No. 695,211. Patented Mar. 11, 1902.

C. F. KELLER.

FOLDING BOX.

(Application filed Aug. 19, 1901.)

(No Model.)

Fig. 1.

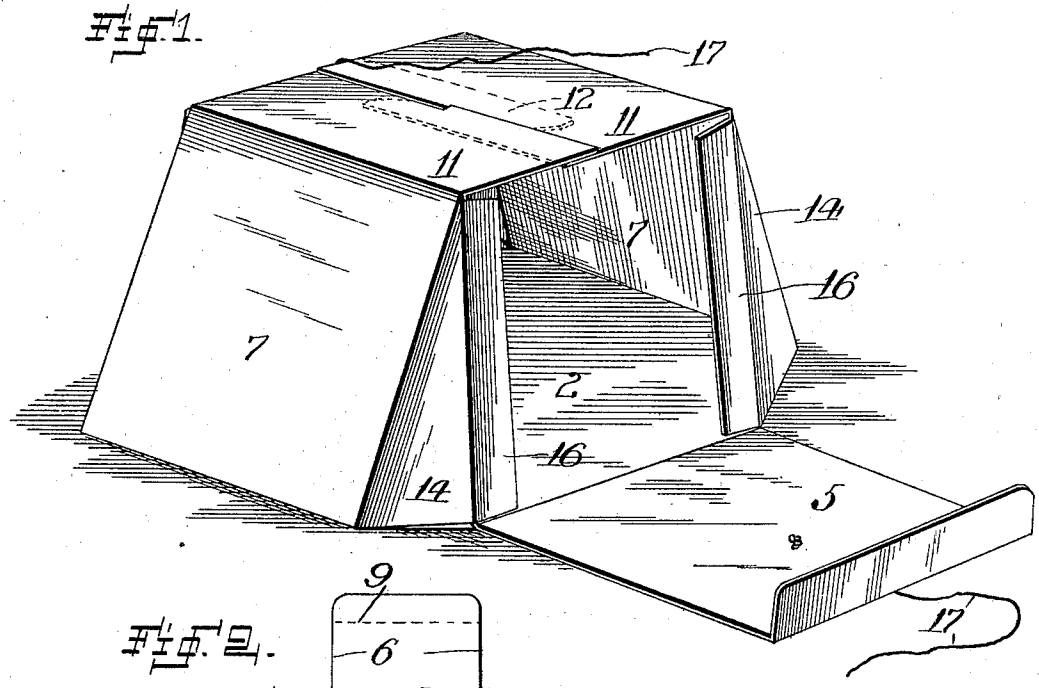


Fig. 2.

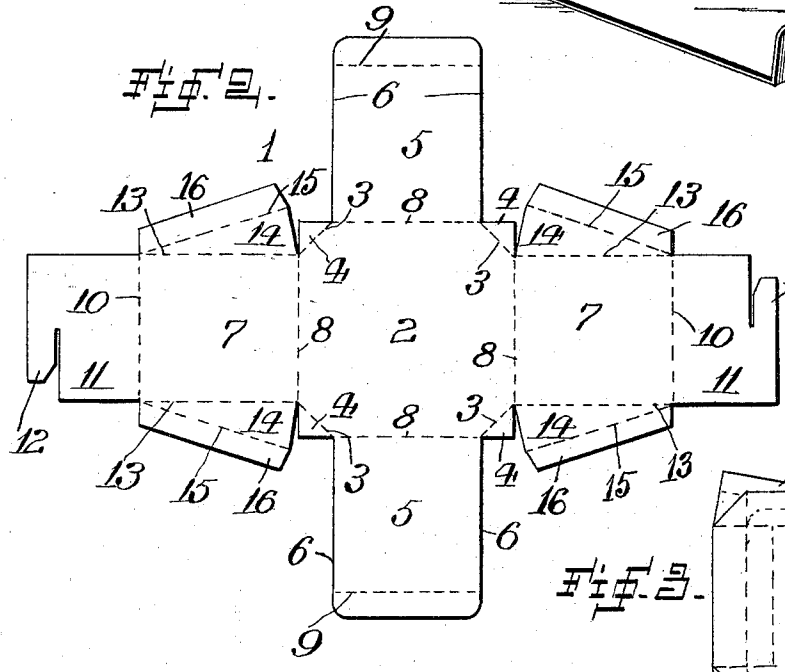


Fig. 5.

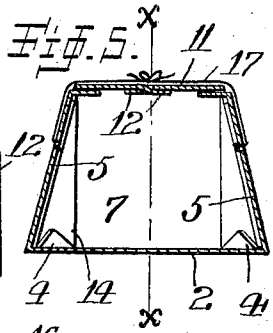


Fig. 3.

