

(No Model.)

R. R. COLBURN.

PAPER BOX.

No. 283,209.

Patented Aug. 14, 1883.

fig. 1

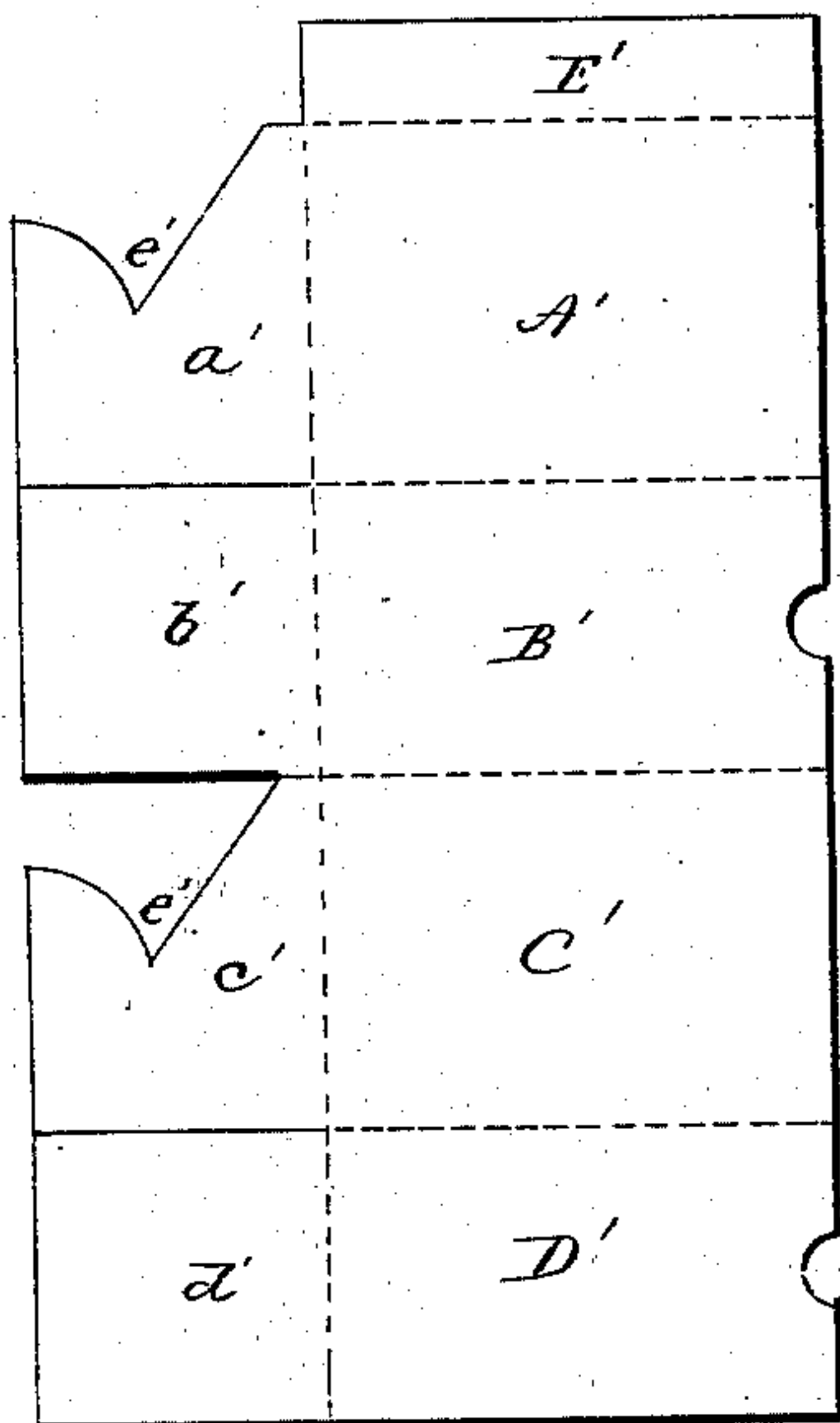


fig. 2

