Feb. 15, 1949. G. A. BREWSTER 2,461,627

OPERATING TABLE

Filed March 29, 1946 2 Sheets-Sheet 1

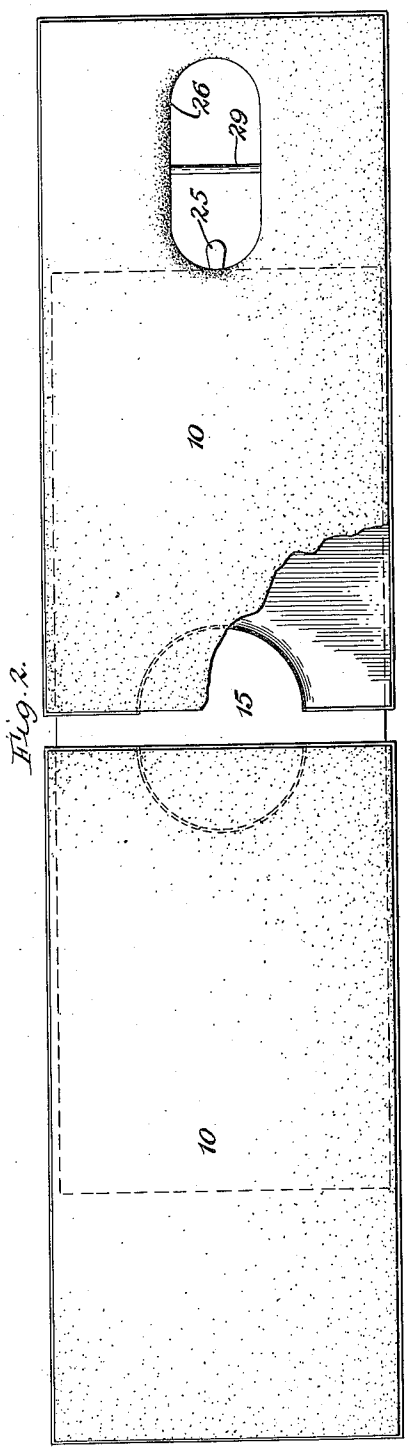


Fig. 2.

