

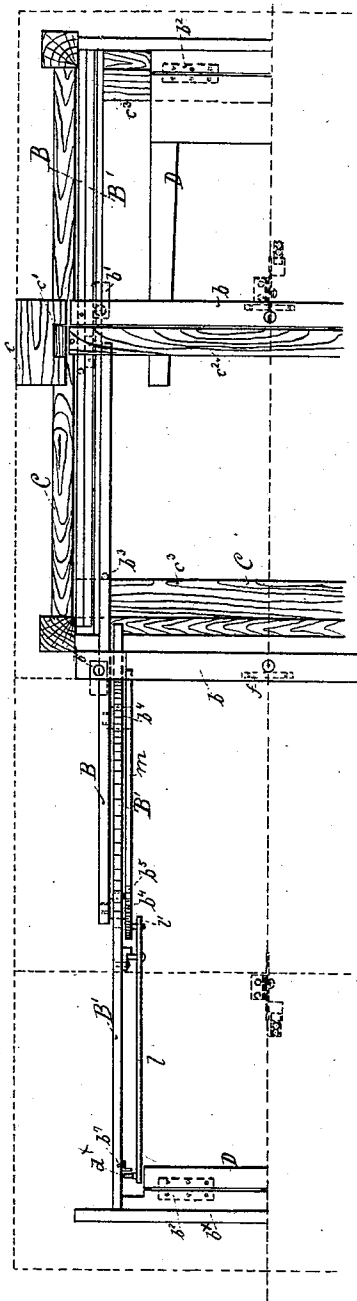
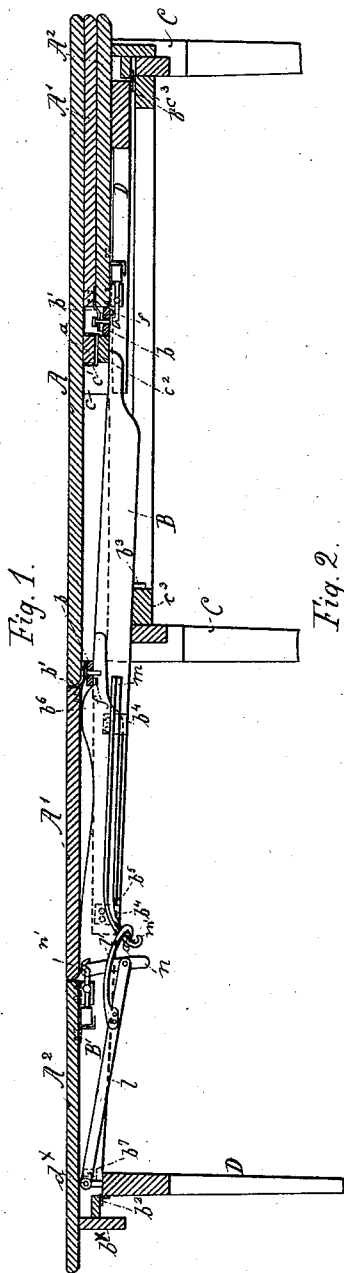
(No Model.)

2 Sheets—Sheet 1.

A. OBERLÄNDER.
EXTENSION TABLE.

No. 531,211.

Patented Dec. 18, 1894.



Witnesses
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Will F. Thomas

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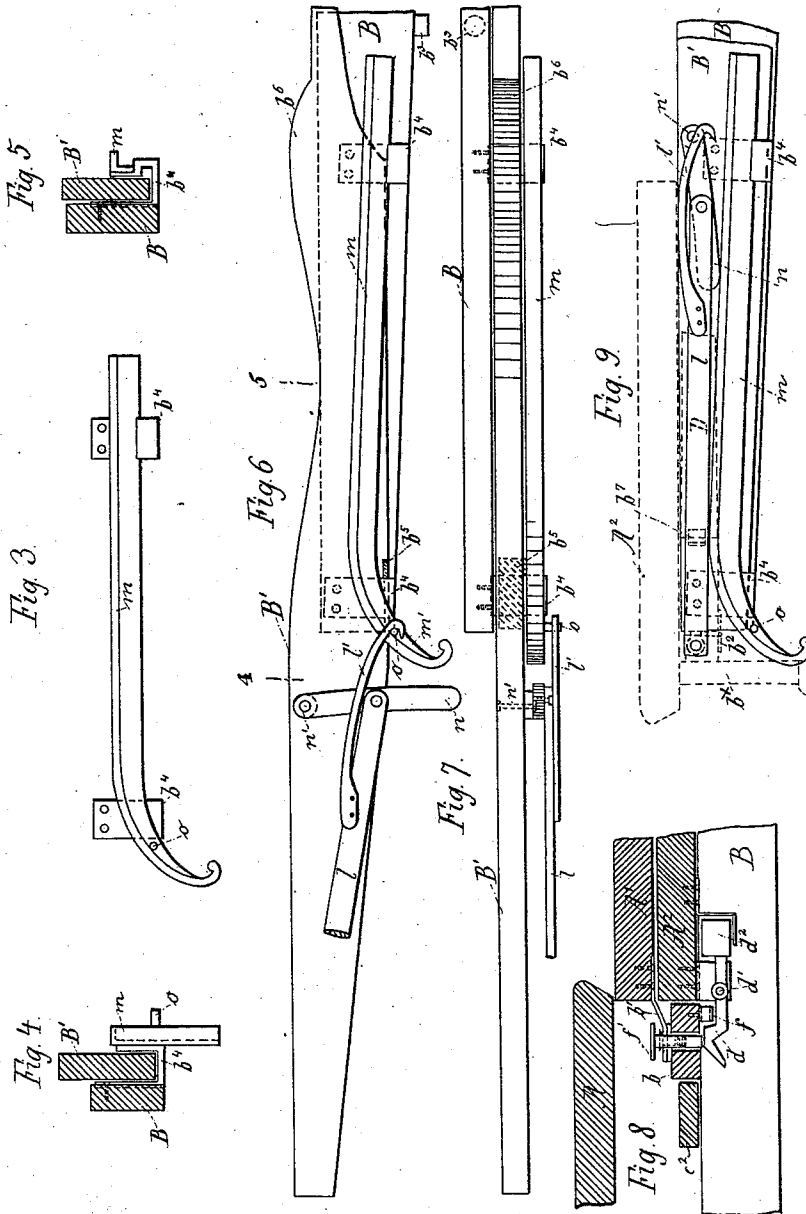
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2 Sheets—Sheet 2.

