

J. A. WAGNITZ.
FOLDING BOX.
APPLICATION FILED APR. 1, 1910.

993,919.

Patented May 30, 1911.

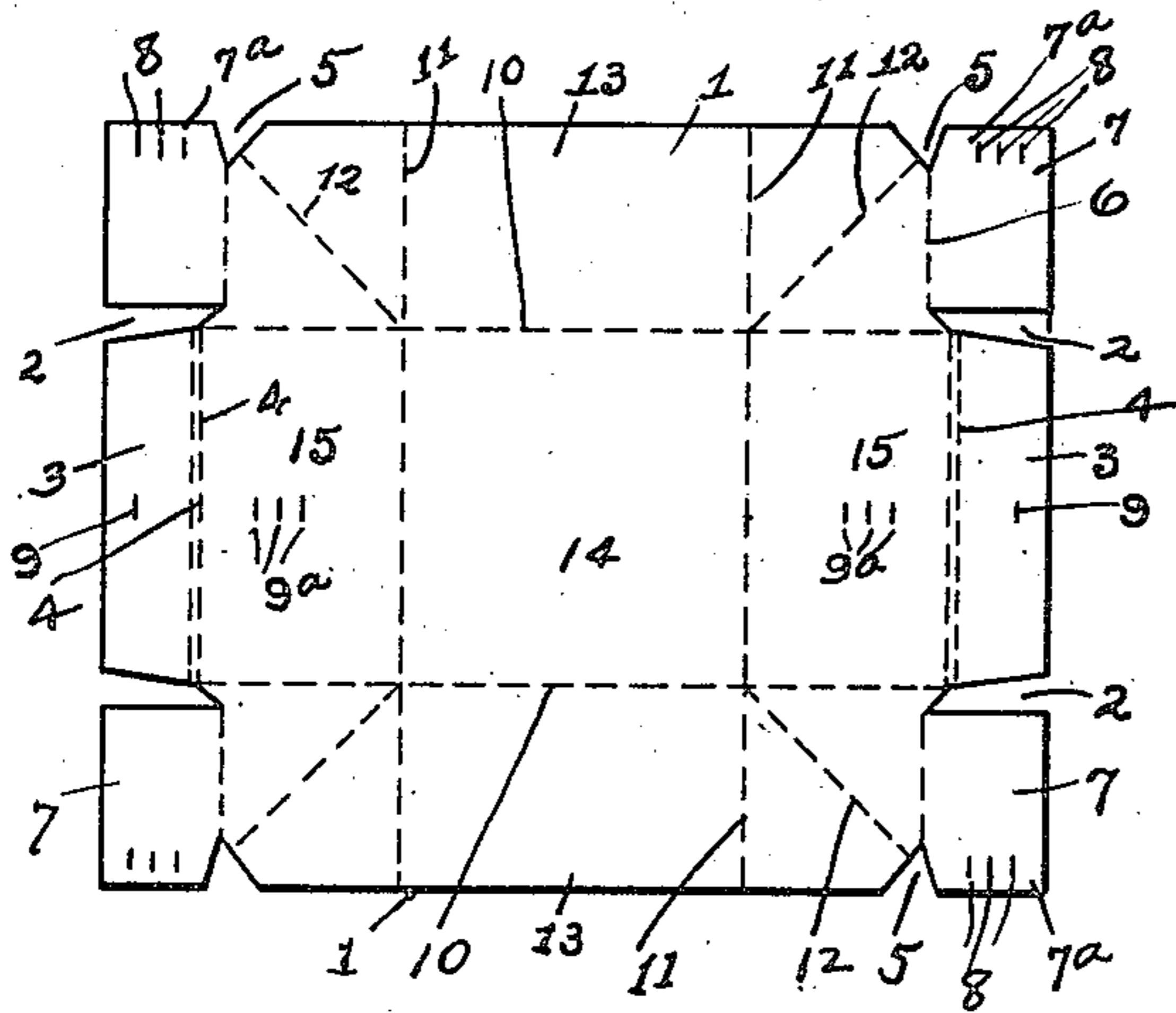


Fig. 1.

