

No. 862,528

PATENTED AUG. 6, 1907.

C. WISSENBACH.  
SHEET OF FIBROUS OR ELASTIC MATERIAL.  
APPLICATION FILED JUNE 30, 1906.

Fig. 1.

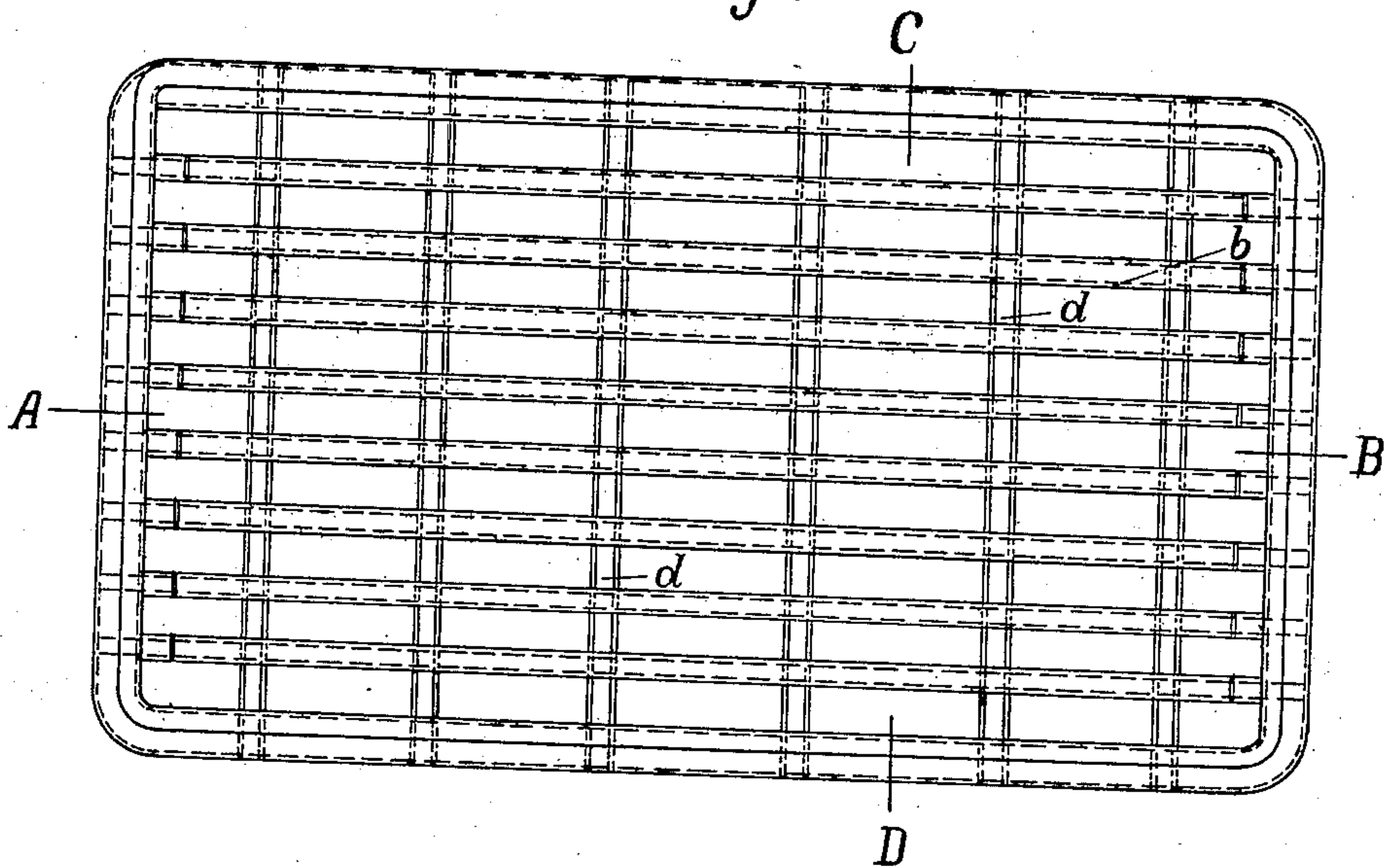


Fig. 2.