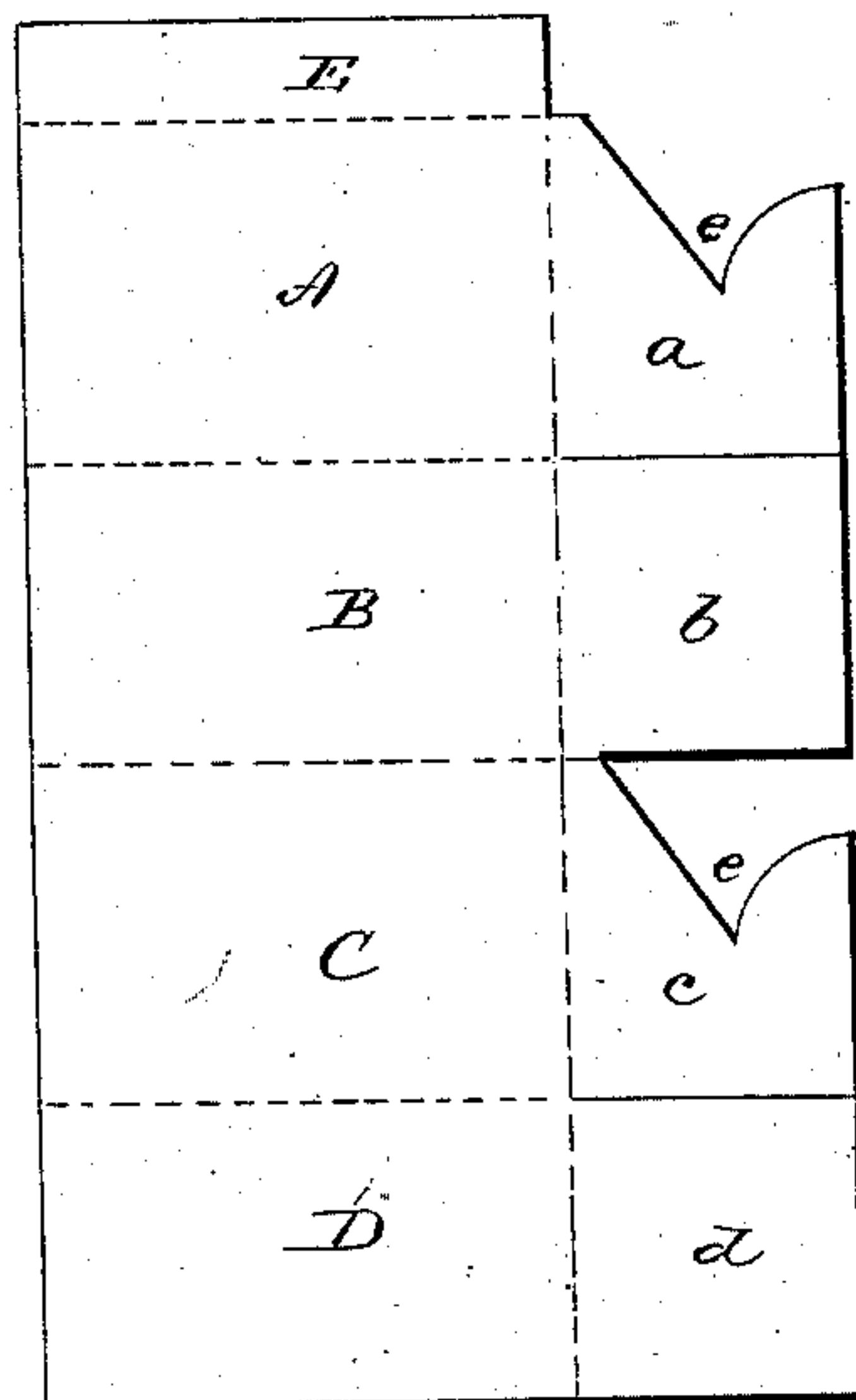


fig. 3

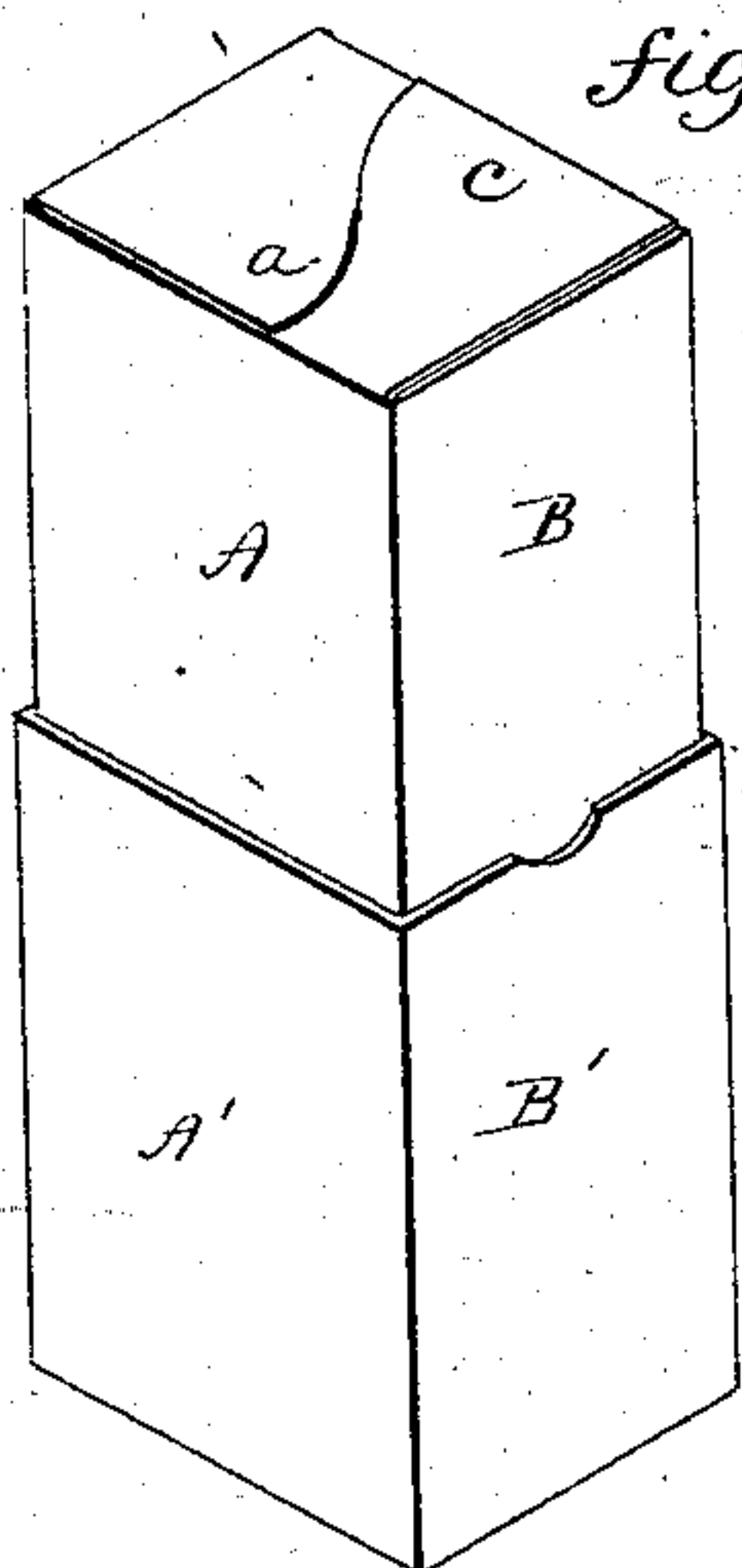


