

March 18, 1947.

G. C. HILLENBRAND

2,417,756

CASKET LOCKING AND SEALING MEANS

Filed March 2, 1944

2 Sheets-Sheet 1

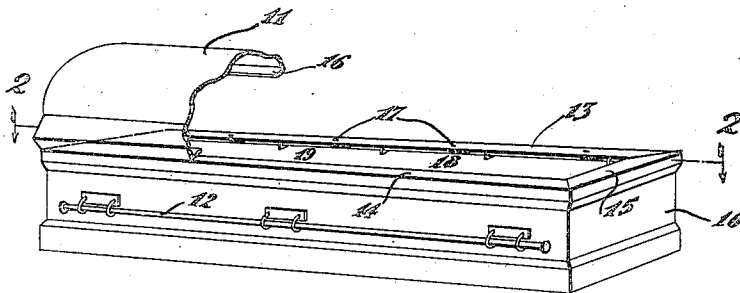


Fig. 1

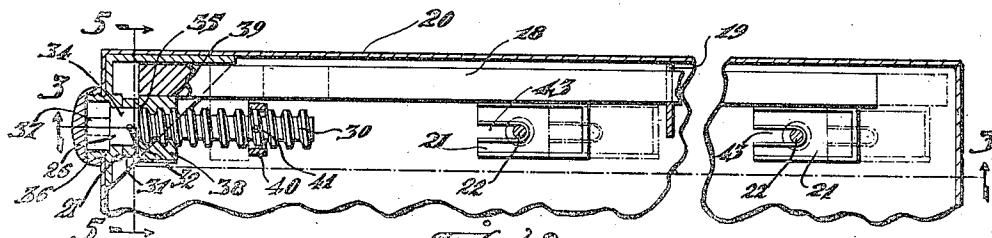


Fig. 2

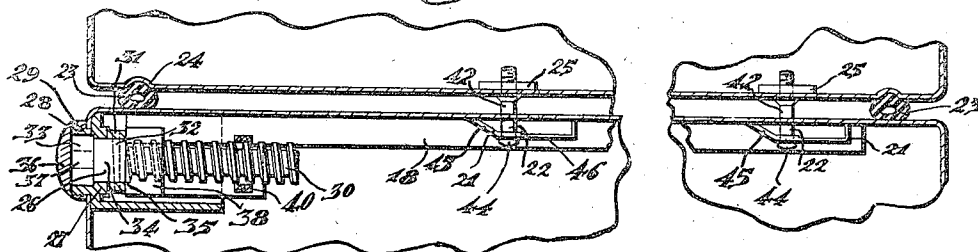


Fig. 3

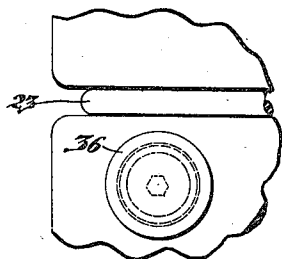


Fig. 4

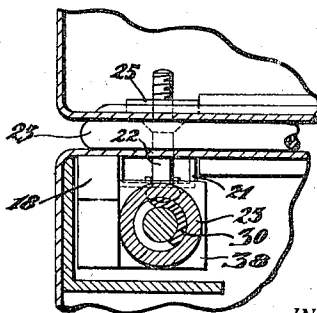


Fig. 5

INVENTOR.

BY George C. Hillenbrand
Wood, Gray, Korman & Evans
Attorneys

March 18, 1947.