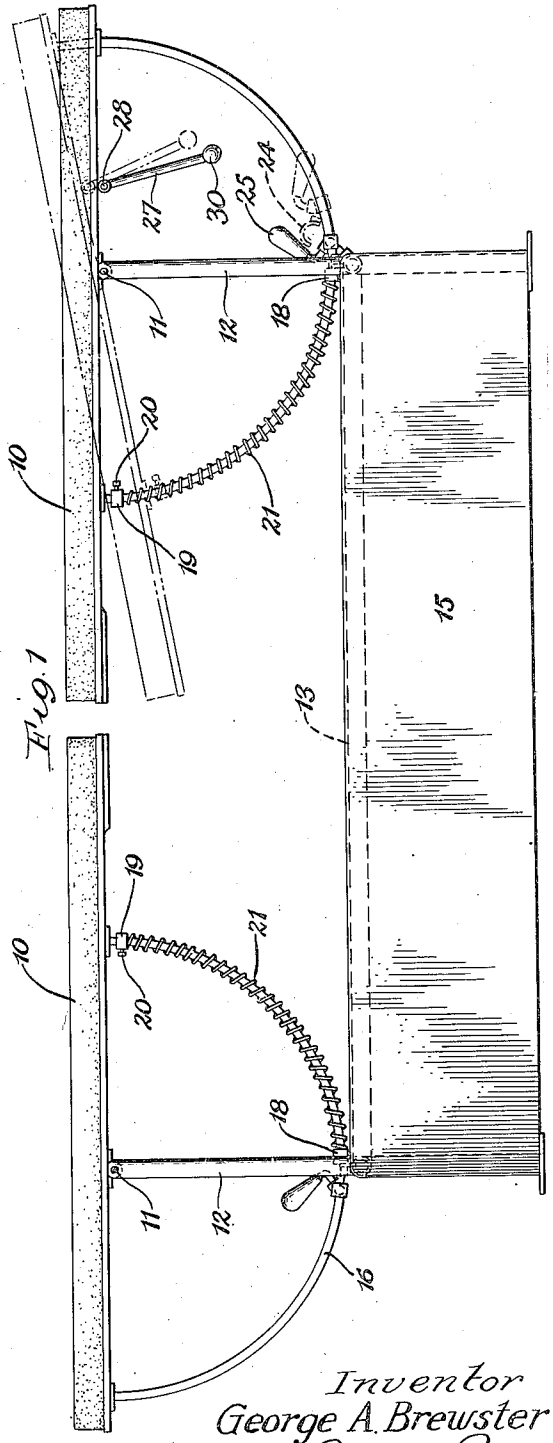


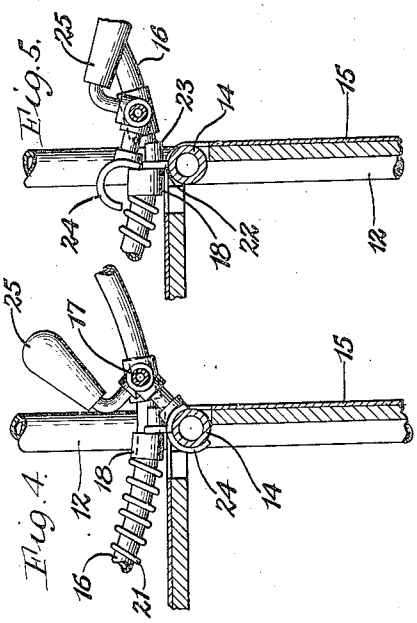
Fig. 1

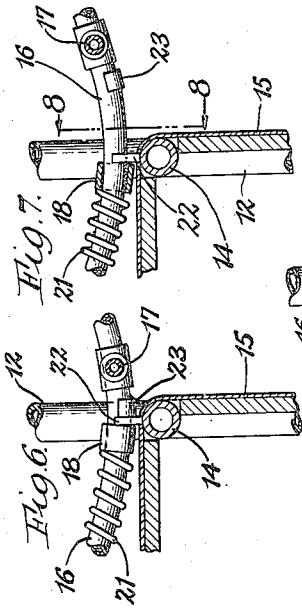
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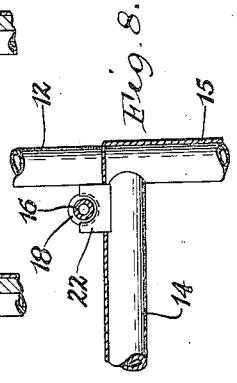
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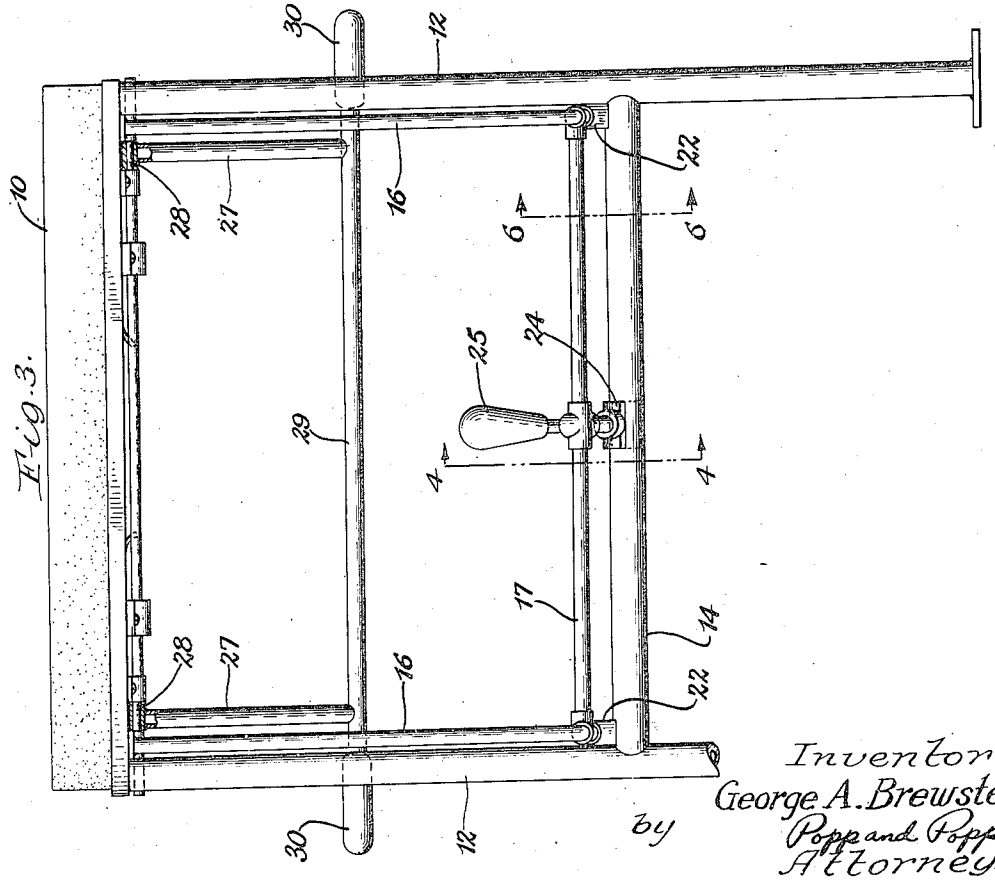
OPERATING TABLE

