July 15, 1941. J. R. BRADY ET AL 2,249,283

COATED BURIAL RECEPTACLE

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FIG. 2.

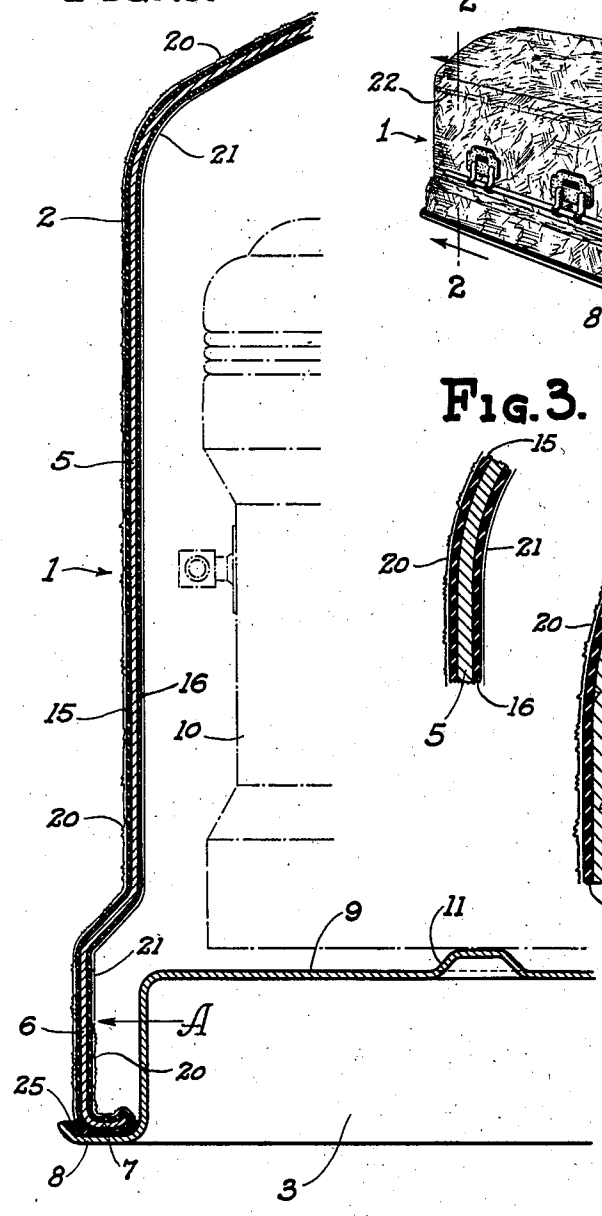


FIG. 1.

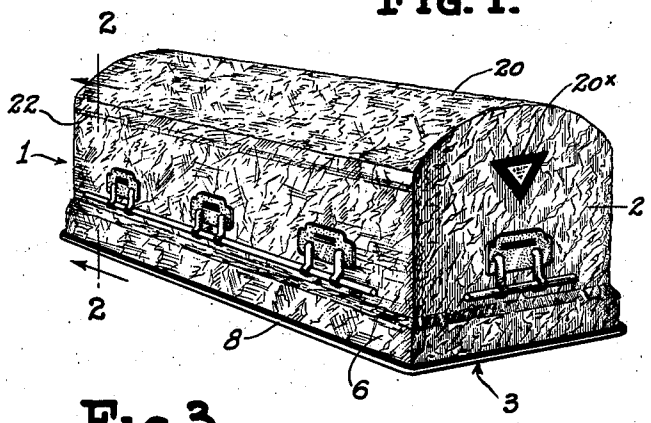


FIG. 3.

FIG. 4.

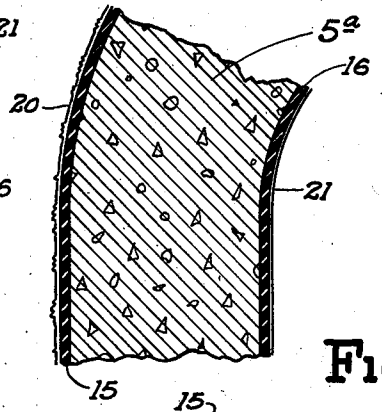
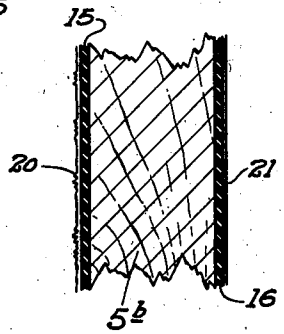


FIG. 5.



