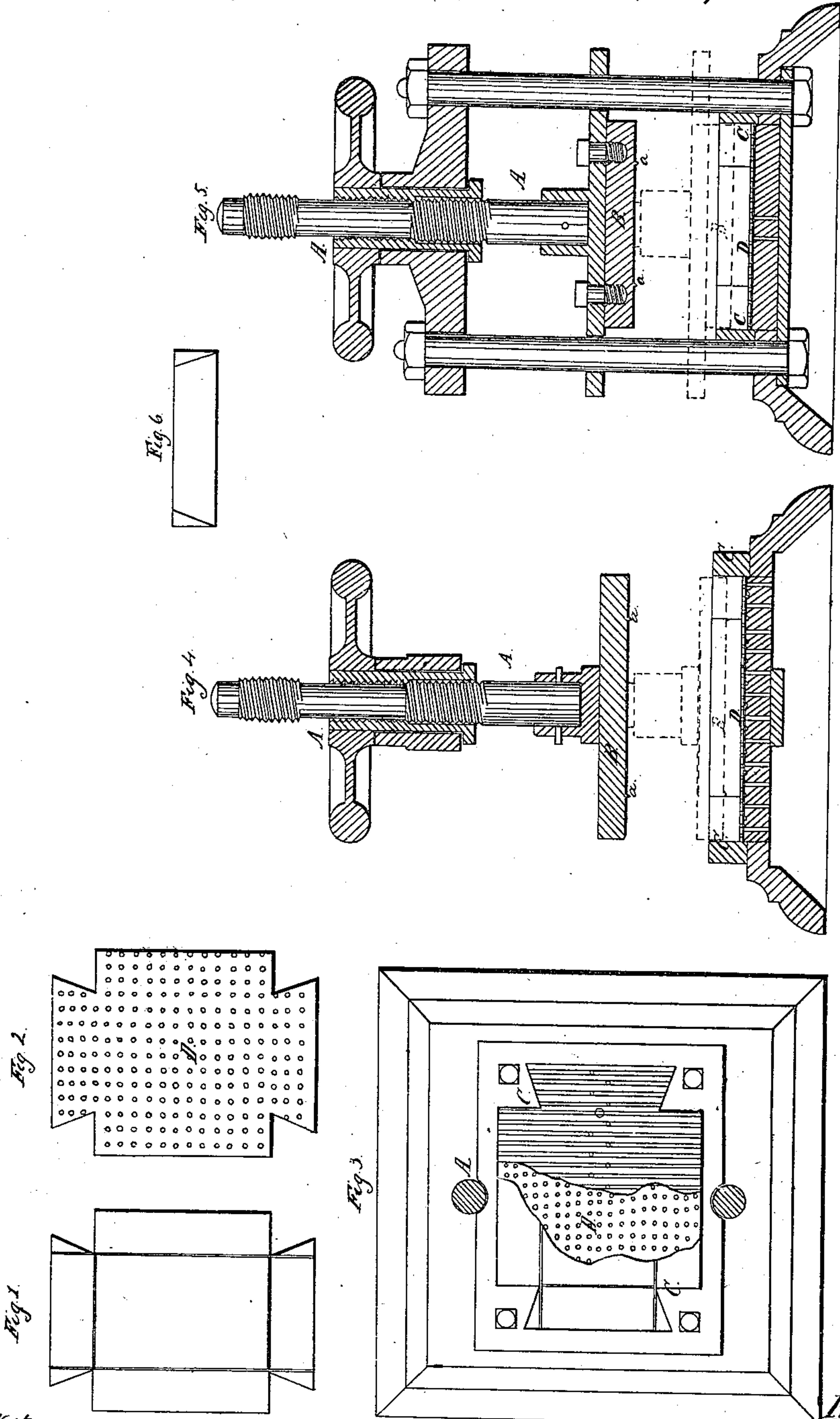


*S. Wheeler & E. Jerome.*  
*Paper Molding.*  
*N<sup>o</sup> 66,920. Patented Jul. 16, 1867.*



Witnesses.  
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# United States Patent Office.

SETH WHEELER AND EDGAR JEROME, OF ALBANY, NEW YORK.

*Letters Patent No. 66,920, dated July 16, 1867*

## IMPROVEMENT IN MAKING BLANKS FOR PAPER BOXES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, SETH WHEELER and EDGAR JEROME, of the city and county of Albany, and State of New York, have invented a new and useful Improvement in Mode of Forming Blanks for making Paper Boxes and other articles; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of a paper-blank for a box, as made directly from paper-pulp, according to our invention.

Figure 2 is a top view of a permeable rigid frame upon which the blank is formed.

Figure 3 is a horizontal section of a forming or shaping-press, just below the male die thereof.

Figure 4 is a vertical central section of the same.

Figure 5 is a similar section at right angles to the line of section, fig. 4.

Figure 6 is a box formed out of one of the blanks.

Similar letters of reference in the several figures indicate corresponding parts.

The nature of the invention embraced by this patent consists, first, in forming paper or paper-board, during the process of manufacture, direct from pulp, with spaces left in it at the points where, in the formation of many-sided hollow articles, no material is required; second, in forming creases in the paper-blanks during their manufacture, such creases, in connection with the spaces left in the blank, determining the depth of the sides of the box, and greatly facilitating the bending of the blank into the form of a box, basket, or other many-sided hollow articles; third, it consists in such blanks, as a new article of trade or sale, from which many-sided hollow articles are to be made, these blanks being a substitute for the large square sheets which are now sold for this purpose, and have to be cut up into pieces with considerable waste before they can be made up into boxes, baskets, or other many-sided hollow articles.

To enable others skilled in the art to make and use our invention, we will proceed to describe one method of forming the blanks, with reference to the drawing.

A is a screw-press, the follower B of which is a male die of the form represented in fig. 1 of the drawings. This die has ribs *a* on its under face, so as to crease the paper-box blank in the manner shown in said figure. This follower B is arranged over a female die C which is formed in the bed-plate of the press, the depth of the female die corresponding with that of the male die B. The die C is shown removable, but it may be cast with the bed-plate if desirable. On its upper surface it is channelled transversely, and at right angles to these channels a series of perforations is made through it, extending from upper to lower surfaces of the bottom of the die. These perforations intersect the channels. Upon this channelled and perforated surface a permeable plate or frame, D, of metal or hard rubber, or other rigid material, is placed as represented.

The paper-pulp is placed in the female die upon the rigid permeable frame in sufficient quantity, the follower or male die is brought down upon it with sufficient force to express the moisture and form a solid mass of paper. The water escapes through the perforations of the frame as the pressing is performed. The male die is now raised, the permeable plate or frame with blank upon it is removed, and the blank allowed to dry upon it. The permeable frame prevents the paper-pulp from closing up the channels and perforations which allow the water to flow off freely, and thus no clogging is experienced. The blanks for tops of boxes are produced in substantially the same manner, the dies only being varied to suit the depth of rim required for the box.

We are aware that flat blanks have been proposed to be made direct from pulp; but in this instance no definite purpose is set forth, nor is it possible from these blanks to make a paper article of useful character, with many sides. We refer to the English patent of Brown and Macintosh, No. 14,131.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. Creasing the paper-blanks in their manufacture, for the purpose described.
2. Forming paper or paper-board, during the process of manufacture, from pulp direct, with spaces at those points where, in the manufacture of many-sided hollow articles, no material is required.
3. As a new article of manufacture, paper or paper-board made direct from pulp, with creases on its surface, and with spaces left in it at the points where, in the formation of many-sided hollow articles, no material is required, substantially as described and shown.

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Witnesses:

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