No. 674,009. Patented May 14, 1901.

C. W. LEWIS.

KNOCKDOWN PAPER BOX.

(Application filed Jan. 11, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

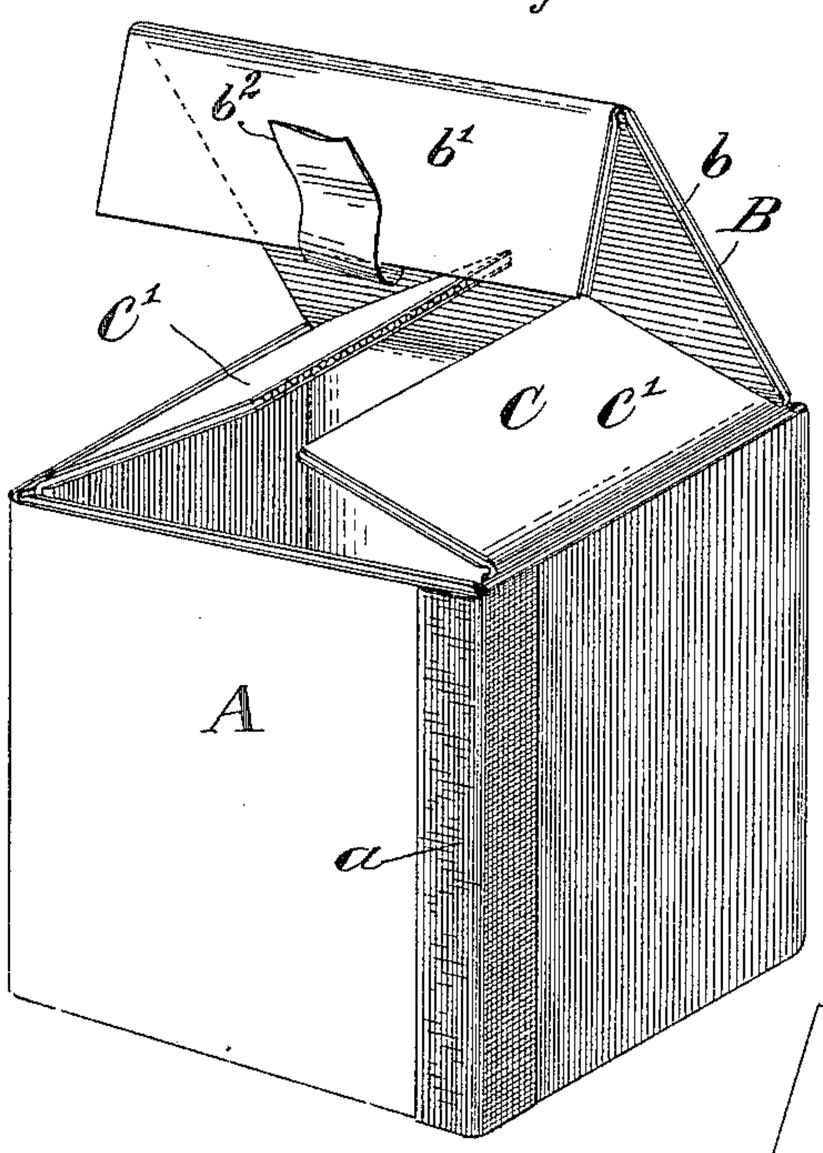


Fig. 3.

