

Aug. 25, 1925.

J. G. DICK

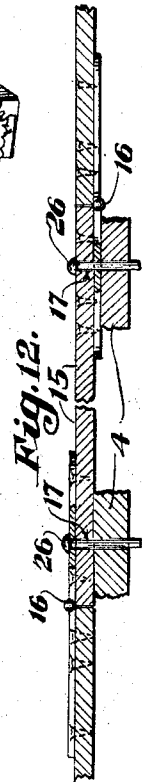
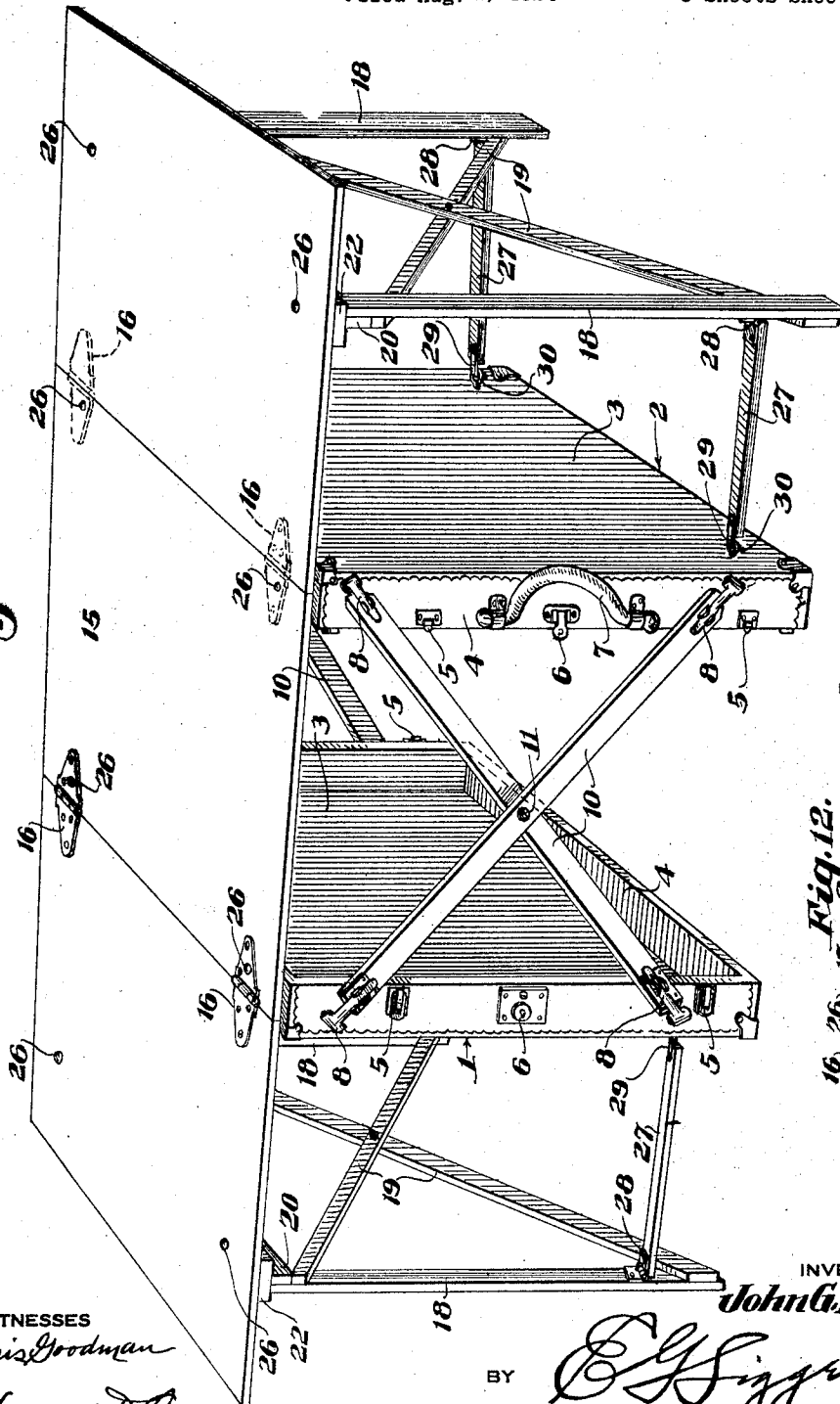
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FOLDABLE OPERATING TABLE

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3 Sheets-Sheet 1

Fig. 1.



