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Electricity, Chemical & Mechanical  
Body wear.  
EXAMINER

No. 683,098.

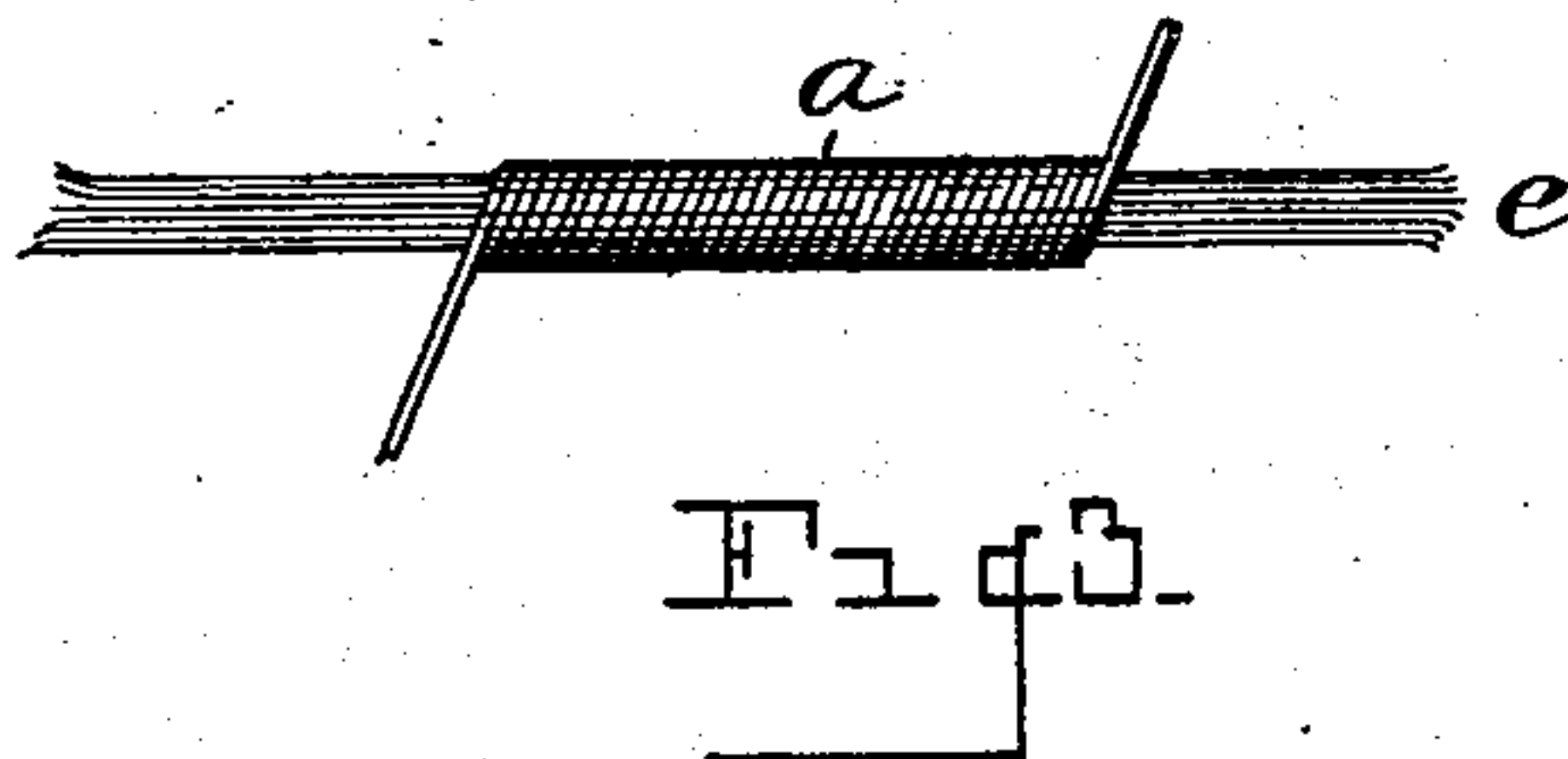
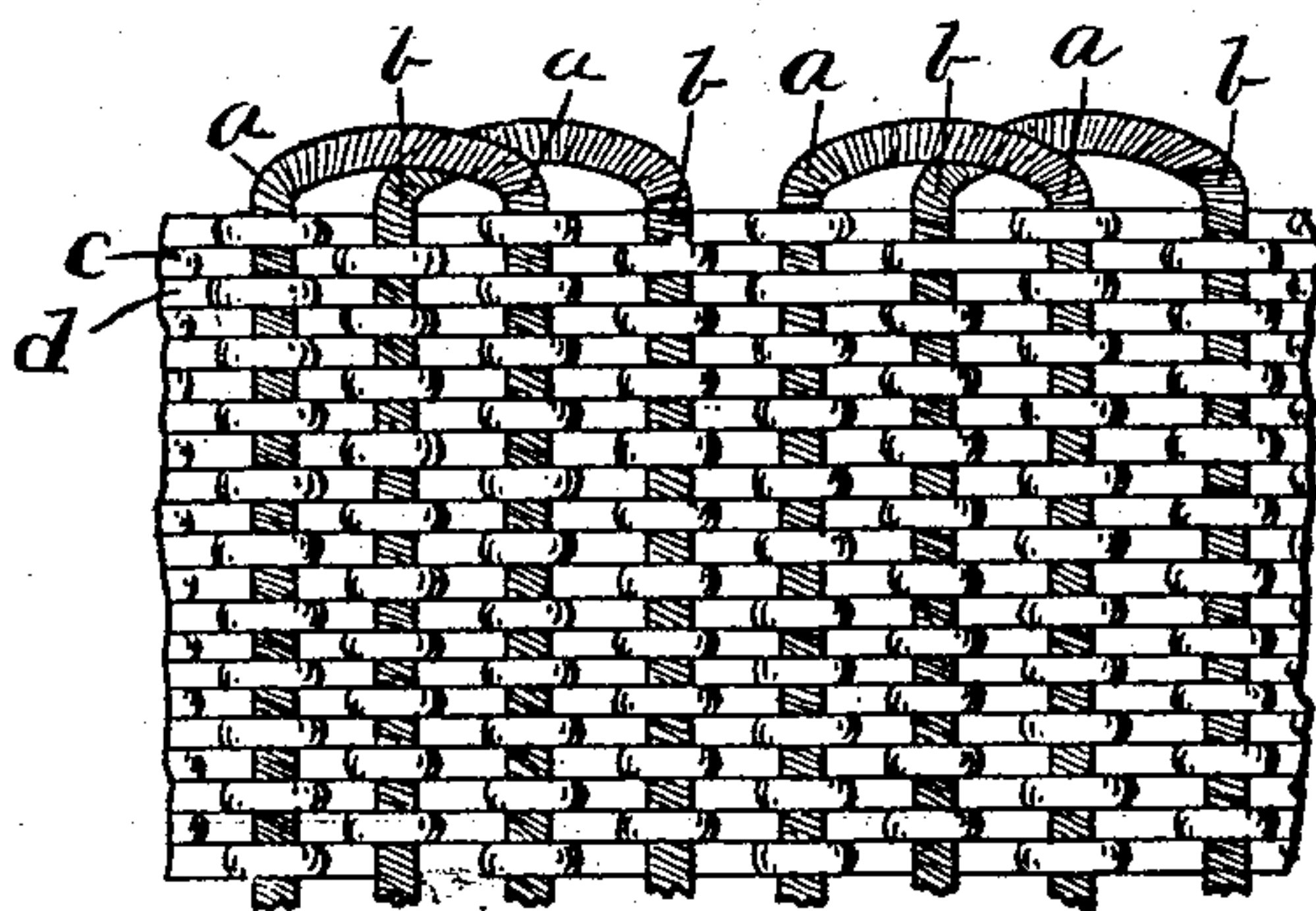
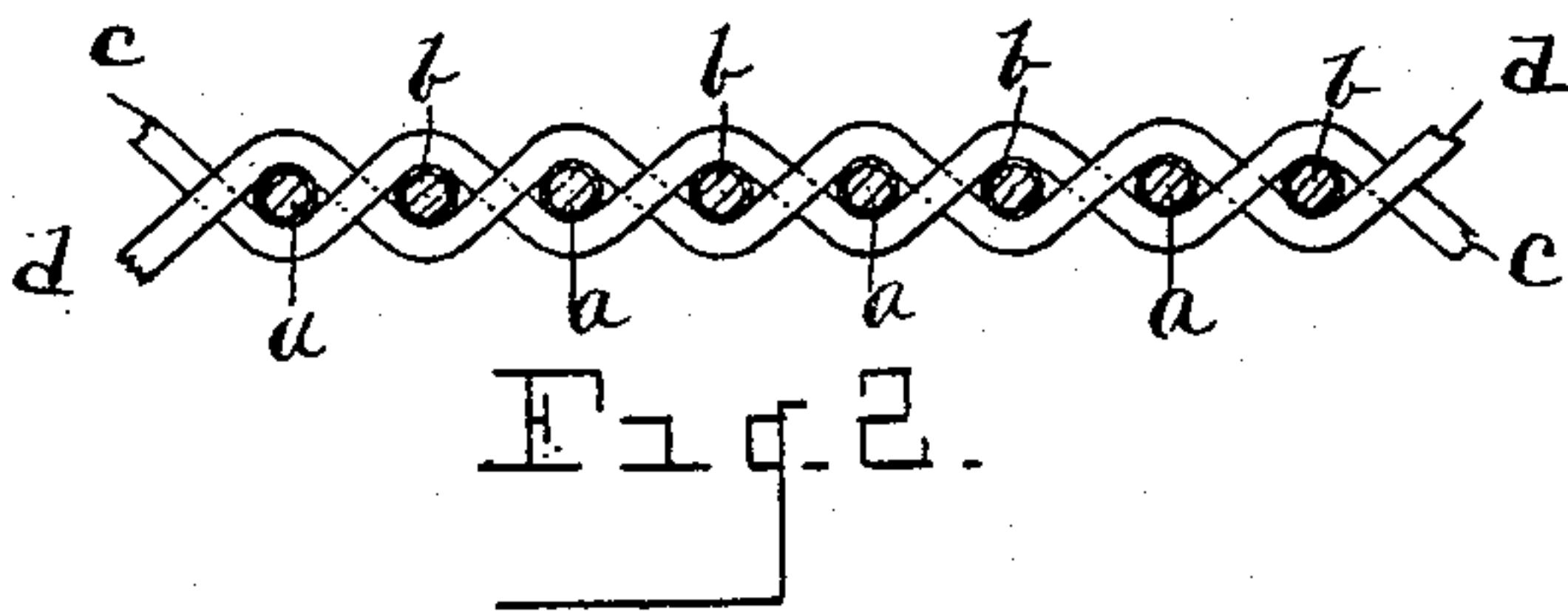
Patented Sept. 24, 1901.

