

Oct. 15, 1935.

B. H. WALTER

2,017,380

PACKAGE FOR SHEET MATERIAL

Filed Dec. 29, 1933

2 Sheets-Sheet 1

Fig. 1.

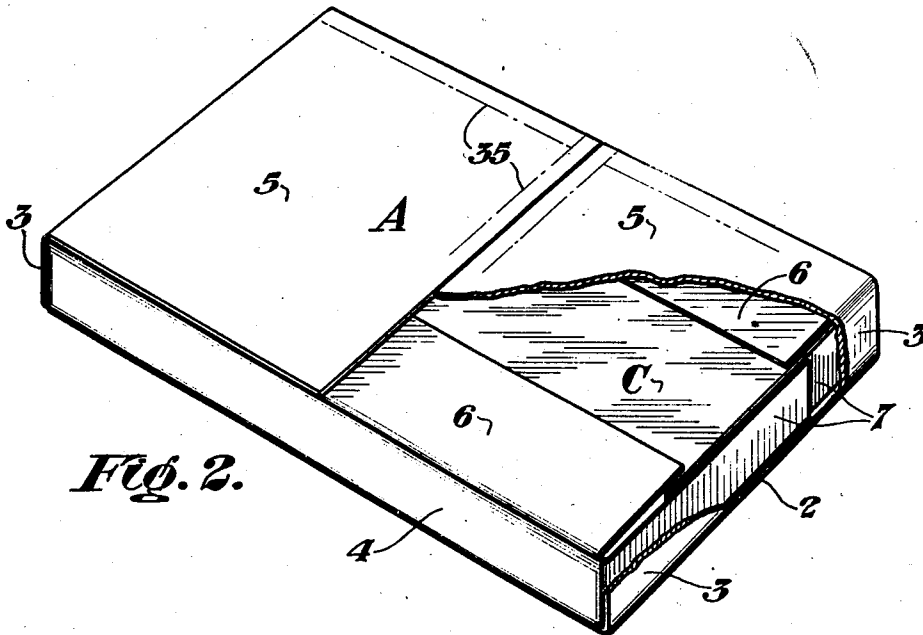
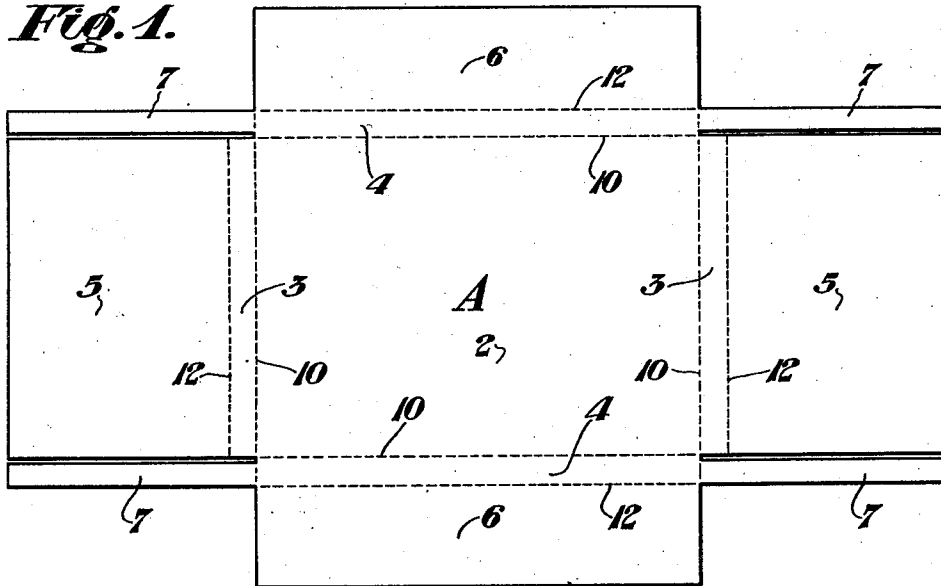


Fig. 2.

Inventor:
BRUNO H. WALTER,
by *Usina & Rauber*
his Attorneys.

Oct. 15, 1935.

B. H. WALTER

2,017,380

PACKAGE FOR SHEET MATERIAL

Filed Dec. 29, 1933

2 Sheets-Sheet 2

Fig. 3.

