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(72) Inventor: **Esteban, Ramos Garcia
Salamanca (ES)**

(74) Representative: **Garcia-Cabrerizo y del Santo,
Pedro Maria
Oficina Garcia Cabrerizo, S.L.,
Vitruvio, 23
28006 Madrid (ES)**

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(71) Applicant: **Esteban, Ramos Garcia
Salamanca (ES)**

(54) **An improved tomb**

(57) The present invention refers to an improved tomb made from heat-strengthened reinforced plastic. It

is comprised within the field of manufacturing tombs and mausoleums for cemeteries.

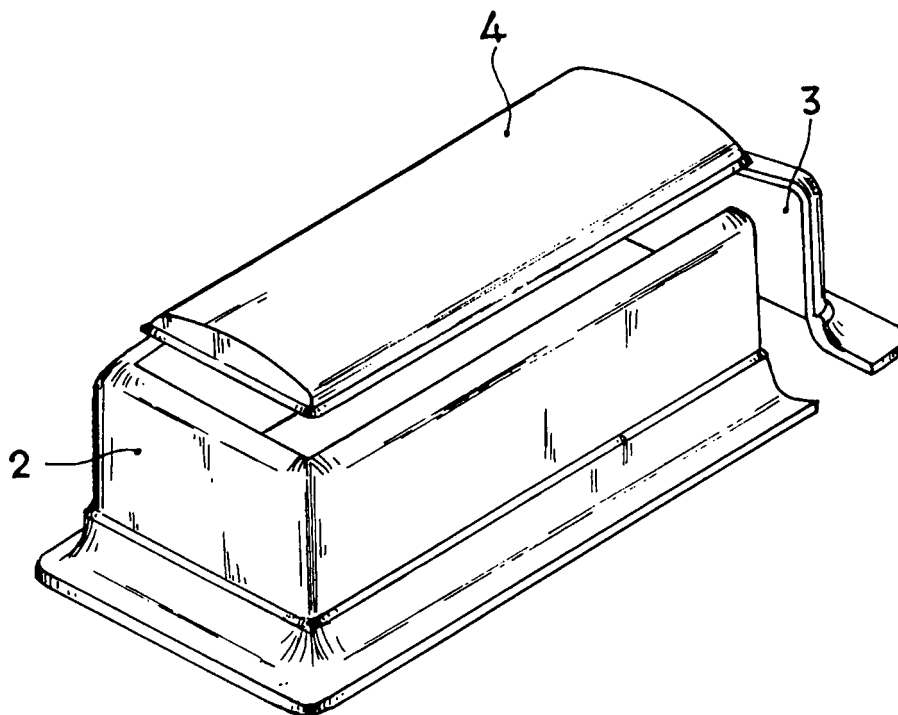


FIG. 1

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Description

[0001] The present invention refers to a type of funeral monument intended for burying one or several persons or pets. It is within the field of manufacturing tombs and mausoleums for cemeteries.

[0002] Materials such as marble, granite or stone (both artificial and natural) arranged in the form of vertical and horizontal plates of a different thickness and surface so as to form a type of more or less parallelepipedic internally open box are currently used within the field of manufacture of tombs and mausoleums for cemeteries. However one of such solutions has numerous drawbacks in terms of economics (high cost, difficult commercial expansion), maintenance (cracking of panels due to settling of the soil, opening of seals due to expansion) and appearance (impossibility of providing different shapes and colors to the final product).

[0003] The objective considered is to provide a tomb formed by one or several lightweight and economical pieces that are assembled, forming a self-supporting structure that is easy to transport and free of the risk of the occurrence of cracks or joint separations, allowing absolute freedom in choosing the shape and color.

[0004] The proposed solution consists of making the tomb from heat-strengthened reinforced plastic. This type of material, well-known in the fields of manufacture of boats or automobile bodies, is made up of two basic components: a matrix made up of a synthetic resin such as polyester, vinylester, epoxy, phenol, melamine, and silicone resins or the like, and a fiberglass reinforcement arranged in the matrix (which is what gives the product the reinforcement assuring its mechanical resistance).

