

No. 658,601.

Patented Sept. 25, 1900.

I. TIMAR.

APPLIANCE FOR IMPARTING HEAT AND ELECTRICITY TO THE BODY.

(Application filed Nov. 10, 1899.)

(No Model.)

Fig. 3.

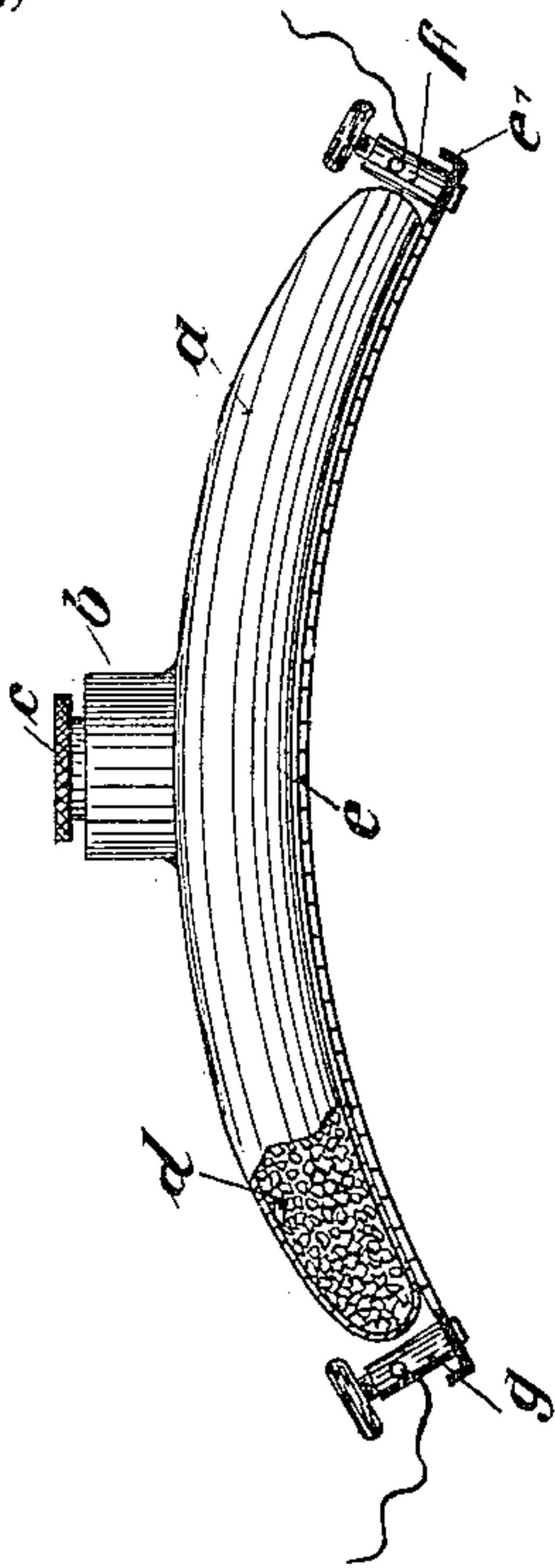


Fig. 4.

