

*A. H. Shipman,*  
*Extension Table.*  
*No. 96,533,                      Patented Nov. 2, 1869.*

Figure 1.

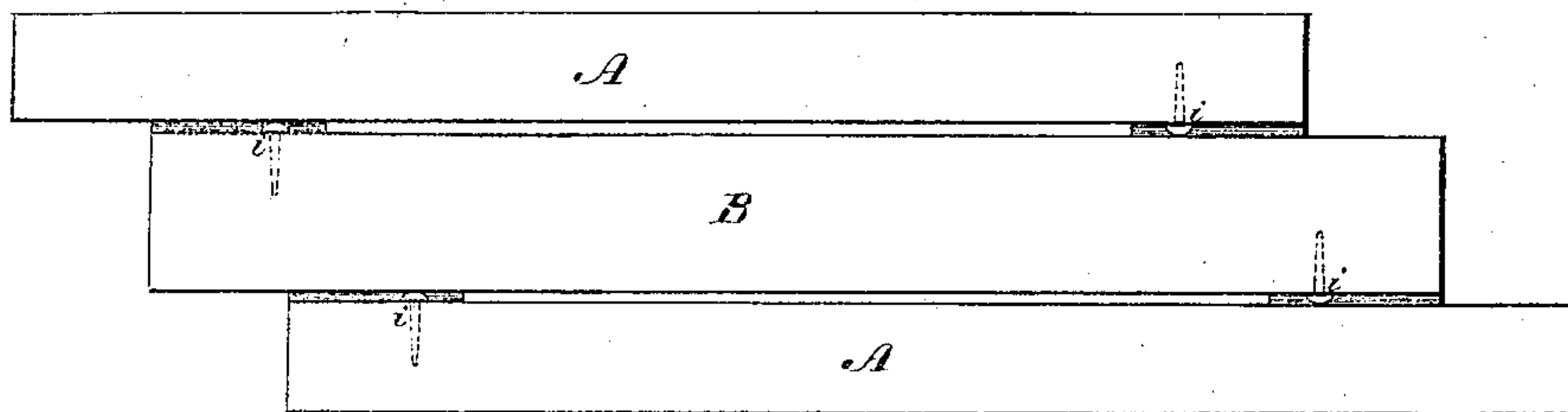


Figure 2.

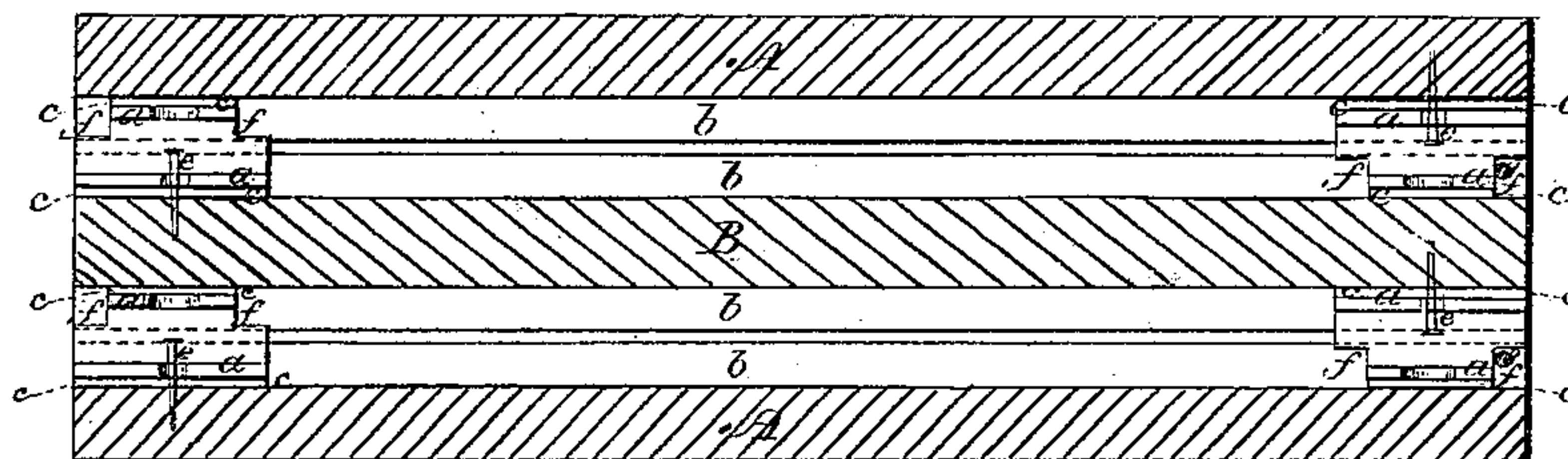


Figure 3.

