

No. 655.358.

Patented Aug. 7, 1900.

S. M. SMYTH.  
TABLE LEG FASTENER.  
(Application filed May 14, 1900.)

(No Model.)

Fig. 1.

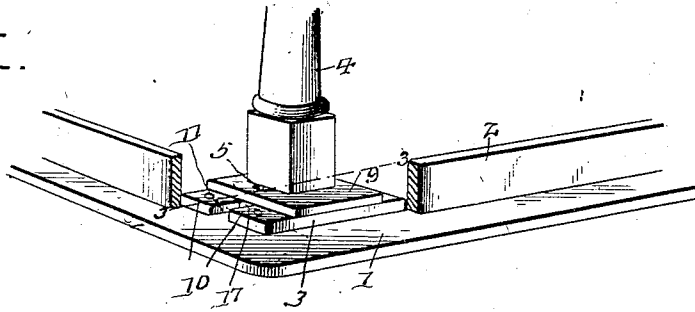


Fig. 2.

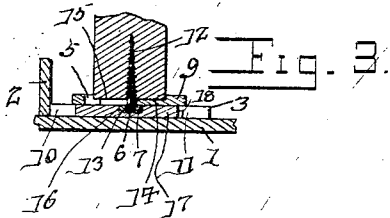
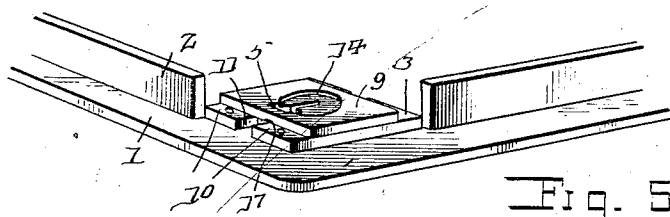


Fig. 3.

Fig. 5.

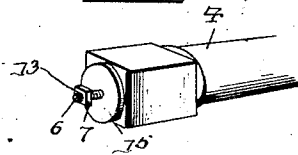


Fig. 4.

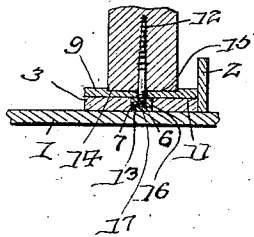


Fig. 8.

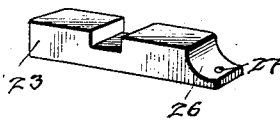


Fig. 6.

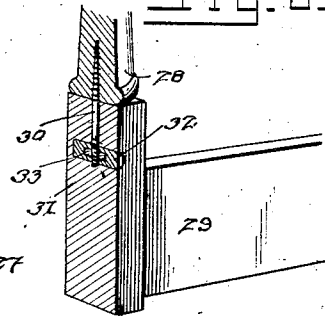


Fig. 7.

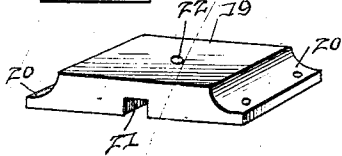
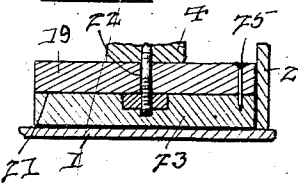


Fig. 8.



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# UNITED STATES PATENT OFFICE.

SAMUEL MALCOLM SMYTH, OF STRATHROY, CANADA.

## TABLE-LEG FASTENER.

SPECIFICATION forming part of Letters Patent No. 655,358, dated August 7, 1900.

Application filed May 14, 1900. Serial No. 16,633. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL MALCOLM SMYTH, a subject of the Queen of Great Britain, residing at Strathroy, in the Province of Ontario and Dominion of Canada, have invented a new and useful Table-Leg Fastener, of which the following is a specification.

The invention relates to improvements in table-leg fasteners.

One object of the present invention is to improve the construction of table-leg fasteners and to provide a simple and comparatively-inexpensive construction for detachably securing table-legs to table-tops and for enabling such legs to be tightly screwed against the parts to which they are secured.

A further object of the invention is to provide a device of this character which may be readily adjusted to enable the leg of a table to be clamped in position to the desired degree of tightness.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of one corner of a table constructed in accordance with this invention, the leg being in position. Fig. 2 is a similar view, the leg being removed. Fig. 3 is a sectional view on line 3 3 of Fig. 1. Fig. 4 is a similar view taken at right angles to Fig. 3. Fig. 5 is a detail perspective view of the leg. Fig. 6 is a detail perspective view, partly in section, illustrating a modification of the invention. Fig. 7 is a detail perspective view showing another form of base. Fig. 8 is a sectional view of a portion of a table having a rectangular block forming a base. Fig. 9 is a detail perspective view of a removable nut-receiving key or piece having an extension adapted to be secured to the top of a table.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a table-top provided with the usual rectangular frame 2 and having a base 3 arranged at each of its corners for the reception of a leg 4, and the said base 3 may, as illustrated in Figs. 1 to 4, inclusive, be constructed of several pieces to enable waste material to be utilized, or, as shown in Figs.

