

(No Model.)

A. JONES & T. BLAKE.

OIL PRESS MAT.

No. 314,679.

Patented Mar. 31, 1885.

Fig. 1.

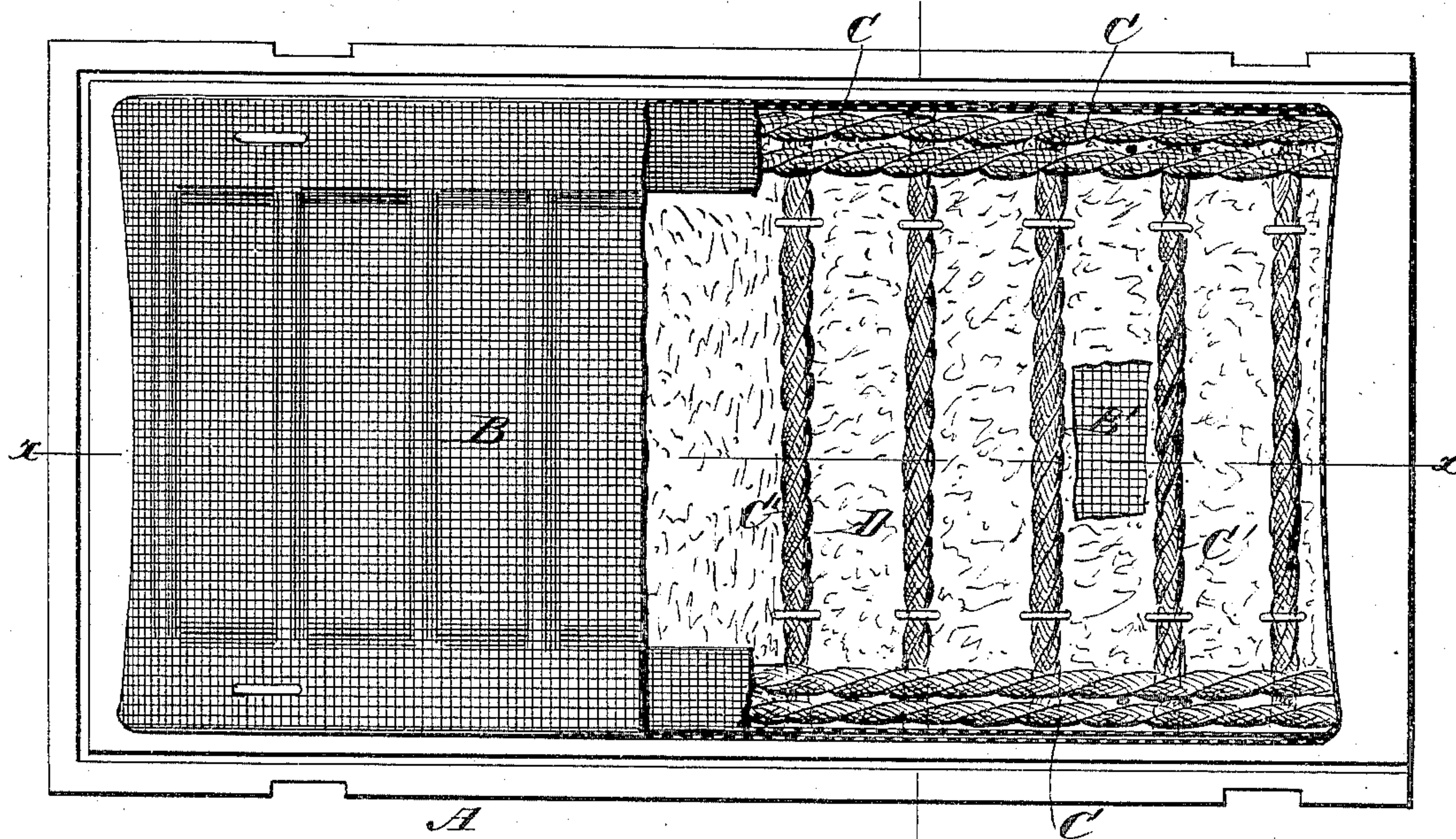


Fig. 2.