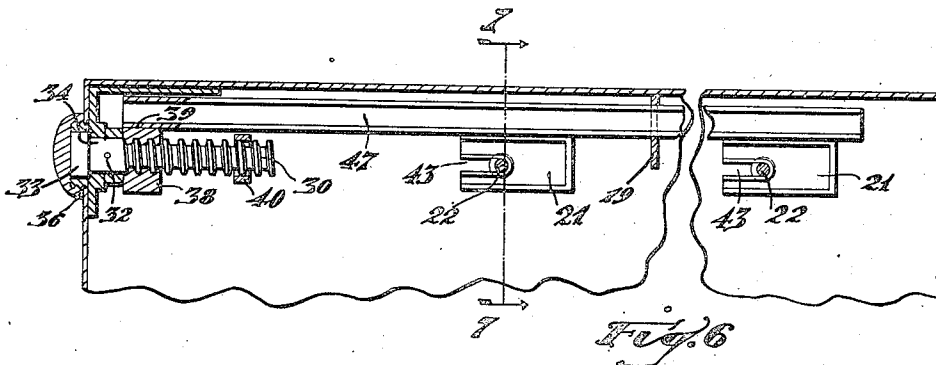
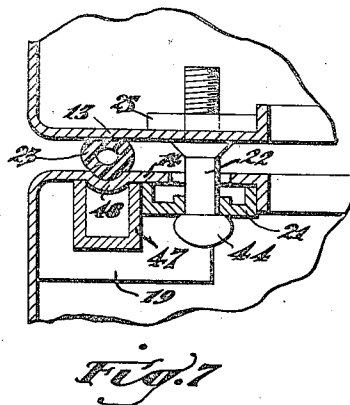
G. C. HILLENBRAND

2,417,756

CASKET LOCKING AND SEALING MEANS

Filed March 2, 1944

2 Sheets-Sheet 2



INVENTOR.

George C. Hillenbrand
BY
Wood, Aray, Ferrar & Evans
Attorneys.

UNITED STATES PATENT OFFICE

2,417,756

CASKET LOCKING AND SEALING MEANS

George C. Hillenbrand, Batesville, Ind., assignor
to The Batesville Casket Company, Batesville,
Ind., a corporation of Indiana

Application March 2, 1944, Serial No. 524,692

3 Claims. (Cl. 292-157)

1

This invention relates to improved means for locking and hermetically sealing burial caskets and similar structures. The invention is particularly directed to locking and sealing means employing pull-down apparatus for forcing the lid of the casket against the casket body in a hermetically sealed contact. More particularly, the invention relates to pull-down or locking means operated from a single point on the casket body.

The invention is in the nature of a simplification and improvement of the structure disclosed as a preferred embodiment of the invention of United States Patent No. 2,323,674, issued June 6, 1943, on the application of Robert B. Purkiss. This patent discloses and claims a particularly effective structure adapted to accomplish the desired result of locking the lid of a casket to the casket body by a series of pull-down elements operated simultaneously from a single point on the structure. The preferred embodiment of the present invention comprises many of the elements of the Purkiss structure as disclosed in the aforesaid patent. However, in the present invention is has been discovered that this structure may be materially simplified and neatenened without in any way detracting from the efficacy of the seal provided. In particular, improvements have been made in the operating head assembly through which the longitudinal moving actuating screw is operated and in the means provided for sealing the end of the operating screw to the casket body to prevent the leakage of air at this point. An overall simplification of the parts and the operation has been provided which has greatly facilitated the manufacture and assembly of the structure without in any way affecting the nature of the operation or the result accomplished.

One of the particular objects of the present invention has been to provide means for locking and sealing burial caskets of the type in which a plurality of pull-down elements are operable from one point on the structure utilizing a minimum number of working parts for accomplishing the locking function and particularly the sealing function.

Another object has been to provide a structure of this type in which the primary seal of the opening provided for the end of the operating screw which extends on the outside of the casket body is formed on the exterior of the body rather than on the interior as in other similar structures.

2

Another object has been to provide a neater and improved appearance for the extended end of the operating screw when the casket is in locked position.

Other and further objects and advantages will be apparent from the further and more detailed description of a preferred embodiment of the invention when considered in conjunction with the drawings in which:

Figure 1 is a rear perspective view of a single seal full couch type casket incorporating locking and sealing means of the type of the preferred type of the invention.

Figure 2 is a sectional view along the line 2-2, Figure 1, particularly illustrating the details of the construction of the locking means with the lid in closed and locked position.

Figure 3 is a sectional view along the line 3-3, Figure 2, particularly illustrating the manner in which the locking means is operable to hermetically seal the casket.

Figure 4 is a fragmentary view of a corner of the casket and particularly illustrates the sealing cap provided at the end of the operating screw.

Figure 5 is a sectional view along the line 5-5, Figure 2.

Figure 6 is a view similar to Figure 2 illustrating a modified structure utilizing a U-shaped lock bar.

