No. 662,109.

Patented Nov. 20, 1900.

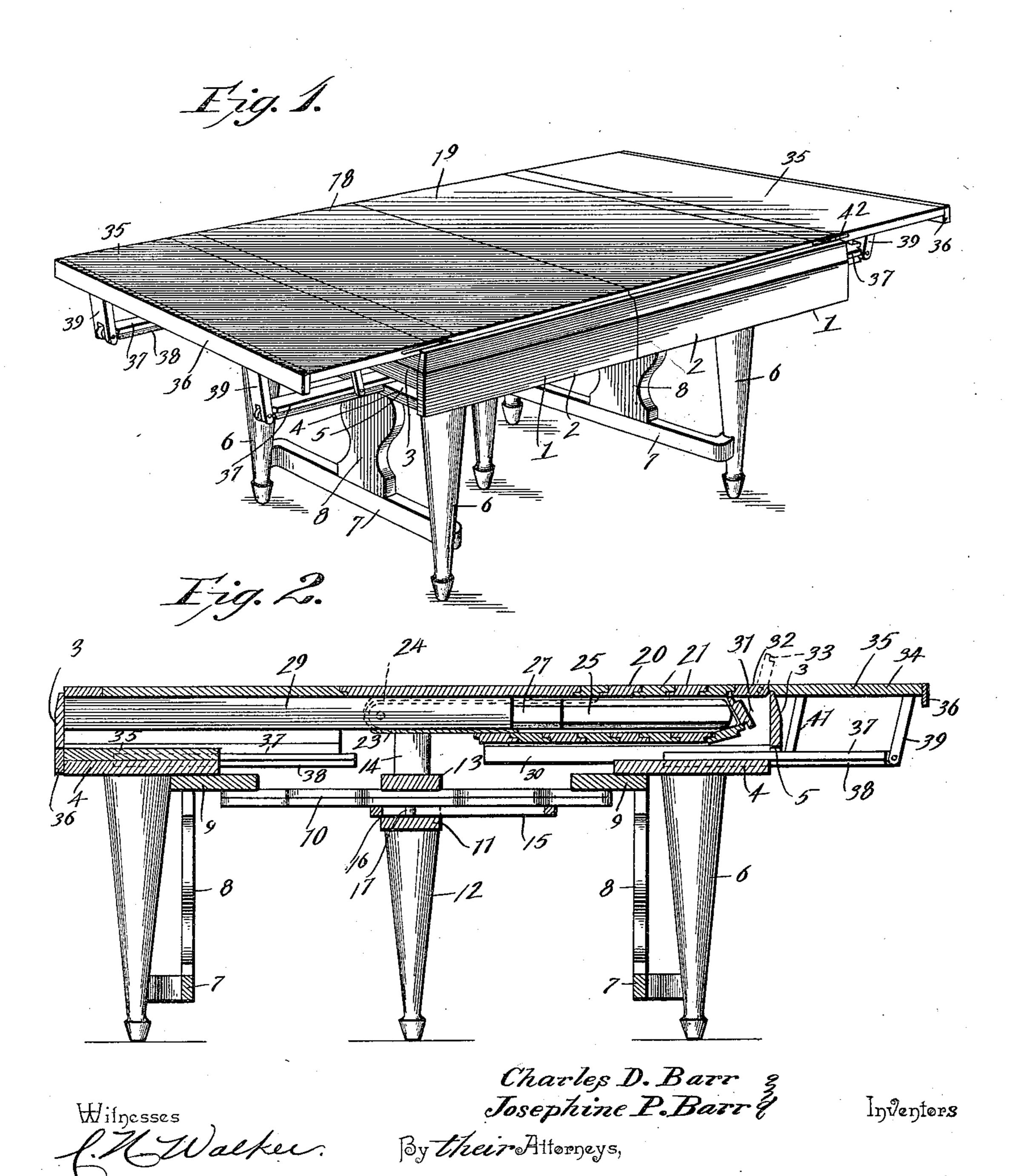
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ROLLER TOP EXTENSION TABLE.

