(No Model.) 2 Sheets—Sheet 1.

J. T. BON.

FOLDING TABLE.

No 434,240. Patented Aug. 12, 1890.

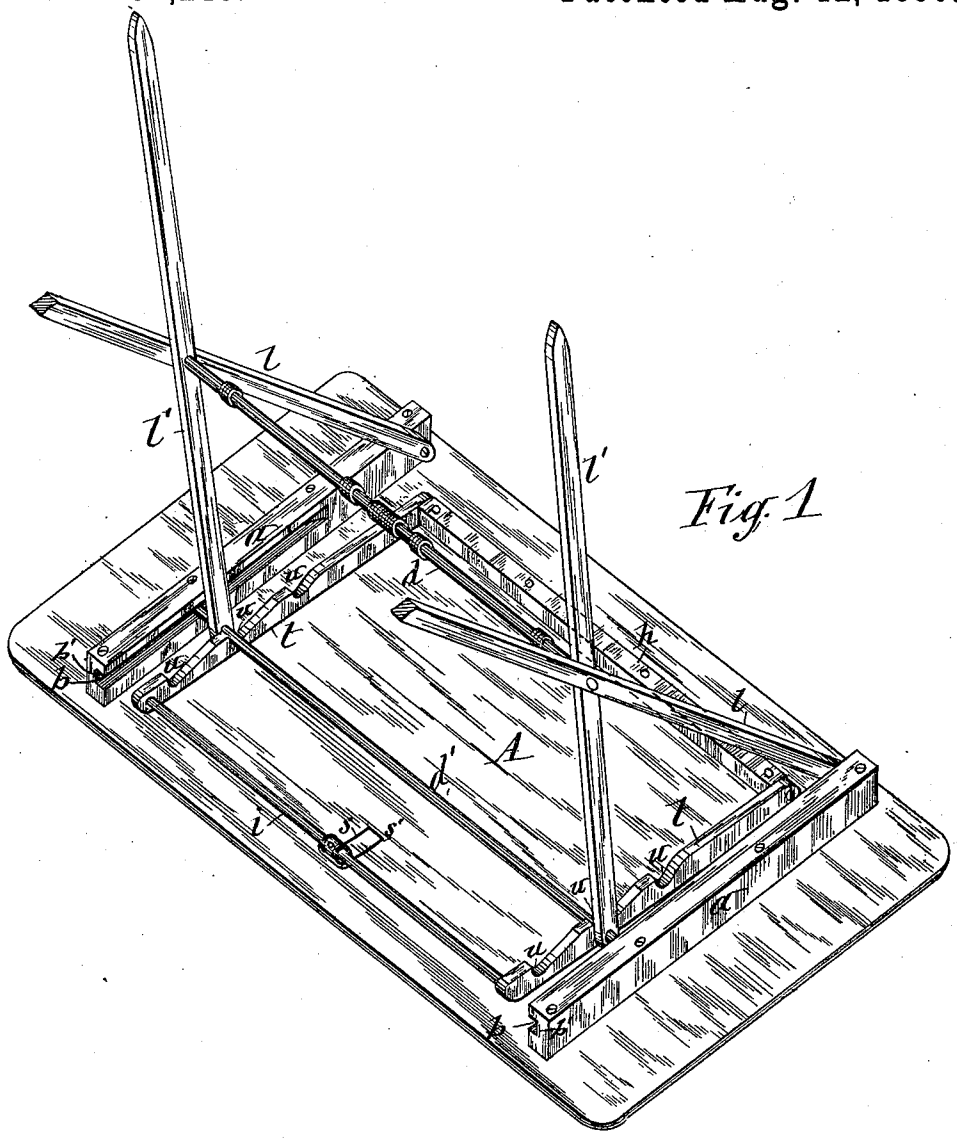


Fig. 1

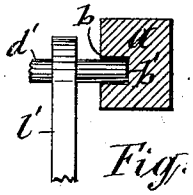


Fig. 7

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C. L. Bendixon

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

J. T. BON.

FOLDING TABLE.

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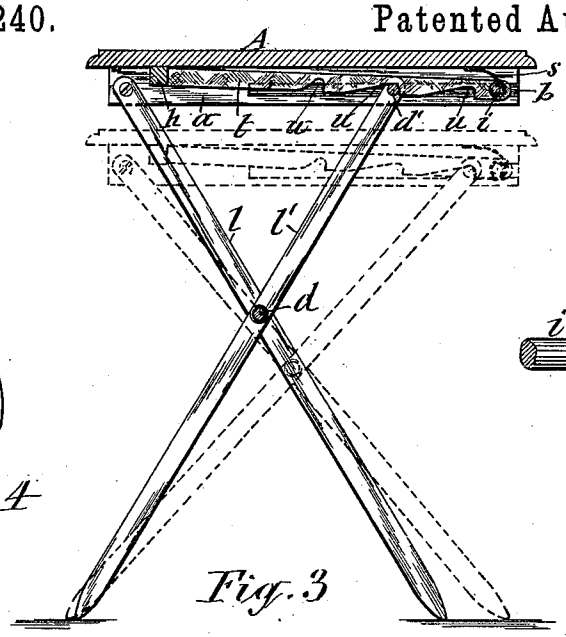


