Sept. 19, 1967 D. A. MORAND 3,342,516

CASKET LATCHING MECHANISM

Filed Oct. 24, 1965 2 Sheets-Sheet 1

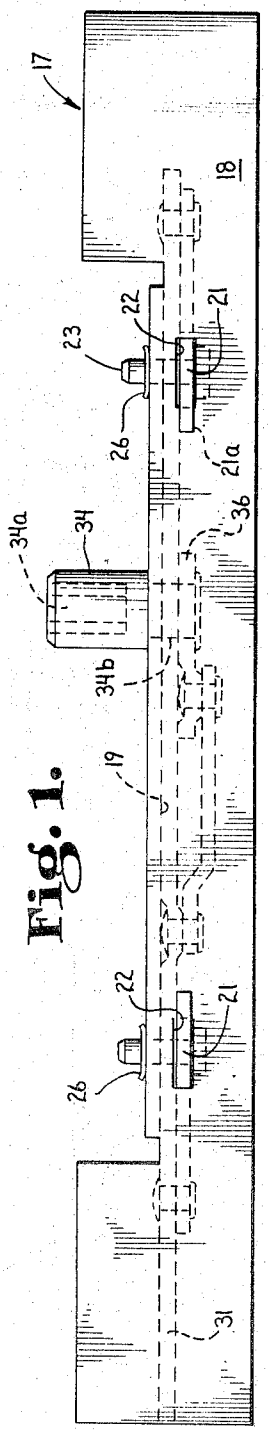


Fig. 1.

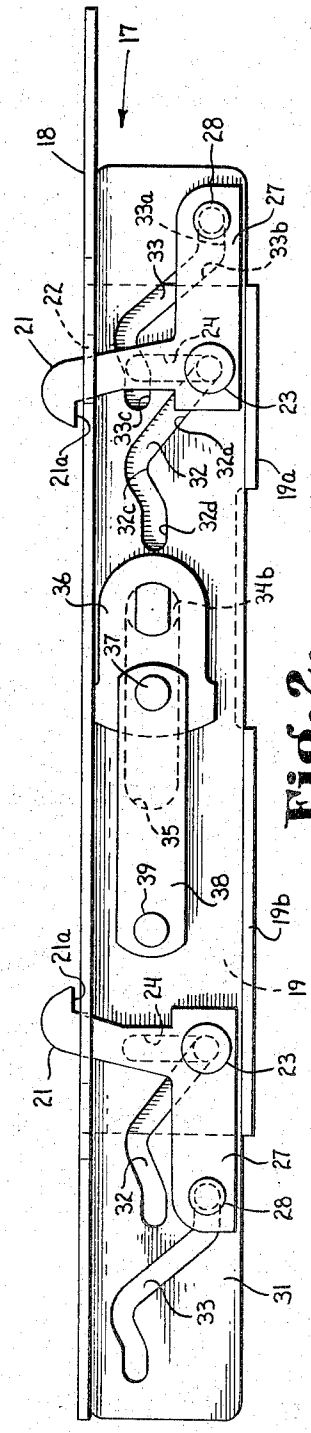


Fig. 2.

