No. 764,681. PATENTED JULY 12, 1904.

S. G. SCANLAN.

SURGEON'S OPERATING TABLE.

APPLICATION FILED DEC. 16, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

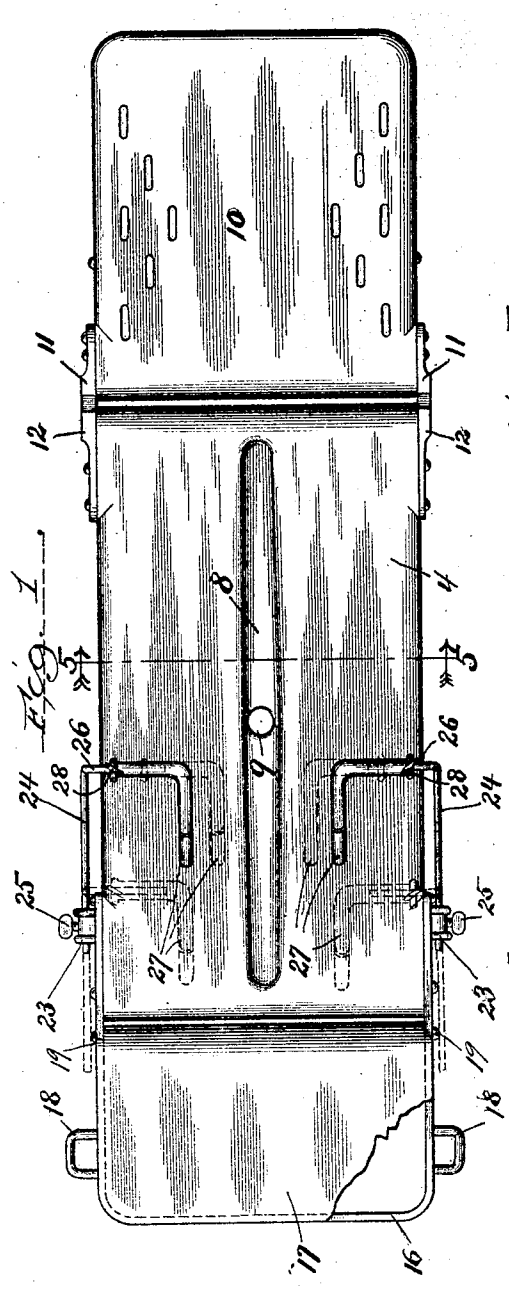

Fig. 1.

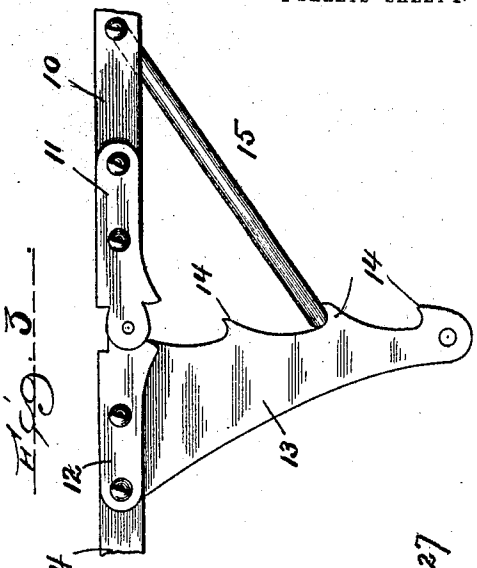

Fig. 3.

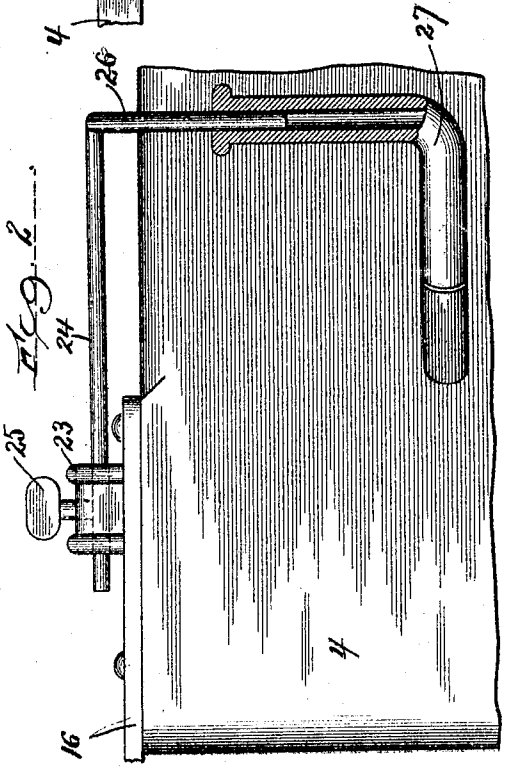

Fig. 2.

