(No Model.)

W. BLANKNER.

EXTENSION TABLE.

No. 498,230. Patented May 30, 1893.

Fig. 1

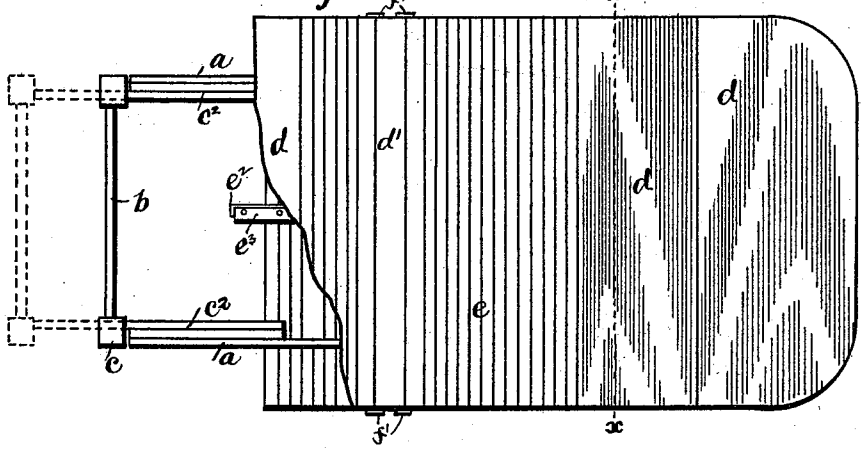


Fig. 2

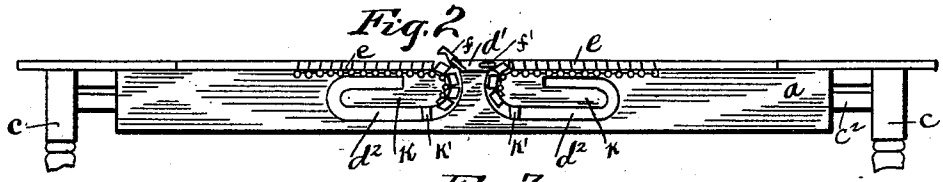
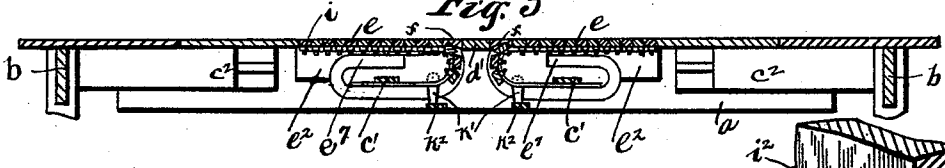


Fig. 3



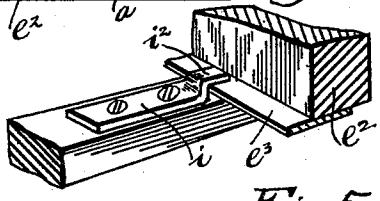


Fig. 5

Fig. 4

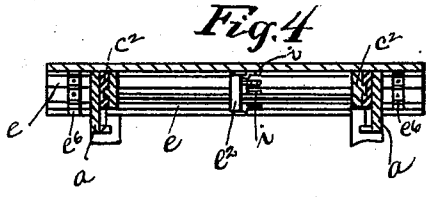


Fig. 6

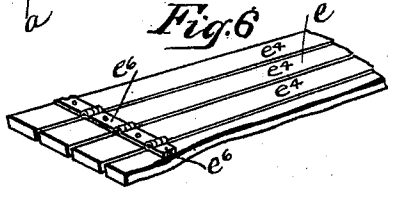
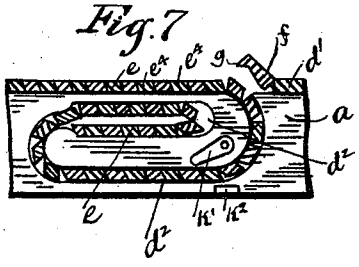


Fig. 7



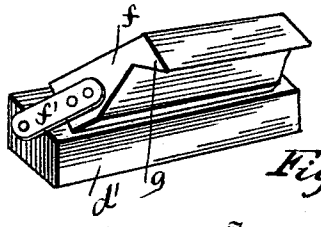


Fig. 8

Witnesses
H. B. Bradshaw
E. E. Bragg.

Inventor
William Blankner.
By his Attorneys
Staley and Shepherd

UNITED STATES PATENT OFFICE.