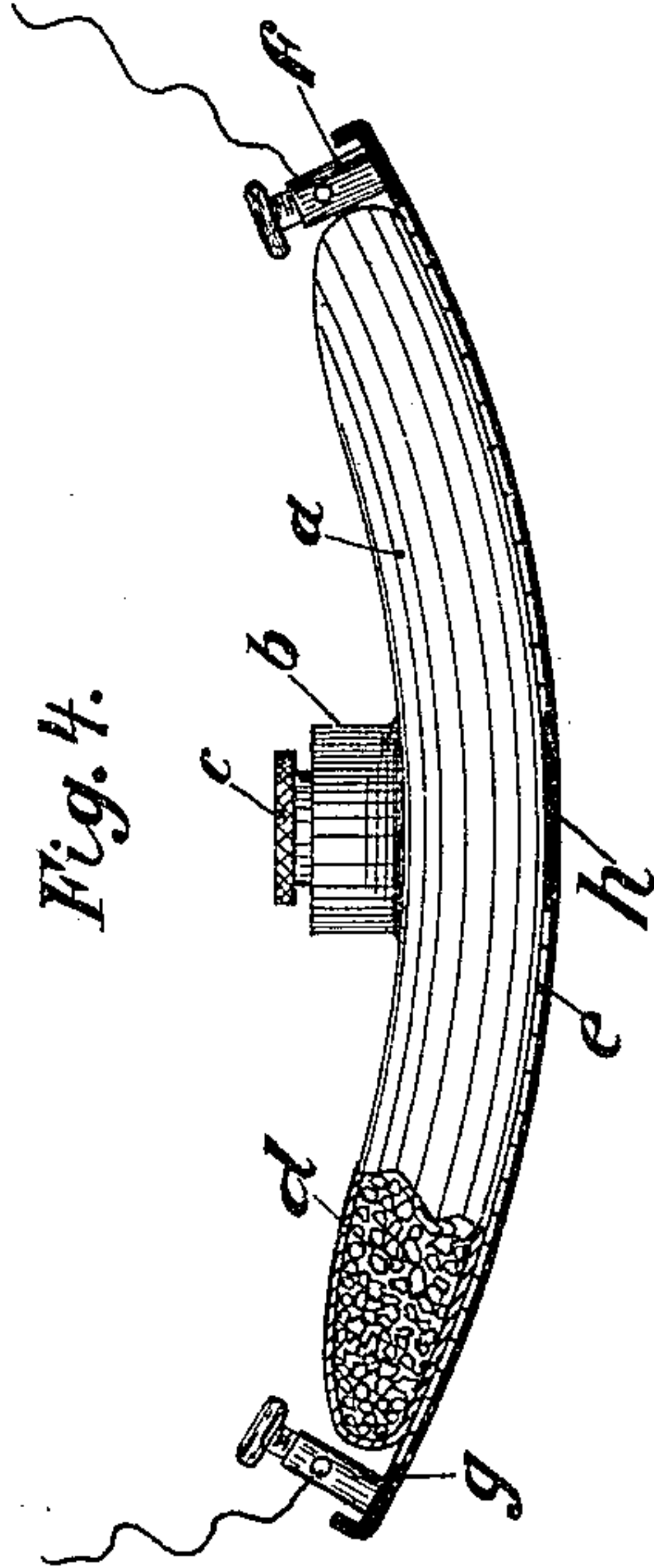


Fig. 1.