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Aug. 25, 1925.

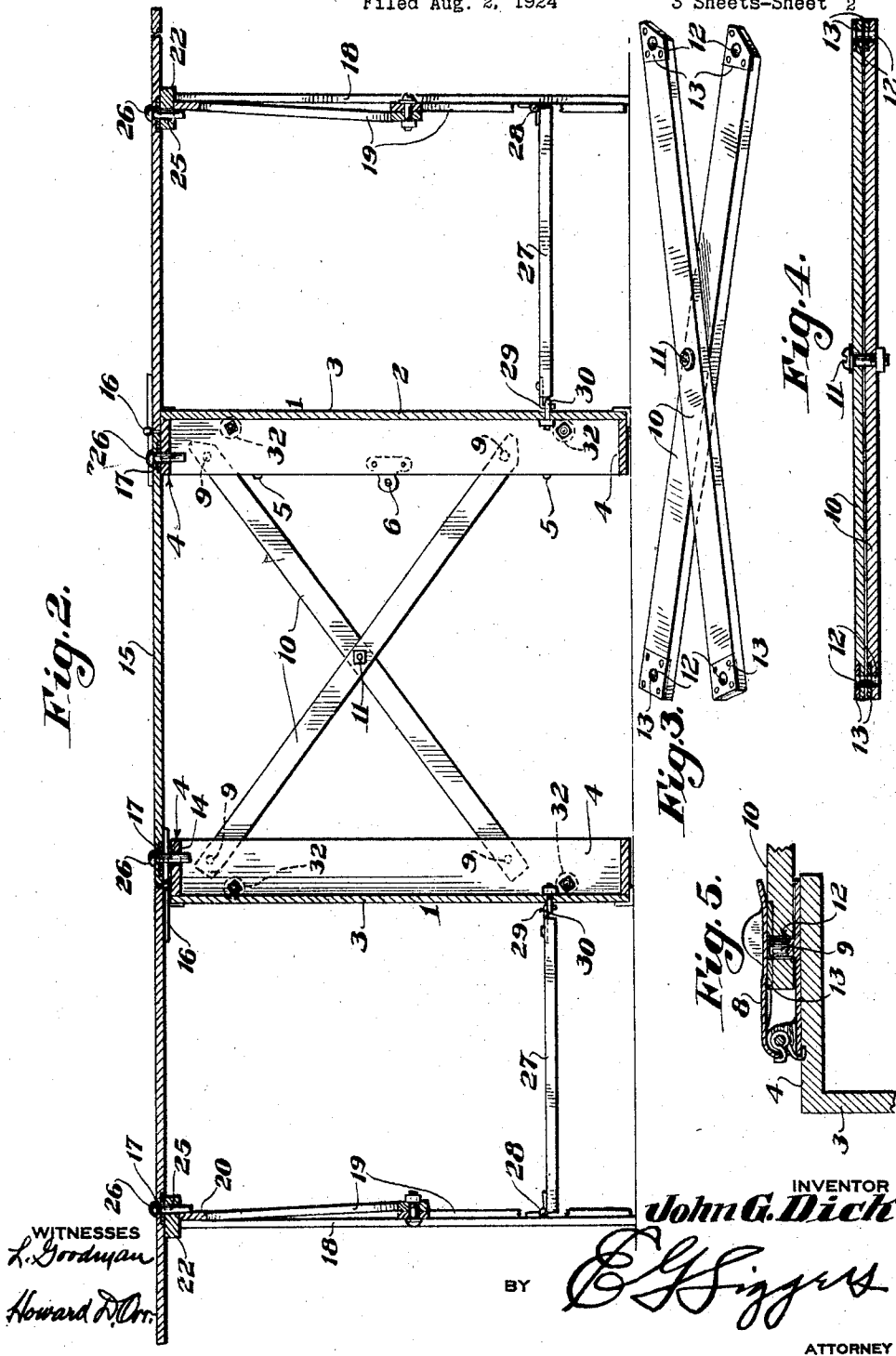
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FOLDABLE OPERATING TABLE

