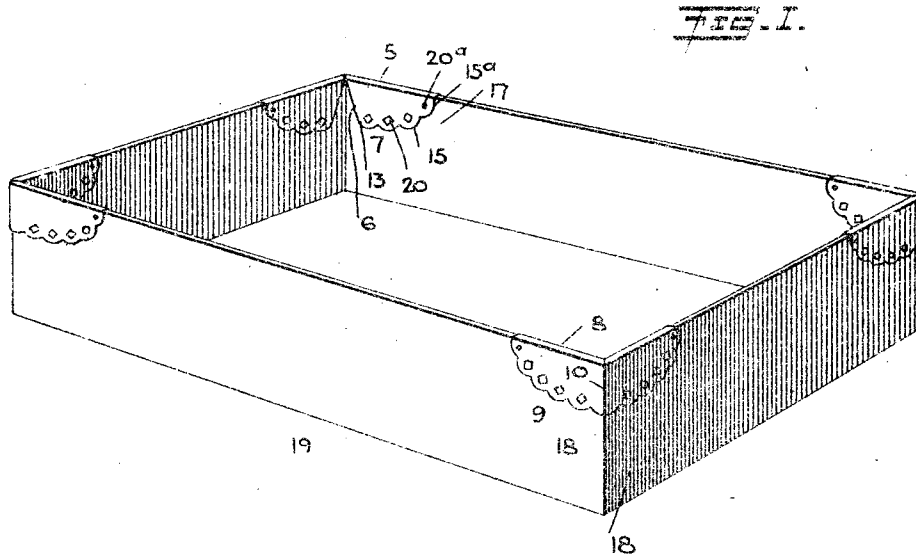
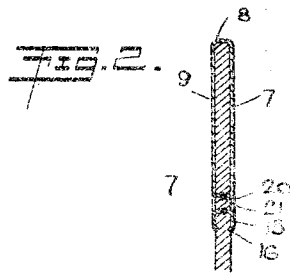
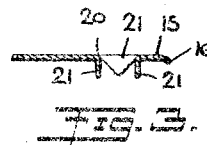
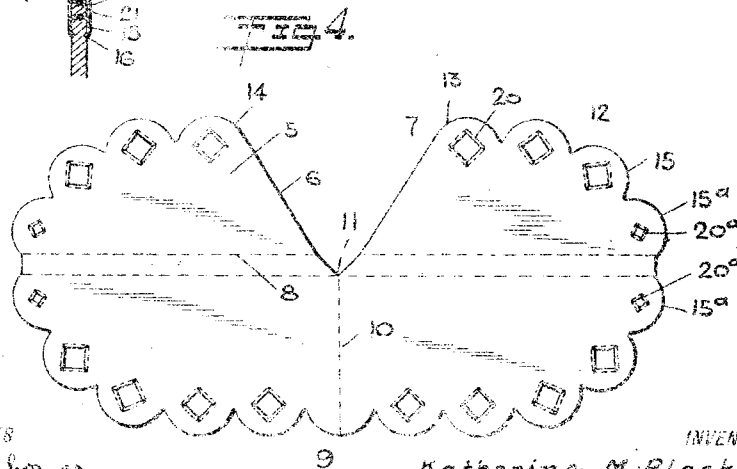


K. M. BLACK.
BOX CORNER PROTECTOR.
APPLICATION FILED JULY 16, 1912.

1,086,984.

Patented Feb. 10, 1914.



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UNITED STATES PATENT OFFICE.

KATHERINE MARY BLACK, OF AUSTIN, TEXAS.

BOX-CORNER PROTECTOR.

1,086,984.

Specification of Letters Patent.

Patented Feb. 10, 1914.

Application filed July 16, 1912. Serial No. 709,681.

To all whom it may concern:

Be it known that I, KATHERINE M. BLACK, a citizen of the United States, and a resident of Austin, in the county of Travis and State of Texas, have invented a new and Improved Box-Corner Protector, of which the following is a full, clear, and exact description.

