

No. 743,882.

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J. JUSTUS.

PROCESS OF MANUFACTURING PLATES OF INSULATING SUBSTANCES.

APPLICATION FILED MAR. 9, 1903.

NO MODEL.

Fig. 1.

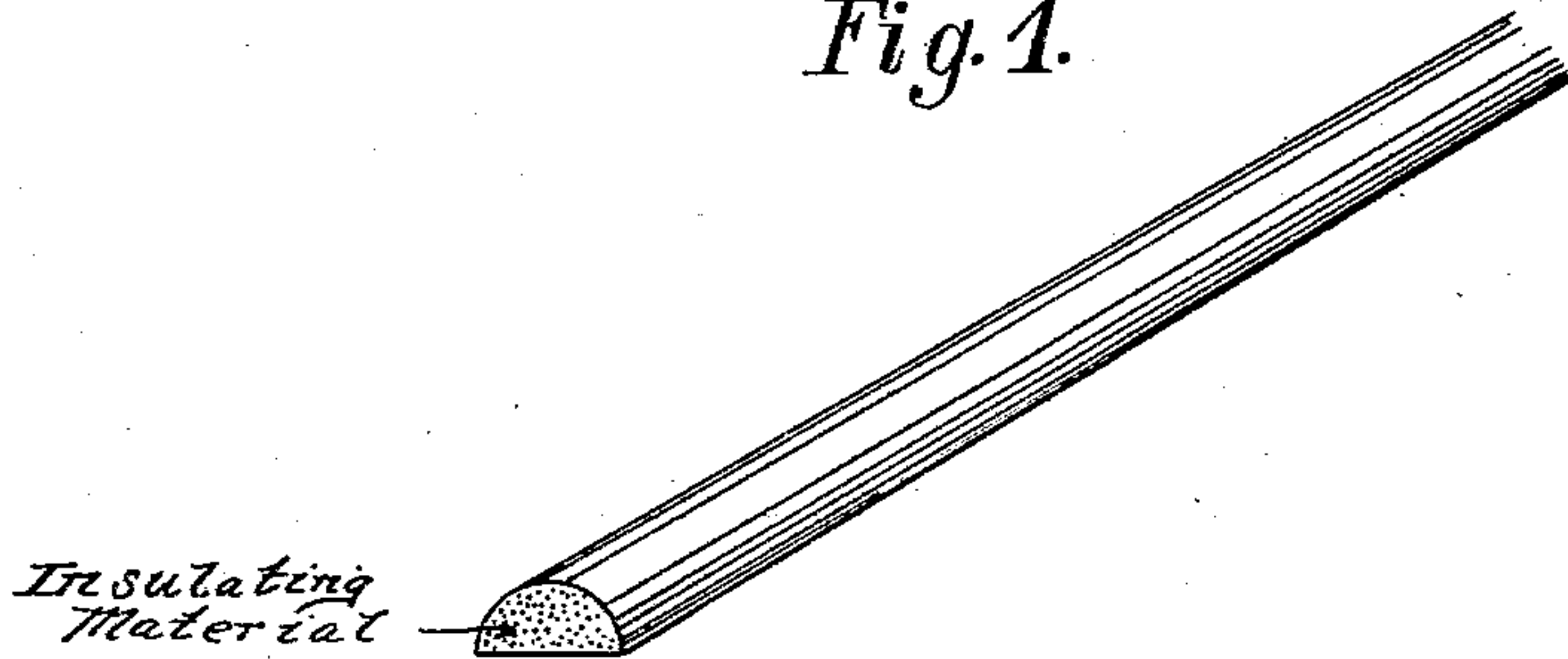


Fig. 2.

