

(Model.)

F. A. PALMER.
MATTRESS OR BED BOTTOM.

No. 282,561.

Patented Aug. 7, 1883.

Fig. 1.

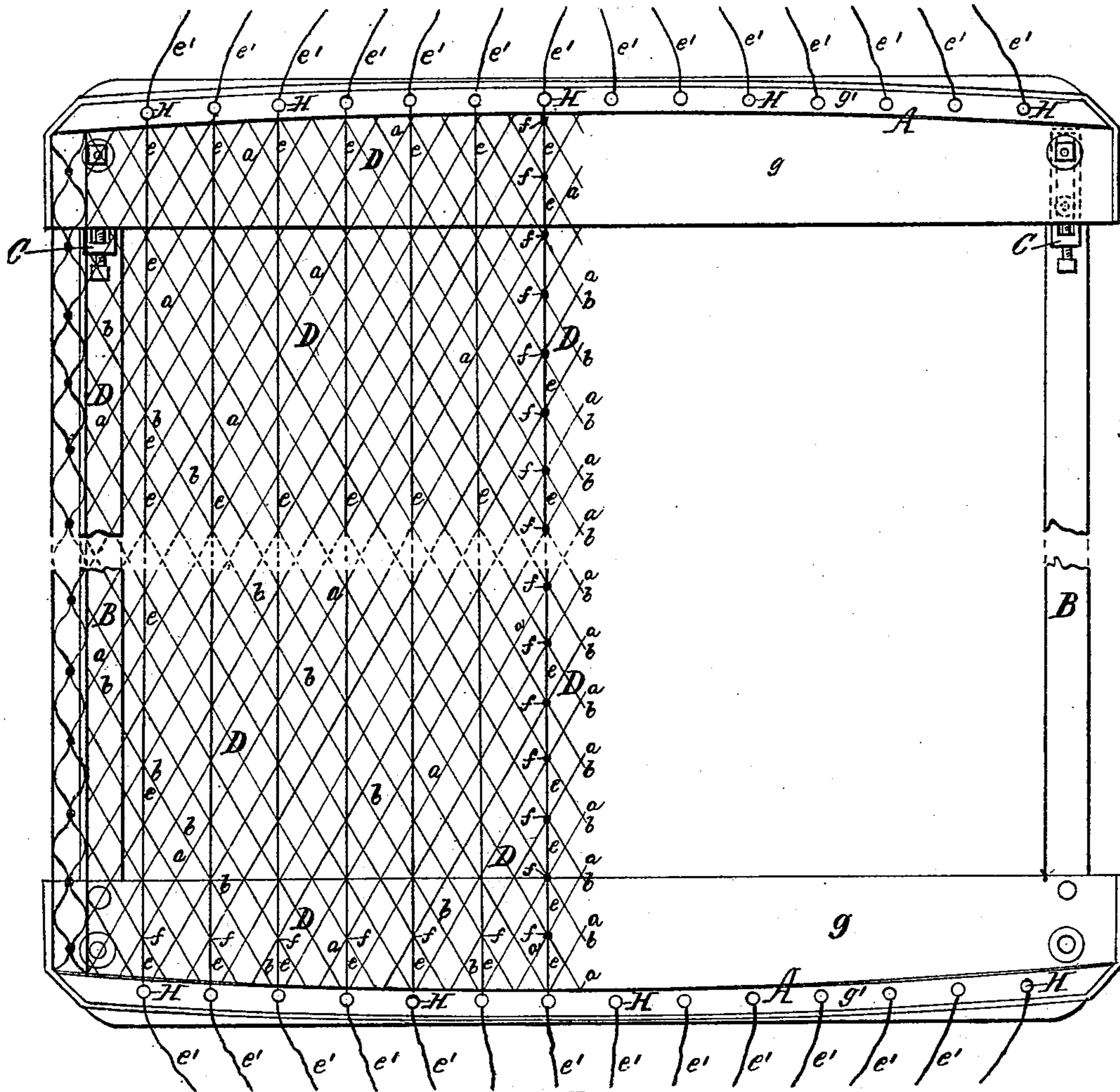
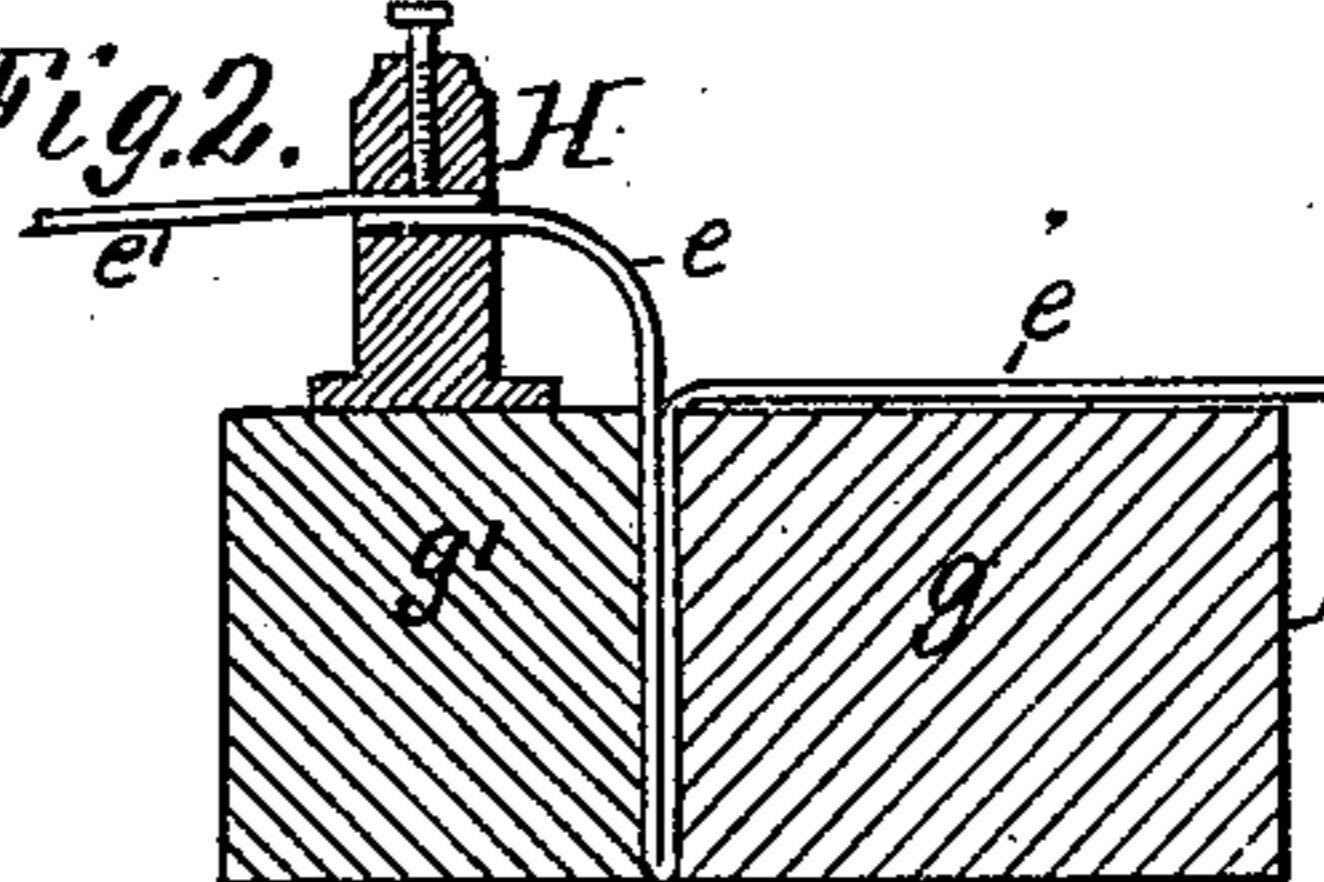