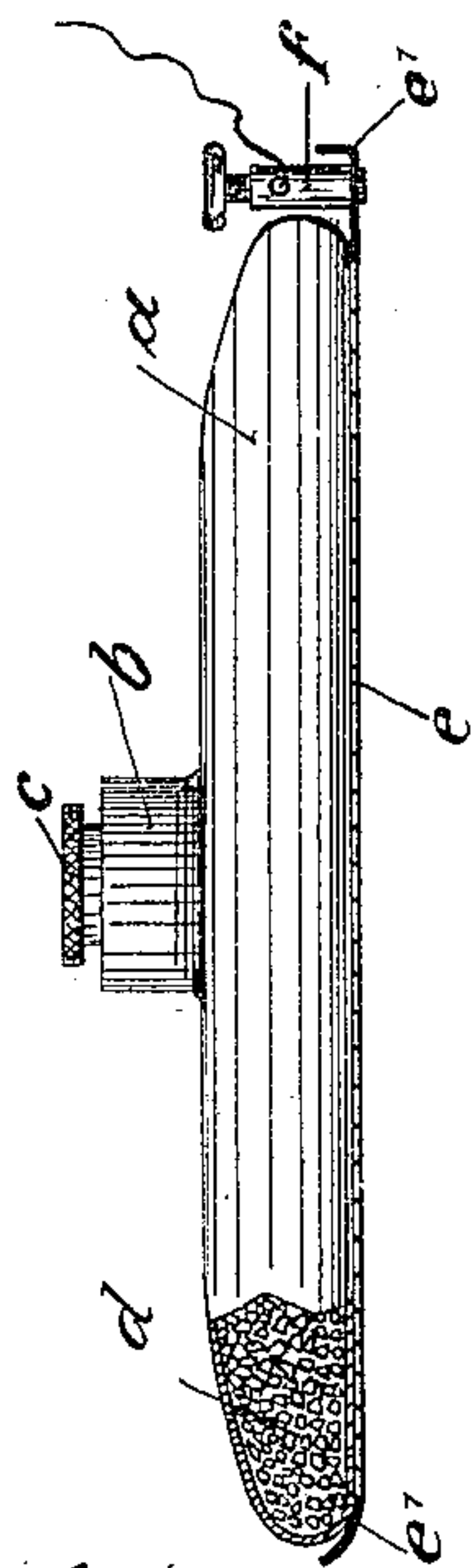
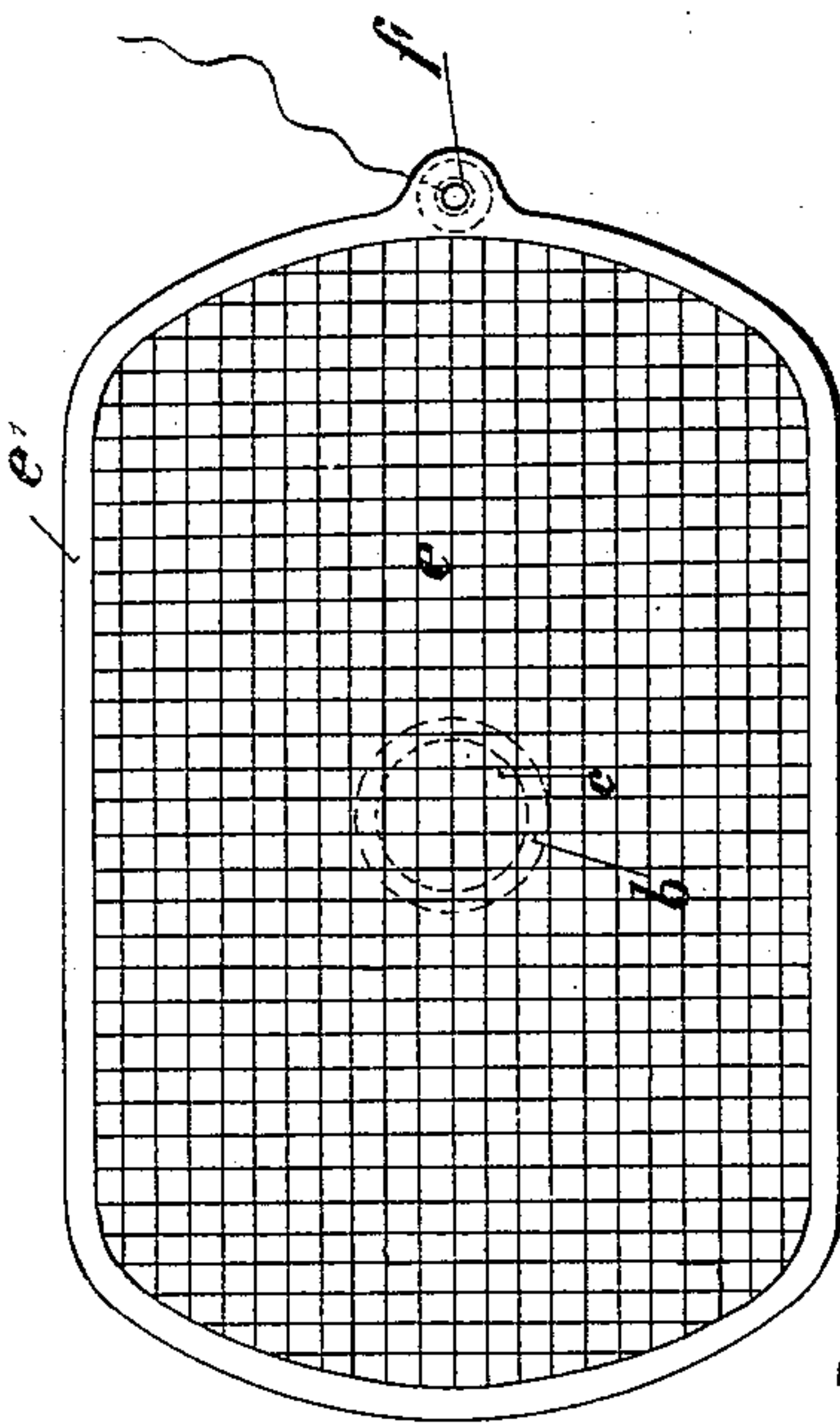