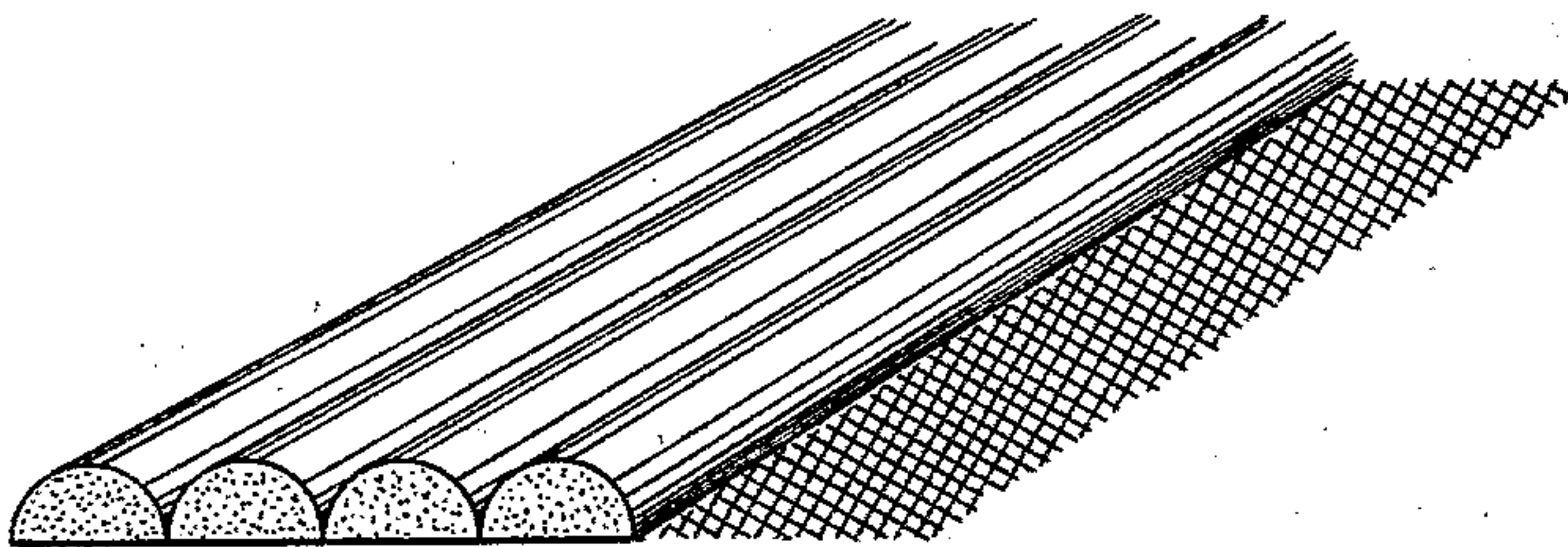
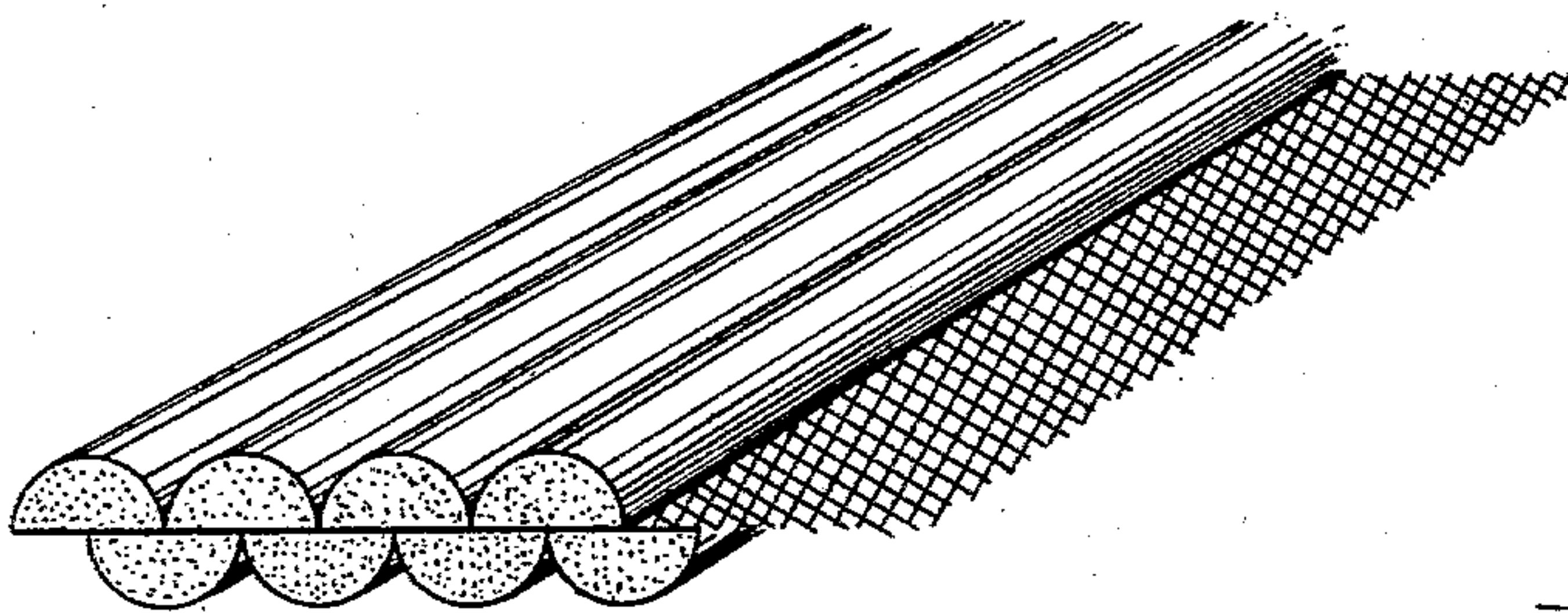


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHANNE JUSTUS, OF BERLIN-HALENSEE, GERMANY.