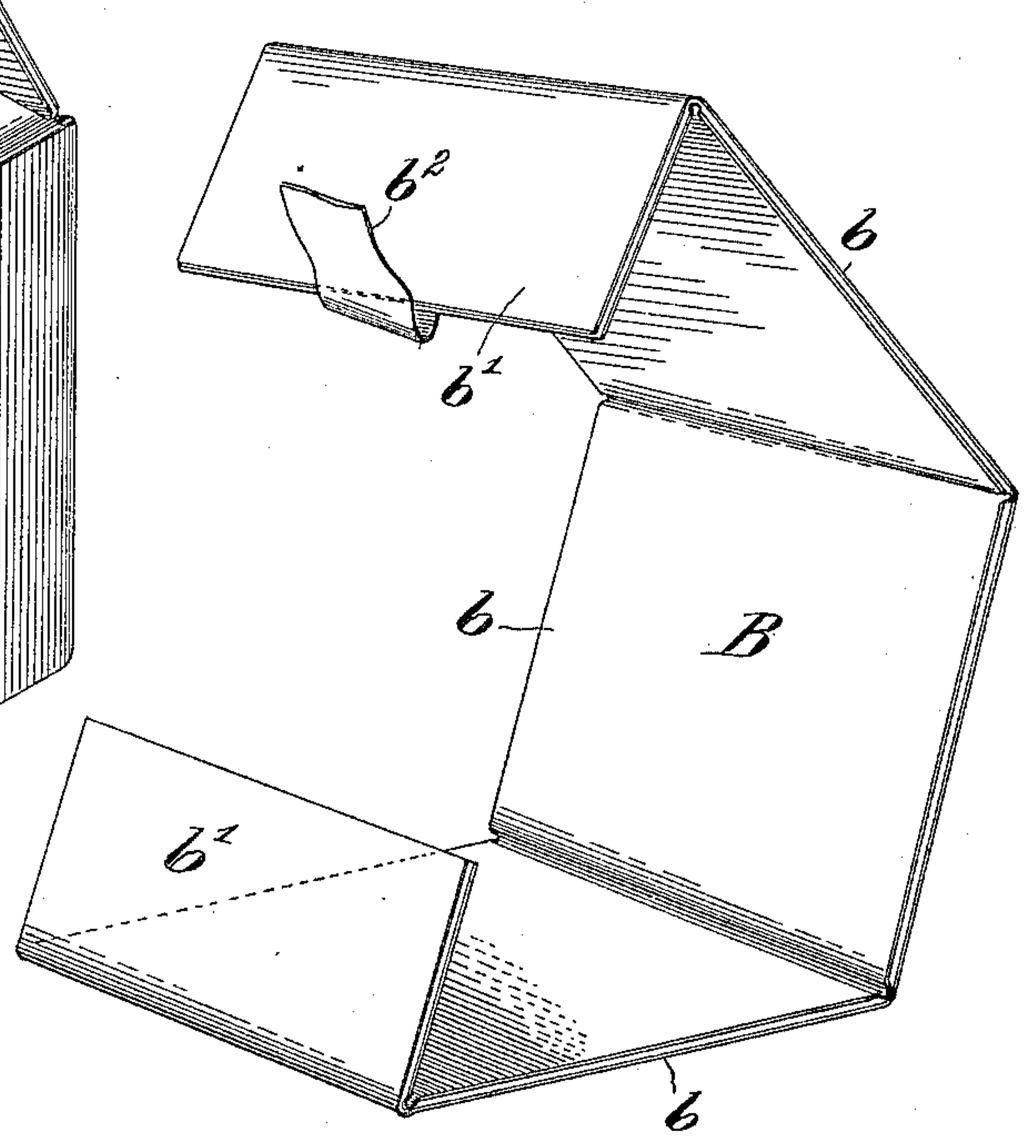


Fig. 2.

