

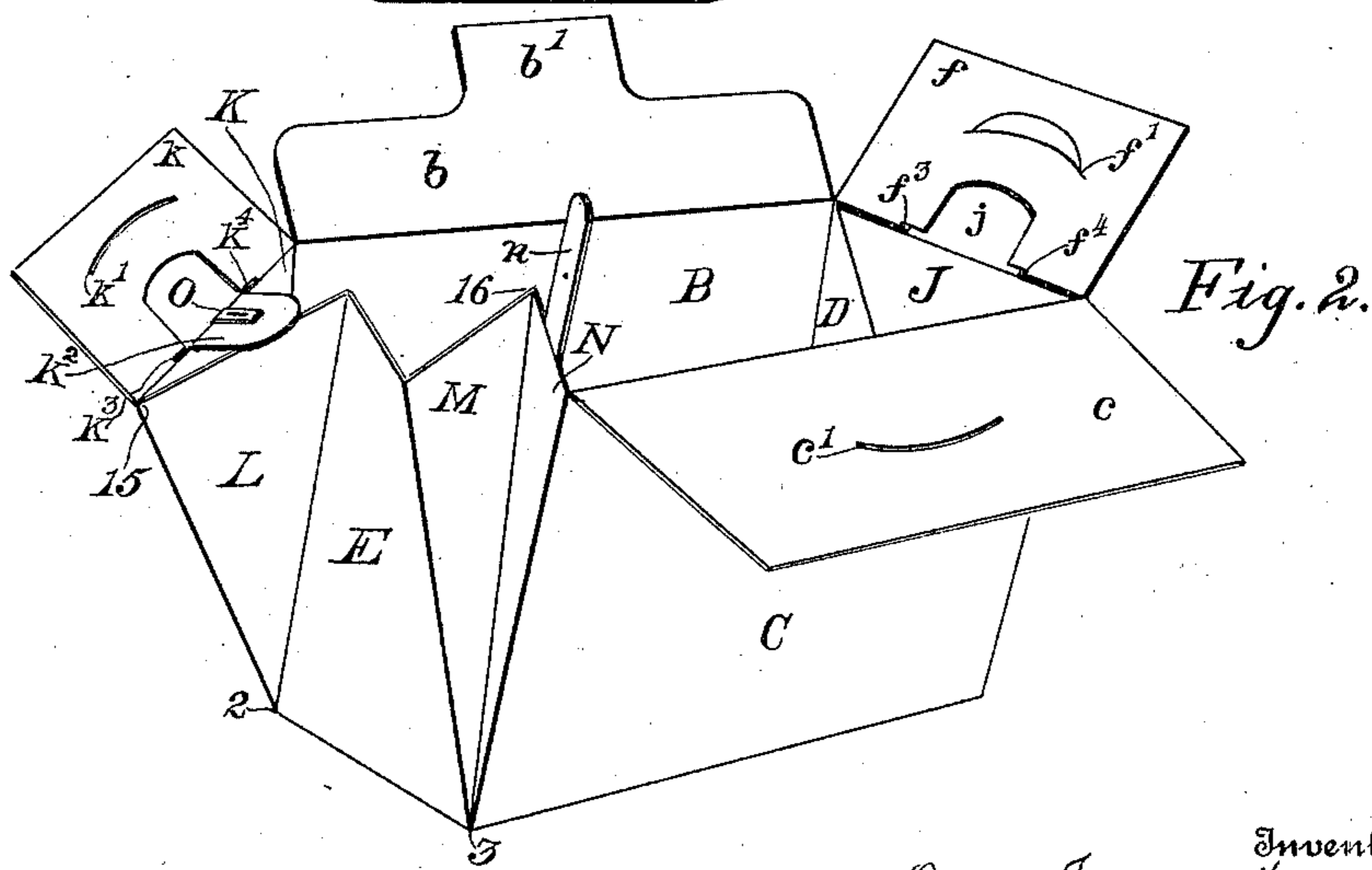
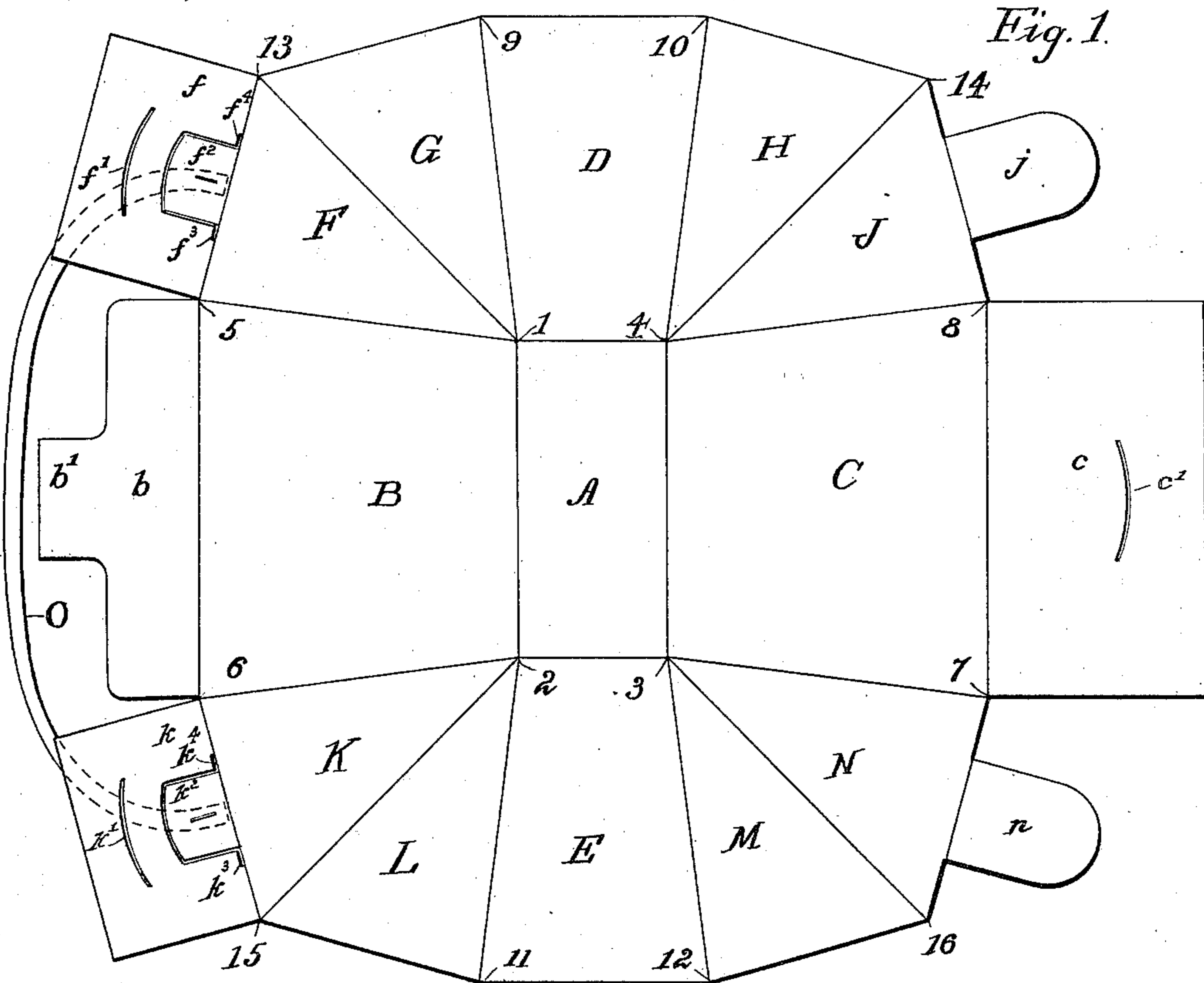
No. 708,288.

