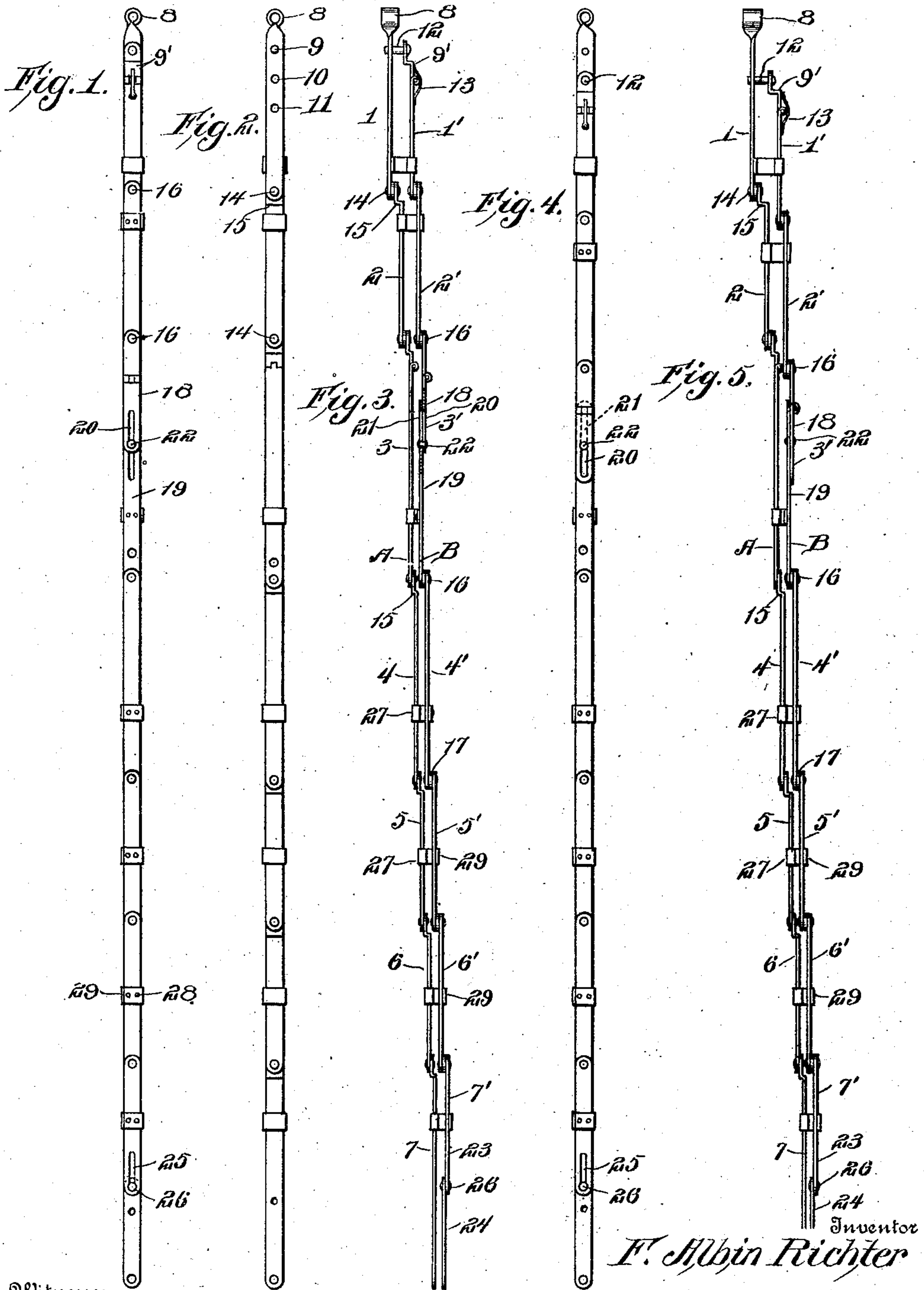


No. 850,056.

PATENTED APR. 9, 1907.