WILLIAM BLANKNER, OF CHICAGO, ILLINOIS.

EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 498,230, dated May 30, 1893.

Application filed January 23, 1892. Serial No. 419,072. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BLANKNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Extension-Tables, of which the following is a specification.

My invention relates to the improvement of extension tables and has particular relation to the improvement of that class of extension tables shown in my former patent, No. 409,662, dated August 27, 1889.

The objects of my present invention are, to provide a table of improved construction, wherein the table-top may be extended or contracted without the necessity of removing or inserting leaves or top-boards; to provide a superior construction for folding the leaves toward the center of the table and properly guiding the same; to provide in connection therewith improved locking strips by means of which the folding top sections may be locked in the desired position and a flush surface for the table top may be attained; to provide improved means for preventing the hinged leaves from wearing the guide-ways in the side pieces of the table by undue frictional contact; to construct my improved table in a simple, neat and practical form, and to provide other improvements which will be more specifically pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved table, showing the top sections partly extended and showing a portion of the permanent and traveling leaves broken away for the sake of clearness. Fig. 2 is a side elevation of the upper portion of said table. Fig. 3 is a central longitudinal section thereof. Fig. 4 is a transverse section on line $x\ x$ of Fig. 1. Fig. 5 is a detail view of one of the guide-plates employed as hereinafter described. Fig. 6 is a view in perspective showing several of the hinged table leaves jointedly connected. Fig. 7 is a detail view of the inner side of a portion of one of the side pieces of a table showing a modified form of guide-way for the traveling leaves and showing the latter in section, and Fig. 8 is a detail view in perspective of the end portion of one of the locking strips.

Similar letters refer to similar parts throughout the several views.

a represents the parallel frame side-pieces, b the end-pieces and c the legs of my improved table. The side frame pieces a are connected at the desired points by connecting frame-pieces indicated at c'.

c^2 represents the ordinary slide-bars of an extension table, which are adjustably supported in the usual manner in sliding contact and which as usual are supported from the side frame-pieces a. The outer end of each of the inner slides c^2 is connected in the usual manner with one of the legs c and adapted to travel outward with said leg when the table is extended. Upon the slides c^2 are secured at each end of the table two or more top boards d. Rigidly secured to the upper sides of the boards of the side-pieces a, at the centers of the lengths thereof, is a central cross-piece d', the length of which is equal to the width of the table top.

Formed in each of the table side pieces, on each side of the center of the length thereof, are guide-ways d^2. The open mouths of these guide-ways are as shown in the drawings, adjoining opposite sides of the center strip d', from which point said guide-ways curve downward toward the lower side of the side pieces a, thence extend toward the outer ends thereof and terminate in upward curves and short inward terminations thereof, as indicated. On opposite sides of the center of the length of the table and midway between the side frame pieces a are arranged parallel with said side pieces, guide pieces e^2, said guide-pieces being supported upon the transverse cross-pieces c' which extend between the side pieces a. These guide-pieces e^2 are of equal height with the side pieces and are each provided with a metallic guide-strip e^3 which is secured to and binds the edge of said guide-piece and overlaps one side of the latter.

In each of the guide-pieces e^2 is formed a guide-way e^7 which is opposite and conforms to the terminating portions of the guide-ways d^2 of the side-pieces.

e represents the jointed leaf sections of my improved table, which are adapted to fold and travel within the side piece guide-ways, as hereinafter described. As shown in Fig.

6 of the drawings, these jointed leaf sections which are indicated at e^4 are hinged together by a suitable hinge strip e^6, said hinge strip being formed as shown, of a number of jointed hinge plates which are secured to the under side of the leaves e^4 near the ends thereof. The outer ends of the hinge strips e^6 are as shown, jointedly connected with the under side of the inner leaves d, thus causing said hinged leaf sections to produce a table-top continuation of the leaves d. As shown in the drawings, the hinged leaf sections are adapted to bear and slide upon the upper sides of the table side-pieces a. These hinged leaf sections are also adapted when forced inward to travel in the slotted guide-ways d^2.

f represents two locking strips, of a length equal to the width of the table top. The inner edges of these strips f normally abut against the longer edges of the center strip d'. These locking strips f are jointedly connected with said center strip d' by joint plates f', one end of each of which is jointedly connected with the end of the center strip and the outer end thereof is rigidly connected with the end of the locking strip. Each of these locking strips is notched throughout its length and on its under side to produce at the outer edge thereof, a longitudinal projection or tooth indicated at g.

