A. AVISS.

CARDBOARD AND LIKE BOXES WHICH ARE MADE COLLAPSIBLE.

APPLICATION FILED NOV. 21, 1918.

1,338,664. Patented May 4, 1920.

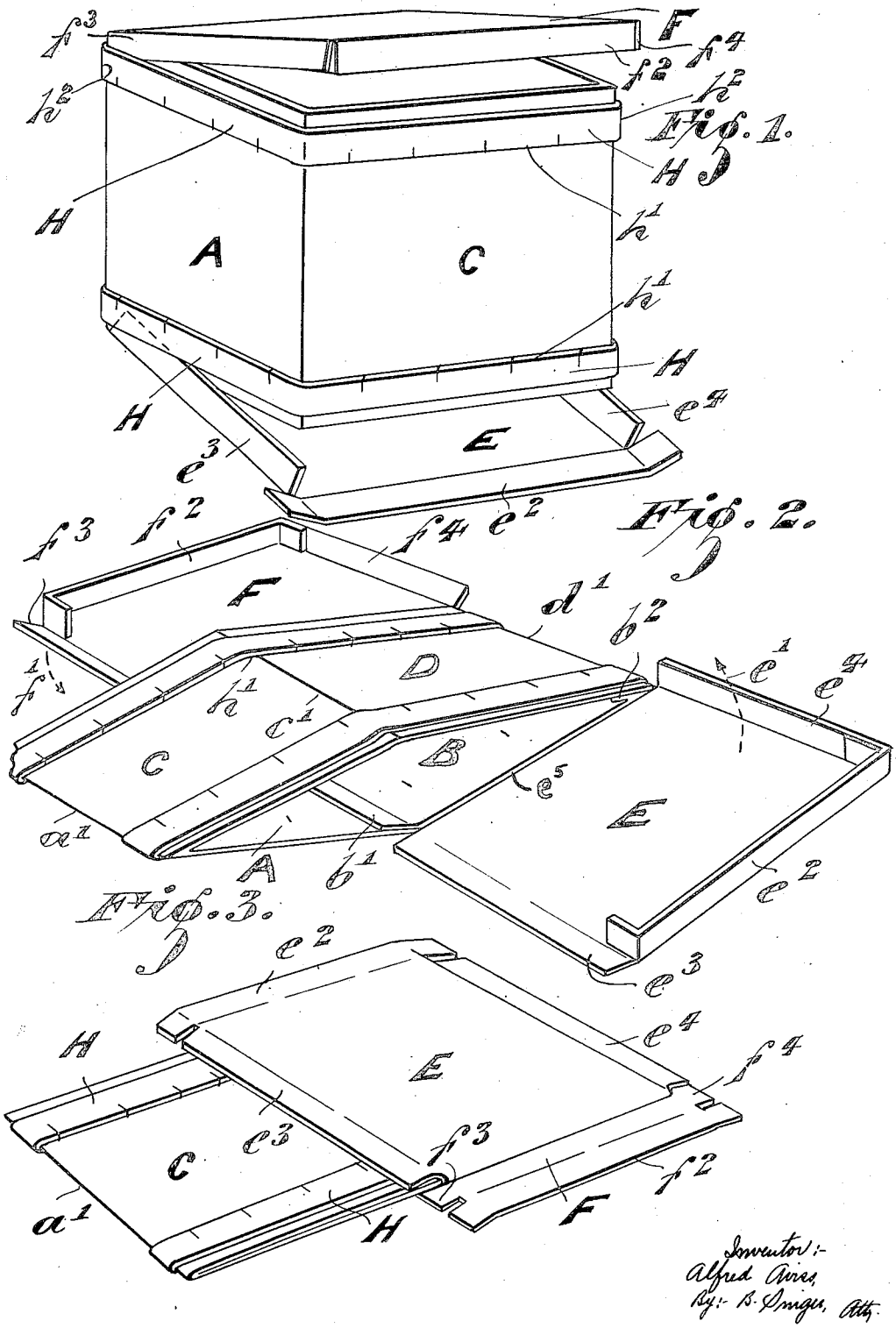


Fig. 1.

Fig. 2.

Fig. 3.

Inventor:-
Alfred Aviss,
By:- B. Singer, Atty.