F. A. RICHTER.
CONVERTIBLE TABLE.
APPLICATION FILED AUG. 1, 1906.

3 SHEETS—SHEET 1.



Witnesses

Louis R. Heimichs
Wm. Bagger

By

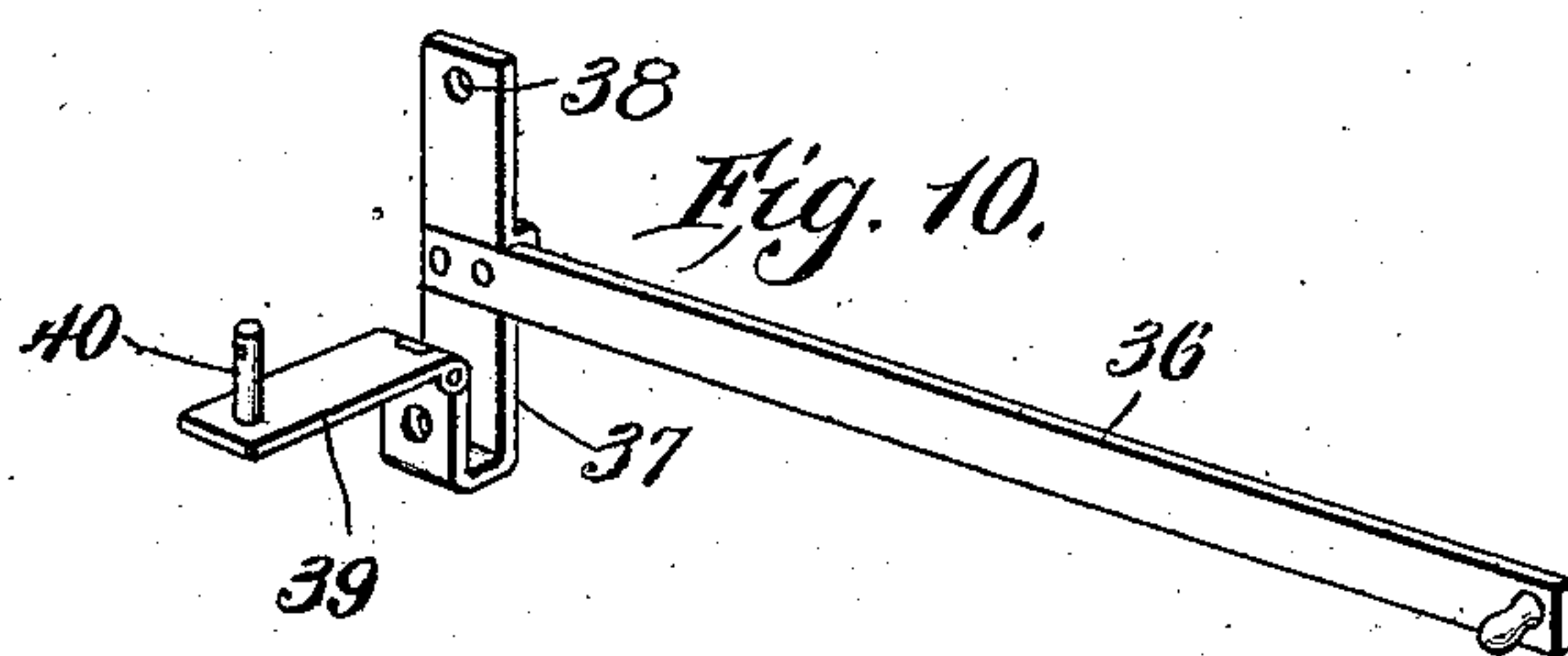
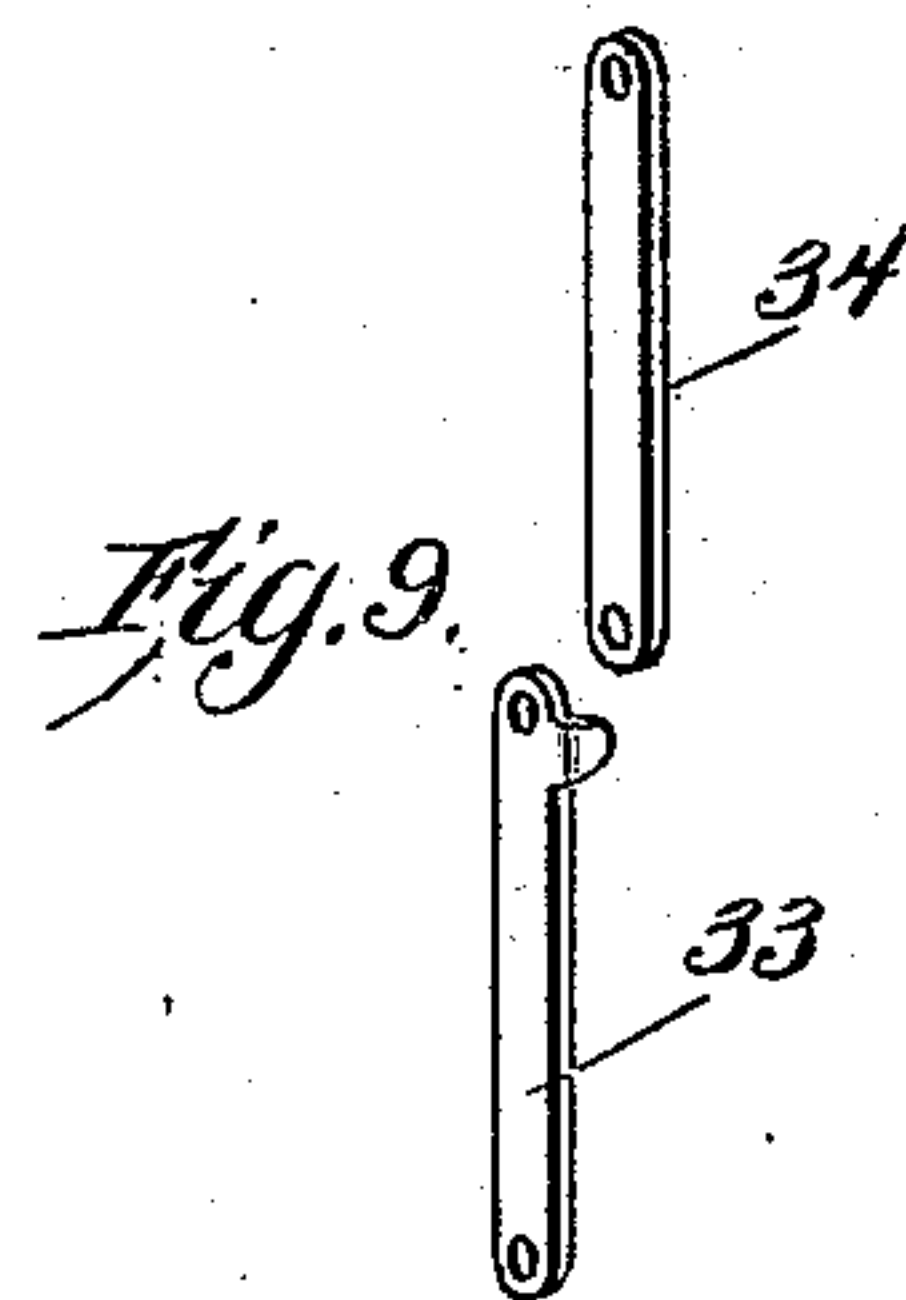
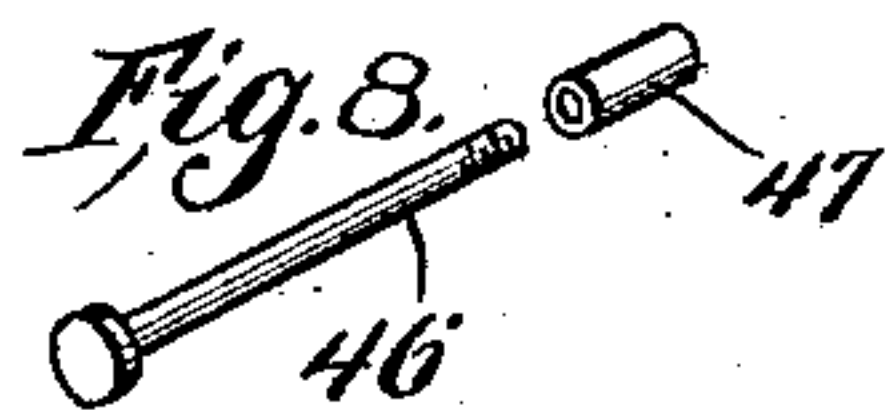