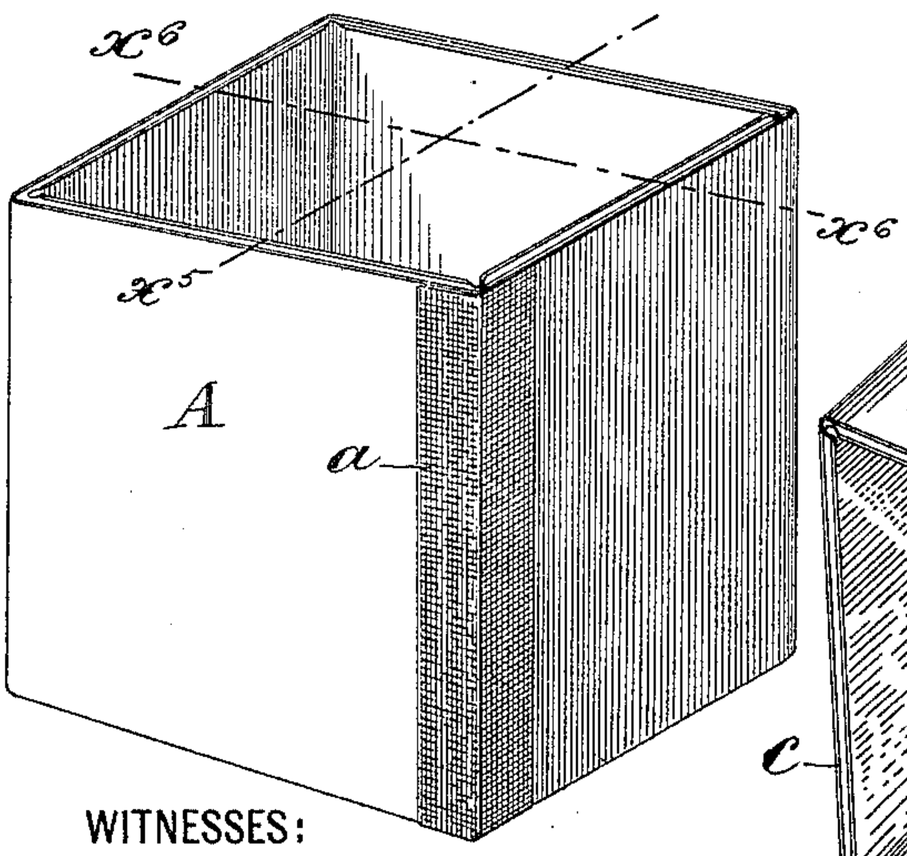
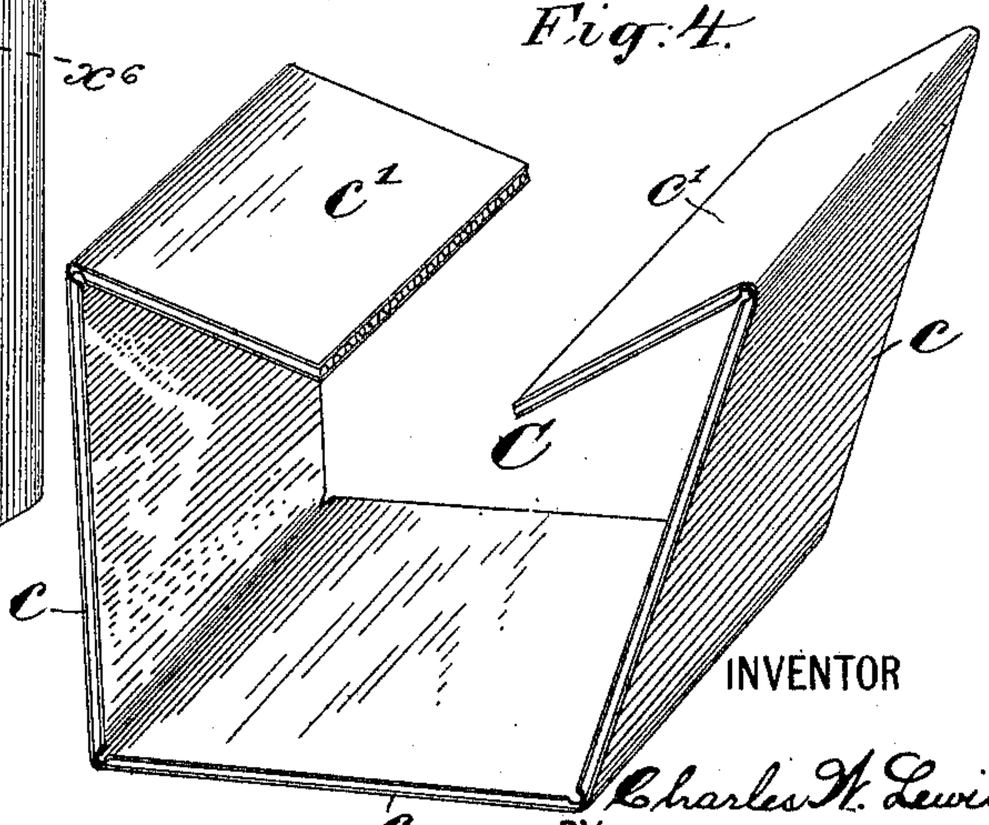


Fig. 4.



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C. W. LEWIS.

KNOCKDOWN PAPER BOX.

(Application filed Jan. 11, 1901.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 5.

