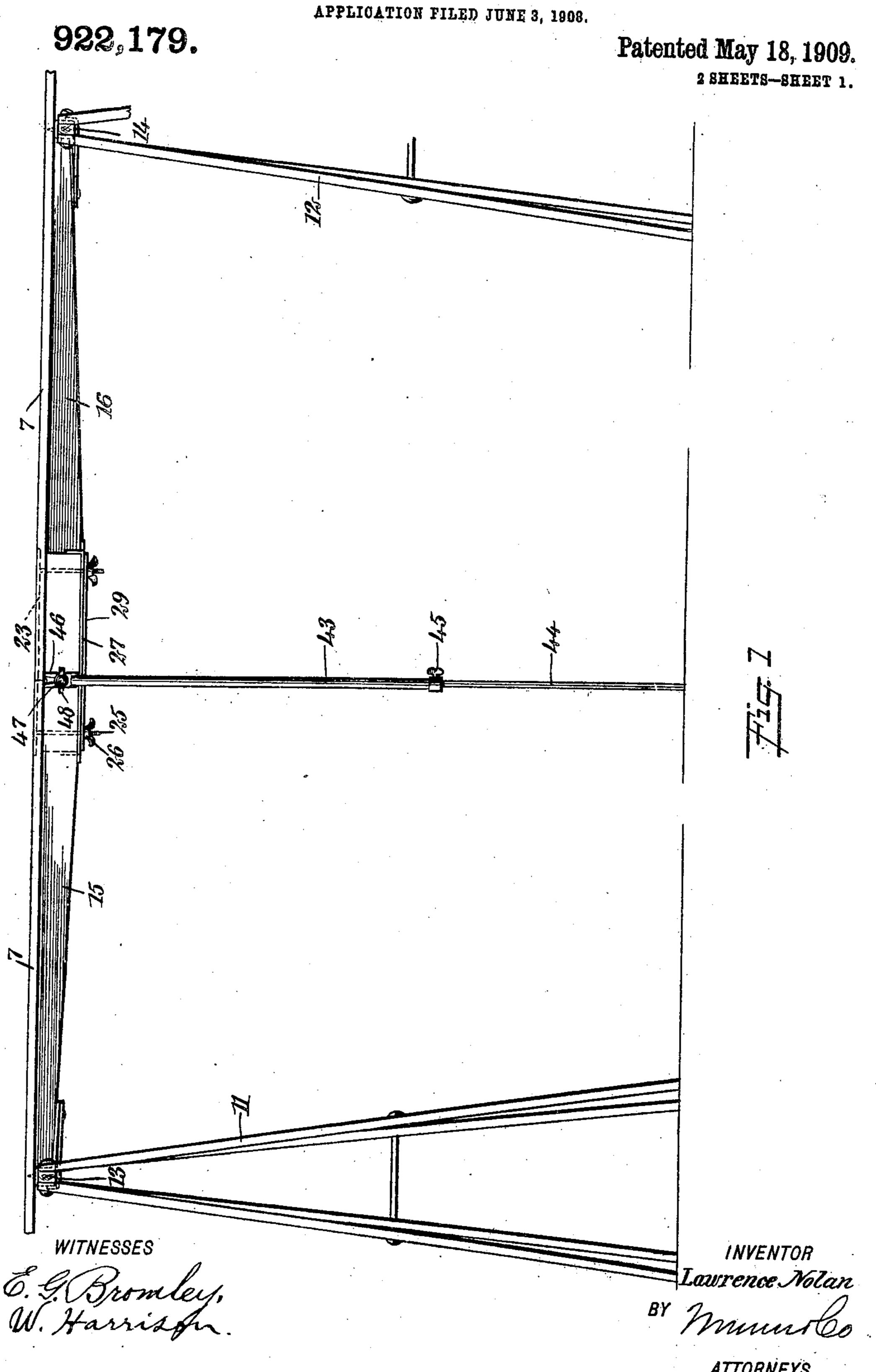
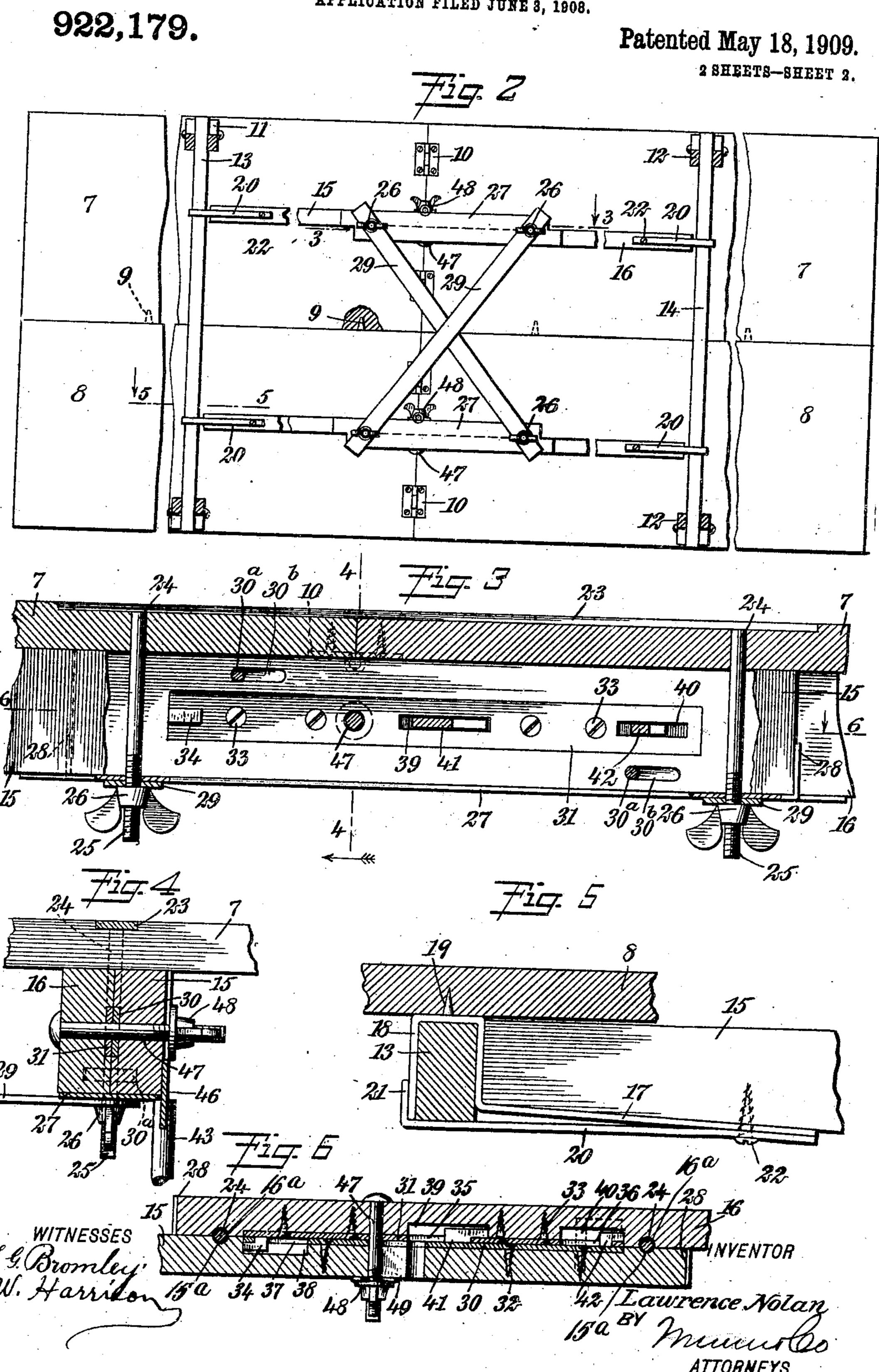
I. NOLAN.
FOLDING TABLE,
PPLICATION FILED JUNE 3, 19



