

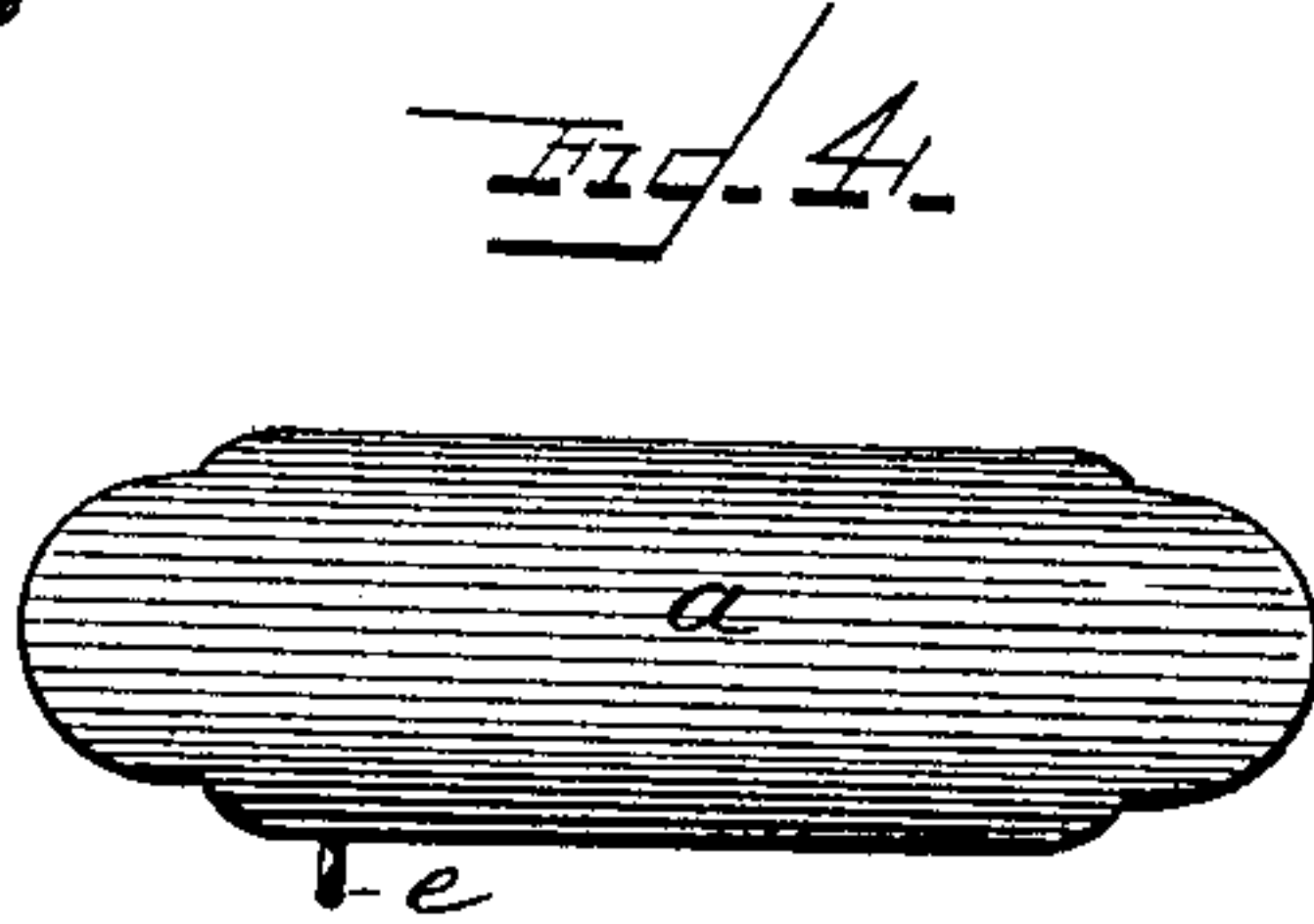
