

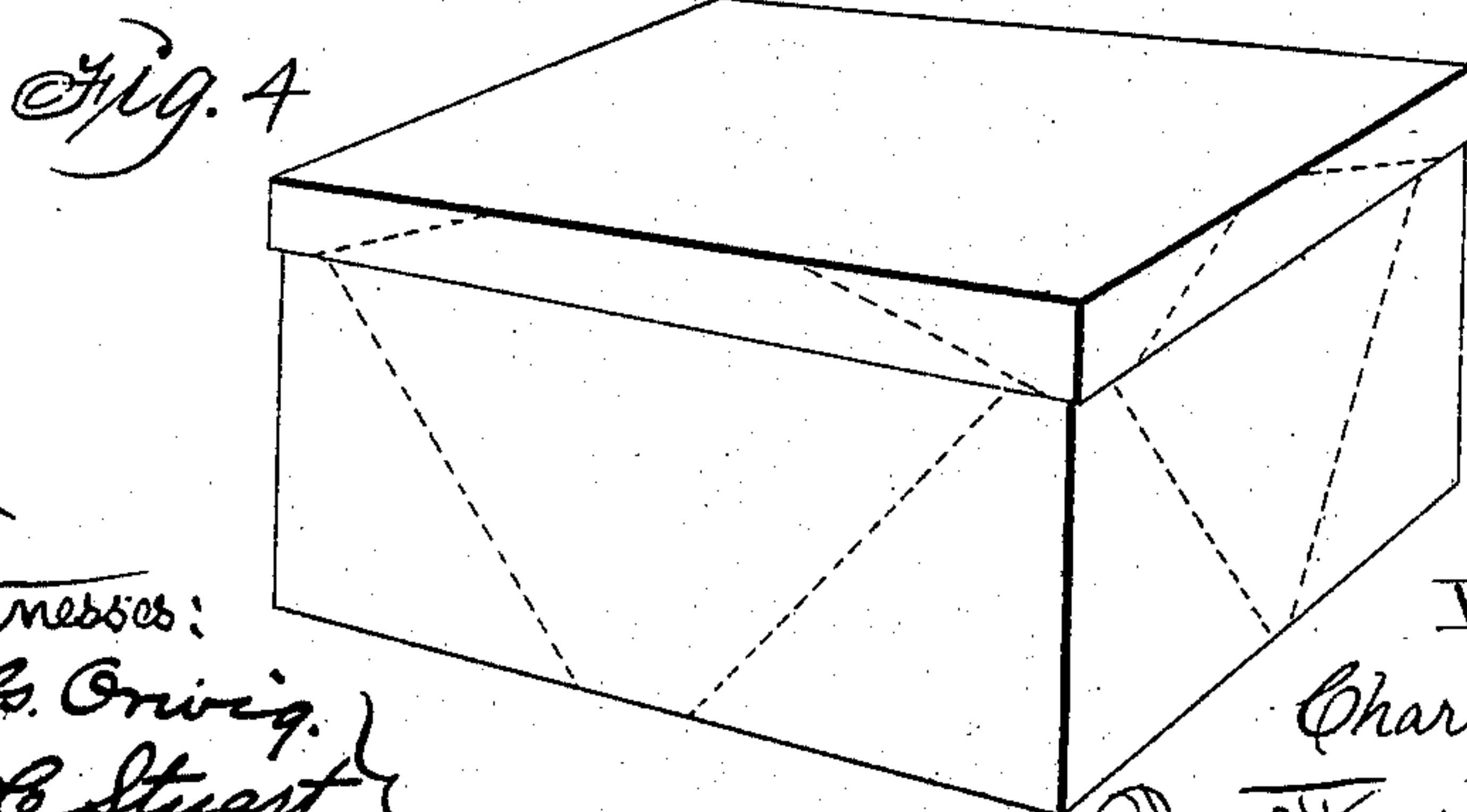
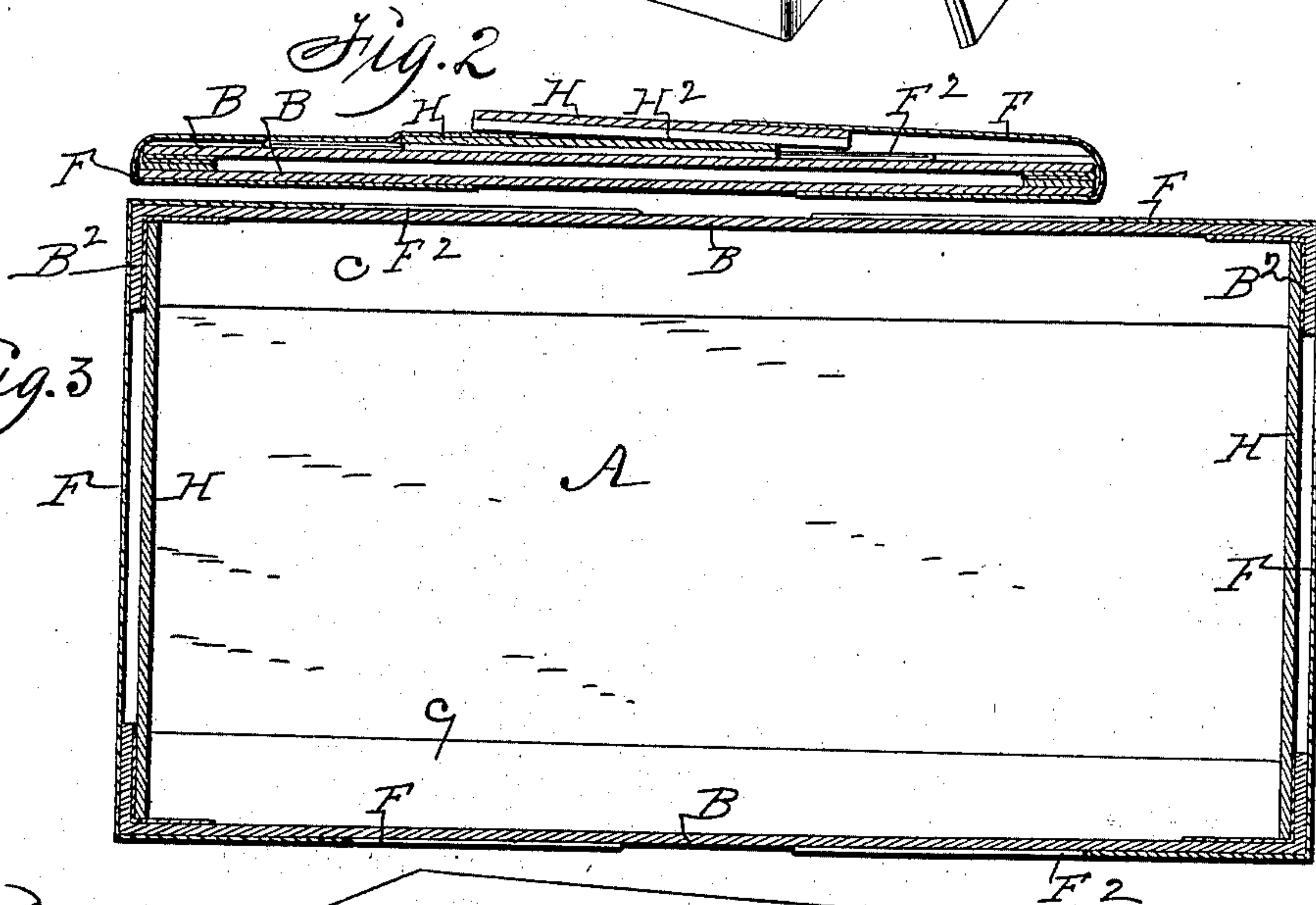