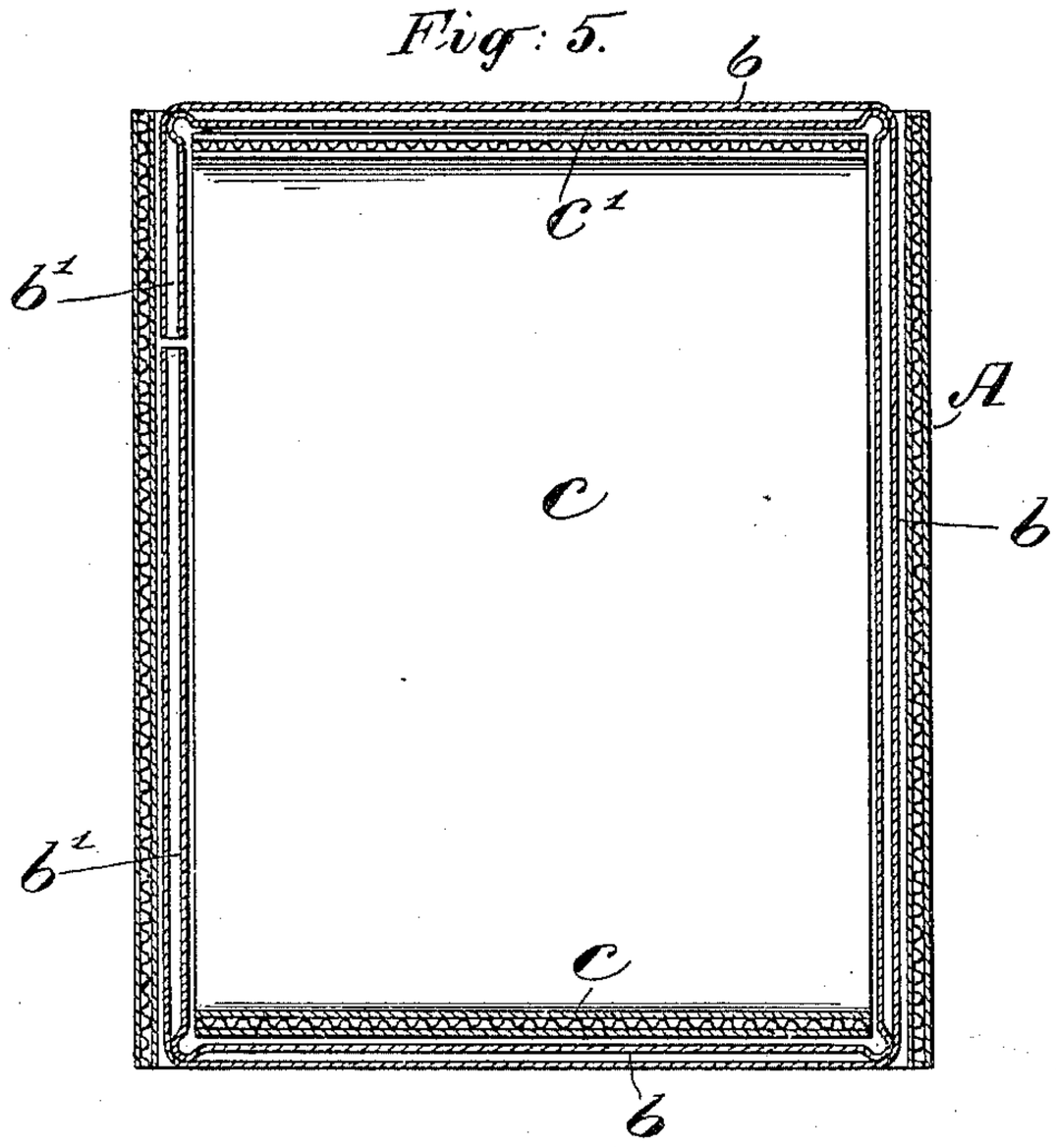