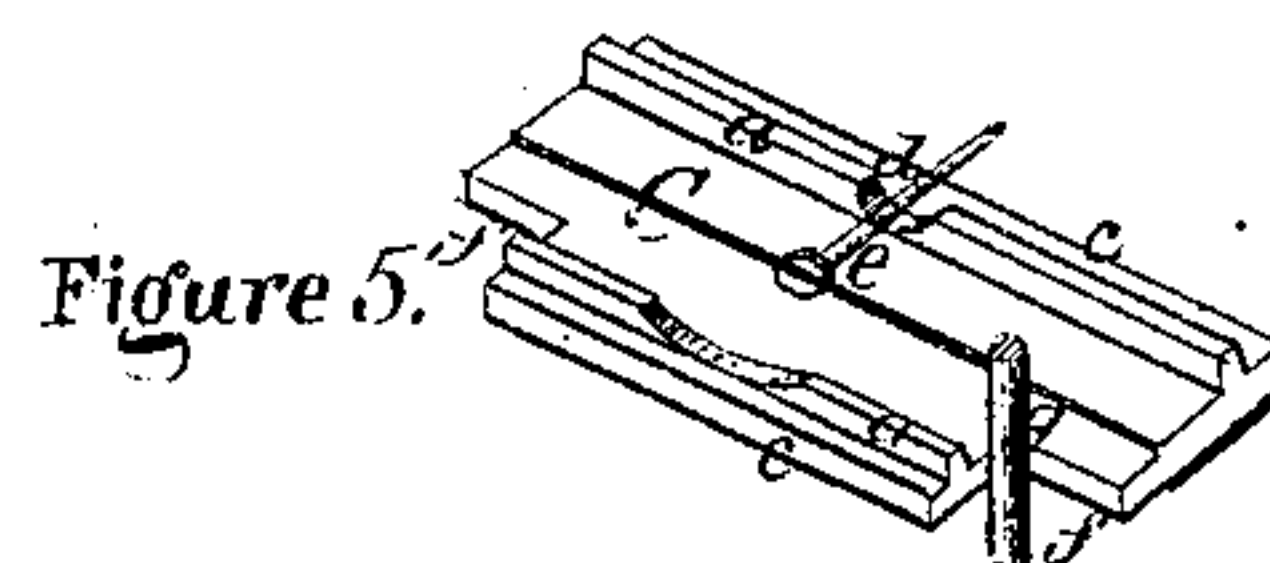
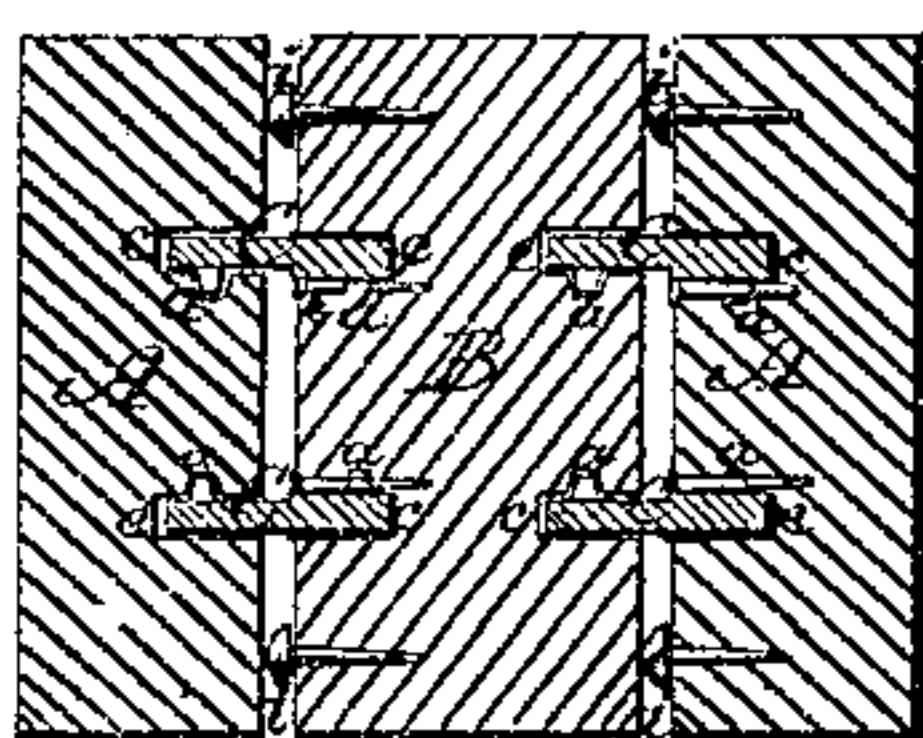
