

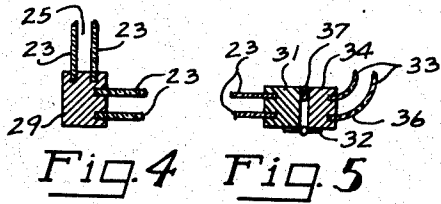
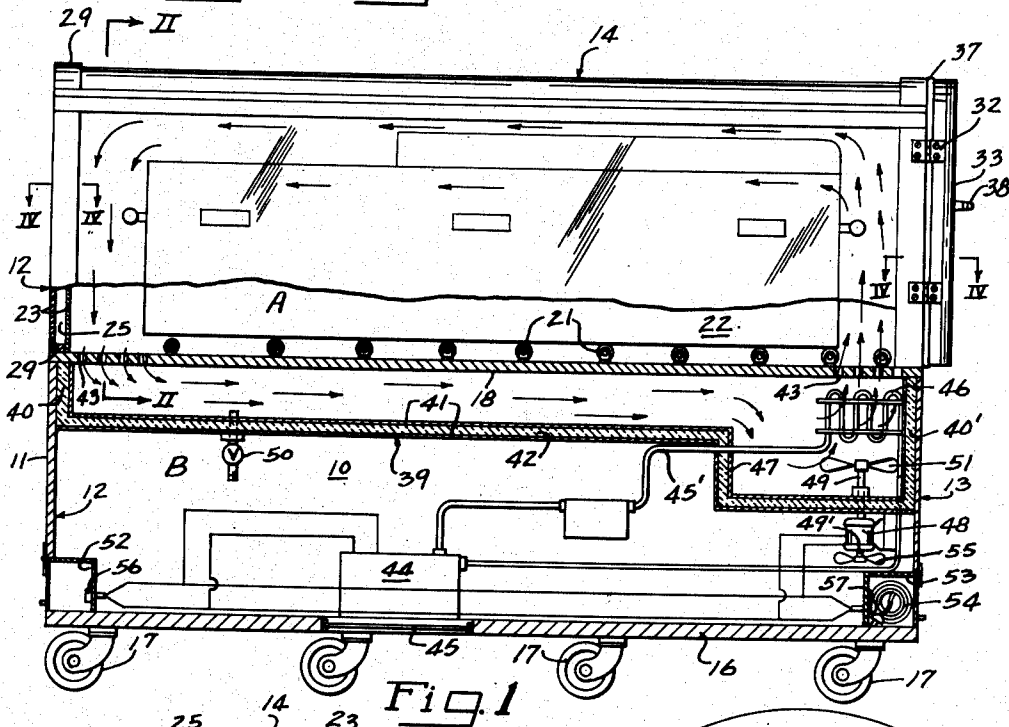
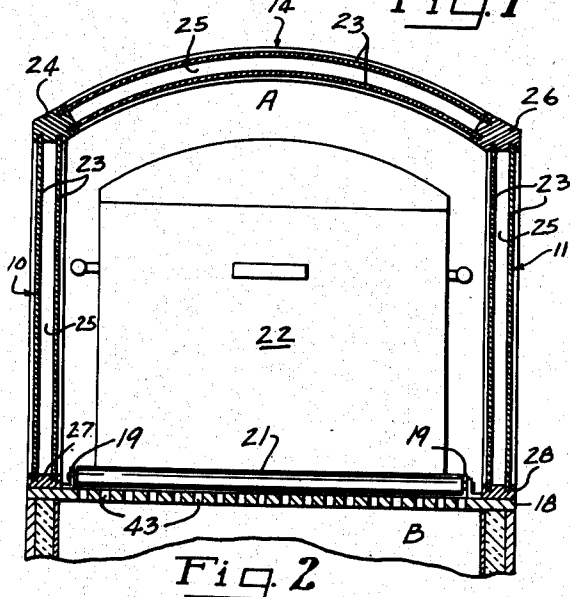
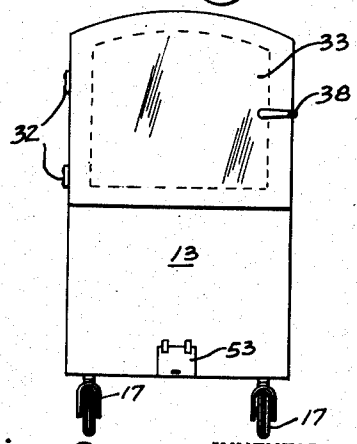
April 6, 1954

G. A. STILE

2,674,102

PORTABLE BIER

Filed Sept. 12, 1952



INVENTOR.
GEORGE A. STILE

BY

Janning & Carter
ATTORNEYS

UNITED STATES PATENT OFFICE

2,674,102

PORTABLE BIER

George A. Stile, Birmingham, Ala.

Application September 12, 1952, Serial No. 309,207

1 Claim. (Cl. 62—100)

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This invention relates to a portable bier and has for an object the provision of such a bier which shall include a refrigerating unit, thus permitting a body to be preserved for any desired length of time.

A further object of my invention is to provide a portable bier which shall preserve the corpse without the necessity of embalming the same.

A further object of my invention is to provide a portable bier of the character designated which shall be particularly adapted for transporting corpses long distances such as on ships, trains, or the like.

Another object of my invention is to provide a portable bier of the character designated which shall be adapted for use in homes, churches, or any other desired location.

A still further object of my invention is to provide a portable bier of the character designated which shall be simple of construction, economical to manufacture and one which shall greatly reduce the expense of funerals.

Heretofore in the art to which my invention relates various types of corpse preservers have been devised. However, so far as I am aware, none of these have been practical due to the fact that they are heavy, bulky, and are not adapted to be moved from place to place. To overcome these difficulties, I have devised a portable bier which embodies a self-contained refrigerating unit and means for circulating a cold medium from the unit about the corpse to be preserved.