Fig. 3

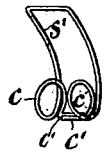


Fig. 4

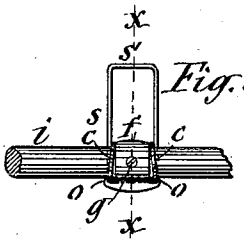


Fig. 5

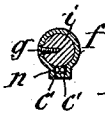


Fig. 6

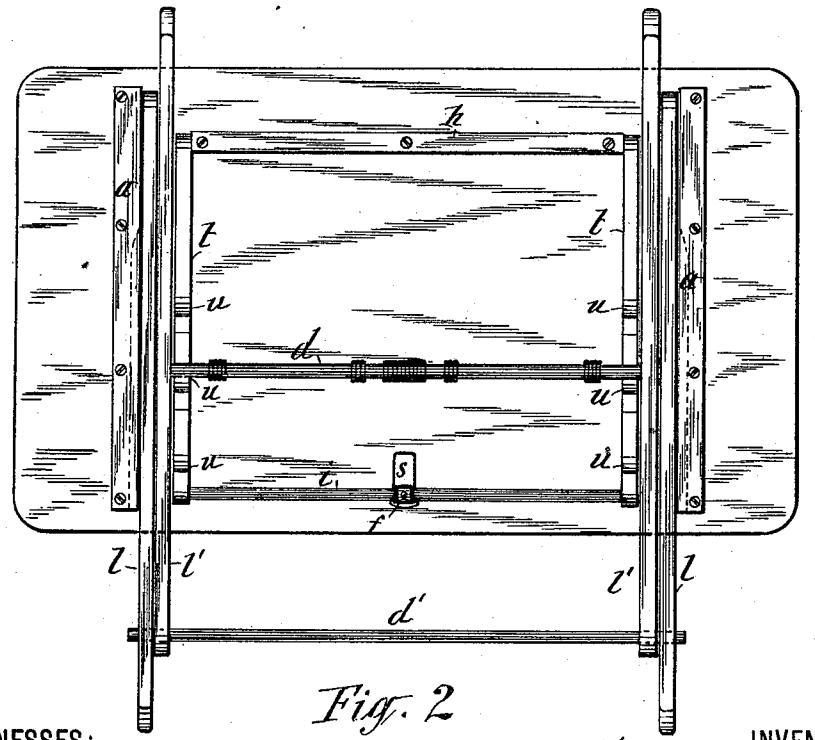


Fig. 2

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UNITED STATES PATENT OFFICE.

JOHN T. BON, OF SYRACUSE, NEW YORK.

FOLDING TABLE.

SPECIFICATION forming part of Letters Patent No. 434,240, dated August 12, 1890.

Application filed November 10, 1888. Serial No. 290,491. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. BON, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Folding Tables, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention is a specific improvement of the folding table for which I have obtained Letters Patent No. 367,589, dated August 2, 1887, said improvement consisting mainly in novel devices for more conveniently and effectually locking the legs in their position for supporting the top plate at the desired elevation; and the invention also consists in certain novel features of some of the details of the structure, as hereinafter fully described, and specifically set forth in the claim.

In the annexed drawings, Figure 1 is a perspective inverted view of the table. Fig. 2 is an inverted plan view of the table in its folded position. Fig. 3 is a central vertical transverse section of the table in its erect position. Fig. 4 is an enlarged detached perspective view of the spring employed in connection with the latches which lock the legs in their erected position. Fig. 5 is an enlarged detached plan view of the attachment of the aforesaid spring. Fig. 6 is a transverse section on line *x x*, Fig. 5; and Fig. 7 is an enlarged transverse section of one of the bed-pieces with the end of the tie-rail inserted.

Similar letters of reference indicate corresponding parts.