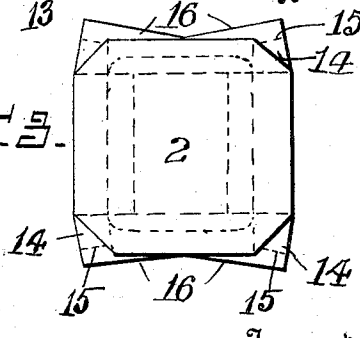
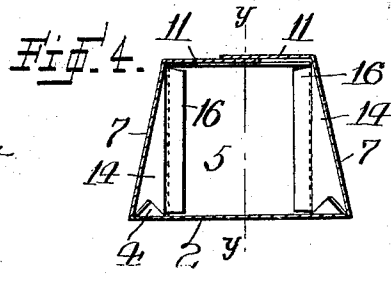


Fig. 4.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES F. KELLER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE J. W. SEFTON MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, AND ANDERSON, INDIANA, A CORPORATION OF INDIANA.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 695,211, dated March 11, 1902.

Application filed August 19, 1901. Serial No. 72,551. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. KELLER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Folding Boxes, of which the following is a specification.

My invention relates to improvements in folding boxes; and it consists in the novel combination and arrangement of the parts, as will be hereinafter more particularly described and claimed.

In the drawings, Figure 1 is a perspective view of my complete invention. Fig. 2 is a plan view of the blank from which the box is formed. Fig. 3 is a plan view of the box in a knockdown or folded position. Fig. 4 is a vertical central section of the box, taken on the line X X of Fig. 5; and Fig. 5 is a similar view taken on the line Y Y of Fig. 4.

The object of my invention is to construct a simple, durable, and inexpensive folding box that may be practically constructed of one piece of material; and it consists of a box having an octagon-shaped bottom, a rectangular-shaped top of smaller dimensions than said bottom, and inclined sides and corner-walls, the construction of which will be hereinafter more fully described.

Referring to the drawings, 1 represents the blank from which the box is formed and is composed of a central portion forming a bottom 2, the four corners of which are creased on lines 3, forming triangular-shaped portions 4, which when bent upwardly form an octagon-shaped bottom. Forming a continuation of the bottom 2 and extending in opposite directions therefrom are two extensions 5, having parallel opposite edges 6, which extensions form two of the side walls of the box when bent upwardly, and also forming a continuation of the bottom are two additional extensions 7, which also extend in opposite directions and form the remaining side walls of the box, the said extensions 5 and 7 being creased on lines 8 in order that the same may easily be elevated in forming the box. The extensions 5 are creased on lines 9 adjacent to their ends, forming tongues, which are adapted to be located below the top of the box, to be hereinafter described. The extensions 7 are to be creased on lines 10, forming portions 11, having hook-shaped tongues 12, which when united form the top for the box, said extension being also creased on lines 13, forming triangular-shaped wings 14, which are adapted to form the corner-walls for the box, the wings being creased on lines 15, forming abutting walls 16, against which the extensions 5 are adapted to come in contact when the parts are properly brought together, and thus prevent the last-named extensions from collapsing inwardly.

Secured to the extensions 5 are the strings or cords 17, which are adapted to be tied together over the top of the box, and by their use the parts are rigidly held together to form the box.

The folded position of the box is shown in Fig. 3, and in order to form the same the blank is opened in the position shown in Fig. 2 and the hat or other article to be inclosed laid upon the bottom 2 and the extensions 7 first elevated and the hook-shaped tongues 12 united, whereby two side walls and the top are formed, after which the wings 14 are bent or brought against the outer surfaces of the upwardly-projecting triangular end portions 4, forming the corner walls. The extensions 5, which form the opposite or remaining side walls, are then elevated, and the tongues or flaps thereof formed beyond the creases 9 are inserted below the top previously formed and over the upper edges of the abutting walls 16, after which the strings attached to said extensions are united or tied together over the top of the box, all of which requires but little time and practically no experience.

From the foregoing description it will be seen that the triangular corner portions not only close the spaces that would otherwise be formed when the parts are brought together, but prevent the corner walls or wings 14, forming the same, from collapsing inwardly at their lower portions, and thus a very rigid and desirable box in shape is formed, economizing material and constructing one that will withstand the rough usage to which the same is necessarily subjected.

The box, as shown and described, is more especially constructed for a hat-box for millinery purposes; but it is evident that the same may be used for any style of hats and many other purposes without departing from the nature of my invention. It is further to be noted that the points of the triangular-shaped wings 14, which form the corner walls of the box, are located at the top of the box which properly form said corner walls and give strength and durability to the box, the said walls also being inclined.