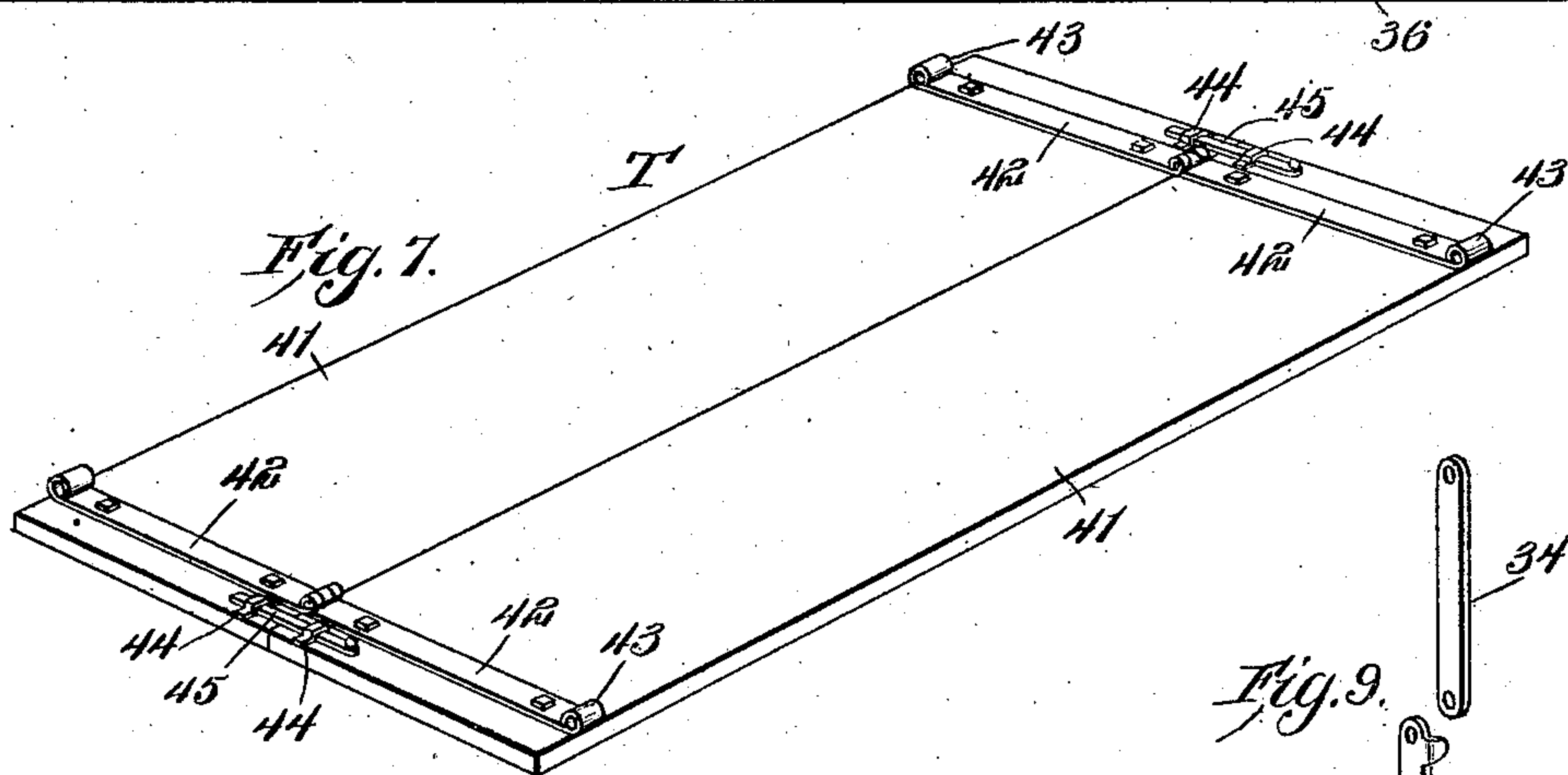
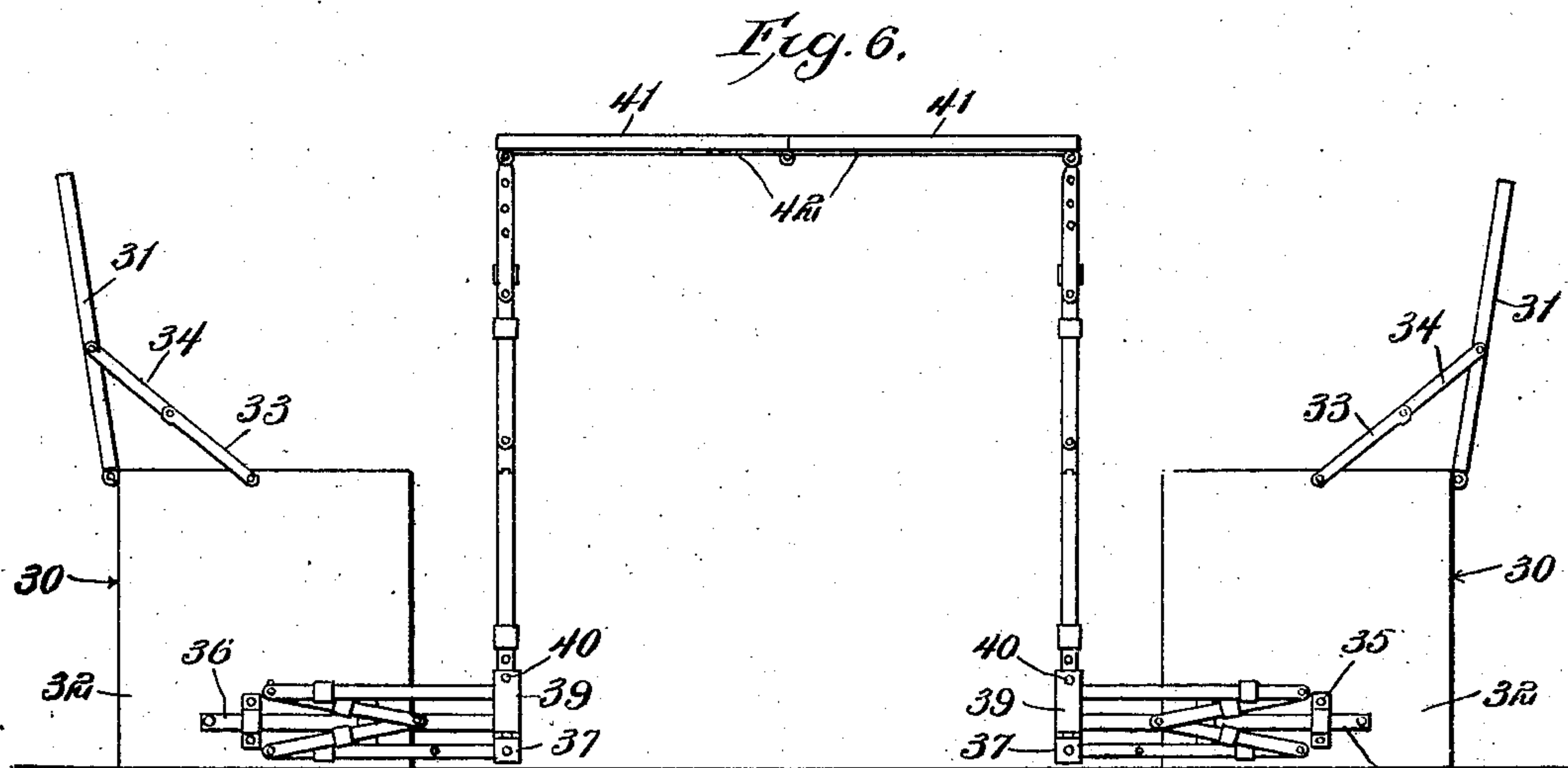
Victor J. Evans
Attorney