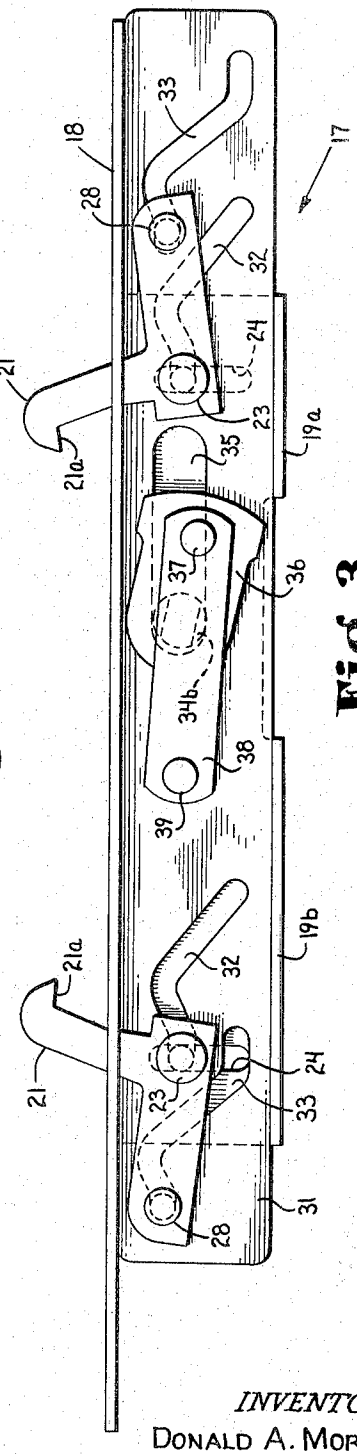


Fig. 3.

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CASKET LATCHING MECHANISM

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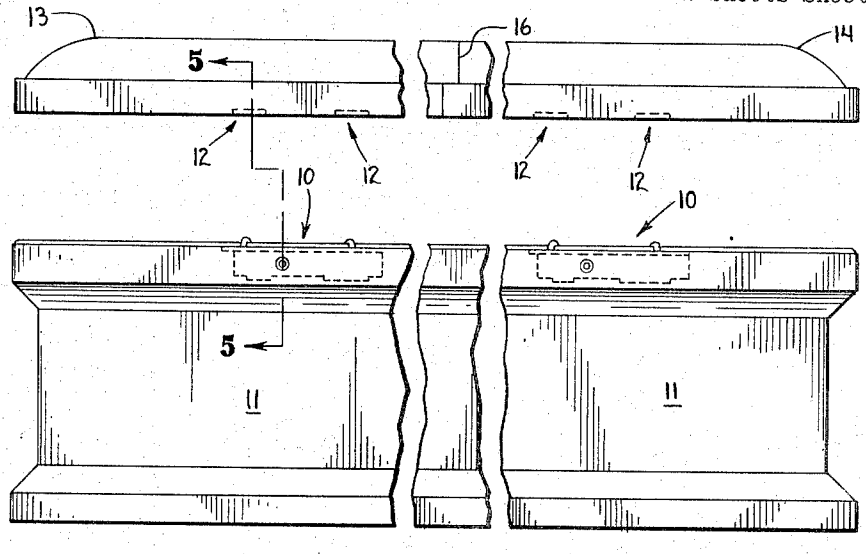
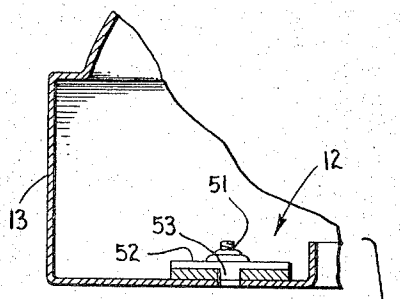


Fig. 4.



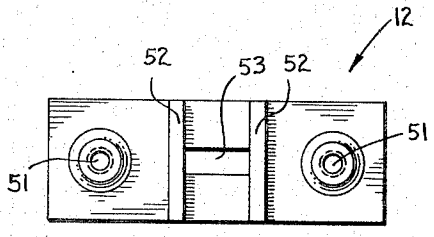


Fig. 6.

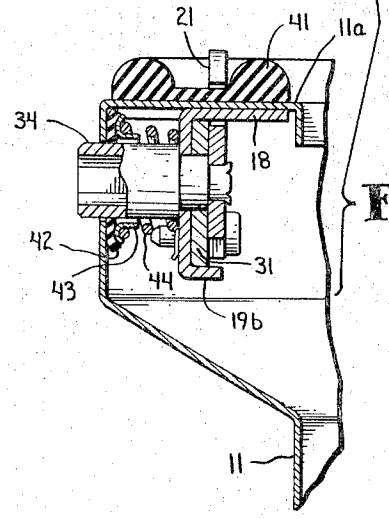


Fig. 5.

