

No. 771,594.

PATENTED OCT. 4, 1904.

O. WILHELMI.
METHOD OF MAKING CONDUITS.

APPLICATION FILED JAN. 14, 1904.

NO MODEL.

Fig. 1.

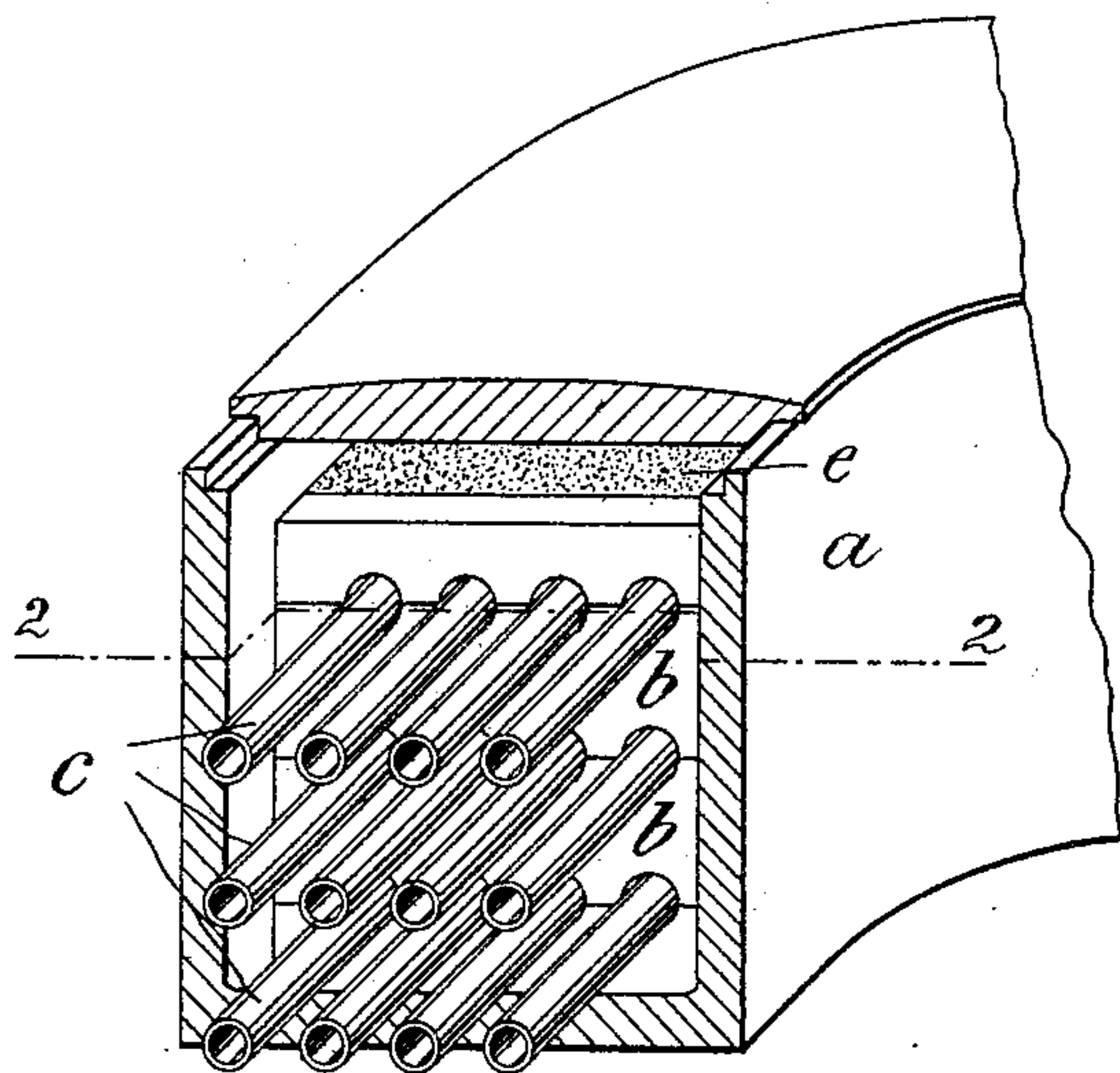


Fig. 5.