L. BAECKER.

ELECTRIC CLOTH OR FABRIC.

(Application filed June 24, 1901.)

(No Model.)



WITNESSES.

O. B. Baenziger  
M. Hickey.

INVENTOR.

Louis Baeker  
By M. S. Wright

His Attorney



# UNITED STATES PATENT OFFICE.

LOUIS BAECKER, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO  
ELIAS ABERLE, OF SAME PLACE.

## ELECTRIC CLOTH OR FABRIC.

SPECIFICATION forming part of Letters Patent No. 683,098, dated September 24, 1901.

Application filed June 24, 1901. Serial No. 65,797. (No specimens.)

*To all whom it may concern:*

Be it known that I, LOUIS BAECKER, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Electric Cloths or Fabrics; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object an electric cloth or fabric as a novel article of manufacture; and it consists of the structure hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in plan, illustrating my invention. Fig. 2 is a view in cross-section. Fig. 3 is a detail view illustrating the method of winding the wires about a silk cord.

I carry out my invention as follows:

My novel article of manufacture consists of a cloth or fabric having suitably interwoven therewith zinc and copper wires or strips in such a manner as to generate electricity by thermal action.

As indicated in the accompanying drawings, *a* may indicate a zinc wire or strip, and *b* a copper wire or strip. These zinc and copper portions of the cloth or fabric preferably constitute the warp and are crossed by the woof, (indicated at *c* and *d*,) the woof being formed of any suitable material to constitute an insulation; and whereby the main body of the copper and zinc wires or strips will be insulated the one from the other. I have shown in the drawings the zinc and copper interwoven with the woof alternately and constituting the sole warp of the fabric; but I do not limit myself solely to such a construction, as my invention contemplates as coming within its scope additional warp-threads, if desired, the zinc and copper being alternately interwoven into the fabric at any desired distance the one from the other. The insulating portions of the fabric may be of any suitable material, preferably woollen. The presence of the copper and zinc so interwoven obviously makes the cloth or fabric electric, the zinc and

copper being interwoven at any desired intervals.

In Fig. 1 I have shown two alternate zinc wires or strips connected at one end thereof, two alternate copper wires or strips being also connected at one end thereof, the connected ends of the zinc wires or strips having contact with the connected ends of the copper wires or strips, to provide the necessary conditions for the generation of electricity by thermal action. My invention contemplates electricity to be generated or induced by the presence of the body of the wearer and the temperature of the body. The fabric is designed for the formation of pads of various kinds and for analogous uses, the electricity being induced by the thermal heat of the body of the wearer when applied, no battery or other electrical source of supply being required to be connected therewith.

In order to secure greater amount of circuit of the zinc and copper, I prefer that the same shall be in the form of spiral wire, the copper and zinc wires being coiled over a silk or other suitable cord, (indicated at *e*.) The interior silk cord might, however, be omitted without departing from the principle of my invention. In Fig. 3 I have shown a zinc wire wound upon a silk cord *e*, and it will be understood that the copper wire *b* may be similarly wound. A cloth or fabric so constructed is especially designed and adapted for electrotherapeutic uses. It will be understood that this fabric may be made of any desired size, width, or form.

What I claim as my invention is—

1. An electric cloth or fabric for electrotherapeutic uses formed of zinc and copper wires or strips constituting the warp of the fabric, and woof-threads interwoven with the warp insulating the zinc and copper the one from the other adjacent to the woof, said fabric adapted to be made electric when in use by the presence of the body and the temperature of the wearer.
2. An electric cloth or fabric for electrotherapeutic uses having copper and zinc interwoven therewith at suitable intervals, said zinc and copper formed of wire or strips coiled into spiral form, said fabric adapted

to be made electric when in use by the presence of the body and the temperature of the wearer.

3. An electric cloth or fabric for electro-  
5 therapeutic uses having zinc and copper interwoven therewith, said zinc and copper portions of the fabric formed of wire or strips coiled over corresponding interior cords, said cords interwoven in said fabric, said fabric

adapted to be made electric when in use by the presence of the body and the temperature of the wearer.

In testimony whereof I sign this specification in the presence of two witnesses.

LOUIS BAECKER.

Witnesses:

N. S. WRIGHT,  
M. HICKEY.