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NO MODEL. 2 SHEETS—SHEET 2.

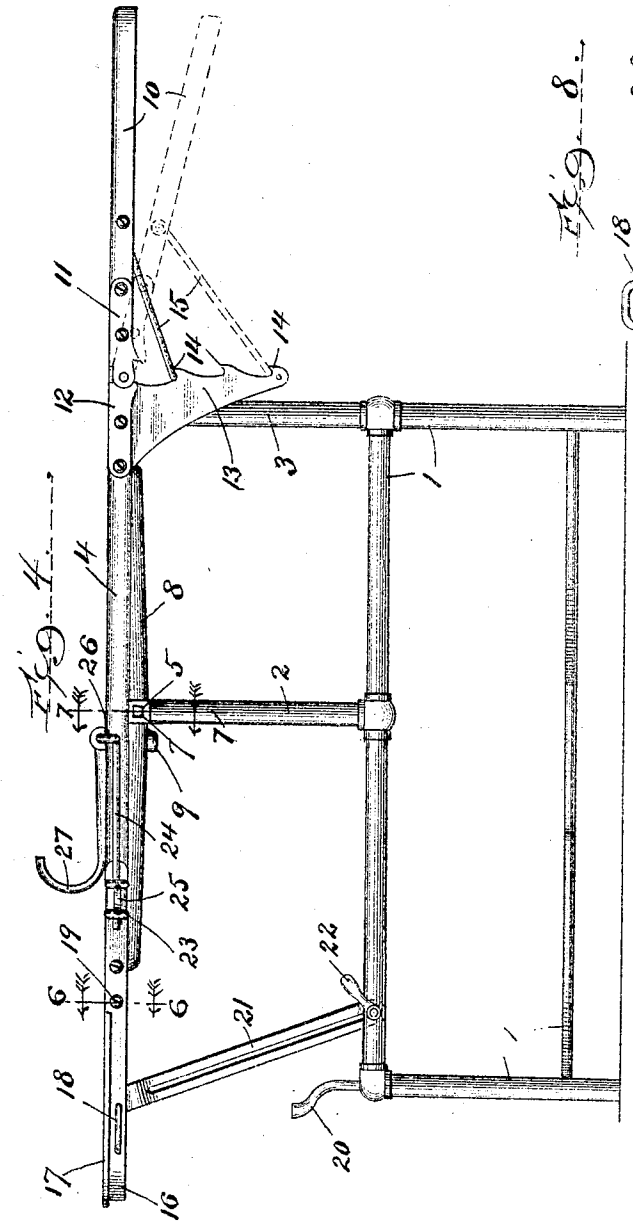

Fig. 8.

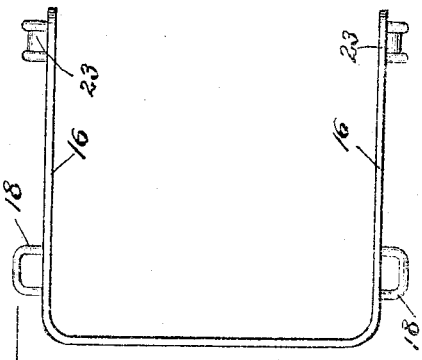

Fig. 7.

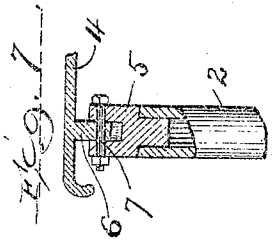

Fig. 5.

