

129. SURGERY.
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DRAFTSMAN.

No. 765,470.

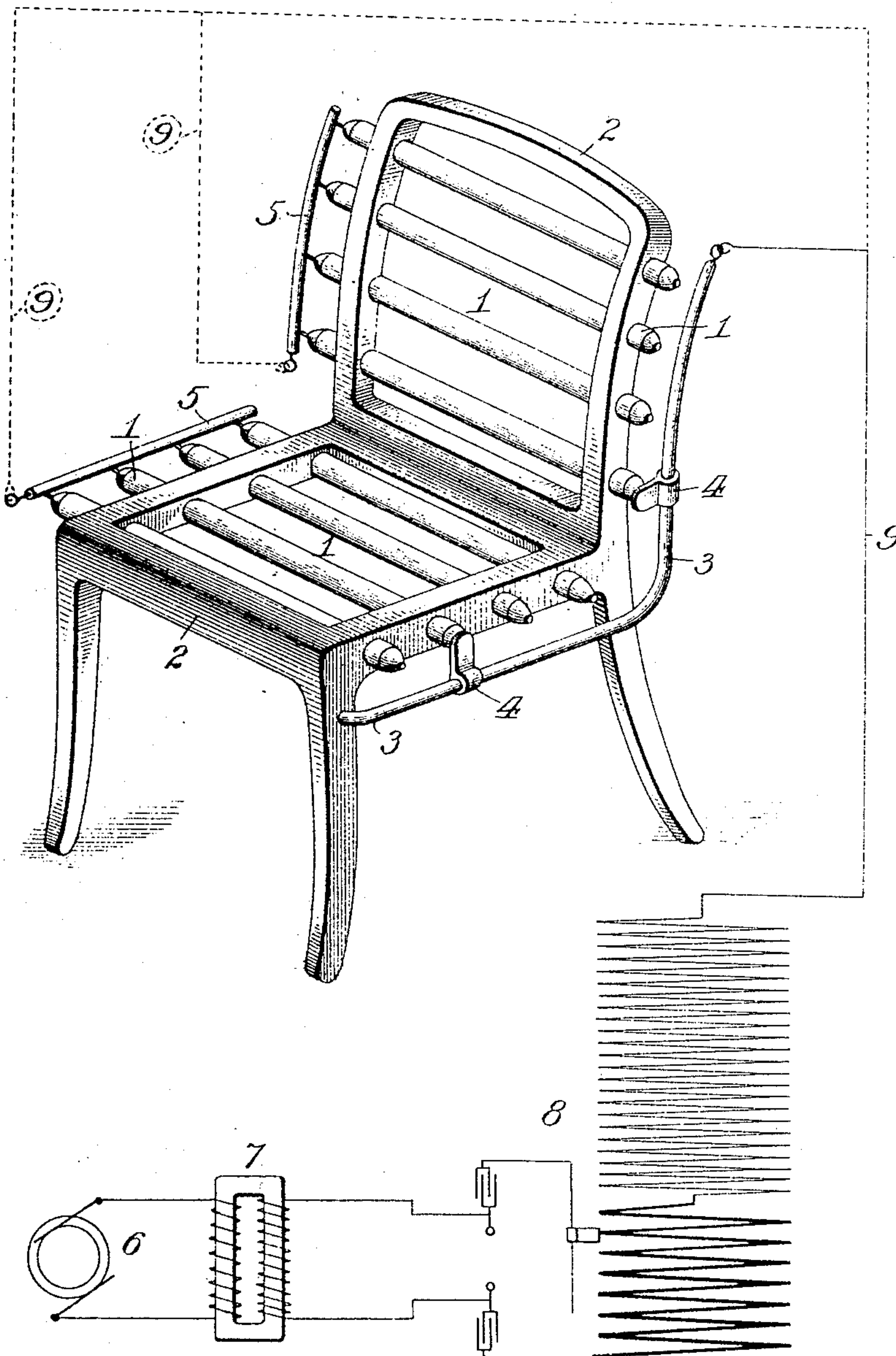
PATENTED JULY 19, 1904.

R. FRIEDLANDER.
ELECTRIC THERAPEUTIC APPARATUS.

APPLICATION FILED JUNE 6, 1904.

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NO MODEL.



Attest:
John Enders.
M. H. Holmes.

Inventor:
Robert Friedlander,
by Robert Burns Attorney.

UNITED STATES PATENT OFFICE.

ROBERT FRIEDLANDER, OF CHICAGO, ILLINOIS.

