No. 606,845. Patented July 5, 1898.

J. H. SIMMONS.

FOLDING TABLE.

(Application filed July 16, 1897.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

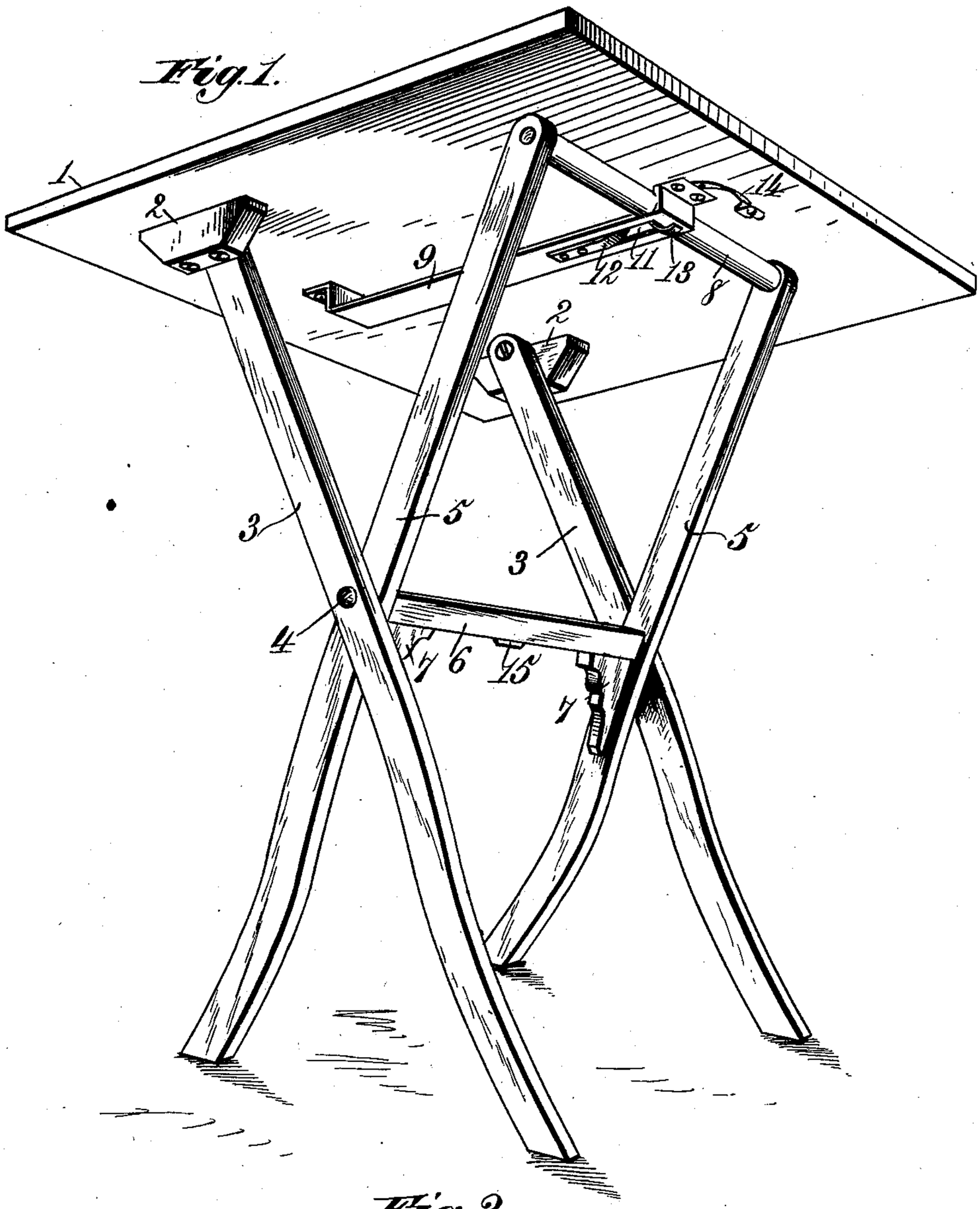
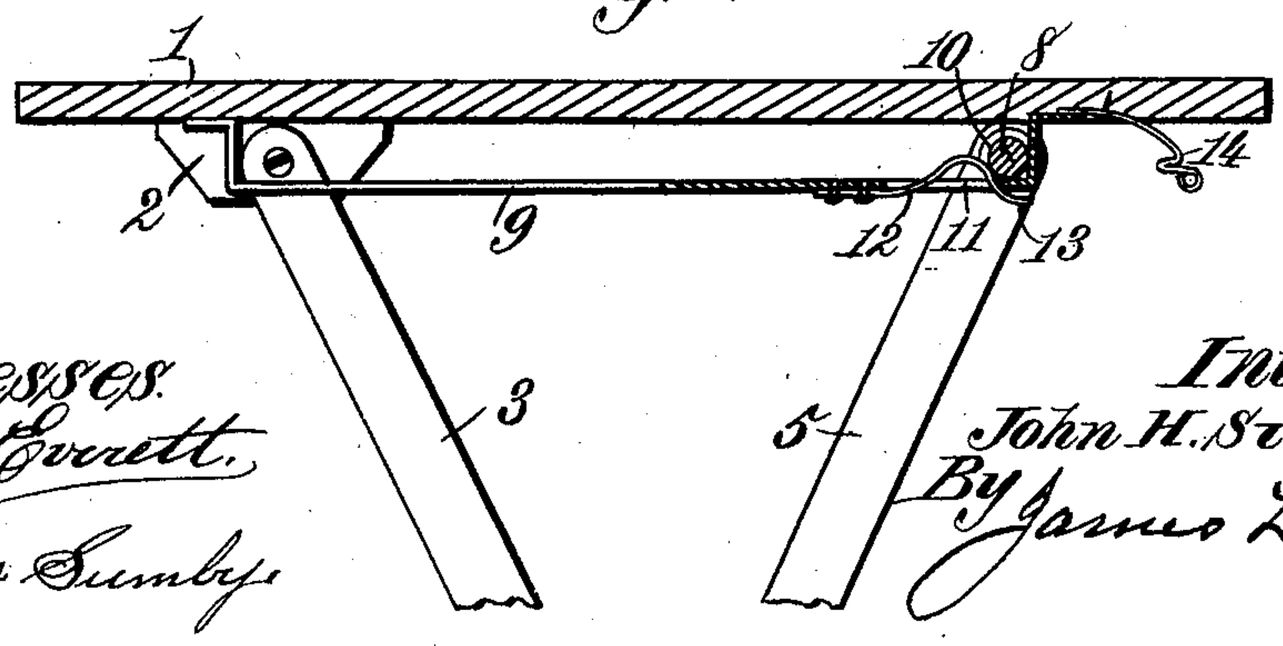