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CASKET LATCHING MECHANISM

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ABSTRACT OF THE DISCLOSURE

A casket latching mechanism having latch hooks which draw the cap or lid into a closed and latched position without lateral movement of the cap and which are withdrawn to an inconspicuous lowered position when the casket cap or lid is separated from the casket body.

This invention relates generally to latching devices and in particular to a burial casket latching mechanism for providing a releasable fastening between either the head or foot caps of a casket and the casket body.

Various types of burial casket latching mechanisms are presently utilized, however, many of these are subject to various structural and functional disadvantages. One functional defect characteristic of prior art latching mechanisms is the lateral or sideward movement of the latch hooks as the hinged head or foot cap is latched closed. This lateral movement of the latch hooks as latching takes place tends to shift the head or foot cap sidewardly somewhat jamming the caps together. Subsequent opening and closing of the head cap, for example, can result in damage to either or both caps. A satisfactory latching mechanism must remedy this difficulty and must position the latch hooks in an inconspicuous, lowered position when the cap is open so that there will be no interference with the upholstery or fabric draping over the casket margin.

It is, therefore, the primary object of the present invention to provide a burial casket latching mechanism in which the latch hooks draw the cap or lid into closed and latched position without any jamming, lateral movement of the cap.

A further object of the present invention is to provide a burial casket latching mechanism in which the latch hooks are withdrawn to an inconspicuous, lowered position when the casket cap or lid is separated from the casket body.

A further object of the present invention is to provide a casket latching mechanism which does not interfere with the effectiveness of the conventional seal at the line of separation between the casket body and the hinged caps.

These and other objects will become apparent as the description proceeds with reference to the accompanying drawings in which:

FIG. 1 is a top plan view of the latching mechanism of the present invention.

FIG. 2 is a side view of the structure shown in FIG. 1.

FIG. 3 is a view similar to FIG. 2 but showing the moveable components in their opposite, extreme position.

FIG. 4 is a side view of a casket showing the latching mechanism of the present invention installed and illustrating the environment of use of the latching mechanism.

FIG. 5 is an enlarged, fragmentary sectional view taken generally along the line 5—5 of FIG. 4.

FIG. 6 is a top plan view of a latching plate illustrating the type of plate with which the latching mechanism cooperates.

Referring initially to FIG. 4, the latching mechanism, identified generally at **10**, of the present invention is customarily installed at the margin of the casket body **11** and cooperates with latch plates **12** positioned in the opposite marginal edge of the removeable casket head cap

13 and foot cap **14**. The head cap and foot cap of the casket have the conventional separation line **16**, permitting the head cap to be opened without opening the foot cap.

Referring now to FIGS. 1, 2 and 5, the structural details of the latching mechanism of the present invention will now be described. The mechanism comprises a body bracket, indicated generally at **17**, which is formed by two perpendicular plates, one forming a striker surface **18** and the other plate having a depending face **19**. The depending plate forming the depending surface **19** pivotally supports two identical latching hooks indicated at **21**. The latching hooks each have a latching abutment **21***a* formed at their free ends, this free end portion of the latching hooks extending through rectangular apertures **22** in the plate forming the surface **18**. The pivotal mounting for the latching hooks includes a headed stud or pin **23** which extends freely through a registering aperture in the latching hook and further extends freely through a slot **24** (FIG. 2) formed in the plate providing the surface **19**, the slot extending normal to the striker face **18**. As may best be seen in FIG. 1 the studs **23** may be provided with a snap-on member **26** which hold the studs in assembled relation. The pivotal mounting of the latching hooks is such that the latching hooks are rectilinearly shifted or displaced upwardly with relation to the striker surface **18** by displacement of the pins **23** within the slots **24**.

