Nov. 12, 1929. H. D. SCOTT 1,735,548

TIN PLATE PACKAGE

Filed June 26, 1928

Fig. 1.

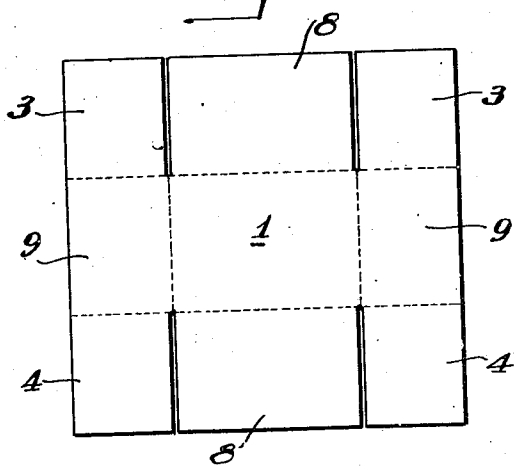


Fig. 2.

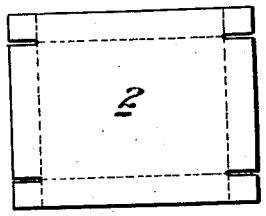


Fig. 4.

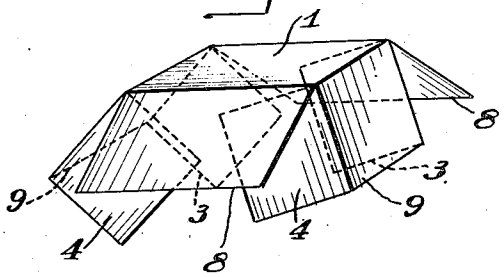


Fig. 3.

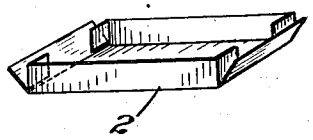
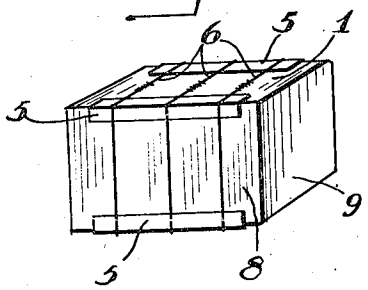


Fig. 5.



WITNESSES

A. B. Wallace.

INVENTOR

Henry D. Scott

By Brown & Critchlow

his Attorneys.

Patented Nov. 12, 1929 1,735,548

UNITED STATES PATENT OFFICE

HENRY D. SCOTT, OF WHEELING, WEST VIRGINIA

TIN-PLATE PACKAGE

Application filed June 26, 1928. Serial No. 288,837.

This invention relates to the packaging of sheets of tin plate and like coated sheet metal which is shipped in relatively large sheets, and which on account of its thinness and the character of its coating must have its surfaces, and especially its longitudinal edges, protected against dust, abrasion and other injury.

Heretofore the common practice has been to ship tin plate in wooden boxes, crates or bales, the bales being formed by placing a rigid slab of some suitable material on the top and bottom of the sheets and binding these together by means of bands encircling the package. Various objections have been raised to the use of these kinds of packages for shipping purposes. For example, wooden boxes are expensive, comparatively heavy and fragile, and rarely capable of being used a second time, while the crates and bales heretofore used afford inadequate protection to the edges of the sheets, and do not satisfactorily prevent the ingress of dust and moisture.

The object of this invention is to provide a simple and inexpensive shipping package of tin plate, in which the sheets are firmly held against movement upon each other to avoid marring their surfaces, and are entirely enveloped in a case which protects them against dust and moisture and also protects their edges from damage due to contact with other objects.

The invention is illustrated in the accompanying drawings in which Figs. 1 and 2 are plan views of sheets of fiber board material cut and creased to form the top and bottom, respectively, of a casing; Figs. 3 and 4 perspective views, respectively, of the bottom with its edges turned up, and the top with its sides and ends partially folded down; and Fig. 5 a perspective view of a complete package embodying the invention.

In the practice of the invention a stack of tin plate is placed upon a bottom fiber board sheet which is slightly larger than the tin plate sheets, its projecting edges being previously cut and creased so that they may be readily folded upwardly on the pack. A second fiber board sheet considerably larger than the plates, which is also previously cut and creased, is placed on the top of the pack and its projecting sides and ends folded downwardly over the pack to completely enclose the package. A corner angle member is then nested on each of the side corners of the package, and around them binding members in the form of wires, bands, straps, or the like, are tightly fastened to hold the top and bottom of the case in place and to prevent relative movement of the sheets.