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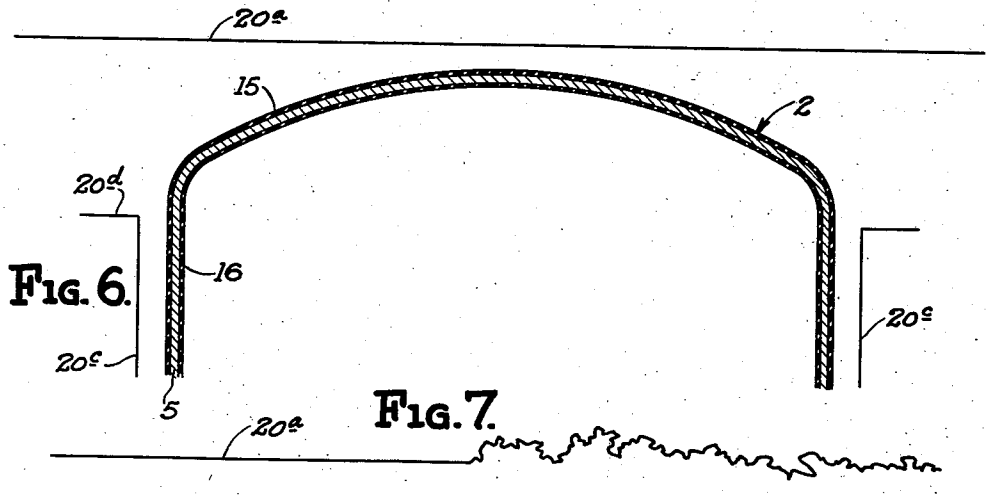


FIG. 6.

FIG. 7.

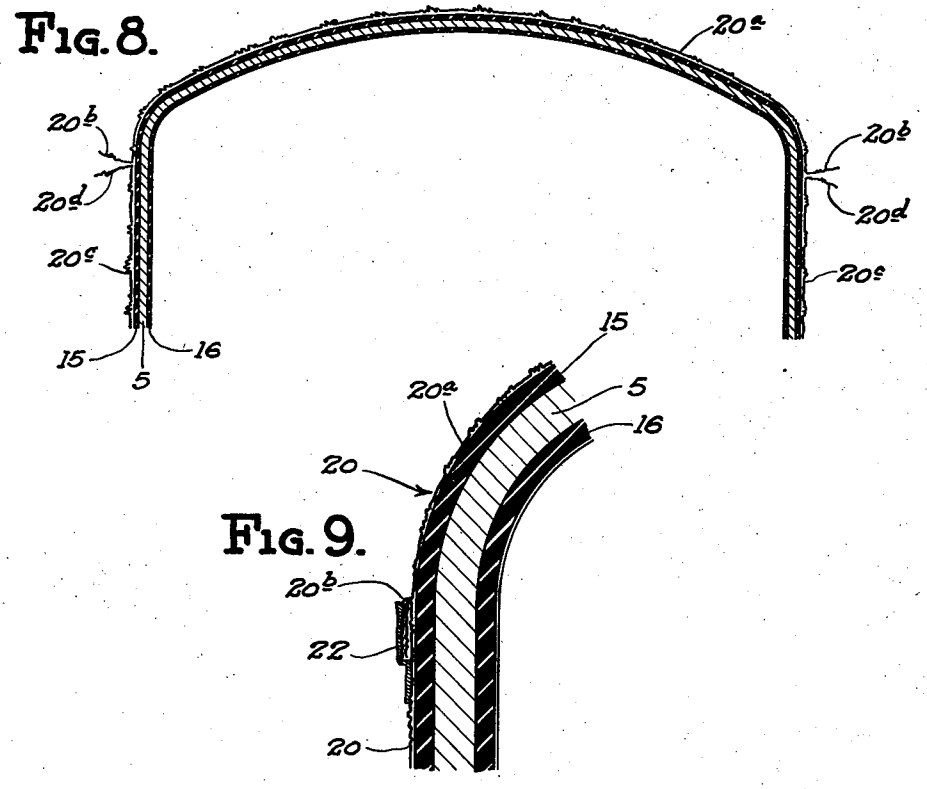


FIG. 8.