My invention has for its object to provide a box corner protector constructed of a piece of metal with an angular cut-away portion at its inner side so that the piece of metal may be bent longitudinally and transversely through the apex of the angle formed by the cut-away portion to fit a corner of a box or box lid without the inner sides of the piece of metal overlapping. The edge of the piece of metal is scalloped, and the edges of the scallops are turned inward to engage the inner and outer surfaces of the sides of the box to obtain a grip thereon and also to prevent protruding edges of the metal from catching the goods which may be contained in the box. The outer sides of the metal have punched portions forming spurs which project inward and which engage similar spurs on the inner sides of the metal, which project outward.

Additional objects of the invention will appear in the following complete specification, in which the preferred form of the invention is disclosed.

In the drawings similar characters of reference indicate corresponding parts in all the views, in which—

Figure 1 is a perspective view of a box, provided with my box corner protectors; Fig. 2 is a transverse sectional view of how the scallops and the spurs pierce the box and how the spurs engage and lock with each other; Fig. 3 is an enlarged sectional view of how the spurs are formed; and Fig. 4 is a plan view of the piece of metal after it has been cut out and the spurs have been punched before it has been bent to fit the corners of the box.

By referring to the drawings it will be seen that a piece of metal 5 is provided having an angular cut-away portion 6 at its inner side 7, the piece of metal 5 being scored longitudinally at 8, so that the inner side 7 of the piece of metal may be bent against the outer side 9 of the piece of metal, the piece of metal also being scored transversely at 10, these scored portions 8 and 10 meeting at the apex of the angle formed by the

angular cut-out portions 6 at the inner side 7 of the piece of metal. The periphery 12 of the piece of metal from the point 13 at the inner side around the ends of the metal at the outer side to the point 14 at the inner side of the piece of metal is scalloped, as shown at 15, the edges of these scallops being turned inward, as shown at 16, in Fig. 3, to obtain a grip on the inner sides 17 and the outer sides 18 of the box. The piece of metal 5 also has punched portions 20 in the scallops 15, which form spurs 21, which are shown in Fig. 2, and which meet each other in the material of the box walls when the inner and outer sides of the piece of metal are forced toward each other, with the spurs piercing the sides of the box. The punched portions 20^a in the scallops 15^a are not as large as the punched portions in the other scallops, this construction being preferred so that these scallops 15^a which are disposed at the rim of the box may be more readily fastened to the box. The edges 16 of the scallops are impressed in the sides of the box in a plurality of arcs, and they do not lessen the strength of the cardboard of which the box is constructed as is the case where the box is indented by a plurality of prongs along a substantially straight line.

It will be understood that as the spurs 21 not only pierce the sides of the box, but engage or meet in the material thereof, the corner protector is secured firmly to the box without any possibility of its becoming knocked off during use. It will also be understood that as the edges of the corner protector are formed of scallops, with the edges disposed inward, these edges will penetrate the outer surface of the box forming an even surface, making it impossible for the goods which are being handled to become caught in the corner protector, and thereby damaged. These box corner protectors may be applied by the manufacturer of the boxes, but it will be also understood that they may be readily applied by store keepers to boxes now in use, in this way greatly strengthening the boxes which are now being used.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

A box protector, comprising a piece of sheet material bent to form angular portions each of which consists of spaced, parallel walls connected at one edge, to overlies the

edges of a box at its corner, and extend upon
the opposite surfaces of the box walls adja-
cent such corner, said protector walls hav-
ing scalloped free edges, the curved edge of
5 each scallop being inturned, and said walls
also having punched openings, each of which
openings is located substantially within an
edge scallop thereof, and spurs surrounding
and projecting inward from each opening,
10 the spurs of each angular portion of the pro-
tector being in opposition between its walls
to abut or meet at points intermediate said

walls, and within the material of the box
when the protector walls are pressed against
the surfaces of the box, substantially as is
shown and described.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

KATHERINE MARY BLACK.

Witnesses:

J. BOULDIN RECTOR,
A. KIRKLAND BLACK.