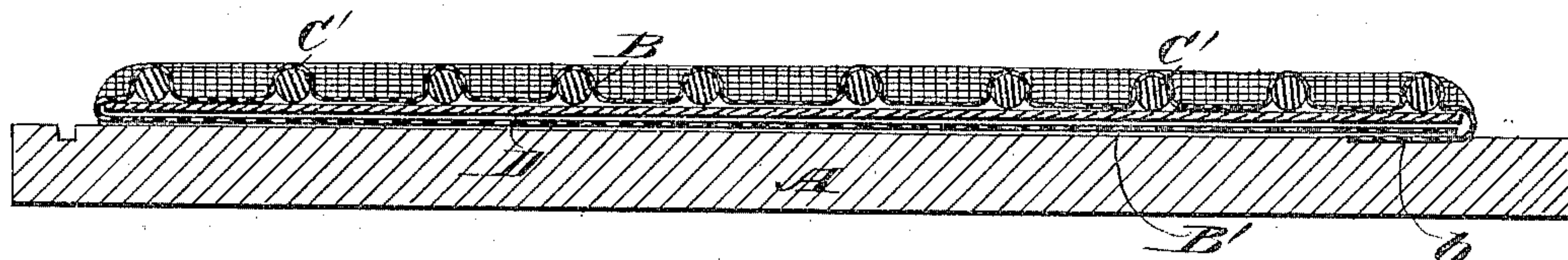
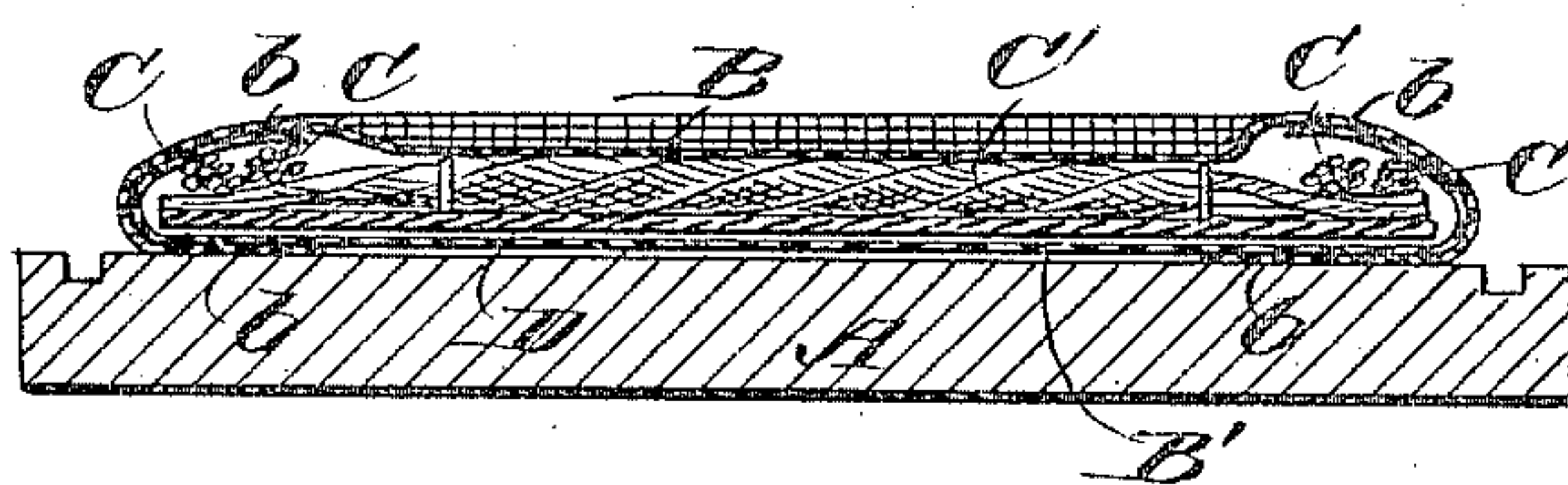


Fig. 3.



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OIL-PRESS MAT.

SPECIFICATION forming part of Letters Patent No. 314,679, dated March 31, 1885.

Application filed February 14, 1885. (No model.)

To all whom it may concern:

Be it known that we, ALFRED JONES and THOMAS BLAKE, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Wire Mats for the Compression of Oleaginous Seeds, &c., of which the following is a full, clear, and exact description.

This invention relates to wire mats used in presses or compressors for the expulsion of the oil from oleaginous seeds or other oleaginous substances; and it consists in certain novel constructions of a mat of the above description, whereby a better escape is established for the oil while the material being acted upon is under pressure; the oil is prevented from lodging in the edges of the mat, thus insuring a "dry" edge to the substance being pressed; oil is prevented from accumulating within the meshes of the mat, and the substance is restrained from spreading beyond the surface exposure of the mat, substantially as hereinafter described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a partly-sectional or broken plan view of our improved wire mat, arranged upon the box or one of the pressing plates or surfaces of the press; Fig. 2, a vertical longitudinal section of the same on the line *x x* in Fig. 1, and Fig. 3 a vertical transverse section thereof on the line *y y* in Fig. 1.

Both the upper and lower mats of the press are or may be similarly constructed, and it will suffice here to refer to the mat shown in the drawings as the lower one, and the plate or box A as the bed-surface which carries it.

The mat is composed in part of two layers of wire-netting, B B', arranged one below the other at a suitable distance apart, and folded over one another at their edges, as at *b*, to better resist the strain upon them during compression. Placed between these two wire layers, along the edges of the mat, are any number of strands of hair rope or fill-

ing, C C, of porous material, which provide for the escape of the oil while the seeds or substance is being compressed, also which prevent the oil from lodging in the edges of the mat, thereby giving the substance under pressure what may be termed a "dry edge." There is also arranged between the wire layers B B' a suitable porous cloth, D, extending the whole area of the mat or thereabout. This cloth, by the act of compression, will be forced into the meshes of the wire, and thereby prevent accumulation of oil within said meshes, and which, if allowed to take place, would soak back into the substance from which it was expressed. There are likewise arranged between the wire layers B B' any number of cross hair strands or porous rope fillings, C', forming ribs in the wire-netting, the purpose of which is to prevent the substance under pressure from spreading in direction of the length of the mat. The longitudinal marginal portions of the mat, also being raised so as to meet the corresponding portions of the other or upper mat, the substance under pressure will likewise be restrained from spreading in direction of the width of the mat.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. In wire mats for the expression of oil from oleaginous seeds or substances, the separated layers of wire-netting B B', folded over at their marginal portions one upon the other, substantially as specified.

2. In wire mats for compressing oleaginous substances, the mat composed of duplicate layers B B', of wire-netting, closed along its marginal portions, and provided along its longitudinal edges with porous ropes or fillings C C, essentially as and for the purpose herein set forth.

3. The combination of the internally-arranged cloth D with the layers B B' of the wire-netting of the mat, essentially as described.

4. The cross porous ropes or fillings C' C', in combination with the porous ropes or fillings C C, arranged to run along the longitudi-

nal margins of the mat, and the inclosing-layers B B', of wire netting, substantially as specified.

5. In a wire mat for expressing oleaginous substances, the hollow wire mat, substantially as herein described, consisting of the layers B B', of wire-netting, and the longitudinal marginal and cross porous ropes or fillings C

C', and the cloth D, arranged between said wire layers, as set forth.

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Witnesses:

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