FIG. 9.

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2,249,283

COATED BURIAL RECEPTACLE

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Application October 28, 1938, Serial No. 237,450

5 Claims. (Cl. 27—19)

This invention relates to the class of burial vaults or receptacles, and more particularly to an improved protective covering for articles of said class.

The fundamental object of our invention is the production of a burial vault or receptacle having a protective covering composed of a tacky pitch-like substance overlaid or enveloped by a superficial layer or coating of material that is impervious to the underlying substance and is tightly affixed thereto by adhesion and which renders the vault or receptacle attractive of appearance, less susceptible to high temperatures, and possible of handling, storage, shipment and display without the difficulty, previously attending vaults or receptacles so coated, of the material sticking to the hands and clothing of persons handling the receptacle and coming off upon objects wherewith the receptacle is brought into contact.

More limitedly, a principal object of our invention is to provide a protective covering or coating for the outside, or for the outside and inside, of burial vaults or receptacles that are constructed of different materials, such as iron or steel, wood, concrete or other suitable compositions, such protective covering comprising a coating of asphalt of proper quality that is applied to the walls of the vault or receptacle, and an overlay of suitable material, desirably of a cellulosic character, preferably cellophane, whereby to permit the use of asphalt, with its well known protective properties and qualities of durability and longevity, without the disadvantages heretofore attending its use for such purpose. Because of the permanently sticky or tacky character of asphalt of the kind suitable for the purpose, as, for example, air-blown asphalt that does not harden to such a degree as to become brittle, the coating of burial vaults and receptacles with such material has heretofore made the handling, wrapping, storing, shipping and display of the vaults or receptacles, especially when subjected to elevated temperatures or exposed to the sun, disagreeable and impractical.

Another object of the invention is to provide a burial vault or receptacle to the walls of which are applied a coating of asphalt or the like, and a superficial layer of cellophane or other suitable sheet material that is embossed or crinkled. Besides adding to the attractive appearance of the article, the embossed or crinkled condition of the material compensates for any shrinkage thereof, and allows for the expansion and contraction of the underlying substance without danger of the sheet material being ruptured or the joints of the envelope or layer constituted of such material being opened or its edges being withdrawn from their initial positions, under which adverse circumstances the tacky surface of the underlying coating would be exposed. Esthetic effects may be accomplished by the use of transparent cellophane of solid or variegated colors or tints, as the corrugations or wrinkles display the color or tint of the cellophane in substantially its full value while the portions intermediate such corrugations or wrinkles, adhering tightly to the underlying substance, have imparted thereto by such substance a much darker tone or color, or a black appearance.

A further object of the invention is the production of a burial vault or receptacle having a coating of asphalt or the like applied to its walls and overlaid by a superficial layer of cellophane or other normally transparent material that is rendered opaque by the application of paint or the like to all but a restricted area thereof thereby to provide a window through which the underlying coating may be clearly observed. The paint, or pigment, is preferably on the reverse side of the layer so that the sheen of the material, if it be of cellophane or the like, may be preserved, as well as the paint protected. This window feature has an important commercial aspect inasmuch as the desirability of asphalt or like substance for the protection of burial vaults or receptacles is so well known that to entirely conceal the coating by an opaque layer or envelope would introduce an element of sales resistance and necessitate, in many cases, removal of a small section of the layer or envelope.

Objects additional to the foregoing will appear as we proceed to describe the invention in detail by reference to the accompanying drawings wherein Fig. 1 is a perspective view of a burial vault embodying the invention; Fig. 2 is a fragmentary vertical sectional view through the vault, the plane of section being indicated by the line 2—2 of Fig. 1; Figs. 3, 4 and 5 are sectional details, of actual size, through the walls of a metal, concrete and wooden vault or receptacle, respectively, to which the protective covering of our invention is applied; Figs. 6, 7 and 8 are views of a diagrammatic nature illustrating steps in the method of applying the overlay or envelope of sheet material to the coating of pitch-like substance, and Fig. 9 is a highly magnified sectional detail showing a taped joint of the overlay or envelope.