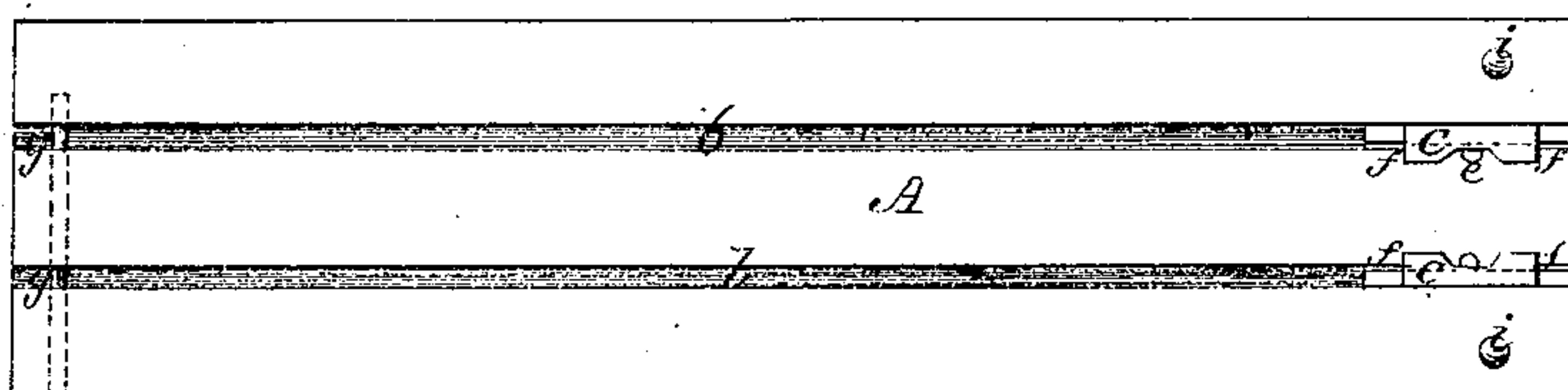