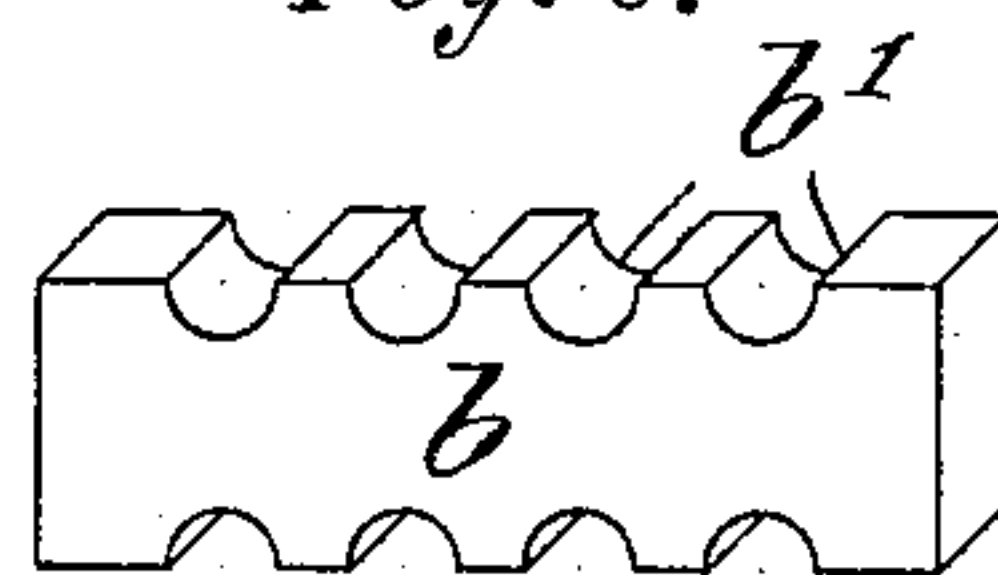


Fig. 3.

