

(No Model.)

F. FRITSCHÉ.
GALVANIC CHAIN.

No. 526,182.

Patented Sept. 18, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

FRIEDERIKE FRITSCHÉ, OF BERLIN, GERMANY.

GALVANIC CHAIN.

SPECIFICATION forming part of Letters Patent No. 526,182, dated September 18, 1894.

Application filed May 12, 1894. Serial No. 510,986. (No model.)

To all whom it may concern:

Be it known that I, FRIEDERIKE FRITSCHÉ, of 67 Leipzigerstrasse, Berlin, in the German Empire, have invented a new and useful Galvanic Chain for Curative Purposes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a device the object of which is to convey a slight but uniform electrical current to the human body, as a remedy for rheumatic pain, gout, convulsions and like disorders, but more especially as a convenient means for giving relief to children during the teething period, by soothing the pain caused by the cramps or spasms attending dentition, and in some cases bringing about a complete cessation of such pain; the said device mainly consisting of a chain intended to be placed round the neck of the invalid, and the effect of which is similar to that of a voltaic cell made up of elements of copper and zinc. The component parts which are necessary in a cell of this class to generate an electrical current, viz: copper, serving as a positive electrode; zinc, acting as a negative electrode; and acid, employed as an exciting liquid, are combined in the manner illustrated in the accompanying drawing. A small copper chain *a*, made of wire about one millimeter in diameter, and consisting of rounded links, is connected by a cord *c*, of wool or similar material, with another chain *b*, similar to the first in size and shape, but made of zinc; the zinc chain being in its turn similarly joined to another copper chain. Thus a uniform connection is obtained between zinc, wool, copper, zinc, and so on, in rotation. The wool cord, when in use, absorbs the perspiration secreted by the body, the wool here accomplishing the pur-

pose of the third or intermediate component of the cell, viz: the exciting agent, generally consisting of diluted acid. When the chain is placed in contact with the body, preferably round the neck, it is only necessary to connect the cords *c'* and *c''*, terminating it at either end, to close or form an electrical circuit, and the feeble current thus generated is caused to produce its beneficial action upon the nervous system of the patient.

An essential advantage of the chain over similar arrangements hitherto devised is that it is capable of exactly fitting or accommodating any part of the body which may happen to be the seat of the pain or disorder, while at the same time it is not apt to inconvenience the patient by its weight, or by chafing the skin.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A chain adapted to act as a voltaic cell, mainly consisting of zinc and copper chains with rounded links connected to each other alternately or in rotation by cords of absorptive material, whereby a slight and uniform electric current may be produced for curative action upon the body, substantially as and for the purposes set forth.

2. A voltaic chain consisting of zinc and copper links connected electrically or in rotation by links or cords of absorptive material, whereby in conjunction with perspiration absorbed from the human body, an electric current may be produced, substantially as and for the purposes set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

FRIEDERIKE FRITSCHÉ.

Witnesses:

PAUL FISCHER,
HANS BAUERLEIN.