[0005] The tomb of the invention can structurally be configured as a single mono-block part, or as an assembly of panels interlocked with one another by means of suitable connection means, such as screws, adhesives, shape connections or similar solutions.

[0006] Compared to the possibilities currently known in the field, the proposed invention provides remarkable versatility in terms of color, shape and design changes. On the other hand, the use of heat-strengthened reinforced plastic for building tombs involves the elimination of specialized manual labor in assembling the tombs since, giving their self-supporting nature, it is not necessary to use cement, bricks or any other building material. Its light weight allows easy transport so the commercial area of the manufacturer increases while at the same time later burials are greatly facilitated since the entire tomb can temporarily be removed, leaving the terrain on which it is necessary to act available.

[0007] To complement the foregoing description and for the purpose of aiding to better understand the features of the invention a detailed description will be given of a preferred embodiment based on a set of drawings attached to this specification and in which, with a merely illustrative and non-limiting nature, the following is shown:

Figure 1 shows an exploded perspective view of the tomb of the invention.

Figure 2 shows a fully assembled perspective view of the tomb of the invention.

[0008] The reference numbers in the previous figures corresponding to the following parts and elements:

1. Tomb
2. Base
3. Facade
4. Cover

[0009] As can be seen in Figures 1 and 2, the tomb (1) object of the invention comprises a base (2) consisting of three panels arranged in a U-shape, a facade (3) making up the fourth side closing the base (2), and a cover (4) intended for covering the top part of the assembly so as to form a type of box leaving an internally empty space. In the preferred embodiment, the different parts are coupled by means of screws in order to make up a self-supporting assembly that is not affected by terrain movements and expansion caused by temperature differences.

[0010] Regarding the manner of manufacturing the tomb of the invention, this can be any of those known by the person skilled in the art. Only two examples are herein described.

Example 1

[0011] Manufacturing the product by applying resins and fibers on previously designed and manufactured molds.

[0012] The mold is manually coated, first applying a thin layer of a demolding agent with a layer of surface resin (generally colored) called gel-coat.

[0013] A plurality of layers of resin and fiberglass are superimposed on the foregoing until reaching the desired thickness. Then it is necessary to wait until the product hardens according to the total thickness, temperature, moisture and accelerator and catalyst percentages.

[0014] Each one of the parts (base, façade and cover) which, joined by means of screws for example, make up the final object is prepared with the process.

Example 2

[0015] Machine injection of the product (resin and fiberglass) in the space remaining between the mold and counter mold (previously designed and manufactured). A demolding agent is applied on the mold.

[0016] A gel-coat is used to achieve the final appearance (it is the element that gives the desired color and texture). Then a reinforcement located inside the free

space between the mold and countermold is impregnated with resin by injection. Both the mold and countermold must be rigid and form a sealed volume.

[0017] As in the previous example, the different parts making up the final object will then be assembled. 5

[0018] A series of modifications and alternatives for adapting the essential features of the invention to different requirements in terms of the final design and available production means will be obvious to a person skilled in the art. Regarding the production means, and apart from the described process, any other processes known in the field for producing reinforced plastics could be used, such as vacuum impregnation, simultaneous compression-projection molding, etc. The final product could also be obtained with the three parts described, with a larger number of parts, or even in a single mono-block part. 10 15

[0019] Tomb is understood within the context of this document as the outer decorative element intended for covering the burial site or grave for people or pets, for either a single unit (graves) or for several units. 20

Claims

1. An improved tomb **characterized by** being made from a heat-strengthened reinforced plastic. 25
2. A tomb according to claim 1, **characterized in that** the heat-strengthened reinforced plastic is made up of a resin and a fiberglass reinforcement. 30
3. A tomb according to claim 2, **characterized in that** the resin is chosen from the group made up of polyester, vinyl ester, phenols, melamines, silicones and epoxy. 35
4. A tomb according to claim 1, **characterized by** being formed from a single mono-block part.
5. A tomb according to claim 1, **characterized by** being formed from a base (2) of three panels arranged in a U-shape, a façade (3) closing the fourth side and a cover (4) intended for covering the top part of the assembly, interlocked by means of suitable connection means. 40 45
6. A tomb according to claim 5, **characterized in that** the means of connection comprise screws.
7. A tomb according to claim 5, **characterized in that** the means of connection comprise adhesives. 50
8. A tomb according to claim 5, **characterized in that** the means of connection comprise shape fittings. 55