Patented Sept. 2, 1902.

D. I. WINSLOW.
FOLDING BLANK PAPER BOX.

(Application filed Dec. 24, 1901.)

(No Model.)



Witnesses
William B. Thomas
R. Clinton Baling.

Inventor
Dion Irving Winslow.
By Edwin Guthrie,
Attorney

UNITED STATES PATENT OFFICE.

DION IRVING WINSLOW, OF BOSTON, MASSACHUSETTS.

FOLDING BLANK PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 708,288, dated September 2, 1902.

Application filed December 24, 1901. Serial No. 87,051. (No model.)

To all whom it may concern:

Be it known that I, DION IRVING WINSLOW, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Folding Blank Paper Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 and figures of reference marked thereon, which form a part of this specification.

My invention relates to folding blank paper boxes, and has for its object the production of a single sheet of paper-stock which may be folded at the sides and ends into a box having continuous walls without slits or openings, and which will not, therefore, leak when filled with partly-fluid substances—such as ice-cream, water-ices, and the like—the blank or sheet being provided with tabs or key-flaps constructed and arranged to lock the end folds together against displacement after folding.

Each constituent element of my invention is described in detail and its individual office, together with the mode of operation of the whole, fully explained hereinbelow.

Of the accompanying drawings, throughout which like letters and numerals refer to like parts, Figure 1 is a plan of the blank, the interior lines indicating the scored lines upon which it is to be folded; and Fig. 2 is a perspective side and end view showing one end folded and the opposite end in an intermediate stage of the folding operation.

Considering Fig. 1, letter A marks the bottom of the box at the middle of the sheet, letters B and C designating the side walls. Scored lines join the corners 1, 2, 3, and 4 of the rectangular bottom. The top corners of side B are numbered 5 and 6, and these points are joined by a line scored in the blank, corners 5 and 1 and corners 6 and 2 being similarly connected. Above the scored top line of side B is a flap *b*, constituting a portion of the closure or attached lid of the box, and projecting from flap *b* is a tab *b'*, which will be again referred to. The top corners of side C are designated 7 and 8, and these are scored

between, a scored line also extending from corner 7 to corner 3 of bottom A, and another scored line being formed from corner 8 to corner 4 of the bottom. The top line of side C divides it from a flap *c*, which forms a portion of the cover, the complementary portion of the cover of the completed box, and this flap is provided with a slit *c'*, adapted to receive the tab *b'* of the remaining part of the cover or closure above described.

