

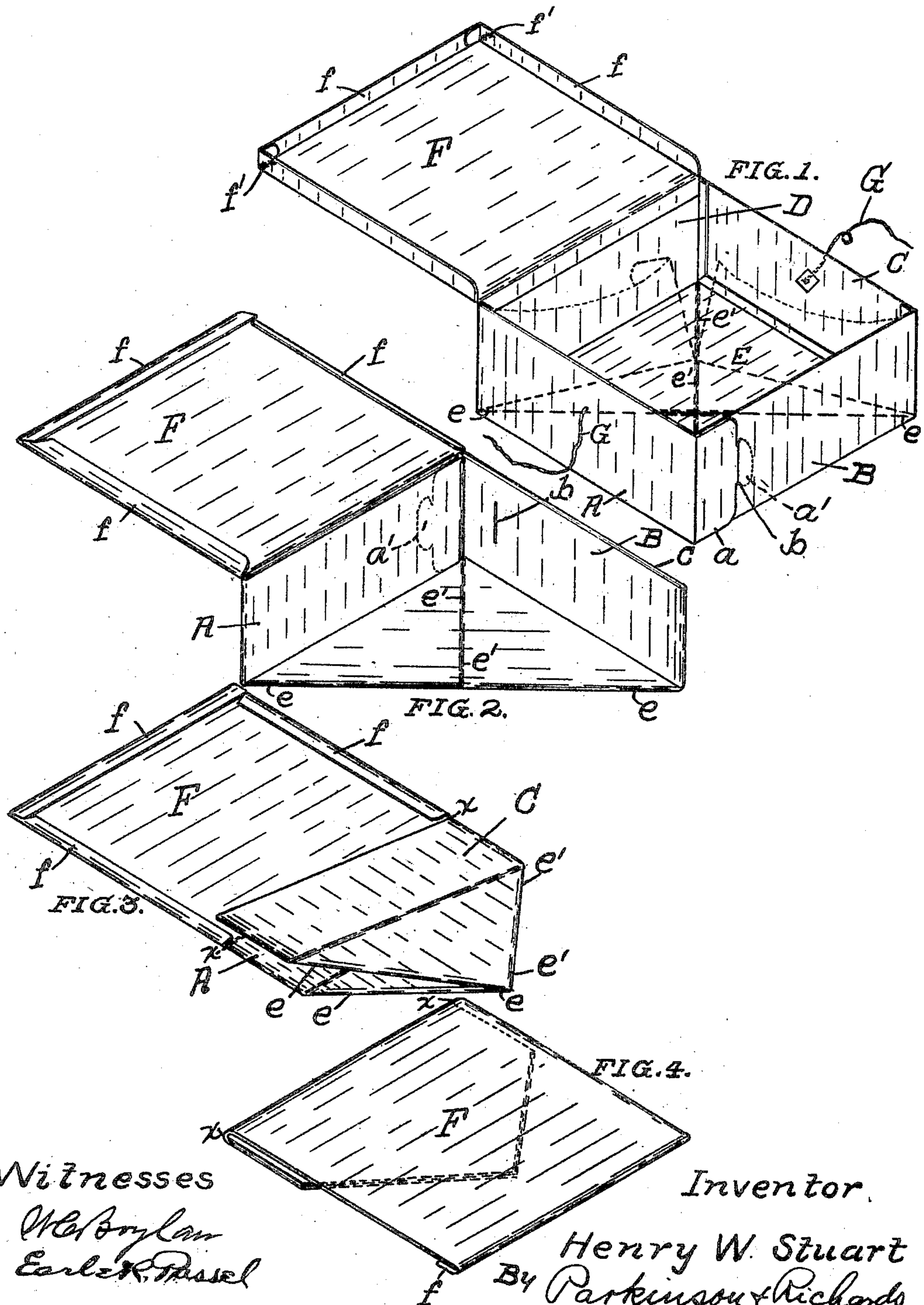
No. 817,531.

PATENTED APR. 10, 1906.

H. W. STUART.

FOLDING BOX.