L. NOLAN.
FOLDING TABLE,
APPLICATION FILED JUNE 8, 1908.



UNITED STATES PATENT OFFICE.

LAWRENCE NOLAN, OF NEW YORK, N. Y.

FOLDING TABLE.

No. 922,179.

Specification of Letters Patent.

Patented May 18, 1909.

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the city of New York, borough of Manhat-5 tan, in the county and State of New York, have invented a new and Improved Folding Table, of which the following is a full, clear, and exact description.

My invention relates to folding tables, my 10 more particular purpose being to provide a form of knockdown table having great

strength combined with lightness.

Reference is to be had to the accompanying drawings forming a part of this specifica-15 tion, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation showing the table complete, the table comprising two horse and folding boards resting thereupon, 20 these boards being provided with various detachable braces and other strengthening members; Fig. 2 is a fragmentary inverted plan of the table, this view showing the folding boards and also showing the various rods 25 and their connections with the boards and with each other; Fig. 3 is a fragmentary section upon the line 3-3 of Fig. 2, looking in the direction of the arrow and showing the oppositely disposed clamping plates for hold-30 ing together the supporting bars, this view further showing a part of the interlocking joint for temporarily connecting the supporting bars together; Fig. 4 is a vertical cross section on the line 4—4 of Fig. 3, looking in 35 the direction of the arrow, and showing the bolt used for connecting the center braces to the supporting rods in order to support the middle of the table; Fig. 5 is a fragmentary section upon the line 5-5 of Fig. 2, looking 40 in the direction of the arrow, and showing how the supporting bars are connected with the top beams of the horses and also how the supporting bars are connected with the table boards; and Fig. 6 is a fragmentary section 45 upon the line 6—6 of Fig. 3, looking in the direction of the arrow, and showing the interlocking joint for holding together the two supporting bars, this view further showing how the supporting bars are also bolted

50 together. A number of table boards 7, 8, are arranged in pairs as indicated in Fig. 2, and fitted edge to edge by dowel pins 9. The various pairs of boards are connected transversely of I proper position form bolt-holes.

To all whom it may concern:

Be it known that I, Lawrence Nolan, a citizen of the United States, and a resident of boards separable on a longitudinal line, while each board consists of sections or members hinged on a transverse line, so that upon the boards being separated, the sections of 60 each board may be folded onto each other and the table top thus be brought into a space having a total width and length equal to the width and length of one hinged section. Supporting legs 11, 12, are arranged 65 in pairs and are provided with top beams 13, 14, so as to form supporting horses which may be of any suitable construction. Supporting bars 15, 16, are arranged in overlapping pairs as best indicated in Figs. 2 and 6, 70 said supporting bars having a general tapered form as seen best in Fig. 1, and being disposed longitudinally of the table, one supporting bar ranging approximately along the center of a board 7 or 8 and crossing the 75 transverse line on which the board sections are hinged. Mounted upon the outer or smaller end of each supporting bar 15 is a clip 17 preferably of sheet metal formed with an approximately U-shaped end portion 18 80 to fit over a top beam 13 or 14 of a horse. On the top of the clip 17 is an upwardly extending spur 19, see Fig. 5, which is adapted to enter a table board and serves to fix the latter on the supporting bar as well as result- 85 ing in relieving the clip from the longitudinal strain which might tend to distort its Ushaped portion. A second clip 20 has a turned end 21 and is secured to a supporting bar as best illustrated in Fig. 5 in a position 90 preferably overlying the shank of the clip 17 so as to coact with the U-shaped portion of said clip to retain the supporting bar in engagement with the horse. A clamping plate 23 is let into the top surface of each table 95 board section and fits a corresponding recess therein, so as to cross the transverse line on which the board sections are hinged. The clamping plate 23 is provided with vertical bolts 24 one bolt being disposed at each side 100 of the transverse hinge line. The said bolts extend downward through the table board sections and through the supporting bars, being received in semi-circular recesses 15^a. 16a, formed in the opposite faces of the over- 105 lapped portions of the supporting bars; said recesses when the supporting bars are in

Thumb nuts 26 are revolubly mounted upon the threaded portions 25. Another clamping plate 27 is adapted to fit against the lower edges of the supporting bars 15, 5 16, and is made of a width corresponding substantially to the aggregate thickness of the supporting bars, as will be understood from Fig. 4. The clamping plate 27 is provided with upturned ears 28, each fitting re-10 spectively one end of a supporting bar (see

Fig. 3).

