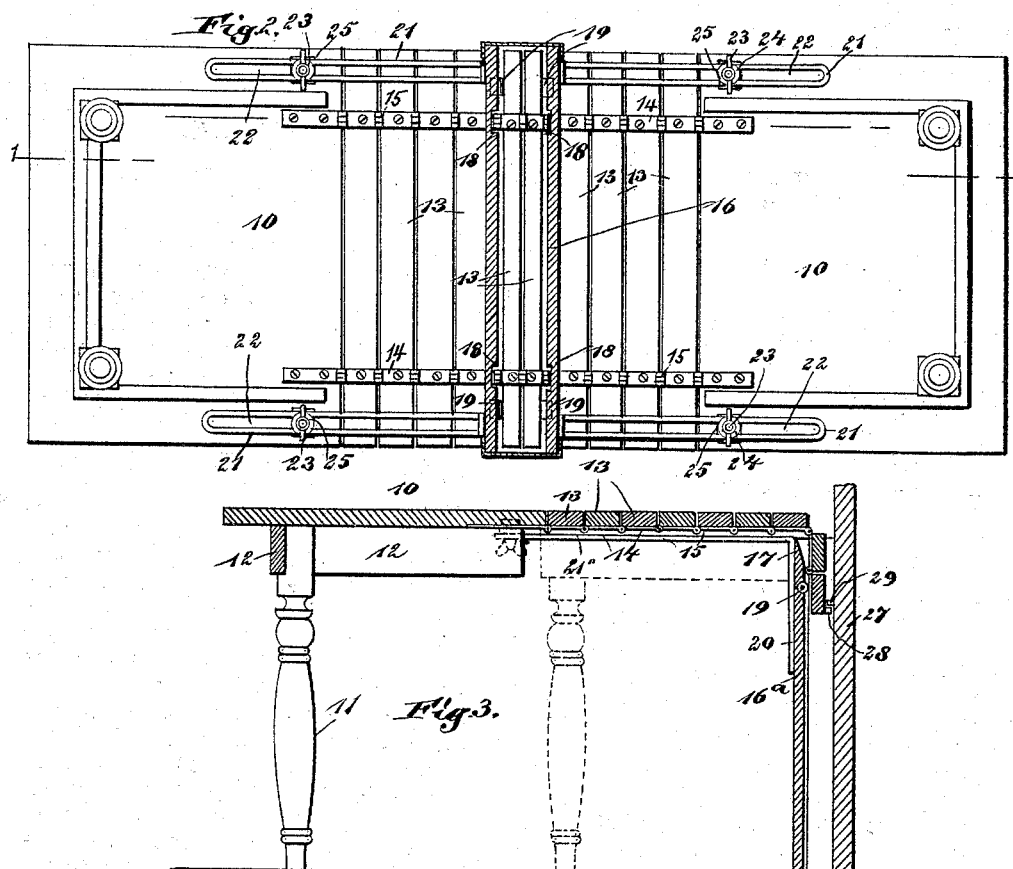
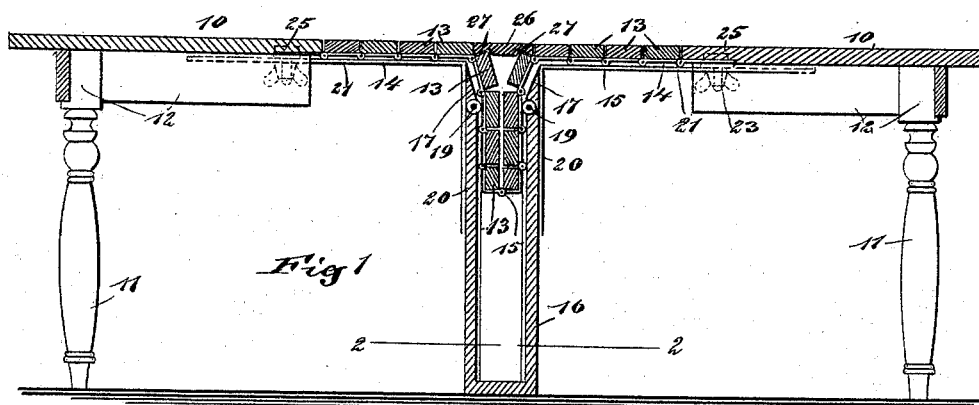


(No Model.)

J. S. GRAAFF & I. M. HARBAUGH.
EXTENSION TABLE.

No. 492,284.

Patented Feb. 21, 1893.



WITNESSES:

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Fig. 4.

UNITED STATES PATENT OFFICE.

JULIUS S. GRAAFF AND IDAH M. HARBAUGH, OF PORTLAND, OREGON.

EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 492,284, dated February 21, 1893.

Application filed June 23, 1892. Serial No. 438,295. (No model.)

To all whom it may concern:

Be it known that we, JULIUS S. GRAAFF and IDAH MAY HARBAUGH, both of Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Extension-Table, of which the following is a full, clear, and exact description.