The box thus formed when folded for shippage or storage constitutes a very compact and desirable package, economizing space and further greatly reducing the cost of freight and handling, especially in crating.

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

1. The herein-described folding box composed of an octagon-shaped bottom, a rectangular-shaped top of smaller dimensions than said bottom, inclined side walls connecting the bottom and top, and triangular-shaped outside corner walls the points of which are located at the top of the box and whose bases are adjacent the sides of the octagon bottom, as and for the purpose described.

2. The herein-described folding box, composed of an octagon-shaped bottom, a rectangular-shaped top of smaller dimensions than said bottom, inclined side walls, and triangular-shaped wings hinged to two of said side walls, and adapted to form inclined corner walls, the points of which are located at the top of the box and whose bases are adjacent the sides of the octagon bottom, as and for the purpose described.

3. A blank for a folding box comprising a central portion, extensions forming a part of the same and adapted to form side walls, two of said extensions having edges substantially parallel with one another, portions forming a continuation of the remaining extensions and adapted to be united to form a top for the box, and triangular-shaped wings forming a part of the last-named extensions, and adapted to form outside corner walls and whose bases are adjacent the sides of the octagon bottom, as and for the purpose described.

4. A blank for a folding box, comprising a central octagon portion adapted to form a bottom, corner portions forming a part of the latter, adapted to be bent upwardly, extensions forming a continuation of said bottom, tongues forming the ends of two of the said extensions, portions forming the ends of the two remaining extensions and adapted to be united to form a top, triangular-shaped side wings forming a part of each of the last-named extensions, and adapted to form corner walls, and abutting walls forming a continuation of said wings, as and for the purpose described.

5. A folding box, comprising a central octagon portion adapted to form a bottom, extensions forming a continuation of said bottom, two of said extensions having parallel opposite edges, tongues forming a part of said last-named extensions, portions forming the ends of the remaining extensions and adapted to be united to form a top, wings forming a continuation of the opposite edges of the last-named extensions and adapted to form corner walls, and abutting walls forming a part of said wings, as and for the purpose described.

6. A folding box, comprising a central, octagon-shaped portion adapted to form a bottom, upwardly-projecting corner portions forming a part of the latter, extensions forming a part of said bottom, two of which are provided with parallel opposite edges, tongues forming the ends of the two last-named extensions, portions forming the ends of the remaining two extensions, and adapted to be united to form a top, triangular-shaped wings forming the sides of the last-named extensions and adapted to be turned against the corner portions of the bottom to form corner walls, and abutting walls forming a part of said wing against which the extensions having the parallel opposite edges are adapted to come in contact, as and for the purposes described.

7. A folding box, comprising a bottom, side walls hinged to the bottom, a top forming a part of two of said side walls, and triangular-shaped wings forming a part of the side walls which form a continuation of the top, and adapted to form outside corner walls, the points or apices of said wings being at the said top, as and for the purpose described.

8. A folding box, comprising an octagon-shaped bottom, extensions forming a part of the latter, portions forming the ends of two of said extensions and adapted to be united to form a top, triangular-shaped wings forming a continuation of said last-named extensions the points of which are located at the top, said wings adapted to form corner walls, abutting walls forming a part of said wings, tongues forming the ends of the remaining extensions and adapted to be inserted below the top, and strings attached to the last-named extensions and adapted to be tied over said top, as and for the purpose described.

9. A folding box comprising an octagonal bottom, the upturned corners 4, the pairs of sides 5 and 7 hinged to said bottom, the pair of sides 7 having hinged triangular flaps or wings forming four of the outside side walls of the box and substantially rectangular engaging extensions 11 on said sides 7 adapted to form the top of the box; substantially as described.

10. A folding box comprising a bottom of irregular octagon shape having four equal sides of greater length and four corners or sides of lesser length, the four sides 5 and 7 substantially rectangular and hinged to the longer sides of the bottom, the sides 7 having flaps or wings of triangular shape forming four

outside walls and whose apex terminates at the top of the box and whose base comes adjacent to the four shorter sides of the bottom, two of the four rectangular sides having extensions to form the top of the box; substantially as described.

11. A folding box comprising an octagonal bottom having the upturned portions 4 at four of the sides of such bottom, the two rectangular sides 5 having end flaps or tongues, the two rectangular sides 7 having extensions 11 adapted to engage to form the top of the box, two opposite edges of the sides 7 having the triangular wings 14 forming outside corner walls or sides and whose bases fit against the portions 4, and substantially rectangular extensions or flaps 16 hinged to said wings and adapted to lie inside the sides 5; substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES F. KELLER.

Witnesses:
JOHN H. BERKSTRESSER,
LOUIS B. ERWIN.