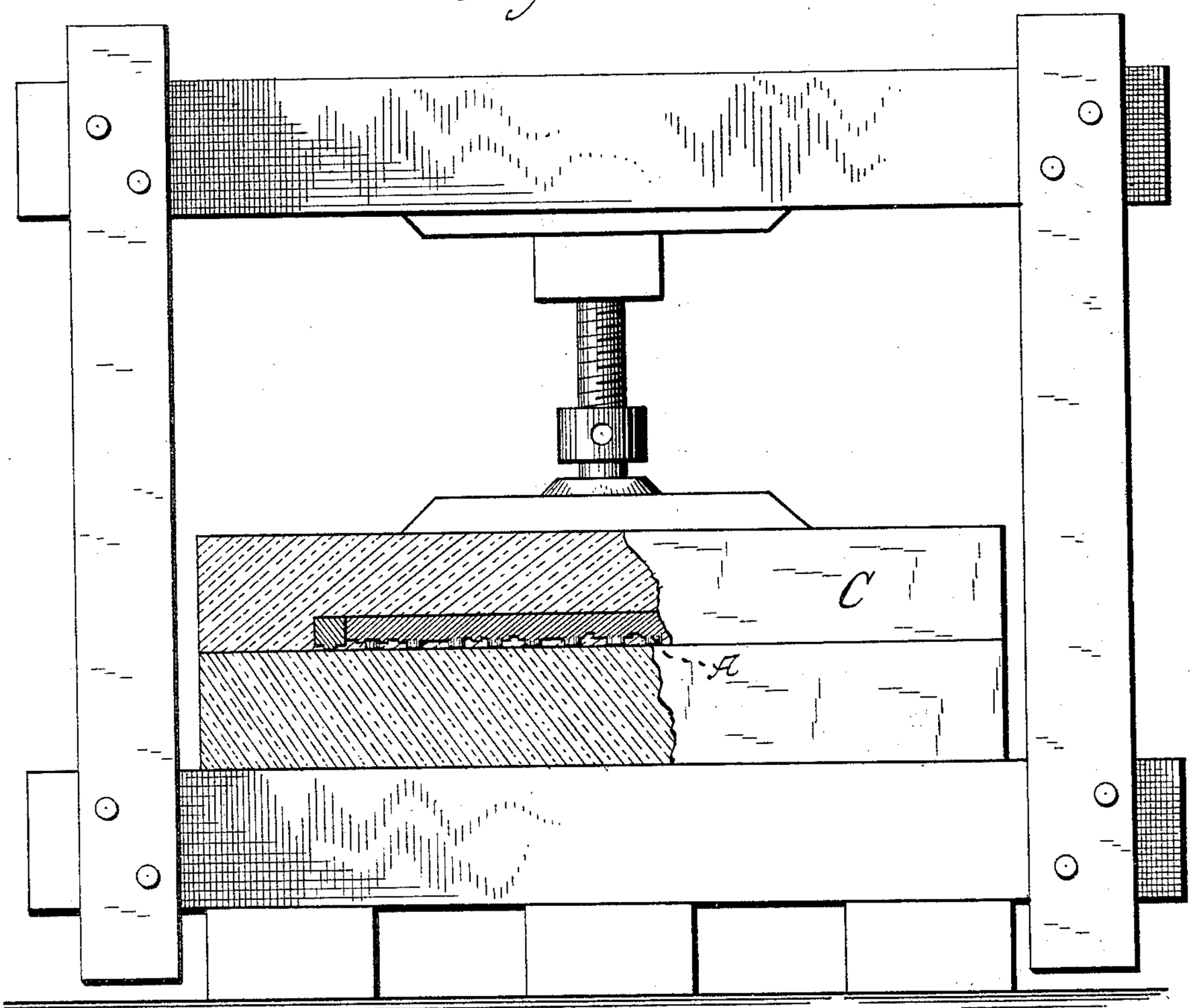
(No Model.)

F. LATULIP.

DIE FOR THE FORMATION OF CHAIR SEATS, BACKS, AND SIMILAR ARTICLES FROM CAOUTCHOUC AND OTHER PLASTIC MATERIAL.

No. 318,754. Patented May 26, 1885.

Fig. 1.