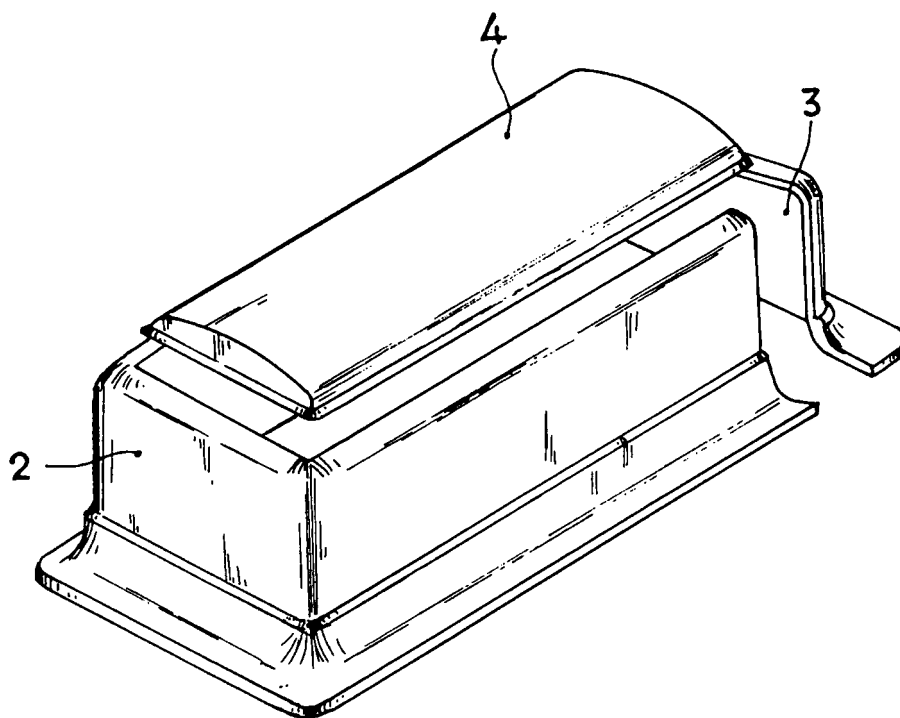


FIG. 1

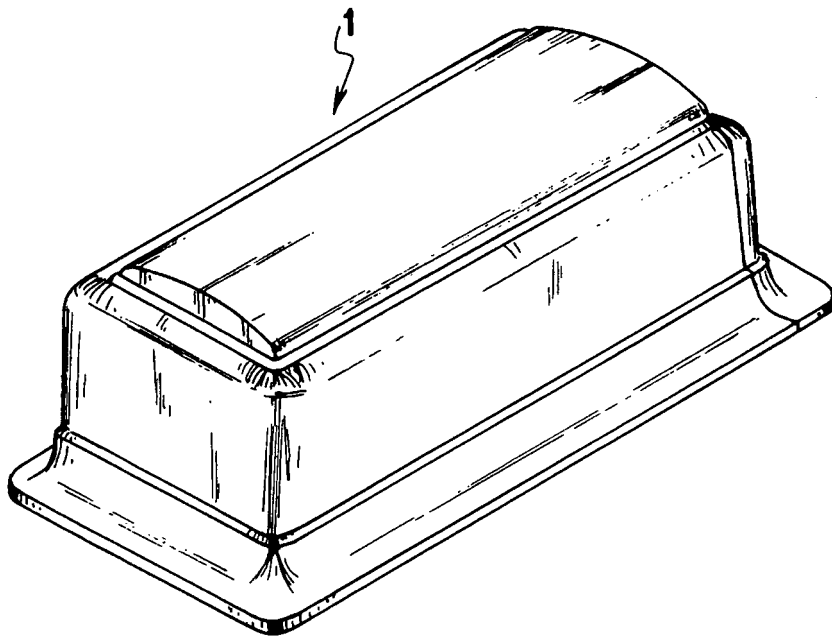


FIG. 2