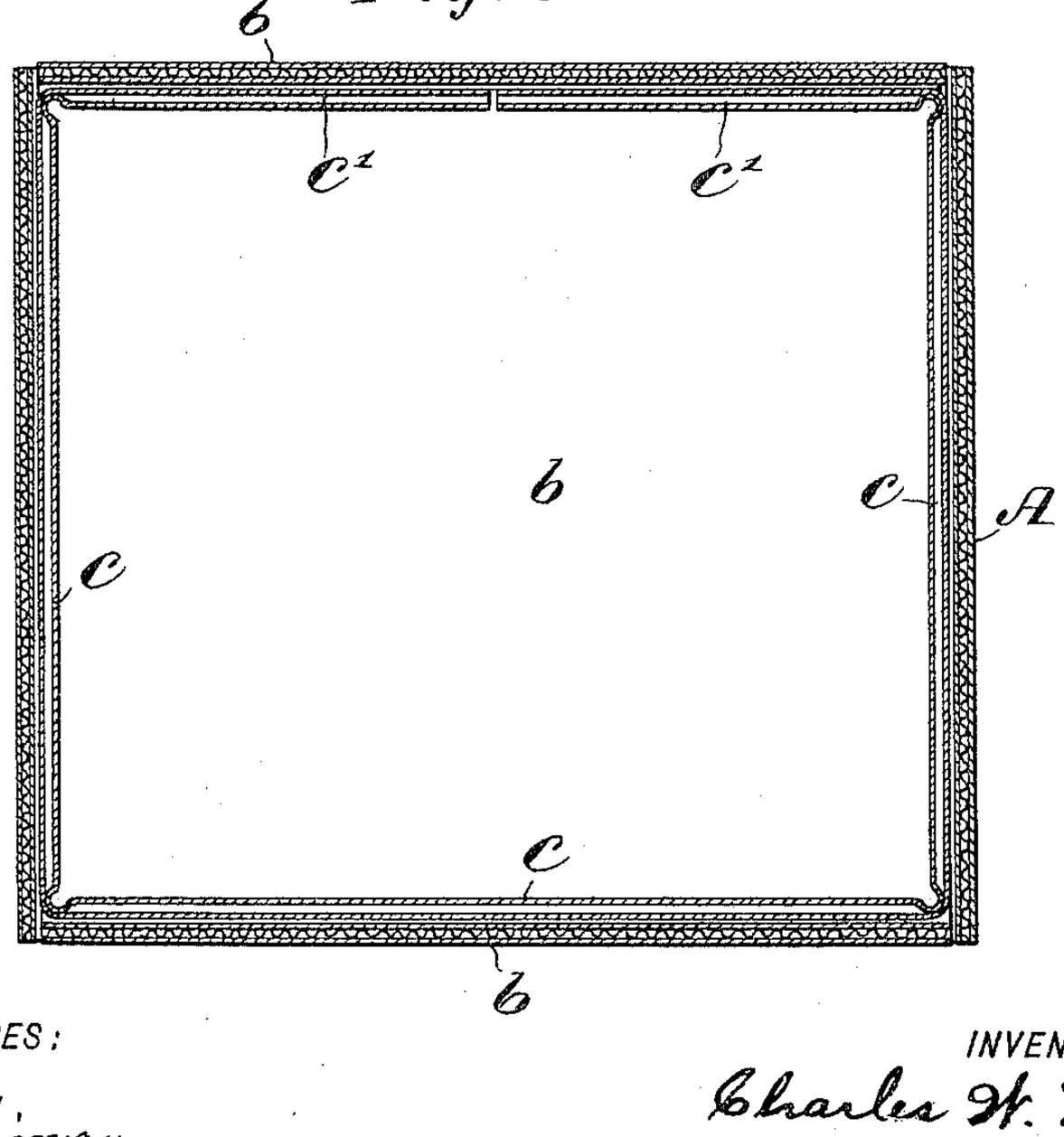


