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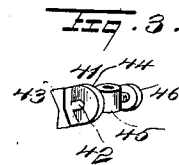
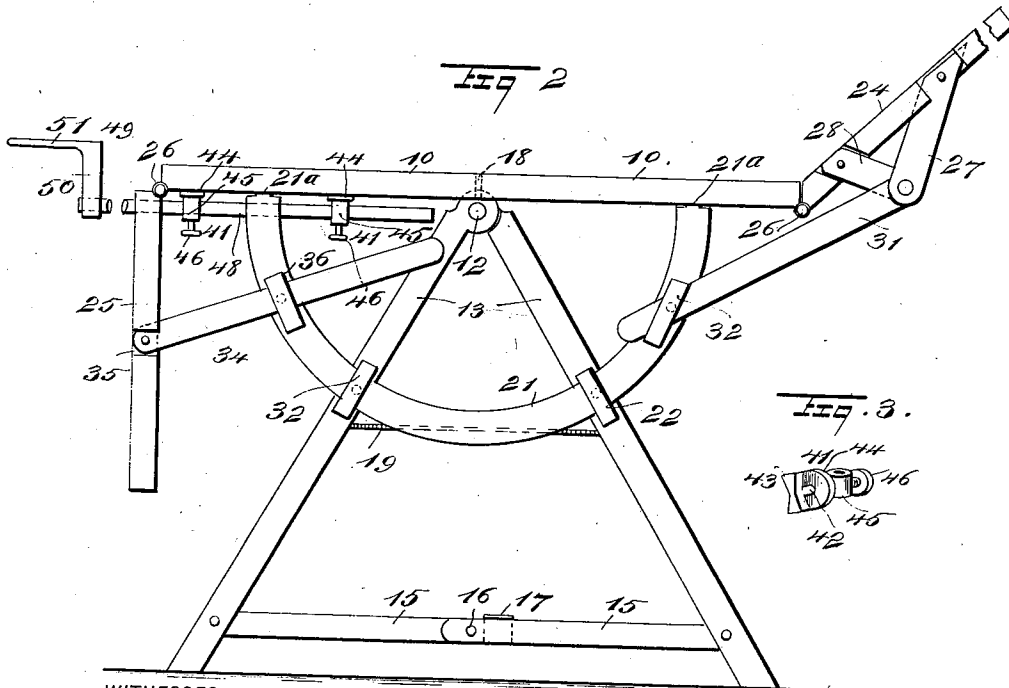
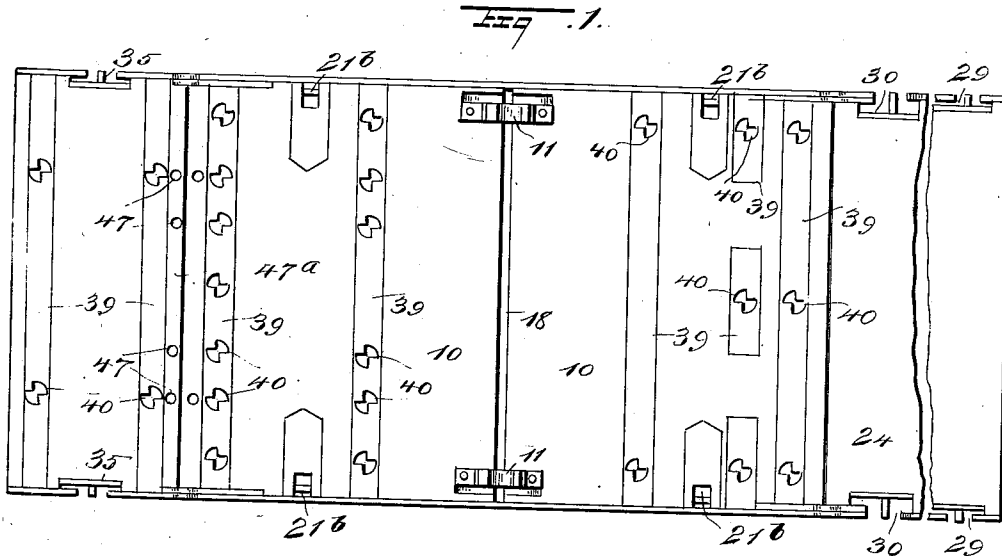
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L. G. BARTON.

