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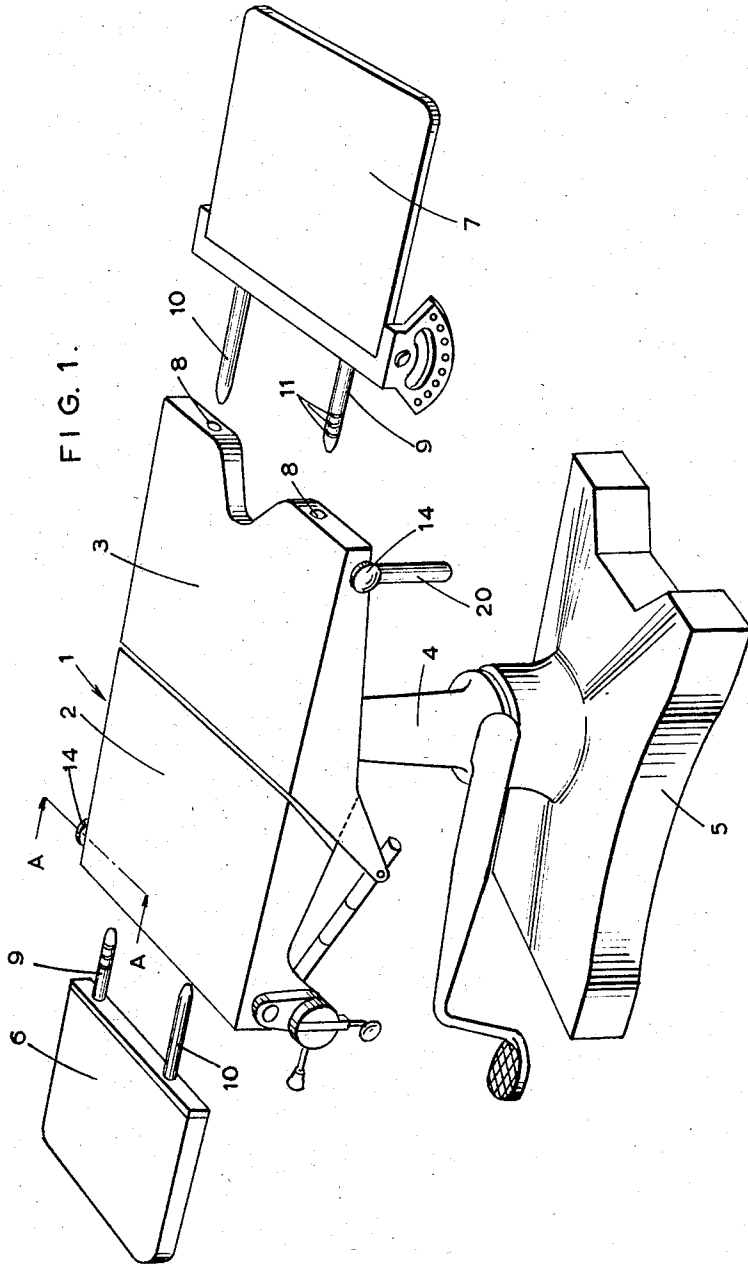
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OPERATION TABLES HAVING REMOVABLY SUPPORTED INTERCHANGEABLE
HEAD AND LEG EXTENSION SECTIONS