The invention is applicable to vaults or recep-

tacles of various designs and types, the one here selected for illustrative purposes being a standard type vault designated, generally, by the reference numeral 1 and comprising a dome 2 and base 3. Both the dome and base of the construction shown in all views but Figs. 4 and 5 are of metal, such as iron or steel, the metal wall of the dome being designated 5. The lower portion of the dome 2 is flared outwardly at 6, and its open bottom is surrounded by an inturned flange 7. When the vault is assembled, the flange 7 rests within a shallow trough 8 that extends about an elevated central portion of the base that constitutes the casket rest 9. The casket, indicated in broken lines at 10, is spaced from the rest 9 by bosses 11 thereby to provide clearance beneath the casket for withdrawal of the usual lowering straps (not shown).

Applied to the outer and inner surfaces of the metal wall 5 of the dome 2 are coatings 15 and 16 of a pitch-like substance, desirably asphalt. What is known as "air-blown" asphalt is at present preferred over other substances because of the fact that it permanently retains a relatively pliable quality as distinguished, for example, from "steam-blown" asphalt that becomes hard and brittle soon after application. The asphalt coatings may be mopped on hot or cold. In the application of cold asphalt, the asphalt is mixed with a highly volatile solvent which evaporates in a relatively short time, depending upon the volatility of the solvent and the relative amount used. As an alternative method of applying the asphalt coating, the vault dome of drawn or fabricated sheet metal or plate may either be given a relatively thin priming coat of asphaltic material, or in lieu thereof the dome may be preheated to a temperature of from 150° to 200° F.; and then the primed or preheated dome is dipped into a vat of hot liquid asphalt having a temperature, for example, of approximately 475° F.

Regardless of the method of applying the asphalt coating, a quantity of an approximately given weight (say 40 pounds for the adult size vault) is deposited upon the metal thereby to hermetically seal the metal and thus insure effective and practically permanent protection against oxidation and corrosion.

To the entire outer surface of the dome 2, and under and about the flange 7, and up the inner side to about the point designated by the arrow A in Fig. 2, a superficial layer or envelope 20 of suitable material is applied that is impermeable to the substance of the underlying coating. While, at the present time, we favor transparent Cellophane, other materials may be employed as, for example, oiled silk, vegetable parchment that is impervious to asphalt, oil cloth, treated paper or metal foil. The Cellophane, treated paper, vegetable parchment, oil cloth and such may be plain or printed, in the latter instance bearing appropriate designs, patterns or effects; or the material, especially transparent Cellophane, may possess solid or variegated colors or tints. The sheet material is desirably embossed or crinkled before being applied, and this is of importance as it permits of shrinkage of the material itself, which is quite perceptible in Cellophane, and compensates for expansion and contraction of the asphalt without danger of rupturing the material or causing the overlay or envelope to separate at its joints and pull away from and thus expose the underlying coating in the region of its edges.

The layer 20 may be painted, or otherwise have applied to it, a pigment; and if the layer be of transparent material, the paint or pigment may be omitted from a restricted area thereof to provide a window through which the underlying coating of asphaltic substance may be observed, as and for the purpose previously explained. In Fig. 1, such a window is indicated at $20^{\times}$, and it is arbitrarily shown as triangular, and as being occupied by a similarly shaped label of lesser area than the window so as not to defeat the purpose of the latter. The label is thus protected by the overlay. Furthermore, if Cellophane or other glossy material is used as the layer 20, and it is desired to preserve the sheen thereof, the paint or pigment should be applied to the inner or reverse side of the layer.

Instead of a casing or envelope of sheet material, liquid cellulose or similar material may be applied, as by spraying, to the surface of the pitch-like substance or asphalt, and in fact it is proposed that such layer of material be applied to the coating of asphalt or the like on the inside of the dome above the zone indicated by the arrow A in Fig. 2, where it is indicated at 21. In other words the layer of cellulosic material would extend across the roof of the dome and down the sides to join the edge of the sheet covering at said zone. The superficial layer of sheet material is much to be preferred on the exterior surface of the dome because of the artistic effects that may be attained through its use that would not be possible in a sprayed coating.