7 and 8, it may consist of a single block. The base 3 is provided with a keyhole-slot 5, having its enlarged portion of rectangular form and providing an opening for enabling a screw or threaded shank 6 and a nut 7 of a leg 8 to be interlocked with the base 3 by arranging the nut on the interior thereof. The base 3 is composed of a plate or piece 9 and a pair of blocks or pieces 10, interposed between the plate 9 and the top of the table and spaced apart to provide a groove 11 for the reception of the nut, and the said groove 11 is of the same width as the nut, so that the inner longitudinal edges of the blocks or pieces 10 will engage the adjacent edges of the nut and prevent the same from rotating. The nut is passed through the enlarged portion of the opening or keyhole-slot 5 and arranged within the groove 11, and the leg 8 is then moved inward to center it on the base 3 and to carry the threaded shank or screw 7 into the neck or narrow portion of the keyhole-slot or opening 5. The screw or threaded shank is provided with inner and outer screw-threads, the inner screw-thread forming a wood-screw and engaging the adjacent portion of the leg and the outer screw-thread 13 engaging the threads of the nut. The base is preferably provided at its center with a circular recess 14, forming the seat for a circular projection 15 of the upper end of the leg, whereby the latter is securely locked against lateral movement when it is screwed home. The interlocking connection formed by the projection 15 of the leg and the circular recess 14 of the base prevents any lateral displacement of the leg and any consequent movement of the screw or threaded shank in the slot or opening 5.

The nut, which is preferably rectangular, is received within a transverse recess 16 of a removable key or piece 17, which is arranged within the groove or space 11 of the base 3 and which extends entirely across the groove. In assembling the parts the nut-receiving piece or key is inserted in the groove 11 with its recess arranged beneath or opposite the opening 5, at the enlarged portion thereof, in order to receive the nut as the leg is placed in position. After the nut is properly seated in the recess of the key or piece 17 the leg is moved inward and centered over the base and is screwed tightly against the same. The key or piece 17 is carried inward by the leg

and is held firmly in position by the engagement of the nut with the outer threaded portion of the screw or shank. The nut is adapted to be adjusted on the outer threaded portion of the screw or shank, so that the leg may be clamped against the base to the desired degree, and by rotating the nut and screwing it on the outer threaded portion of the screw or shank the clamping action will be increased. As the nut is held between the side walls of the groove of the base and the side walls of the recess of the nut-receiving key or piece, it will be readily apparent that it is effectually prevented from rotating while the leg is being turned to screw it on or off. Instead of placing the leg in position with the nut on the threaded outer portion of the screw or shank the nut may be arranged within the recess of the nut-receiving piece or key, which may be placed in the groove of the base preparatory to applying the leg.

In order to enable the nut-receiving key or piece to be readily centered to arrange the nut-receiving recess centrally, it may be provided at one end with a stop 18, or the frame 2 may be employed as a stop to be engaged by the other end of the nut-receiving piece or key.

Instead of constructing the base of several blocks or pieces a single block or piece 19 may be used and its ends may be cut off square or they may be provided with extensions 20. The base, whether constructed of one or more pieces, may be fastened to the top of a table by screws or any other fastening means, such as glue or the like. The block 19 is provided with a groove 21 and it has a central opening 22, but a keyhole-slot or opening may be employed, if desired. The nut-receiving key or piece 23 may be secured within the groove of a base by a nail 25 or other suitable fastening device, which is passed through the base and embedded in one end of the nut-receiving block or key, as clearly shown in Fig. 8 of the accompanying drawings. The nut-receiving piece or key may, as illustrated in Fig. 9, be provided with an extension 26, having a perforation 27, adapted for the reception of a fastening device for engaging the top of the table. In Fig. 6 of the drawings is illustrated a modification of the invention wherein the leg 28 is connected with the frame 29 at the outside thereof. In this form of the invention the threaded shank or screw 30 is passed through a perforation of a corner block or base 31, which is provided with a transverse bore or groove receiving a key or piece 32 for holding a nut 33. The nut 33 is engaged by the outer threaded portion of the screw or shank, which passes through the piece or key and through the nut, as clearly shown in Fig. 6.

It will be seen that the construction for connecting the leg with the top of the table is exceedingly simple and inexpensive in construction, that it is adapted to permit the leg to

be readily detached and replaced, and that it may be screwed tightly home and the nut adjusted without employing a wrench. It will also be apparent that the base against which the leg abuts may be constructed of one or more pieces, that when constructed of several pieces material may be utilized which would otherwise be wasted, and that in all of the forms shown the parts are readily accessible.

What I claim is—

1. In a device of the class described, the combination with a table-top, of a base provided with an opening and having an interior groove or recess, a nut-receiving key or piece arranged within the groove or recess, a nut arranged in the nut-receiving key or piece and having its edges engaged to hold it against rotation, and a leg provided with a threaded stem extending through the opening of the base and engaging the nut and retaining the same and the said key or piece in place, substantially as described.

2. In a device of the class described, the combination with a table-top, of a base provided with a keyhole-slot and having an interior groove or recess communicating with the same, a nut-receiving key or piece arranged in the groove or recess, a leg having a threaded stem, and a nut mounted on the threaded stem and adapted to be passed through the keyhole-slot to arrange it within the groove or recess and on the nut-receiving key or piece, substantially as described.

3. In a device of the class described, the combination with a table-top, of a base having a keyhole-slot and provided with a circular recess, said base being also provided with a groove, a nut-receiving key or piece arranged within the groove a nut mounted on the key or piece and engaged by the same and by the walls of the said groove, and a leg having a threaded stem engaging the nut, said leg being also provided with a circular projection to fit in the circular recess, substantially as described.

4. In a device of the class described, the combination with a table-top, of a base composed of two blocks or pieces spaced apart to provide an interior groove or recess, and a plate or piece mounted on the blocks or pieces and provided with an opening, a nut-receiving key or piece arranged within the groove or recess, a nut arranged in the nut-receiving key or piece and having its edges engaged to hold it against rotation, and a leg provided with a threaded stem extending through the opening of the base and engaging the nut and retaining the same and the key or piece in place, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SAMUEL MALCOLM SMYTH.

Witnesses:  
HENRY HARDY,  
DUNCAN C. ROSS.