SURGEON'S PORTABLE POSTURING TABLE.

No. 540,939.

Patented June 11, 1895.



WITNESSES:

W. Walker
H. B. Hutchinson

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ATTORNEYS.

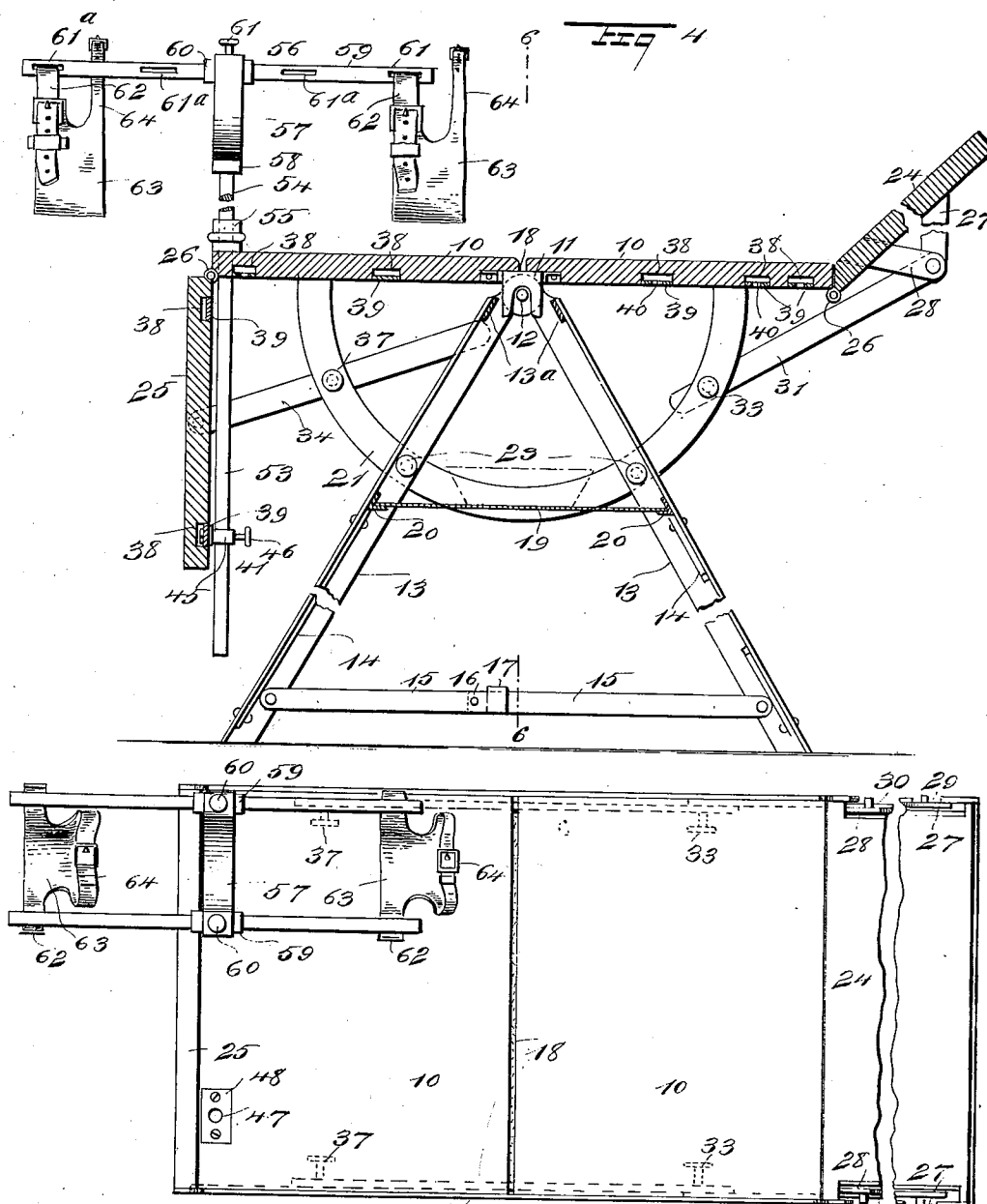
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Fig. 5.

