R. X. TUTTLE.

THERAPEUTIC APPARATUS.

APPLICATION FILED SEPT. 30, 1919. RENEWED MAR. 14, 1921.

1,376,593. **Patented May 3, 1921.**

2 SHEETS—SHEET 1.

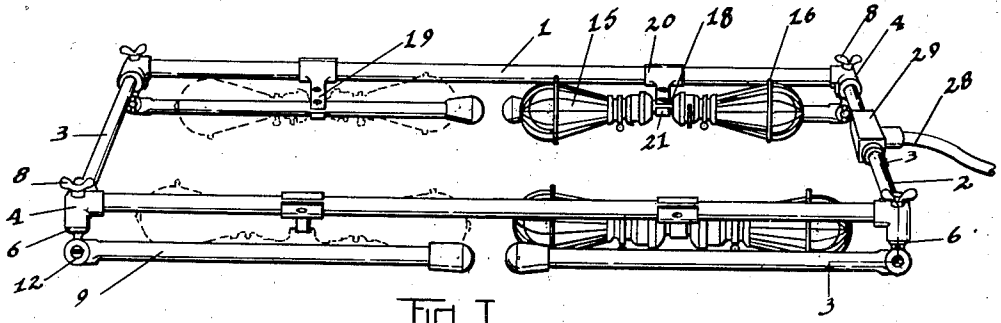


FIG. I.

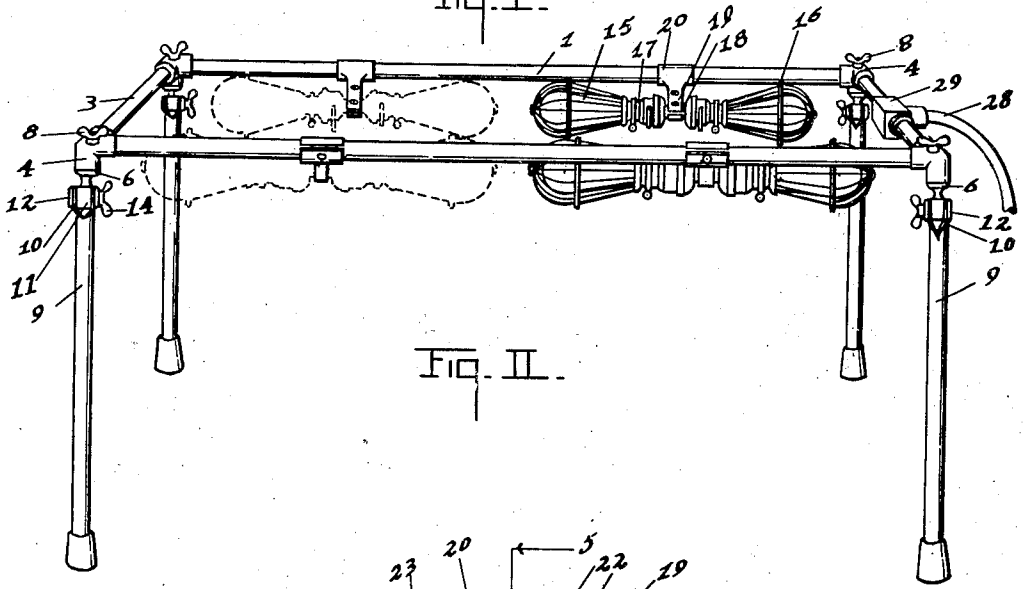


FIG. II.

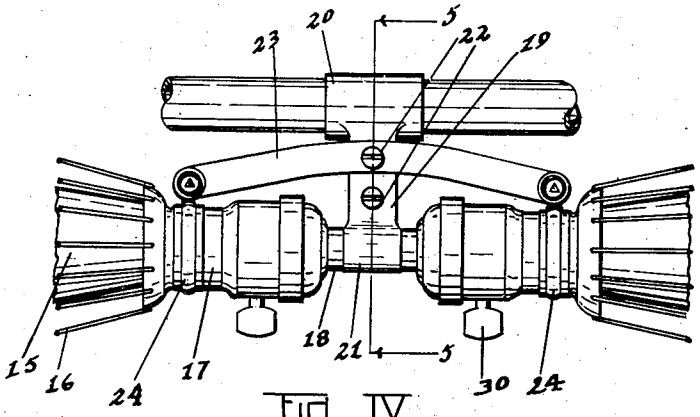


FIG. IV.