Filed Nov. 25, 1957

2 Sheets-Sheet 1



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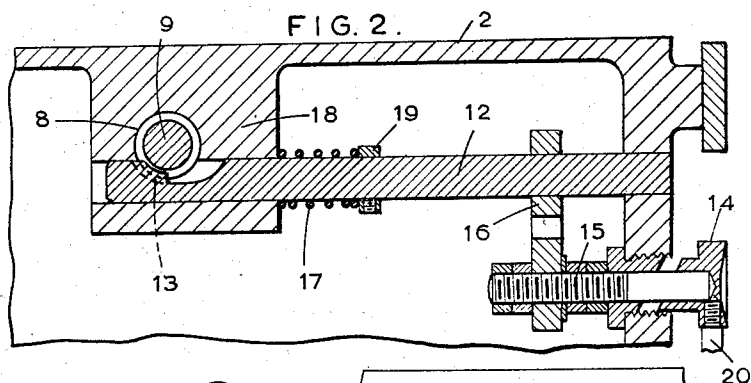
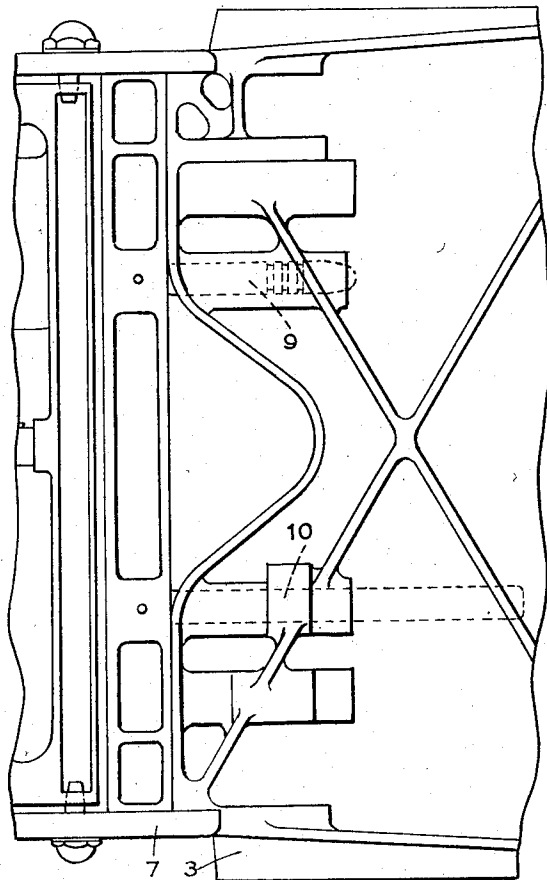


FIG. 3.



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OPERATION TABLES HAVING REMOVABLY SUPPORTED INTERCHANGEABLE HEAD AND LEG EXTENSION SECTIONS

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4 Claims. (Cl. 311—10)

This invention relates to surgical operation tables.

Surgical operation tables usually include a platform on which a patient can be supported and which may be in one part or may be divided transversely into two or more parts called trunk sections. The platform can be swung about a longitudinal axis and about a transverse axis and the trunk sections can also be swung about a transverse axis so as to be arranged in different angular positions with respect to each other. The trunk sections do not provide a platform long enough to support a patient of average size in a lying position and extensions, called head and leg sections, are therefore provided at each end of the table and respectively support the head and legs of the patient.

It is convenient for all movements of the platform to be controlled from one end of the table and such movement is therefore frequently effected from controls at the head end of the table. This is a satisfactory arrangement except when the site of an operation being performed is at or above the upper thoracic portion of the body of the patient as the surgeon and his assistants are then grouped around that part of the table at which the controls are situated. This difficulty cannot be satisfactorily overcome by placing the patient on the table with his feet on the head section and his head on the leg section as the leg and head sections are usually of a different size. Moreover, the head and leg sections are usually movable with respect to the trunk sections and the mechanism for moving the head section is usually one which provides a smoother movement and finer adjustment than the mechanism associated with the leg section.

It is an object of the present invention to provide a surgical operation table in which this difficulty is overcome and the invention accordingly provides a table having head and leg extension sections which are interchangeable with each other and are removably supported from the ends of the table by means of pins on the head and leg sections which engage in sockets in the table, releaseable locking means being provided for locking the removable sections in position. One of the pins by which each of the removable sections is supported can be a locking pin engageable in a locking socket in the table, the locking means being a displaceable locking plunger which is spring-loaded for movement into a locking position in which it engages the locking pins in the locking socket.

In the accompanying diagrammatic drawings:

Figure 1 is an exploded perspective view of an operation table constructed according to the invention,

Figure 2 is a section on line A—A of Figure 1, and

Figure 3 is a fragmentary underplan view of part of the table.

