

H. N. GORES.
JUNCTION DEVICE FOR PAPER BOXES.
APPLICATION FILED JULY 24, 1911.

1,014,297.

Patented Jan. 9, 1912.

Fig. I.

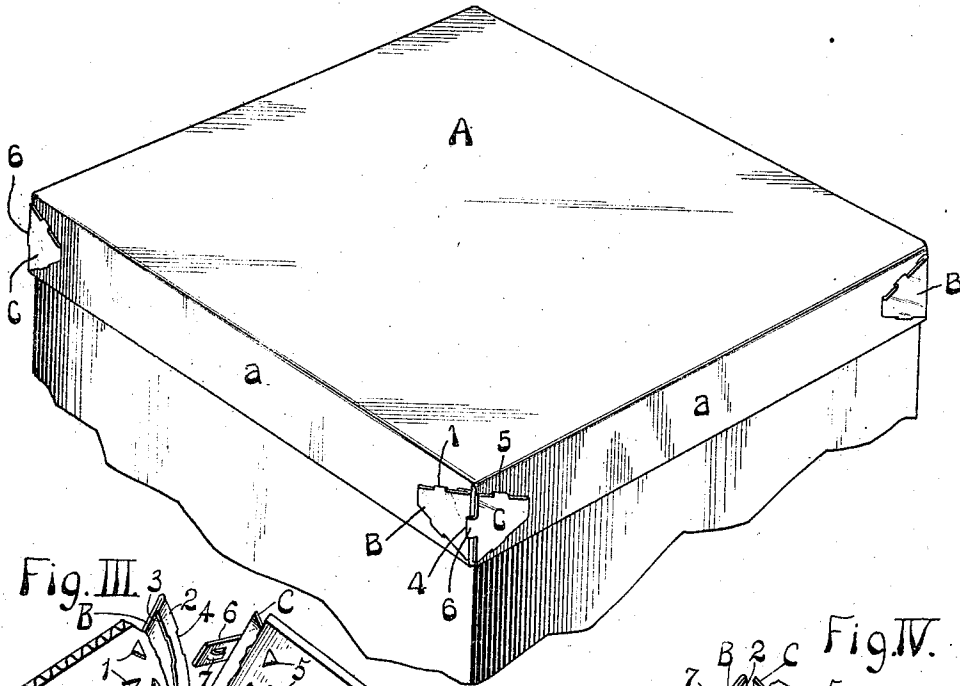


Fig. III.

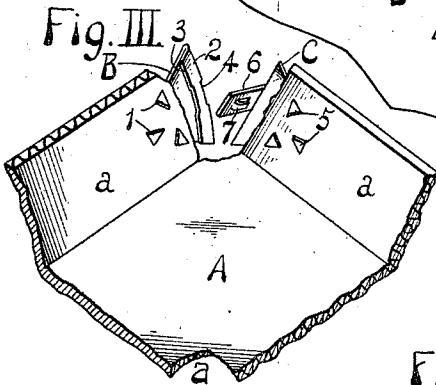


Fig. IV.

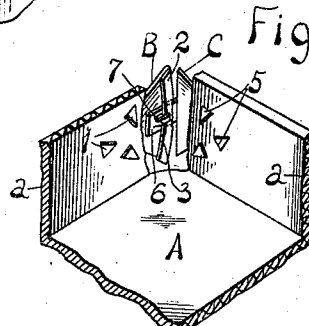
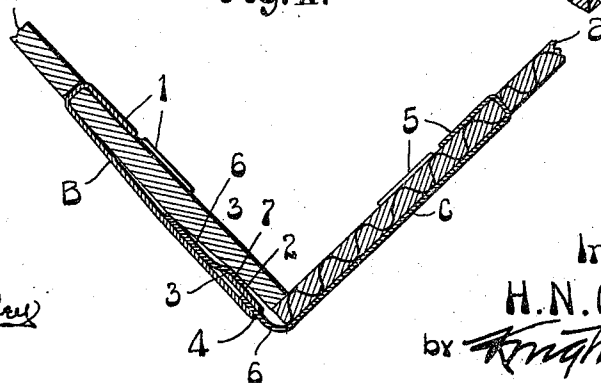


Fig. II.



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UNITED STATES PATENT OFFICE.