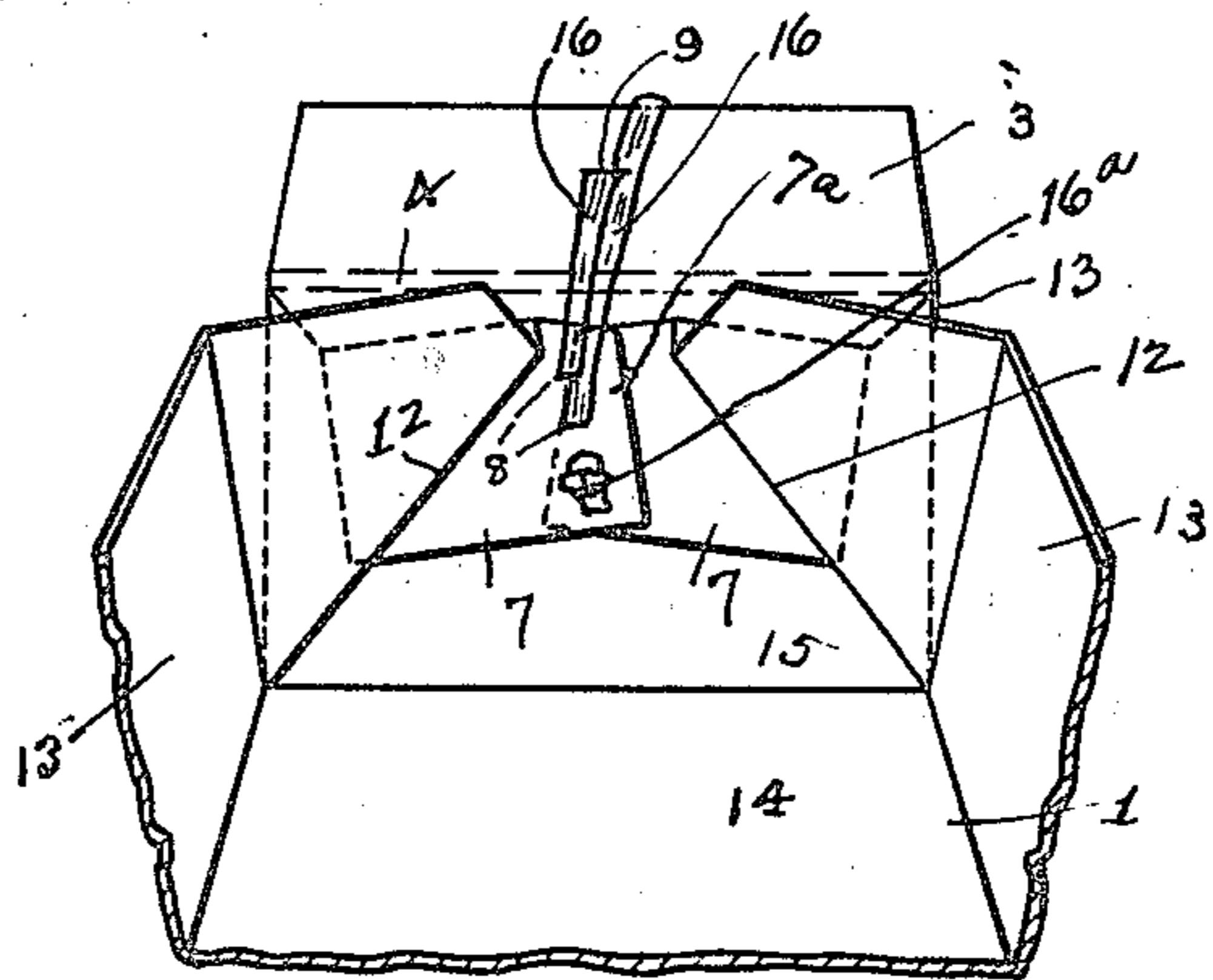


Fig. 2.

