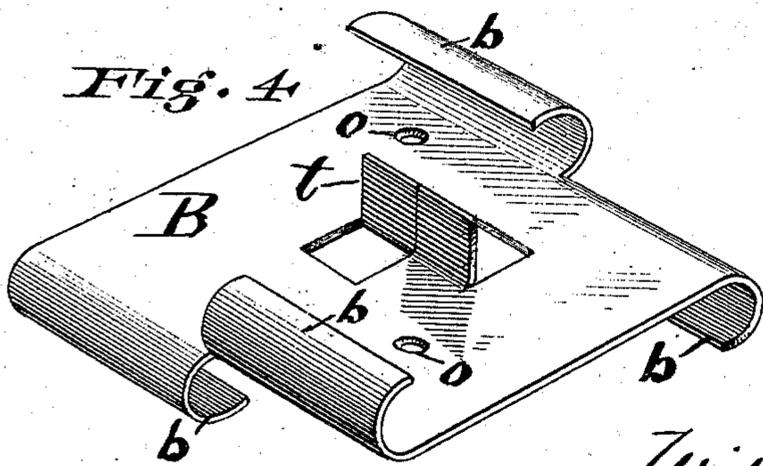
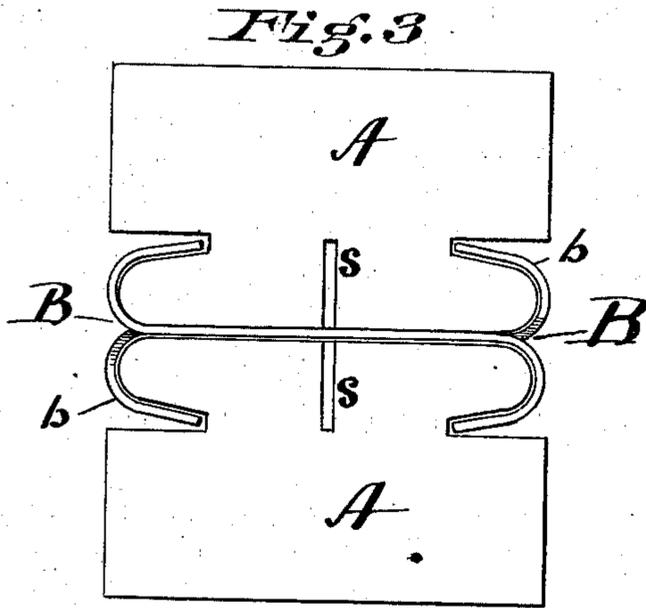
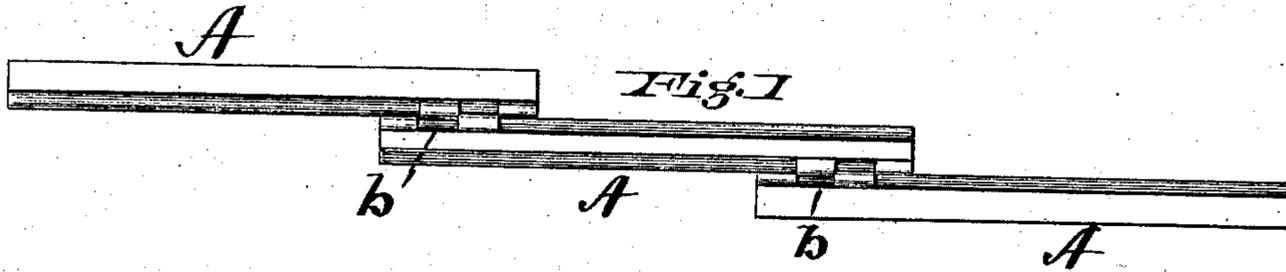


(No Model.)

W. H. WOODFORD.  
Extension Table Slide.

No. 239,588.

Patented March 29, 1881.



Attest  
C. J. Heuser  
Henry Dross

Inventor  
William H. Woodford,  
by R. M. Hovea  
Attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM H. WOODFORD, OF OWENSBOROUGH, KENTUCKY, ASSIGNOR TO  
JOSEPH H. BARKER, OF CINCINNATI, OHIO.

## EXTENSION-TABLE SLIDE.

SPECIFICATION forming part of Letters Patent No. 239,588, dated March 29, 1881.