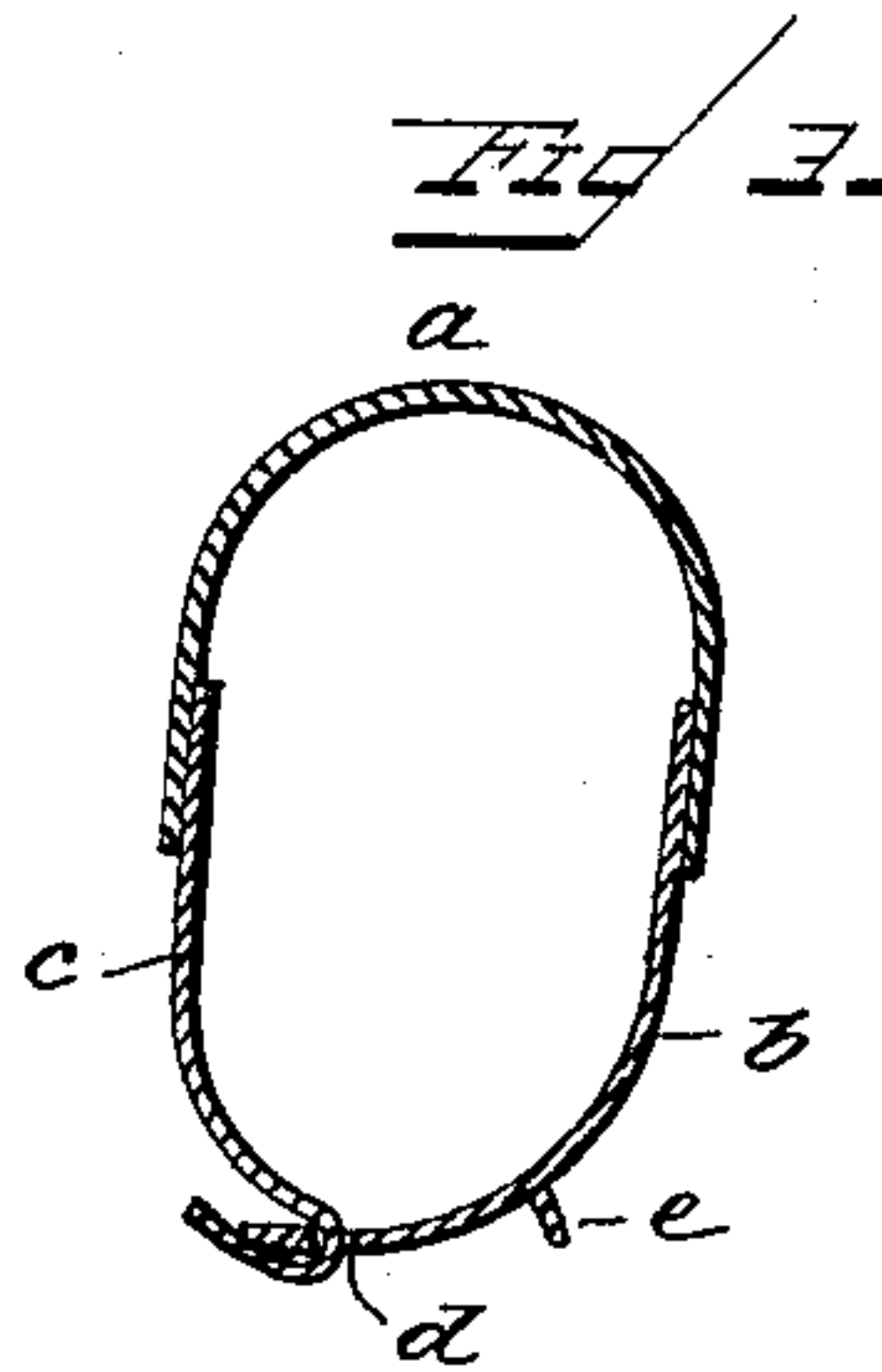
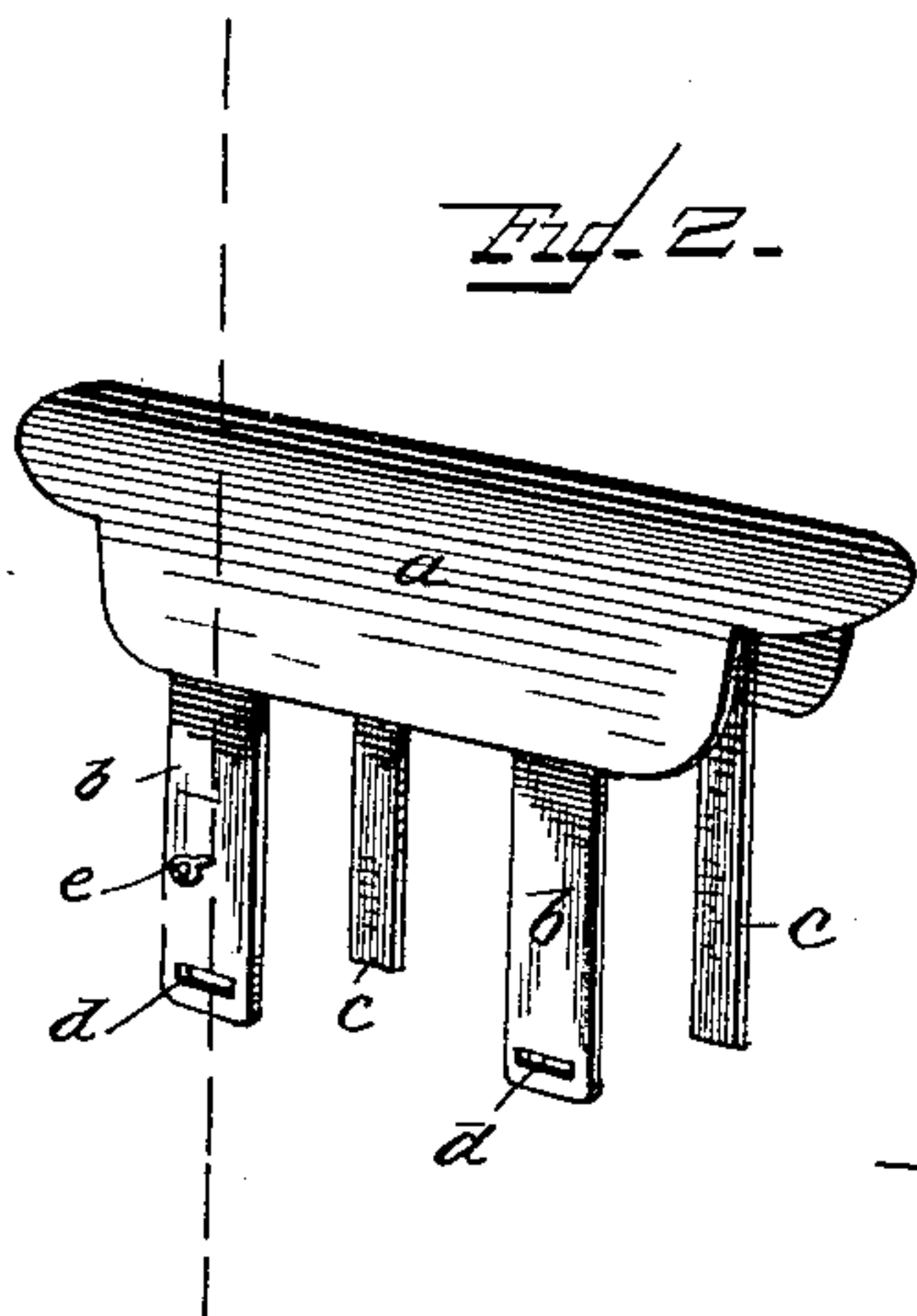