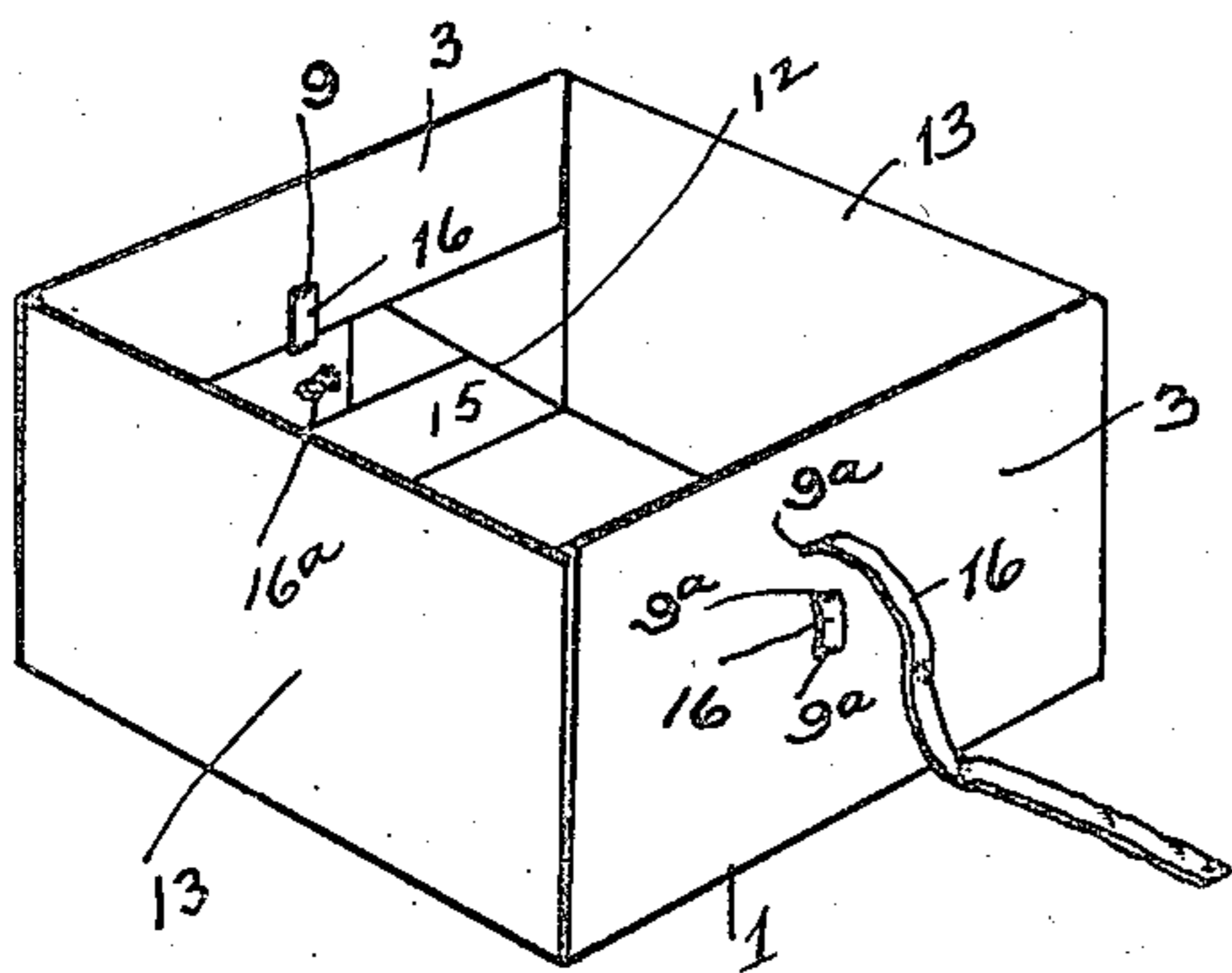


Fig. 3.

