No. 686,859. Patented Nov. 19, 1901.

E. L. MADDEN.

ELECTRIC GENERATOR AND DISTRIBUTER FOR MEDICAL TREATMENT.

(Application filed Mar. 28, 1901.)

(No Model.)

Fig. 1

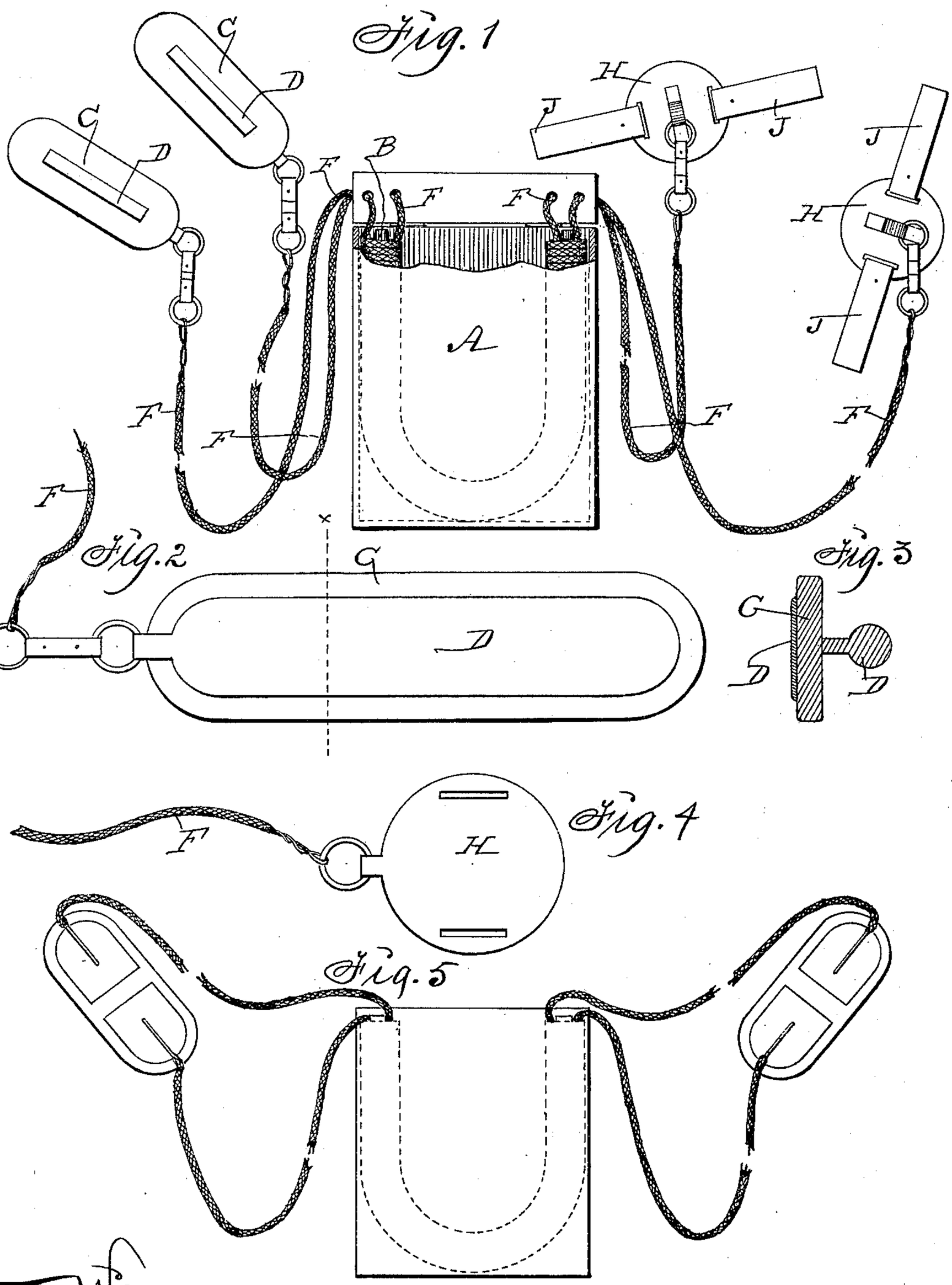

Fig. 2

Fig. 3

Fig. 4

Fig. 5

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UNITED STATES PATENT OFFICE.