Each of the identical latching hooks **21** has extending sidewardly therefrom an arm **27** which at its free end carries a pin or abutment **28** extending sidewardly from the arm. While the arms **27** and the corresponding latching hooks **21** might take the form of separate elements rigidly joined together, they are preferably formed integrally by a unitary stamping as shown in FIG. 2. The relation of the arm **27** and the abutment **28** to its corresponding latching hook **21** is such that when the arm is displaced rectilinearly with relation to the striker surface **18**, the latching hook **21** will be rotated, that is, angularly moved, with relation to the striker surface **18**.

The means for providing the required motion for the pins **23** and the abutments **28** includes a slide member **31** which is disposed parallel to and closely adjacent the depending plate forming the surface **19**. This plate has sidewardly turned marginal portions **19***a* and **19***b* which underlie the edge of the slide **31** and guide it in its motion with relation to the body bracket **17**. The slide is provided with a first identical pair of generally Z-shaped slots **32** which freely accommodate the pins **23** pivotally mounting the latching hooks **21**. Adjacent each of the slots **32** is a similarly, but not identically, formed generally Z-shaped slot **33** which freely accommodates the abutments **28** carried at the ends of the arms **27**. As will be evident from FIG. 2, because of the orientation of the slots, shifting of the slide **31** beneath the surface **18** will move the latching hooks rectilinearly as the pin **23** is shifted and rotationally as the abutment **28** is shifted toward and away from the surface **18**.

The means for providing the required motion of the slide **31** from a conveniently accessible point, after the latching mechanism has been installed as shown in FIG. 4, includes a sealer bolt **34**, having a hexagonal counterbore **34***a* adapted to receive a suitable crank (not shown). The reduced end **34***b* of the bolt extends freely through a horizontal slot **35** in the plate forming the surface **19** and further extends freely through an aperture in the slide **31**. The reduced end **34***b* of the bolt **34** is rigidly joined to a cam member **36**, which, by means of the pin **37** is pivotally joined to a link **38**. The link **38** is, in-turn, pivotally supported by the slide **31** at the pin **39**. As will be evident from FIGS. 2 and 3, rotation of the bolt **34** will

pivotally move the cam **36**. Movement of the cam **36** will cause the pin **37** to traverse the slot **35** and to rectilinearly move the link **38**, and consequently the slide **31**.

FIG. 5 indicates the arrangement of the structure just described when installed in a burial casket, FIG. 5 being a fragmentary section taken along the line **5—5** of FIG. 4. The outer or striker surface **18** of the body bracket is positioned in underlying relation to the in-turned marginal edge **11***a* of the casket body **11**. This marginal edge portion of the casket body is provided with apertures (not shown) which register with the apertures **22** in the body bracket. The latching hooks **21** extend through these apertures and through registering apertures in the resilient gasket **41** which overlies the marginal edge portion **11***a* of the casket body. As will be evident from FIG. 5, only the outer end portion of the bolt **34** protrudes from the casket body, the bolt being encircled by a rubber washer **42** which is topped by a ferrule **43**. The ferrule **43** is urged into compressive engagement with the washer **42** by a compression spring **44**. The latching hooks cooperate with apertured latch plates **12** mounted on the marginal portion of the head or foot cap of a burial casket. One of the latching plates is shown in detail in FIG. 6 and includes apertures **51**, surrounded by an offset area for accommodating countersink mounting screws. The plates are provided with two, spaced, parallel ridges or bosses **52**, and between the bosses the plate is provided with a rectangular aperture **53** sized to accommodate the ends of the corresponding latching hooks **21**. The bosses **52** provide latching abutments against which the hooked ends of the latching hooks **21** are pressed when the latching mechanism is in closed or latched position.

