May 7, 1929. G. ROSENQVIST 1,711,542

CASKET

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Fig. 1.

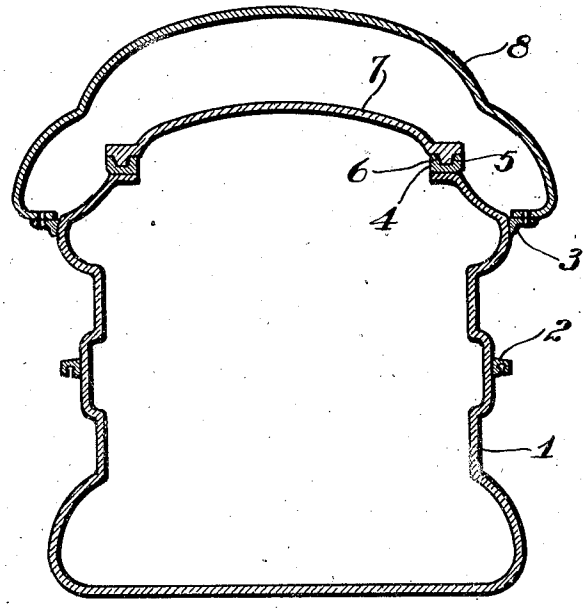
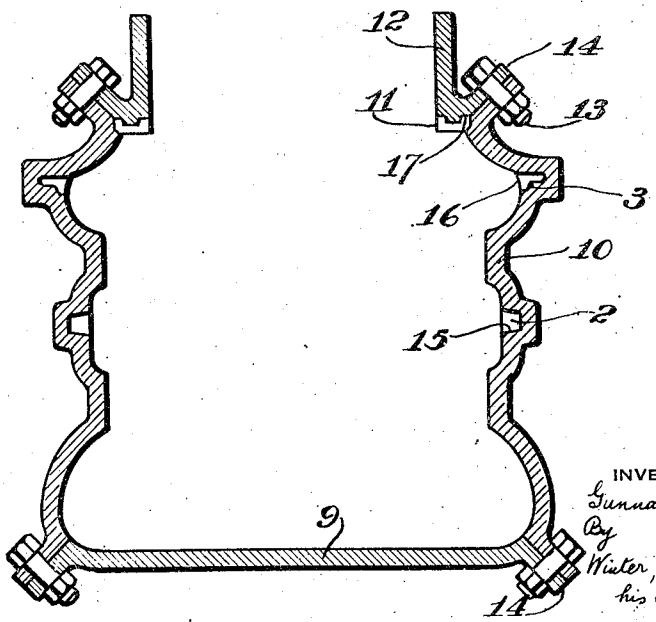


Fig. 2.



WITNESSES

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Fig. 3.

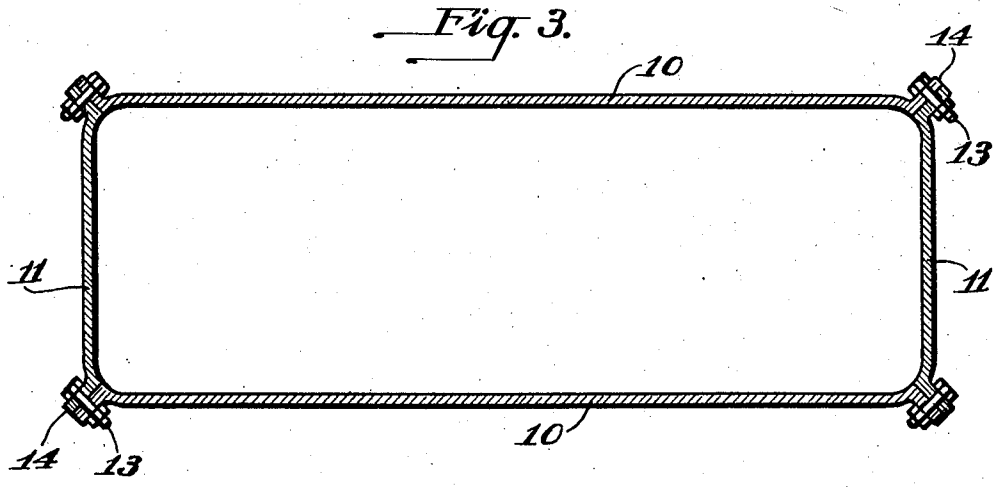


Fig. 4.