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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APPLIANCE FOR IMPARTING HEAT AND ELECTRICITY TO THE BODY.

SPECIFICATION forming part of Letters Patent No. 658,601, dated September 25, 1900.

Application filed November 10, 1899. Serial No. 736,469. (No model.)

To all whom it may concern:

Be it known that I, IGNAZ TIMAR, manager, a subject of the King of Prussia, German Emperor, residing at Kommandantenstrasse 14, Berlin, in the Kingdom of Prussia and Empire of Germany, have invented certain new and useful Improvements in Appliances for Imparting Electricity and Heat to the Body, of which the following is a full, clear, and exact description.

This invention has reference to an appliance for imparting heat and electricity to the body, and has for its object an appliance which enables the body to be electrified and heat to be introduced at the same time.

The invention is illustrated in the annexed drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a plan viewed from underneath, of one form of appliance, while Figs. 3 and 4 are modifications of same.

Referring to the drawings, and more particularly to Figs. 1 and 2, *a* is an india-rubber bag of any suitable shape, on the upper side of which is a neck-shaped opening *b*, closed by means of the stopper *c*, the neck *b* serving as a handle for the appliance and allowing the bag to be filled with a calorific substance *d*, which may be crystallized acetate of sodium, crystallized hyposulfate of sodium, or crystallized caustic baryta. These three chemical substances are well known to possess the quality of melting in their own water of crystallization, and in so doing to absorb a large amount of latent heat. When recrystallizing, the latent heat is applicable for heating objects or parts of the body brought into contact with the india-rubber bag. The calorific substances mentioned may be melted by suspending the bag in warm water or in any other suitable way. The bag *a* is laid on a piece of metallic netting or a perforate or imperforate plate *e* in such a manner as to fit into the turned-up edges *e'* of the metallic netting or plate *e*. The metallic netting *e* at its edge *e'* carries a terminal *f* to receive a wire for the electric current.

It is evident that in using the apparatus represented in Fig. 1 it is necessary to have a cathode or carrying-off plate, (not shown

in the drawings,) so as to provide a closed circuit for the current. The electrical current spreads from the terminal *f* over the wire-netting *e* and circulates to the above-mentioned cathode or carrying-off plate.

Figs. 3 and 4 show modifications of the electrifying and heating device. In Fig. 3 a second terminal *g* is attached to the metallic netting in place of the cathode or carrying-off plate, so that the current will circulate to a large extent directly from *f* through the wire-netting *e* to *g*, while a smaller portion of the current will pass through the body from *f* to *g*. By this means and according to the form given to the electrifying body-heater it is possible to vary the course of the electric current through the body and also to enable the electrifier or body-heater to fit well to the various parts of the body. In Fig. 4 the arrangement is similar to that of Fig. 3; but in this case an isolating layer *h* is arranged in the metallic netting, so that the current is forced at the part *h* to pass in its entirety through the body. In this manner that part of the body which is under *h* forms part of the circuit, and the current must pass through it in its full strength.

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

1. An appliance for heating and electrifying the body comprising a metallic frame a receptacle attached to one side of said frame, and a heating material soluble in its own water of crystallization contained in said receptacle, as set forth.

2. In an appliance for heating and simultaneously electrifying the body, the combination of a metallic frame having electrical terminals insulating material interposed between the parts of said frame, and a receptacle attached to one side of said frame and adapted to contain a heating medium, substantially as set forth.

In witness whereof I subscribe my signature in presence of two witnesses.

IGNAZ TIMAR.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.