In the illustrated embodiment of the invention, a surgical operation table comprises a platform 1 on which a patient can be supported and which is divided transversely into two parts 2 and 3 respectively called upper

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and lower trunk sections carried by a pedestal 4 extending upwards from a wheeled base 5. The length of the platform 1 is increased by removable head and leg sections 6 and 7 respectively which are fitted in end to end relationship with the upper and lower trunk sections 2 and 3 respectively. Two sockets 8 extend beneath the upper surface of each trunk section 2 and 3 lengthwise of the platform 1. Two pins 9 and 10 project endwise from one end of each of the head and leg sections 6, 7 and each pair of pins is engageable either in the sockets 8 associated with upper trunk section or in the sockets 8 associated with the lower trunk section so that the head and leg sections are interchangeable.

One pin on the head section and one pin on the leg section is a locking pin 9 and has three spaced annular locking grooves 11. One of the sockets associated with each trunk section is a locking socket. A locking plunger 12 extends into each locking socket from one side of each trunk section. Each locking plunger 12 has an integral key 13 which can engage in one of the locking grooves 11 in a locking pin 9 engaged in that socket. If the locking pin is fully inserted in its locking socket the key will engage the outermost locking groove, and if the locking pin is partly withdrawn the key 13 will engage the middle annular groove. The inner locking groove serves merely to prevent accidental withdrawal of the locking pin. Each locking plunger 12 is displaceable by a locking button 14 at the side of the table to disengage its key 13 from a locking groove 11 and release the locking pin 9. The locking button 14 is connected with the locking plunger 12 by an operating stem 15 and a link 16 so that the stem 15 and plunger 12 are slideable together. A coil spring 17 surrounding the locking plunger 12 bears between a fixed abutment 18 on the underside of the appropriate trunk section and a collar 19 on the plunger 12 to urge the plunger to the locking position shown in Figure 2. A handle 20 is connected with each button 14 and is displaceable and rotatable to disengage the plunger from the locking position.

In each pair of pins the locking pin 9 is shorter than the other pin 10. When it is desired to remove a head or leg section 6 or 7 from the table, one hand can be used to operate the button 14 and the other hand can be used for the initial part of the movement of the section from the table, but when the locking pin has moved out of the locking socket both hands are free to remove the section which is still supported by the engagement of the other pin in the socket.

The pins of the leg section can extend from a support member or bracket on which the leg section proper is pivotally mounted. If desired, the head section can be mounted in a similar manner.

The locking sockets 8 and the locking pins 9 and 10 are so arranged that the locking pin 9 of either the head or the leg section can enter the locking socket at either end of the table.

What I claim is:

1. A surgical operation table comprising a base, a platform mounted on said base for supporting a patient and having, extending inwards from each end, sockets disposed lengthwise of said platform, a head extension section and a leg extension section each of which is removably connected with an end of said platform, support pins on each of said extension sections removably engageable in said sockets at one end of said platform whereby each said section can be connected to and removed from said platform interchanged with the other said section, and releaseable locking means adjacent each end of said platform for locking said extension sections in position.

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2. A surgical operation table comprising a base, a platform mounted on said base for supporting a patient, removable head and leg extension sections arranged to increase the length of said platform, means beneath the platform at each end thereof in which are sockets extending lengthwise of the platform, support pins located on said extension sections and removably engageable in said sockets at either end of said platform, two displaceable locking plungers arranged one near each end of the platform so that each of them is movable into one of said sockets into releaseable engagement with one of said pins therein, and springs for urging said locking plungers into their respective adjacent sockets.

3. A surgical operation table comprising a base, a platform which is adapted to support a patient and is mounted on said base, said platform having extending inwards from each end thereof a locking socket and a second socket; removable head and leg extension sections connected with opposite ends of the platform to increase the length thereof; a locking pin on each of said extensions which is engageable in either one of said locking sockets and has annular locking grooves; a second pin on each said extension section, said pin being larger than said

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locking pins and engageable in either one of said second sockets; two locking plungers one of which is located near each end of said platform and each of which is movable into a locking position in which it enters a locking socket to engage in one of said locking grooves of a locking pin therein; and springs for urging said locking plungers towards their locking positions.

4. A surgical operation table as claimed in claim 3 comprising two displaceable operating stems each of which is operatively connected with one of said locking plungers, and two operating handles one of which is connected with one of said operating stems whereby movement of said handle causes displacement of said stem and the plunger connected therewith.

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