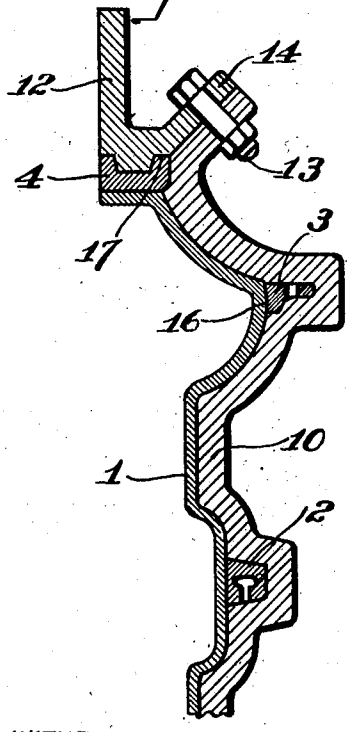
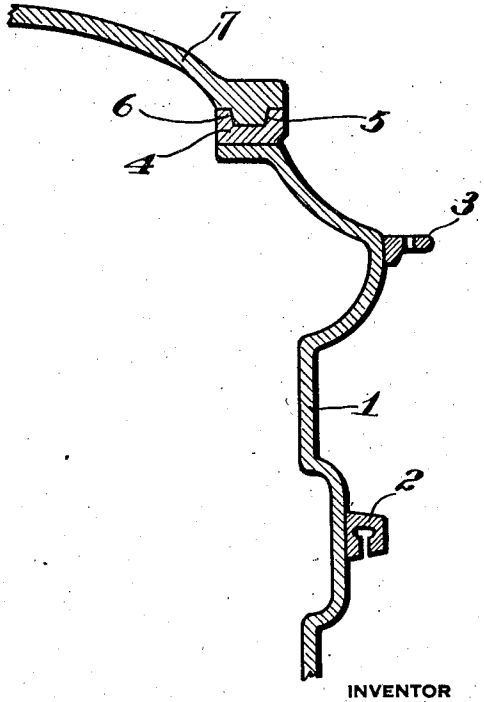


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CASKET.

Application filed November 18, 1926. Serial No. 149,089.

This invention relates to hollow metal articles. More particularly it relates to metal caskets or the like.

It is among the objects of this invention to provide a metal casket which shall comprise two cooperating body portions each of which is constituted of a one-piece metal body free from seams and joints whereby the members when sealed constitute an air-tight chamber.

Another object of the invention is to provide a casket in which the main body portion shall be formed of metal of substantially uniform thickness throughout and in which the enlarged sections such as the sealing frame, hinge brackets, and handle lugs, are formed integrally with the main body portion; whereby soldered seams and joints in the meeting planes of the wall members and soldering, welding, or riveting, for joining the brackets to the body portion of the casket are entirely dispensed with.

Another object of the invention is to provide an integral metal casket which shall be of relatively light weight and durable construction and which shall be relatively inexpensive to manufacture.

Still another object of the invention is to provide a mold for metal caskets, or hollow articles, which is adapted to produce such articles, of any desired configurations or form and with extreme accuracy, and by means of which an indefinite number of such articles may be produced which shall be of uniform size, shape and quality throughout.

Numerous attempts have heretofore been made to produce burial caskets of metal free of seams and joints, and some have been made by the casting process employing molten metal. Caskets formed in this manner are of great weight and are very expensive, and as a result cast metal caskets have not been developed on a commercial basis to any great extent. Other attempts have been made to form caskets of composition materials, glass and cements without obtaining the results sought for.

In accordance with the present invention it is proposed to manufacture metal caskets by providing a sectional mold of the shape of the article to be formed which mold constitutes a matrix on the surface of which galvanoplastic depositions are made to form the body of the casket. On account of the large size of the mold required for making burial caskets, I circulate the electrolytic solution in the mold in the manner described in a Patent No. 1,594,509 granted to me August 3, 1926.

In the accompanying drawings constituting a part hereof, and in which like reference characters designate like parts, Fig. 1 is a transverse sectional view of a metal casket made in accordance with the present invention; Fig. 2 is a similar view of the mold utilized in making the casket in Fig. 1; Fig. 3 is a longitudinal sectional view of the mold; Fig. 4 is a cross-sectional view of an enlarged detail of the mold and casket; and Fig. 5 is a similar view of a portion of the casket after it is formed.

Referring to Fig. 1 of the drawings the structure therein illustrated comprises a casket 1 formed in one piece which is free from seams and joints and which is of substantially uniform cross-section throughout. The casket is provided with handle lugs 2, hinge brackets 3 and a sealing frame 4, which are formed integrally with the body portion 1, in a manner as will be hereinafter set forth. The sealing frame 4 is provided with a groove 5 which is adapted to receive a tongue 6 of the sealing cover 7 which may also be formed of galvanoplastic metal in accordance with the present invention. An outer cover 8 which is primarily of an ornamental nature, but which has nothing to do with the casket in forming a container, is secured to the casket on the hinge brackets 3 as shown. This cover 8 may be formed of metal and may be produced in the same manner as the body of the casket, but inasmuch as the casket is constituted by the body portion 1 and the sealing cover 7 the ornamental cover 8 may be formed in any suitable manner and of any suitable material, as this has nothing to do with the present invention.