fig. 4

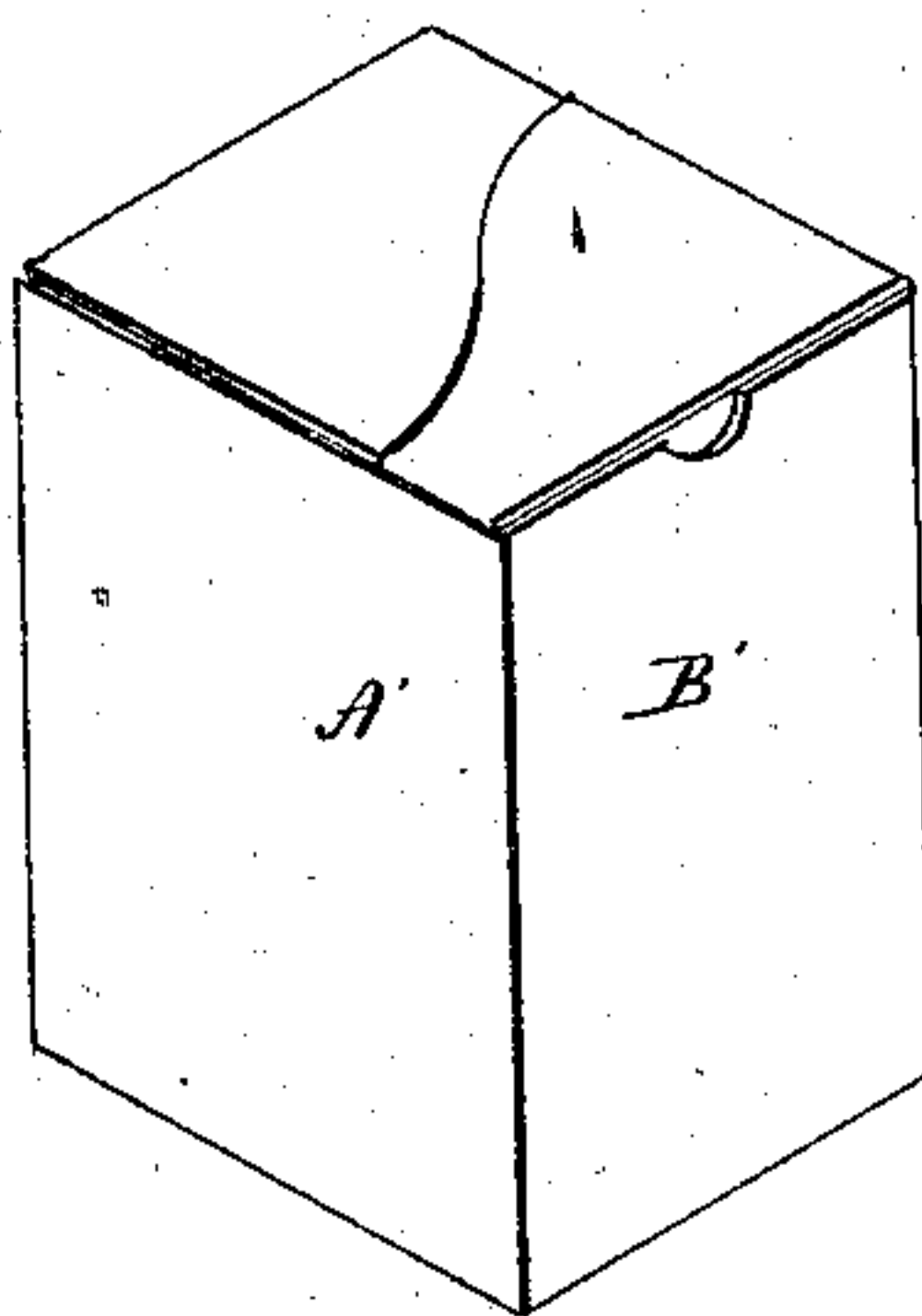


fig. 5