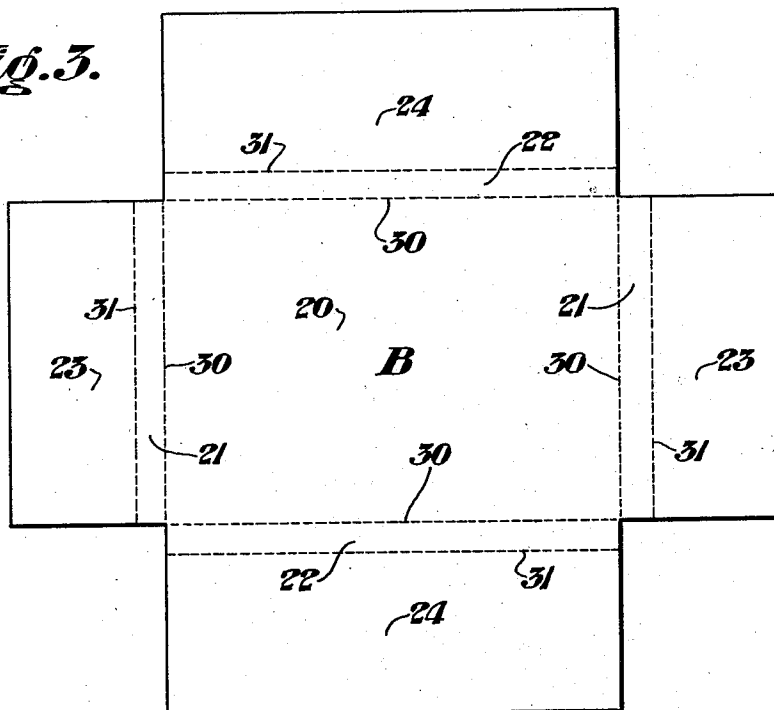


Fig. 4.

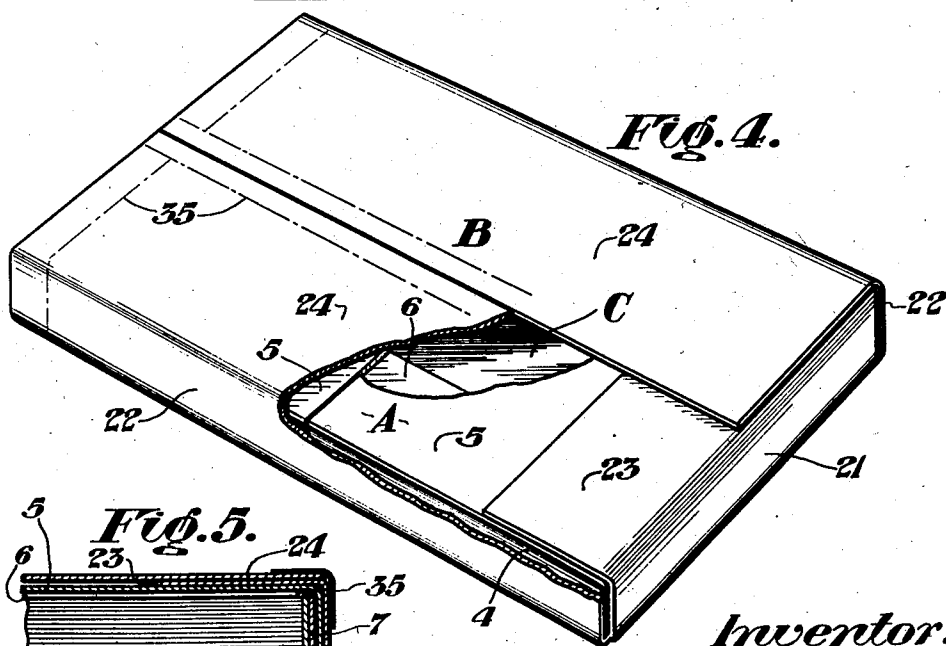
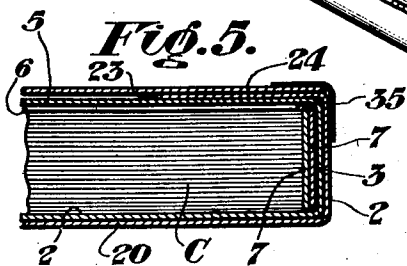


Fig. 5.



Inventor:

BRUNO H. WALTER.

by: Usina & Rauber
his Attorneys.

UNITED STATES PATENT OFFICE

2,017,380

PACKAGE FOR SHEET MATERIAL

Bruno H. Walter, Pittsburgh, Pa., assignor to
American Sheet & Tin Plate Company, a corporation of New Jersey

Application December 29, 1933, Serial No. 704,529

3 Claims. (Cl. 206—60)

This invention relates to an improved package or carton for metal sheets such as tin or terne plate and tin mill sizes of black plate, and has for one of its objects the provision of a package of this class consisting of inner and outer carton members having great strength and being of light weight.

Heretofore in the shipping of metal sheets such as tin plate, terne plate and the like, especially in export shipments, great care was necessary in order to prevent the metal sheets from becoming damaged by corrosion or the infiltration of foreign material. It has generally been the custom in export shipments to provide wooden boxes lined with sheet metal, which sheet metal enclosed the metal sheets to be shipped and was soldered to form a substantially air and watertight container. These combined wood and sheet metal packages were expensive to manufacture and added considerably to the weight of the shipments, and consequently greatly increased the cost of shipment.

The present invention provides a package which will withstand the rough usage which it is subjected to in export shipments. Furthermore, it provides a package which is readily sealed tight against the infiltration of moisture or foreign substances, and which completely protects the plates during shipment. An added advantage of the present package is also its greatly reduced initial cost of manufacture and its reduced weight, and consequently reduced cost of shipment.