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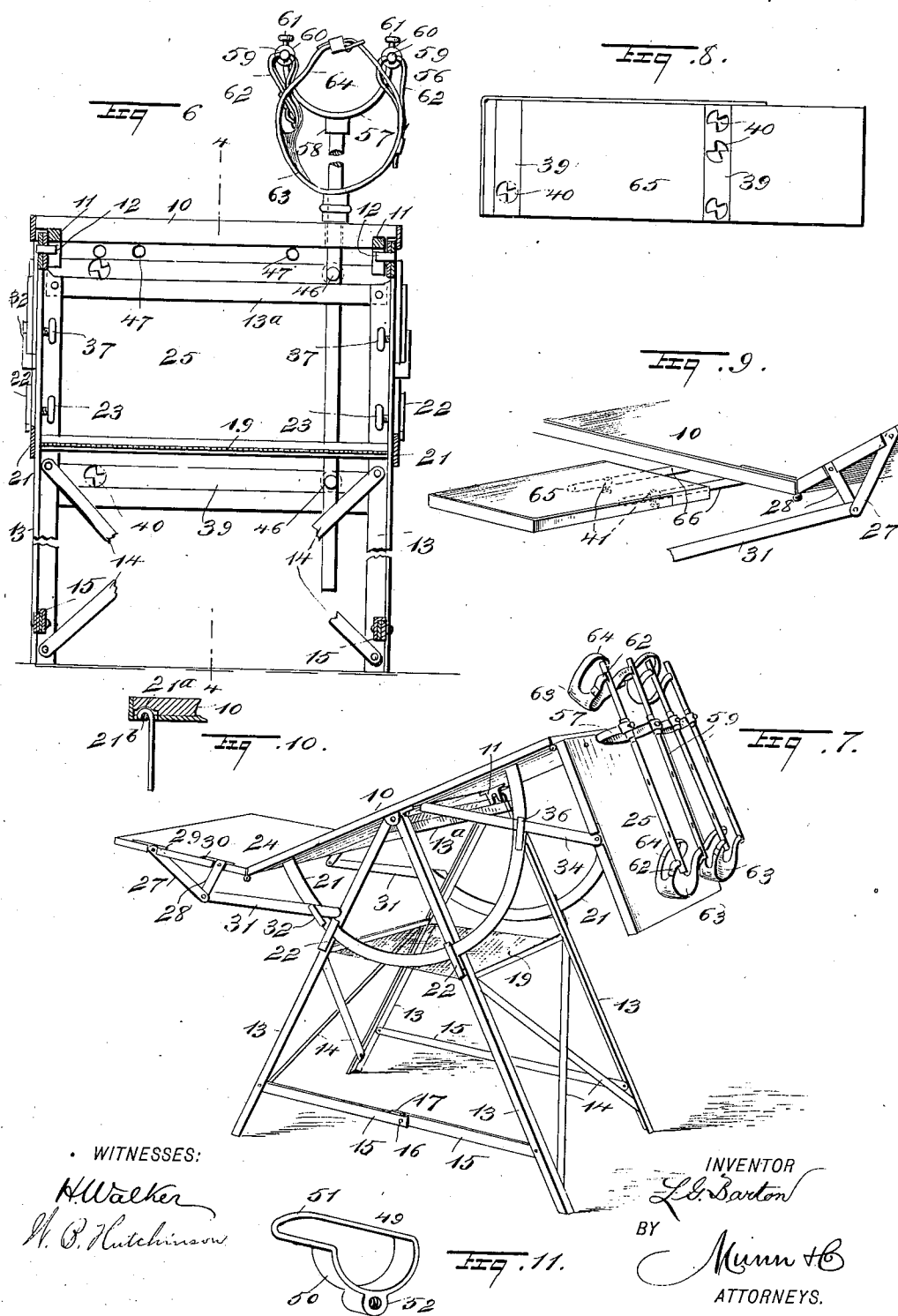
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Fig. 12.

