(No Model.)

E. M. SCOTT.

KNOCKDOWN BOX.

No. 550,648. Patented Dec. 3, 1895.

Fig. 1.

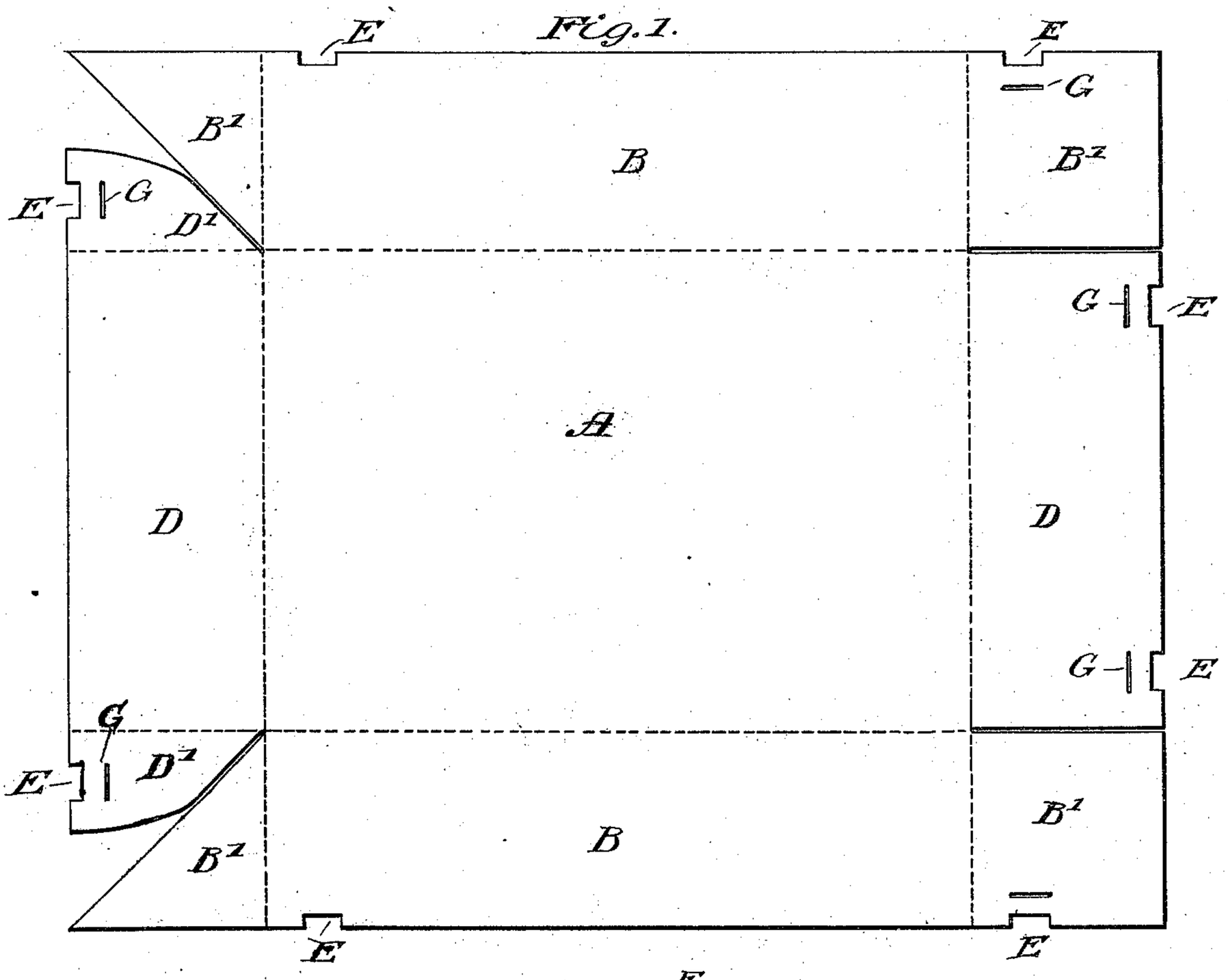


Fig. 2.