The ends of the box are marked D and E. The outer corners of end D are designated by numerals 9 and 10. A scored line joins corner 9 and corner 1 of bottom A, and another scored line extends from corner 10 to corner 4 of the bottom. The outer corners of end E are marked 11 and 12, corner 11 being the starting-point for a scored line to the corner 2 of the bottom, and the line from corner 12 to corner 3 of the bottom is also scored.

At either side of the box end D will be noted triangular portions of the blank joining end D to the sides B and C. Upon one side of end D these triangles are designated by letters F and G and their outermost corners at which they meet by number 13. Between corners 13 and corner 1 of the bottom a scored line extends. Upon the remaining side of end D the triangles are lettered H and J, their outermost meeting corners by number 14, and it will be noted that a scored line joins corners 14 and 4, the latter of the bottom A, and that these scored lines 13 1 and 14 4 separate the triangles. Triangle F possesses a projecting flap *f*, toward the outer edge of which is a slit *f'*, and at the lower edge at the middle of the scored line joining corners 13 and corners 5 of side B is a small locking-tab *f*², which is, in fact, a part of the flap *f* and formed by cutting through that flap, as illustrated. Triangle J has a tab *j*, projecting from the middle of its outer edge, and this tab *j* is designed to fit the slit *f'* of flap F and will be again mentioned. Attention is called to the two short side slits *f*³ and *f*⁴, cut through the blank at the junction of tab *f*² and flap *f* and extending a short distance away from the tab along the scored lines 13 5.

Upon the left side of end E of the box the triangular divisions of the blank are designated by letters K and L. Their meeting corners are marked 15, and a scored line con-

nects corners 15 with corner 2 of the bottom A. Triangle K has a projecting flap k , which is provided with a slit k' , and at the middle of the scored line joining corners 15 and corner 6 of side B there is formed the locking-tab k^2 by cutting through flap k . In respect of construction or design flaps f and k are alike. At the lower side of end E in Fig. 1 the triangles are referred to by letters M and N. Their meeting corners are numbered 16, and a scored line connects these corners and corner 3 of the bottom. Triangle N has a tab n projecting from its outer edge, and this tab is fashioned to enter the slit k' in flap k . Attention is called to the two short side slits k^3 and k^4 , cut through the blank at the junction of tab k^2 and flap k and extending a short distance away from the base of the tab along the scored line 15 6.

To fold the blank above described into a box for use, which folding may be done either by the maker or user of the boxes, the following steps are to be taken: Fold triangles M and N together, the corners 16 and scored line 16 3 being pressed inwardly. Fold triangles K and L together, causing corners 15 and scored line 15 2 to pass outwardly. Now triangle M will fold against the inner surface of end E of the box, and triangle L will fold against the outer surface of end E, the outer surface of the triangle meeting the outer face of the end. Next fold the locking tab k^2 inwardly and pass it between the meeting surfaces of triangle L and side E. It will here be seen that one end of the tape-bail O is stapled to the tab k^2 , usually upon its outermost surface—that is, the surface hidden in Fig. 1. The final step in the folding consists in inserting the tab n , which may also be termed a “locking-tab,” first through the short slits k^3 and k^4 , passing over the previously downwardly-folded tab k^2 , and, lastly, through the slit k' of flap k . When this is accomplished, the end folds will have been securely locked together. The other end folding of the blank into box form is carried out in the same manner, the remaining end of the bail O being stapled to the tab f^2 . To close the box, fold the flaps f and k inwardly,

fold flap c above them, and flap b over flap c , inserting tab b' into the slit c' to secure the closure in its place.

I am aware that other blanks have been made of continuous sheets which may be folded into box form, and I do not claim that feature broadly.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. As a new article of manufacture, a folding blank paper box consisting of a single sheet, comprising a bottom portion, front and rear side portions, and end portions, the said sides and ends being connected by folding portions, the two correspondingly-placed folding portions upon opposite sides of each of the said end portions and immediately next to the said side portions being provided one with a locking-tab and the other with a flap, the said flap of the folding portion having a plurality of slits, and the said locking-tab adapted to be passed through all the said slits during the folding operation thereby locking the folding portions together, substantially as described.

2. As a new article of manufacture, a folding blank paper box consisting of a single sheet, comprising a bottom portion, front and rear side portions, and end portions, the two correspondingly-placed folding portions upon opposite sides of each of the said end portions and immediately next to the said side portions being provided one with a locking-tab and the other with a flap, the said flap of the said folding portion having a plurality of slits and a tab formed by cutting through the said flap, the said tab formed in the flap being bent over an adjacent folding portion, and the said locking-tab adapted to be passed over the said bent flap-tab and through all the slits in the said flap during the folding operation thereby locking the folding portions together, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DION IRVING WINSLOW.

Witnesses:

JAMES RAY,

ELIZABETH T. CORRIGAN.