T. W. DOWLING.

Construction of Paper-Boxes.

No. 215,196. Patented May 6, 1879.

Fig. 1

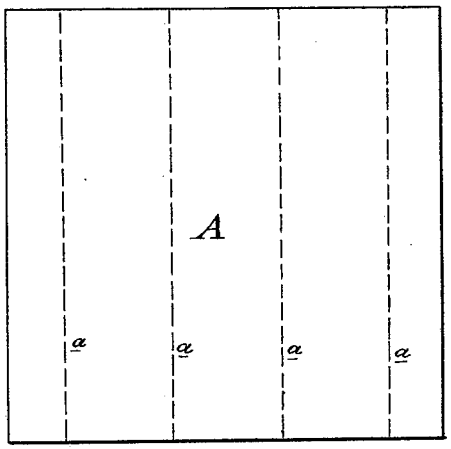


Fig. 2

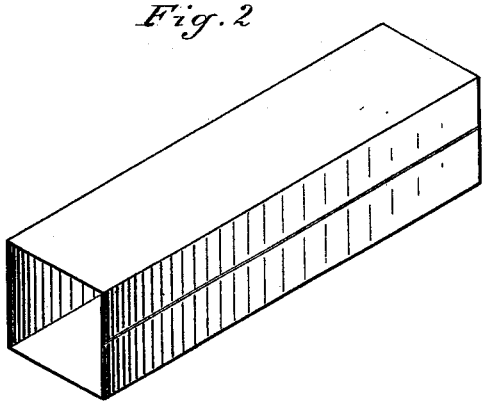


Fig. 3

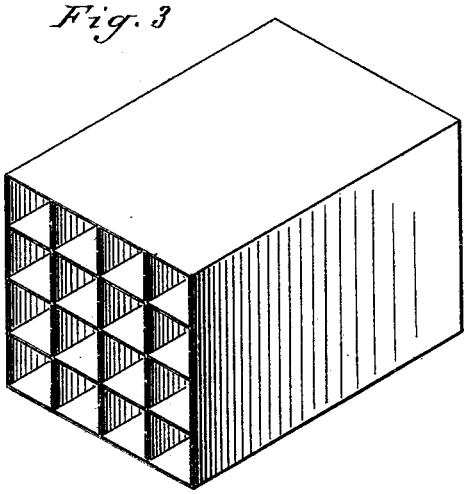
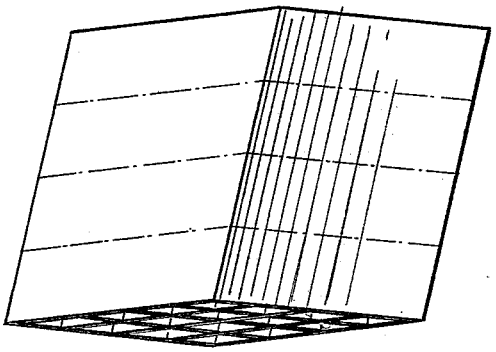


Fig. 4



Attest:

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UNITED STATES PATENT OFFICE.

THOMAS W. DOWLING, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF HIS RIGHT TO HENRY FOWLER, OF SAME PLACE.

IMPROVEMENT IN CONSTRUCTION OF PAPER BOXES.

Specification forming part of Letters Patent No. **215,196**, dated May 6, 1879; application filed October 5, 1878.

To all whom it may concern:

Be it known that I, THOMAS W. DOWLING, of Detroit, Wayne county, State of Michigan, have invented an Improvement in the Construction of Paper Boxes subdivided into compartments, of which the following is a specification.

The nature of my invention relates to new and useful improvements in the manufacture of paper boxes which are divided into series of compartments of any desired size or number, such as are employed in the transportation of eggs or other fragile substances, where it is necessary, in order to prevent breakage, to prevent contact between the articles inclosed in said compartments.

The invention consists in a cell-case for forming egg-carriers, composed of a number of rectangular boxes, made as hereinafter explained, the meeting edges of the sheet from which each box is made not being secured together, the several boxes thus formed being pasted to one another on all sides and bound by an outer wrapper.

Figure 1 represents a plan of one of the box-blanks cut from the entire length or width of a sheet of board, and showing the creasing where it is desired to fold and form the corners of the box. Fig. 2 is an isometrical end view of Fig. 1, folded into shape. Fig. 3 is a perspective view of a nest or series of these boxes as completed ready to be cut into pieces of the various depths required. Fig. 4 is an end view of Fig. 3, "knocked down" or compressed, and as presented to the knife, by means of which the series of long boxes are cut into similar series of shorter ones.

In the accompanying drawings, which form a part of this specification, A represents a strip of straw-board or other suitable material cut from the width or length of the sheet, and of sufficient width to form the four sides of a box. This sheet is creased at *a*, where it is desired to bend the same, care being taken that the edges should abut each other at or about the center of one of the sides. A block or former of the required size is employed, around which this strip is bent at the creased corners. As many of these long boxes are made as it is desired that the nest should consist of, the former being left in each box. Paste or its equivalent is then applied to the entire outer surfaces of these boxes, and they are nested or piled up together, care being taken that the whole side of one should be presented to the side of its fellow where the ends meet. The pile is then bound together under pressure and secured in place by a wrapper-sheet glued or pasted around the whole.

In this condition we have a box of the desired size in cross-section, divided into compartments of great depth. In order to reduce these compartments to the proper depth, the box is laid upon one corner and compressed from the top, as shown in Fig. 4, and presented to the shears or a proper knife, which cuts the whole into a box with compartments of the required depth.

By the construction hereinbefore described a very strong egg-carrier is provided when the case is cut into the right lengths.

I am aware that it is not original with me to make egg-carriers by first constructing a nest of long cells and then dividing this nest into the proper lengths, and therefore I do not claim the same broadly, but only my peculiar construction.

What I claim as my invention, and desire to secure by Letters Patent, is—

The cell-case for forming egg-carriers described, composed of a number of rectangular boxes, each made from a single sheet of material bent into a rectangular form, the edges of the sheet meeting on one side of the box but not being secured, the several boxes thus formed being pasted to one another on all sides and bound together by an outer wrapper, substantially as set forth and shown.

T. W. DOWLING.

Witnesses:
H. S. SPRAGUE,
CHAS. J. HUNT.