When the clamping plates 23, 27 are in position and the thumb nuts 26 are tightened upon the bolts 24, the supporting bars and 15 the table boards are forced tightly together. A pair of flat metal bars 29, each serving as a brace, are crossed as indicated in Fig. 2, and connect together adjoining clamping plates 27. These bars 29 are provided with 20 holes which are slipped over the threaded portion 25 before the thumb nuts 26 are forced into position. The thumb nuts being tightened, the bars 29 effectively brace the supporting bars upon one part of the table

25 relatively to those upon another part. Mounted upon the supporting bars 15, 16

and embedded therein are metallic plates 30, 31. These metallic plates are secured to the supporting bars by aid of screws 32, 33. 30 The plate 31 is provided with a hook 34 and with slots 35, 36. The plate 30 is provided with a slot 37, and underlying this slot is a longer slot 38 in the supporting bar 15. The supporting bar 16 adjacent to the slots 35 35, 36 is provided with longer slots 39, 40. Mounted upon the plate 30 are hooks 41, 42, which may extend into the slots 39, 40, the hook 34 upon the plate 31 meanwhile extending into the slot 38. This enables the 40 two supporting bars to be locked together, the plates 30, 31 with their various hooks and slots together serving as an interlocking joint, as will be understood from Fig. 6. Dowel pins 30^a on one supporting bar sec-45 tion 15 or 16 are received in longitudinal slots 30^b in the companion section to further hold the supporting bars in position, said pins being located at opposite sides of the interlocking plates 30, 31, near opposite ends 50 of said plates and serving to protect the hooks 34, 41, 42, against any wrenching strain to which they may be subjected, since the pins act to resist a careless movement tending to swing the sections 15, 16 on 55 the clamping bolt 47 next to be referred to. The sections or bars 15, 16, composing each supporting bar are united and clamped by a horizontal bolt 47 having a binding nut 48

60 see particularly Fig. 6, is formed with a slot 49 whereby when a nut 48 is loosened sufficiently the members 15, 16, can be moved longitudinally with respect to each other and then given a lateral movement flatwise 65 toward or from each other in the direction

and one of the sections, as 15 for instance,

of the axis of the bolt 47 for engaging or disengaging the hooks 34, 41 and 42 of the plate 31 with the corresponding slotted portions 38, 39, 40. With the nut 48 loosened sufficiently and without entirely removing 70 it, the sections 15, 16 after the described longitudinal and lateral separating movements may be swung around with the bolt 47 as a pivot and thus swung onto one another to occupy a small space. The bolts 47 are 75 preferably located at such a point on the supporting bars 15, 16, that the said bolt in each pair of supporting bars will come directly under and parallel with the transverse hinge line of boards 7, 8 and I utilize 80 said bolts to secure a pair of attachable central supporting legs so that the latter will thus be on the hinge line of the boards. One of said legs is shown, see Fig. 1, and preferably consists of telescoping sections 43, 44, 85 that are to be clamped together in a given adjustment by a binding screw 45. The upper end of the upper section, 43, is flattened and slotted to form a fork 46, which may be readily passed over a bolt 47 and be 90

tightly clamped by the nut 48. My improved devices are used as follows: In order to assemble the parts, the boards 7, 8 are fitted together by aid of the dowel pins 9 and arranged as indicated in Fig. 2. The 95 supporting bars 15, 16 are next arranged in pairs, each pair being held together by a bolt 47. Each pair of supporting bars are first put together loosely, as indicated in Fig. 6, the hooks 34 entering the slot 38, and the 100 hooks 41, 42 entering the slots 39, 40. The supporting bars are then pulled endwise so as to move the bar 16 to the right and the

bar 15 to the left. The hooks thus grip under the adjoining edges of the plates 30, 105 31 and hold the supporting bars firmly together. The bolts 24 are next inserted and further tend to prevent the bars becoming dislodged relatively to each other. The clamping plates 23, 27 carry the purpose 110 still further and also prevent the possibility of the supporting bars being displaced relatively to each other in a direction corresponding to the general longitudinal direction of the bolts 24. The horses are next 115 set up and the clips 17 are secured thereupon by slipping the U-shaped portions 18 over them, the clips 20 being sprung slightly downward according to Fig. 5 and passed around the U-shaped portions 18. The 120 boards 7, 8 are next forced down upon the spikes 19. The tubular sections 43, 44 are next mounted in position by securing the fork 46 by pressure of the thumb nut 48.