Filed March 29, 1946 2 Sheets-Sheet 2









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UNITED STATES PATENT OFFICE

2,461,627

OPERATING TABLE

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Application March 29, 1946, Serial No. 658,065

2 Claims. (Cl. 311—7)

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This invention relates to improvements in operating tables and proposes a table which is particularly suitable for use in connection with osteopathic treatments. It may be pointed out that in the practice of osteopathy, it is desirable to support the patient, face downward, upon a table and to adjust portions of the supporting surface provided by the table in order to bring the parts of the body of the patient to a certain position or alignment at which complete relaxation is either promoted or facilitated.

The principal object of the invention is to provide an improved table upon which a patient may lie, which may be adjusted so that the weight of the patient will cause the top portions of the table to move automatically to a position at which the parts of the body of the patient are placed in proper alignment.

Another object of the invention is to provide a table which may be readily adjusted to accommodate the weight of the patient and which, when adjusted, will support the patient resiliently in the desired position.

A further object is to provide a table in which either or both of the top portions thereof may be easily and quickly locked in a horizontal position.

Another aim is to provide such a table with means for supporting the hands of the patient to increase the comfort of the patient.

A further object is to provide a simple, sturdy and compact construction which may be inexpensively manufactured.

In the accompanying drawings:

Fig. 1 is a side elevation of the table.

Fig. 2 is a top plan view thereof.

Fig. 3 is a fragmentary right end elevation of the table shown in Fig. 1.

Fig. 4 is a fragmentary, sectional view taken along the line 4—4, Fig. 3.

Fig. 5 is a view similar to Fig. 4 and showing the locking means in an unlocked condition.

Fig. 6 is a fragmentary sectional view taken along the line 6—6, Fig. 3.

Fig. 7 is a view similar to Fig. 6 and showing the parts in a different relative position.

Fig. 8 is a fragmentary, sectional view taken along the line 8—8, Fig. 7.

A patient supporting surface is provided by a pair of conterminous top sections 10, each of which is pivotally mounted on separate cross or pivot rods 11. While any suitable supporting means for the pivot rods 11 may be used, it is preferred, as shown in the drawings, to support the pivot pins 11 on a frame of rectangular out-

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line comprising vertical posts 12, horizontal longitudinal rods 13 and horizontal transverse rods 14, each pivot pin 11 being mounted on the upper end of a post 12. For appearance, a cover 15 can be provided for the lower portion of the frame.

A semi-circular rod 16 is arranged on the inner side of each post 12 and is connected at both ends to the respective top section 10 so as to be concentric with the corresponding pivot pin 11. Each pair of transversely spaced semi-circular rods 16 so provided are connected together by a cross member or bar 17, as best shown in Fig. 3. Each semi-circular rod 16 carries a collar 18 which is slidable along the rod and an adjusting collar 19 which is arranged adjacent its upper inner end and can be held in any given position on the rod by the screw 20. A coil spring 21 embraces each semi-circular rod and at one end bears against the collar 18 and at its opposite end against the adjusting collar 19.

