No. 684,131. Patented Oct. 8, 1901.

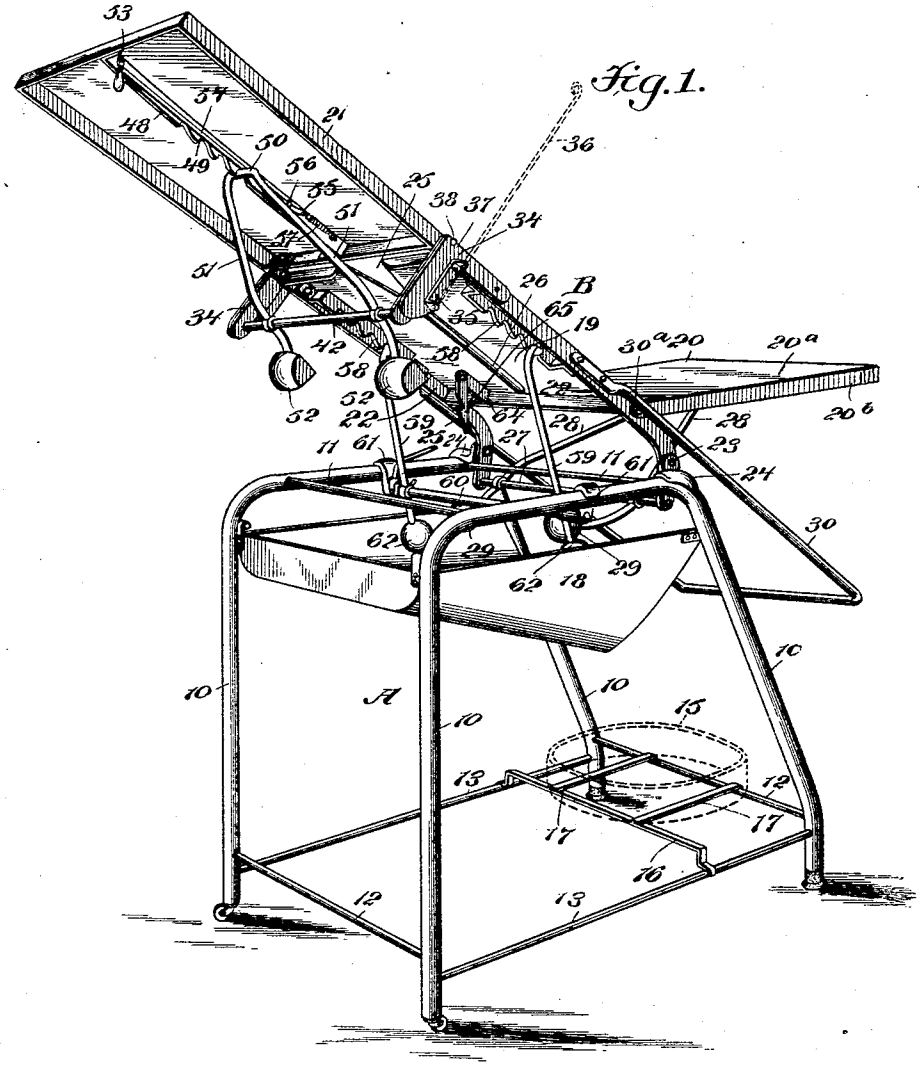
A. TAUBERT & R. KNY.

OPERATING TABLE.

(Application filed Dec. 31, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.



WITNESSES:

A. R. Appleman Jr.

J. Fred Acker

INVENTORS.

Albert Taubert

Richard Kny

BY

Munn & Co.

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 684,131. Patented Oct. 8, 1901.

A. TAUBERT & R. KNY.

OPERATING TABLE.

(Application filed Dec. 31, 1900.)

(No Model.) 2 Sheets—Sheet 2.