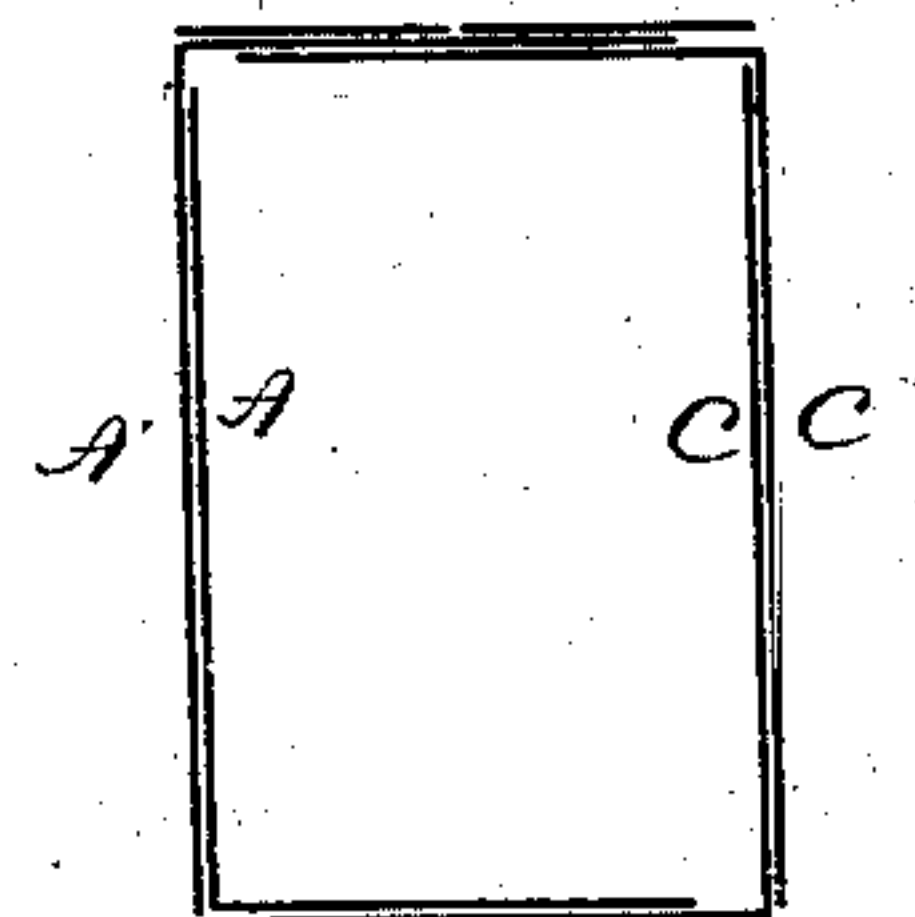
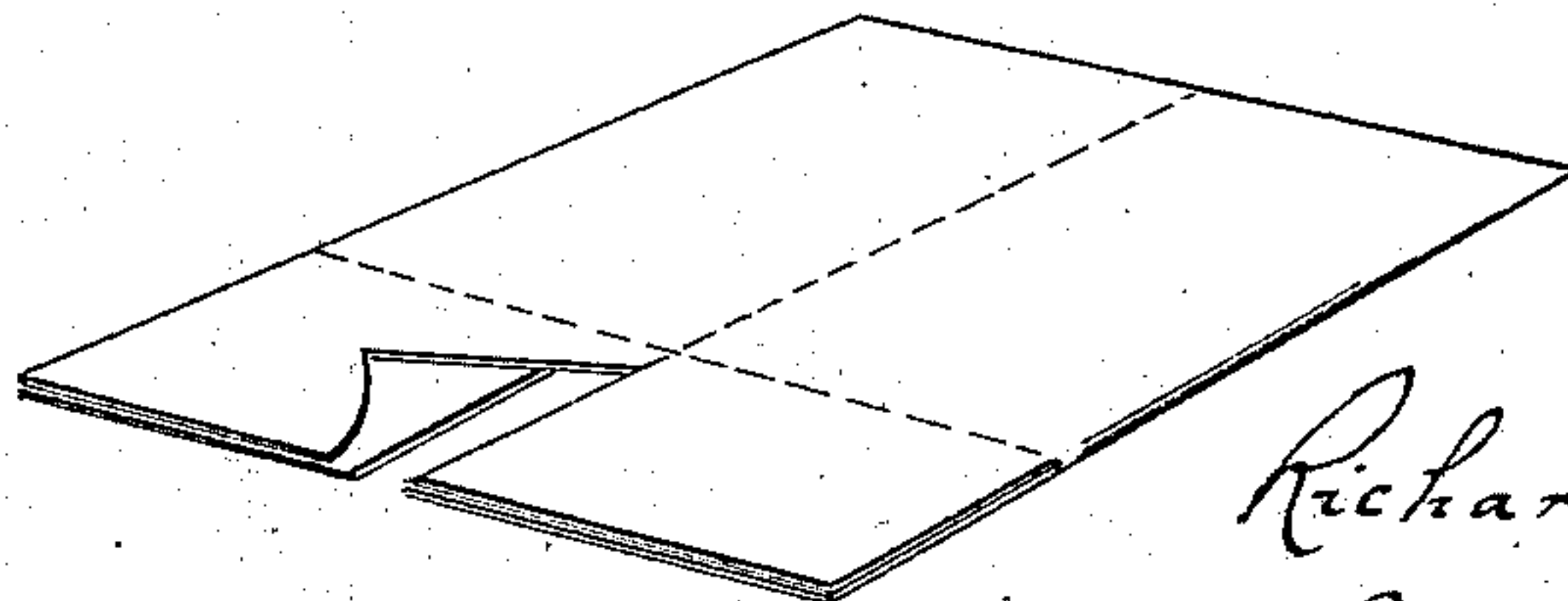