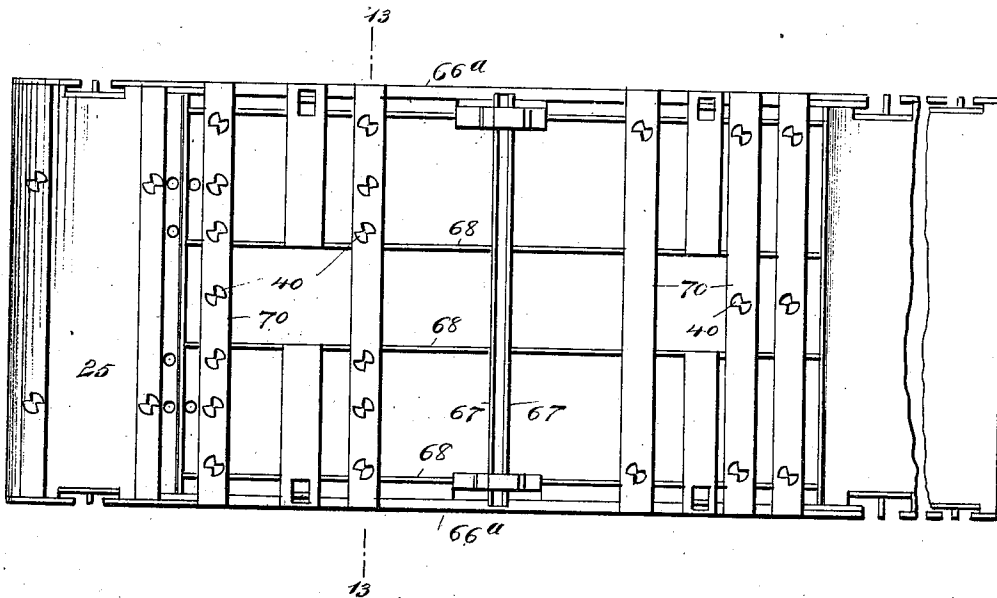
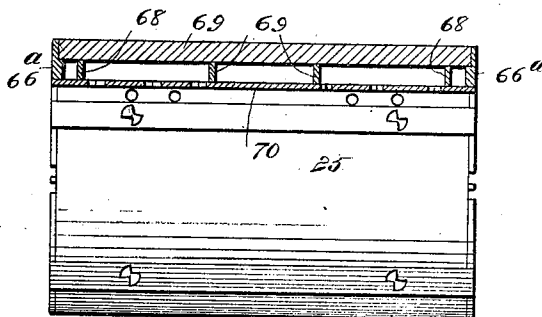


Fig. 13.



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UNITED STATES PATENT OFFICE.

LYMAN G. BARTON, OF WILLSBOROUGH, NEW YORK.

SURGEON'S PORTABLE POSTURING-TABLE.

SPECIFICATION forming part of Letters Patent No. 540,939, dated June 11, 1895.

Application filed June 27, 1894. Serial No. 515,838. (No model.)

To all whom it may concern:

Be it known that I, LYMAN G. BARTON, of Willsborough, in the county of Essex and State of New York, have invented a new and Improved Surgeon's Portable Posturing-Table, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of tables which are used by surgeons in performing surgical operations; and the object of my invention is to produce a comparatively simple table having leaves at opposite ends for the head and feet, which are movable independently of each other; to provide means for changing the angle of the table as a whole without altering the angle of the head and foot leaves in relation to the middle section of the table; to provide various attachments which may be conveniently applied to the table and utilized for different purposes in holding the limbs of a patient; to provide a table having its parts readily separable; to arrange the parts so that they are very light and strong; to provide an easy means of adjusting the leaves to any necessary angle, and to produce a table which may be easily taken apart and folded into a very small compass.