UNITED STATES PATENT OFFICE.

ALFRED AVISS, OF RUGBY, ENGLAND.

CARDBOARD AND LIKE BOXES WHICH ARE MADE COLLAPSIBLE.

1,338,664. Specification of Letters Patent. Patented May 4, 1920.

Application filed November 21, 1918. Serial No. 263,538.

To all whom it may concern:

Be it known that I, ALFRED AVISS, a subject of the Kingdom of Great Britain, residing at 161–163 Station road, Rugby, in the county of Warwick, England, have invented certain new and useful Improvements in Cardboard and like Boxes Which are Made Collapsible, of which the following is a specification.

This invention relates to the type of cardboard or like boxes, in which the body can be collapsed into a flat condition by the closing of two of the angles between the sides and the opening out or flattening of the other two angles, the present invention having for its object the increased rigidity of such boxes when set up for use, the improvements consisting of the provision of permanently formed pockets at one or both ends of the sides of the box, which pockets are adapted to receive flanges on the lid end or ends when the box is in the set up position.

In order that this invention may be clearly understood and readily carried into practice, reference may be had to the appended explanatory sheet of drawings, upon which:—

Figure 1 is a view of a box as when ready for use for containing articles.

Fig. 2 is a view of the same box as shown in Fig. 1, but illustrated as when partially collapsed.

Fig. 3 is a view of the same box as shown in the previous figures but illustrated as when fully collapsed and folded for transport.

In an embodiment of this invention the four sides of the body A, B, C, and D, are formed of a length of material, which material is bent over to form four angles, *i. e.* the angle a^1 between A and C, the angle c^1 between C and D, and the angle d^1 between B and D, while the ends of the material adjacent the fold which forms the angle b^1 between A and B are wire stitched together at a point adjacent such angle. The material forming the side B may be separate from the other sides A, C, D, in which case the folded over part b^2 of the side B is stitched to the side D adjacent the angle d^1 or the sides A, B, C, D, may be formed of two lengths of material and stitched as before described either at the angles a^1, d^1, or b^1, c^1.

In the aforementioned embodiment the material forming the one end E of the box is attached to the end of the side B at e^5, while the material forming the other end F of the box is attached to the other end of the side B, the material being so bent at the junctions between the ends E, F, of the box and the side B that the one end F of the box can be bent over in the direction shown by arrow f^1 until its face lies flat against the outer face of the side B, the other end E of the box being folded over the reverse way in the direction shown by arrow e^1 until the face lies opposite to the outside face of the side D.

The material of the ends E, F, of the boxes is bent over on three sides to respectively form flanges e^2, e^3, e^4 and f^2, f^3, f^4, and these flanges may be so formed at the angles as to be capable of occupying a flat position when the boxes are in their collapsed condition.

The one edge h^1 of each of a pair of strips H of cardboard is stitched around the top and bottom edges of the sides of the body, such strips H being continued around the sides A, C, and D, so as to form pockets around each end of the sides A, C and D, into which pockets the flanges on the lid are inserted when the boxes are made up for use.

Strips H forming the pockets may be used only at one end of the sides in which case the flanges of the lid at the other end would merely embrace the ends of the sides.

For increasing the pocket opening a base strip may be arranged intermediately between each outer strip H and the face of the sides of the body at the point where the strip is stitched to the sides of the body, but such base strips of cardboard forming the pockets are preferably not continued around the angles of the sides of the pocket. The outer strip is attached with sufficient fullness at h^2 to form the pocket around the angles when the box is in the extended condition for use, the fullness being if necessary adapted to partially fold over when the sides are in their collapsed condition.

What I claim is my invention and desire to secure by Letters Patent is:—

A collapsible box comprising side members flexibly connected together and end members flexibly connected at one side to one of the side members, and provided at the opposite side and at the ends with flanges; the sides of the box other than that to which the

end members are attached being provided with strips, said strips being fastened on the outside, near the edges, to said sides and being otherwise spaced from said sides to form pockets between said sides and strips for the reception of the said flanges of the end members when the box is set up and closed.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ALFRED AVISS.

Witnesses:
LEWIS W. GOOLD,
ARTHUR HENRY BROWN.