A. OBERLÄNDER. EXTENSION TABLE.

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Witnesses

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By G. Pittman.

Atty

UNITED STATES PATENT OFFICE.

ALBERT OBERLÄNDER, OF BERLIN, GERMANY.

EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 531,211, dated December 18, 1894.

Application filed May 2, 1894. Serial No. 509,838. (No model.)

To all whom it may concern:

Be it known that I, ALBERT OBERLÄNDER, a subject of the German Emperor, residing at Berlin, Germany, have invented certain
5 Improvements in Extension-Tables, of which the following is a specification.

This invention relates to certain improvements in that class of extension tables wherein a series of automatically operating
10 leaves and legs are employed, and the object of the present invention is to improve and simplify the construction of such tables all as will be hereinafter fully set forth.

The novel features of the invention will be
15 carefully defined in the claims.

In the accompanying drawings illustrating the invention—Figure 1 is a longitudinal sectional view of the upper part of an extension table embodying my improvements and
20 Fig. 2 is a partial plan view of the same the leaves and top being omitted. Fig. 3 is an enlarged detail view showing the guide bar employed for actuating the hinged or folding leg. Figs. 4 and 5 are sections through the
25 extension bars, guides and guide bar being taken, respectively, along lines 4 and 5 in Fig. 6. Fig. 6 is an enlarged side elevation and Fig. 7 is a plan view of the leg actuating and extension devices of the table. Fig. 8 is
30 a detail view showing the mechanism for disengaging the leaves, and Fig. 9 is a detail view showing the hinged or folding leg in its raised position.

In the views A represents the top of the
35 table which is stationary except for a slight vertical movement permitted by the cross bar *a* which engages a recess in the block *c* secured to the frame C.

*A*¹ *A*² are the folding leaves of the table
40 arranged on each side of the top A. The leaf *A*¹ is connected by means of bent metal straps *b*¹ (Fig. 8) to a cross piece *b* which connects the first extension bars B B, so that said leaf *A*¹ follows in its movements the movement
45 of said bars B. The straps *b*¹ are not entirely fast but permit a slight upward movement of the leaf *A*¹, equal about to the thickness of said leaf. The second leaf *A*² is firmly secured to the extremity of the second extension bars B¹, B¹, slidingly mounted in guides
50 *b*⁴, *b*⁴, secured to bars B (Figs. 4 and 5). The leaf *A*² is provided at its end with a depend-

ing rail *b*^x to which is hinged at *b*³, the folding leg D. At the middle of the frame C is secured a cross piece *c*² and at the ends are
55 arranged the cross pieces *c*³, *c*³, which serve as guides for the extension bars. When the first extension bars B are drawn out to their fullest extent, stops *b*³, *b*³, thereon engage the cross pieces *c*³, and prevent further move-
60 ment. These stops are so arranged that when the extension bars are drawn out to their fullest extent their inner ends engage and bear under the central cross piece *c*², so that
65 said bars B are held against tilting and are caused to move in a slanting direction.

The bars B¹, B¹ are arranged in a slanting position so that the leaves *A*¹ *A*² are caused to rise when drawn out in order to bring them
70 from their lowered positions under the top A, up to the level of said top. When the bars B¹, B¹ are drawn out their rear ends rest under the ties *b* of bars B and in order to prevent said bars B¹ from being too far
75 drawn out stops *b*⁵, *b*⁵ are provided (Fig. 6) which engage with the guide *b*⁴ on bars B. At about its center, the cross bar *b* is provided with a stud or tappet *f* and adjacent thereto with an opening in which a vertically
80 movable bolt *f*¹ is arranged (Fig. 8).