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3 SHEETS—SHEET 2.



Witnesses

Louis R. Heinrichs
Wm. Baggett

Inventor

F. Albin Richter

By

Victor J. Evans

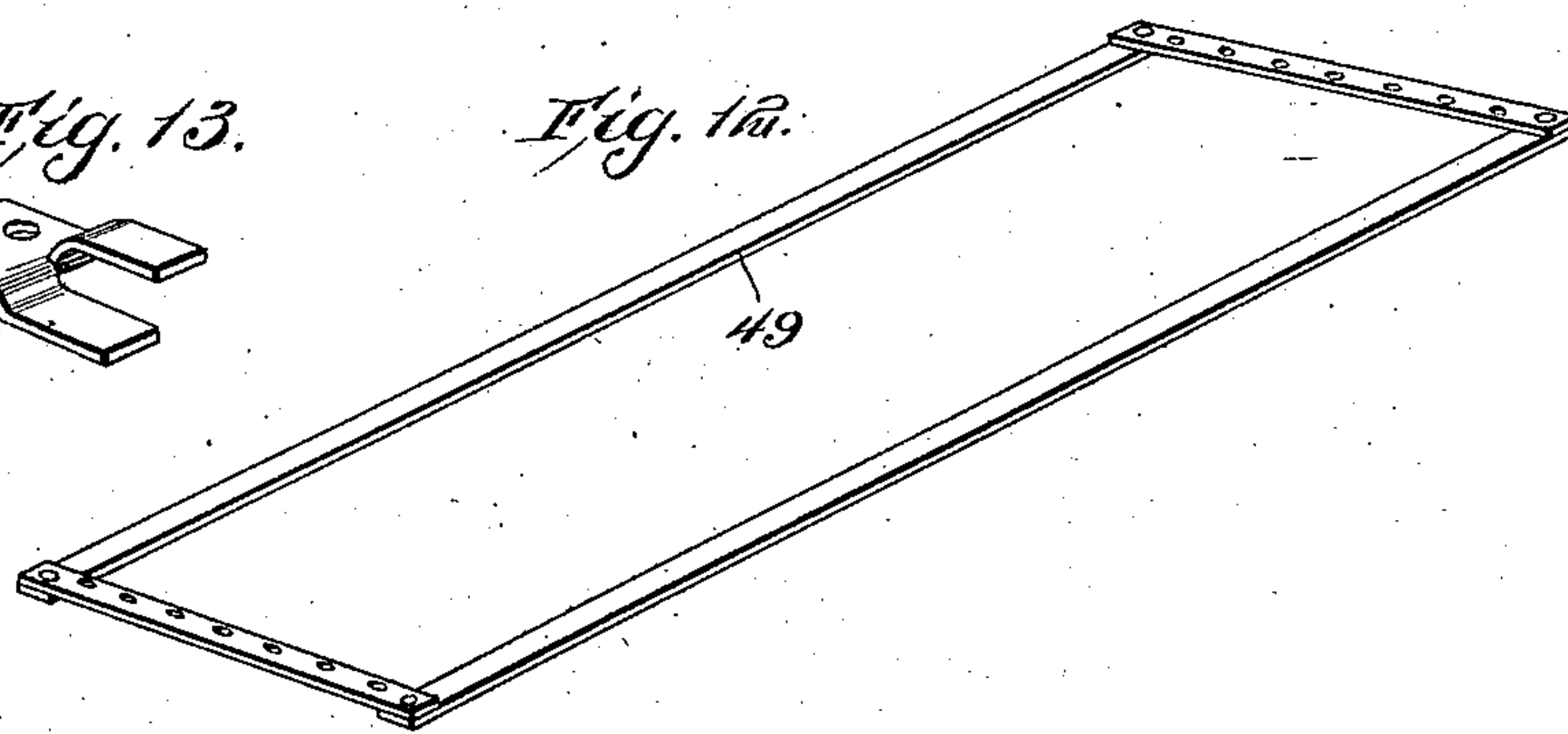
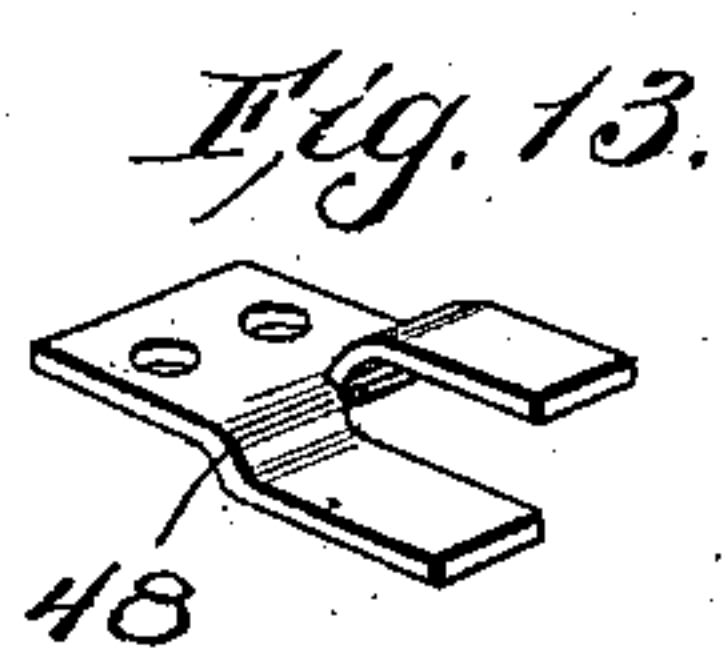
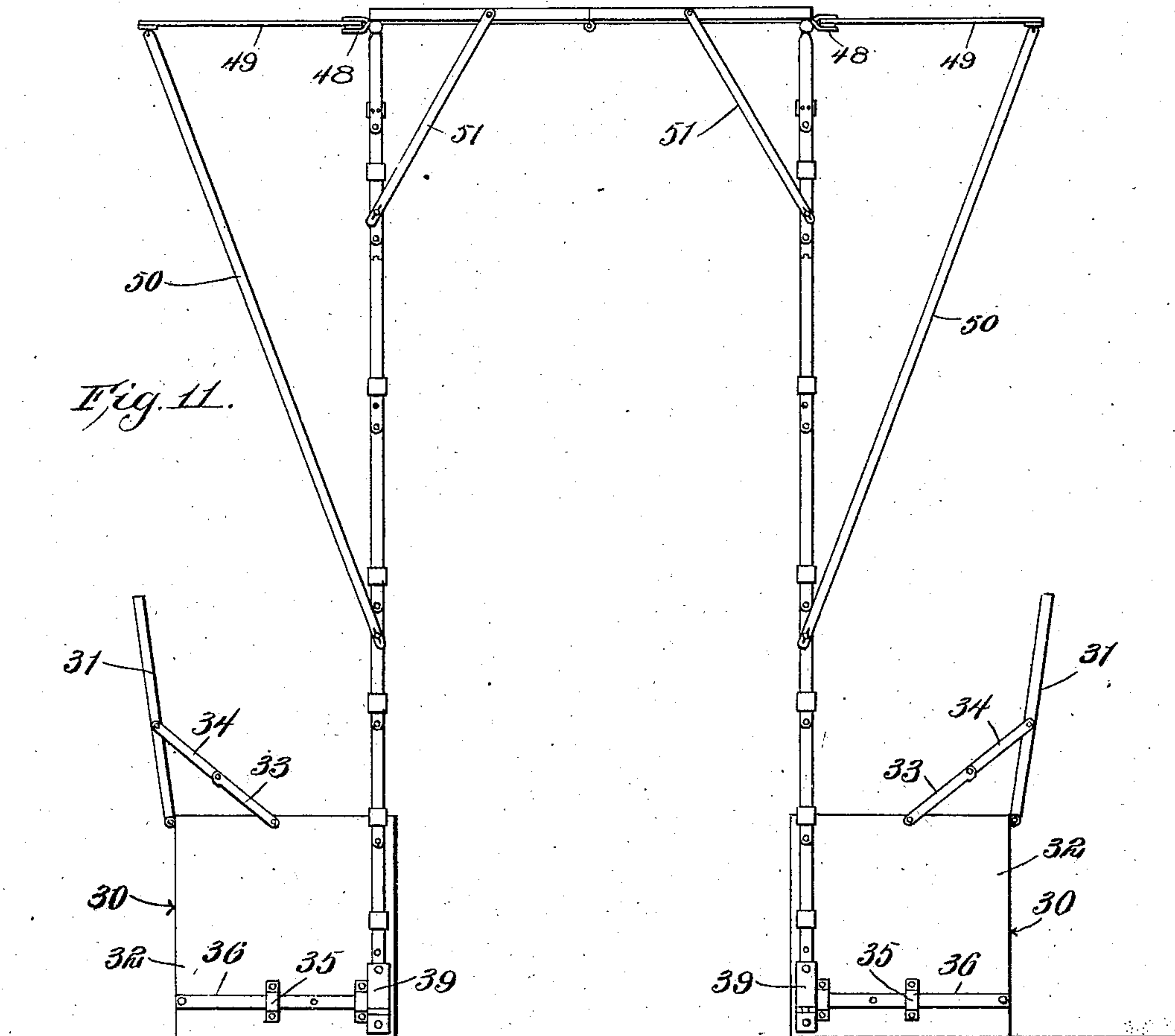
Attorney