(Application filed Apr. 13, 1900.

(No Model.)

2 Sheets—Sheet 1.



By their Altorneys,

Chas D. Hyer.

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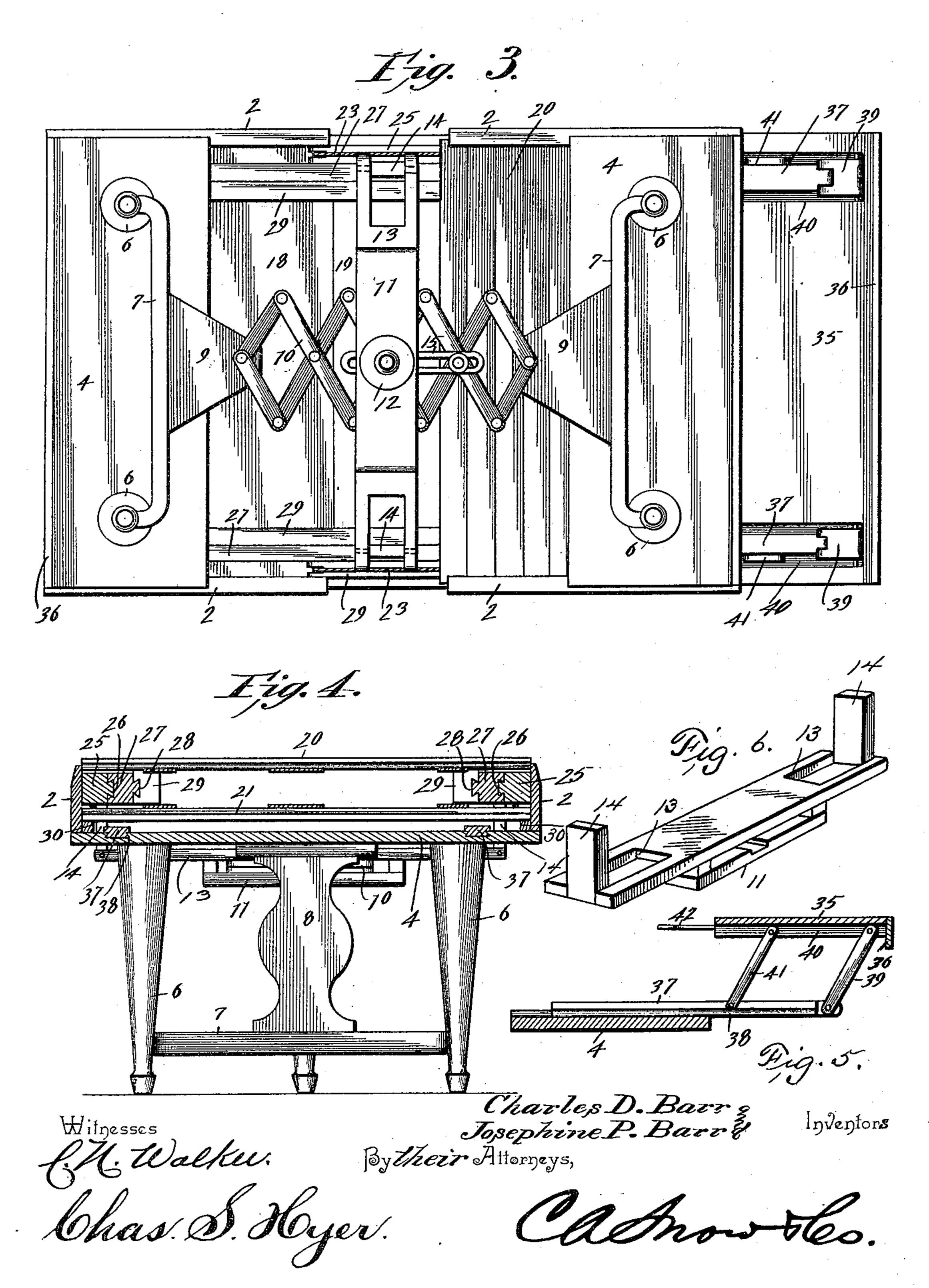
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ROLLER TOP EXTENSION TABLE.