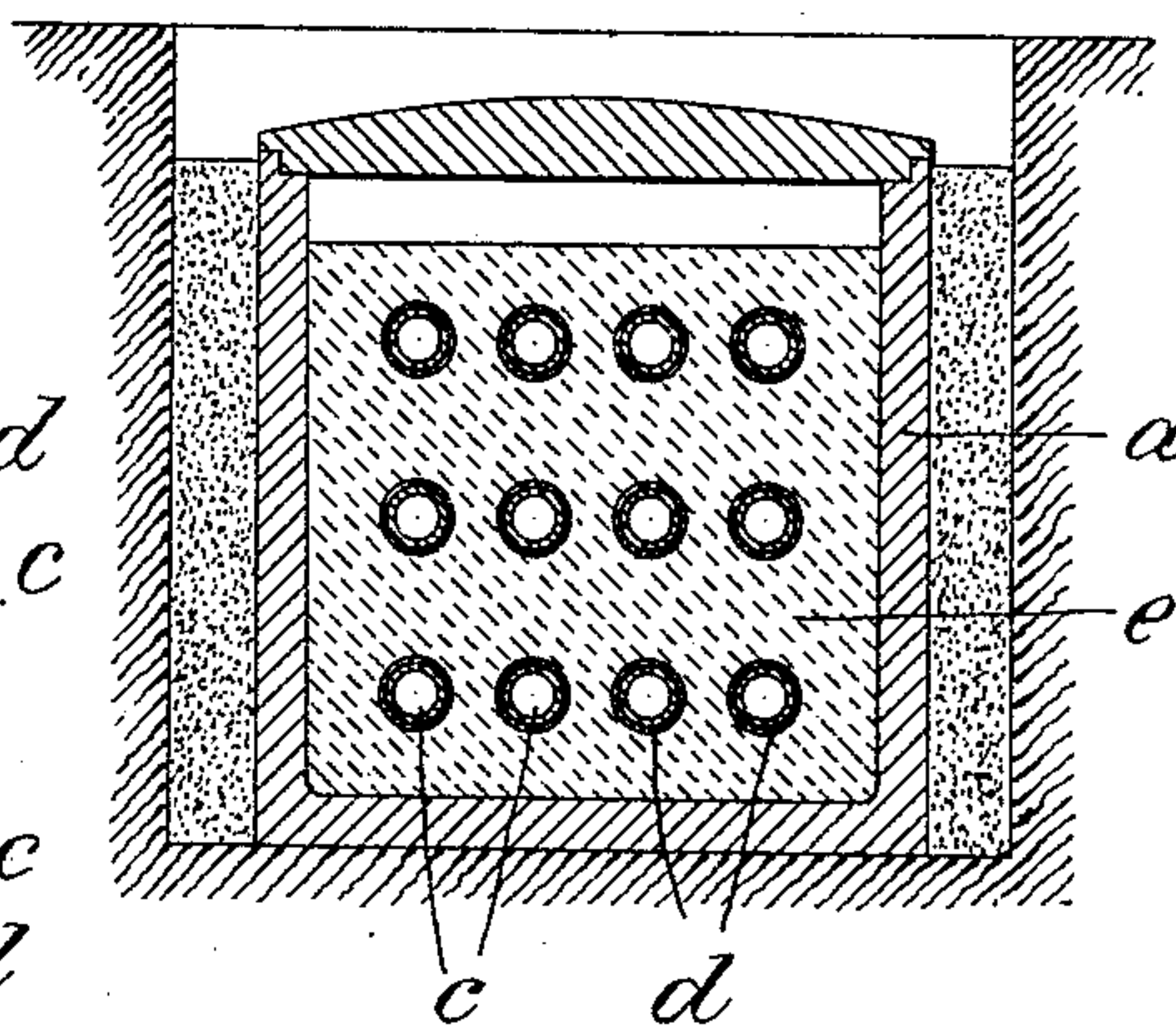


Fig. 2.

