

No. 775,090.

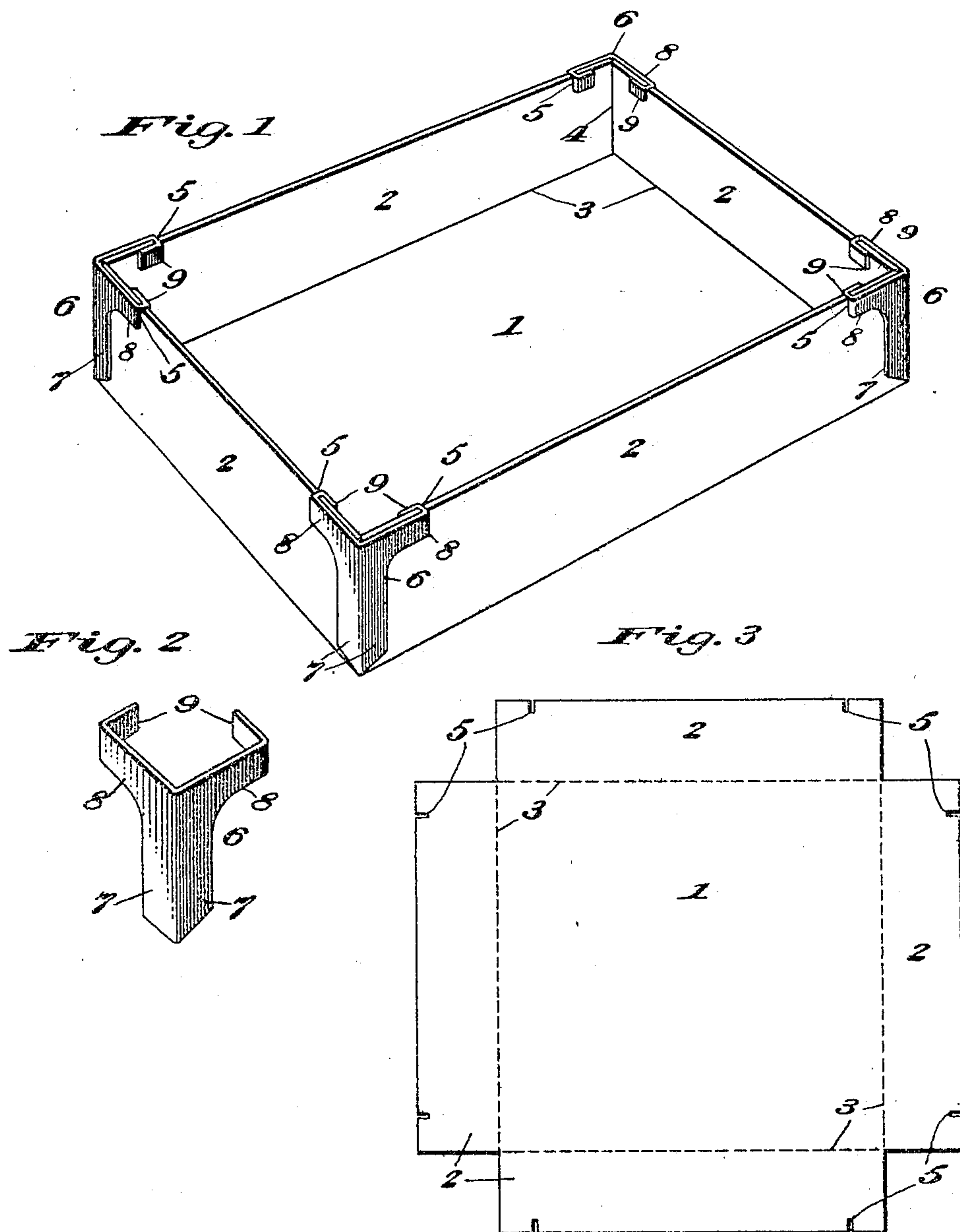
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FASTENER FOR THE CORNERS OF PAPER BOXES OR THE LIKE.

APPLICATION FILED MAR. 8, 1904.

NO MODEL.



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UNITED STATES PATENT OFFICE.

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FASTENER FOR THE CORNERS OF PAPER BOXES OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 775,090, dated November 15, 1904.

Application filed March 8, 1904. Serial No. 197,152. (No model.)

To all whom it may concern:

Be it known that I, THEODORE PILZ, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Fasteners for the Corners of Paper Boxes or the Like, of which the following is a specification.

This invention relates to certain improvements in fasteners, and more particularly in that class of such devices as are especially adapted for reinforcing and holding the corner-joints of boxes, trays, and other receptacles; and the object of the invention is in part to provide a fastener of this general character of a simple and inexpensive nature which shall be adapted for strengthening or reinforcing and holding together the joints of the boxes or other devices in connection with which the improved fastener is used and in part to provide a box or other receptacle of a simple and improved nature in connection with which the improved fastener is especially well adapted for use.

