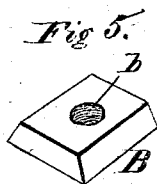
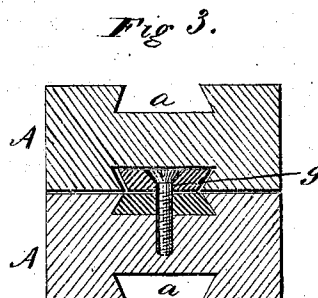
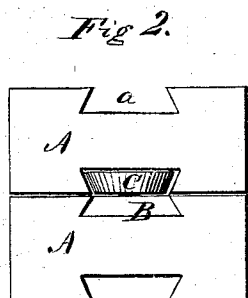
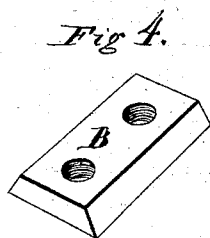
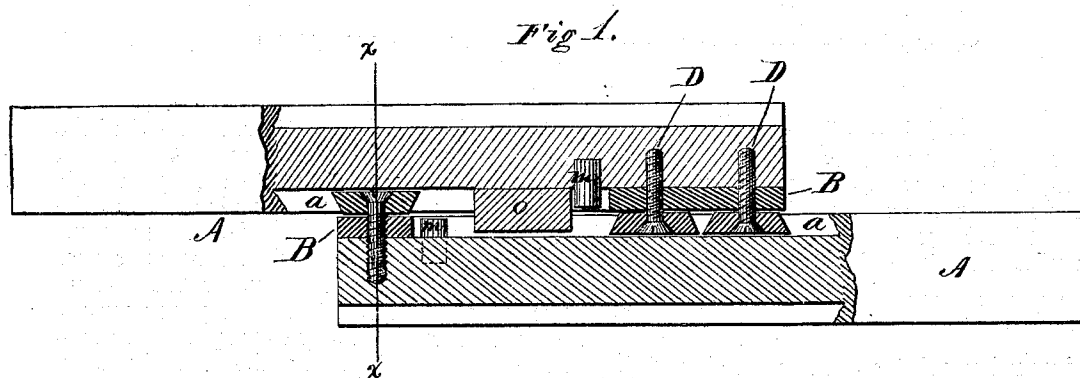


JACOB DOURSON.

Improvement in Extension Table Slides.

No. 125,034.

Patented March 26, 1872.



Witnesses.

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UNITED STATES PATENT OFFICE.

JACOB DOURSON, OF COLUMBUS, OHIO.

IMPROVEMENT IN EXTENSION SLIDES.

Specification forming part of Letters Patent No. 125,034, dated March 26, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, JACOB DOURSON, of Columbus, in the county of Franklin and State of Ohio, have invented certain Improvements in Extension Slides for Dining-Tables, of which the following is a specification, reference being had to the accompanying drawing.

My invention relates to an extension slide for dining-tables; and consists in employment of conical-rollers working in dovetail grooves for the purpose of connecting the slides together, and also in a peculiar manner of attaching the rollers to the slides so as to prevent them from working loose.

Figure 1 is a horizontal section of my improved slide; Fig. 2, an end view of the same; Fig. 3, a cross section of the same on the line *xx* of Fig. 1; Figs. 4 and 5, views of two forms of the plate for supporting the rollers; and Fig. 6, a perspective view of one of the rollers.

In constructing my extension slide, I first provide the usual wooden bars or slides *A*, and in both sides of each bar form a longitudinal dovetail groove, *a*, as shown. I then provide metal plates or blocks *B*, of the proper size, to fit into the grooves *a*, and fill the same out flush with the face of the bar, and through each of these plates I form a hole, *b*, provided with a screw-thread, as shown. I next provide the rollers *C*, made of a conical form to fit into the grooves *a*, and provided with a central countersunk hole to receive the head of the pivot-screw. The screws *D* are formed with large conical heads so as to hold the rollers firmly; but the heads are made to extend only part way through the roller, so as to leave a flat bearing, *g*, on the neck of the screw, as shown in Fig. 3, to receive the strain of the roller. In putting the slide together I drive one of the dovetail plates *B* tightly into the end of one of the grooves *a* so as to be flush with the end of the bar, and then slip one of the rollers *C* onto one of the screws *D*, and screw the latter through the plate *B* into the wooden bar, so as to hold the roller up against the face of the plate, as shown in Figs. 1 and 3. The plate, being, as stated, driven tightly into the groove, is held by the wood, so that when the screw is inserted and turned the

plate serves as a die, and forces the end of the screw firmly into the wood, so that it cannot be worked loose. The screw not only serves as a pivot for the roller, but also to hold the metal plate from moving endwise in the groove. Thus it will be seen that while the plate serves to support and hold the screw, the screw serves to secure the plate, so that each part serves to hold the other. Having thus applied the roller to one bar, I attach another one to the opposite end of the second bar in like manner, and then place the two bars together in the manner shown in Fig. 1, inserting the roller of each into the groove of the other.

When thus arranged the rollers hold the two bars together and in line with each other, but permit them to be shoved together and drawn apart endwise in the ordinary manner. In order to prevent the rollers from striking each other when the slide is extended, a dowel-pin, *m*, is inserted in each groove near the roller, as shown in Fig. 1, so that when the bars are drawn apart the two pins will strike against each other and prevent any further movement. In this way the rollers are not only prevented from striking and bruising each other, but also from knocking each other out of place when the slides are drawn violently apart. The amount of lap that the bars shall have when extended is regulated by inserting a block, *o*, of the proper length, between the bars in the grooves *a*, as shown in Fig. 1, so as to prevent the dowel-pins from coming in contact. By thus providing the bars with the dovetail grooves and conical rollers to run in them, I produce a very cheap, strong, and durable slide, which has very little friction, and which is not affected by dryness or moisture of the atmosphere. And by the method of driving the metal plates into the grooves and of screwing the pivots through them into the wood, I hold the rollers very firmly, so that they will not be loosened or forced off by use. In case the wood shrinks or swells at any time, so that the rollers bind in the grooves, they may be eased by loosening the screws very slightly, which, as the rollers are conical, permit them to fall back into the wider portion of the groove. It is this facility of easing the rollers that constitutes the greatest advantage of my slide over all others heretofore in use.

It is obvious that, instead of using single

rollers, they may be arranged in pairs, as shown on the right hand in Fig. 1, in which case the plate B will be made long enough to receive the pivot-screws of both rollers, as shown in Fig. 4. It is also obvious that the rollers may be made of metal, gutta-percha, hard rubber, or any other suitable material.

Having thus described my invention, what I claim is—

1. The extension slide for tables, consisting of bars A, provided with the dovetail grooves *a*, and the conical-rollers C, when constructed

and arranged to operate, substantially as described.

2. In combination, the bars or slides A provided with the dovetail grooves *a*, and plates B, the conical-rollers C, and screws D, when constructed and arranged to operate as described.

JACOB DOURSON.

Witnesses:

J. MCKENNEY,
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