

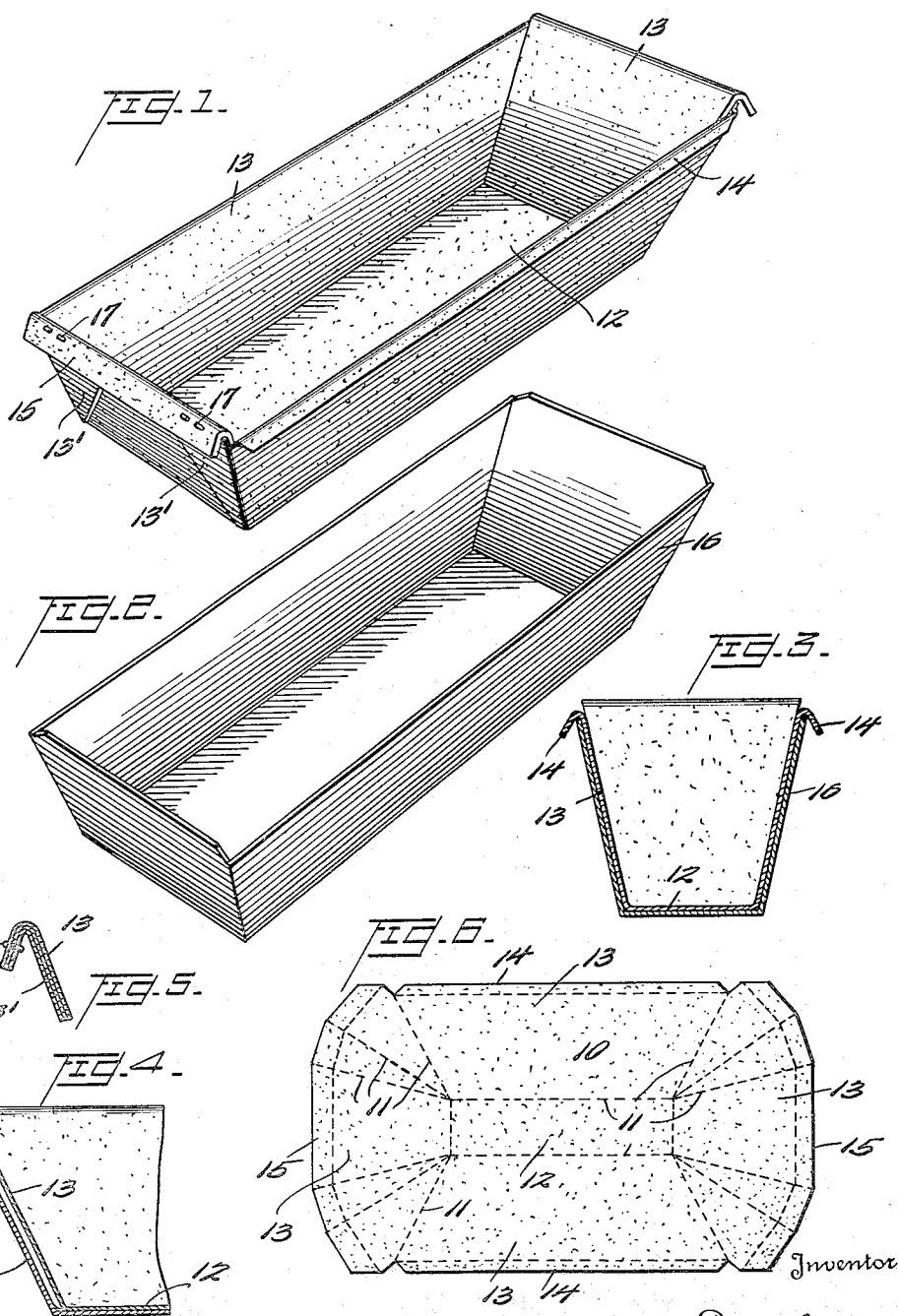
July 3, 1934.

C. K. DUNLAP

1,965,138

VESSEL FOR COLLECTING TURPENTINE GUM

Filed Dec. 15, 1932



Inventor

C. K. Dunlap,

By Watson, Cook, Moore & Lindell,
Attorney

UNITED STATES PATENT OFFICE

1,965,138

VESSEL FOR COLLECTING TURPENTINE GUM

Charles K. Dunlap, Hartsville, S. C., assignor to
Sonoco Products Company, Hartsville, S. C.,
a corporation of South Carolina

Application December 15, 1932, Serial No. 647,484

3 Claims. (Cl. 47—11)

The present invention relates to fluid containers and particularly to vessels for collecting turpentine gum in the turpentine industry.

Collectors of turpentine gum now generally employ metallic vessels or open-topped containers one such container being fastened to each tree and being periodically emptied during the turpentine season by an attendant with a dipper. These metallic vessels are generally rectangular in horizontal section, inexpensive to manufacture, simple in operation, and very durable in use. At the same time it is found that the crude gum turpentine reacts with the metal of the container, thereby causing darkening of the gum and loss of value.

