To all whom it may concern:

Be it known that I, FREDERICK A. STEVENS, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Abutments for Ring-Trays, of which the following is a specification.

My invention relates to abutments for ring trays, and which are in the final tray assembled side by side with a textile or other soft covering or padding.

The essential objects of my invention are durability, strength, cheapness to manufacture; adaptability to attachment to the boxes speedily and without glue; facility for automatic construction; adaptability to variation of spacing; and capacity for use in connection with boxes of different dimensions.

To the above ends essentially my invention consists in such parts and in such combinations of parts as fall within the scope of the appended claims.

In the accompanying drawings which form a part of this specification,

Figure 1 is a plan view of a blank for a single abutment,

Figs. 2, 3, and 4, a plan, side elevation, and end elevation respectively of a skeleton abutment bent up from the blank,

Fig. 5, an end elevation of the same fixed to a strip,

Fig. 6, a plan view of a horizontal series of abutments,

Fig. 7, a section of the same covered with padding and carrying a ring, taken on line 7—7 of Fig. 6,

Fig. 8, a plan view of a blank adapted for use to form a multiple series of abutments,

Fig. 9, a plan view of the same bent up into skeleton form, and

Fig. 10, an end view of the same attached to a base.

Like reference characters indicate like parts throughout the views.

In the form of my invention herein shown, a blank is by suitable tools cut from a thin sheet of metal comprising a rectangular lar body portion B having lateral prongs B out of alinement with each other. Upon the top and bottom of the blank are parallel strips C connected to the body by webs c. By suitable tools in a power press or other machine, the blank is bent up into the form shown in Figs. 2 to 4 inclusive. That is to say, the body portion B of the blank forms the top wall B and the side walls D of the main or retracted portion of the abutment. The web portions c and the parts of the 60 strips C adjacent thereto also form a part of the top, but the top portions of the strips C are of greater breadth forming lateral extensions e at both sides of the body. The remainder of the strips C are downwardly bent forming legs f whose ends, if of sufficient length, are outwardly bent forming supporting members g. While these flanges or fingers g strengthen and add efficiency to the structure, an operative construction may omit these. There are resultant vertical slots h formed in the body. The abutments are completed by applying the same to a base strip J which is preferably of cardboard, through which the prongs b are passed and bent over against the bottom face thereof, as shown in Fig. 5.

Blanks similar to A may be continued side by side, the connection being a continuation of the strips C. When bent up, they assume the form shown in Figs. 6 and 7 which are identical with two of the units shown in Fig. 4 placed side by side, with their separated lugs or flanges g united to form a single support g'.

When a plurality of rows of abutments are desired, the blank A', as shown in Fig. 8, is employed. This differs from the blank A merely in elongating the outer strips C', and in having the intermediate strip or strips C'' of double width. This results after bending merely in making the inner legs f', and inner supports g'' of double width. Obviously, if a blank suitable for forming the construction shown in Fig. 6 is desired, it is only necessary to longitudinally sever, with metal shears, the strip C along its central portion. If preferred, the final abutment form, shown in Fig. 9, may be severed along a corresponding line, if a horizontal row or rows of abutments is desired. If a vertical row or rows of abutments are desired, the flanges or supports g' and g'' may be divided in vertical alinement.

The resilient character of the metal con- 105 structing the material of the structure makes it possible to vary the spacing between the side walls to accommodate rings of various sizes prior to the insertion of the prongs into the base J.

It will be observed that this construction is capable of speedy and automatic forma-
tion and in sheets sufficiently extensive to be cut into any desired form and size to fit the particular box or tray to be equipped. There is a maximum of strength and lightness obtained by this construction, and the integral attaching prongs form an efficient means for engaging the base strip without the use of glue and in a more permanent manner.

In Fig. 7, these abutments are shown covered by the usual padding K in which is mounted a ring L.

I claim:

1. An abutment for ring trays comprising a series of parallel top walls, vertical side walls integral with the top walls, lateral extensions on the top walls, vertical legs on the extensions, supports connecting the lower ends of the adjacent legs, and engaging prongs integral with the bottoms of the side walls.

2. An abutment for ring trays comprising in a single resilient piece of metal continuous and parallel series of top walls, side walls upon the top walls, lateral extensions on the top walls, legs on the extensions, supports connecting the lower ends of adjacent legs, and prongs upon the side walls.

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

FREDERICK A. STEVENS.

Witnesses:

CHARLES S. JENCKES,
HORATIO E. BELLows.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."