To all whom it may concern:

Be it known that I, HERMANN R. LEONHARD, a citizen of the United States, residing at Haledon, city of Paterson, county of Passaic, and State of New Jersey, have invented new and useful Improvements in Container-Lining Forming Devices, of which the following is a full, clear, and exact specification.

My invention relates to box-lining forming devices and refers particularly to devices suitable for the forming of box-linings employed in the complete covering of a contained material adapted to be removed from the box in covered form. It is frequently desirable to form, or mold, a material within a box and then to remove the same covered with a material, such as paper.

The production of so-called ice-cream bricks is an example of this method of procedure, in the production of which a box is lined with paper, the ice-cream packed tightly within the lining, the upper portion of the lining wrapped over the top of the ice-cream form and the wrapped form removed from the box.

While my device is not limited to this particular use, it is especially adapted for that purpose and presents a means whereby all of the necessary operations can be performed in a rapid and efficient manner.

In the production of ice-cream wrappers, it is not necessary that the edges of the covering be hermetically sealed, and for this reason a cross-shaped piece of paper of particular construction can be successfully employed with my device. It is customary, in the production of ice-cream bricks, to place two rectangular pieces of paper at right angles to each other within the box, this operation being mainly performed by fitting each piece of paper as a lining within the box. This requires considerable time and skill, as the pieces must be so exactly placed as to produce an abutment of the corner edges when completed to prevent leakage of the ice-cream. It also causes a loss of paper material, as twice the quantity is used in the bottom of the box as is actually necessary.

My device overcomes all of the above and other difficulties and presents a means whereby a single layer of paper may be inserted by one operation, with assurance of proper formation of the covering material to prevent leakage.

In the accompanying drawings illustrating modifications of the device of my invention, similar parts are designated by similar numerals.

Figure 1 is a perspective view of a box or container.

Figure 2 is a perspective view of the box, or container, of Figure 1 with my forming device inserted therein.

Figure 3 is a cross-section through the line 3—3 of Figure 2.

Figure 4 is a plan view of the paper lining material.

Figure 5 is a perspective view of the formed lining material removed from the box or container.

Figure 6 is a broken cross-section of a modification of my forming device.

The particular form of the device of my invention, shown in the accompanying drawings, comprises a rectangular wooden forming body composed of the sides 11, 11, the ends 12, 12, and the top 13 and interior chamber 14, open at the bottom and connecting with the opening 15 of the body top 13. The top 13 extends beyond the sides 11, 11 and the ends 12, 12 and has a recess 16 within the lower face of the extended portion for purposes to be described later. The upper face of the top 13 carries the supporting members 17, 17, carrying the handle 18.

The operation of my device is as follows:

Over the top of a box 19 is placed a cross-shaped piece of paper, preferably waxed paper 20, and the forming body pressed upon the paper and inwardly of the box 19, the openings 14 and 15 allowing of the escape of air. The device is then in the position shown in Figure 3 and the paper is folded inwardly along the indicated lines A—A, B—B, A—B and A—B and outwardly along the lines C—C, D—D, E—E and F—F, the latter foldings being caused by the recessed flange 16 of the top 13.

The forming body is then withdrawn from within the paper, leaving the box 19 with a folded paper lining covering the bottom, sides and ends thereof.

The material, such as ice-cream, is then introduced into the paper and the end portions 21, 22, 23 and 24 folded over the top
and the wrapped contents removed from the box.

The shown box has a bottom, but my device is adaptable to boxes without fixed bottoms, in which case the wrapped material is removed by raising the box, allowing the wrapped material to remain upon the surface upon which the box rested during filling.

In the modification shown in Figure 6, the forming body is made from one piece of metal with the top 13' and the side 11' and having the outwardly extended recessed top flange 26.

From the above it is evident that my device presents an economical, rapid and effective means for the lining of boxes and containers, in that the accomplishment of this result consists simply in placing a piece of container material over the box and forcing the forming member therein.

I do not limit myself to the particular size, shape, number or arrangement of parts, as shown and described, as these are given simply as a means for clearly describing the device of my invention.

What I claim is:

1. In a container-lining forming device, in combination, a container, a hollow forming device of the same shape as the container and capable of close insertion therein, an outwardly extended flange carried by the former capable of abutment upon the top edges of the container when the former is inserted therein and a handle carried by the upper portion of the former.

2. In a container-lining forming device, in combination, a container, a hollow forming device having the same shape as the container and capable of close insertion therein, an outwardly extending flange carried by the former having a recess in the lower face capable of receiving the upper edges of the container when the former is inserted therein and a handle carried by the former extending exteriorly of the container when the former is inserted therein.

Signed at Haledon, in the county of Passaic and State of New Jersey, this 15th day of July, 1922.

HERMANN R. LEONHARD.