Figure 4.



*Witnesses*  
*J. H. Upfferman*  
*A. C. Johnson*

*Inventor.*  
*Albert H. Shipman*



# United States Patent Office.

ALBERT H. SHIPMAN, OF ARCADIA, NEW YORK.

Letters Patent No. 96,533, dated November 2, 1869.

## IMPROVEMENT IN EXTENSION-TABLE SLIDES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ALBERT H. SHIPMAN, of Arcadia, in the county of Wayne, and State of New York, 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 of the same, reference being had to the accompanying drawings, which make part of this specification, and in which—

Figure 1 represents a plan showing three bars of an extension-slide;

Figure 2 represents a horizontal section of the same, taken through the grooves and slides of the bars;

Figure 3 represents a transverse section of the same;

Figure 4 represents a plan of the grooved side of one of the bars; and

Figure 5 represents a view, in perspective, of the metallic tongued slide, detached from its bar.

In the accompanying drawings—

A represents the bars attached to the ends of the table, and

B, the intermediate bar, supported by and sliding between the end-bars.

These bars are, of course, arranged on each side of a table in the usual manner, and a greater or less number may be used, according to the length of the table.

I am aware that metallic slides have been fitted in a groove formed in the centre of each bar of an extension-slide, so as to form stops thereto, having the form of a double dovetail, and that the bars have also been united together by slides secured to the outer side of the bars, so as to slide within outside grooves, but the latter arrangement is so frail that the shoulders of the bar, between the lips of the slide, often break off and render the table comparatively useless, and necessitates the refitting therein of a new bar, while a single central groove, with its slide, does not give to the bars that strength and rigidity which are required.

My improvements are designed to obviate these defects, and to produce an extension-slide, firm, durable, and simple in construction, and consist in constructing the metallic slides C with two parallel tongues *a*, projecting from the same side thereof, so as to leave shoulders *c*, thereon, contiguous to said tongues, and at right angles thereto, thereby forming a bracing shoulder to each tongue, within the groove *b* of each bar.

One side of each slide C, thus constructed, is made thicker than the other, namely, that side which is secured in the groove *b*, in order to allow it to be driven tightly into said groove, while the other side is of less thickness, to allow it to move freely within the groove *b* of the adjacent bar, as shown in figs. 3 and 5.

The slide thus inserted is fastened by a pin, *e*, driven

into the bar against the face of said slide, through a notch, *d*, in the tongue, as shown in figs. 3 and 5.

The tongues *a* are fitted into grooves in the bars A B, and serve to lock them together; and in order to enable them to slide within the grooves, and prevent the bars from wobbling, the right-angled shoulders *c* are formed adjacent thereto, which give a firm bearing to the slide C.

Each slide is notched or recessed at each end at *f*, in order that it may strike against a pin, *g*, inserted into and crossing the grooves *b*, as shown in fig. 2, so as to form a stop to the bars A B, not liable to be torn out of the grooves, and to allow the ends of said bars to come flush when they are brought together in closing the table.

These slides C are secured in the ends of the bars A B, so as to slide within the grooves *b*, made above and below the centre of each bar; and from this arrangement it will be seen that when the bars are extended, the pair of slides at the end of one bar, forms a perfect support and brace to the slides of the adjacent bar, and thus gives a firmness to said bars which cannot possibly be obtained by a single slide in each bar, or which cannot be obtained by plates screwed on the outer opposite sides of the bars.

It has been found by experience that a flat plate, forming part of the slide, and fitted so as to slide and offer a considerable surface to the adjacent sides of the bars, while it effectually separates the two, so as to form a space between them, does not, however, prevent the binding which it was intended to remedy.

Moreover, in securing the bars together, if they should bind at any part of their length, the plates cannot be adjusted, and therefore the bars must be planed to remove the defect, and particularly will this be the case if the groove is not cut of a uniform depth.

To remedy these defects, I insert in the opposite contiguous faces of each of the bars, near the upper and lower edge thereof, a common round-headed tack or pin, *i*, as shown in fig. 4, so that its head shall project between the bars, and offer to the adjacent bar a small round bearing-point, whereby it is impossible for it to bind between said bars.

In addition to this, if the bar should be warped or the grooves *b* of unequal depth, the round-headed pins *i* afford the greatest facility in making the slides to move without binding, by simply driving either one or the other into the bar until the inequality is compensated for.

The use, therefore, of a simple round-headed pin, which may be adjusted into the bar to a greater or less depth, it is apparent, possesses many advantages over a flat plate, admitting of no adjustment.

Having described my invention,

I claim—

1. The metallic slides *C*, made thicker at one side than at the other, and provided with tongues *a*, shoulders *c*, and notches or recesses *f*, in combination with bars *A B*, having grooves *b* and pins *g*, as herein described, for the purpose specified.

2. The bars *A B*, separated and held apart by means of a common round-headed pin, *i*, for the double

purpose of presenting a convex bearing-point for the adjacent bar, and admitting adjustment, as described.

In testimony whereof, I have signed my name.

ALBERT H. SHIPMAN.

Witnesses:

T. H. UPPERMAN,

A. E. H. JOHNSON.