The sections 43, 44 together constitute a 125 central bracing member for holding the table at its middle, as will be understood from Fig. 1. In order to take the construction apart the thumb nuts 26, 48 are loosened and the various parts removed in 130

the order reverse to that above described i

for purposes of assembling.

Having thus described my invention, I claim as new and desire to secure by Letters 5 Patent:

1. The combination in a table, of a supporting bar composed of overlapping members, one of said members being provided with a hook and the other being provided 10 with a slot having a portion longer than said hook in order to hold the said members together by an interlocking connection, means for preventing retrogressive movement between said members, a table top to be sup-15 ported upon said bar, and means connecting the table top with the overlapped portions of the bar members.

2. The combination of boards to be supported on a table top, a supporting bar for 20 engaging the same and composed of overlapping members, mechanism for forming an interlocking joint for connecting said members to each other at their overlapping ends, and means for detachably clamping the 25 said bar to the table top at overlapping por-

tions of the bar members.

3. The combination of a pair of horses provided with supporting beams, a supporting bar of rigid material provided with attached 30 clips for detachably embracing the beams of said horses, boards to be supported upon said supporting bar as a table top, and means for detachably clamping the supporting bar to the boards at a point intermediate the 35 ends of the table top.

4. The combination of elongated supporting bars, metallic clips mounted upon the ends of said bars for engaging the top bars of supporting horses, spurs on said clips, and 40 table top boards to be engaged by said spurs.

5. The combination of horses provided with supporting beams, a supporting bar to connect the beams of said horses, clips mounted upon the ends of said supporting 45 bar and provided with a portion embracing said beams, means co-acting with said clips for preventing the disengagement of the same from said beams, and a table top to be carried on said supporting bar.

50 6. The combination of folding boards constituting a table top, a bar for sustaining the table top, and clamping means embracing respectively the upper surface of the table top and the under surface of the supporting 55 bar at a point adjacent to the line of folding

of the boards.

7. The combination of supporting bars composed of overlapping members, a table top, a clamping plate engaged in the table 60 top, bolts extending from the clamping plate through the table top and through said supporting bars between the overlapped portions of the latter, and fastening members engaging said bolts and adapted to exert 65 pressure against said supporting bars.

8. The combination of folding boards, supporting bars for the boards, diagonally crossed bars connecting together a pair of supporting bars, means for detachably connecting said crossed bars with said support- 70 ing bars, and means for detachably engaging the ends of the supporting bars with horses

or other suitable support.

9. The combination with a table top, of means for supporting said table top at points 75 adjacent to its ends, longitudinal supports engaging the said end supports and composed of overlapping members having clamping means, and an upright telescopic member at about the center of the table for support- 80 ing the latter, the said telescopic member having detachable connection with the clamping means of the overlapped longitudinal supporting members.

10. The combination of a table top, means 85 for supporting the ends thereof, a horizontal supporting member made in sections slidable relatively to each other, means for clamping said sections rigidly in relation to each other, additional means for effecting an interlocking 90 engagement between the said sections, and means for clamping the united sections to

the table top.

11. The combination of boards to be employed as a table top, a supporting bar 95 formed of overlapped sections on which said boards rest, end supports for said bars, a bolt extending through said supporting bar sections, and an upright central supporting member provided with a fork engaging said 100 bolt.

12. The combination of boards arranged in pairs to constitute a table top, hinges connecting the boards of each pair, the boards having dowel pins for connecting adjacent 105 boards at their longitudinal edges, longitudinal supporting bars each composed of overlapped sections ranging longitudinally of the respective top boards, and detachable diagonally crossed braces connecting the over- 110 lapped sections of one supporting bar with the diagonally opposite sections of the other

bar. 13. The combination of boards, a supporting bar for sustaining the latter, said sup- 115 porting bar being formed of sections placed side by side and overlapped, a clamping plate having a width commensurate with the aggregate thickness of said supporting bar sections, said clamping plate being provided 120 with upturned ends engaging the ends of said supporting bar sections, and means for connecting together said boards, said supporting bars and said clamping plate.