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(No Model.)

2 Sheets-Sheet 2.



United States Patent Office.

CHARLES DAVID BARR AND JOSEPHINE P. BARR, OF NEBRASKA CITY, NEBRASKA.

ROLLER-TOP EXTENSION-TABLE:

SPECIFICATION forming part of Letters Patent No. 662,109, dated November 20, 1900.

Application filed April 13, 1900. Serial No. 12,740. (No model.)

To all whom it may concern:

Be it known that we, CHARLES DAVID BARR and JOSEPHINE P. BARR, citizens of the United States, residing at Nebraska City, in the county of Otoe and State of Nebraska, have invented a new and useful Roller-Top Extension-Table, of which the following is a specification.

This invention relates to roller-top extension-tables, and has for its object the production of a table which may be readily and easily extended or contracted without the insertion or removal of independent leaves and which is properly stiffened and braced, so that in all positions the table is firm, rigid, and steady and has auxiliary end extensions which will add to the length of the table to materially increase the length of the same, the several parts of the improved device being simple and effective in their construction and operation.

With this and other objects and advantages in view the invention consists in the construction and arrangement of parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a table embodying the features of the invention and showing the auxiliary end extensions elevated and applied in operative position and a roller-top concealed beneath. 30 Fig. 2 is a central longitudinal section of the improved table, showing one of the end auxiliary extensions elevated in operative position and a part of the roller-top section elevated to complete the top of the table. Fig. 35 3 is a bottom plan view of the improved table, showing one of the auxiliary end extensions drawn outwardly. Fig. 4 is a transverse vertical section taken through one extremity of the table. Fig. 5 is a longitudinal section of 40 one of the auxiliary end extensions and the support therefor. Fig. 6 is a detail view of the intermediate brace.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates opposite end frames, each comprising half side rails 2, connected at their outer ends by end rails 3 and by bottom cross-strips 4, which provide seats or rests for mechanism which will be presently explained, and between the said cross-

strips 4 and the lower edges of the end rails 3 openings 5 are provided, which extend entirely across the ends of the table. From the cross-strips 4 pairs of legs 6 depend and are 55 connected at their lower extremities by inner cross braces or ties 7, from which uprights 8 extend upwardly to the inner central edge portions of the said strips. Also attached to the inner edge portions of the strips 4 and 60 projecting inwardly are central connectors 9, to which are movably attached the opposite extremities of horizontally-disposed lazytongs 10, freely slidable through an intermediate guide 11, having a depending centrally- 65 located leg 12 and an upper transversely-extending rest-brace 13, with supporting-arms pivotally mounted in the opposite slotted extremities thereof, said arms being elevated and brought into contact with the under op- 70 posite portions of the table-top to prevent the latter from sagging, particularly when extended a considerable distance, the slots in the opposite extremities of the rest-brace 13 being large enough to fully receive the 75 arms 14, and thereby provide means for holding the arms flush with the brace and out of the way when not in use. Loosely connected to the under portion of one extremity of the lazy-tongs 10 is a directing-link 15, which has 80 a free sliding movement and works in a slot 16 in the upper central portion of the base of the guide 11, a pin or stud 17 projecting upwardly from the said base and extending through the opening of the link, and by this 85 means the said lazy-tongs are caused to have a positive longitudinal movement and prevented from working out in lateral directions during the operation of the same. Moreover, the disposal of the lazy-tongs in the guide 11 90 also prevents sagging of the same and produces a more positive and reliable operation without liability of jamming or sticking.