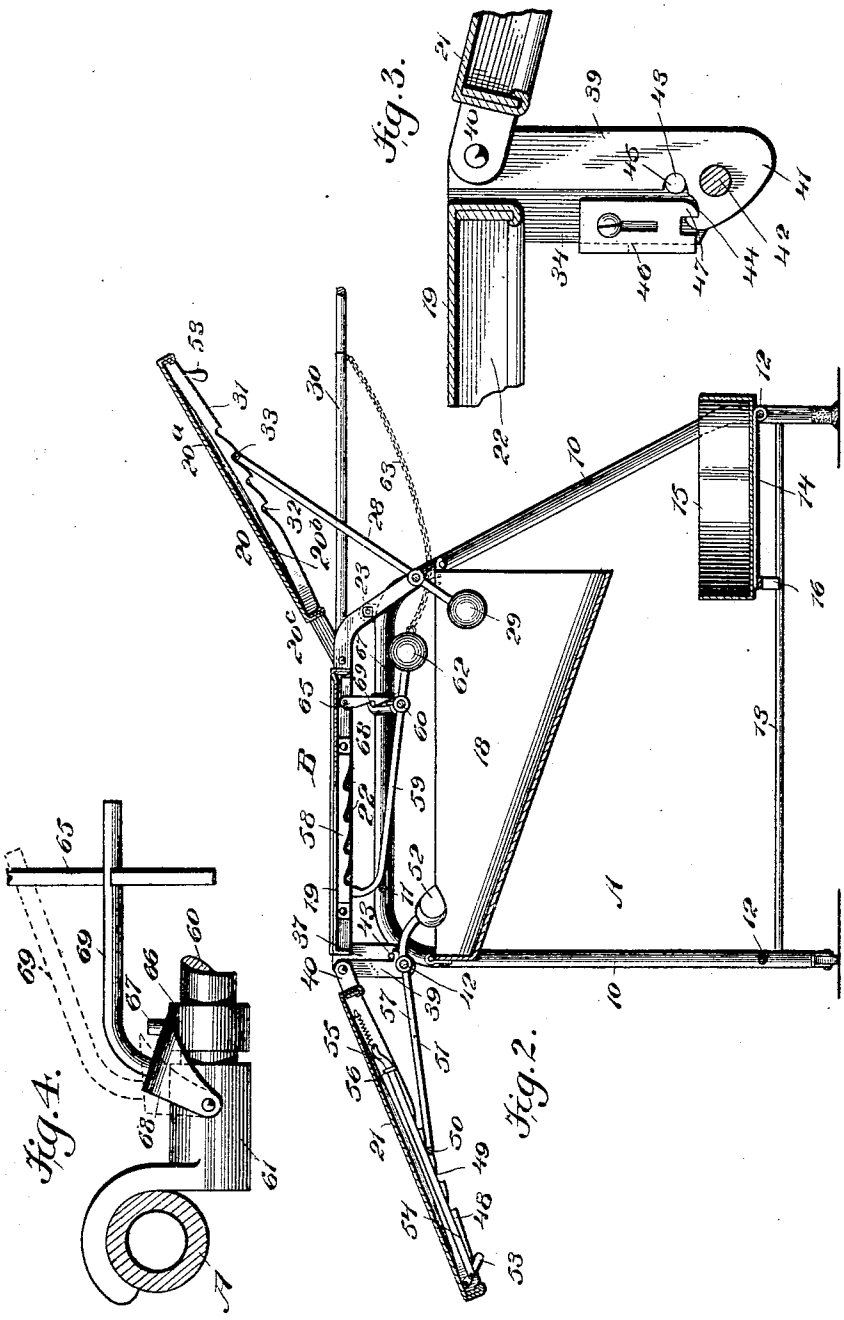


Fig. 3.

Fig. 2.

Fig. 4.

WITNESSES:

A. R. Appleman

J. Fred. Acker

INVENTORS
Albert Taubert
Richard Kny
BY Munn & Co.
ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALBERT TAUBERT AND RICHARD KNY, OF NEW YORK, N. Y.

OPERATING-TABLE.

SPECIFICATION forming part of Letters Patent No. 684,131, dated October 8, 1901.

Application filed December 31, 1900. Serial No. 41,685. (No model.)

To all whom it may concern:

Be it known that we, ALBERT TAUBERT and RICHARD KNY, citizens of the United States, and residents of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Operating-Table, of which the following is a full, clear, and exact description.