To these ends my invention consists of certain features of construction and combinations of parts, 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 broken inverted plan view of the table-top and the leaves thereon. Fig. 2 is a broken side elevation of the table with the head-leaf raised and the foot-leaf lowered. Fig. 3 is a detail perspective view of one of the locking-clips which are adapted to be secured at various points on the table to assist in holding various attachments to be hereinafter described. Fig. 4 is a longitudinal vertical section on the table on the line 4 4 of Fig. 6, showing one of the leg-rests in position for use. Fig. 5 is a plan view of the table as shown in Fig. 4. Fig. 6 is a cross-section on the line 6 6 of Fig. 4. Fig. 7 is a perspective view of the table with the body of the table

held at an inclination and the foot and head leaves at different angles to the body. Fig. 8 is an inverted plan view of one of the table-shelves which may be applied thereto to support an arm or a leg. Fig. 9 is a broken detail perspective view showing the way in which the shelf is attached to the table top. Fig. 10 is a detail sectional view showing how one of the curved braces is attached to the table-top. Fig. 11 is a detail perspective view of one of the foot-rests. Fig. 12 is an inverted plan view of the preferred form of table-top frame, and Fig. 13 is a cross-section on the line 13 13 of Fig. 12.

The table top 10 is provided near the center and on opposite sides with depending forked clips 11 which are adapted to rest on the pintles 12 of the table legs 13 and thus form a pivotal support which permits the table to be swung easily up and down and conveniently removed from the legs.

The legs 13 are preferably angular in cross section, in order that they may be light and strong and they are hinged together at the top as specified, the legs on opposite sides of the table being connected at the top by cross braces 13^a and near the bottom by braces 14 so as to give them the necessary strength, while at the bottom the longitudinally opposite legs are connected by braces 15 which are pivoted to the legs, are pivoted together, as shown at 16 in Figs. 1 and 4, and are provided with overlapping ends and with a clip 17 fastened to one brace and adapted to engage the top edge of the other so as to prevent the brace from swinging below a horizontal position. This arrangement just described enables the legs to be folded together when desired.

The table top is slotted transversely in the center, as shown at 18, and beneath the center of the table is a removable shelf 19 which rests on brackets 20 secured to the legs 13, see Fig. 4, and on this shelf a vessel may be placed to catch the drip from the table. The table top is held in place and is braced by the curved braces 21, which are arranged on opposite sides of it, the braces terminating at their ends in hooks 21^a which are adapted to engage pins 21^b on the under side of the table, as shown in Figs. 1, 2 and 10, and these braces turn in clips 22 on the table legs and are held in a fixed po-

sition by set screws 23, see Figs. 4 and 6, which project through the legs and impinge on the braces.

The clips 22 serve to guide the braces and also support them, and it will be seen that the table may be swung steadily and accurately on its pivot when the screws 23 are loosened and, by tightening the screws, the table may be held at any desired inclination. The table top has at its ends leaves 24 and 25, the former being at the head of the table and the latter at the foot, and the leaves are hinged to the table top, as shown at 26, and they may thus be held at any necessary angle to the table top. The leaf 24 has on opposite sides converging arms 27 and 28, which are held in recesses 29 and 30 in the side edges of the leaf, and the lower ends of these arms are pivoted to braces 31 arranged on opposite sides of the table and moving in guide clips 32 on the braces 21 in which clips they are fastened by set screws 33, see Figs. 4 and 7, and in this way the table leaf 24 may be held in the desired position and may be instantly released and its position changed. The leaf 25 is provided with braces 34 which are pivoted in recesses 35 in opposite edges of the leaf and which are held in clips 36 on the braces 21, being fastened by set screws 37 and thus the angle of the leaf in relation to the table top may be easily regulated. The table top, when of wood, and the foot leaf 25 have, in their under side, transverse recesses 38 which are covered by plates 39 having at necessary intervals key-hole slots 40 therein which are adapted to receive the locking clips 41, one of which is shown in detail in Fig. 3. The clip 41 has a spindle 42 with a bit 43 at one end, which is adapted to fit in one of the key-hole slots 40 and which, when turned out of registry with the slot is held above the plate 39, thus locking the clip in place. The clip has a bearing washer 44 which fits against the plate 39, a collar 45 whose bore is at right angles to the spindle 42 and which is adapted to receive one of the rods hereinafter described, and with a set screw 46 which projects through the collar and is adapted to impinge on a rod to fasten it in place. The table top is, near the foot leaf, provided with vertical holes 47 and the foot leaf is also near its hinged end provided with similar holes, the holes, when the table top is of wood, being preferably bound by wear plates 48, although this is not essential. The purpose of these holes and the locking clips is illustrated in Fig. 2, in which the foot leaf 25 is swung down at substantially right angles to the table top 10, while the leaf 24 is raised to form a support for the head.