The envelope 20 of sheet material may be fabricated before it is applied to the dome, in which case it would be constructed of sections that are suitably joined together, as by vulcanizing, and it would be made of a size considerably greater than the area to which it is to be applied. Prior to applying the superficial layer or envelope to the dome, or during application, the sheet material of which it is composed may be crinkled, as by crumpling it in the hands. Or prior to application the material may be embossed or corrugated by suitable means. As it is applied to the tacky substance of the coating it is pressed firmly into contact with the surface thereof, and it is important that this be done while the substance is hot or, in the case of asphalt being applied cold, before the solvent therein has evaporated.

If the superficial layer 20, especially if it be of sheet Cellophane, is applied to the dome in sections, this may be done in the manner illustrated in Figs. 6, 7 and 8. A sheet or strip 20^{a}, considerably longer and wider than the top of the dome 2, being first crinkled, as indicated at the right in Fig. 7, is engaged near its edges with the coating 15 and subsequently throughout the remainder of its area and it is then pressed firmly against the surface of the coating so as to be made to adhere tightly thereto. The surface of the layer then appears quite smooth excepting where interrupted by wrinkles, the wrinkles being reduced to very narrow lines; and if it be Cellophane of a tinted or colored character, yet transparent to a considerable degree, the effect is quite striking. The smooth areas will be greatly darkened or practically blackened by the underlying layer of asphaltic substance while the wrinkles will show the color or tint of the Cellophane, and if the Cellophane be of variegated coloring, the effect is of an opalescent nature. The edges 20^{b} of the sheet or strip 20^{a} are left free, and the sheets 20^{c} that are similarly applied to the sides of the dome are left free at their edges, as indi-

cated at 20d, in proximity to the free edges 20b of the sheet 20a. These contiguous marginal portions 20b and 20d may then be trimmed, or they may be pressed downwardly and sealed against the side of the wall by an adhesive or gummed tape or by gluing a strip of material thereover, as indicated at 22 in Fig. 9.

For the sake of sealing the vault, a quantity of asphalt may be placed within the trough 8 of the base before the dome 2 is lowered into position with its peripheral flange 7 disposed within the trough. This feature is illustrated in Fig. 2 where the deposit of asphalt within the trough is designated 25.

In Figs. 4 and 5, the protective coatings 15 and 16, with the layers 20 and 21 of our invention are shown applied to the concrete wall 5a of a vault or receptacle composed of such material; and to the wall 5b of a wooden box or receptacle, respectively.

Having thus described our invention, what we claim is:

1. A burial receptacle having applied to the walls thereof a coating of asphaltic substance having a relatively smooth exterior surface, and a superficial corrugated layer of relatively light toned translucent sheet material that is impervious to said substance overlying and attached by adhesion to said coating, the areas of the material between corrugations being pressed firmly against the relatively smooth surface of the coating so as to have imparted to them by the underlying substance a darkened effect in contrast to the substantially normal tone of the material apparent in the corrugations.

2. A burial receptacle having applied to the walls thereof a coating of asphaltic substance, and a superficial layer of normally transparent sheet material that is impervious to said substance overlying and attached to said coating by adhesion, said sheet material having a pigment applied to all but a restricted portion of its area thereby to be rendered opaque except for a window constituted of said restricted portion through which the underlying asphaltic substance may be observed.

3. A burial receptacle having applied to the walls thereof a coating of asphaltic substance, a superficial layer of normally transparent sheet material that is impervious to said substance overlying and attached to said coating by adhesion, said sheet material having a pigment applied to all but a restricted portion of its area thereby to be rendered opaque except for a window constituted of said restricted portion through which the underlying asphaltic substance may be observed, and a label interposed between the layer and coating and occupying, and being of lesser area than, said window.

4. A burial receptacle having applied to the walls thereof a coating of air-blown asphalt, and a superficial layer of Cellophane that is preformed with wrinkles overlying and attached to said coating by adhesion, the areas of the Cellophane between wrinkles being pressed into firm contact with the surface of the coating in such manner as to reduce the wrinkles to relatively narrow lines.

5. In combination, a metal burial receptacle, a coating of asphaltic substance thereon, a sheet of normally transparent material attached to said coating by adhesion, and a substantially opaque substance applied to all but a restricted portion of the outer surface of said sheet, thereby to provide a window through which said coating is visible.

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