The purpose of the invention is to construct an operating-table in three sections—namely, two end sections and an intermediate section—and to provide means for independent adjustment of each section and means for locking the sections together in such manner that they may be collectively adjusted and to effect the adjustments expeditiously and in a manner convenient to the operator.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a perspective view of the operating-table and its support, illustrating the table in elevated position, two sections of the table being connected in the same longitudinal plane and the third section appearing at an angle thereto. Fig. 2 is a longitudinal section through the table and its support, the central section of the table being in a lowered horizontal position and the other sections being placed at different inclinations to the central section. Fig. 3 is an enlarged detail view illustrating the manner in which one of the end sections is detachably connected to the central section, and Fig. 4 is a transverse section through a member of the support for the operating-table and a side elevation of a latch employed to hold the central section of the table firmly in its horizontal and lowered position.

A represents the base or support for the operating-table B. This support or base A may be of any suitable construction. As shown it consists of four legs 10, which are outwardly inclined to render the base wider at the bottom than at the top, and said legs are braced at the top by suitable cross-bars 11 and at the bottom by cross-bars 12 and side bars 13. At the bottom portion of the base a support is provided for a receptacle 15, adapted to receive the drainage from the operating-table B. This support, as shown, consists of an intermediate cross-bar 16, adjacent to one of the end cross-bars 12, and longitudinal bars or plates 17, as is best illustrated in Fig. 1. At the upper portion of the base or support A a pan 18 is attached to said base or support in any suitable or approved manner, and the bottom of this pan is given a downward inclination in direction of the receptacle 15, and that end of the pan which is over the receptacle 15 is open. The pan 18 receives liquid from the operating-table B and conducts said liquid to the receptacle 15.

The operating-table B is preferably made in three sections—namely, a central section 19 and two end sections 20 and 21. The sides 22 of the central section 19 extend beyond one end of the body of said section, and the extended portions of the sides are curved downward and are pivoted, as shown at 23, to the extensions or lugs 24, which are secured in any suitable or approved manner to the upper portion of the base or support A at a point where the upright portions of the said base or support connect with the upper or horizontal sections, as is illustrated in Fig. 1. The body of the central section 19 of the operating-table is provided with an opening 25, preferably V-shaped, which opening is made at that end of the section 19 farthest removed from the pivots 23, as is shown in Fig. 1, and the said opening 25 connects with a longitudinal gutter 26, formed in the body or bed of the said section 19, which gutter is open at the top of the said bed or body throughout its entire length and is open at the bottom, where it connects with the V-shaped opening 25, so that any blood or liquid may find its way from the operating-table through the V-opening 25 and the open portion of the gutter to the pan 18. The curved or pivotal ends of the intermediate section 19 of the operating-table are connected by a cross-bar 27, and on this cross-bar 27, near each end, arms 28 are secured, which arms extend beyond the pivotal end of the intermediate section 19 of the operating-table and engage with and serve to hold in position the end section 20 of the operating-table in a manner to be here-

inafter described. Each of these arms 28 is provided with a ball or weight 29, and these balls or weights 29 serve to hold the outer ends of the arms 28 in engagement with the said end section 20 of the operating-table. The central section 19 of the operating-table B is provided, preferably, with a handle 30, which handle is in the form of a yoke and is attached rigidly to the sides of the said intermediate section of the operating-table at a point about centrally between the ends of the said section, as is shown in Fig. 1. This handle 30 is utilized for adjusting the intermediate section 19, and when the other sections are locked to the intermediate section all of the sections may be adjusted together simultaneously by moving the handle 30 up or down. The end section 20 is pivotally connected at the side portions of its inner ends with the side portions of the intermediate section 19 at a point between the pivot of the central section and the central side portions of said central section, as is shown at 30^a in Fig. 1. The end section 20 consists of a bed or body plate 20^a and side and outer end flanges 20^b, which extend down from the bed or body plate, and at the central end portion of the end table-section 20 a longitudinal bar 31 is located, which extends from the outer end flange of the said outer table-section 20 to the inner end flange 20^c, (shown in Fig. 2,) and the sides of this end section 20 extend beyond the inner flange 20^c, so that the end section 20 may be raised or lowered while the central section 19 of the operating-table is in a fixed position, as is also shown in Fig. 2. The longitudinal bar 31 is provided with a series of notches 32 in its under edge, and these notches are adapted to receive a cross-bar 33, which connects the weighted arms 28, as is also shown in Fig. 2.