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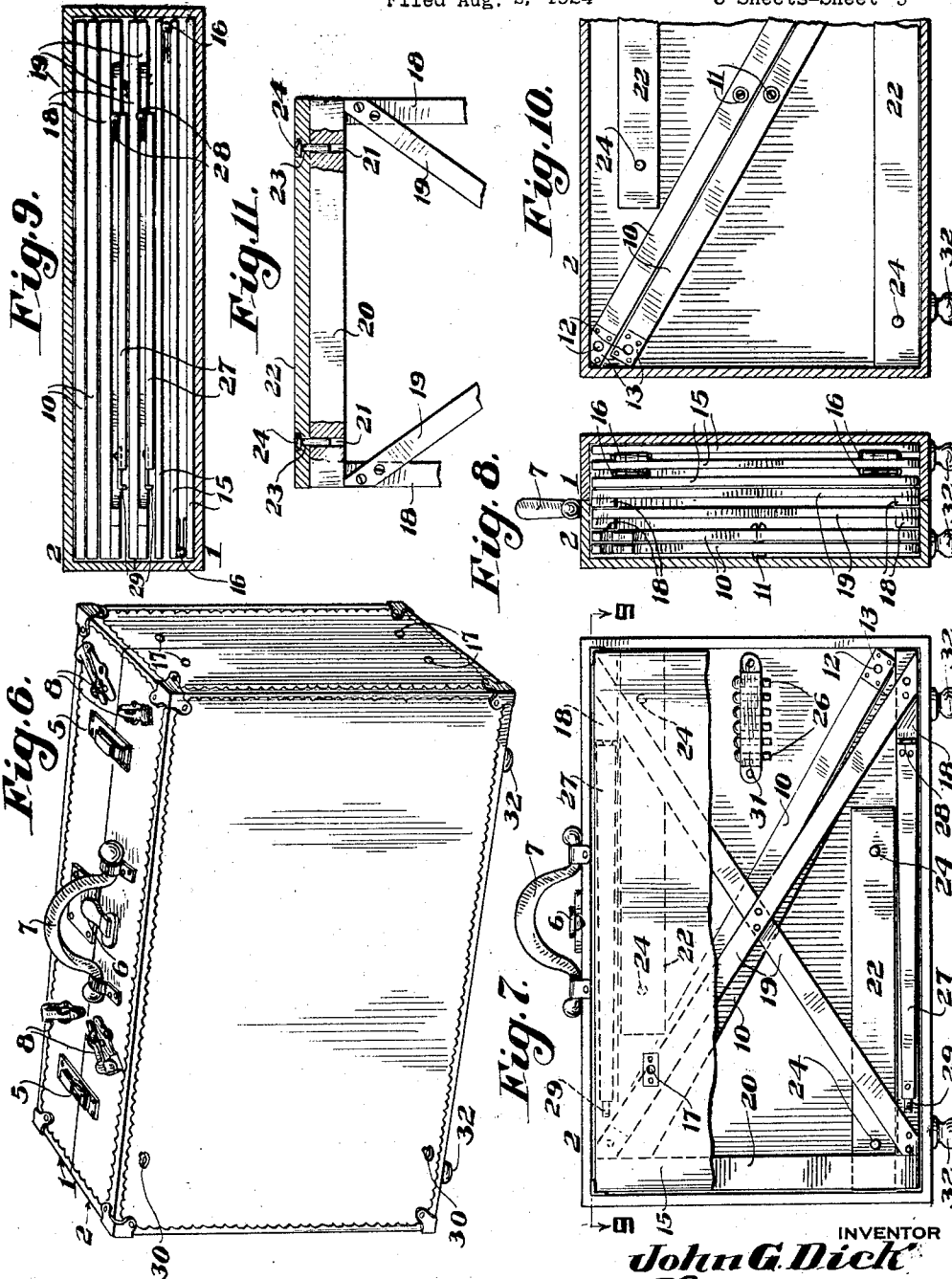
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UNITED STATES PATENT OFFICE.

JOHN G. DICK, OF CHINOOK, MONTANA.

FOLDABLE OPERATING TABLE.

Application filed August 2, 1924. Serial No. 729,771.

To all whom it may concern:

Be it known that I, JOHN G. DICK, a citizen of the United States, residing at Chinook, in the county of Blaine and State of Montana, have invented new and useful Improvements in Foldable Operating Tables, of which the following is a specification.

This invention relates to foldable operating tables.