The table-top proper comprises fixed top sections 18 and 19, the one pair of half side 95 rails 2 being fixed or secured at their upper edges to the opposite ends of the section 18, and the other pair of side rails have their upper edges free of attachment and are movable over the opposite end edges of the section 19, 100 and also a roll-top 20, connected to one side of the section 19 and composed of a series of

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flexibly-attached tongued strips 21, which are secured and held in freely-movable relation by an inner strip of fabric or other material. The extremity of the roll-top 20 opposite that 5 attached to the side edge of the section 19, has opposite pull-cords 23, secured thereto and run up over grooved pulleys 24, as shown by dotted lines in Fig. 2, located in the free ends of slides 25 at opposite sides of the table, 10 which are formed with inner tongues 26, freely movable in an unattached intermediate slide 27, having inner tongues 28, movable in guides 29, fixed to the table-top sections 18 and 19. The slide 25 at each side is secured 15 to the half-rail 2, and when the latter or the end frame to which said right half-rails are secured is moved outwardly the slides 25 are drawn therewith and simultaneously the rolltop 20 is opened or brought up into alinement 20 with the sections 18 and 19 and supported beyoud the inner limit of the opposite right half side rails by the said slides 25. This supporting means for the roll-top 20 when brought up into place and in alinement with the sec-25 tions 18 and 19 is strengthened and rendered more firm by means of the engagement with the said slides 25 of the intermediate slides 27, which are held by the inner guides 29, fixed to the table-top sections 18 and 19. When 30 the roll-top 20 moves beneath the sections 18 and 19 during the operation of contracting the table, it is held by oppositely-disposed cleats 30 on the inner opposing portions of the half-rails 2, and in the outward movement of 35 the said roller-top to aline with the said sections the several tongued strips 21 automatically interlock and produce a substantially smooth surface. The parts of the right frame are so arranged that the roll-top will be fed 40 outwardly and inwardly through an open space 30, adjacent the end rail 3 forming the outer wall and the adjacent portions of the opposite right half-rails 2 the end walls for said opening, the parts all being primarily 45 proportioned and positioned to have the rolltop operate with constancy through the said opening as regards position of the same and relation to the adjacent structural devices. For bridging over the upper portion of the 50 said opening 31 a hinge-flap 32 is employed and is connected at its opposite ends to the outer upper end portions of the right half-rails 2 by suitable hinges and so that it can be opened in an outward direction and adapted to form 55 a continuation of the upper surface of the table-top and to have its upper surface flush with the adjacent strip of the roll-top 20, with which it engages. The inner free edge of this flap 32 is formed with a tongue 33 to engage 60 the grooves of the several strips that remain elevated in accordance with the degree of adjustment or extension of the table and which become exposed by reason of the fall of the preceding strip, as clearly shown in Fig. 2, 65 and by this means the gap between the upper edge of the right end rail 3 and the outer edge 1

of the adjacent strip 21 will be completely covered by the flap, and, moreover, a locking means to prevent inward movement of the opposite parts of the table after extension 70 will also be provided by reason of the fact that the tongue 33 of the flap engaging the groove of the adjacent strip 21 will obstruct inward movement of the opposite parts of the table.

An important feature of construction in the present improvement is the provision of auxiliary extensions 34 at opposite ends of the table and whereby a table of, say, eight feet in length can be increased one foot or more 80 on each end without materially adding to the structure of the table and without requiring lengthening of the roll-top and operating mechanism or parts active in conjunction therewith. These auxiliary extensions each 85 comprise an upper flat leaf 35 of a length corresponding to that of the width of the table and having an outer depending closingrail 36. By the length of the auxiliary extensions being the same as the width of the 90 table is meant the width of the table-top minus the additional extent on each side provided by the half-rails 2. The auxiliary extensions comprise as a part of their complement in each instance a pair of slides 37, which 95 have lower dovetailed portions 38, as clearly shown in Figs. 4 and 5, and which move in corresponding longitudinally-extending slots constructed in the upper portions of the strips 4. From the outer ends of each pair of slides 100 37 arms 39 extend upwardly and are pivotally connected to the under outer portions of the opposite extremities of the leaf 35. Both ends of the arms 39 are pivotally attached, and in the under portion of each leaf near op- 105 posite ends seat-slots 40 are formed, into which the upper ends of the said arms extend. Nearer their inner edges the leaves 35 are connected to the slides 37 by pivoted links 41, which move in planes parallel with the arms 110 39 and act with the latter to hold the leaves in elevated position, and when the leaves are let down the arms 39 and links 41 fold into the slots 40 and in like manner the upper portions of the slides 37 down to the under dove- 115 tails 38 thereof enter the said slots or recesses 40 to permit the leaves and coacting parts to be reduced to compact form in a vertical direction and be unitedly moved with the slides inwardly through the openings 5 below the 120 lower edges of the end rails 3, and when the said leaves and their parts are so disposed the closing-rails 36 thereof cover the said rails and virtually form lower continuations of the latter. To hold the inner edges of each of 125 the leaves 35 flush with the outer edge of the adjacent part of the table-top, a spring-finger 42 is secured to each end of each leaf, the said fingers having intermediate inward deflections or bends to set up a frictional bearing 130 of sufficient strength to hold the inner edges of the leaves with sufficient firm contact in re62,109

