

(No Model.)

M. M. M. SLATTERY.
CORE FOR CONVERTERS.

No. 407,618.

Patented July 23, 1889.

Fig. 1.

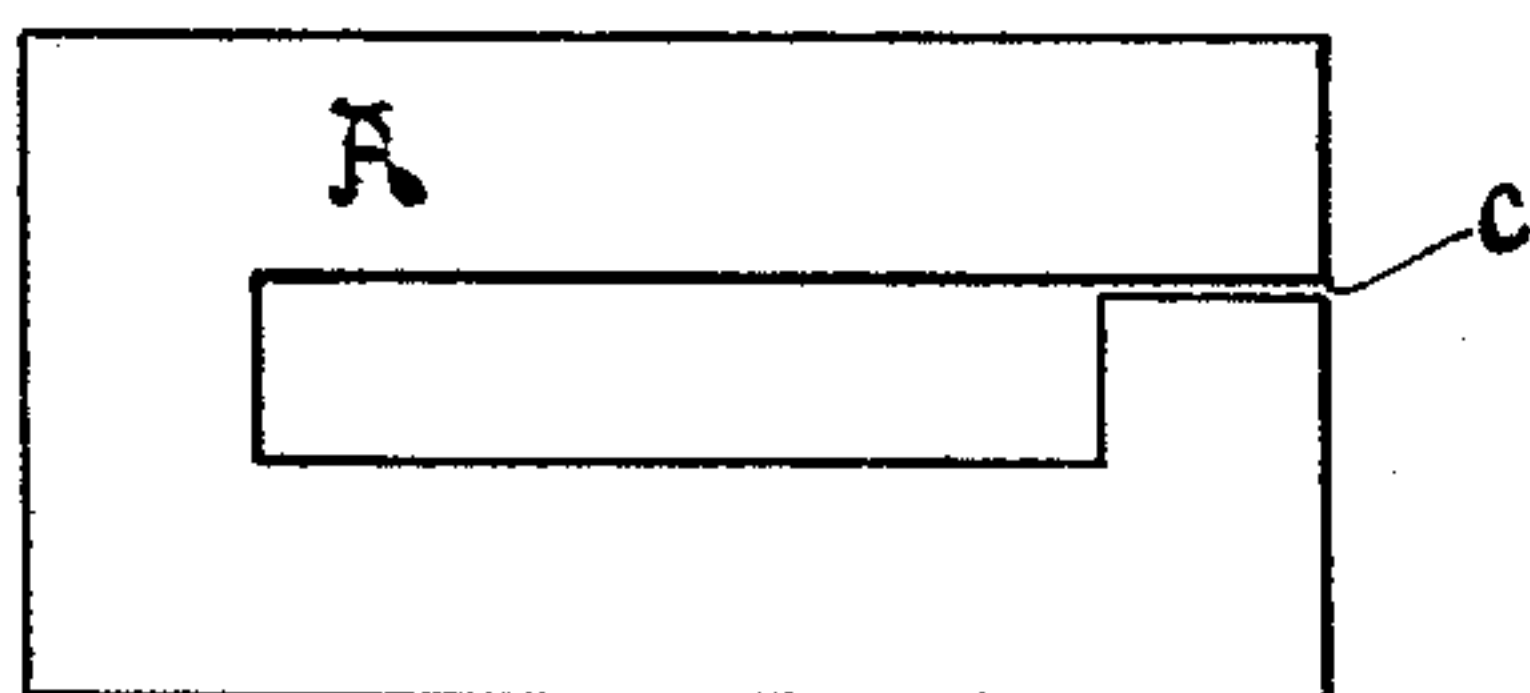
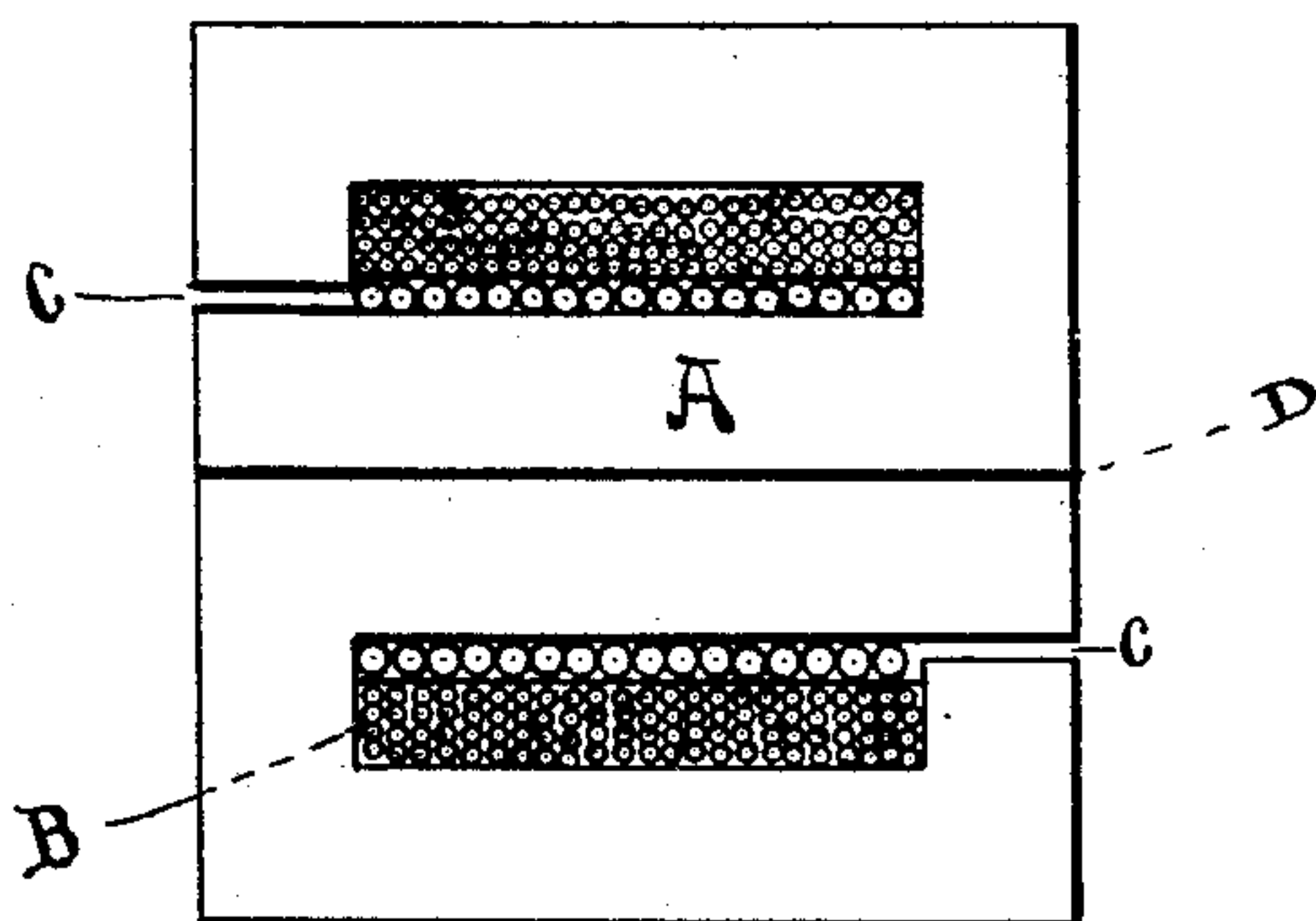