The object is to provide a table of strong and durable construction which may be set up to support the weight of a body in prone position thereon, and at the same time to build the structure sufficiently light as to permit the same, when folded, to be easily carried in one hand in the same manner as a suit case, the several parts comprising the table, being detachable from each other and certain parts being foldable into compact form to be stowed and carried in container sections, constituting intermediate legs or supports for the table, said sections being locked together, with the other parts therein, and conveniently carried, as stated.

Another object is to provide a foldable and portable table which may be easily and quickly set up into table form and locked together by simple means to support considerable weight and to withstand rough usage, as when used for osteopathic purposes, said table being as easily and quickly knocked down, folded and assembled into form similar to a suit case.

A full and complete understanding of the invention may be obtained from a consideration of the following detailed description, taken in connection with the accompanying drawings forming a part of this specification, it being understood that while the drawings show a practical form of the invention, the latter is not to be confined to strict conformity with the showing thereof, but may be changed or modified, so long as such changes or modifications mark no material departure from the salient features of the invention, as specifically pointed out in the appended claims.

In the drawings, in which similar reference characters designate corresponding parts throughout the several figures:—

Figure 1 is a perspective view of the improved table set up ready for use;

Figure 2 is a vertical, longitudinal sectional view of the same;

Figure 3 is a detail perspective view of one of the cross braces used to strengthen the table when set up;

Figure 4 is a longitudinal sectional view through the same;

Figure 5 is a detail sectional view of the means for detachably connecting the ends of the cross braces and drawn on a larger scale;

Figure 6 is a perspective view of the parts comprising the table folded and locked ready for carriage;

Figure 7 is a side elevation of one of the container sections with some of the parts stored therein;

Figure 8 is a vertical, transverse sectional view through the folded table as shown in Figure 6;

Figure 9 is a horizontal section taken on the line 9—9 of Figure 7;

Figure 10 is a vertical, longitudinal section through a portion of one of the container sections and showing the manner of placing the cross braces and end cleats therein.

Figure 11 is a transverse view, partly in section, and showing the manner of securing the end cleats to the end legs of the table;

Figure 12 is a fragmentary sectional view showing the manner of securing the table top to the intermediate legs or supports.

Referring to Figure 1 of the drawings, wherein the table is shown in set up condition and ready for use, the numerals 1 and 2 indicate, respectively, the two equal, box-like halves or sections of a closure or container, which, when properly applied to each other, with their open sides abutting, forms a complete casing into which the remaining parts of the table may be housed for the purpose of carrying the same, after being properly folded in a manner to be explained.

When the said members or sections 1 and 2 are used in connection with the other parts to form a table, the same are placed in properly spaced relation to each other and constitute the intermediate legs or supports of the table, in proper position to support the greatest weight of a person lying prone upon the table, in case the same is

used by osteopaths, surgeons or physicians, or by undertakers and embalmers, as the improved table is admirably adapted for all of such uses.

5 Each of the sections comprises an imperforate bottom 3 formed of suitable strong and durable wood, preferably of laminated form, so as to be thin and light and yet having the required strength, the said bottoms
10 being of rectangular shape and preferably higher or longer than wide. Each bottom 3 is surrounded by wooden side walls 4 securely fastened thereto and adapted, when the two sections are placed together, with
15 the free edges of the surrounding walls 4 in abutting relation, to form the sides of the closed container for holding the rest of the parts, after the latter have been folded.

Each of the longer side walls 4 of each
20 section is provided with spaced locking elements 5, such as are in common use on trunks, suit cases and the like, and in addition, the two sections are provided with co-acting locking means 6 adapted to be operated by a key in the usual manner, said locking means serving to hold the two sections
25 securely together while being carried by means of the handle 7 attached to one of the sections.

30 The longer side walls 4 are further provided adjacent to their ends, with spring clamping means 8, which may be of any well known construction, the said clamps being arranged at an angle on the wall 4 and
35 comprising an attaching plate having an up-standing post or lug 9, and an overhanging, spring-actuated arm to clamp down upon the free end of said post or lug, as clearly shown in Figure 5 of the drawing.

40 Cross braces 10 formed of suitable wooden strips of proper length, are pivotally connected at their centers by a rivet 11 and are provided near their free ends with apertures 12 surrounded by wear plates 13 suitably
45 secured in mortices in the ends of the strips with their outer faces flush with the surfaces of the strips, as shown in Figures 3 and 4 of the drawing. The cross braces 10 may be folded, one upon the other, to occupy a minimum amount of space, and when opened and
50 applied to the set-up table, as shown in Figures 1 and 2, the apertures 12 are adapted to receive the aforesaid posts or lugs 9 on the container sections 1 and 2, and the clamping
55 members 8 are in proper diagonal position to clamp over and cover the ends of the diagonal braces and hold the latter in engagement with said lugs to prevent any relative movement between the two sections 1 and 2.