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

Fig. 3.

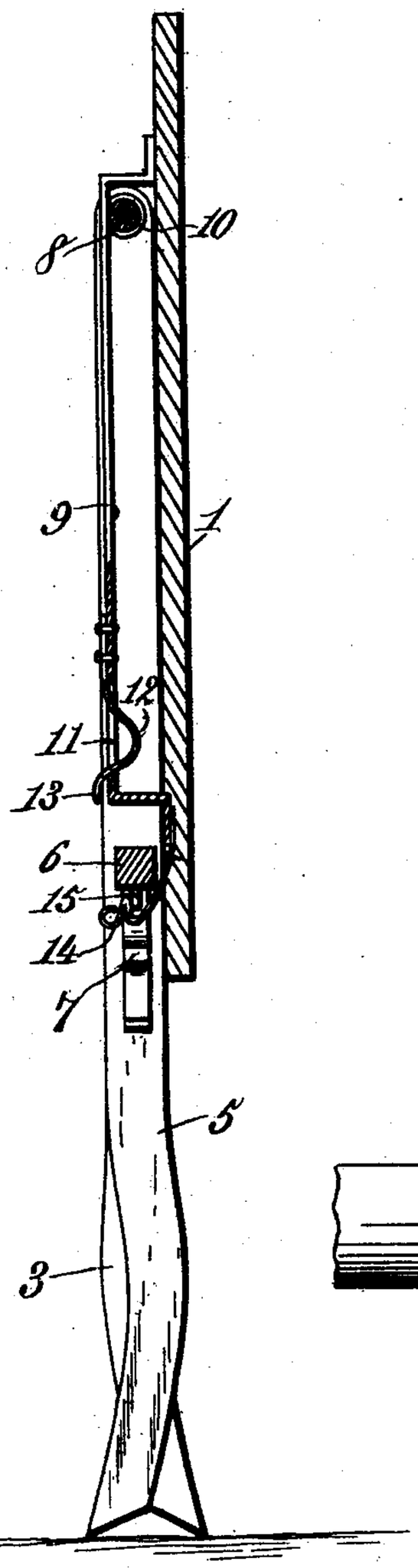


Fig. 4.

