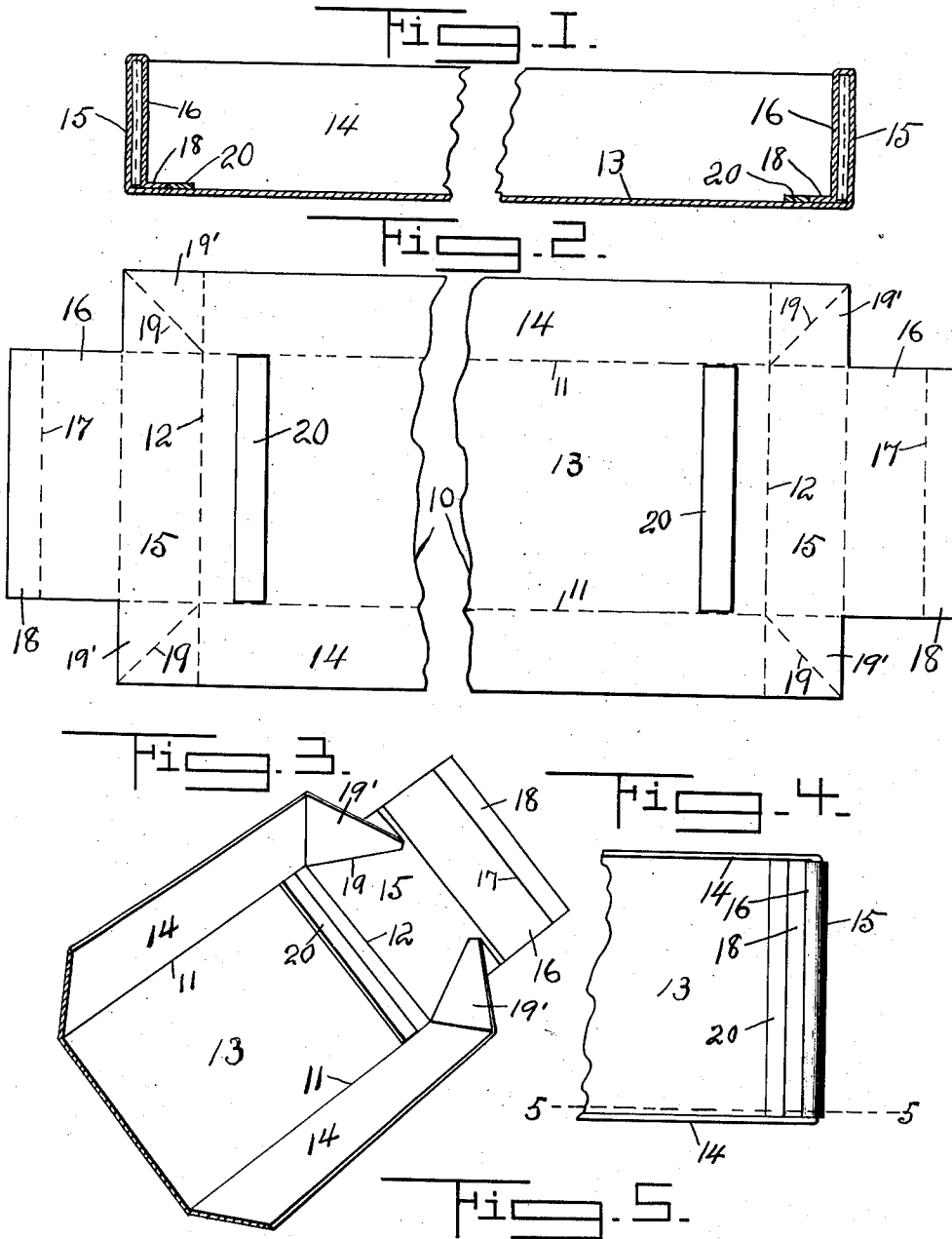


C. H. GOODYEAR.  
FOLDING BOX.  
APPLICATION FILED SEPT. 15, 1910.

998,497.

Patented July 18, 1911.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## FOLDING BOX.

998,497.

Specification of Letters Patent. Patented July 18, 1911.

Application filed September 15, 1910. Serial No. 582,231.

*To all whom it may concern:*

Be it known that I, CHARLES H. GOODYEAR, a citizen of the United States of America, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Folding Boxes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in folding box and more especially to what are known as knock-down paste-board boxes.