60 The upper or table-supporting walls 4 of the sections 1 and 2 are provided with apertures 14 adjacent to their ends, and a table top 15 is adapted to rest upon said wall so that the box-like structure of the two sections 1 and 2 will give the required strength

to support the central portion of said table top.

The table top 15 is composed of three equal sections or panels of a width somewhat less than the width of the sections 1 and 2 and
70 joined together by hinges 16, one pair of which is located on the upper side of the table top and the other pair is located on the under side thereof, the joints of the table top being located directly on the upper wall
75 4 of the sections 1 and 2, so that the latter serve also to support the inner edges of the end panels. The above manner of hinging the panels together permits the same to be folded together to occupy the smallest possible space, as shown in Figures 8 and 9 of the drawings and, being narrower than the container sections, the table top may be easily placed in one or the other thereof, after being folded in the manner described.
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Each of the panels of the table top 15 is provided with apertures or pin holes 17 passing therethrough, those in the middle panel passing through the leaves of the hinges and being four in number, while those passing
90 through the end panels are located a distance from the free end thereof and spaced from the side edges thereof.

Spaced end legs 18 are adapted to support the free ends of the end panels of the table
95 top, and these legs are formed into pairs connected together in proper spaced relation by crossed strips 19, and carrying at their upper ends, transverse sills 20 secured to their inner faces, the ends of the sills and the
100 outer edges of the legs being flush with the side edges of the table top.

The sills 20 are provided with spaced holes or apertures 21, adjacent to their ends, as shown in Figure 11, and are adapted to support detachable cleats 22 of equal length
105 therewith, said cleats being considerably wider than the sills 20 and having apertures 23 in which are countersunk pins 24, the free depending ends of which are adapted to enter the aforesaid holes 21 to rigidly secure the cleats 22 in place upon the end legs, and to readily permit the same to be detached therefrom by merely lifting the same.

In addition to the holes 23 and the pins 24
115 carried therein, the cleats 22 are provided with other holes or apertures 25 arranged the same distance apart as the aforesaid holes 14 in the upper walls 4 of the container sections 1 and 2, and in registering relation to the aforesaid holes 17 formed in the table top panels, so that removable pins 26 may be readily dropped therein, as shown in Figures 1 and 2 to hold the table top to the intermediate sections 1 and 2 and also to the
125 pairs of end legs 18, said pins being also easily removed by means of enlarged heads formed thereon.

In order to hold the lower ends of the end legs 18 from movement, horizontal longitu-
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inally disposed arms 27 are provided, the same being hingedly connected to the said end legs 18, near the lower ends thereof, as at 28 and carry at their free ends hooks 29 which are adapted to be engaged in eyes 30 secured to the bottoms 3 of the sections 1 and 2 as clearly shown in Figure 2.

One of the container sections is provided with a small rack or keeper 31 in which the several pins 26 may be placed when the device is in knock-down, folded and locked position and ready to be carried, so that said pins may not be lost, and in addition, the sections 1 and 2 may be equipped with knobs or feet 32 attached to the proper wall 4 thereof to rest upon the floor when the table is folded and locked, with the handle on the top.

Assuming that the improved foldable table is arranged in the form shown in Figure 1 and it is desired to fold up the same into suitcase form ready for transporting it to another location, the pins 26 are withdrawn from their seats in the table top and the section walls 4 and cleats 22 respectively. The table top 15 is then lifted off its supports and folded, one panel being swung down and the other up when the same may be placed to one side. The end cleats 22 are then lifted off, the pins 24 carried thereby, readily leaving their seats in the transverse sills of the end legs, and by detaching the hooks 29 from the eyes 30, the said end legs may be removed and the arms 27 folded back against the same ready to be placed into the container sections. The clamps 8 are then raised from over the ends of the cross braces 10 and the locking pins 9, and said braces may also be removed and folded into aligned relation, when the container sections 1 and 2 are free to be placed on the floor, with their open sides uppermost and ready to receive the various folded parts. One section may receive the table top in folded condition and one of the end legs, as shown in Figure 8 of the drawings, and the other section may receive the two pairs of folded cross braces 10, the cleats 22 and the other end leg. When the parts are thus stowed, the two sections may be placed together and locked by the locking means 5 and 6.