EDWIN LYMAN MADDEN, OF KANAWHA, IOWA.

ELECTRIC GENERATOR AND DISTRIBUTER FOR MEDICAL TREATMENT.

SPECIFICATION forming part of Letters Patent No. 686,859, dated November 19, 1901.

Application filed March 28, 1901. Serial No. 53,263. (No model.)

To all whom it may concern:

Be it known that I, EDWIN LYMAN MADDEN, a citizen of the United States, residing at Kanawha, in the county of Hancock and State of Iowa, have invented a new and useful Electric Generator and Distributer for Medical Treatment, of which the following is a specification.

My object is to provide a simple, durable, convenient, and efficient apparatus for relieving human distress and suffering incident to impaired circulation of the vital fluids and the low degree of temperature occasioned thereby in diseased portions of the body that affect the general health.

Heretofore nerve-currents have been stimulated by means of therapeutical electrization, and therefore I do not claim a new method of treatment, but improved means for accomplishing the purpose contemplated.

My invention consists in the construction, arrangement, and combination of parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows the forms and relative positions of all the parts combined as required for practical use. Parts of the case in which the magnet is inclosed is broken away. Fig. 2 is a bottom view, and Fig. 3 a transverse sectional view, of one of the devices adapted to be manually operated to produce frictional electricity and a static charge in the magnet. Fig. 4 is an enlarged bottom view of one of the anodes connected with the magnet by means of an insulated flexible conductor for distributing a current to any part of a person to which the anode may be applied to stimulate nerve force, to increase circulation, and equalize the temperature of the person as required to restore a diseased and partially dormant member of the body to its normal condition. Fig. 5 shows a modified form of my apparatus in which the anodes and friction-plates are jointly connected with the magnet in such a manner that when the friction-plates and anodes are in contact with a person and simultaneously operated by hand to produce frictional electricity or only one of the plates and one of the anodes so operated the body of the person will be the field through which a current will be established as required to affect the person.

The letter A designates a case adapted for inclosing a magnet B, that may vary in size and weight as desired. Friction-plate holders C are made of rubber, preferably flexible, that will bend as required to be pressed and rubbed against different parts of a person. They are provided with elongated fixed ribs D, adapted for use as handles.

On the bottoms of the holders C are fixed plates D, made of silk and shellac or other suitable material, preferablysuch as will be pliable, to be pressed and fitted to the body of a person while in operation. These plates are electrically connected with the coils on the magnet by means of insulated conductors F, that may vary in length as desired at one end of the magnet. From the other ends of the coils and magnet extend insulated conductors, to which are connected anodes H, that have flexible extensions J, adapted for distributing a current advantageously to the person upon whom they are placed.

It is obvious that when a patient is properly insulated and my invention applied as required for practical use and the friction-plates D rubbed upon the person the electric current produced penetrates one of the coils on the magnet and by induction extends the current through the other coil, and by means of the anodes electrically connected with the coils at the other end of the magnet B and the application of the anodes to the person a field is established between the friction-plates and the anodes by that portion of the body of the person that intervenes between the friction-plates and the anodes.

In the practical use of my invention when the friction-plates are rubbed over the body-surface of a person a limited amount of frictional electricity is produced and conducted, by means of the plates and the insulated conductors and the coils on the magnet, to the anodes and from thence distributed to increase the temperature and stimulate the circulation and nerve force of the patient that is subjected to such treatment.

Having described the purpose and construction, arrangement, and combination of all the elements of my invention, its practical oper-

ation and utility will be understood by persons familiar with the art to which it pertains.

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

1. In an electric generator and distributer, an insulated friction-plate holder having a handle on its top and a friction-plate and conductor on its bottom, in combination with flexible insulated conductors and coils on a magnet, to operate in the manner set forth for the purposes stated.

2. In an electric generator and distributer, an anode having flexible extensions in combination with flexible insulated conductors and coils on a magnet, to operate in the manner set forth for the purposes stated.

3. In an electric generator and distributer comprising a case, a magnet fitted in the case, wire coils on the magnet, insulated friction-plate holders having handles on their tops, friction and conducting plates on their bottoms, insulated flexible conductors connected with the friction-plates and the coils at one end of the magnet, insulated conductors connected with the coils at the other end of the magnet and provided with anodes at their other ends, arranged and combined to operate in the manner set forth for the purposes stated.

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Witnesses:
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