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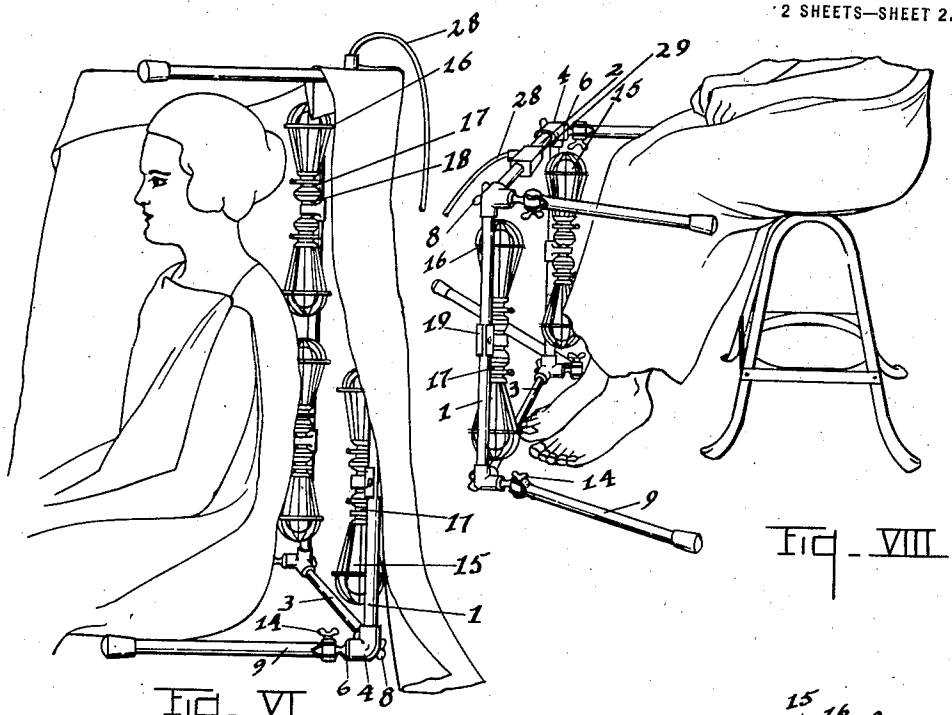


Fig. VIII.

Fig. VI.

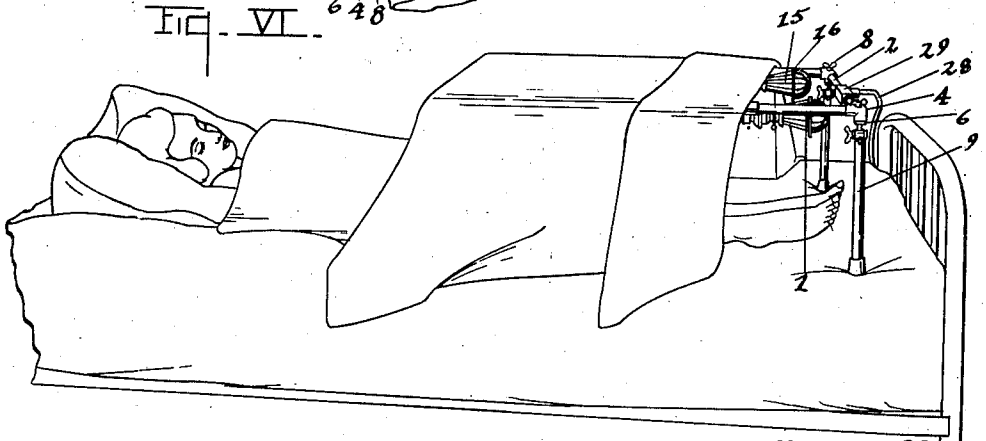


Fig. VII.

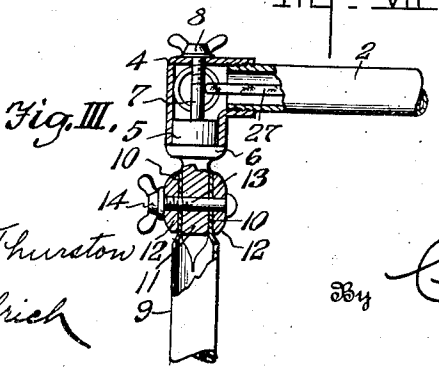


Fig. III.

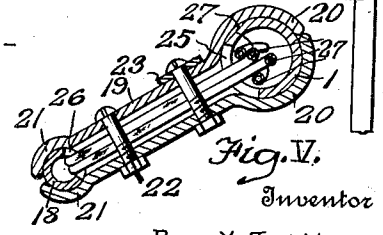


Fig. V.