In shipping tin plate, the customary practice is to arrange the packages on the floor of a freight car with their sides lying in planes transversely of the car. Accordingly it is the sides, rather than the ends, of the packages that are subjected to injury by the jamming together of adjacent packages due to the shocks incident to the abrupt starting and stopping which characterizes freight hauling. To prevent such injury, strips of wood have heretofore been placed between the sides of adjacent packages, separating them in rows transversely of a car. In the package provided according to the invention, the outer laterally projecting portions of the cover sheet are preferably folded inwardly on the sides of the package to reinforce the sides of the case, thus giving double thicknesses of fiber board at the sides, and making it unnecessary to separate the adjacent sides of packages by strips of wood.

Having reference to the embodiment of the invention illustrated in the accompanying drawings, a fiber board casing consisting of a rectangular top 1 and a rectangular bottom 2 is shown, the edges of which are creased and cut as shown by the dotted and full lines in Figs. 1 and 2, whereby they may be readily formed to shape. The fiber board employed in making these casings may be plain cardboard, corrugated cardboard, or other like materials, all of which are herein designated as cardboard. To give it the necessary body, it is preferably from one-sixteenth to one-quarter of an inch in thickness depending in part upon the strength of the particular material used. The bottom sheet is made slightly larger than the tin plate sheets to be protected, and its edges are folded upwardly

to form a box-like container such as illustrated in Fig. 3. The top sheet used for covering the top, sides and ends of the package is preferably made from a piece of fiber board considerably larger than the tin plate, and is also creased and cut as indicated in Fig. 1 to form the sides 8 and ends 9 which are folded down over the stack in the manner shown in Fig. 4 to form a dust-proof package.

The outer laterally projecting end portions 3 and 4 of cover 1 are folded inwardly along the sides of the package, reinforcing the sides of the casing to protect the side edges of the tin plate from damage due to shock received in shipping. When the casing is folded in place, angle irons 5 are nested on the side corners of the package, and around them suitable metal strands or bands 6 are tightly drawn, holding the casing firmly in place and preventing the sheets in the package from moving relative to one another. The angle irons project beyond the planes of the casing and prevent the encircling bands from contacting with and injuring the edges of the tin plate.

It will be noted that no glue or connecting means, other than the binding bands are used for holding the casing members in their folded positions or in place, and that the casing is formed on the package with comparative ease. Thus the labor incident to the packing of the sheets for shipment is very small, a comparatively inexpensive package being formed of light weight material which affords adequate protection to the enclosed sheets of tin plate. Other advantageous features of packages embodying the invention are that the angles employed in the packages may be used repeatedly, the fiber board may be readily salvaged, and, as stated, strips of wood need not be used for separating the sides of packages in freight cars.

According to the provisions of the patent statutes, I have explained the principle and operation of my invention, and have illustrated what I now consider to represent its best embodiment. However, I desire to have it understood that, within the scope of the appended claims, the invention may be practiced by other forms than those specifically shown and described.

I claim:

1. A shipping package of tin plate, comprising rectangular top and bottom covering sheets of thick fiber board, said bottom sheet being slightly larger than the tin plate and having its projecting sides and ends folded upwardly against the lower portions of the sides and ends of the tin plate, said top sheet being materially larger than the tin plate and having its projecting sides and ends turned downwardly to completely envelop the sides and ends of the tin plate, a metal angle nested upon the fiber board at each side corner of the package, and metal strands bound around the top, bottom and sides of the package and upon said angles.

2. A shipping package of tin plate, comprising rectangular top and bottom covering sheets of thick fiber board, said bottom sheet being slightly larger than the tin plate and having its projecting sides and ends folded upwardly against the lower portion of the sides and ends of the tin plate, said top being materially larger than the tin plate and having its projecting sides turned downwardly to completely envelop the sides of the tin plate, the projecting ends of the top sheet being turned downwardly to completely envelop the ends of the tin plate and their outer portions being turned laterally against and reinforcing said downwardly turned sides, a metal angle nested upon the fiber board at each side corner of the package, and metal strands bound around the top, bottom and sides of the package and upon said angles.

3. A shipping package of tin plate, comprising top and bottom covering sheets of thick fiber board larger than the tin plate and having protecting sides and ends folded against and completely enveloping the sides and ends of the tin plate, an angle member nested upon the fiber board at each side corner of the package, and metal strands bound around the top, bottom and sides of the package and upon said angles, said cover sheets being so formed and folded that they are firmly held in their folded positions by said angles and metal binding strands.

In testimony whereof, I sign my name.

HENRY D. SCOTT.