Secured to the under side of each of the jointed leaves e^4 at one side of and adjacent to the center of the length thereof, is a metallic guide-plate i, the inner end of each of said plates having a downward and inwardly extending tongue or extension i^2 which embraces or over-laps the under side of the projecting portion of the guide strip e^3 and forms a bearing for the latter.

The operation of my improved table so far as described, is as follows: It being desired to shorten or produce a contraction of the table and the locking strips f being elevated to the position shown in Fig. 8 of the drawings, the top sections are forced inward toward each other. The force thus imparted results in the hinged or jointed leaves of said sections traveling downward into the curved guide-ways d^2 of the side pieces and into the corresponding guide-way e^7 of the guide-piece e^2. It is evident from the construction shown and described, that this folding movement of the hinged leaves may be continued until the outer and wider leaves d are at the mouths of the slotted guide-ways d^2 and said jointed leaf sections have reached the inner end portions of the guide-ways. This having been accomplished the locking pieces or strips f may be dropped downward until flush with the leaves d and the center strip d', the longitudinal teeth or tongues g of said locking strips being allowed to enter and fill the correspondingly shaped space between the last leaf e^4 and the inner leaf d^2. As shown in the drawings, these teeth and tongues g of the locking strips f, may, in a similar manner be made to enter and fill correspondingly shaped spaces between any of the jointed leaves, thus admitting of the table being contracted or extended to any desired extent and the locking strips dropped to a flush position therewith. Owing to the fact that the tongues or teeth g of the locking strips are adapted to engage as described, with the jointed leaves, it will readily be seen that they will serve to lock said jointed leaf sections from accidental inward movement. The bearing of the first jointed leaf e^4 which is within the guide-way mouths being against the inclined or beveled inner face of the locking strip tooth, it is evident that the necessity of raising the locking strip before pulling out one of the joint leaf sections to extend the table, is obviated as the upward and outward pressure of the joint leaf upon said inclined tooth face will operate in itself to sufficiently elevate the locking strip. It is also evident from the construction shown and described, that either or both of the leaf sections may be drawn out or forced inward, as desired.

In order to prevent any tendency of the splitting or breaking down of the side pieces a or those portions in which are cut the slotted guide-ways d^2, I pivot to the inner side of each of the side pieces against the tongue portions k thereof, which are formed by the partially surrounding guide-ways, the upper ends of brace latch plates k', the rounded lower ends of which normally bear upon block rests k^2 affixed to the inner sides of the side pieces a, vertically beneath the pivot points of said brace-plates. When the jointed leaves of the top sections are folded inward, the first of said jointed leaves which comes into contact with said brace-plates k' will operate to raise the same out of the path of said leaves. When the latter are drawn outward, said brace-plates will drop by gravity to their normal position and thus serve to support or reinforce the side pieces. As shown in Fig. 7 of the drawings, I may so enlarge the inner end portion of the guide-ways d^2 as to admit of the jointed leaf sections when of unusual length being dropped within said guide-ways.

It is evident from the construction herein shown and described, that my improved table may be produced at a reasonable cost of manufacture and that the same may be extended or contracted with but slight exertion. It will also be seen that my improved construction will afford a solid and flush top and that the folding parts will in nowise interfere with the usefulness of the table.

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

1. In an extension table, the combination with the frame and slides therefor, the side pieces a and intervening guide-pieces e^2, curved guide-ways in said side and guide pieces and strip e^3 projecting as described from said guide piece e^2, of the permanent top leaves, jointed leaf sections e adapted to

travel as described, within said curved guide-ways, guide-plates or brackets *i* as described on said jointed leaf sections, top cross-piece *d'* between the mouths of said guide-ways and locking strip *f* jointedly connected as described with said cross-strip and having tooth-shaped outer portions adapted to enter the angular spaces between the jointed leaves and locking the latter against movement, substantially as and for the purpose specified.

2. In an extension table, the combination with the frame and slides therefor, the side pieces *a* and intervening guide-pieces e^2 and curved guide-ways in said side and guide pieces, bracing latch *k'* pivotally connected with said side pieces, above the guide-way slots and a block k^2 projecting from said side pieces beneath said slots on which said latch pieces are adapted to rest, substantially as and for the purpose specified.

WILLIAM BLANKNER.

In presence of—
C. C. SHEPHERD,
BARTON GRIFFITH.