The locking clips 41 are fastened, in the manner heretofore described, on the under side of the table top so as to align with one of the holes 47 in the leaf 25, and a rod 48 is thrust through this hole and the collars 45 of the two locking clips to which it is fastened by the set screws 46, while the foot rest 49 is

attached to the projecting end of the rod, this foot rest comprising a U-shaped portion 50 in which the heel may rest, a forwardly extending loop 51 to receive the foot and fit against the hollow thereof, and a threaded collar 52 to screw to the rod 48. It will be understood that two rods and foot rests may be arranged in this way side by side and that other attachments may be fastened to the rod, as hereinafter specified.

Instead of applying the rod longitudinally, as shown, the clips may be fastened to the leaf 25, as illustrated in Fig. 4, and a rod 53 inserted in the clips and fastened as described, the rod being also extended through one of the holes 47 in the table top and an extension 54 of the rod is connected with it by a nut 55, while the upper end of the extension is arranged to carry the leg rest 56 which has a U-shaped center frame 57 with a fixed nut 58 on the under side to screw to the rod 54. This leg rest has also parallel side bars 59 arranged at right angles to the frame 57 and held in collars 60 at the top of the frame to which the side bars are fastened by set screws 61. These side bars have slots 61^a to receive the ends 62 of the leg straps 63, which straps are provided with suitable buckles and have other straps 64 to be fastened around the limb of a patient.

It will thus be seen that the leg may be securely held in the leg rest while a patient lies on the table, and it will be observed that the height of the leg rest may be easily regulated and that the leg rest may be adjusted vertically, so as to support the desired part of the leg, and horizontally by means of the parallel bars 59.

It is apparent that when the leg rest is in the position shown in Fig. 4, it is applied to the leg below the knee, constituting what is known as the lithotomy position; but when it is applied for Trendelenberg's position, the rod 53 or 48 is adjusted as shown in Figs. 2 and 7, so as to project through the leaf 25, and the leg rest is fastened to the end of the rod as specified. It will of course be understood that two leg rests may be arranged side by side, either on the top of the table or on the leaf, as shown in Fig. 7, and they may be held near the center or nearer one side of the table as desired, and may be adjusted horizontally or vertically by means of the rods 53 and the parallel bars 59.

In connection with the table, a side leaf 65 is used, see Figs. 8 and 9, which may be arranged opposite either end of the table so as to support an arm or leg. The shelf 65 has on the under side key-hole slots 40, like those already described, to receive the retaining clips 41, and rods 66 are fastened in these clips and extend beneath the table where they are fastened by similar clips, as already described, and thus the shelf is held at right angles to the table top and may be adjusted in and out as desired.

From the foregoing description, it will be seen that the limbs of the patient may be se-

curely held, that the table may be adjusted to bring it to any desired inclination, that the leaves may be easily and quickly regulated, and that the head leaf may be instantly dropped and fastened, or the entire top instantly inclined, thus rendering the table particularly advantageous, as in case the patient faints or in case of anæsthesia narcosis, the head may be quickly lowered so as to give relief. It will also be seen that means is provided for catching all the drip from the table, and that if the table is not in use it may be taken apart and folded snugly up.