APPLICATION FILED MAY 20, 1905.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY W. STUART, OF FERNBANK, OHIO.

FOLDING BOX.

No. 817,531.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed May 20, 1905. Serial No. 261,429.

To all whom it may concern:

Be it known that I, HENRY W. STUART, a citizen of the United States, residing at Fernbank, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Folding Boxes, of which the following is a specification.

The object of my invention is to provide an improved box of economical and comparatively rigid construction and which may be folded flat for shipment or storage. My invention consists of a box constructed substantially as hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a distended box embodying my invention; Fig. 2, a perspective view of the box partially folded; Fig. 3, a perspective view of the box when further folded, and Fig. 4 a perspective view of the box completely folded.

The box is constructed of the four sides A, B, C, and D, bottom E, and lid F. At one corner sides A and B are left open and side A provided with a flap *a*, having a tongue *a'*, and side B with a slot *b* for detachably securing the two sides together. The bottom E is scored or creased for bending on diagonal lines *e e* and *e' e'*. Lid F is permanently secured to side D and is provided with sealing flaps or flanges *f*, which are scored or creased on lines *f'* for folding.

In folding the box tongue *a'* is removed from slot *b*, so as to leave that corner free to open in folding, as indicated by dotted lines in Fig. 1. Then by folding the bottom on line *e e* side A is folded against side D, side B against side C, and bottom E diagonally doubled onto itself, as shown in Fig. 2. In making this fold flap *a* and tongue *a'* are folded inside of side A, as indicated in dotted lines. As sides A and B thus lie within sides D and C, respectively, when folded it is necessary to make sides A and B a little shorter than sides D and C to obtain a smooth fold. In constructing the box it will generally be found preferable to attach the lid to one of the longer sides D or C for convenience in folding. The box is next folded on line *e' e'* and at the corner between sides C and D to bring sides B and C down onto sides A and D, when the box may be laid out flat and flaps *f* folded down, as shown in Fig. 3.

It will be observed that the crease *e e*, connecting the corners of the box adjacent to the open corner, is an inwardly-folding crease,

while the crease *e' e'*, connecting the open corner with its opposite corner, is inwardly-folding in the portion remote from the open corner and outwardly-folding in the portion adjacent to the open corner.

If desired, the box may be further folded on line *x x*, as shown in Fig. 4. Tapes G may be secured to sides A and C for fastening the lid when the box is filled. By this construction it will be noted that I provide a folding box in which the sides are uncreased, and thus retain all of their original stiffness and rigidity, in which the bottom may be made of a single piece of material suitably creased and in which the lid is permanently attached to the box.

It is obvious that the box when folded flat may be readily distended and secured in box-form by engaging tongue *a'* in slot *b*.

While I have illustrated and described the preferred construction for carrying my invention into effect, this is capable of variation without departing from the spirit of the invention. I therefore do not wish to be limited to the exact construction shown in the drawings; but

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

1. In a folding box, the combination of four uncreased sides permanently secured to the bottom and at three of the corners; a detachable connection between the sides at the fourth corner; an inwardly-folding crease in the bottom, connecting the corners of the box adjacent to the open corner; and a crease in the bottom connecting the other corners, said last-named crease being inwardly-folding in one portion and outwardly-folding in the other portion, substantially as specified.

2. In a folding box, the combination of four uncreased sides permanently secured to the bottom and at three of the corners; a detachable connection between the sides at the fourth corner; an inwardly-folding crease in the bottom, connecting the corners of the box adjacent to the open corner; and a crease in the bottom connecting the other corners, said last-named crease being inwardly-folding in the portion remote from the open corner, and outwardly-folding in the portion adjacent thereto, substantially as specified.

3. In a folding box, the combination of four uncreased sides permanently secured to the bottom and at three of the corners; a

tongue-and-slot connection between the sides
at the fourth corner; an inwardly-folding
crease in the bottom, connecting the corners
of the box adjacent to the open corner; and
5 a crease in the bottom connecting the other
corners, said last-named crease being in-
wardly-folding in the portion remote from the

open corner, and outwardly-folding in the
portion adjacent thereto, substantially as
specified.

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