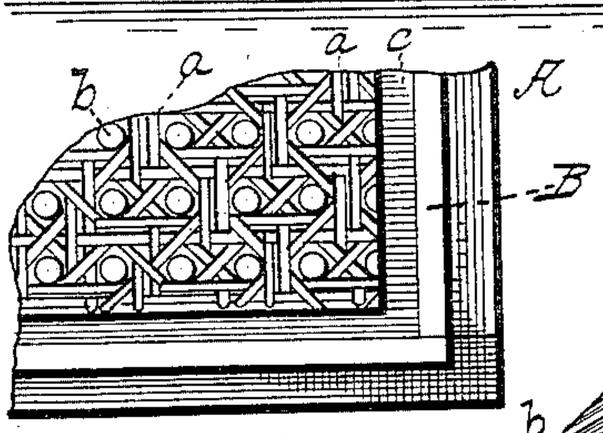
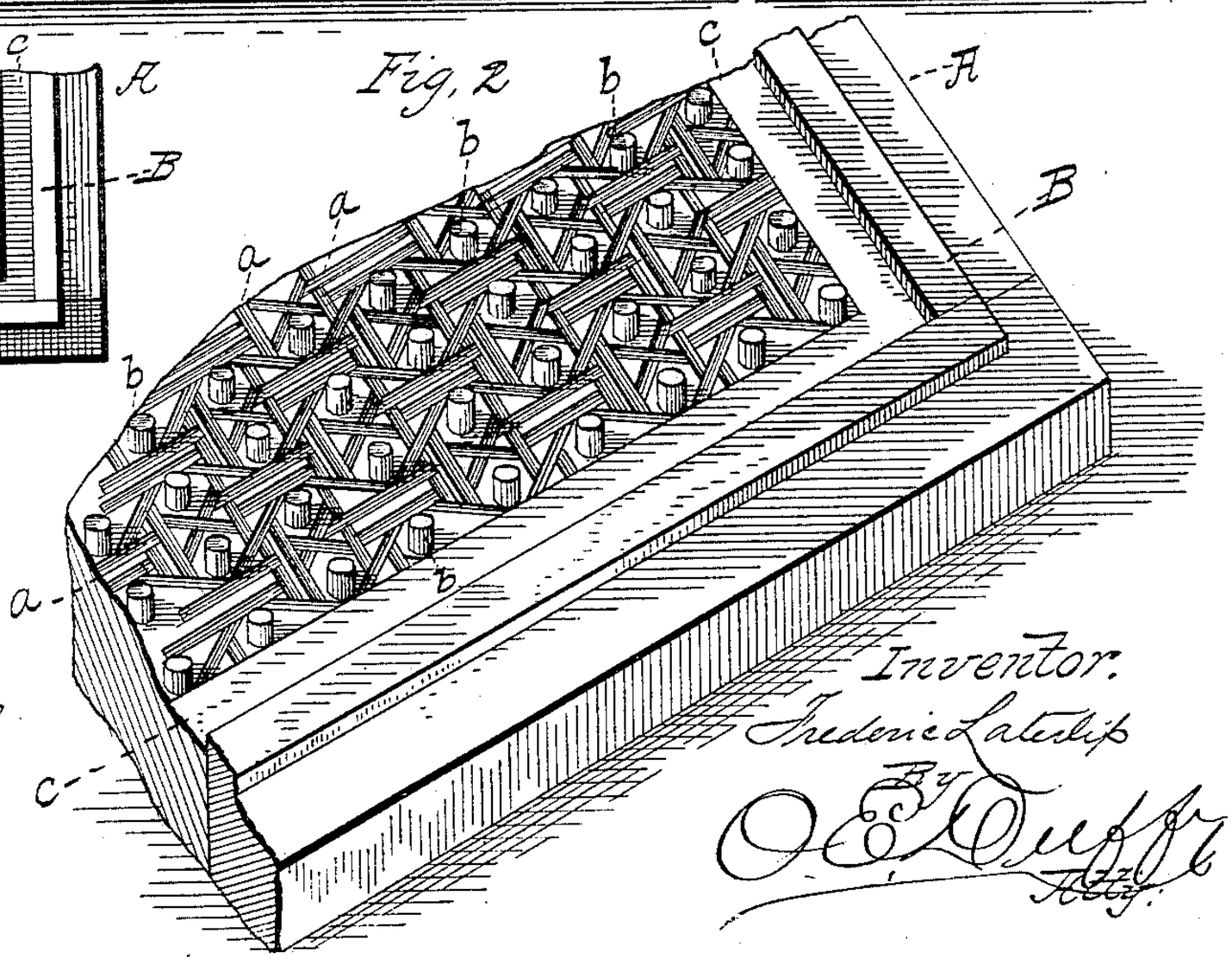


Fig. 3.