A denotes the top plate of the table. *a a* designate the cross-rails or bed-pieces, which are firmly attached to the under side of the aforesaid plate and are provided in their inner sides with longitudinal grooves *b b* extending through one and the same end of the respective bed-pieces, said grooves extending only part way the widths of the bed-pieces, so as to form a wall *b'* for the purpose hereinafter described.

l l and *l' l'* represent two sets of legs. The legs *l l* are pivoted to the under side of the top plate A near the rear edge thereof and preferably to the inner sides of the bed-pieces *a a*. The other set of legs *l' l'* is united by tie-rails *d d'*, respectively, near the center of the lengths and at one end of the said legs. The central tie-rail *d* extends with its ends through the central portions of the legs *l l*, and thereby pivots the two sets of legs together. The tie-rail *d'* also projects at the outer sides of the legs *l' l'*, and the end portions of said rails are adapted to enter the grooves *b b* through the open ends thereof, and when entered the ends of the rail *d'* abut against the inner walls *b' b'* of the grooves, and thus prevent lateral swaying of the upper ends of the legs *l' l'*.

In connection with the described members of the table I employ the following improved devices for locking the legs in their operative positions:

t t designate two hook-arms or latches consisting of bars hinged at one end to the under side of the top-plate A at the rear portion thereof and preferably to a rail *h*, which is rigidly secured to the plate A. The said hook-arms are united at their free ends by a bar *i*, which is rigidly attached thereto so as to prevent its turning on the hook-arms, and also prevent the latter from swaying laterally. The free ends of the hook-arms pass between the top plate A and rail *d'*, and are provided on their under sides with hooks *u u* at different points of their lengths, by which hooks the arms *t t* engage the rail *d'* at points in proximity to the inner sides of the legs *l' l'* when the table is erected and the rail *d* enters into the grooves *b b* of the bed-pieces *a a*. The aforesaid engagement of the hook-arms with the rail *d'* locks the upper ends of the legs *l' l'* in their position to support the top plate A. The hooks *u u*, being different distances from the hinged ends of the arms *t t*, allow the legs *l' l'* to be locked in different angles of inclination, and thus support the top plate A at different elevations, as illustrated in Fig. 3 of the drawings.

One of the salient features of my present invention consists in the employment of the aforesaid two hook-arms, hinged at one end to the under side of the top of the table and united at the opposite end by the bar *i*, said hook-arms engaging the rail *d* near the ends thereof and close by the sides of the legs *l' l'*. Said combination of parts effectually obviates the springing of the rail *d'* by the strain transmitted thereto by the hook-arms when the table is erected and subjected to a weight

placed upon it, said springing or deflection of the rail d' being a serious defect of analogous tables, which are sustained in erect position by catches engaging the aforesaid rail at the center. The bar i constitutes a handle for adjusting the table to its desired position. Said handle remains uniformly in proximity to the edge of the top plate and is therefore very convenient for manipulation.

In adjusting a table to a greater or less height the operator supports the top plate by his hands, and by passing the fingers of one hand under the top plate and under the bar i and lifting the latter both hook-arms t t are caused to release the rail d, which can then be shifted lengthwise of the grooves b b in the bed-pieces, and when adjusted the operator can release the bar i to allow the hook-arms to re-engage the rail d without compelling the operator to release his hold on the top plate. By connecting the spring s to the bar i, so as to press against the under side of the top plate, both of the aforesaid hook-arms receive simultaneously the action of said spring.

Although the hook-arms are adapted to fall by gravity into engagement with the rail d', yet I prefer to render said engagement more positive by attaching to the bar i a spring s, which presses against the under side of the top plate A. This spring I prefer to form of a wire or rod bent at its center into an elongated or rectangular bail or loop s' and having its end portions bent into coils c c, terminating with straight prongs c' c', extending laterally from the coils and toward each other, as shown in Fig. 4 of the drawings. Said spring I secure to the bar i by means of a ferrule f, fastened to the bar i by a nail or screw g, passing through one side of the ferrule and into the side of the aforesaid bar, said ferrule being formed with a longitudinal groove n in its inner side, and into this groove are inserted the end prongs c' c' of the spring, while the coils c c of the spring are held at opposite ends of the ferrule by lips o o, formed on the ferrule and embracing a portion of each coil, as illustrated in Figs. 5 and 6 of the drawings. The liability of the bar i becoming split by the insertion of the nail or screw g is obviated by the ferrule f embracing the rod, and the spring is thus fastened without weakening the aforesaid bar.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In combination with the top plate A, legs l' l', and rail d', firmly secured to said legs, the hook-arms t t, passing between the top plate and the rail, the bar i, uniting said hook-arms at their free ends, the ferrule f, rigidly attached to the bar i and provided with the longitudinal groove n in its interior and with clinching-lips o o on its ends, and the spring-bail s', having its end portions bent into coils c c and secured to the ends of the ferrule by the aforesaid lips and terminating with straight prongs c' c', extending into the groove n, substantially as described.

In testimony whereof I have hereunto signed my name, in the presence of two witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 3d day of November, 1888.

JOHN T. BON. [L. S.]

Witnesses:
C. H. DUELL,
J. J. LAASS.