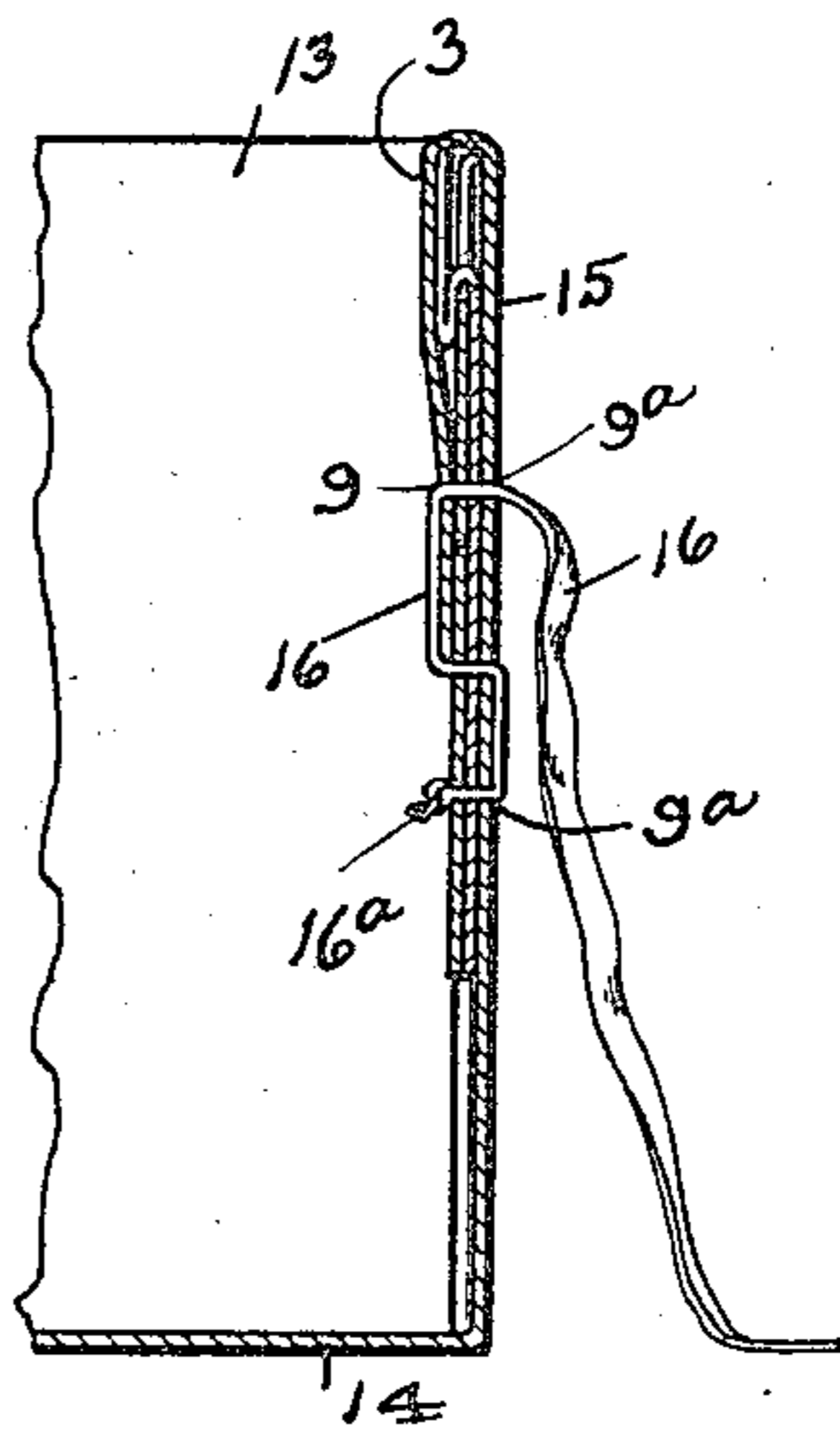


Fig. 4.

Witnesses

E. B. Maurer
A. L. Phelps

Inventor
John A. Wagnitz

By

C. C. Shepard

Attorney

UNITED STATES PATENT OFFICE.

JOHN A. WAGNITZ, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-HALF TO L. A. FRANKENBERG, OF COLUMBUS, OHIO.

FOLDING BOX.

993,919.

Specification of Letters Patent.

Patented May 30, 1911.

Application filed April 1, 1910. Serial No. 552,834.

To all whom it may concern:

Be it known that I, JOHN A. WAGNITZ, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Folding Boxes, of which the following is a specification.

My invention relates to the improvement of folding boxes of that class which are adapted for use as containers for hats or other articles.

The objects of my invention are to provide a folding box of this class of simple and inexpensive construction which may be readily converted from a substantially flat blank into a substantial and durable form of box, the walls of which are of sufficient strength and rigidity to retain their proper relative positions; to provide improved means for uniting the folded members of the box and to produce other improvements the details of which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawing, in which—