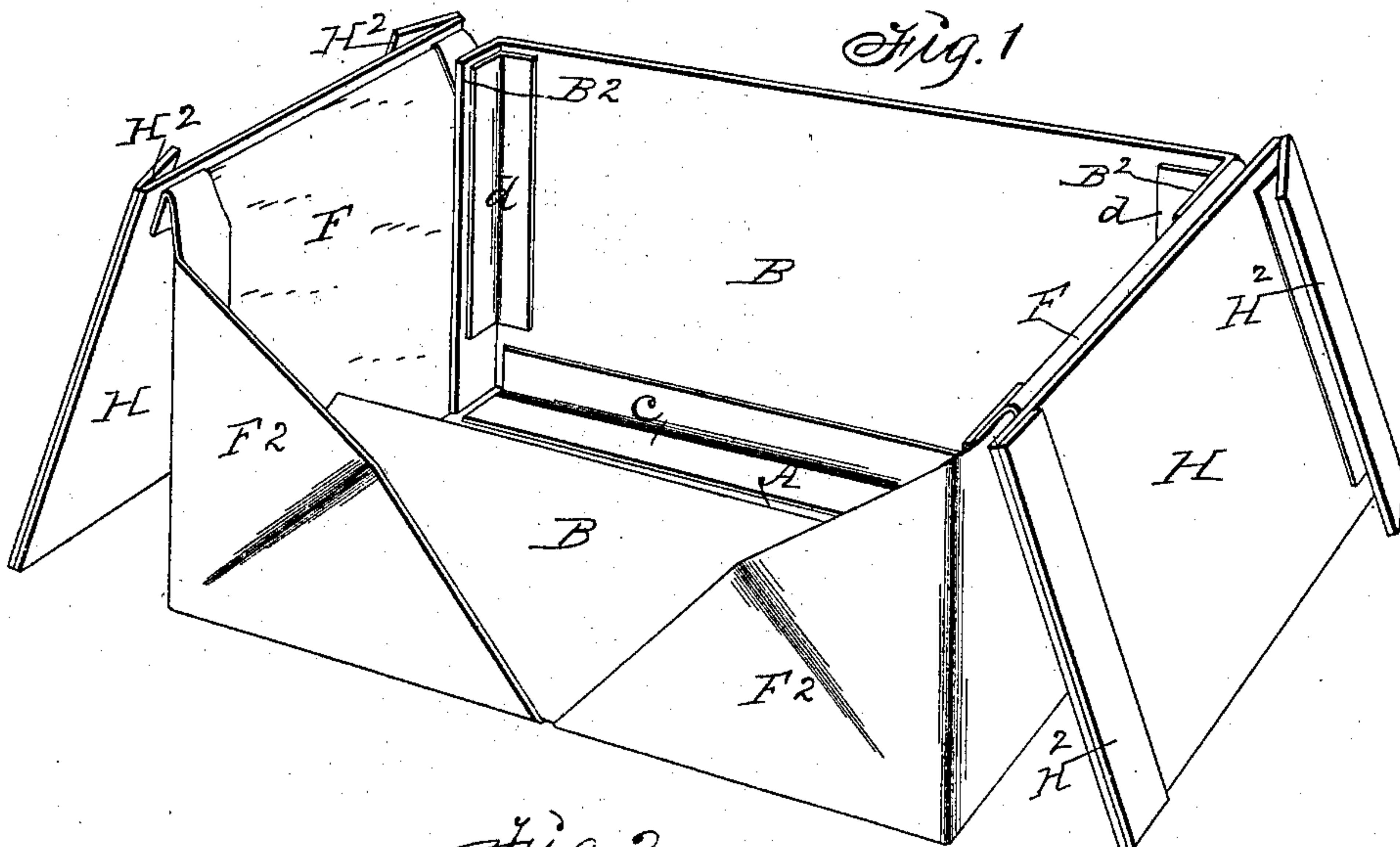
No. 692,070.