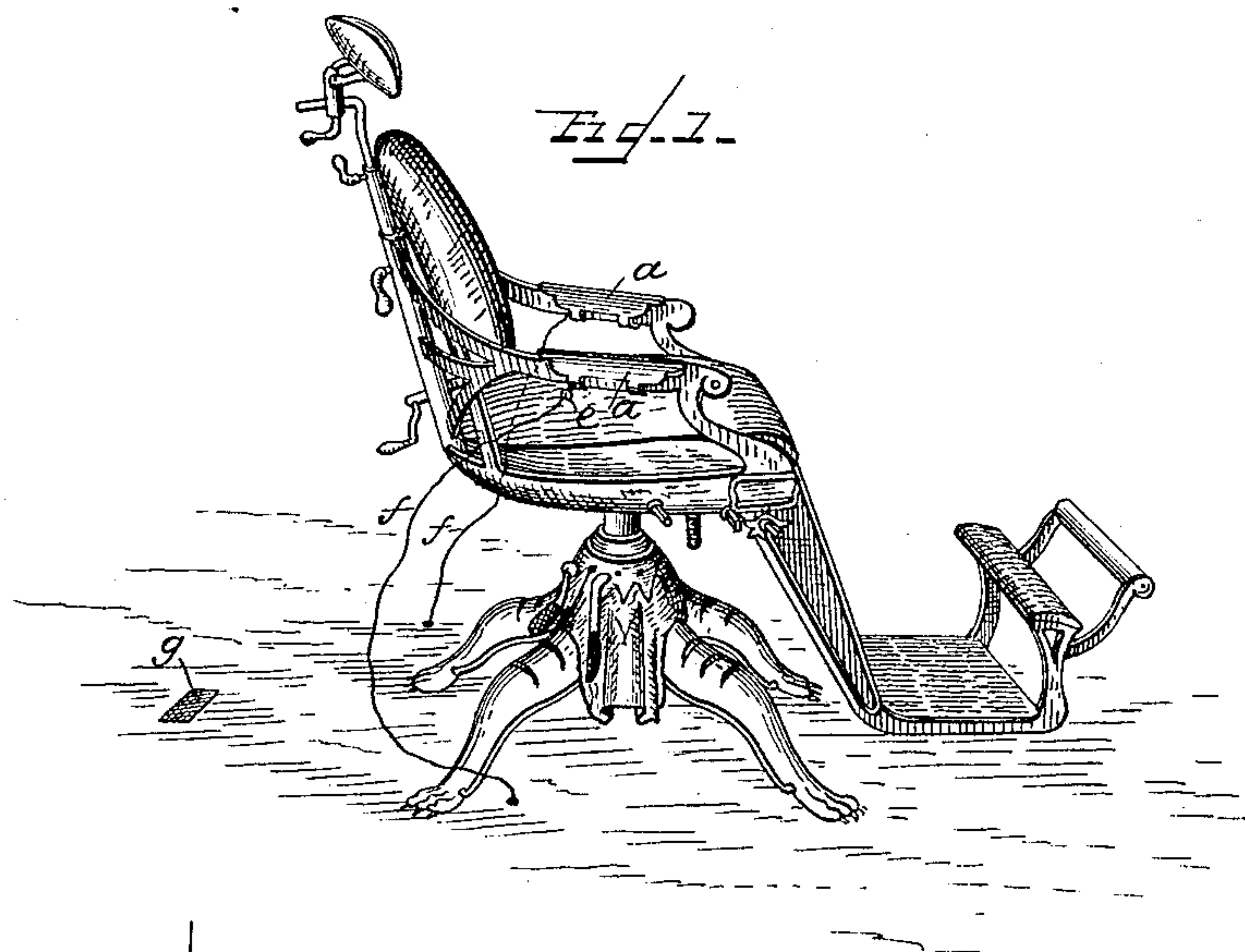
(No Model.)