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THERAPEUTIC APPARATUS.

1,376,593. Specification of Letters Patent. Patented May 3, 1921.

Application filed September 30, 1919, Serial No. 327,531. Renewed March 14, 1921. Serial No. 452,347.

To all whom it may concern:

Be it known that I, ROY X. TUTTLE, a citizen of the United States, residing at Battle Creek, county of Calhoun, State of Michigan, have invented certain new and useful Improvements in Therapeutic Apparatus, of which the following is a specification.

This invention relates to improvements in therapeutic apparatus.

The main objects of this invention are:

First, to provide an improved treatment apparatus of the electric lamp type which is capable of ready adjustment for use in the treatment of various portions of the body, the patient reclining, sitting or standing as may be desired.

Second, to provide an improved apparatus, the legs of which may be adjusted so as to support the frame in the desired position with the patient in various positions and also to support a covering for the lamps and the patient.

Third, to provide an improved apparatus having these advantages which is simple and economical in structure, light in weight and capable of being collapsed into very compact form for transportation or storage.

Further objects, and objects relating to structural details, will definitely appear from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification. The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which:

Figure I is a perspective view of a structure embodying the features of my invention collapsed, a part of the lamps being indicated by dotted lines.

Fig. II is a perspective view with the legs adjusted to a vertical position.

Fig. III is an enlarged detail view partially in section on a line corresponding to line 3—3 of Fig. I, showing details of the leg mounting which permits the legs being adjusted to the desired position.

Fig. IV is a detail inside elevation showing the mounting of the lamps.

Fig. V is an enlarged sectional view on a line corresponding to line 5—5 of Fig. IV.

Fig. VI is a perspective view illustrating my improved apparatus adjusted to one position for treating the back of a patient.

Fig. VII is a detail perspective view showing another adjustment or adaptation of my improved apparatus for the treatment of a patient in a reclining position.

Fig. VIII is a detail perspective showing another adjustment of my improved treatment apparatus, the apparatus, for convenience in illustration, having only two groups or sets of lamps.

In the drawing similar reference characters refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the drawing, the frame of the structure illustrated comprises tubular side members 1—1 and tubular end members 2 and 3 connected by hollow three-armed or three-way coupling members 4. The side and end members are connected to two arms of the corner members so that their third arms project downwardly to provide sockets for the leg coupling members 5.

These leg coupling members 5 are disposed in the corner members to be rotated therein having portions projecting into the corner members and flange-like collars 6 engaging the ends thereof.

The leg coupling members have threaded shanks 7 projecting through the tops of the corner members to receive the winged clamping nuts 8 by means of which they may be clamped in their adjusted positions so that the legs are supported for swivel adjustment and at the same time may be secured in their adjusted positions.

The legs 9 have pivot ears 10 at their upper ends spaced to embrace the ear portions 11 of the leg coupling members. Clamping members 12 are disposed on the outer sides of the ears 10, the leg pivots 13 being provided with winged nuts 14 so that they may be clamped in their adjusted positions.

The lamps 15, illustrated conventionally, are preferably provided with guards 16. The lamp sockets 17 are mounted on the ends of the tubular socket arms 18 carried by brackets 19 mounted on the frame member. These brackets 19 are formed of a pair of complementary clamping members having curved ends 20 and 21 embracing the frame side members 1 and the socket arms 18 respectively, the bracket members being

clamped upon the frame members and arms by means of the bolts 22.

To brace the lamp sockets 17, I mount a brace member 23 on the bracket and connect the same to the sockets by means of clips 24, the brace being secured by one of the bolts 22.

The frame members have holes 25 in the sides thereof while the socket arms have holes 26 in their sides embraced by the brackets which constitute conduits for the circuit wires 27. The circuit wire cables 28 lead into the frame end member 2 through a housing 29 inserted therein and through the corner members into the side members and therefrom into the brackets to the sockets as shown in Fig. V. With this arrangement, the circuit wires are housed and protected so that they are not likely to be broken or short circuited.

The apparatus may be adjusted to a large number of positions, not illustrated, for the treatment of patients in reclining or sitting postures and for the treatment of various parts of the body as may be desired, the leg connection being such that a substantially universal adjustment thereof is possible either to support the frame in various positions or as supports for a covering as may be desired. When collapsed, the legs may be adjusted to constitute guards or shields for the lamps.