Arranged immediately adjacent each vertical post 12, each transverse rod 14 carries a stop plate 22 provided with a semi-circular recess which is concentric with the cross-sectional circular form of the companion semi-circular rod 16, as best shown in Fig. 8. The inner face of the stop plate 22 engages the opposing face of the collar 18 and acts as a stop therefor. The outer face of the stop plate 22 is adapted to engage the stop lug 23 carried by the semi-circular rod 16, this stop lug being in the form of a semi-circular collar welded to the rod 16. The stop lug 23 on each semi-circular rod 16 is so positioned thereon that it engages the companion stop plate 22 when the top sections 10 are in a horizontal position. It will therefore be seen that the top sections 10 are prevented from retrograde tipping movement.

While the top sections 10 are in this horizontal position with the companion stop lugs 23 and stop plates 22 in abutting engagement, the top sections can be easily and quickly latched or locked in this position.

For this purpose, a semi-circular lock or latch member 24 is pivotally mounted on the cross member 17, which it will be noted is arranged on the outer side of the stop lugs 23, and adapted to engage the corresponding frame transverse rod 14. An L-shaped lever 25 is mounted on the lock member 24. When the parts are in their respective positions shown in Fig. 4, the top section 10 is locked in an immovable position with respect to the table frame. When the lever 25 is manually operated to move the lock member 24 to the position shown in Fig. 5, the top section

10 is free to move relative to the table frame, such movement being caused by the weight of the patient lying on the top sections 10 and resisted by the springs. A tilted position of the right section 10, as would be occasioned by the weight of the patient lying on the table, is shown by interrupted lines in Fig. 1. It will be noted that the adjusting collars 19 may be easily shifted to any desired positions on their semi-circular rods 16 so as to adjust the resilient action of the springs 21, as desired.

The top section 10 having the face receiving aperture 26 carries hand supporting means for the patient which comprise a pair of transversely spaced hanger rods 27 pivotally mounted at their upper ends on pivot pins 28 secured to the top section 10 in any suitable manner and connected at their lower ends by a transverse bar 29 which extends laterally outwardly from the hanger rods to provide hand grips 30. While lying face downward on the top sections 10, the patient can grasp the grips 30 and thereby increase his comfort or can brace himself thereon to support the upper part of his body as may be required by the treatment being received.

From the foregoing it will be seen that the present invention provides an operating table having top portions which move automatically to a position at which the parts of the body of the patient are placed in proper alignment and resiliently support the patient in such position; wherein such resiliency can be easily adjusted; wherein either or both of said top sections can be easily and quickly locked in a horizontal position as desired; which includes means to increase the comfort of the patient; and which is simple in construction and inexpensive to manufacture.

I claim:

1. In an operating table, a support, a table section pivoted on said support to swing about a horizontal axis adjacent the center of said section and providing a supporting surface for the body of the patient, a pair of spaced semi-circular rods concentric with said axis, secured to and depending from the under side of said section, a transverse rod fast to said support and arranged generally parallel with said axis adjacent said semi-circular rods, a pair of stop plates fast to said transverse rods and projecting toward a corresponding one of said semi-circular rods, a stop on each of said semi-circular rods and arranged to prevent one end of said section from swinging

downwardly about said axis from a generally horizontal position, a collar around the upper end of each of said semi-circular rods at the opposite end of said section, means for adjusting each of said collars lengthwise of said semi-circular rods, and a helical compression spring around each of said semi-circular rods and interposed between said collars and said stop plates to bias said opposite end of said section upwardly to effect engagement between said stop and stop plate.

2. In an operating table, a support, a table section pivoted on said support to swing about a horizontal axis adjacent the center of said section and providing a supporting surface for the body of the patient, a pair of spaced semi-circular rods concentric with said axis, secured to and depending from the under side of said section, a cross bar connecting said semi-circular rods intermediate the ends thereof and arranged generally parallel with said axis, a transverse rod fast to said support and arranged generally parallel with said cross bar and, in the horizontal position of said section, being arranged adjacent to said cross bar, springs carried by said semi-circular rods and bearing against said transverse rod to urge one end of said section upwardly, a stop on each of said semi-circular rods and bearing against said transverse rod to stop said upward movement of said one end of said section when said section reaches a horizontal position, and a latch member pivoted on said cross bar to swing about the axis thereof and including a latch adapted to embrace said transverse bar in said adjacent positions of said cross bar and transverse rod and including an operating lever for releasing said catch.

GEORGE A. BREWSTER.

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