From the foregoing it will be seen that a simple, cheaply manufactured and strong and durable table has been provided for use by osteopaths, surgeons, physicians, or undertakers for their various purposes, that said table may be easily and quickly set up to support a person or a body in prone position without danger of becoming detached at any of the joints, and that the same may be as easily disconnected, folded and stowed into the form of a suit case with all the parts contained therein without danger of breakage or loss of any of the parts.

What is claimed is:—

1. An operating table comprising an elongated platform top divided transversely into hinged sections, each section being rigid when distended, supports adapted to be arranged transversely of the top and beneath the hinged joints thereof when the table is set up, said supports constituting coacting sections of a container, transverse cleats provided beneath the outer ends of the end sections, pairs of connected legs adapted to engage each of said cleats, means for detachably connecting the top sections to the supports and legs, detachable and foldable braces connecting the said supports together, arms hinged to the legs for detachable connection with the supports, all other parts, when detached and folded, being adapted to be placed within the coacting sections of the container, and means for locking the latter together.

2. An operating table having spaced, intermediate legs or supports constituting the half sections of a container, a table top adapted to rest thereon and foldable to be placed in one of said sections, detachable braces connecting the two sections and foldable to be placed in one of said sections, detachable legs arranged beneath and supporting the outer free ends of the foldable table top and having foldable arms detachably connected to the sections and adapted to be detached, folded and placed in one of the same, said sections being locked together to contain all the parts and carried as a suitcase.

3. An operating table comprising a foldable top having three equal panels hinged together, two equal container sections adapted, when separated, to serve as intermediate legs or supports beneath the transverse joints of the foldable top, end legs for supporting the outer ends of the outer table top panels, and foldable arms hinged to the lower ends of the end legs and having hook and eye connection with the container sections, the top, braces and end legs being adapted to be placed, when folded, within said sections and the latter locked together.

4. An operating table comprising a foldable top having three equal panels hinged together, said panels being provided with pin holes, two equal container sections adapted, when separated, to serve as intermediate legs or supports beneath the transverse joints of the foldable top and having pin holes registering with the first-named holes, pins for traversing the same to secure the top in position, end legs for supporting the outer ends of the outer table top panels, detachable cleats having pin and hole connection with the top of the end legs and having holes registering with the holes in the outer panels, pins for securing the latter to the cleats, and foldable arms hinged to the

lower ends of the end legs and having hook and eye connection with the container sections, the top, braces and end legs being adapted to be placed, when folded, within said sections and the latter locked together.

5 5. A foldable and portable operating table, comprising, when folded, a case or container having two equal box-like sections adapted to be locked together to have the appearance
10 of a suit case, a foldable table top to be carried in the container and adapted, when straightened, to rest on the spaced container sections, foldable cross braces to be carried in the container and adapted, when un-
15 folded, to be detachably connected to said sections to hold the same in spaced relation, and connected pairs of end legs to be carried in the container and having means for detachable connection to the outer, extended
20 ends of the table top, said legs having hinged, foldable arms at their lower ends for detachable connection to the lower portions of the spaced container sections.

25 6. A foldable and portable operating table, comprising, when folded, a case or container having two equal box-like sections adapted to be locked together to have the appearance of a suit case, a foldable table top to be carried in the container and adapted, when
30 straightened, to rest on the spaced container sections, and connected pairs of end legs to be carried in the container and having means

for detachable connection to the outer, extended ends of the table top, said legs having hinged, foldable arms at their lower ends for detachable connection to the lower portions of the spaced container sections.

7. A foldable and portable operating table for osteopathic practice, comprising a table top having three equal panels oppositely hinged together to be straightened out to form a flat surface or to fold flat against each other and provided with pin holes, spaced box-like sections constituting legs or supports and adapted to be placed beneath the transverse joints of the top to hold the major part of a patient's weight, detachable pins to hold the top on the sections, braces having detachable means at their ends for connection to the sides of said sections, end legs joined together in pairs and having detachable connection with the overhanging ends of the outermost table panels to support the head and feet of the patient, and opposite arms hinged to the end legs and detachably connected to the said sections to brace the legs, said top, said braces and said end legs being detachable and foldable to be carried in the sections when the same are locked together.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

JOHN G. DICK.