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F. A. RICHTER.
CONVERTIBLE TABLE.
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3 SHEETS—SHEET 3.



Witnesses

Louis R. Heinrichs
Wm. Baggett

Inventor

F. Albin Richter

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

FRANZ ALBIN RICHTER, OF DALLAS, TEXAS.

CONVERTIBLE TABLE.

No. 850,056.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed August 1, 1906. Serial No. 328,765.

To all whom it may concern:

Be it known that I, FRANZ ALBIN RICHTER, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented new and useful Improvements in Convertible Tables, of which the following is a specification.

This invention relates to convertible tables and to an improved device for supporting table-tops or canopies and the like, the same being adapted to be used in connection with seats or benches and with an improved supporting device adapted to be connected with the legs or end members of such seats or benches.

The primary object of the invention is to provide a supporting device which shall be capable of being folded into very small compass, and to this end the device is composed of two separate members slidably connected to each other and each composed of a plurality of individual pivotally-connected sections, the said members being so arranged that all of the pivotal joints of the one member may be brought into registry with the pivotal joints of the other member, thus permitting the sections of the two members to be folded in small compass, as above set forth, the arrangement being such that part or all of the pivotal joints of the one member may be moved out of registry with the corresponding pivotal joints of the other member, thus preventing the joints thus moved out of registry from bending, and consequently maintaining a part or all of the device in a rigid condition, so that it may be effectively utilized as a support.