14. The combination of supporting bars 125 formed of sections arranged in pairs united by a single bolt, one section of each pair being provided with a dowel pin and the other with a depression for receiving said dowel pin, boards fitting upon said bars, the 130

dowel pins serving to prevent movement of the bar sections on the bolt until the bars are separated to disengage the dowels, boards constituting a table top, and means for secur-5 ing the boards to the supporting bars.

15. A supporting bar for the tops of knockdown tables, comprising two members having overlapped ends, interlocking means for said ends consisting of a hook on the side face 10 of one member and an undercut slot in the other member for receiving said hook, dowel pins projecting from the face of each member and fitting slots in the opposite face of the other member to reinforce the connec-15 tion and prevent damaging strains on the mentioned hook, and additional clamping

means for the said overlapped ends.

16. A supporting bar for the tops of knockdown tables, comprising two members hav-20 ing overlapped ends, interlocking means for said ends consisting of a hook on the side face of one member and an undercut slot in the other member for receiving said hook, dowel pins projecting from the face of each 25 member and fitting slots in the opposite face of the other member to reinforce the connection and prevent damaging strains on the mentioned hook, and additional clamping means for the said overlapped ends, said 30 additional clamping means consisting of a bolt and a nut thereon, one of the members of the supporting bar having a slot through which said bolt passes, whereby when the nut is loosened the overlapped members of | tachably securing the table top to the said 35 the bar may be moved longitudinally and transversely relatively to each other and have a swinging movement with the bolt as an axis when said members are sufficiently separated.

17. A knockdown table, comprising a top composed of boards formed of sections hinged together on a transverse line at a point intermediate the ends of the top, to fold one on top of the other, a longitudinal supporting 45 bar adapted to rest at its ends on suitable supports, and means for detachably connecting said bar with the table top, said means comprising a plate extending longitudinally of the top across the line on which 50 the sections are hinged, at the upper surface of the top, and bolts extending downward from the plate through the table top to an engagement with the supporting bar.

18. A knockdown table, comprising a top 55 composed of boards formed of sections hinged together on a transverse line about centrally of the top to fold one onto the other, a supporting bar formed of members overlapping at the center of the table, means for holding

said overlapped members against movement 60 relatively of each other, and means for detachably connecting the top with the supporting bar, at the overlapped portion, said means comprising a plate on the upper surface of the table in a position crossing the 65 meeting ends of the top board sections, and a bolt extending downward from said plate through the top and through the supporting bar members, in combination with end supports.

19. In a knockdown table, a top formed of members hinged about centrally to fold one on top of the other, and a supporting bar formed of sections having means for connecting them together at a point adjacent to the 75 line on which the top members are hinged, and clamping means for securing the top and the supporting bar together, said means comprising a plate at the upper surface of the table top and extending across the line on 80 which the members are hinged, and a plate at the under side of the supporting bar sections, and means for establishing a connec-

tion between said plates.

20. A knockdown table having its top 85 composed of boards consisting of sections hinged together on a transverse line, a supporting bar composed of overlapped members united by a clamping bolt extending transversely through the overlapped ends, 90 in a plane approximately parallel with the plane of the table top, and means for debar, said means comprising a plate at the upper surface of the table top, and bolts ex- 95 tending vertically downward from the plate at each side of the hinge joint of the top board sections, through said sections to a connection with the supporting bar.

21. The combination of a pair of horses 100 provided with supporting beams, a supporting bar of rigid material provided with means for detachably securing said supporting bar to the beams of said horses, boards to be supported upon said bar at a table top, and 105 divided transversely at a point intermediate the ends of the table, and means for detachably securing the supporting bar to the said boards at the transverse dividing line thereof.

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

LAWRENCE NOLAN.

Witnesses:

HENRY BAUMGARTNER, GEORGE HOAG.