An object of the invention is the provision of a box consisting of two telescoping similar sections, each of which is capable of being easily and quickly folded together for use from a blank, a large number of which may be easily kept on hand and which take up very little space.

A further object of the invention is to provide such a structure in which merely a folding of the parts together will in itself afford a locking thereof into the folded position, without the necessity of such members as a slot and tongue.

With these general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

In the drawings forming a part of this application and in which like reference characters designate corresponding parts throughout the several views: Figure 1 is a central longitudinal section of the box member, the same being partly broken away.

Fig. 2 is a plan view of a blank, straightened out, of which one of the box members is formed and also being partly broken away.

Fig. 3 is a perspective view of one end portion of the blank showing the same as partly folded up in the operation of forming a box member therefrom.

Fig. 4 is a top plan view of an end portion of a box member, the parts being in their folded and locked positions, and, Fig. 5 is a longitudinal sectional view of a box member taken upon line 5—5 of Fig. 4.

Referring in detail to the drawings, it will first be noted that in the class of boxes now being considered, the same are generally constructed of a light-weight card-board or paste-board and are formed of two substantially identical sections in which one

is adapted to telescope with the other to form the completed box, and in which assembled relations one of the sections will constitute the bottom of the box for the reception of articles to be contained therein while the other section will fit or telescope thereover and forming the cover. It being further noted that in such formation the slight movement being possible by reason of the folding of the paste-board will allow of sufficient expansion of the cover member to accommodate the bottom member from within.

From the above general statement, it will be apparent that both box sections being identical, a description of one of the same will be sufficient for an accurate and complete understanding of the invention in box formations.

A flattened out blank 10 as shown in Fig. 2 is substantially rectangular, being of a size depending upon the dimensions of the box desired to be formed therefrom. As the main portion of said blank must in width include the width of the box together with the height of the sides and in length include the length of the box as well as the ends thereof, and the sides and ends necessarily being of the same height, it will be seen that by marking and scoring the card board longitudinally as at 11 and transversely as at 12, each of said scorings being an equal distance from the outer edge of the blank, there will thus be formed the central rectangular portion of the blank as a bottom 13 for the member with marginal sides 14 and ends 15 surrounding the same. Extending from the opposite ends of said blank and of a width equal to that of the marked out bottom 13, there are provided the end flaps 16 which constitute the locking flaps of the box and which are thus scored or creased upon a line 17 forming terminal extensions 18 thereon. The bottom scorings above referred to being carried completely to the outer edges of the blank provide for the folding over of the ends and sides of the box as shown in Fig. 3, it being noted however that the substantially diagonal scorings 19 of each corner portion 19' of the blank are also necessary for allowing the complete folding up of such end portions at which time the flaps 16 are folded over the ends of the box and inwardly down against the inner faces of such folded over portions until the terminal extensions 18 are

contacted against the bottom 13 of the box member and being forced over and back of the transverse strips 20, as shown in Fig. 1, which strips are securely glued or otherwise secured upon the inside of the bottom of the box and adjacent each end thereof and whereupon said terminal extensions seat themselves behind the strips 20 and firmly fit between the same and the folded ends 15 and firmly lock all of the folded parts in their assembled positions.

The assembling of a box section being as briefly described above, it will be evident that to "take down" the box member, it will be only necessary to substantially reverse the operation by withdrawing the terminal extension 18 from its seat behind the strip 20 and then unfold the flap 16 and the ends, sides and corners of the box section. These blanks as shown in Fig. 2 are adapted to be kept in large numbers in superposed relations and the boxes thus made up by the folding of the blanks at the time that the box is actually desired for use.

While the forms of the invention herein shown and described are what are believed to be preferable embodiments thereof, it is nevertheless to be understood that changes may be made in the form, size and minor

details of construction without departing from the spirit and scope of the invention as set forth in the appended claims.

Having thus fully described my invention and in what manner the same is designed for use, what I claim as new and desire to secure by Letters Patent of the United States is:—

A box section comprising a bottom, and opposite sides and ends and diagonally scored corner members, opposite flaps carried by said ends, said corner members adapted to lie in folded relation against said ends when said flaps inclose thereover, narrow terminal rectangular extensions carried by said flaps, transverse strips secured upon said bottom within said section and at a distance from said ends equal to the width of said terminal extensions and equal in length to and parallel with said ends, said terminal extensions adapted to seat between said strips and ends and flatly upon said bottom for locking said end flaps in position.

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

CHARLES H. GOODYEAR.

Witnesses:

JOHN N. AINSLIE,  
A. H. CONN.