fig. 6



Witnesses:

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Inventor

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UNITED STATES PATENT OFFICE.

RICHARD R. COLBURN, OF ANSONIA, CONNECTICUT.

PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 283,209, dated August 14, 1883.

Application filed July 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, RICHARD R. COLBURN, of Ansonia, in the county of New Haven and State of Connecticut, have invented a new Improvement in Paper Boxes; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, the blank for the case or interior part; Fig. 2, the blank for the outer part; Fig. 3, a perspective view, showing the two parts, being set together in inverted position; Fig. 4, a perspective view of the two parts set together in inverted position; Fig. 5, a vertical section; Fig. 6, a perspective view of the one part as folded for transportation.

This invention relates to an improvement in that class of paper boxes which are commonly called "telescopic boxes"—that is to say, boxes which consist of a case closed at one end and open at the other, with an inclosing-case the internal dimensions of which correspond to the external dimensions of the case proper, open at one end and closed at the other, and so that, the case itself being filled, the outer or inclosing case may be passed on over the open end and serve both as a cover for the open end and an inclosure for the box. This class of boxes are largely used for packing screws, rivets, and like small metal articles, and as usually constructed both the inner and outer cases are made firm—that is, made in box form, pasted so as to retain their shape. Boxes thus constructed occupy the same space whether filled or empty, and storage-room for the empty boxes necessarily kept on hand in large manufacturing factories is very great, and as in many cases these boxes are made distant from the factories, the empty boxes make a large bulk and expensive transportation.

The object of my invention is to construct this class of boxes so that when not required for use they may be folded in a compact form, so as to occupy little more than the bulk of the solid paper contained in the box.

To this end my invention consists in a telescopic box the outer and inner parts of which

are cut so that the closed end may be left open and the two parts folded into a flat condition when not required for use, but when required for use the parts may be opened to shape, the end extensions turned downward and interlocked, so as to secure the two parts in their proper shape and condition, the one for being filled and the other to serve as the inclosing-case, as more fully hereinafter described.