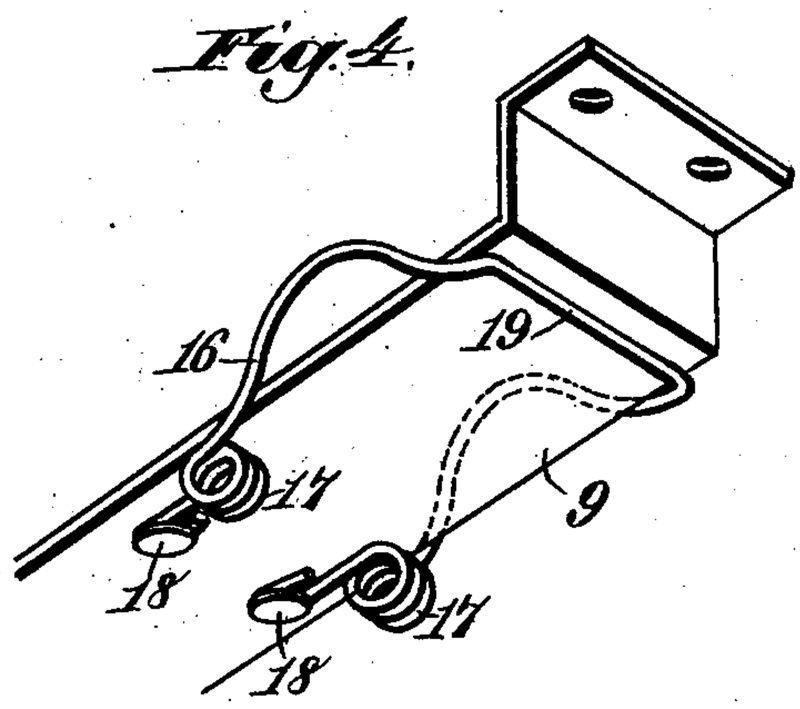
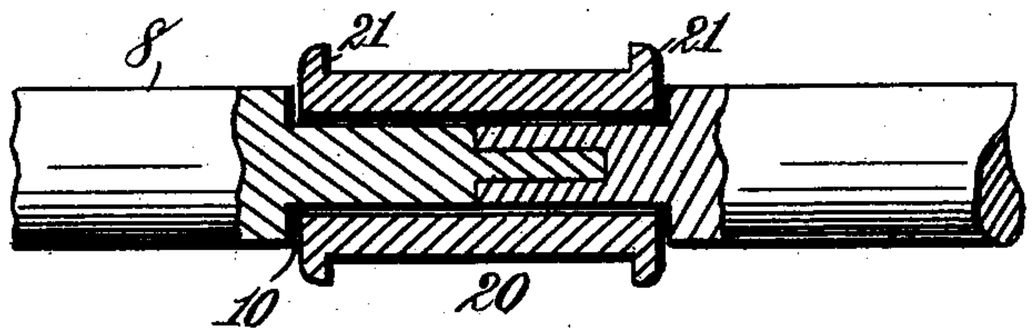


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN H. SIMMONS, OF WARREN, PENNSYLVANIA.

FOLDING TABLE.

SPECIFICATION forming part of Letters Patent No. 606,845, dated July 5, 1898.

Application filed July 16, 1897. Serial No. 644,814. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. SIMMONS, a citizen of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented new and useful Improvements in Folding Tables, of which the following is a specification.

This invention relates to folding tables; and it consists in features of construction and novel combinations of parts, as hereinafter described and claimed.

In the annexed drawings, illustrating my improvements, Figure 1 is a perspective of my improved folding table, showing the arrangement and manner of securing the legs when the table is unfolded. Fig. 2 is a longitudinal section of the upper portion of the table. Fig. 3 is a sectional view of the table in folded position. Fig. 4 is an enlarged detail view illustrating a modification in the form of the guide and attached spring-catch for securing the legs of the table in unfolded position. Fig. 5 is an enlarged sectional view of a roller mounted on the round or bar that connects the upper ends of a pair of folding legs.