Application filed May 25, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. WOODFORD, a citizen of the United States, residing at Owensborough, Daviess county, Kentucky, have invented new and useful Improvements in Extension-Table Slides, of which the following is a specification.

My invention relates to extension-slides used in extension tables, ladders, &c., and is designed to improve the construction and efficiency of such slides.

To this end it consists in an improved metallic clamp and guide, hereinafter more fully described, and in the combination of the movable slides therewith; also, in the provision of a guiding-tongue in the guide, arranged to move in a grooved slot in the slide to form a stop.

My invention is embodied in mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved extension-slide in three sections extended. Fig. 2 is a view of the same closed. Fig. 3 is an end view of two slides with clamps attached. Fig. 4 is a perspective view of the metallic slide or clamp detached.

Similar letters of reference indicate like parts throughout the drawings.

A represents the wooden slide or extension-piece, which, when used as the end piece in a connected series, is grooved and tenoned on the opposite edges of one side only, but when used as an intermediate slide in the series is grooved and tenoned on both sides, as shown in the drawings.

The metallic clamps B, used to secure the slides together and guide them in their movement, may be formed of sheet metal (which is preferred) or of malleable cast metal. They consist of a flat body, with two or more ears, *b*, projecting on opposite sides and turned in opposite directions, to correspond with the shape and size of the tenon formed on the sliding pieces A. If made of sheet metal, a rectangular piece of metal is taken, of suitable dimensions, and from opposite edges slits are cut inward at right angles thereto, and the projecting tongues thus left are turned over in opposite directions and suitable holes *o* punched in the body of the clamp for the insertion of screws

to fasten the same securely to the wooden slides. The clamps are then slipped over the end of the slides, so that the tongues *b*, turned over upon the side adjacent to the wood, embrace the tenon formed thereon and form part of the means by which the clamp is held to the wooden slide. The screws are then inserted in the apertures *o* and the clamp securely held to its slide. The tongues *b*, which are thus left projecting outward, form a guide, in which the tenons of the contiguous slide are inserted, and upon the last-mentioned slide other clamps may be fastened to engage the tenons of the first, and on its opposite side another clamp to engage with an independent slide, as clearly shown in the drawings.

It will be seen that one set of tongues embrace and clamp the slide to which the clamp is attached, and the strain of weight upon the extended structure is relieved from the fastenings securing the clamp to its wooden slide and brought upon the substance of the clamp itself, thus making a very secure and strong joint and preventing the parts becoming loose. Besides, when formed of sheet metal, the elastic nature of the tongues will prevent any binding of parts by reason of the swelling of the wooden parts. Any number of slides may in this manner be united together, according to the uses for which they are designed.

I use two clamps upon adjacent surfaces of the slides, in order to form a stronger splice-joint when extended, and these form stops for each other, to prevent the slides drawing apart. As an additional means, however, of stopping the slides at the proper point and preventing their drawing apart, I form upon the body of the clamp a central tongue, *t*, which, in the case of a sheet-metal clamp, is made by cutting the metal on three sides of a square and turning up a central tongue, *t*. A narrow groove or slot, *s*, is then formed in the center of the face of the slide A, in which this tongue *t* travels. A small pin inserted in the groove or slot *s* at any desired point thus forms a perfect stop to prevent the further travel of the slides.

I do not claim, broadly, a slide consisting of a plate having its opposite edges curved in the same direction to form flanges or ears, and provided at its center with a guide-tongue—

such, for instance, as shown in Patent No. 162,049, dated April 13, 1875; nor do I claim, broadly, a slide having its opposite edges formed with upward and downward projecting flanges, as in Patent No. 104,340, dated June 14, 1870, as such constructions are not my invention; but,

Having described my invention, I claim and desire to secure by Letters Patent—

10 1. The sheet-metal clamp B, consisting of a flat body slitted at opposite edges, as set forth, and having each of said edges reversely curved to form the four independent flanges or ears *b*, the two flanges at one edge of the body being  
15 curved in reverse directions to each other, and the two flanges at the other edge being likewise curved in reverse directions, substantially as described.

2. The sheet-metal clamp B, consisting of a flat body having its central portion cut and turned outward to form the central guide-tongue, *t*, and having its opposite edges curved to form the independent flanges or ears *b*, the flanges at each edge being curved in reverse directions to each other, substantially as de- 25 scribed.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM H. WOODFORD.

Witnesses:

L. M. HOSEA,  
E. KELIHAN.