In accordance with the present invention, a paper liner for the metallic turpentine trays or pans now in use is provided, which liner is so constructed as to fit snugly within the metallic tray and to receive the turpentine, the liner being treated so as to resist the softening action of water and turpentine gum and so as to be mechanically strong and resistant to the dipping operation. By the use of these liners the gum collected is kept wholly out of contact with metallic elements which might, and generally do, cause the gum to be darkened. The liner is preferably formed of a single paper blank, folded so as to conform to the shape of the metal tray into which it is to be inserted, after having been given a treatment to render it stiff, self-supporting, and impervious to the action of turpentine gum and water. The liner is further provided with flanges at the upper edges of its side walls which project laterally therefrom and preferably downwardly. When the liner is assembled with the supporting container, these lateral flanges project over the upper edges of the container and thus provide closers for any gaps or spaces which might remain between the outer surfaces of the liner and the inner surfaces of the walls of the container, which spaces might become filled with water or dirt.

In the operation of forming the paper liner, certain portions of the blank are folded, and it is desirable that these folds be secured to the main body of the liner. In accordance with the present invention, the operation of folding and shaping the liner is so carried out that it is possible to insert a securing device or devices through parts of the folded portions and parts of the flanges at the upper ends of the walls of the liner, the positions which these metallic fastening devices occupy being, therefore, remote from the body of turpentine gum held by the liner and there being

no possibility of the gum being darkened by contact with the metal.

The liner may be made in various ways and in numerous shapes. In the accompanying drawings one preferred type of liner is disclosed by way of example, but it will be appreciated that the invention contemplates the manufacture of liners of different shapes and details of construction where conditions make this necessary.

In the drawing:

Figure 1 is a perspective view of a completed liner ready for insertion in the container;

Figure 2 is a perspective view of the container;

Figure 3 is a transverse section through the container and liner as assembled;

Figure 4 is a partial longitudinal section through the same;

Figure 5 is a section intended to show one of the fastening devices; and

Figure 6 is a plan view of a paper blank from which the liner is fabricated.

In the manufacture of the liner, any suitable paper may be utilized but preferably a paper of inferior grade and hence relatively inexpensive. The paper is first subjected to a treatment which renders it resistant to moisture and turpentine gum, any suitable process of treatment being employed for this purpose, and which process need not be specifically described herein as it forms no portion of the present invention. The paper so treated is resistant to the action of moisture and is inert to the action of turpentine gum. It is also rendered hard, stiff, and strong and well able to maintain its shape when dry and to resist the mechanical shock and abrasion due to transportation and use.

The blank from which the liner shown in the drawing is fabricated is indicated at 10 in the drawing (see Figure 6) and is seen to comprise a single one-piece member. Before being severed from a paper web, the entire web is first submitted to the treatment above described and the blank 10 struck therefrom while the paper is still moist. It is then folded along the lines 11 until it has been shaped as shown in Figure 1, having a bottom 12 and four lateral or side walls 13. The blank is so formed that it has side marginal portions 14 and end marginal portions 15 which, in the completed liner, extend laterally and downwardly from the walls and in reality comprise flanges. It is the function of these flanges to not only stiffen the liner but to overlie the upper edges of the container 16, as may be seen more clearly in Figures 3 and 4, and thereby prevent the entrance of water or dirt into any

space which may be found between the outer surfaces of the liner and the inner surfaces of the container, due to an inexact fit of the liner within the container. Metallic staples or securing devices are indicated at 17, these staples passing through the end flanges of the liner, both the flanges which constitute continuations of the upper edges of the walls of the liner and the flanges which constitute continuations of the upper edges of the triangular folded-over portions or ears 13'. These securing devices, therefore, constitute additional means for rendering the liner rigid. They are so positioned as to be completely inaccessible to the body of turpentine gum which is collected within the liner in the course of its ordinary use, and hence no deterioration of the gum by reason of contact with metal can occur. When the liner is thoroughly dry, it is rigid and strong and is well suited to withstand not only the action of moisture but the mechanical abrasion to which it is subjected during the dipping operation.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A paper liner for turpentine cups comprising

ing a stiff, strong, self-sustaining paper structure, resistant to water and turpentine gum, and having laterally and downwardly extending flanges at the upper edges of its walls.

2. A paper liner for turpentine cups comprising a one-piece folded paper blank having fluid retaining walls with laterally extending flanges at the upper edges thereof, and metallic fastening devices securing folded-over portions to the side walls, said devices passing through said flanges and through said folded-over portions and being entirely without the fluid retaining space.

3. A paper liner for turpentine cups comprising a one-piece folded blank having fluid retaining side walls with integral laterally extending flanges at their upper edges, folded portions lying parallel and closely adjacent to the side walls, said folded portions likewise having integral laterally extending flanges at their upper edges, and fastening devices securing the folds to the side walls, said devices passing through the flanges of folds and side walls, said liner being stiff, strong, self-sustaining, and impervious to the action of water and turpentine gum.

CHARLES K. DUNLAP.

30	105
35	110
40	115
45	120
50	125
55	130
60	135
65	140
70	145
75	150