Our invention relates to improvements in extension tables, and the objects of our invention are to produce a cheap, strong, light, durable, and convenient table which may be extended to great length, which may be made to occupy but little space, and which as preferably constructed may be conveniently carried about.

To this end our invention consists in an extension table, the construction of which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a vertical longitudinal section, on the line 1—1 in Fig. 2, of a table embodying our invention, showing it partially extended; Fig. 2 is an inverted sectional plan on the line 2—2 in Fig. 1; Fig. 3 is a longitudinal vertical section of a modified form of table which is adapted to be used where space is limited; and Fig. 4 is an inverted plan of the box cover or removable leaf.

The table has its top portion provided at the ends with solid or fixed leaves 10, of substantially the usual character, these being secured to supporting legs 11 having the usual braces 12 at the top. The rigid sections 10 of the table top are connected by a series of narrow hinged leaves 13, these corresponding in length to the width of the table and they are connected on the under side by plates 14 having knuckles 15, the plates extending entirely across the leaves 13, so as to form continuous hinges which greatly strengthen the table top. The leaves are adapted to double down in the center of the table and to enter a box 16 which is of rectangular shape and open at the top, the box corresponding in width and height to the width and height of the table. The box is beveled off slightly on its inner sides and at the top, as shown at 17, so that the leaves 13 may easily enter and leave it; and to fur-

ther facilitate the easy insertion and removal of the leaves, the box is provided with vertical recesses 18 to receive the hinges comprising the plates 14 and knuckles 15, and also with anti-friction rollers 19 which are arranged on the opposite sides and near the ends of the box at points just below the beveled surfaces 17, and this construction enables the box to be made very narrow and it also enables the leaves to be very easily moved.

Secured to opposite sides of the box near the top and near the ends are angle braces 20, the upper arms 21 of which extend beneath the table top and at right angles to the box, these arms being sufficiently long to support all the leaves 13 when the table is fully extended. The arms 21 are slotted longitudinally, as shown at 22, in Fig. 2, and extending upward through the arms are thumb screws 23 having large bearing portions 24 to frictionally engage the arms, and the screws are held to turn in fixed nuts 25 which are secured to the under sides of the rigid end portions 10 of the table. The screws 23 should have coarse threads with steep tips, so that that they may be quickly operated. When the table is extended or closed, the screws are tightened so as to hold it in a fixed position, and when the table is to be adjusted, the screws are first loosened so that the leaves may slide easily upon the arms 21. The space between the opposite leaves 13, when they dip down into the box 16, is closed by a cover 26 which has inclined recesses 27 on its under side adapted to fit over the tilting upper leaves in the box, as shown clearly in Fig. 1. To extend the table the thumb screws are loosened and the opposite end portions of the table are simply pulled apart, thus raising and drawing out the leaves from the box and the leaves will assume a horizontal position and render the table top perfectly flat. The cover 26 is then adjusted so as to close the space above the box. The thumb screws are also tightened so as to hold the parts in place.

When the table is to be collapsed, the thumb screws are loosened, the cover 26 removed, and the end portions of the table pushed toward each other, thus doubling down the leaves 13 in the middle and causing them to slide face to face down into the box 16. It

will be understood that by providing a sufficient number of these boxes, the table may be made of any desired length.

When the table is to be used where space is limited the form shown in Fig. 3 is preferred; this is practically half the table, as shown in Figs. 1 and 2. As shown in Fig. 3, a box 16^a, substantially like the box 16 described above, is fixed permanently to the wall 27 of the room, and one solid end portion 10 of the table is connected with the box in the manner already described, but as there is but one end to the table a stop 28 or its equivalent is provided, to limit the outward movement of the leaves 13, a stop being secured to the last leaf and adapted to engage a lug 29 on the wall.

When this form of table is used, it is only necessary to pull out the table to prepare it for use, and when it is pushed inward and collapsed, the leaves 13 drop down into the box 16^a, and the rigid part 10 occupies but little space and is very convenient for use as a desk, shelf, or the like.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. An extension table, comprising the central box open at its upper end and forming a central support, the end portions movable toward and from the box and having supporting legs, a single series of flexibly connected leaves

secured at their ends to the adjacent edges of said end portions and depending between their ends within the said box, the faces of such leaves being thus opposite and contiguous and braces projecting horizontally from opposite sides of the box under the lower sides of the said end portions to support them and the folding leaves, substantially as set forth.

2. In an extension table, the combination of the open topped box, the rigid portion of the table having supporting legs, the hinged leaves held to slide in and out of the box and having a hinge connection with the rigid part of the table, the slotted braces secured to the box and extending beneath the leaves, and a screw mechanism for fastening the table top to the braces, substantially as described.

3. An extension table, comprising the two rigid top portions, a series of flexibly connected leaves hinged at their ends to the said two top portions, an intermediate box into which the series of leaves extend between the rigid top portions, and angle braces at opposite sides of the box the horizontal members of which project under the two rigid top portions and are adjustably connected therewith, substantially as set forth.

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Witnesses:

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