In the drawings:

Figure 1 is a plan of a blank forming the inner carton of my package.

Figure 2 is a perspective view of the assembled inner container partly broken away.

Figure 3 is a plan of a blank forming the outer carton.

Figure 4 is a perspective view of the assembled complete package.

Figure 5 is a fragmentary detailed sectional elevation through a portion of the completed package.

Referring more particularly to the drawings, the letter A designates the inner carton as a whole, and the letter B designates the outer carton, while the packaged sheet metal is designated by the letter C. Each of the cartons A and B is preferably composed of a single piece of fibre board suitably cut and folded.

The carton A is composed of a bottom portion 2, end walls 3, side walls 4, end flaps 5, side flaps 6 and reinforcing strip portions 7.

The end walls 3 and side walls 4 are formed integral with the bottom 2, and are marked by score lines 10 to facilitate the bending of side walls into upright position. The end flaps 5 and side flaps 6 are formed integral with the end and side walls of the carton, and are marked by score lines 12 to facilitate the bending of said flaps into a plane parallel to the bottom wall to form the top closure of the carton. The end flaps 5 are of substantially one-half the area of the carton so that when said flaps are bent into closure forming position, they will be substantially coextensive with the top of said carton and will have their free end edges abutting.

The reinforcing strips 7 are formed integral with the opposite ends of each of the side walls 4, and are adapted to extend inwardly along the inner face of each of the end walls 3.

The outer carton B is of slightly greater dimensions than the inner carton A so as to enclose the inner carton. The outer carton B is composed of a bottom portion 20, end walls 21, side walls 22, end flaps 23 and side flaps 24.

The end walls 21 and side walls 22 are formed integral with the bottom 20, and are marked by score lines 30 to facilitate the bending of said walls into upright position. The end flaps 23 and side flaps 24 are formed integral with the end and side walls 21 and 22, respectively, of the carton, and are marked by score lines 31 to facilitate the bending of said flaps into a plane parallel to the bottom wall 20 to form the top closure of the carton. The side flaps 24 are substantially one-half the area of the carton so that when said flaps are bent into closure forming position, they will be substantially coextensive with the top of said carton and will have their free side edges abutting.

It will be noted that the abutting edges of the side flaps 24 are at right angles to the abutting edges of the end flaps 5 of the inner carton so that the juncture line of end flaps 5 are substantially covered by the side flaps 24.

When assembling the package of this invention, both the inner and the outer cartons are preferably sealed along all open joints by gummed tape or the like 35 so that when the package is completed it is substantially hermetically sealed and forms a rigid, light weight unit.

While I have shown and described one specific embodiment of my invention, I do not wish to be limited thereto since various modifications or details may be made without departing from the scope of my invention as defined in the appended claims.

I claim:

1. A fibre board package for metal sheets comprising one-piece inner and outer cartons, each of said cartons being composed of a bottom portion, a pair of end portions, and a pair of side-wall portions, and integral flaps extending from said end portions and said side-wall portions, each corresponding pair of said flaps being foldable into a plane parallel to said bottom portion to form a top enclosure, and an integral reinforcing strip extending from each end of each of the side wall portions of said inner carton, said strips being of a length which is less than the total length of the package, and greater than the width of the side wall portions, the edges of the integral flaps of said inner and outer carton abutting the corresponding edges of similar elements throughout their entire lengths.

2. A fibre board package for metal sheets comprising one-piece inner and outer cartons, each of said cartons being composed of a bottom portion, a pair of end portions, and a pair of side-wall portions, and integral flaps extending from said end portions and said side-wall portions, each corresponding pair of said flaps being foldable into a plane parallel to said bottom portion to form a top enclosure, and an integral reinforcing strip extending from each end of each of the side wall portions of said inner carton, said strips being of a length which is less than the total length of the package, and greater than the width of the side wall portions, said inner carton having the integral flaps of its end portions composing

substantially one-half of the area of the carton so that when said flaps are folded into carton-closing position they will abut each other and substantially close the top of said carton.

3. A fibre board package for metal sheets comprising one-piece inner and outer cartons, each of said cartons being composed of a bottom portion, a pair of end portions, and a pair of side-wall portions, and integral flaps extending from said end portions and said side-wall portions, each corresponding pair of said flaps being foldable into a plane parallel to said bottom portion to form a top enclosure, and an integral reinforcing strip extending from each end of each of the side wall portions of said inner carton, said strips being of a length which is less than the total length of the package, and greater than the width of the side wall portions, said inner carton having the integral flaps of its end portions composing substantially one-half of the area of the carton so that when said flaps are folded into carton-closing position they will abut each other and substantially close the top of said carton, said outer carton having the integral flaps of its side wall portions composing substantially one-half of the area of the carton so that when said flaps are folded into carton-closing position they will abut each other and substantially close the top of said carton with their abutting edges extending at right angles to the abutting edges of the flaps of the end portions of said inner carton.

BRUNO H. WALTER.