In operation, when the casket head cap (or foot cap) is swung back from the casket body, the laching hooks will be in the position shown in FIG. 2. When the latching mechanism is to be moved to latched position (the position of FIG. 3), the bolt **34** is rotated counterclockwise, as viewed in FIG. 2. The consequent motion of the cam **36** and link **38** causes the slide **31** to move rightwardly as viewed in FIG. 2. During the initial increment of rightward movement of the slide **31** from its position of FIG. 2 the pin **23** will immediately moveup the inclined portion **32***a* of the slot **32**, however, the pin **28** on the arm **27** will, at this time, traverse the relatively horizontal portion **33***a* of the slot **33**. The compound motion thus provided the latching hook will move it upwardly and simultaneously rotate its ends away from the center of the body bracket as viewed in FIG. 2, the rotational movement occurring because of the horizontal movement of pin **28** while the pin **23** is moving upwardly. This upward and rotational locking motion of the latch hooks places the tip of the hooks in register with the apertures **53** in the latching plates **12**.

With the casket cap lowered on to the sealing gasket **41** on the casket body, further rotational movement of the bolt **34** will cause the pin **23** to continue up the inclined surface **32***a* of slot **32** while the pin **28** moves up the inclined surface **33***b* of the slot **33**. The resulting motion of the latching hooks **21** is, during this period, substantially vertically upward. As the pin **23** moves over the surface **32***c* of the slot **32** the pin **28** will be traversing the upper end of the inclined portion **33***b* of the slot **33** and there will be a resulting inward motion of the tip of the latching hooks which places the surfaces **21***a* of the latching hooks over the adjacent latching plate abutment surfaces **52**. Further rotation of the bolt **34** will move the pin **23** down on the substantially horizontal surface **32***d* of the slot **32** while the pin **28** moves along the substantially horizontal surface **33***c* of the slot **33**. Since the pins **23** and **28** are moving on substantially horizontal surfaces, there will be no rocking or rotation of the latching hooks during this increment of the motion and the hooks will be moved vertically downwardly, the surfaces **21***a* of the hooks engaging the latching plate abutment **52** and drawing the plate, and consequently the casket cap down into latched position against the sealing gasket **41**. Rotation of the bolt **34** in the reverse direction serves to reverse the sequence of motion described above for the latching hooks and releases the latching hooks from latching engagement with the latch plates **12**.

While the latching mechanism has been illustrated and described as having two opposed latching hooks **21**, cooperating with two latching plates **12**, it will be understood that, for less elaborate installations, the latching mechanism might be foreshortened by omitting one of the latching hooks and the corresponding portion of the slide which would accommodate its cooperating slots **32** and **33**. Such single latching hook arrangements are intended to be within the scope of the present invention.

While the invention has been disclosed and described in some detail in the drawings and foregoing description, they are to be considered as illustrative and not restrictive in character, as other modifications may readily suggest themselves to persons skilled in this art and within the broad scope of the invention, reference being made to the appended claims.

The invention claimed is:

1. A casket latching mechanism for releasably retaining a casket cap in closed position and adapted to cooperate with an apertured latch plate, said mechanism comprising a body bracket having one face forming a striker surface and another face depending therefrom pivotally mounting at least one latching hook, said latching hook having a latching abutment at its free end, said pivotal mounting comprising a slot in said depending body bracket face normal to said striker face and a pin freely accommodated within the slot and extending from said latching hook whereby the latching hook may be rectilinearly shifted with relation to said striker surface by displacement of said pin within said slot, an arm extending from said latching hook having an abutment thereon and adapted to rotate the latching hook with relation to said striker surface when said arm is displaced rectilinearly with relation to said striker surface, and a slide member disposed adjacent said depending face of the body bracket and adapted for rectilinear motion with relation thereto, said slide member having a first generally Z-shaped slot therein through which said latching hook mounting pin extends and having a second generally Z-shaped slot into which said arm abutment extends, the orientation of said slots with relation to each other being such that upon movement of said slide from a first extreme position to a second extreme position said pin and said arm abutment travel said first and second generally Z-shaped slots respectively, thereby simultaneously moving said latching hook upwardly and rotating the end of said latching hook away from the center of said body bracket, placing the tip of said hook in latching engagement with said latch plate.

