and a low bearing face, said faces being selectively reversible in constructing the table, depending upon whether the same is of the center support type or the end support type. Heretofore, standard bearing blocks, such as described in the prior patent referred to, have been provided with shoe portions, which serve as bearing surfaces for the juxtaposed slide, the said bearing surfaces being approximately equal distances from an imaginary center line passing through the block, and hence, when the said blocks were "glued in" or otherwise anchored, as to become in effect, a permanent part of one of the slides, the bearing surfaces being relatively fixed, would necessarily permit a certain amount of play, for the shiftable slide-bar supported thereby, and this play will obviously permit a certain amount of vertical play of the shiftable slide-bar, whereby the sag previously mentioned is developed.

My invention, therefore, provides the upper and lower parallel bearing surfaces of the shoe extension of the block, at different distances from the center of the shoe, whereby a reversal of the block is effected, when the table slide structure is assembled, to thus compensate for this sag in the table, to which they will thereafter be applied, and the reversal selection whereby the high or low bearing surface is positioned up or down depends upon the type of table under construction.

In the drawings,

Figure 1 represents a diagrammatical side elevation of an end supported table, embodying the features of my invention.

Figure 2, a fragmentary sectional plan view of the series of slide-bars employed in connection with constructing a table.

Figure 3 is a similar diagrammatical side elevation of a center supporting table, embodying the features of my invention.

Figure 4, a detailed enlarged cross sectional view of the fragment of an end supported table, such as illustrated in Figure 1, the slide-bars being illustrated in their closed position.

Figure 5 is a similar enlarged cross sectional view of a fragment of a center supported table, and

Figure 6, an enlarged detail cross sectional view of an interlocking bearing block, embodying the features of my invention, wherein the shoe portion thereof, is

formed with reversible high and low bearing faces for the support of an associated shiftable slide-bar.

Referring by characters to the drawings, especial reference to the Figures 1, 2 and 4, A—A′ represents end supported slide-bars of standard type for the reception of the usual table leaves, it being understood that the supported legs *a* may be of any suitable type. The supported slide-bars A—A′ have T-shaped grooves of the usual type, wherein shoe bearing surfaces *b* are formed at their upper and lower edges. The inner ends of said slide-bars have fitted within the T-shaped grooves and rigidly secured thereto, blocks 1—1, which blocks have shoe extensions 2 that serve as bearings for a floating slide-bar B, it being understood that the floating slide-bar upon its opposite faces is provided with T-shaped grooves having bearing edges, similar to the bearing edges mentioned in connection with the end slide-bars, which bearing edges engage the bearing surfaces of the shoe extension of the blocks 1—1. Each groove of the floating slide-bar B, also has secured therein, at opposite ends, a block 3, the shoe extension of which one of the blocks engages the bearing surface *b* of the slide A, while the corresponding shoe extension engages bearing surfaces *b*—*b* of the groove formed in the slide-bar A′.

All of the above construction forms no part of my present invention, however, and it is understood that the sliding bars in addition to the shoe extensions, which serve as surface supports for the shiftable bars, also carry metallic dished washers *d* which enter the base of the T-shaped grooves, to thereby lock the slide-bars against separation in a lateral direction.

In the end type of the table just described, it will be noted that the tendency of the center or floating slide B is to sag downwardly, under load and that the tendency of the end slides supported upon their legs *a* will also tend to rock downwardly in the same direction. Hence, in order to overcome this sag, the reversible blocks having the shoe extension, are secured to their respective slide-bars, so as to bring the high bearing surface X, see Fig. 6, against the bottom edge *b* of the T-shaped grooves and, by so doing when the slides are distended, they will practically assume a straight line in place of the sag previously mentioned, due to the fact, that this extra depth of support, formed by the bearing surfaces X of the shoe, will prevent the sagging of the parts and sustain them in their normal horizontal plane.

Referring now more particularly to Figures 3 and 5, *a′* represents the center supporting leg.

In this exemplification of my invention, the center slide B′ is fixed, and the details of construction with respect to this slide and the floating end slides A″, A‴ are similar to the structure described in connection with Figure 1, with the exception that the center support reverses the type of extension table, whereby the end slides have a tendency to sag downwardly and, in supporting the extension leaves, they will assume convexity, in place of a concavity developed in that type of table illustrated in Figure 1 of the drawing. To overcome the convexity or end sag, mentioned in connection with the center supported table, the blocks are reversed so as to bring their high bearing surfaces *x* above, in place of being below, as in the other case. Hence, when these high bearing surfaces are in position, as indicated in Figure 1, the tendency of the end slides to sag will be overcome and the table top will assume a normal horizontal plane. In other words, all that is necessary to correct the tendency to sag in the two types of tables, is to reverse the position of the bearing surface *x* of the blocks, whereby their high surfaces will either form bearings for the upper edges of the grooves as shown in Fig. 3, or the lower edges as shown in Fig. 1.

It is understood, as best illustrated in Figure 6, that said bearing blocks are each formed with a high bearing surface *x* and a low or clearance bearing surface *y* which bearing surfaces in connection with the shoe heretofore have been spaced equal distances from an imaginary line intersecting the center of the block.

I claim:

1. The combination of slide-bars having longitudinal recesses therein, and a block having an upper surface, a second surface, spaced lower than said first mentioned upper surface, a lower surface spaced below said second upper surface, and a second lower surface spaced below said first mentioned upper surface, the distances between said upper surfaces being unequal to the distances between said lower surfaces, and said slide-bars receiving said block in said recesses and contacting with said surfaces.

2. The combination of slide-bars having longitudinal recesses therein, and a block having an upper surface, a second surface, spaced lower than said first mentioned upper surface, a lower surface spaced below said second upper surface, and a second lower surface spaced below said first mentioned upper surface, the distances between said upper surfaces being unequal to the distances between said lower surfaces, said slide-bars receiving said block in said recesses and contacting with said surfaces, said block being reversible to alter the level of said slide-bars.

3. The combination of slide-bars having longitudinal recesses therein, and a block having an upper surface, a second upper

surface, spaced lower than said first mentioned upper surface, a lower surface spaced below said second upper surface, and a second lower surface spaced below said first mentioned upper surface, the distances between said upper surfaces being unequal to the distances between said lower surfaces, said slide-bars receiving said block in said recesses and contacting with said surfaces, said block being reversible to alter the level of said slide-bars, and means for securing said block to one of said slide-bars.

In testimony that I claim the foregoing I have hereunto set my hand at Watertown, in the county of Jefferson and State of Wisconsin.

HARRY N. SMITH.