When the table is in its closed position and until the bars B have been fully drawn out, this bolt *f*¹ is held uplifted by a dog or
latch *d*, pivoted at *d*¹ to the under side of leaf
85 *A*² and having a shoulder engaging stud *f*, said stud having a weighted end *d*² whereby its shouldered end is normally held uplifted.

To the guides *b*⁴, on each bar B is fixed a guide bar *m* of angle iron having an inclined end *m*¹ provided with a stop pin *o* and to
90 each bar B¹ is pivoted at *n*¹ a link *n*, the free end of which is arranged in the plane of guide bar *m*. The intermediate portion of link *n* is connected by a rod *l* with a stud *d*^x, fixed to leg D (Figs. 1 and 2) and said link *l* carries
95 at its inner end a hook *l*¹ arranged to engage the projection *o* on guide bar *m*.

The bars B¹ are provided near their outer ends, with inwardly projecting stops *b*⁷, against which the studs *d*^x impinge, when the legs
100 D are extended, and thus they serve to assist in securing the said legs in perpendicular positions.

The operation is as follows:—The operator

seizes the rail b^x and draws out the second leaf A^2 and second extension bars B' . As seen in Fig. 8 the leaf A^2 is detachably connected to leaf A' , and consequently both leaves will
 5 move together until the edge of the leaf A' reaches the edge of top A , when said top A being vertically movable will fall, pressing down the bolt f' so as to disengage the dog d from the stud f . Thus the edge of leaf A'
 10 comes to be flush with the edge of top A , and further movement of leaf A' is prevented by the engagement of stops b^3 with cross piece c^3 . The second extension bars B' , B' and leaf A^2 carried thereby now move independently of
 15 the leaf A' whereby the link n is gradually withdrawn from its position seen in Fig. 9 owing to the weight of the leg D , and said leg is thus caused to support the leaf A^2 . The displacement of the leg D is prevented in one
 20 direction by stops b' on bars B' (Figs. 1 and 2) and in the reverse direction by the engagement of hook l' with pin o .

The rear ends of bars B' are provided with projections b^6 , which, in the act of extending the table, are brought in contact with the under surface of the cross-piece b and thereby depress, causing a corresponding elevation of the outer ends of said bars and of the parts connected therewith. Thus the legs D are kept
 25 clear of the floor until the leaves have been fully extended and all danger of injury to said legs or of their operating mechanism is avoided.

In order to close the table it is only necessary to slightly lift the outer edge of leaf A' and to push the leaf A^2 thereunder until dog d again rides over stud f . The independent movement of the leaves having been stopped the edge of top A is then elevated and the
 30 leaves A' A^2 are pushed thereunder. During the independent movement of leaf A^2 and extension bars B' , link n strikes guide bar m and is thrown up to the position seen in Fig. 9, whereby the leg D is raised.

In the drawings I have shown the table provided with four leaves, two at each end, and it will usually be thus made but as the operation of the two sets of leaves is identical, the parts being merely duplicated, I have only
 45 described one set. It is obvious that some change may be made in the device as herein

set forth, and for that reason I do not wish to be understood as limiting myself to the exact construction and arrangement shown.

Having thus described my invention, I
 55 claim—

1. The combination in an extension-table, of a frame and a vertically movable top connected therewith, the bars B guided in said frame and adapted to move upward when
 60 outwardly drawn, the leaf A' mounted on bars B , the bars B' guided on bars B and adapted to move parallel therewith, the leaf A^2 mounted on bars B' , the legs D hinged to the depending rail of leaf A^2 , the curved plates
 65 m secured to bars B , links n pivoted to bars B' , and the rods l connecting the said links and legs, substantially as and for the purpose set forth.

2. The combination with a frame and a vertically movable top connected thereto, of the bars B , guided in the frame beneath the top and adapted to move upward in a slanting direction when withdrawn, the leaf A' mounted on bars B , the bars B' guided on bars B
 70 and also adapted to move in a slanting direction, the leaf A^2 mounted on bars B' , the leg D hinged to the depending rail of leaf A^2 , the curved plates m secured to bars B and provided with pins o , the links n pivoted to
 75 bars B' in the plane of the plates m , the rods l connecting said links to said leg D and hooks on said rods l adapted to engage the pins on plates m , substantially as set forth.

3. In an extension table, the combination
 85 of the bars B and connecting cross piece b , with the bars B' provided at their rear-ends with projections b^6 and carrying on their outer ends the leaf A^2 , depending-rail b^x , hinged-
 90 legs D and leg operating mechanism, as described; the bars B and B' adapted to move in a slanting upward direction, when withdrawn, the legs D being kept clear of the floor until projections b^6 have cleared the cross
 95 piece b substantially as set forth.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ALBERT OBERLÄNDER.

Witnesses:

W. H. EDWARDS,
 GUSTAV FUDE.