A further object of the invention is to provide a device of the character described which shall possess superior advantages in point of simplicity, inexpensiveness, durability, and general efficiency and which may be utilized in a great variety of ways and for a variety of purposes.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists of the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention and several ways of utilizing the same.

In the drawings, Figure 1 is a side eleva-

tion of a supporting device constructed in accordance with the principles of the invention. Fig. 2 is a side elevation showing the opposite side of the device. Fig. 3 is an edge view. Fig. 4 is a side elevation showing the device with a portion of one of the side members displaced to make the upper portion of the device non-collapsible. Fig. 5 is an edge view of the device as seen in Fig. 4. Fig. 6 is an end view showing two benches and between them a table-top mounted upon supporting devices constructed in accordance with the invention. Fig. 7 is a perspective view showing the table-top in an inverted position. Fig. 8 is a perspective view illustrating a bolt and a spacing-sleeve, such as are used for connecting the table-top with the supporting device. Fig. 9 is a perspective view of a pair of links constituting one of the braces for supporting the hinged backs of the benches. Fig. 10 is a perspective view of a bracket used for connecting the supporting devices with the end members of the benches. Fig. 11 is an end view showing a pair of benches having the supporting devices connected therewith, said supporting devices being extended at full length to support the table-top at an elevation where it constitutes the central part of a canopy, auxiliary canopy-frames being shown in connection therewith. Fig. 12 is a perspective view of one of the auxiliary canopy-frames. Fig. 13 is a perspective detail view of a bracket member utilized for mounting the canopy-frames in position.

Corresponding parts in the several figures are denoted by like characters of reference.

The improved supporting device which constitutes the leading feature of the present invention is composed of two parts or members A and B, each of which is made up of a plurality of sections or links, seven links being preferably employed in the make-up of each of said members A and B. The links composing the member A are numbered from 1 to 7, consecutively, beginning at what will be regarded and hereinafter referred to as the "upper" end. The links composing the member B are in like manner numbered from 1' to 7', consecutively.

The first or uppermost link 1 of the member A is provided at its upper extremity with an eye 8, and it has three suitably-spaced apertures 9, 10, and 11. The uppermost link 1' of the member B has a lug 9' hingedly connected therewith and provided with a pin or stud 12, which is adapted to engage any one

of the apertures 9, 10, and 11 in the link 1 with which it may be held in engagement by the action of suitably-arranged spring 13. The links composing the member A are pivotally connected with each other, as by means of pins or rivets 14, and several of said links are provided with offsets 15 for the purpose of conveniently accommodating the pivotal joints of the links composing the member B, which are in like manner pivotally connected by pins or rivets 16, it being understood that washers, as 17, are to be employed wherever desired or needed in order to properly space the parts and to dispose them in the most advantageous and satisfactory manner. When the members A and B are in their relative positions, (shown in Figs. 1, 2, and 3 of the drawings,) which may be regarded as the normal position of said members when the device is in condition to be collapsed or folded for storage or shipment, the pivots connecting the links of the member A are in axial alinement with the pivots connecting the links of the member B, and it follows that the device when in this condition may be collapsed or folded in a very compact condition.

The third link 3' of the member B is composed of two individual parts or sections 18 and 19, having slots 20 and 21, that are connected by means of a stud 22 in such a manner as to permit the sections 18 and 19 to move slidably upon one another to an extent equaling the combined lengths of the slots 20 and 21. The seventh or lowermost link 7' of the member B is in like manner composed of two independent sections 23 24, the former of which has a slot 25, which is of a length equal to the length of one of the slots 20 and 21 and in which moves a stud 26, connected with the section 24.

Each of the links 1 to 7, inclusive, of the member A is provided with a clip 27, said clips being suitably secured upon the links, as by rivets 28, and said clips are provided with guiding members, such as sleeves or hooks 29, in which the corresponding links 1' to 7', inclusive, of the member B are guided, thus permitting the said member B, when the links are all extended in longitudinal alinement with each other, as shown by Figs. 1 to 5, inclusive, to be slid or moved longitudinally with relation to the member A to an extent which is, however, governed by considerations to be presently more fully referred to, it being understood that when the stud 12 is in locking engagement with one of the perforations 9, 10, or 11 the parts or members A and B will be secured together against sliding movement.

It will be seen that when the stud 12 is in engagement with the uppermost perforation 9 of the link 1 the members A and B are maintained in the relation illustrated in Figs. 1, 2, and 3, when the entire device is

collapsible or foldable. By shifting the stud 12 to the second perforation 10 the links 1' and 2' and the section 18 of the link 3' will be moved in a downward direction, and the pivots connecting the links 1', 2', and 3' will thus be moved out of registry with the pivots connecting the links 1, 2, and 3 of the member A. The three uppermost links of each member will thus be prevented from folding or collapsing and will be stiffly and rigidly maintained in an extended condition. This relative arrangement of the parts will be clearly seen in Fig. 5 of the drawings. By further shifting the pin or stud 12 to the lowermost perforation 11 in the link 1 the section 19 of the link 3', together with the links 4' 5' 6' and the sections 23 of the link 7', will be permitted to move downward to the extent of the length of the slots 21 and 25, and all the pivots connecting the links of the member B will thus be carried out of alinement with the pivots connecting the corresponding links of the member A, the entire device being thus maintained in a rigid and non-collapsible condition.