C. A. EISENHART.

ELECTRICAL ATTACHMENT FOR DENTAL CHAIRS.

No. 326,957.

Patented Sept. 29, 1885.



WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES A. EISENHART, OF YORK, PENNSYLVANIA.

ELECTRICAL ATTACHMENT FOR DENTAL CHAIRS.

SPECIFICATION forming part of Letters Patent No. 326,957, dated September 29, 1885.

Application filed November 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. EISENHART, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented a certain new and useful Improvement in Electrical Attachments for Dental Chairs, of which the following is a full, clear, and exact description.

The object of this invention is to provide a simple and cheap attachment for use by dentists on their operating-chairs in putting patients under the influence of an electric current in order to fix the patient in the chair, and to a certain extent divert the mind from the pain usually attending such dental operations as extracting teeth. The use in dental operations of ordinary anæsthetics is attended with great risk, and their proper administration is both awkward and inconvenient, and at the same time costly. These considerations have led me to the seeking of some more simple, inexpensive, and convenient substitute, and I have found such in the electric current. I have demonstrated by numerous practical operations that persons may be sufficiently electrically influenced far below a danger-point to stand without any considerable inconvenience or suffering ordinarily very painful dental operations. By the use of my invention the patient may be put under the influence of electricity and to the extent required in an instant, without the disagreeable anticipations accompanying the use of anæsthetics, and by the most simple and inexpensive appliances, and the application and continuance of the use of the electric current or influence is wholly under the control of the operator.