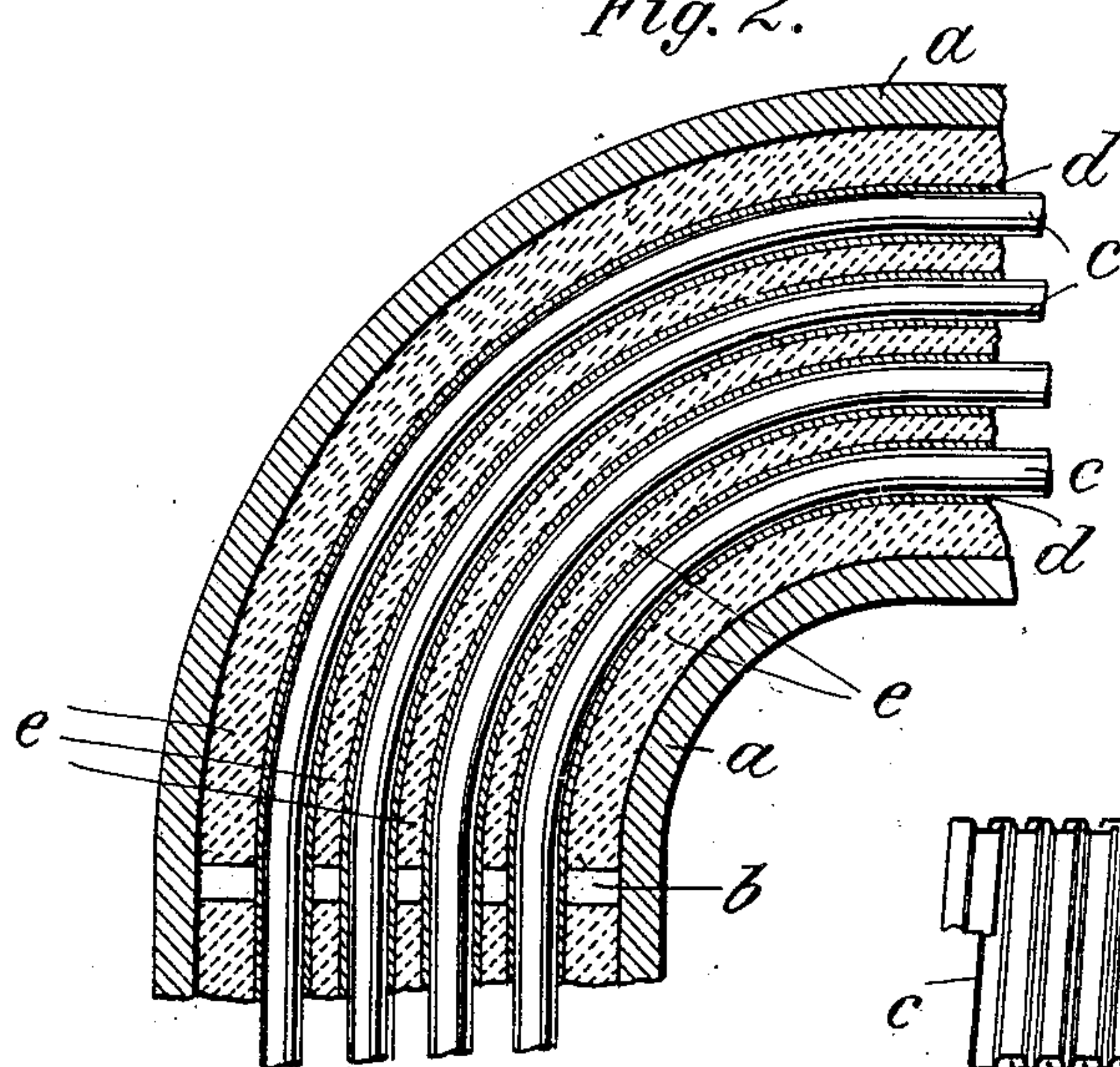
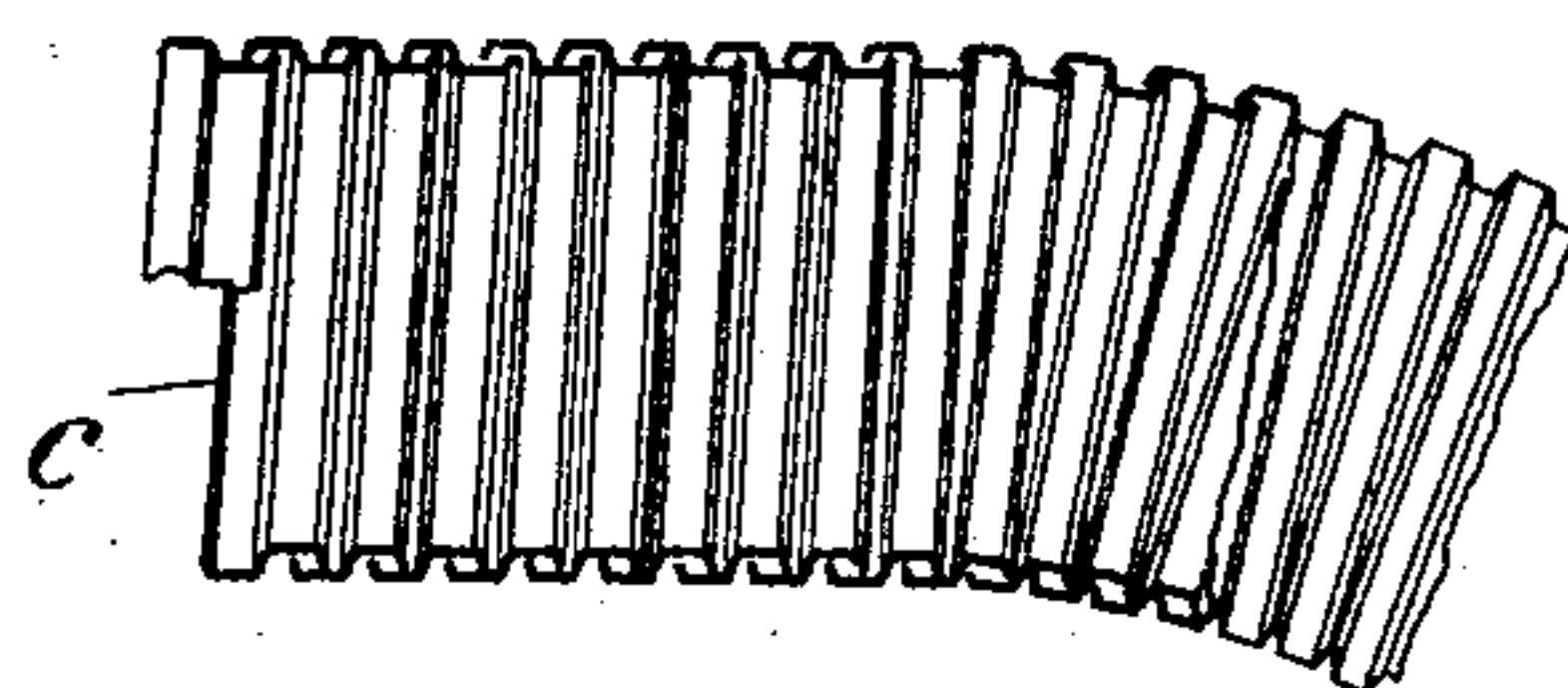