The mold employed in forming the body portion 1 of Fig. 1 is shown in Figs. 2 and 3 and is a sectional mold comprising the bottom section 9, the side sections 10, the end sections 11, Fig. 3, and the top section 12, all of these sections being joined by bolts 13 extending through the lugs 14 to securely clamp them together.

The side sections 10 and the top sections 12 are provided with apertures or recesses 15, 16 and 17 which are of the form and dimensions of handle lugs 2, hinge brackets 3, and the sealing frame 4. The elements 2, 3, and 4 may be made of drop forgings, castings, or in any other suitable manner to make a uniform product, and they are inserted in the aper-

tures 15, 16, and 17 as shown in the detail view of Fig. 4.

The inner surface of the sectional mold is coated with a suitable substance, known in the art, to prevent adherence of the galvanoplastic precipitation to the surface of the mold. The inner surface of the lugs, brackets and frame, 2, 3, and 4, respectively, are cleaned with acid or otherwise treated to present a non-oxidized, clean metallic surface to the precipitated metal to cause adherence thereof whereby the members are formed integrally with the deposition in the mold, and constitute an integral part of the body portion 1 which is formed by the deposition of galvanoplastic precipitations.

After the mold has been prepared by inserting the lugs, brackets and frame portions 2, 3, and 4 into their respective apertures, 15, 16, and 17, the assembled mold is placed on the platform of a tank or vat containing the electrolyte, as is shown in the patent referred to above, and one or a plurality of baskets of perforated material containing scrap copper or other suitable metal of which the casket is to be formed, are suspended within the mold. The electrolyte is then conducted by suitable means such as a pump from the vat on which the mold rests into the basket or baskets containing the scrap metal and the mold and basket being respectively connected to the terminals of a source of electrical energy, the galvanoplastic precipitation will produce a deposition on the inner surface of the mold and on the exposed surface of the inserts 2, 3, and 4, in the apertures of the mold, to form a body of suitable cross-section the thickness of which is controlled by the amount of power and the duration of time the process is constituted. When a suitable thickness has been produced the process is interrupted and the mold is removed by dismembering its sectional elements leaving the finished casket 1 having lugs 2, brackets 3, and sealing frame 4 formed integrally therewith as shown in Fig. 1. The completed casket possesses a smooth highly finished outer surface by reason of its contact with the metal mold.

A casket made in accordance with the present invention constitutes a unitary member free from joints, seams or the like and may be sealed to constitute an air-tight chamber by placing the sealer 7, Fig. 1, having tongues 6 in the groove 5 of the sealing frame, which may in addition be prepared with suitable sealing material such as special cement to provide an air-tight joint.

Although a specific embodiment of the invention has been herein described it will be obvious to those skilled in the art that various modifications may be made in the details of construction and that the process may be practiced in the manufacture of articles other than caskets without departing from the principles herein set forth.

I claim:

1. A casket section having its side, end, and bottom walls seamless, integral, of self-sustaining galvanoplastic metal and substantially homogeneous between the inner and outer galvanoplastic metal wall surfaces, and a preformed sealing strip set on the open wall edges, and secured thereto by galvanoplastic metal.

2. A casket section having its side, end, and bottom walls seamless, integral, of self-sustaining galvanoplastic metal electrolytically deposited, and substantially homogeneous between the inner and outer galvanoplastic metal wall surfaces, and a preformed sealing strip set on the open wall edges, and secured thereto by galvanoplastic metal.

3. A casket section having its side, end, and bottom walls seamless, integral, of self-sustaining galvanoplastic metal electrolytically deposited, and substantially homogeneous between the inner and outer galvanoplastic metal wall surfaces, and a preformed sealing strip set on the open wall edges, and secured thereto by said electrolytically deposited metal.

4. A casket having side and end walls all integral of galvanoplastic metal electrolytically deposited, said walls including handling devices such as hinge and handle brackets integrally united thereto.

5. A one piece burial casket having its side, end and bottom walls of a single layer of self supporting galvanoplastic metal electrolytically deposited, the outer surface being smooth and the electro-deposited material being built up inwardly from said outer surface.

6. A burial casket comprising integral side and end walls of electro-deposited material having their outer surfaces formed according to the predetermined surface design and contour of the interior of a mold, the electro-deposited body being built up inwardly from the outer surface and being sufficiently strong to withstand the stress to which it is subjected when used for burial purposes.

In testimony whereof, I sign my name.

GUNNAR ROSENQVIST.