An angular bar or arm 34 is attached to each side of the central or intermediate section 19 of the operating-table at that end which is farthest removed from the pivot 23, and a bracket 35 is secured to the outer face of the vertical member of each arm or bar 34, and these brackets are adapted to receive the lower ends of rods 36, (shown in dotted lines in Fig. 1,) to which rods clips may be attached for holding the limbs at a point above the table. The vertical members of the arms 34 extend downward or beyond the under face of the table, as is shown in Fig. 1.

In the upper edges of the arms 34 and in the upper portions of the sides of the intermediate section 19 of the operating-table recesses 37 are made, and these recesses are adapted to receive lugs 38, which extend from the sides of latch-arms 39, which arms, as shown in Fig. 3, are pivotally attached to extensions 40 from the sides of what may be termed the "inner" end of the end section 21 of the table.

The latch-arms 39 are provided with heads 41 at their lower ends, and the head portions of the arms 39 are connected by a cross-bar 42. Above the said cross-bar each latch-arm is provided with two connecting-recesses 43 and 44, which recesses may be produced in the longitudinal edges of the latch-arm, which face the intermediate section of the said operating-table. The recesses 43 in the latch-arms 41 are adapted to receive pins 45, which extend from the inner faces of the vertical members of the angle plates or arms 34, as is also shown in Fig. 3, and the recesses 44 in the said latch-arms are adapted to receive points 47, formed on slides 46, having vertical movement upon the inner faces of the vertical members of the said angle plates or arms 34, as is also shown in Fig. 3. Thus it will be observed that the end section 21 is removably connected with the intermediate section 19, as when the slides 46 are carried upward out of engagement with the latch-arms 39 the said arms may be removed from engagement with the angle-plates 34, and while the slides 46 serve to lock the lower portions of the latch-arms 39 in engagement with the central section of the table the pins 38 serve the same purpose at the upper portion of the said latch-arms.

A longitudinal bar 48 is secured to the under face of the end section 21 of the operating-table, and this longitudinal bar 48 corresponds to the longitudinal bar 31, carried by the opposite end section 20. The bar 48 is likewise provided with notches or recesses 49 in its under face. These notches or recesses are adapted to receive a cross-bar 50, connecting adjusting-arms 51, which arms rock upon the cross-bar 42, as shown in Fig. 1. The free ends of the adjusting-arms 51 extend down below the bar 42 and are provided with weights 52, which serve to normally hold the connecting-bar 50 in engagement with the recessed surface of the longitudinal bar 48.

Both longitudinal bars 48 and 31 are provided with a releasing device of the same construction. This releasing device is best shown in Figs. 1 and 2 and consists of levers 53, pivoted to the longitudinal bars 31 and 48 at or near their outer ends, and rods 54, pivotally connected with the said levers, which rods extend along the longitudinal bars normally above the recesses therein, and the opposite ends 55 of the rods 54 are curved, and the curved ends of the said rods pass through guide-staples 56, attached to the said longitudinal recessed bars 31 and 48, while springs 57 are attached to the said curved ends 55 of the rods 54 and to the longitudinal recessed bars. These springs 57 serve to hold the rods 54 above the recesses in the longitudinal bars 31 and 48; but when an end section is to be adjusted the lever 53 carried by that section is pulled outward, whereupon the rod 54 connected with that lever moves downward and forces the weighted locking device used in connection with that section out from the recess in the longitudinal bar belonging to such

section, whereupon that section may be carried up or down as far as desired. When the lever 53 is released, the rod 54 will return to its normal position, and the weights on the locking device for that section will cause the said locking device to enter the most convenient recess in the longitudinal bar carried by that section.