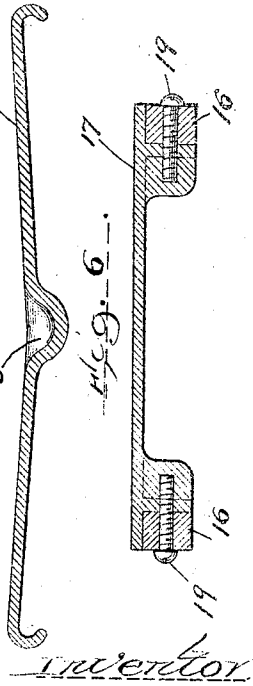

Fig. 6.

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UNITED STATES PATENT OFFICE.

SAM GWYN SCANLAN, OF CHICAGO, ILLINOIS.

SURGEON'S OPERATING-TABLE.

SPECIFICATION forming part of Letters Patent No. 764,681, dated July 12, 1904.

Application filed December 16, 1902. Serial No. 135,374. (No model.)

To all whom it may concern:

Be it known that I, SAM GWYN SCANLAN, a citizen of the United States, residing in the city of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Surgeons' Operating-Tables, of which the following is a specification.

My invention relates to surgeons' operating-tables which are provided with pivoted tops and adjustable head and foot pieces; and the objects of my invention are, first, to provide a table the top piece and head and foot pieces whereof shall each be of a single continuous piece, combining rigidity with lightness and free from all objectionable corners or angles; second, to provide a rack for the foot-piece brace integral with the hinge-plate, whereby said foot-piece is supported, thereby obtaining strength and simplicity of construction, and, third, to provide a wide range of adjustment of the shoulder-crutches. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the complete table. Fig. 2 is a top fragmentary view showing the manner of adjusting the shoulder-crutches. Fig. 3 is a side view of the combined hinge-plate and rack. Fig. 4 is a side view of the complete table. Fig. 5 is a sectional view of the table-top on the line 5 5, Fig. 1. Fig. 6 is a sectional view of the head-piece hinge on the line 6 6, Fig. 4. Fig. 7 is a fragmentary sectional view taken on the line 7 7, Fig. 4. Fig. 8 is a top view of the head-piece frame.

Similar numerals refer to similar parts throughout the several views.

1 1 represent the supporting-framework of the table, which has near its center the upright 2 and at one extremity the uprights or extended corner-posts 3, all consisting of wrought-iron piping or other suitable material. The center piece 4 of the table-top is pivoted to said central uprights 2, the preferred construction being shown in Fig. 7. In said preferred construction the plug 5 is let into and secured to the upright 2, and the lug 6, upon the center top piece 4, is pivotally mounted in said plug by means of the bolt or pin 7. The center top piece 4 is thus pivotally mounted on the framework, so that the table-top may be tilted to the desired angle for operating. When in an approximately horizontal position, the lower extremity of the center piece 4 rests upon the uprights 3. It will be seen that these uprights or extended carrier-posts 3 at one end of the framework furnish an absolutely rigid rest for the table 4 when in its horizontal position, so that security and steadiness of the table is assured. Said center top piece 4 consists of cast-iron coated with the substance commonly known as "porcelain enamel." It has been the custom heretofore to construct the top pieces of such tables of sheet metal mounted upon light frameworks; but sheet metal has the disadvantage of lacking stiffness and rigidity, and the enamel becomes cracked and loosened and frequently becomes dislodged. Sheet metal also has a disadvantage, in that it is apt to have sharp edges and corners which cannot be entirely eliminated. By construct ing the top pieces of cast-iron the edges may be smooth and rounded and a rigidity is imparted to the entire device. The drain 8 is formed in said center top piece in any desired position and has an escape-aperture 9. At the lower or foot end of said center top piece is the foot-piece 10, which has the hinge-plate 11 screwed thereto. In a similar manner the hinge-plate 12 is secured to the center top piece 4. Said plates 11 and 12 are pivotally connected together and constitute the hinge whereby the pieces 4 and 10 are joined. Said plate 12 has a depending rack-plate portion 13 whereon are formed the projecting teeth 14 for retaining the free extremity of the swinging brace 15. Said brace is pivoted to the foot-piece 10, and the angle of said foot-piece relatively to the center piece 4 may be varied by placing the free extremity of said brace in engagement with the desired one of said teeth 14 on the depending portion or rack 13. By thus forming the hinge-plate and rack of a single piece great rigidity is combined with simplicity of construction. Said depending portion 13 of plate 12 extends downward approximately at right angles to the top surface of the table, and thus affords a long leverage for the brace 15 and supports it without great strain upon any of the parts. Furthermore,

the hinge parts 12 and 13 are substantially flush with the top of the table, and no portion of plate 12 projects upward beyond the same, consequently leaving the top surface of the table free and unobstructed.