A portable bier illustrating the features of my invention is shown in the accompanying drawings forming a part of this application in which:

Fig. 1 is a side elevational view of the bier, partly broken away and in section;

Fig. 2 is a sectional view taken along the lines II—II of Fig. 1;

Fig. 3 is an end view thereof;

Fig. 4 is a detail sectional view taken along the line IV—IV of Fig. 1; and,

Fig. 5 is a detail sectional view taken along the line V—V of Fig. 1.

Referring now to the drawing for a better understanding of my invention, the bier comprises an outer housing unit having rectangular shaped side walls 10 and 11, end walls 12 and 13, a curved top 14, and a bottom wall 16. Secured to the bottom wall 16 are a plurality of caster wheels 17 which permit the bier to be easily moved from place to place.

A partition wall 18 separates the housing unit into an upper compartment A and a lower compartment B. Mounted for rotation directly

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above the partition wall 18 in suitable L shaped brackets 19 are a plurality of elongated transversely extending rollers 21 for supporting a casket 22.

The sides, ends and upper wall of the compartment A are all formed of sheets of glass 23 spaced from each other to define a space 25 therebetween. The space 25 is filled with a suitable gas, such as hydrogen gas, to prevent frosting of the glass. The glass sheets 23 forming the top walls 14 are joined to the sheets of glass forming the side walls of the compartment A by means of spacer strips 24 and 26. Spacer strips 27 and 28 are provided for joining the side walls of the compartment A to the partition wall 18. The sheets of glass 23 forming the end wall 12 of the compartment A are joined to the sheets of glass forming the side walls and the top 14 of the compartment A by means of a spacer strip 29 which extends around the upper periphery of the end wall 12. Preferably, the strip 29 is made in sections to simplify the construction thereof. A spacer strip 31 is also provided at the end 13 of the upper section A which surrounds the ends of the sheets of glass 23 forming the sides and the top 14 of the compartment A, as shown in Fig. 5.

Hingedly connected to the spacer strip 31 by means of suitable hinges 32 is a door 33, also formed of spaced sheets of glass 23 which are joined by a spacer strip 34. The sheets of glass 23 forming the door are curved as at 36, thus providing a smooth outer surface for the door. A strip of sealing material 37 is secured to either of the spacer strip 31 or 34 to provide an airtight joint between the door and the spacer strip 31. The door is opened and closed by means of a handle 38. When the bier is in transit a suitable shipping case may be provided.

Positioned below and spaced from the partition wall 18 is a second partition wall 39 formed of spaced apart sheets of metal 41. The space between the metal sheets 41 is filled with a suitable insulation material 42 to prevent the transfer of heat through the wall 39. The end walls of the compartment defined between the partition walls 18 and 39 are also insulated, as at 40 and 40'. Openings 43 are provided at each end of the partition wall 18 to provide an air passageway between the compartment A and the space defined between the partition walls 18 and 39.

Mounted on a suitable grill 45 on the bottom 16 of the housing unit, and within the compartment B, is a refrigerating unit 44. Communicating with the unit 44 through a conduit 45' is a

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cooling coil 46 which is positioned within the compartment defined between the partition walls 18 and 39. The partition wall 39 is offset as at 47 to provide ample room for the circulation of a suitable cooling medium, such as air around the cooling coils 46. Mounted in the compartment B below the partition wall 39 and directly beneath the cooling coil 46 is a double-shaft motor 48 having vertically extending upper and lower shafts 49 and 49' respectively. The upper shaft 49 projects through a suitable opening in the partition wall 39 and mounted on the upper end thereof is a fan 51 in position to blow air around the cooling coils 46 and recirculate the same about the casket 12, as indicated by the arrows in Fig. 1. To renew the cooling medium from time to time, a two-way valve 50 having suitable inlet and outlet ports is provided in the partition wall 39.

Receptacles 52 and 53 are provided at the end of the housing unit adjacent the bottom 16 thereof for receiving an electrical extension cord 54 which is employed to connect the refrigerating unit 44 to any suitable source of electrical power. The extension cord is detachably connected to suitable plugs 56 and 57 in the receptacles 52 and 53 respectively, thus making it possible to employ a single extension cord which may be conveniently connected to either end of the housing unit. A circulation of air around the refrigerating unit 44 may be obtained by any suitable means such as by providing a fan 55 at the lower end of the motor shaft 49'.

Biers employed to transport corpses long distances may be made of a light material, such as aluminum or plastic, to decrease the cost of shipping the same. In such cases the bier would not have to have an ornamental appearance, as would be the case when the bier is employed in homes, churches or the like.

From the foregoing it will be seen that I have devised an improved portable bier which is easily

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transported from place to place and one which will preserve a corpse indefinitely. By providing a self-contained refrigerating unit in the lower portion of the bier and providing a transparent upper portion, the bier is particularly adapted for use in homes, churches, funeral parlors or any other desired locations.

While I have shown my invention in but one form, it will be obvious to those skilled in the art that it is not so limited, but is susceptible of various changes and modifications without departing from the spirit thereof, and I desire, therefore, that only such limitations shall be placed thereupon as are specifically set forth in the appended claim.

What I claim is:

In a portable bier, an outer housing comprising an upper compartment for receiving a casket, an intermediate compartment and a lower compartment, said upper compartment having transparent side, end and top walls, each of said transparent walls comprising a pair of spaced sheets of glass with the space therebetween filled with hydrogen gas, a refrigerating unit in said lower compartment, a cooling coil in said intermediate compartment, means connecting said cooling coil to said refrigerating unit, means circulating a cooling medium from said intermediate compartment into said upper compartment, and means rotatably supporting said housing.

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