Fig. 2.



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UNITED STATES PATENT OFFICE.

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DIE FOR THE FORMATION OF CHAIR SEATS, BACKS, AND SIMILAR ARTICLES FROM CAOUTCHOUC AND OTHER PLASTIC MATERIAL.

SPECIFICATION forming part of Letters Patent No. 318,754, dated May 26, 1885.

Application filed January 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK LATULIP, of Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Dies for the Formation of Chair Seats, Backs, and Similar Articles from Caoutchouc and other Plastic Materials; 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, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to a die or matrix for the formation of chair seats and backs and similar articles from caoutchouc, rubber, gum, and like material; and it consists, substantially, in the die as constructed or formed, as will be hereinafter distinctly described, and pointed out in the claims.

In constructing a die in accordance with my invention I so form the same as to produce in the finished article or product an imitation of the ordinary cane seats and backs used on chairs and the like; and to effect such imitation I provide in the die series of intagliated grooves or channels, which run in longitudinal, transverse, and diagonal directions, those which lie in longitudinal and transverse paths being preferably double and parallel, while those in the diagonal directions are single and extend in two directions, crossing each other at even distances and regular intervals apart, each set of double parallel grooves, as well, also, as those which are diagonal thereto, all intersecting and tending to effect on the article produced series of corresponding ribs having the appearance of passing over and under each other, as though interlaced.

Between the squares on the surface of the die formed by the intagliated portions are formed in relief small punches or projections, which are forced through the material and produce in the finished article regularly-arranged perforations. Also, if desired, a groove or recess may be provided between the general surface of the die and an outer rim or flange following the main outline or contour thereof, by which is formed in the product an outer strengthening-border, by which attachment may be made to the structure on which it is to be employed.

For the purpose of completeness I have represented a press in which the die is used for the formation of the articles.

Reference being had to the annexed drawings, Figure 1 represents such press in vertical front elevation. Fig. 2 represents a broken-off perspective view of the die; and Fig. 3, a top or plan view thereof, partly broken off, the two latter figures furnishing a complete understanding of the mode of construction.

Referring to the several parts by letter, A represents the die as a whole. *a* indicates the punches in "relief," or projections; and *b* represents the intagliated grooves or channels, which lie in longitudinal, transverse, and diagonal paths.

B indicates the outer rim or flange, which stands out in relief from the main body of the die, and is in the same plane as the punches *b*. The groove or recess *c*, formed between this flange and the general surface of the die, forms in the product an outer rim or border for attachment to the chair seat or back by screws, rivets, or otherwise.

C represents a press of the ordinary form, in which the die A is placed, the material being placed on a smooth surface beneath, in any suitable manner, and the die forced down upon it from above in forming the article, the latter, when finished, presenting an entirely smooth under surface, while the upper surface is given the desired configuration.

In operation the material removed by the punches is forced or squeezed outwardly into the intagliated grooves, serving to fill them up, and producing in the article more prominent and uniform sets of ribs than would be produced by a simple impression of the die upon the material. This peculiarity constitutes the main feature of my invention, and it will be seen that none of the material whatever is lost

or wasted, all that is displaced by the punches being equally distributed over the entire surface by the pressure brought to bear.

Having thus described my invention, what I claim is—

1. A die or matrix formed with sets of longitudinal, transverse, and diagonal intagliated grooves, and projections or punches formed in relief in spaces between such grooves at uniform distances apart, substantially as described.

2. A die or matrix for producing in rubber, caoutchouc, and the like, imitation of cane seats and backs for chairs and similar articles, consisting of a body having in its surface double sets of intagliated grooves that lie in longitudinal and transverse paths, similar single grooves crossing the others diagonally in two directions, and punches formed in relief in the intermediate spaces, substantially as described.

3. A die or matrix formed in its surface with sets of intagliated grooves, which lie in longitudinal, transverse, and diagonal paths, and having punches formed in relief in the intermediate spaces and an outer rim or flange in relief, whereby a strengthening-border is formed in the finished article, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

his
FREDERICK × LATULIP.
mark.

Witnesses:
P. W. HOGAN,
THOMAS HOGAN.