The head-frame 16 in its preferred shape forms three sides of a rectangle, as best shown in Fig. 8, and is secured at its parallel sides to the sides of the center piece 4, so as to project sufficiently to support the head-piece 17. Said head-frame is provided with handles 18, and inasmuch as said frame and the center top piece 4 are rigidly connected together said handles are employed in swinging said top piece 4 about the pivot in the upright 2. Said head-piece 17 is pivoted by the bolts 19 to said frame 16, and the stop 20 is so located upon the framework 1 that when the center top piece 4 is swung downward about its pivot said stop will engage said head-piece from beneath and raise the same from the frame 16.

The slotted bar-brace 21 is pivoted to the frame 16 and is adjustably secured to the framework 1 by means of the clamping device 22. The tilt or angle of inclination of the table about the pivot in the upright 2 may be adjusted by clamping said bar 21 at the proper position in the framework 1. The corner-posts at this end of the frame do not extend above the plane of the frame proper, so that the table is open beneath, so as to permit ready access to the adjustable brace 21 and permit its manipulation without any inconvenience by reason of interfering frame-posts.

At the sides of the head-frame 16 are located the eyes 23, which receive the rods 24, so that the same lie lengthwise of the table. Said rods are adjustably secured within said eyes by the set-screws 25. The rods 24 are substantially L-shaped and have arms 26 extending inwardly over the table for carrying the shoulder-crutches 27, said arms 26 lying in a plane offset from the plane of the rods 24, so as to bring the arms above the surface of the table. Said crutches are adjustably secured to said arms by means of the set-screws 28. By this construction the shoulder-crutches are adjustable longitudinally and transversely of the table, so that said crutches may be suitably employed for all subjects operated upon, and minimum interference with the table-surface is secured. The eyes 23 are permanently and rigidly attached to the table and are preferably formed integral with the head-frame 16 at the side of the central top section 4. The extent of said eyes lengthwise of the rods 24 is considerable, preferably two or three times the diameter of said rods 24, and consequently on account of the length of said eyes and their rigid attachment to the table the crutches 27 are rigidly and firmly held in the position in which they are set.

What I claim as new, and desire to secure by Letters Patent, is—

1. A surgical table comprising a substantially rectangular supporting-frame having its corner-posts at one end only extended above the plane of the frame proper, in order to form table-rests for one end of the table when in horizontal position, and having its corner-posts at the other end of the frame terminating at the plane of the frame proper, in order to have an uninterrupted space between the frame and table; centrally-placed table-supports on said frame of substantially the same height as said extended corner-posts; a table pivotally mounted on said central supports; and an adjustable brace connecting the other end of said table with said supporting-frame.

2. In a surgical table, the combination with a supporting-frame; of central uprights rising from said frame; a table pivoted on said central uprights; fixed table-rests carried by said frame at one end only and extended above the plane of the frame proper to form supports for the table when in horizontal position; and an adjustable brace connecting said table and frame at the other end.

3. A surgical table having horizontally-arranged crutch-supporting eyes at its edges; substantially L-shaped one-piece crutch-rods mounted in said lugs with their vertical limbs lying in a plane parallel with the plane of the table, said L-shaped crutch-rods being adjustable lengthwise of the table, and being bent in two directions at the point of juncture of their limbs so that their horizontal limbs are offset and adapted to extend inwardly above the surface of the table; and substantially L-shaped crutches adjustably mounted on the inwardly-extending offset horizontal limbs of said crutch-rods; whereby longitudinal and transverse adjustment of the crutch-rods and crutches may be readily secured, together with minimum interference with the operating-surface of the table.

4. A detachable crutch for surgical tables comprising a one-piece L-shaped crutch-rod bent in two directions at the point of juncture of its limbs, whereby said limbs are offset relative to each other so as to lie in different horizontal planes; and a substantially L-shaped crutch-piece adjustably and detachably secured to the upper of the limbs of said crutch-rods.

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