Patented Jan. 28, 1902.

C. B. PROCTOR.  
FOLDABLE BOX.

(Application filed Jan. 21, 1901.)

(No Model.)



Witnesses:  
R. B. Orwig,  
J. B. Stuart

Inventor:  
Charles B. Proctor,  
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# UNITED STATES PATENT OFFICE.

CHARLES B. PROCTOR, OF INDIANOLA, IOWA.

## FOLDABLE BOX.

SPECIFICATION forming part of Letters Patent No. 692,070, dated January 28, 1902.

Application filed January 21, 1901. Serial No. 43,992. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES B. PROCTOR, a citizen of the United States, residing at Indianola, in the county of Warren and State of Iowa, have invented a new and useful Foldable Box, of which the following is a specification.

My invention relates to the manner of constructing boxes of paper-board or other suitable light material, so that they can be folded together compactly when empty to be advantageously handled and stored away when not in use and preserved and available for use at different times and for different purposes.

Heretofore paper boxes have been provided with jointed ends for the purpose of folding the ends and sides upon the bottom; but in no instance have ends been made of flexible material and extended over the sides and fixed to the bottom and not to the sides, so that forming joints in the ends is not required, as contemplated by my invention, which consists in the construction and combination of sides and flexible ends with a fixed bottom and a removable cover, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my box, partly folded, and shows the manner of forming and connecting the parts that fold upon each other. Fig. 2 is a longitudinal sectional view showing the relative positions of the different parts when folded compactly upon each other. Fig. 3 is an enlarged horizontal sectional view showing the positions of the hinged parallel sides and hinged parallel flexible ends that extend over the sides to serve as hinges for connecting the ends with the bottom permanently and with the sides adjustably. Fig. 4 is a perspective of the box and a cover thereon, preferably made foldable in the same manner as the lower part of the box is made.