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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MATTRESS OR BED BOTTOM.

SPECIFICATION forming part of Letters Patent No. 282,561, dated August 7, 1883.

Application filed December 19, 1882. (Model.)

To all whom it may concern:

Be it known that I, FREDERIC A. PALMER, a citizen of the United States, residing in the city of New York, county and State of New York, have invented a new and useful Improvement in Mattress or Bed Bottoms, of which the following is a specification.

The object of my invention is to provide means in the construction of a mattress or bed bottom whereby to supply, restore, and equalize the electric and magnetic forces of the human body indispensable to its health and vigor. To this end I apply such forces by means of electric wires connected with a mattress or bed bottom having supporting-wire, ordinarily either reticulated or woven, and upon which a patient is to be treated while lying on a bed in a horizontal or recumbent position, either asleep or awake, such posture of the patient being the most natural and effective one for receiving the beneficial action of electric or galvanic currents generated either by a single battery or by more than one battery, as the case may be.

In the drawings, Figure 1 is a plan view of a bed-bottom having head and foot rails, A A, and side rails, B B, and provided with tightening devices C, for stretching the wire fabric D; and Fig. 2 is a sectional view of the head and foot rails, A A, in the line of one of the conducting-wires of the bed-bottom, which connects with a galvanic battery.

The head and foot rails, as indicated in Fig. 1, are placed upon the side rails, B, at the ends of the latter, as shown, while over the whole is stretched a wire fabric, D, one longitudinal half of which only is represented in the figure, while a central portion of both the wire fabric and the bed-bottom frame A A and B B is also shown as broken out in said figure. In this instance I have shown the wire fabric D as composed simply of reticulated wires *a* and *b*; and throughout the whole length of the fabric D, and properly spaced apart throughout the width of said fabric, I apply electric conducting strips or wires *e*, of either copper or zinc, extending them from end to end of the bed-bottom, and secured in any suitable way. The wires *e* at the point *f*, where they cross the wires *a* *b*, are wound around the wires *a* *b*, thus not only making a close contact with the wires *a*

b, but also holding the wires *a* *b* in proper reticulated position, and thus the wires *e*, *a*, and *b* are made to mutually support each other.

The head and foot rails, A A, are constructed of two pieces, *g g'*, as shown, and the wire fabric D, having the electric conducting-strips *e* interwoven therewith, is at both ends firmly confined by any proper means between the pieces *g* and *g'* of the head and foot rails, A A, but with each of the conducting-strips *e* extending up and entering a stand-post, H, as shown in Fig. 2. At each of the stand-posts H the conducting-strips *e* are put in connection, as shown, with a conducting strip or wire, *e'*, leading off to a galvanic battery situated at each end of the bed-bottom and beneath the same, the connection of the conducting-strips *e* and *e'* with said batteries being made such and in the well-known way as to establish an electric current between the two batteries and throughout the wire fabric D, with its interwoven conducting-strips *e*.

I do not confine myself to the particularly-described mode of construction of the wire fabric D, nor to the particularly-described mode of connecting the electric conducting-wires *e* therewith, nor to the described frame A A B B for a mattress or bed bottom, my main purpose being to provide wires or their equivalents in mattress or bed bottoms for the attachment of either one or more batteries artificially generating and having electro-magnetic or galvanic forces for the purpose of supplying, equalizing, and restoring the nerve forces of the human body; and this I accomplish by means which admit of the best position of the human body for receiving the action of the battery or batteries—to wit, while the body is resting in a recumbent or horizontal position.

In the drawings I have represented stand-posts A with binding-screws; but these may be dispensed with by extending the conducting-wires *e* from the bed or mattress bottom, so that they may be connected directly with the battery or batteries. In this case the wires *e e'* would be as one wire, and would not be secured between the parts *g g'* of the head and foot rails, A A.

In the manufacture and use of my bed and mattress bottom I would preferably adopt the following as the best construction and mode of

use: The supporting fabric to be of wires spirally interwoven, and with the electric conducting-wires intertwined spirally with these common woven wires, or with the woven wire
5 commonly used for bed-bottoms; and the battery which is employed may consist of what is known as the "galvanic battery" or "voltaic pile," this battery to be connected directly with the conducting-wires by fastening
10 the positive pole with the conducting or copper wires, while the negative pole is fastened on the other side of the supporting fabric to the common woven non-conducting wire, thus completing the circuit, and in this way charging the whole bed or mattress bottom, which
15 charge of the electric current will continue so

long as the battery lasts, unless disconnected. The battery may be a component part of the bed bottom or mattress; but this is optional with the manufacturer. 20

What I claim as my invention, and desire to secure by Letters Patent, is—

A mattress or bed bottom as a new manufacture, combining in its construction conducting electric wires with the main supporting
25 fabric of the mattress or bed bottom, substantially as and for the purpose described.

FREDERIC A. PALMER.

Witnesses:

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JAMES T. KEYES.