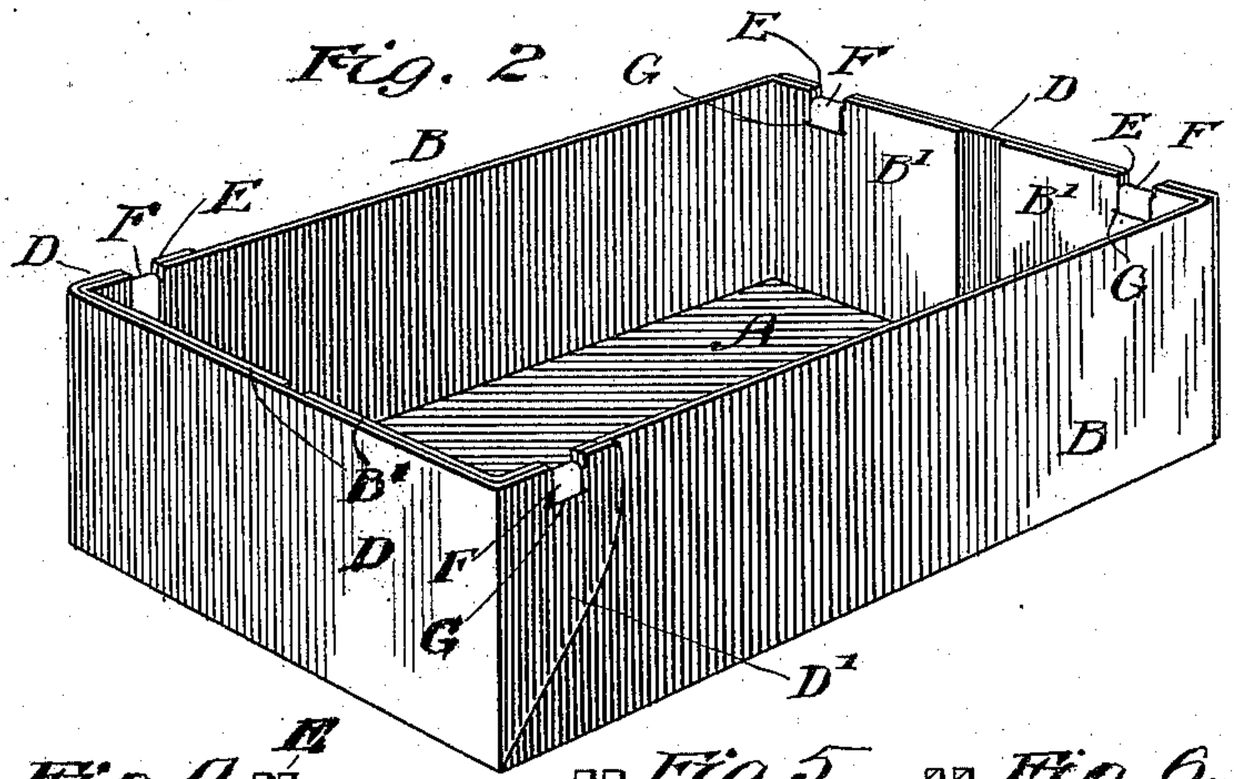


Fig. 3.

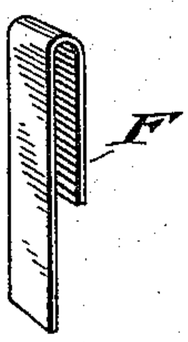


Fig. 4.

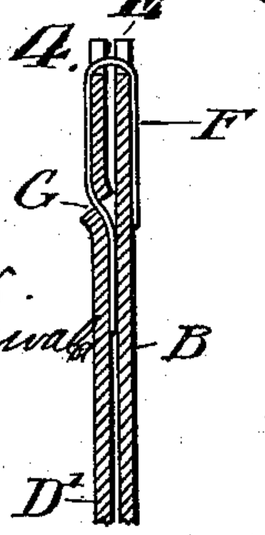


Fig. 5.

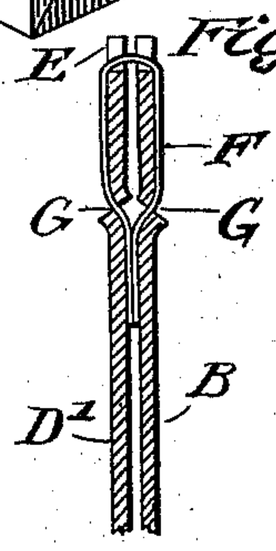
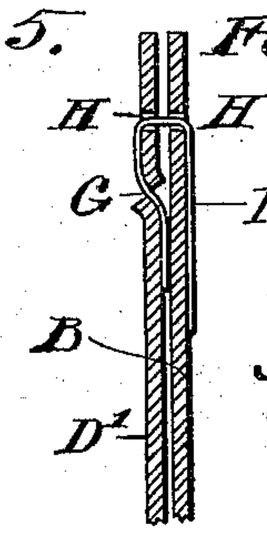


Fig. 6.



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KNOCKDOWN BOX.

SPECIFICATION forming part of Letters Patent No. 550,648, dated December 3, 1895.

Application filed May 8, 1895. Serial No. 548,508. (No model.)