PROCESS OF MANUFACTURING PLATES OF INSULATING SUBSTANCES.

SPECIFICATION forming part of Letters Patent No. 743,882, dated November 10, 1903.

Application filed March 9, 1903. Serial No. 146,973. (No model.)

To all whom it may concern:

Be it known that I, JOHANNE JUSTUS, a subject of the Emperor of Germany, residing at Berlin-Halensee, Empire of Germany, have
5 invented certain new and useful Improvements in Processes of Manufacturing Plates of Insulating Substances, of which the following is a specification.

This invention relates to an improved
10 method of manufacturing insulating-plates of kieselguhr or like substances; and the object thereof is to produce strong, durable, and efficient insulating-plates of various lengths and widths, as desired.

15 In order that the present invention may be fully understood, reference will now be had to the accompanying drawings, in which—

Figure 1 is a perspective view of one bar of insulating substance. Fig. 2 is a similar view
20 of a plurality of insulating-bars joined together by means of wire or other fabric and arranged on one side of the fabric. Fig. 3 is a similar view of a plurality of insulating-bars joined together by means of wire or other fabric and arranged on both sides of the fabric.
25

The process of manufacture is as follows: Single bars are first pressed out of the insulating substance, preferably of semicircular or segmental section, as shown in Fig. 1 of
30 the accompanying drawings. These bars are then laid on their flat sides closely side by side on one side of flexible foundation, such as wide-meshed wire fabric, and united with the fabric by pressure or the use of an adhesive, as indicated in Fig. 2. The insulating
35 substance may also be applied to the other side of the flexible foundation or wire fabric, whereby an entire covering of the wire fabric is obtained, together with a better connection of the insulating-bars with the fabric. The plates formed of these semicircular
40 bars have, owing to the rounded groove or furrow between the separate bars, great flexibility, which renders the manufactured plates very suitable for incasing strongly-curved
45 bodies—such, for instance, as thin pipes. The plates thus formed are very strong and yet very flexible, so that they may be easily fitted, and the sharp-cornered recesses form
50 a good hold for the plaster which is applied.

In similar manner to what has been hereinbefore described the wire fabric may also

be coated on both sides with the bars, preferably in such a way that the bars lying underneath alternate with the bars lying above
55 the fabric—that is to say, the thickest part of the lower bars comes immediately underneath the junction of two of the upper bars, and vice versa, as is shown in Fig. 3. An insulating-plate of wavy or corrugated section
60 is thus formed, having a center foundation of wire network, which is of uniform strength, as the diminishing thickness of the bars on the one side owing to their curved form is practically equalized by the correspondingly-
65 increasing thickness on the other side.

I declare that what I claim is—

1. A method of making insulating-plates of insulating material, consisting in pressing an insulating substance into bars, laying the
70 bars so pressed side by side on a foundation of wire network, and causing the bars to adhere to the network.

2. A method of making insulating-plates of insulating material consisting in pressing insulating substance into bars of segmental section, laying the bars on a foundation of wire network and causing the bars to adhere to the network substantially as described and set
80 forth.

3. A method of making insulating-plates of insulating material consisting in pressing insulating substance into bars laying the bars on both sides of a foundation of wire network and causing the bars to adhere to the network substantially as set forth.
85

4. A method of making insulating-plates of insulating material, consisting in pressing kieselguhr into bars, laying the bars so pressed side by side on a strong flexible foundation, causing the bars to adhere to the foundation substantially as and for the purpose described.
90

5. A method of making insulating-plates of insulating material consisting in pressing kieselguhr into bars of segmental section laying the bars on a strong flexible foundation, causing the bars to adhere to the foundation, substantially as and for the purpose described.
100

6. A method of making insulating-plates of insulating material consisting in pressing kieselguhr into bars of segmental section, laying the bars on a foundation of wire network

and causing the bars to adhere to the network, substantially as described and set forth.

7. A method of making insulating-plates of insulating material consisting in pressing
5 kieselguhr into bars laying the bars on both sides of a foundation of wire network and causing the bars to adhere to the network, substantially as set forth.

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

JOHANNE JUSTUS.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.