2. A casket latching mechanism for releasably retaining a casket cap in closed position and adapted to cooperate with a latch member, said mechanism comprising a body bracket having a striker surface and pivotally mounting at least one latching hook, said latching hook having a latching abutment at its free end, said pivotal mounting comprising a slot in said body bracket and a pin freely accommodated within the slot and extending from said latching hook whereby the latching hook may be rectilinearly shifted with relation to said striker surface by displacement of said pin within said slot, an arm extending from said latching hook having an abutment thereon and adapted to rotate the latching hook with relation to said striker surface when said arm is displaced rectilinearly with relation to said striker surface, and a slide member disposed adjacent said depending face of the body bracket and adapted for rectilinear motion with relation thereto, said slide member having a first generally Z-shaped slot therein through which said latching hook mounting pin extends and having a second generally Z-

shaped slot into which said arm abutment extends, the orientation of said slots with relation to each other being such that upon movement of said slide from a first extreme position to a second extreme position, said pin and said arm abutment travel said first and second generally Z-shaped slots respectively, simultaneously moving said latching hook upwardly and rotating the end of said latching hook away from the center of said body bracket, thereby placing the tip of said hook in latching engagement with said latch plate.

3. A casket latching mechanism for releasably retaining a casket cap in closed position and adapted to cooperate with an apertured latch plate, said mechanism comprising a body bracket having one face forming a striker surface and another face depending therefrom pivotally mounting at least one latching hook, said latching hook having a latching abutment at its free end, said pivotal mounting comprising a slot in said depending body bracket face normal to said striker face and a pin freely accommodated within the slot and extending from said latching hook whereby the latching hook may be rectilinearly shifted with relation to said striker surface by displacement of said pin within said slot, an arm extending from said latching hook having an abutment thereon and adapted to rotate the latching hook with relation to said striker surface when said arm is displaced rectilinearly with relation to said striker surface, and a slide member disposed adjacent said depending face of the body bracket and adapted for rectilinear motion with relation thereto, said slide member having a first generally Z-shaped slot therein through which said latching hook mounting pin extends and having a second generally Z-shaped slot into which said arm abutment extends, the orientation of said slots with relation to each other being such that upon movement of said slide from a first extreme position to a second extreme position said pin and said arm abutment travel said first and second generally Z-shaped slots respectively, simultaneously moving said latching hook upwardly and rotating the end of said latching hook away from the center of said body bracket, thereby placing the tip of said hook in latching engagement with said latch plate.

4. A casket latching mechanism for releasably retaining a casket cap in closed position and adapted to cooperate with a latch member, said mechanism comprising a body bracket having a striker surface and pivotally mounting at least one latching hook, said latching hook having a latching abutment at its free end, said pivotal mounting comprising a slot in said body bracket and a pin freely accommodated within the slot and extending from said latching hook whereby the latching hook may be rectilinearly shifted with relation to said striker surface by displacement of said pin within said slot, an arm extending from said latching hook having an abutment thereon and adapted to rotate the latching hook with relation to said striker surface when said arm is displaced rectilinearly with relation to said striker surface, and a slide member disposed adjacent said depending face of the body bracket and adapted for rectilinear motion with relation thereto, said slide member having a first generally Z-shaped slot therein through which said latching hook mounting pin extends and having a second generally Z-shaped slot into which said arm abutment extends, the configuration and orientation of said slots with relation to each other being such that upon movement of said slide from a first extreme position to a second extreme position said pin and said arm abutment travel said first and second generally Z-shaped slots respectively, simultaneously moving said latching hook upwardly and rotating the end of said latching hook away from the center of said body bracket, thereby placing the tip of said hook in latching engagement with said latch plate.

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