HENRY N. GORES, OF ST. LOUIS, MISSOURI, ASSIGNOR TO AMERICAN PAPER PRODUCTS COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

JUNCTION DEVICE FOR PAPER BOXES.

1,014,297.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed July 24, 1911. Serial No. 640,062.

To all whom it may concern:

Be it known that I, HENRY N. GORES, a citizen of the United States of America, residing in the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Junction Devices for Paper Boxes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a junction device for securing the parts of paper boxes to each other, the device being more particularly intended for use in joining parts of folding paper boxes when they are set up for use. It is especially useful in connecting the flanges of paper box covers or closures, thereby permitting transportation of such covers or closures in a flat condition and the connection of the flanges just previous to the covers being placed in service in boxes of which they form parts.

Figure I is a perspective view of a fragment of a box, including the cover therefor, the cover being equipped with my junction device. Fig. II is an enlarged cross section through a corner of the box closure shown in Fig. I, and the junction device on such corner. Fig. III is an inverted view of a corner of the box closure and one of the junction devices with its parts un-connected. Fig. IV is a view similar to Fig. III, with the parts of the junction device un-connected.

In the accompanying drawings: A designates a box closure provided with foldable flange wings *a*. The junction devices to which my present invention pertains are utilized to join the flanged wings at the corners of the closure body. Each junction device comprises two sheet metal members B and C, one of which is suitably attached to a flange wing *a* adjacent an end thereof, and the other of which is suitably attached to another flange wing at an angle to the first mentioned.

The junction device B comprises a body portion, preferably provided with tangs 1 by which the body of the member B may be secured to the part it is attached to. At the outer end of the junction device member B is a return flange 2 that lies parallel with the body of said member and terminates in a rear free edge 3 having utility to be hereinafter fully specified. In the fold

at the forward end of the member B is an aperture 4 through which an element carried by the junction device member C may be inserted, as will hereinafter appear.

The junction device member C has a body preferably provided with tangs 5 that may be inserted through a flange wing *a* to which the member C is applied. At the forward end of the member C is a tongue 6 provided with a supplemental spring tongue 7 that extends backwardly and laterally from its end nearest the free end of the tongue 6 toward the body of the member C.

In the practical use of my junction device, the members B and C are applied to the parts of the box that are to be joined thereby, and to effect the connection of such parts, it is only necessary to insert the main tongue 6 and supplemental spring tongue 7 through the aperture 4 in the member B and move them between the body of the member B and its return flange 2 until the free end of the supplemental spring tongue passes beyond the rear free edge 3 of the return flange. The spring tongue, on being relieved of pressure, springs outwardly away from the main tongue 6 and then when said main tongue is moved backwardly, to a slight degree, the free edge of the return bend 2 is straddled by the main tongue and spring tongue, thus providing locking engagement between the junction member C and the junction member B, as most clearly seen in Figs. II and IV.

It will be readily appreciated that the main tongue 6 of the junction member C may be readily bent at an angle to the body of the member. This being true, it is possible to apply the member C to box closure flange wings, with the main tongues in alignment with the body of the closure, so that they are parallel with the box closure flange wings, when in flat condition. Then, when the flange wings are to be connected, the main tongues 6 are readily bent at angles to the bodies of the members C to permit of their being placed in interlocking engagement with the junction members B after the flange wings have been folded.

While I have in the preceding description set forth my junction device as utilized to connect the flange wings of box closures, I wish it understood that I do not limit myself to the use of the device in connecting such flange wings, as it is obvious the de-

vice may be used to connect other parts of paper boxes and that in such use it may be employed, irrespective of whether or not the parts connected are at angles to each other, or in alinement with or parallel to each other.

Having thus described my invention the following is what I claim as new therein and desire to secure by Letters Patent:

10 In a device of the character described, a junction member comprising a body portion and a main tongue, the main tongue being provided with a supplemental spring tongue extending backwardly toward said body
15 portion; and a second junction member comprising a body portion and return flange

parallel with said body portion terminating in a free rear edge, the joining fold at the forward end of said return flange being apertured to receive said main tongue and supplemental tongue of the first named junction member, and the free rear edge of said return flange being separated from the body portion of the second junction member permitting the straddling interlocking engagement therewith of said main and supplemental tongues.

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In the presence of—
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