The table-top (designated by the reference-numeral 1) has preferably secured to its under side toward one edge a pair of blocks, lugs, or bearings 2, to which a pair of legs 3 may be hinged or pivoted. These legs 3 carry on pivots 4 another pair of legs 5, which are securely connected and braced by a cross-bar 6 at the point of pivotal connection between the two pairs of legs. As an additional means of bracing there may be provided brackets 7 in the angles formed by the legs 5 and the said connecting cross-bar. At their upper ends the legs 5 are connected by a round or cross-bar 8, that is adapted to slide in a guide-way provided between the under side of the table-top and a guide-bar 9, the ends of which are secured to the table-top, as shown.

In Figs. 1, 2, and 3 the round or bar 8 is shown as having a circumferential groove 10, corresponding with the width of the guide-bar 9 and engaged with the edges of said guide-bar, so that all lateral sway of the legs will be prevented in folding or unfolding the table. This construction also braces the table-legs in such manner as to avoid any torsional strain on the pivots 4, whether the table is folded or unfolded or in adjusting it from the one position to the other. There may be provided in the guide-bar 9 a longitudinal slot 11, that affords a housing for a spring-catch 12, one end of which is secured to the under side of the said guide-bar. The free portion of this spring-catch 12 constitutes a bend that projects upward through the guide-bar slot 11 in such manner as to bear against the round 8 when the table is unfolded, as in Figs. 1 and 2, and thus locks the table-legs rigidly in unfolded position, so as to form a firm support for the table-top. When the unfolded legs are thus secured, the table can be safely lifted by its top and moved from place to place without slipping or disarrangement of the legs, as is often the case with folding tables.

In order to fold the table, it is only necessary to draw down the spring-catch 12 by catching hold of its end 13, thereby releasing the round 8 from the locking-pressure of said catch, and then the legs 3 and 5 may be moved to a position parallel with the table-top, as shown in Fig. 3, the round 8 meanwhile sliding rearward along the guide-bar 9 and with the groove 10 in engagement with the edges of said guide-bar, so as to obviate lateral swaying of the legs and avoid any tendency to twisting at the pivotal connections. At one end of the guide-bar 9 there is a spring-catch 14 to engage a lug or projection 15 on the cross-bar 6 when the table-legs are folded together, thus holding the table in secure and compactly-folded position for transportation and storage. The round or cross-bar 8 slides easily and freely along the guide-bar 9 in folding and unfolding the table, and by its engagement with said guide-bar the table-legs are most effectually braced and strain on the pivots prevented. By means of the slot 11 in the guide-bar 9 the spring-catch 12 is housed in such manner as to protect it from injury and yet permit it to exert the most effective locking action on the round 8 when the table is unfolded.

Instead of providing the guide-bar 9 with a spring-catch, such as 12, there may be secured to said guide-bar a spring-catch 16, Fig. 4, consisting of a single piece of wire formed into two coiled springs 17, having loop ends fastened to the guide-bar 9 by means of studs 18 on its under side. The two main arms of

the springs project upward at the sides of the guide-bar 9 in position to exert locking-pressure on the round 8, and they are connected in front by a cross-bar 19, that affords a finger-hold for depressing the spring-catch to release the round 8 when it is desired to fold the table.

A roller 20, Fig. 5, may be mounted in the circumferential groove 10 of the round 8 to diminish friction in running along the guide-bar 9, and the ends of this roller will be provided with flanges 21, between which the guide-bar is engaged or received to prevent lateral movement of the table-legs. To facilitate mounting this roller 20, the round 8 may be formed in two parts, jointed together, as in Fig. 5, after the roller is placed in position.

The fastenings for the table-legs are simple, not liable to get out of order, and will hold the table parts securely whether folded or unfolded.

What I claim as my invention is—

In a folding table, the combination with the table-top, of a pair of legs having hinged or pivotal connection with the under side of the table-top, another pair of legs pivotally attached to the first-named pair of legs and connected by a cross-bar at the said point of pivotal attachment and by a round at the upper ends of said legs, a guide-bar secured to the under side of the table-top, a roller mounted on the said round and having flanged ends engaged with the edges of said guide-bar to prevent lateral movement of the legs, a spring-catch mounted on said guide-bar to engage the round and lock the table in unfolded position, and a spring-catch at one end of the said guide-bar to engage the cross-bar located between the pivotal connection of the legs and secure the folded table, substantially as described.

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

JOHN H. SIMMONS.

Witnesses:
O. H. HOLDRIDGE,
SUMNER E. ORR.