To illustrate one of the many uses to which the improved supporting device may be put, there has been shown in Fig. 6 of the drawings two benches 30 30. It may be stated that these benches are to be preferably constructed in such a manner that they may be collapsed or folded in small compass. The benches are provided with hinged backs 31, which are connected with the end members 32 by means of collapsible braces composed of pivotally-connected links 33 and 34. Upon the end members of the benches there are secured keepers 35 for the accommodation of slides 36, carrying hook-shaped brackets 37, each of said brackets being adapted to receive and to hold one of the supporting members that have been shown in Figs. 1 to 5, inclusive. The long arms of the hook-shaped brackets are provided with perforations 38, and the short arms of the brackets are provided with hinged clips 39, having pins or studs 40, adapted for engagement with the perforations 38, as will be readily seen by reference to Fig. 10 of the drawings.

T designates a foldable table-top consisting of two leaves 41, provided upon their under sides with straps 42, hingedly connected at their inner ends and provided at their outer ends near the outer edges of the leaves 41 with eyes 43. Each of the leaves 41 is provided upon its under side with keepers 44 for the accommodation of bolts 45, which when adjusted in said keepers maintain the leaves 41 in an extended and non-collapsible condition. By removing the bolts it is obvious that the table-leaves may be folded upon each other.

In practice four of the supporting devices are connected with the eyes 43 of the straps 42 near the corners of the table-top, the con-

necting means preferably employed including bolts 46 and spacing-sleeves 47, which have been shown in Fig. 8 of the drawings. To support the table-top, as shown in Fig. 6, the parts A and B are disposed in the relative relations shown in Figs. 4 and 5 of the drawings, thus permitting the lowermost four links 4 5 6 7 and 4', 5', 6', and 7' of the members to be folded or collapsed in the manner clearly seen in Fig. 6 of the drawings, the supporting members being mounted in the brackets 37 and secured in said brackets by means of the pins 40, which are adapted for engagement with properly-disposed perforations in the links of the supporting device. The table-top will thus be supported in a convenient position between the two benches.

When it is desired to utilize the table-top for canopy purposes, as illustrated in Fig. 11 of the drawings, the members of the supporting devices at the four corners of the table-top are adjusted in the manner hereinbefore described in such a manner as to render them rigid and non-collapsible, and the lowermost links of each section are now secured in the supporting-brackets, it being here desired to call attention to the fact that by securing the lowermost section 24 of the bottom link 7' of the member B of each supporting device in its supporting-bracket in alignment with the lower portion of the bottom link 7 of the member A of each device said lowermost section 24 is prevented from sliding with the remaining portion of the member B of each section. The supporting devices being thus extended will support the table-top at a suitable elevation, as clearly seen in Fig. 11. Bifurcated brackets 48 of the construction seen in Fig. 13 of the drawings are now secured to the under side of the table-top near the edges of the leaves composing the same for the reception of the inner edges of frames 49, the outer edges of said frames being supported by means of braces 50, suitably connected with the supporting devices. The frames 49 are to be covered with canvas, cloth, or other suitable material, so as to constitute parts of the canopy or awning. The table-top when used for canopy purposes is preferably connected with the supporting members by braces 51.

While in Figs. 6 and 11 of the drawings there has been shown two distinct ways of utilizing the improved supporting devices of this invention these are by no means the only uses to which the improved device may be put. By proper manipulation the said supporting devices may be used in a great variety of ways for supporting tents, awnings, and collapsible furniture of various descriptions, more particularly for outdoor use.

Being readily collapsible to small compass the improved supporting devices are particularly useful for canopy purposes, since they may be packed in small space for convenient transportation. They are light, easily manipulated, and generally efficient for the purposes for which they are intended.

What is claimed is—

1. A supporting device of the character described comprising two members slidably connected and each composed of a plurality of links pivotally connected with each other; the pivotal joints of the links composing the two members being adapted to be placed in or out of registry with each other.

2. In a supporting device of the class described, a pair of members each composed of a plurality of links, means connected with the links of one member for slidably supporting the corresponding links of the other member, and a spring-actuated lug hingedly connected with a link of one member and carrying a stud engaging one of a plurality of perforations in the corresponding link of the other member.

3. A supporting device of the character described comprising two members slidably connected and each composed of a plurality of pivotally-connected links; in combination with means connected with a link of one member for engaging a corresponding link of the other member to lock the members together.

4. A supporting device of the character described comprising two members each composed of a plurality of links, the links of one member being provided with clips slidably supporting the corresponding links of the other member, locking means connected with the link of one member and adjustably engaging a corresponding link of the other member to secure the said members in related position at various adjustments; one or more links of one section being composed of slidably-connected sections.

5. A supporting device of the character described composed of slidably-connected members each comprising a plurality of pivotally-connected links and one or more links of one member being composed of slidably-connected sections, in combination with means for securing the members in adjusted relation when part or all of the pivots connecting the links of one member are brought into or out of register with the pivots connecting the corresponding links of the other member.

In testimony whereof I affix my signature in presence of two witnesses.

FRANZ ALBIN RICHTER.

Witnesses:

F. R. BOWLES,
PAUL MARWEDEL.