lation to the adjacent ends of the table-top to resist ordinary weights or strains, and thereby

prevent accidental disengagement.

It will be seen from the foregoing that the improved roller-top extension-table is most simple in construction and operation, involving no complicated mechanism whatever. Although allowing of great extension, it can be also reduced to compact and small compass.

To operate the same necessitates merely the drawing apart and moving together of the table ends or frames, according as a larger or a smaller table is required, and, furthermore, in this adjustment the parts will all move easily and without friction of any moment in view of the arrangement set forth.

Changes in the form, size, proportions, and minor details may be resorted to without departing from the principle of the invention.

Having thus described the invention, what

is claimed as new is-

1. The combination with an extension-table having end openings, of supporting devices longitudinally movable into and outwardly through said openings beneath the plane of the top portions of said ends, and auxiliary end extensions connected to and foldable downwardly upon the said devices and having means for retaining them in position relatively to the table ends and also for closing the said openings.

2. The combination with an extension-table, having end openings, of supporting devices movable into and outwardly through the said openings, and auxiliary end extensions movably connected to and foldable downwardly upon the said devices and having depending portions to close the said open-

ings.

ble of end cross-strips with dovetail grooves therein auxiliary end extensions each comprising a pair of slides having lower dovetailed portions movable in the grooves of said cross-strips and a leaf adjustably secured to the said slide and adapted to be raised and lowered in relation thereto.

4. The combination with an extension-table, of auxiliary end extensions each comprising a pair of slides, arms pivotally connected to the slides, links also pivotally at-

tached to the slides, and a leaf to which the arms and links are also pivotally connected, the under portion of the leaf where the links and arms are attached being grooved to re- 55 ceive said links and arms and a portion of the slides.

5. In an extension-table the combination with opposite end frames, of rigid top sections, a roller-top, an intermediate brace have for ing a depending leg, and arms movably mounted in the opposite extremities of the brace for engagement with the opposite side portions of the table to prevent sagging of the same at an intermediate point.

6. In an extension-table the combination with opposite end frames, a fixed top portion, a roll-top to conjunctively act with the fixed top portion, a lazy-tongs connection between the end frames, an intermediate leg having a 70 transversely-extending brace, and a guide supported by and extending above the top of the brace through which the said lazy-tongs connection has free movement.

7. In an extension-table the combination 75 with end frames, of a fixed top portion, a rolled top conjunctively operating with the fixed top, slides secured to one of the frames and having antifrictional devices in the one end of each, guides attached to the opposite 80 frame, slides loosely interposed between the first-mentioned slides and the guides, cords attached to the roll-top and movable over said antifrictional devices, and a connection between the frames.

8. In an extension-table, the combination with end frames, of an intermediate guide having a depending supporting-leg, a lazy-tongs connection between the opposite frames and movable through the guide, and a direct-90 ing-link loosely connected to a portion of the lazy-tongs and to the guide, the said link being free to move and the lazy-tongs connection unattached by any other means.

In testimony that we claim the foregoing as 95 our own we have hereto affixed our signatures in the presence of two witnesses.

CHAS. DAVID BARR.
JOSEPHINE P. BARR.

Witnesses:

JNO. W. STEMHOY, C. H. SCHOCHT.