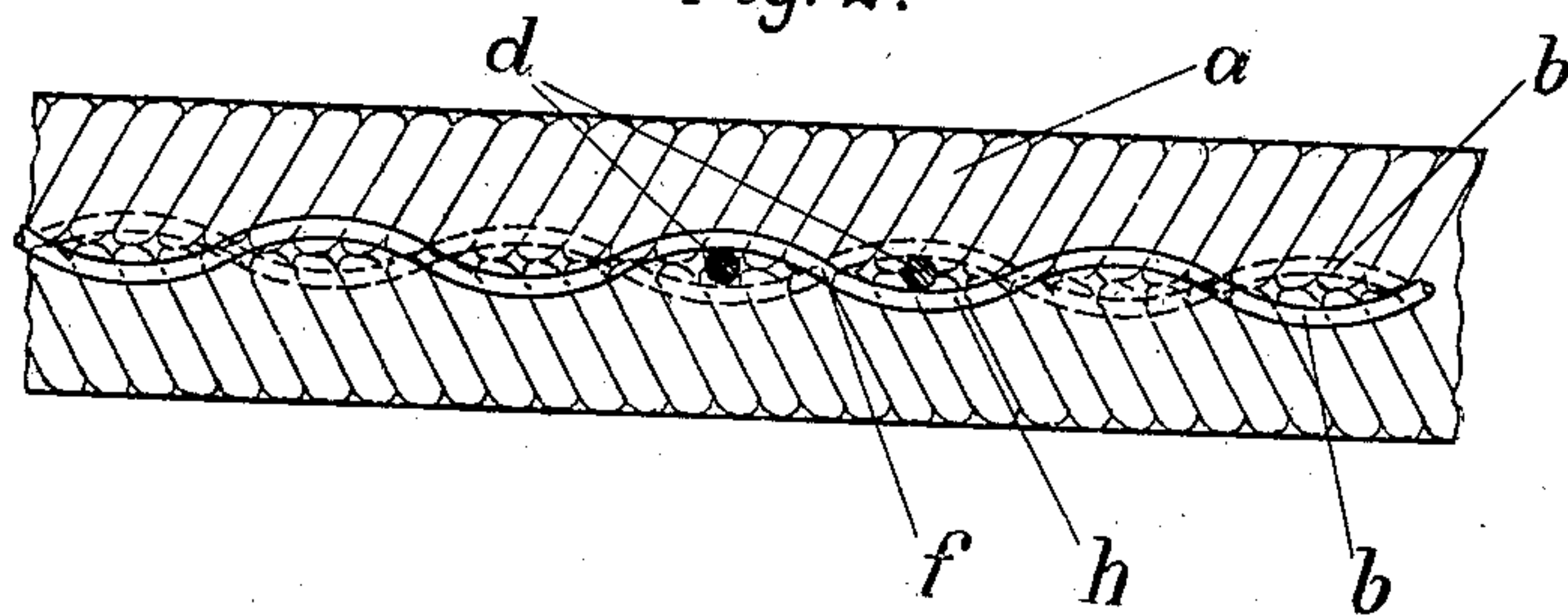
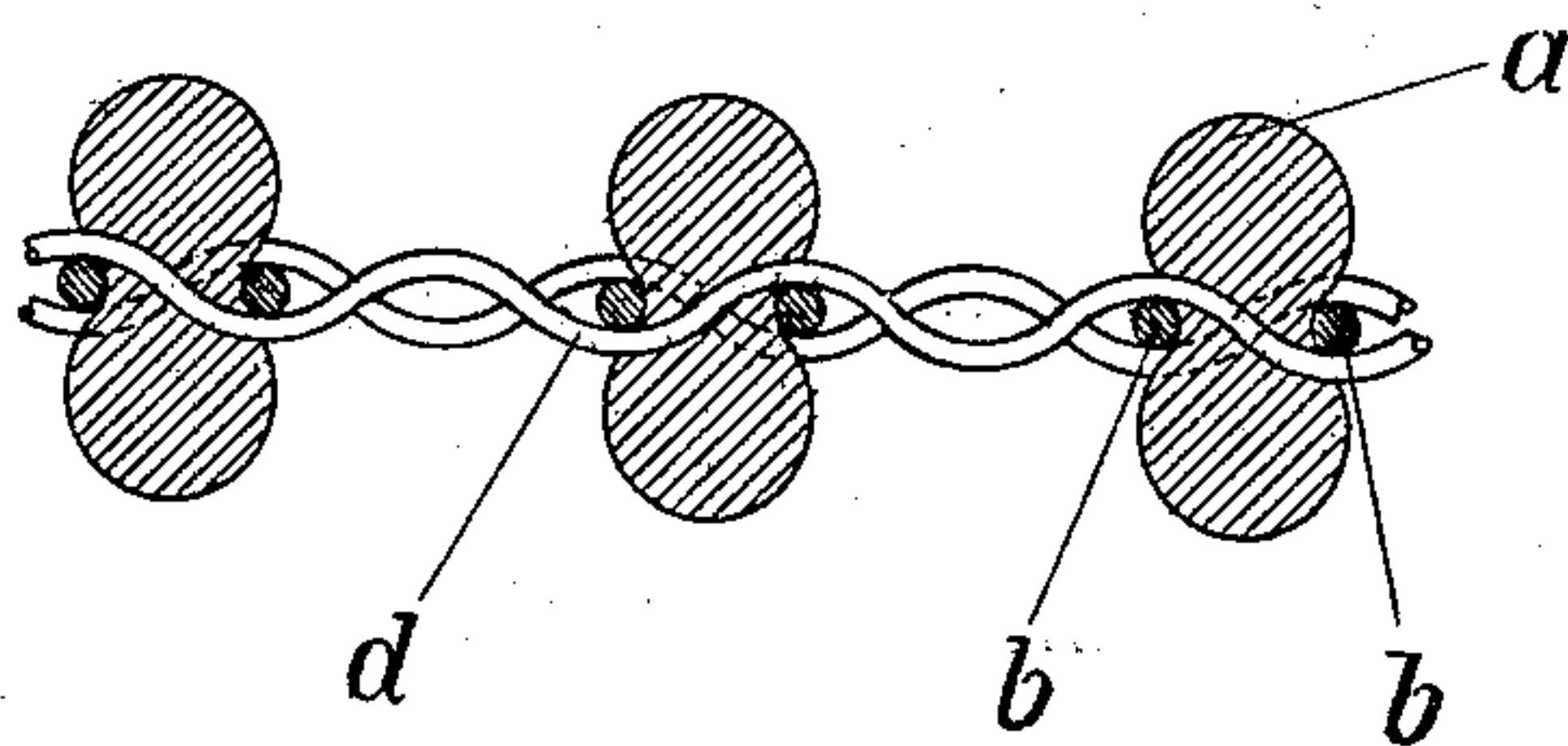