The letter A designates a flat bottom, quadrilateral in form, that may vary in dimensions as required for boxes of different sizes. Mating sides B are hinged to the parallel edges of the bottom by means of strips of cloth *c* or other suitable flexible material pasted or

otherwise fixed to the outside surfaces of the bottom and sides.

B<sup>2</sup> designates extensions on the ends of the sides B, formed integral therewith or connected therewith by means or strips of cloth *d* or pasted thereto and to the sides or in any suitable way that will allow them to fold flat upon the inside faces of the ends or to extend at right angles thereto to reinforce and stiffen the corners of the box.

Ends F, made of flexible strong paper or other suitable material, have integral extensions F<sup>2</sup>, and the ends and extensions are pasted or otherwise fixed to the under side of the bottom A in such a manner that the extensions will fold together when the ends are folded inward upon the bottom and prevent the sides B from turning outward when extended perpendicularly, as required, when in use.

In place of shaping the ends F and extensions F<sup>2</sup> as shown they may be formed complete in one piece to serve as the outside cover of the hinged sides of the box, as shown in Fig. 4.

Auxiliary ends H are pasted or otherwise fixed to the tops of the flexible ends F in such a manner that they will fold inward and downward to reinforce and stiffen the ends of the box as required for use and also as required to fold flat upon the bottom when not in use, as shown in Fig. 2. Extensions H<sup>2</sup> may be attached to the ends H to fold inward for stiffening the corners of the box.

It is obvious the bottom A, sides B, and ends F can be cut from paper-board, thin sheets of wood, or other suitable material and the cover made rigid in a common way or foldable in the same manner that the lower part of the box is made.

Having thus described the purpose, construction, and operation of my invention, its practical utility will be readily understood by persons familiar with the art to which it pertains, and what I claim as new, and desire to secure by Letters Patent therefor, is—

1. In a foldable box, a flat bottom, sides hinged to the parallel side edges of the bottom to fold inward, flexible ends hinged to the ends of the bottom and also to the side



edges of the bottom to extend over the sides to fold inward over the sides and bottom and auxiliary ends hinged to the tops of said flexible ends, arranged and combined to operate in the manner set forth for the purposes stated.

2. In a foldable box, a flat bottom, mating sides having hinged extensions at their ends, flexible strips of sheet material fixed to the edges of the bottom and the lower edges of the sides, flexible ends having extensions to overlie the sides hinged to the ends and sides of the bottom and auxiliary ends being hinged extensions of the flexible ends, arranged and combined to operate in the manner set forth for the purposes stated.

3. A foldable box comprising a flat bottom, mating sides hinged to the parallel edges of the bottom, flexible ends having extensions at their sides adapted to overlie the stiff sides hinged to the bottom and the side edges of the bottom, auxiliary ends hinged to the tops of the flexible ends and a removable cover, arranged and combined to operate in the manner set forth for the purposes stated.

4. In a foldable paper box, a stiff bottom, a flexible end fixed to the end of the bottom and provided with extensions at its free parallel sides and said extensions fixed to the parallel sides of the bottom to extend loosely over the rigid sides hinged to the rigid bot-

tom and adapted to be folded into a parallel plane with the rigid bottom and rigid hinged sides, as shown and described for the purposes stated.

5. In a foldable paper box, a four-sided rigid bottom, flexible ends fixed to the ends of the rigid bottom, auxiliary stiff end pieces fixed to the tops of the flexible ends, lateral extensions at the parallel sides of the flexible ends and said extensions fixed to the end portions of the parallel sides of the rigid bottom to fold between the parallel rigid hinged sides and said stiff end pieces, arranged and combined as shown and described for the purposes stated.

6. In a foldable paper box, stiff sides and a stiff bottom hinged together at the parallel edges of the bottom and flexible ends fixed to the ends of the bottom and provided with extensions at their sides and the extensions fixed to the parallel sides of the end portions of the bottom and rigid ends fixed to the top edges of the flexible ends and provided with extensions at their parallel sides for reinforcing the corners of the box, arranged and combined, for the purposes stated.

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Witnesses:

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