The invention consists in electrodes, of shape and character for ready application to the arms of a dental chair, to be grasped by a patient while undergoing a dental operation, substantially as hereinafter particularly set forth and claimed.

In the accompanying drawings illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view of a dental chair supplied with my invention. Fig. 2 is a perspective view of one of the electrodes detached, and on a larger scale. Fig. 3 is a vertical

cross-section on the line *xx*, Fig. 2, and Fig. 4 is a top plan view of the same.

My electric attachment for dental chairs is composed of metal plates *a*, of a size and shape to fit the arm of the chair at the point usually or conveniently occupied by a patient's hands while in the chair—say that portion usually upholstered. If the chair-arms be metallic, the plates *a* will be insulated therefrom; if of wood or upholstered, no insulation is needed. The plates *a* (one for each arm, and duplicates in fact, or rights and lefts, if need be) are provided with straps *b c*, for securing them to the arms. These straps may be of metal, textile material, leather, or other substance, but are here shown as of metal, and each plate is provided with two straps (say *b*) broader than the others, *c*, opposite them, and in pairs with them. The straps *b* have slots *d* in them, through which the straps *c* are passed and bent back upon straps *b*, to securely connect said straps in pairs and firmly attach the plates to the arms of the chair, the straps passing beneath and embracing the under sides of the arms, with the plates resting on top the arms. The straps, when of textile material, leather, or the like, may be provided with buckles for connecting them together.

The plates are provided with the binding-posts *e*, (in this instance eyes,) in metallic contact therewith, and to these eyes, on opposite plates, when in position on the chair, are connected the circuit-wires *f f* of an electric generator, such as a battery, which is conveniently located in a cellar or elsewhere out of sight. These wires are shown as extending through the floor, and at *g* is indicated a foot-piece, whereby the operator may make the connection and regulate the strength of current to be used. Such appliances, being well known, need no extended description here. I, however, prefer to use either of the forms of electrical apparatus shown in my application for Letters Patent No. 155,506, filed February 10, 1885, in which last-named case I lay claims to the broad invention herein set forth.

It is obvious that if the circuit-wires be properly connected with a source of electricity, and the connection made at the foot-piece, and a patient grasp the two plates in his hands, the circuit will be completed and

the patient put under the influence of the electric current, and in this condition, besides being held rigidly in the chair, he is far less sensitive to pain than otherwise, and teeth
5 may be extracted very expeditiously and economically, both as to time and material, by the operator, without any great strain upon the sensibilities of the patient, and without the latter losing consciousness.

10 In conducting the operation, if it be found that the tooth is difficult to pull, the operator will increase the strength of the electric current, and so render the patient less capable of resistance and more tractable, as well as less
15 sensitive, owing to the diversion of his sensibilities and the electric shock to his nerves. The electric current is thus useful as a sort of counter-irritant.

20 The plates may be readily detached when not in use, and may be applied by the most unskillful.

25 The value and importance of this invention to dentists generally, and specially to those put in compromising positions by accidents resulting from the use of anæsthetics, cannot be overestimated.

30 I do not limit the use of the invention to dentists' or dental chairs, technically so called, as it is equally applicable to any arm-chair. It is also useful for general practice in applying electricity to the human body. For trade

purposes the plates may be got up in various styles of ornamentation and shape.

I am aware that it is not new to provide a chair with an electric apparatus for applying
35 electricity to the human body.

What I claim is—

1. The portable apparatus herein described, for use in dental operations, in connection with a chair, consisting of the hand-
40 pieces or electrodes *a*, having straps *b* and *c*, whereby they are adapted to be attached to any chair, and provided with binding-posts or eyes *e*, for receiving the conductors of an electric generator, substantially as shown. 45

2. The combination, with a chair having arms, of the portable apparatus for use in dental operations, consisting of the hand-
50 pieces or electrodes *a*, having straps *b* and *c*, whereby they are attached to said arms, and means for connecting said plates with the wires of an apparatus for generating a current of electricity, substantially as shown, and for the purpose described.

55 In testimony whereof I have hereunto set my hand this 8th day of November, A. D. 1884.

CHARLES A. EISENHART.

Witnesses:

JOS. R. STRAWBRIDGE,
JAMES K. LEWIS.