A rack 58 is formed at each side of the intermediate or central section 19 of the operating-table, at the bottom portion thereof, and the teeth of these racks are adapted to be engaged by the upper ends of the latch-arms 59, which constitute the locking device for this section of the operating-table. These arms 59 extend below the bar 60, to which they are secured, and at the lower ends of the latch-arms weights 62 are secured. The bar 60 is virtually a shaft, as it is mounted to turn in bearings 61, secured to the upper portion of the support or base A, as is best illustrated in Fig. 4. A chain 63, a cord, or its equivalent is attached to one of the weights 62 and to the handle 30, as shown in Fig. 2, and by drawing upon the chain 63 the latch-arms may be carried out of engagement with the racks 58, and the central section of the said table may be adjusted up or down. It will be understood that when the sections of the table have been locked in adjusted position by the locking or latch devices described and the central section of the table is moved all of the sections will be moved at the same time.

It is necessary at times to secure the central section 19 of the table in a lower horizontal position, as shown in Fig. 2. This is accomplished as follows: An arm 64 extends from the end of the intermediate section of the table, which is adjacent to the end section 20, and this arm 64 is provided with a pivotally-attached latch 65. A collar 66, as shown in Fig. 4, is secured on the shaft 60, and a pin 67 extends from this collar, which pin is adapted, when the intermediate section of the table is to be locked, to enter a slot in a rocking member 68, carried by one of the bearings 61, as is also shown in Fig. 4, and this rocking member is provided with an arm 69, adapted to be received by the head of the latch 65. When the central section of the table is brought to the lower horizontal position, the head of the latch 65 is in the position shown in Fig. 2 and in positive lines in Fig. 4—namely, in a horizontal position—and the rocking member 68 is carried inward until the pin 67 is received in the slot therein, as is also best shown in positive lines in Fig. 4. The central section of the table will thus be held firmly locked in its lower position; but when the central section of the table is to be raised the handle 30 is pressed down, whereupon the latch 65 will carry the arm 69 up to the dotted position shown in Fig. 4, and the rocking member 68 will be carried away from the pin 67, permitting the shaft 60 to turn and the weights 62 to act in a manner to bring the upper ends of the latch-arms 59 in engagement with the racks 58.

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

1. An operating-table comprising pivotally-connected sections, a rack on one of said sections, a latch arranged to engage said rack, and a releasing-bar extending lengthwise adjacent to the rack and movable outward to disengage the latch from the rack.

2. An operating-table comprising a support, a table proper pivoted thereto and provided with a rack, a latch pivoted to the support and arranged to engage said rack, said latch having a projecting pin at its fulcrum, an arm pivoted to the support and having a member adapted to engage the pin of the latch, to lock the latter, and another latch projected from the table proper and adapted to be engaged by said arm, as set forth.

3. A support, an operating-table constructed in pivotally-connected sections, one of which sections is pivotally attached to the support, means for disconnecting one section from the other, racks carried by all of the sections, a weighted latch device for each section, the latch devices being adapted for engagement with the said racks, levers pivoted to sundry of the said racks, spring-controlled rods pivotally attached to the said levers, one end of the said rods being curved, and guides for the curved ends of the said rods, for the purpose specified.

4. A support, an operating-table constructed in pivotally-connected sections, each section being provided with a rack and sundry of the racks being provided with releasing devices, a weighted latch device for each section of the table, the latch devices for the end sections of the table being carried one by the intermediate section and the other by the end section to which it belongs, means for detachably connecting an end section with the intermediate section, and a locking device for the intermediate section, as and for the purpose specified.

5. The combination, with a base or support having a shaft mounted thereon, a pin carried by the said shaft, and a rocking member carried by the base or support and provided with an arm adapted to extend over the said pin, of an operating-table consisting of a central section and end sections pivotally connected, one end section being pivotally connected with the central section, racks located upon the under face of each of the said sections, a pivotal connection between the central section and the base or support, a weighted latch device for one end section carried thereby, adapted for engagement with the rack of said section, a latch device for the opposite end section, which latch device is carried by the central section of the table, a latch device for the central section of the table, which latch device is carried by the

shaft connected with the base, and an auxiliary latch carried by the central section, which latch is arranged for engagement with the arm connected with the said rocking member, the said rocking member having a slot to receive the pin on the said shaft when the central section is brought to a lower horizontal position, as specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

ALBERT TAUBERT.
RICHARD KNY.

Witnesses:
J. BERNARD ENGLISH,
ALFRED C. JONES.