The invention consists in certain novel features of the construction, combination, and arrangement of the several parts of the improved fastener and of the box or receptacle in connection with which the same is used, whereby the fastener and box or receptacle are made simpler, cheaper, and otherwise better adapted and more convenient for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claim.

In the accompanying drawings, which serve to illustrate my invention, Figure 1 is a perspective view showing a box or receptacle embodying my improvements and having its corners reinforced and held together by means of the improved fasteners. Fig. 2 is a perspective view drawn to a larger scale and showing one of the fasteners detached. Fig. 3 is a stretch-out view showing the formation of the blank from which the box or receptacle is made.

As shown in the views, the improved box or receptacle in connection with which the improved fastener is used and which may be

made from paper-board or other suitable and desired material is of a rectangular form and is provided at its four corners with joints, to which are applied the improved fasteners; but it will be evident that the box is not necessarily made in such rectangular form, but may have any desired contour instead. Also it will be readily understood that my improvements may as well be applied to other articles, as to the lids or trays of boxes and other receptacles and structures, as to boxes.

As herein shown, the box is made up from a blank such as is shown in outline in the flat in Fig. 3 and has a central portion 1 adapted to form the bottom of the box and flaps 2 2 integrally connected with said central portion 1 and extended along the sides thereof and adapted to be bent up at right angles therefrom in a well-known way to produce the sides and ends of the box, as indicated in Fig. 1, the jointure between the said flaps 2 2 and central portion 1 being preferably demarcated in a well-known way by creases 3, along which the material from which the blank is made is adapted to be readily bent to facilitate the making up of the boxes. At the corners of the blank thus formed the material is adapted to be cut out, as indicated in Fig. 3, so that the ends of the flaps 2 2 are adapted when upbent to fit against each other to produce joints 4 at the corners of the box, and in the outer longitudinal edge of each flap 2, adjacent to each end thereof, is cut or otherwise produced an open-ended slit or cut 5, adapted to be engaged, as will be hereinafter explained, by a device upon the fastener, so that said fastener may be held in position at the corner of the box in such a way as to close and cover and to strengthen and hold together the flaps 2 2 at the joint at said corner.

6 6 indicate the improved fasteners, one of which is shown in detail detached and enlarged in Fig. 2, and each of said fasteners is formed of a clip of metal or other suitable material, which is bent centrally to produce side portions at angles to each other and adapted to extend over the outer sides of the flaps or side portions 2 2 of the box, adjacent to the joint 4 at the corner thereof, the central bent

portion of the clip extending over the said joint, so as to close and cover and conceal the same, and each clip is formed with a downward extension of a length corresponding to the depth of the box and composed of integrally-connected wings or sections 7 7, which extend down from the body portion of the clip, at the central bent part thereof, and are adapted, as indicated in Fig. 1, to overlies the outer surfaces of the box sides, adjacent to the corner-joint thereof, so as to close and strengthen said joint from top to bottom of the box. At its upper part the improved clip is also constructed with integral outwardly-directed arms 8 8, which are adapted to overlies the outer surfaces of the box sides at the upper edges thereof and also at points adjacent to the corner-joint of the box, and said arms 8 8 are of lengths greater than the width of the lower integrally-connected wings 7 7 and are provided at their extremities with inwardly bent or turned parts 9 9, adapted to be extended through the slits 5 5 in the upper edges of the box-flaps 2 2 and are also adapted when inserted in said slits 5 5 to be bent over or clenched upon the inner surfaces of the respective flaps, as clearly shown in Fig. 1, in such a way as to insure that the clip will be securely and firmly held in position at the corner-joint of the box.

The improved box constructed in this way is of an extremely simple, inexpensive, and strong character, so that it is especially well adapted for use, and the improved fastener is of such a nature that it is adapted for ready application to the creased blanks, so that the blanks may be shipped in the flat and quickly made up for use when desired, whereby a very material convenience is afforded in the hand-

ling and storage of the boxes. The improved fastener may also be manufactured separately and readily and securely applied to boxes or other structures of various kinds by merely slitting the edges of the flaps thereof, so as to permit the arms to be engaged therewith. It will also be obvious from the above description of my improvements that the improved fastener and box are capable of considerable modification without material departure from the principles and spirit of the invention, and for this reason I do not wish to be understood as limiting myself to the exact form of the several parts of the devices herein set forth in carrying out my invention in practice.

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

A box or equivalent structure having side portions in the outer longitudinal edges of which are produced open-ended slits adjacent to the corners of the structure in combination with fasteners of angular form having central bends and provided with arms extended along the outer surfaces of the structure with extremities extended in planes parallel to the corners of the structure and passed through said slits and clenched on the inner surfaces thereof and with a downwardly-extended central part adapted to close the joint between the sides of the structure and having angular wings overlying the outer surfaces thereof below said arms.

Signed at Cincinnati, Ohio, this 29th day of February, 1904.

THEODORE PILZ.

Witnesses:

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