Fig. 6.



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KNOCKDOWN PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 674,009, dated May 14, 1901.

Application filed January 11, 1901. Serial No. 42,869. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. LEWIS, a citizen of the United States, residing in the borough of Manhattan, in the city, county, and State of New York, have invented certain new and useful Improvements in Knockdown Paper Boxes, of which the following is a specification.

This invention relates to the general class of boxes or crates made from paper fabric in several separate parts, each of which is adapted to be presssd out flat for packing or shipment, but when folded and telescoped one within the other they form a box or receptacle.

The object of the present invention is to provide a very strong and stiff box or receptacle made up from three separate and distinct telescoping parts.

In the accompanying drawings, Figure 1 is a perspective view of the box with all the parts telescoped and the cover partly open. Fig. 2 represents in perspective the outer casing or part detached. Fig. 3 represents in perspective the intermediate section or part detached. Fig. 4 is a perspective view of the inner section or part detached. Figs. 5 and 6 are sectional views of the box on a somewhat larger scale, the former being a vertical section in the plane indicated by line x^5 in Fig. 2 and the latter a vertical section in the plane indicated by line x^6 in Fig. 2.

The material from which the box is made is what is known as "cellular board," which is composed of two flat sheets of paper and an intermediate corrugated sheet pasted between them.

A designates the outer casing or part of the box. This casing, which is in the form of a rectangular tube open at the ends, is preferably formed of a single sheet of the fabric, with the corrugations extending roundwise and the hinging-creases extending transversely of the corrugations. The meeting ends of the sheet of fabric are connected together by a hinging-strip *a*, of some suitable fabric. The intermediate section or part B (seen detached in Fig. 3) has the corrugations extending lengthwise of the strip or piece. It consists of three full sides *b* and two half-sides or flaps *b'* at the respective ends of the piece. On one of these end flaps or half-sides is a tab b^2. This part B when folded fits snugly into the casing A, so that the corrugations of the latter cross those of the former at right angles. The inner section or part C is shaped similarly to the section B and consists of three full sides *c* and two half-sides or flaps *c'*. In this part C the corrugations extend lengthwise of the strip or piece, and when inserted in the intermediate section B the corrugations of the latter cross those of the former at right angles. The box thus composed of the telescoped parts A, B, and C forms a complete two-ply box of the cellular paper fabric wherein the intermediate section B has its corrugations at right angles to those of the other two sections.

As seen in Fig. 1, the box has an inner cover formed of the two flaps *c'* and an outer cover formed of one of the full sides *b* of the section B, the flap or half-side *b'* on this side forming the securing-tuck, which may be drawn out by the tab b^2.

It will be noted that by telescoping the folded strips B and C, so as to cross each other, the two plies of the box-wall are made to extend to all the six sides of the box. The hinges of the several folding parts A, B, and C are formed by crushing the fabric along the hinging-lines.

The box will be rectangular, but may be of any desired size or proportions. The flap *b'*, which bears the tab b^2, may of course be wide or narrow, as desired. In Fig. 5 it is represented as narrower than the other flap *b'*.

Preferably the inner covering-flaps *c'* on the section C will be of equal width, as shown; but obviously this is not essential to the invention. This flap might be full, like the cover-flaps *b' b'* of the section B.

Having thus described my invention, I claim—

1. A knockdown box made from stiff, cellular paper fabric, in three separable or distinct parts folded and telescoped together, each of the six sides of said box consisting of two non-adherent plies or thicknesses of said cellular fabric, and said plies having their corrugations crossing at right angles.

2. A box made from stiff paper in three separable, distinct parts, the outer part being in the form of a rectangular open-ended

tube, the intermediate part composed of sides or sections hinged together, the ends of said part being free or disconnected and the inner part, telescoped within and crossing the intermediate part, said inner part being composed of sides or sections hinged together and having its ends free or disconnected, said intermediate and inner parts having cover and tucking flaps.

3. A square, knockdown box made from stiff, cellular paper fabric in three separable parts or pieces, namely, the tubular outer casing A, the folded intermediate part B, having a tuck or tucking-flap at one end, and the folded inner part C, telescoped within and crossing the part B, said part C having two inner cover-flaps c', substantially as set forth.

4. A knockdown box made from stiff paper in three separable or distinct parts, the outer part being in the form of a rectangular tube, hinged at its corners so that it may be flattened for packing, the intermediate part, composed of sides or sections hinged together so that the part may be flattened for packing, and the inner part, telescoped within and crossing the intermediate part, said inner part being composed of sides or sections hinged together so that the part may be flattened for packing, said intermediate and inner part having a cover and tucking flaps, substantially as set forth.

In witness whereof I have hereunto signed my name, this 7th day of January, 1901, in the presence of two subscribing witnesses.

CHARLES W. LEWIS.

Witnesses:
WILLIAM G. CHAPIN,
MARTIN H. DAY.