ELECTRIC THERAPEUTIC APPARATUS.

SPECIFICATION forming part of Letters Patent No. 765,470, dated July 19, 1904.

Application filed June 6, 1904. Serial No. 211,248. (No model.)

To all whom it may concern:

Be it known that I, ROBERT FRIEDLANDER, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Therapeutic Apparatus, of which the following is a specification.

The present invention relates to high-frequency electric apparatus employed in the therapeutical treatment of bodily ailments, and has for its object to provide a simple and efficient structural arrangement of parts with which the treatment of any one or more parts or portions of the patient or subject can be effected in a controllable and efficient manner, all as will hereinafter more fully appear, and be more particularly pointed out in the claims.

The accompanying drawing is a diagrammatic view illustrative of an ordinary type of the present apparatus.

The material feature of the present improvement involves the attachment of a series of high-frequency electrical terminals, such as ordinary vacuum-tubes 1, in fixed and separated relation on a seat 2 or other equivalent rest or support for the patient undergoing treatment and in connection therewith to provide suitable current-controlling switches by means of which the high-frequency electric current may be directed through any one or more of the terminals 1 at the will and judgment of the operator. The location of the terminal tubes 1 in the seat 2 or other rest is such that the patient resting upon said seat will either be in close proximity to or in direct contact with said tubes in accordance with the different uses and applications of the present invention and so that in the one case a combined light and electric current therapeutic treatment will be effected and in the other case an electric-current therapeutic treatment mainly will be provided.

3 is a conducting-bar at one side of the seat or rest 2, and 4 represents one or more removable and adjustable contact-pieces on said bar by means of which conductive connection is made with one or more of the vacuum-tubes 1 to energize the same. 5 is a companion con-

ducting bar or bars at the opposite side of the seat or rest 2, and preferably of the sectional form shown, with each section connected directly to a group of the vacuum-tubes 1 and at the end of said tubes opposite to where the conducting-bar 3 aforesaid is arranged.

In actual use the line wire or conductor supplying the high-frequency current employed in the present apparatus will be connected to one or the other of the conducting-bars 3 or 5 in accordance with the nature of the treatment required, and a varied connection with the different vacuum-tubes will be effected in accordance with the particular part of the patient which the operator intends to treat.

The source of electromotive force may be either a static electric machine or a generator 6 and a step-up transformer 7, either of which may be used in connection with a high-frequency coil 8 of the Tesla or other usual type to supply a high-frequency current of the required tension to the line wire or conductor 9, by which the vacuum-tube terminals 1 of the apparatus are energized in the practical use of the present apparatus.

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

1. In a high-frequency therapeutic apparatus, the combination of a seat or like rest, a series of vacuum-tube terminals secured thereto in fixed and separated relation, and means for connecting said tubes with a source of high-frequency electric current, substantially as set forth.

2. In a high-frequency therapeutic apparatus, the combination of a seat or like rest, a series of vacuum-tube terminals secured thereto in fixed and separated relation, a conducting-bar at one side of said seat, one or more contact-pieces on said bar affording conductive connection with said tubes, and a connection between said bar and a source of high-frequency electric current, substantially as set forth.

3. In a high-frequency therapeutic apparatus, the combination of a seat or like rest, a series of vacuum-tube terminals secured thereto in fixed and separated relation, conducting-bars at the respective ends of the series of

vacuum-tubes, one of said bars having contact-
pieces affording conducting connection with
the adjacent ends of the series of vacuum-
tubes, and the other of said bars having direct
5 connection with the opposite ends of the
vacuum-tubes, and a line-wire connected with
a source of high-frequency electric current
and adapted for connection with either of said
bars, substantially as set forth.
10 4. In a high-frequency therapeutic appa-
ratus, the combination of a seat or like rest, a
series of vacuum-tube terminals secured there-
to in fixed and separated relation, conducting-
bars at the respective ends of the series of
15 vacuum-tubes, one of said bars having contact-

pieces affording conducting connection with
the adjacent ends of the series of vacuum-
tubes, and the other of said bars formed in sec-
tions and having direct connection with the
opposite ends of the vacuum-tubes, and a line- 20
wire connected with a source of high-fre-
quency electric current and adapted for con-
nection of either of said bars, substantially as
set forth.

Signed at Chicago, Illinois, this 1st day of 25
June, 1904.

ROBERT FRIEDLANDER.

Witnesses:

ROBERT BURNS,
M. H. HOLMES.