It will be understood that the number of lamps may be varied as desired and in use the lamps are preferably provided with individual switches 30 so that they may be turned on or off as desired.

I have illustrated and described my improvements in an embodiment which has proven very successful in use. I find that considerable variation in sizes and proportions are not required owing to the great adaptability of the structure. However, it will be understood, particularly for hospital uses, it might prove a matter of convenience to have structures of various sizes and varying dimensions.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a structure of the class described, the combination of a frame comprising tubular side and end members and three-armed hollow corner members constituting wire conduits, the side and end members being connected to two arms of said corner members so that their third arms project downwardly and constitute leg member sockets, leg coupling members swiveled in said leg member sockets and provided with threaded shanks projecting through the corner members, screws on said shanks for independently clamping the leg coupling members in their adjusted positions on said frame, legs having spaced ears at their upper ends embracing said leg coupling members, clamping bolts arranged through said leg ears and leg coupling members for independently clamping the legs in their adjusted positions on said leg coupling members, lamp brackets provided with lamp sockets mounted on said frame members, and circuit wires for said lamp sockets disposed in said frame members.

2. In a structure of the class described, the combination of a frame comprising side and end members and three-armed corner members, the side and end members being connected to two arms of said corner members so that their third arms project downwardly and constitute leg member sockets, leg coupling members swiveled in said leg member sockets and provided with threaded shanks projecting through the corner members, screws on said shanks for independently clamping the leg coupling members in their adjusted positions on said frame, legs having spaced ears at their upper ends embracing said leg coupling members, clamping bolts arranged through said leg ears and leg coupling members for independently clamping the legs in their adjusted positions on said leg coupling members, and lamps mounted on said frame members longitudinally thereof.

3. In a structure of the class described, the combination of a frame comprising tubular side and end members and hollow corner members having leg coupling member sockets, said frame members constituting wire conduits, leg coupling members disposed in said leg member sockets for rotative adjustment and provided with means for securing them in their adjusted positions, legs pivotally mounted on said leg coupling members, means for adjustably securing the legs in their adjusted position on said leg coupling members, lamp brackets provided with lamp sockets mounted on said frame members and circuit wires for said lamp sockets disposed in said frame members.

4. In a structure of the class described, the combination of a frame comprising side and end members and corner members having leg coupling member sockets, leg coupling members disposed in said leg member sockets for rotative adjustment and provided with means for securing them in their adjusted positions, legs pivotally mounted on said leg coupling members, means for adjustably securing the legs in their adjusted position on said leg coupling members, and lamps mounted on said frame longitudinally of said frame members.

5. In a structure of the class described, the combination of a frame, leg coupling members mounted on said frame for rotative adjustment about vertical axes and provided with means for securing them in their adjusted positions, legs pivotally mounted

on said leg coupling members and provided with means for securing them in their adjusted positions so that the legs may be collapsed longitudinally of the frame or adjusted to support the frame in various positions relative to the patient to be treated, and lamps mounted on said frame.

6. In a structure of the class described, the combination of a frame, leg coupling members mounted on said frame for rotative adjustment about vertical axes and provided with means for securing them in their adjusted positions, legs pivotally mounted on said leg coupling members and provided with means for securing them in their adjusted position so that the legs may be collapsed longitudinally of the frame or adjusted to support the frame in various positions relative to the patient to be treated.

7. In a structure of the class described, the combination of a frame comprising side and end members, lamps mounted on said frame longitudinally thereof, and leg coupling members mounted on said frame for rotative adjustment about vertical axes and provided with means for securing them in their adjusted positions, legs pivotally mounted on said leg coupling members and provided with means for securing them in their adjusted positions so that the leg members may be adjusted to constitute guards for the lamps or to support the frame in various adjusted positions relative to the patient to be treated and to provide supporting means for a covering.

8. In a structure of the class described, the combination of a frame comprising a tubular member constituting a circuit wire conduit and having an opening in the side thereof for the circuit wires, a tubular socket arm having a wire opening in the side thereof and a lamp socket mounted thereon, a bracket comprising a pair of complementary members of channel cross section curved at their ends to embrace said frame member and socket arm and constituting a circuit wire conduit, a bolt disposed through said bracket members clamping them upon said frame member and socket arm, and circuit wires for said lamp socket disposed in said frame member, bracket, and socket arm.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

ROY X. TUTTLE. [L. S.]

Witnesses:
CLINTON D. RHODES,
MAUDE KENT.