To all whom it may concern:

Be it known that I, EBEN M. SCOTT, a citizen of the United States, residing at Southford, in the county of New Haven and State of Connecticut, have invented a new and useful Knockdown Box, of which the following is a specification.

My invention relates to improvements in boxes made from paper, pasteboard, and like materials; and it consists, essentially, in the blank and the devices hereinafter described whereby the sides of the blank are held together after being bent up to form the completed article.

The object of my invention is to produce a blank of suitable form and fastening devices to be used in connection with said blank to hold the same after it has been bent up into the form of a box, the said parts being so formed that they may be either set up or knocked down ready for use or in form for shipment, the knocked-down box consisting merely of flat paper-blanks and separate attaching devices, all capable of being packed substantially flat, thereby reducing the space required for storage or shipment, while the assembled article possesses great strength and durability.

My invention is illustrated by the accompanying drawings, in which—

Figure 1 is a plan view of a blank. Fig. 2 is a perspective view of a portion of a box of the telescopic pattern. Fig. 3 is a perspective view of a fastening device. Figs. 4, 5, and 6 are transverse sectional views through the sides of a box, showing several modifications of the manner in which the fastening device may be attached to secure the sides of the same.

Similar letters refer to similar parts.

A is a blank made from paper, pasteboard, or like material and of suitable outline to form a box of the desired shape.

The sides B B and the end pieces D D are adapted to turn up, so that the projecting flaps of the sides and end pieces overlap either on the inside or the outside of the box to close the corners. The flaps projecting from the sides are designated by the reference-letter B′, while the end flaps are lettered D′.

E E are recesses formed in the upper or outer edges of the sides or end pieces or flaps, so that when the sides, end pieces, or flaps are bent up into the form of a box at least two of the recesses E E at each corner will coincide, as shown in the perspective view in Fig. 2 and in Figs. 4 and 5. The said recesses are by preference of a width substantially the same as the width of the fastening device F, which consists, essentially, of a piece of wire or sheet metal doubled upon itself, so as to be substantially U-shaped. Directly below each set of coinciding recesses E E, I provide one or more perforations G. These lower perforations may be formed in the flaps D′, as shown in Fig. 4, or in both the flap and the adjacent side, as shown in Fig. 5. In securing the sides and end pieces together I make use of the above-referred-to fastening device F, one or both extremities of which may be inserted into the perforations G G, and the said fastening device is pressed down until its upper end rests in the recess E, the frictional engagement of the lower extremities of the said fastening device between the double thickness of stock constituting the blank A preventing the same from being accidentally displaced. The upper end of the fastening device resting in the two coinciding recesses E E prevents the two parts—the side and flap or end and flap—from becoming separated. By passing through the perforation G and being also dropped into the said recesses E E all lateral displacement of the fastening device F is prevented.

It is obvious that, if desirable, coinciding perforations H H may be formed in the sides or end pieces or flaps in place of the recesses E E (see Fig. 6) and the fastening device passed through said perforations H H, instead of being dropped or pressed into the above-mentioned recesses E E.

Various forms of boxes may be thus constructed from blanks of suitable outline, and it is therefore apparent that the feature of my invention consists in providing a blank of suitable outline capable of being folded to form the box, fastened together by a uniting device, the latter being made from tin or any other pliable substance.

A box thus formed may be made from paper or pasteboard of any desired thickness,

and when made up is fully as strong as a solid box—that is, a glued box—and in addition thereto possesses an important advantage over the said glued box, in that it can be readily knocked down for storage or shipment without injury to the same.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A box formed from a paper or pasteboard blank having upturned sides and end pieces, the overlapping corners described, recessed and perforated as described, and separate detachable fastening devices operating to hold said box-corners together, substantially as described.

2. A box consisting of a paper or pasteboard blank having upturned sides and end-pieces, one or more perforations G near each corner, and sets of coinciding recesses or perforations directly above said perforation G, separate detachable fastening devices F, each fastening device consisting of a piece of pliable material bent upon itself and held in engagement with the said box blank at or near each corner in said recesses and perforations, substantially as described.

3. A paper or pasteboard box consisting of a blank having upturned sides and ends, said sides and ends overlapping at each corner with coinciding recesses E E as described, at each corner, perforations G G below said recesses, and separate detachable fastening devices as described, carried in said recesses and perforations, substantially as described.

4. A paper or pasteboard box consisting of the blank A, sides B B, end-pieces D, flaps B′ D′, the sides B and end flaps D′ or ends D and side flaps B′ having coinciding recesses E at or near each corner of the box, with perforations G G directly below said recesses E, and separate detachable fastening devices held in said recesses and perforations, substantially as described.

EBEN M. SCOTT.

Witnesses:
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