The blanks for the parts of the box are cut from suitable paper, such as commonly used for folding paper boxes. The inner case is best cut as seen in Fig. 1, A B C D representing the four sides, the paper between the sides being creased, as seen in broken lines, for convenience of bending. At one extreme—say on the side A—a flap, E, is formed, which, when the four sides are bent together, is pasted to the adjacent side D. On one edge of the blank extensions *a*, *b*, *c*, and *d* are made from the respective sides, corresponding in width to the said respective sides, as seen in Fig. 1. Two of these extensions—that is, on opposite sides, as *a c*—are cut so as to interlock the one with the other. This method of interlocking, as here shown, is that for which Letters Patent were granted to myself and Charles M. Arthur, dated July 2, 1878, No. 205,608. That construction, I believe, is the best adapted for this class of boxes; but other constructions for securing the closed end may be adopted.

On the corresponding edges of the two extensions *a c* a notch, *e*, is cut, of substantially V shape, extending about midway of the width of the said two extensions. The angle of the V is distant from the edge of the part to which it is attached about half the width of the adjacent sides—that is, B D—and so that when the blank is folded into rectangular shape the extensions *b d* are turned inward, the one onto the other, and then over those ends the two extensions *a c* are interlocked by bringing the end of each extension under the other, and so that the angles engage, as seen in Fig. 3. This interlocking of the two extensions *a c* firmly secures the case in its condition to receive whatever is proposed to be inclosed, the other end left open.

The inclosing-case, Fig 2, is cut from a blank of paper substantially the same as for

the inner case, except that it is as much larger than the inclosing-case as the thickness of the material of which it is composed, and so that when the blank is folded and its end closed and secured it will pass over the case, the depth of the inclosing-case being substantially the same as that of the inner case, making the two parts, when secured together, substantially the same as the common telescopic box.

10 The description of the blank for inclosing the case is therefore the same as that hereinbefore given for forming the blank for the inner case. The same letters apply; but for convenience of illustration in showing the two parts together

15 I mark the corresponding parts of the inclosing-case A, B, C, &c., as seen in Fig. 2.

The outer and inner cases having been secured together by the flap E and the extensions left in the same plane as the respective sides, the box may be folded into the position seen in Fig. 6, thus bringing the blank into half its original extent simply doubled, and occupying no more bulk than the thickness of the blank; and a package of these cases occupies no more space than that of the paper of which they are composed, the package being substantially solid. When required for use, they are readily set up, and when set up are substantially as firm as the usual rigidly-made

25 boxes.

As before stated, while I prefer the peculiar cut of the extensions *a c*, whereby the parts are securely locked in their open or extended condition, other known cuts of these parts may be made whereby the cases may be so locked for use or unlocked for packing. I do not therefore wish to be understood as limiting my invention to the particular cut of the locking devices, the gist of my invention being a paper box composed of two parts, the said two parts closed at one end and open at the other, the internal dimensions of the one corresponding to the external dimensions of the

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other, whereby the one may be placed over and form an inclosing-case for the other, the closed ends formed by an extension from opposite sides interlocked so as to secure the said extensions and hold the box in its required shape; or, by unlocking the said extensions, the parts may be closed into a flat condition.

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I claim—

1. The herein-described folding box, consisting of the two parts, each composed of four sides, with extensions at one edge of the blank from said sides, whereby when the sides at the opposite end of the blanks are united said extensions may be turned inward and interlocked to close that end, leaving the other end of the part open, the internal dimensions of one part corresponding substantially to the external dimensions of the other part, whereby the one part may be set over the other part and inclose that other part, the closed end of one part closing the open end of the other part, substantially as described.

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2. The herein-described telescopic box, consisting of the two parts, each constructed from a blank having the sides A B C D in a continuous piece, the two sides A C constructed, respectively, with extensions *a c* at one end, and the said extensions having a V-shaped notch, *e*, cut in the corresponding edge, the dimensions of one part with relation to the other part being such that when the said parts are set up the internal dimensions of one part will correspond to the external dimensions of the other part, and whereby the one part may be telescopically passed on over the open end of the other part and serve to inclose the other part, substantially as described.

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RICHARD R. COLBURN.

Witnesses:

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E. LA RUE JOSLYN.