Figure 1 is a face view of the blank or box pattern before folding, Fig. 2 is a detail view in perspective of one end portion of the box, showing the parts thereof partially folded together, Fig. 3 is a detail view in perspective of the completed box, and, Fig. 4 is an enlarged central vertical section through one end of the completed box.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I employ a single piece of paper, cardboard, or similar material such as is indicated at 1, the same being cut into the general oblong form indicated in Fig. 1 of the drawing. By producing in each end of the blank thus formed an incision or cut 2 on each side of the center of the width of the blank, I produce central end tongues or projections 3 which are scored throughout their base portions as indicated at 4. By producing V-shaped incisions or cuts 5 in the sides of the blank, the points of said incisions being in alinement with the inner ends of the cuts or incisions 2 and connected with the latter by score lines 6, I form corner ears 7 in the outer portion of each of which I form a plurality of slits or suitable openings 8. I also provide the outer portion of each of

the tongues 3 with a short longitudinal slit or opening 9 and three openings 9^a in horizontal alinement therewith in the body of the blank on the inner side of each of the score lines 4. Between the ends of the tongues 3, I form parallel score lines 10, these score lines being intersected by similar lines 11 crossing the blank at right angles with the lines 10 and on opposite sides of the center of the blank. From the points of intersection of the lines 11 and 10, score lines 12 lead diagonally outward to the recesses 5.

In converting the blank such as herein shown and described, into a box or receptacle such as is shown in Fig. 3 of the drawing, those portions of the blank which are indicated at 13 and which are bounded by the score lines 10 and 11 and the outer edge of the blank, are bent upward at right angles with the bottom portion 14 of the box, which bottom portion forms the center of the blank and is bounded by the score lines 10 and 11. The blank portions 13 when thus turned up, form the sides of the box body. In further constructing the box, those portions of the sides of the blank which extend beyond the score lines 11 and with which are connected the ears 7 are first bent upward at right angles with the box bottom, after which the ears 7 are turned inward against those portions of the blank which bear the score lines 12. This being accomplished, the corners of the body of the blank which carry the score lines 12 are folded on said score lines and the substantially triangular sections of said corner members are pressed one against the other, these triangular members together with the ears 7 being in turn pressed against the end portions 15 of the blank body, which portions form the end walls of the box by being bent at right angles on the score lines 11 between the lines 10. It will be observed that those portions of the ears 7 in which are formed the slotted openings or slits 8 and which in the blank are on the outer sides of the recesses or incisions 5, form tongues 7^a which overlap each other when the end members are folded in the manner heretofore described. It will be understood that the box end is completed by turning inward and downward over the upper portions of the blank corner members and ears 7, the tongues or flaps 3. By the

operation described, the slits 9^a and 8 are brought into opposite or registering positions and the slits 9 of the end flaps are made to register with the outer slits 9^a.

5 In order to bend the folded end parts together in the position shown and described and at the same time provide strings or tapes which will serve to bind a cover or lid on the box, I provide at each end of the
10 box a suitable form of string or tape 16 one end of which is knotted as shown at 16^a on the inner side of the lower slit 8 of the inner tongue 7. From its knotted end the string or tape passes through the lower slit
15 in the remaining ear 7, thence outward through the corresponding slit 9^a in the end member 15, thence upward and inward through the middle slits 9^a of the members 15, thence upward over the outer edge of
20 the flap 3, inward and downward through the slit 9, thence outward through the upper slits 8 and 9^a. The string or tape being drawn taut, it is obvious that the parts thus connected, will be bound in close relationship with each other, the end flaps 3
25 being thus held in firm connection with the box ends. In this manner, it will be observed that desired thickness and rigidity is imparted to each end of the box, insuring a
30 substantial and rigid box construction. It will be understood that those portions of the strings or tapes which depend from the outer sides of the box ends, may be tied together over the cover or lid of the box, to
35 retain the latter in place.

From the foregoing description, it will

be seen that simple and efficient means are herein provided for accomplishing the objects of the invention, but while the elements shown and described are well adapted
40 to serve the purposes for which they are intended, it is to be understood that the invention is not limited to the precise construction set forth, but includes within its
45 purview such changes as may be made within the scope of the appended claim.

What I claim, is—

A folding box formed of a blank having substantially straight outside edges, said blank being scored and folded to form bot-
50 tom and main side and end members, those portions of the blank that lie within the angle formed between the end and side members being diagonally creased, end flaps carried
55 by the end members and corner flaps separated from the end flaps, said corner flaps being carried by the diagonally creased portions and being creased and folded against
60 said portions, and a drawing and retaining tape which passes through both of the corner flaps and through the outside wall of the box and is then extended upwardly and
65 passed through the inwardly and downwardly folded end flap and thence outwardly through the end wall of the box and terminates in a free end.

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

JOHN A. WAGNITZ.

Witnesses:

C. C. SHEPHERD,
A. L. PHELPS.