Figure 7 is a sectional view along the line 7-7, Figure 6.

In Figure 1 there is illustrated a typical casket of the full couch type with which the construction of the invention is adapted to be utilized. In this figure, 10 represents the casket body and 11 is the lid or cover. A handle for raising the casket is positioned on one of the side walls of the body and designated as 12. On the upper surfaces of the side and end walls of the body, flanges extend inwardly. The front flange has been designated as 13, the rear flange as 14, and the end flanges as 15. Similarly, corresponding flanges extend inwardly from the lower edge of the lid. Of these, the front flange has been designated as 16 but the rear and end flanges which form no part of the invention have not been numbered. At spaced points along the front body flange 13, vertical apertures 17 have been formed. These apertures are for the reception of the locking studs, the operation of which will be described at a later point in this specification. Positioned directly beneath the flange 13 is the lock bar 18 which is movable longitudinally and supported in position by the spaced brackets 19.

3

In Figure 2 the front wall of the body has been designated generally as 20. The lock bar 18 is positioned preferably directly adjacent this front wall and is substantially coextensive therewith in length. The lock bar includes one or more wedge shaped portions 21 rigidly secured to the inner side thereof as by welding. The studs 22 depending from the upper front edge of the lid are adapted to engage in slots in these wedge shaped portions. A rubber gasket 23 extends preferably entirely around the edge of the casket, and in the form of the invention shown in Figures 1 to 5, inclusive, this gasket may be positioned in and secured to a continuous groove 24 formed in the upper flanges. As shown particularly in Figure 3, this gasket is adapted to extend substantially below the surface of the upper flanges and constitutes the primary sealing element for the casket. The studs 22 may be secured to the upper front flange on the upper side thereof by the nuts 25, various alternate means of securing these studs being disclosed in the aforesaid Purkiss Patent No. 2,323,674.

The head assembly providing for the actuation of the lock bar is shown in detail in Figures 2 and 3 and is designated generally as 26. This assembly includes a mounting bracket 27 which in the embodiment shown is rigidly secured to an end of the body of the casket closely adjacent the front wall and has a flanged portion 28 extending on the exterior of the end wall. This flanged portion is screw threaded on the outer surface as at 29. The screw 30 is inserted through the flanged portion of the mounting bracket into the interior of the casket. A collar 31 positioned directly adjacent the inner surface of the casket wall is secured to the screw 30 by the pin 32 and prevents the withdrawal of the screw after insertion. The head 33 of the screw extends partially on the exterior of the end of the casket body and is confined closely in the flange 28. A smooth shank portion 34 on the screw adjacent the head is supported in the bore 35 in the mounting bracket 27. This support cooperates with that provided by the flange 28 in maintaining the screw in general horizontal position. A cap 36 is adapted to fit over the screw head and has interiorly formed screw threads adapted to engage with those on the flange. When the cap 36 is screwed tightly in position the screw head is not only completely concealed but the entire opening is rendered absolutely airtight. This cap 36 performs a dual function, therefore, in closing the end of the opening and in rendering less unsightly the protruding head of the screw. When the cap is removed a crank or similar actuating element can be inserted in the socket 37 in the head of the screw shown in dotted lines in Figures 2 and 3 and the screw may then be rotated for actuating the lock bar to a locked or unlocked position as desired.

The nut 38 is positioned on the screw and rigidly secured to the lock bar as at 39 (Figure 2). A stop nut 40 is also positioned on the screw and secured thereto by the pin 41. This stop nut is for the purpose of preventing the nut 38 from passing off the end of the screw during the rotation of the latter element.

In the operation of the device the lid 11 is closed and the studs 22 inserted through the openings 17 in the front flange on the body. With the lock bar in unlocked position the shank portions 42 of the studs will be aligned longitudinally with the slots 43 in the wedges 21 and

4

the conical ends 44 of the studs will be in a plane beneath the lower surface of any part of the inclined portion 45 of the wedge. As the bar is moved longitudinally toward the head assembly 26, through the operation of the screw 30 and the nut 38 the conical ends 44 of the studs ride up the inclined portions 45 of the wedge elements until they reach the horizontal portions 46 of these elements at which point the gasket 23 has been compressed to provide a hermetical seal around the periphery of the casket. The unlocking is accomplished by the rotation of the screw in a reverse direction until the studs have reached the inclined portions of the wedges at which the lid may be lifted. The slots in the wedges are preferably of approximately the same width as the width of the shank portions of the studs, whereas the tapered ends of the studs are substantially wider than the slots.