Fig. 2.

Witnesses

H. Talbot

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by his Attorney

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UNITED STATES PATENT OFFICE.

MARMADUKE M. M. SLATTERY, OF FORT WAYNE, INDIANA, ASSIGNOR TO THE
FORT WAYNE ELECTRIC LIGHT COMPANY, OF SAME PLACE.

CORE FOR CONVERTERS.

SPECIFICATION forming part of Letters Patent No. 407,618, dated July 23, 1889.

Application filed March 8, 1889. Serial No. 302,516. (No model.)

To all whom it may concern:

Be it known that I, MARMADUKE M. M. SLATTERY, a citizen of the United States, residing at Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Cores for Converters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 part of this specification.

My invention consists of an improved form of cores for converters or inductoria. As is well known, it is essential that the iron cores of converters used in connection with alternating currents be subdivided or laminated in order to prevent the formation of induced electrical currents therein, which produce heat and waste of energy. It is also necessary that the plates or laminae be of such form that they can conveniently be built up or placed in proper position with relation to the coils, previously wound upon formers, of which they are to constitute a magnetic core.

The drawings show in plan in Figure 1 the core of a converter built according to my present invention, the plates A A being used in pairs and the copper coils B B shown in section. Fig. 2 is a plan view of a single plate.

A complete plate or lamina consists of two parts or sections, each of which is itself a rectangular plate cut or punched away in the middle, the resulting strip of metal being divided at one side, preferably near one angle,

as shown in the drawings at C. The plates being thin, can easily be placed in proper position within and around the completed coils, and successive layers superposed, "breaking-joint" at the points of division C and suitably insulated one from the other. It will be observed that double the mass of metal is provided within the coil to that on either side, so that the magnetic circuit is not choked. An insulation may also be placed between the two sets of plates with advantage, as indicated at D; but this is not essential.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A core for electrical converters or transformers, consisting of two sets of superposed iron plates laid side by side, each plate of a rectangular form divided at the side opposite to the divided side in the corresponding plate of the pair, substantially as shown and described.

2. A compound plate for a converter-core, consisting of two thin flexible laminae of iron, each with a central opening to embrace the wire coils and each slitted at one end to permit its being opened and placed upon the coils, the two laminae to be laid one above the other with no insulation between them and with the slitted ends opposite each other.

In testimony whereof I do hereto subscribe my name, in the presence of two witnesses, this 27th day of February, 1889.

MARMADUKE M. M. SLATTERY.

Witnesses:

J. E. TALBOT,
ROBB. MACKIE.