Fig. 3.



WITNESSES

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ATTY'S

# UNITED STATES PATENT OFFICE.

CARL WISSENBACH, OF FRANKFORT-ON-THE-MAIN, GERMANY.

## SHEET OF FIBROUS OR ELASTIC MATERIAL.

No. 862,528.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed June 30, 1906. Serial No. 324,161.

*To all whom it may concern:*

Be it known that I, CARL WISSENBACH, a subject of the Emperor of Germany, and a resident of Frankfort-on-the-Main, Germany, have invented a certain new and useful Improvement in Methods of Producing Plates or Sheets of Fibrous or Elastic Material, of which the following is a specification.

This invention relates to a method of producing plates or sheets of fibrous or elastic material, the novelty of which resides in the feature that strips or wisps of fibrous or elastic material, such for instance as rubber, cocoa-nut fiber, straw, asbestos, or felt, are pinched or nipped between longitudinal wires, transverse or cross wires being drawn or threaded through the strips or wisps so that a regular net-work is produced which is sufficiently rigid to be able to resist tensile pressure or bending stresses.

The lengths of wire are connected by forming the same with waves or bends transposed relatively to one another so that the cross wires can be guided into the strips over the one longitudinal wire and under the other. By this mode of connection, especially when two adjacent cross wires are used a rigid framework is produced. The plates or sheets produced in this manner may be formed with interspaces or the strips may be arranged alongside each other so as to present an uninterrupted surface. The plates or sheets can be used for any desired purpose, on which purpose obviously the choice of the fibrous material and of the wire will depend. For instance, by means of asbestos, plates or sheets may be produced which are used for forming matting. Plates provided with interspaces can be used for instance as foot-mats or as substitutes for wooden gratings.

The accompanying drawing shows a plate which is intended to be used as a foot-mat and made by the method above described.

In the said drawing Figure 1 is a plan: Fig. 2 a sec-

tion to enlarged scale on the line A—B of Fig. 1, and Fig. 3 a section on the line C—D of Fig. 1.

The said plate comprises ropes or wisps of cocoa-nut fiber *a* which are pinched or nipped between longitudinal wires *b* disposed opposite one another and wormed with wave-like sinuosities: the waves of the said wires being transposed relative to one another. Through the ropes or wisps *a* are passed cross wires *d* of the same formation as the longitudinal wires *b*. A bend in the cross wire lies under a sinuosity *f* in the longitudinal wire on one side and emerges on the opposite side so that a bend in the cross wire lies over a bend *h* in the longitudinal wire. Such cross wires may, as in the construction illustrated, be combined in pairs or double rows, but in every case they are so guided through the longitudinal wires as to produce a regular net-work. The matting produced in this way is relatively stiff in both transverse and longitudinal direction. The wear of the fiber in use does not detract from the stiffness of the matting in any way. Moreover the matting can be used on either the right or the left side without affecting its structure.

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

A plate or sheet of elastic or fibrous material, said plate or sheet comprising wisps or strips of fibrous or elastic material, wave-shaped longitudinal wires pinching said strips or wisps between them, and transverse wires threaded through the strips and passed between the longitudinal wires so that said longitudinal wires and cross wires form a relatively rigid net-work, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL WISSENBACH.

Witnesses:

HANS EYCK,  
JEAN GRUND.