In the modified form of the invention shown in Figures 6 and 7, the structure is substantially the same except that a lock bar 47 which is U-shaped in cross section is employed. The reason for this is that in this embodiment the gasket 23 is seated in a groove 48 formed in the front flange of the body rather than in the front flange of the top, as in the embodiment shown in Figures 1 to 5. The arms of the U are disposed one on either side of this groove which depends into the interior of the U. The construction of the lock bar and the assembly and operation of the other elements is the same as in the preferred embodiment.

As will be apparent from the foregoing description, this improvement provides a structure which is materially simpler than those of the prior art. The problem of hermetically closing the openings where the head of the screw protrudes has been neatly and effectively solved by the provision of the mounting bracket 27 having the extended flange portion 28 and by the cap 36. This arrangement completely dispenses with the necessity for compressible rubber gaskets or washers of any type. The wedge elements have also been improved and simplified, and provision has been made for disposing the sealing gasket 23 on the upper or lower flange as desired. The entire assembly requires a substantially smaller number of parts and the manufacturing problem has been materially simplified. In either of the embodiments described the seal is completely effective to prevent the passage of air into or out of the casket.

Having described my invention, I claim:

1. A pull-down and locking means adapted to be mounted within the body of a casket for pulling the lid of the casket into sealed engagement with the body, comprising a series of latching elements adapted to cooperate with pull-down elements, said latching elements being interconnected and movable along and within the casket body, an operating screw for actuating said elements simultaneously, said screw having its head end extended through an aperture in the wall of the casket, a bracket for supporting said screw interior of the casket body, said bracket being secured to an inner surface of the casket, and having a portion thereof extended through the aperture in the casket wall and forming a peripheral flange exterior of the casket wall around the screw head and a cap secured on said flange and enclosing said screw head for rendering airtight the aperture in the wall.

2. In a casket of the type having a body having an inwardly extending marginal flange, a top having a corresponding flange and a compressible

5

seal member associated with the flange: a lid pull-down and locking means comprising studs having shank portions and headed ends depending from the flange of the top and adapted to project through the flange of the body, a lock bar, means for mounting said lock bar adjacent the forward flange of the body, said lock bar including wedge portions at spaced intervals thereon, said wedge portions having upwardly inclined and horizontal surfaces and a longitudinal slot formed centrally of the width of each wedge portion and extending throughout the length of the inclined surface and into the horizontal surface, said slot being open at one end for entry of the shank portion of the stud longitudinally thereof, said slot being of uniform width slightly greater than the width of the shank of the stud but narrower than its head, and means for actuating the lock bar longitudinally whereby the shank portions of the studs will enter the slots laterally and the head ends of the studs will ride up the inclined portion thereof into locking engagement with the horizontal portion.

3. In a casket of the type having a body having an inwardly extending marginal flange, a top having a corresponding flange and a compressible seal member disposed in a peripheral groove formed in said body flange: a lid pull-down and locking means comprising studs having shank portions and headed ends depending from the

6

flange of the top and adapted to project through the flange of the body, a lock bar U-shaped in cross section disposed adjacent the under side of the forward flange of the body, one arm of said lock bar being on each side of the peripheral groove, means for supporting said lock bar in generally horizontal position, said lock bar including wedge portions at spaced intervals thereon, said wedge portions having upwardly inclined and horizontal surfaces and a longitudinal slot formed centrally in both of said surfaces, said slot being of substantially the same width as the shank portion of the studs and means for actuating the lock bar longitudinally whereby the shank portions of the studs will enter the slots and the head ends of the studs will ride up the inclined portion thereof into locking engagement with the horizontal portion.

GEO. C. HILLENBRAND.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,323,674	Purkiss	July 6, 1943
388,624	Bremer	Aug. 28, 1888
2,018,346	Busby	Oct. 22, 1935
1,512,939	Ledin	Oct. 28, 1924