The table top, as above described, is made in any convenient way, but it is sometimes necessary to have the top of metal, sometimes of wood, sometimes of glass, or other things may be used. To provide for easy variations or modifications, the table top is preferably provided with a rectangular binding frame 66* of angle iron, this frame having central cross pieces 67 which have sufficient space between them to form the transverse slot in the table top above referred to, and the frame is provided with longitudinal plates 68 which are arranged at necessary intervals and extend from the ends of the frame to the cross pieces 67 so as to support slabs 69 of wood, glass, or metal which are laid on them to form the top surface of the table. The plates 68 have also fastened to their under sides, at necessary points, cross plates 70 which are provided with key-hole slots 40 like those already referred to. It will be seen that this frame may be fastened to the supporting legs in the manner already described.

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

1. In a surgeon's table, the combination with a folding support formed of legs pivoted together at their upper ends and provided with guides, of a table top provided with depending forked clips engaging the pivots of the legs, and curved braces secured to the table top and working in the guides of the legs, substantially as described.

2. In a surgeon's table, the combination with a support and a table top pivoted on the support, and provided with curved braces working in guides on the support, of head and feet leaves hinged to the table top and braces having one end pivotally connected with the said leaves and their other ends adjustably secured to the curved braces of the table top, substantially as described.

3. In a surgeon's table, the combination with a folding support, of a table top removably pivoted on the support, and curved braces having their ends detachably secured to the table top, and working in clips on the support, substantially as described.

4. In a surgeon's table, the combination with a support formed of legs pivoted together at their upper ends, of a table top provided with depending clips resting upon the

pivots of the legs, and curved braces having their ends detachably secured to the table top and working in clips on the legs, substantially as described.

5. The combination, with the table top having recesses in the under side thereof and the slotted plates extending beneath the recesses, of the retaining clips having bits to enter the slots, collars to receive supporting rods, and fastening screws on the collars, substantially as described.

6. In a surgeon's table, the combination with a perforated table, of retaining clips detachably secured to the table, a rod detachably secured in the said clips, and a limb rest on the outer end of the said rod, substantially as described.

7. In a surgeon's table, the combination with a perforated table, of retaining clips detachably secured to the table, a rod projecting through the aperture of the table and having its inner end adjustably and detachably secured in the said clips, and a limb rest on the outer end of the said rod, substantially as described.

8. In a surgeon's table, the combination with a perforated table, of a rod detachably and vertically adjustably secured to the table and projecting through the aperture of the table, a U shaped frame on the upper end of the rod and provided with collars, bars adjustably secured in the collars, and leg straps secured to the said bars, substantially as described.

9. A leg rest, comprising a rod, a U-shaped frame detachably secured to said rod, and provided with collars at the top, parallel bars adjustably held in the said collars, and leg straps secured to the ends of the bars, substantially as described.

10. A leg rest, comprising a rod having a detachable extension, a U shaped frame detachably secured to the extension and provided with collars at the top, parallel slotted bars adjustably held in the collars of the said frame, and leg straps secured in the slots of the said bars, substantially as described.

11. The combination, with the table top, of the side shelf, the rods connecting the shelf and table top, and means, comprising the slotted plates and fastening clips, for securing the rods to the table top and shelf, substantially as described.

12. The hereinbefore described table top, comprising a binding frame of angle iron, longitudinal plates held on the frame, cross pieces forming the top surface, secured to the frame and the longitudinal plates, and the key-hole cross plates on the under side of the frame, substantially as described.

13. A surgeon's table, comprising a support formed of legs pivoted together at their upper ends, and having their lower ends connected by braces, a table top provided with depending clips resting upon the pivots of the legs, curved braces having their ends detachably secured to the table top and work-

ing in guides on the legs, and adjustable and folding head and foot rests, substantially as described.

14. A surgeon's table comprising a support
5 formed of legs pivoted together at their upper ends and having their lower ends connected by hinged and folding braces, a table top provided with depending clips resting upon the pivots of the legs, curved braces
10 having their ends detachably secured to the

table top and working in guides on the legs, head and foot leaves hinged to the table top, and braces pivoted to the leaves and adjustably and detachably secured to the curved braces, substantially as described.

LYMAN G. BARTON.

Witnesses:

WILLIAM E. DAVIS,

CHARLES E. RICHARDSON.