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

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METHOD OF MAKING CONDUITS.

SPECIFICATION forming part of Letters Patent No. 771,594, dated October 4, 1904.

Application filed January 14, 1904. Serial No. 188,946. (No model.)

To all whom it may concern:

Be it known that I, OTTO WILHELMI, a citizen of Germany, residing at Berlin-Zehlendorf, Germany, have invented new and useful Improvements in Methods of Making Conduits, of which the following is a specification.

This invention relates to a new method of making conduits adapted for the reception of electric wires, cables, and similar devices.

The invention is particularly designed to permit the ready formation of an elbow within the conduit.

In the accompanying drawings, Figure 1 is a perspective view of a conduit constructed according to my invention; Fig. 2, a horizontal section on line 2-2, Fig. 1; Fig. 3, a vertical cross-section of the conduit; Fig. 4, a detail of the flexible tube, and Fig. 5 a detail of one of the saddles.

In constructing my improved conduit I proceed as follows: Within a mold or casing *a* are arranged a number of saddles *b*, placed at suitable intervals. These saddles are provided with grooves *b'* to form the seats for a series of metallic flexible tubes *c*, which have previously been covered with a coating of fat or other meltable material *d*. The flexible tubes *c* are in Fig. 4 shown to be formed of a coiled strip of metal which is S-shaped in cross-section, so that the adjoining coils will become interlocked. It is evident, however, that the tubes may be of different construction. After the tubes have been fitted in the manner de-

scribed the mold *a* is filled with concrete *e*, which is tamped around the tubes and saddles. The concrete is allowed to set, and then a heating medium, such as steam, is introduced into the tubes, which will melt the coating *d*, and thus disconnect the tubes from the concrete. The tubes are now withdrawn to form the conduits for the wires, cables, &c. These conduits will be coated by the retained fatty body *d*, which forms a non-conductive and moisture-excluding protective layer.

It will be seen that by making the tubes flexible they may be placed in a straight direction and may also be curved or bent to form elbows of any suitable radius, Fig. 2. Owing to their resiliency, the tubes may also readily be withdrawn from curved as well as from straight positions.

What I claim is—

The process of making a conduit, which consists in fitting saddles into a mold, covering flexible tubes with a meltable coating, mounting the covered tubes upon the saddles, tamping concrete into the mold, melting the coating, and withdrawing the tubes, substantially as specified.

Signed by me at Berlin this 1st day of January, 1904.

OTTO WILHELMI.

Witnesses:

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