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A. F. BECK

FASTENING MECHANISM FOR GRAVE VAULTS

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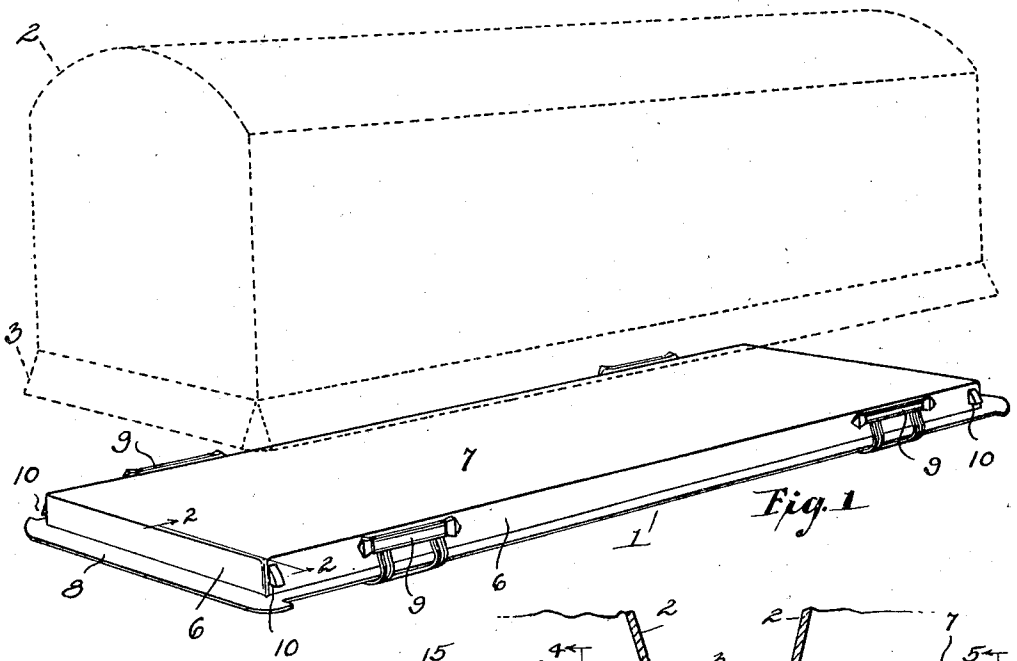


Fig. 1

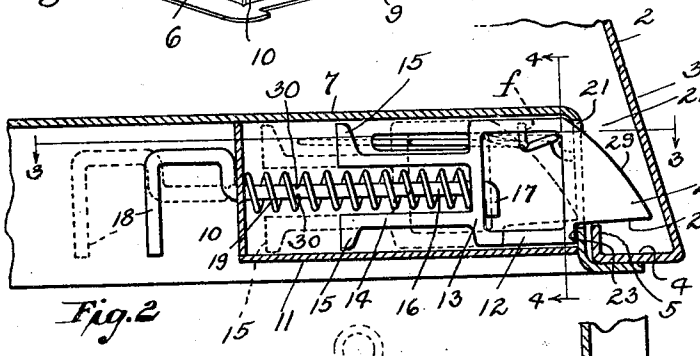


Fig. 2

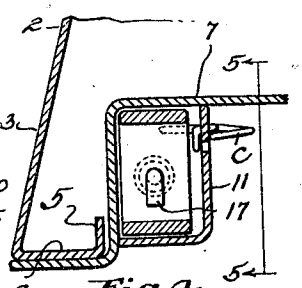


Fig. 4

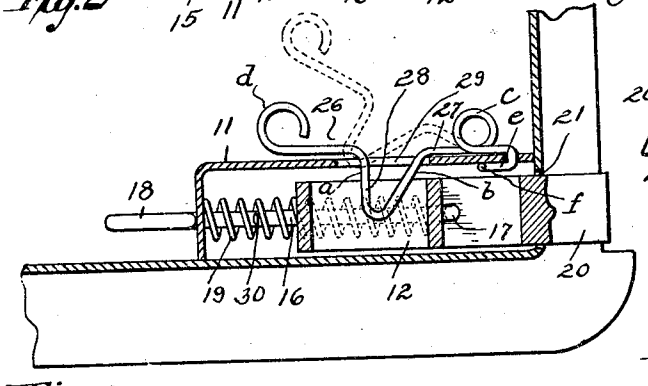


Fig. 3

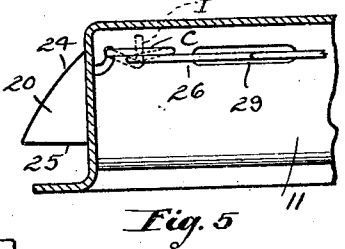


Fig. 5

Inventor

Allen F. Beck

By W. D. McDowell.

Attorney

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UNITED STATES PATENT OFFICE.

ALLEN F. BECK, OF COLUMBUS, OHIO, ASSIGNOR TO THE CLARK GRAVE VAULT COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

FASTENING MECHANISM FOR GRAVE VAULTS.

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This invention relates broadly to grave vaults of the type formed from sheet metal and constructed to include separable base and cover sections, and the primary object of the invention resides in the provision of a grave vault of this character wherein is provided improved fastenings or latching means for securing and retaining the base and cover sections together in assembled relation.

Another object of the invention resides in the provision of latching mechanism for the purpose set forth of simple, positive and efficient construction formed to include a spring pressed bolt, slidably carried by the base section and adapted, when extended, to lie within an opening provided in the lower part of the cover section so as to prevent the lifting or removal of the cover section from its secured position on the base section.

A further object of the invention resides in providing a latching mechanism of this character with a resilient catch adapted for cooperation with the bolt so as to hold the latter in its retracted or inoperative position, but whereby upon the actuation of the catch the bolt may be released so as to respond to the influence of its controlling spring and move outwardly automatically to assume its operative position.

Other objects reside in the specific construction and mounting of the resilient catch, the specific construction of the sliding bolt, and in the provision of a frangible manually operated stem for moving the bolts inwardly against the influence of its spring, the operating portion of the stem being removable from the main body of the stem in order that provision may be had for permanently fastening the vault sections together.

With these and other objects in view, as will appear as the description proceeds, the invention consists in the novel features of construction, combinations of elements and arrangements of parts hereinafter to be more fully described and pointed out in the appended claims.

In the accompanying drawing:

Figure 1 is a perspective view of the base section of a sheet metal grave vault, disclosing the operating positions of the bolt used by the present invention, the cover section of the vault being disclosed in dotted lines,

Figure 2 is a vertical longitudinal sectional view taken through one of the fastening units of the vault,

Figure 3 is a horizontal sectional view taken on the plane indicated by the line 3—3 of Figure 2,

Figure 4 is a transverse sectional view on the line 4—4 of Figure 2,

Figure 5 is a vertical sectional view, the plane of which being indicated by the line 5—5 of Figure 4.

Referring more particularly to the drawing the numeral 1 designates the base section of a sheet metal grave vault, and the numeral 2 the hood or cover section. The latter is of the usual type and includes closed top, side and end walls and an open bottom, the lower edges of the side and end walls being outwardly flared as at 3, the flared walls terminate in inwardly and horizontally arranged base portions 4 and inwardly and upwardly extending vertical flanges 5. The base portion is formed to include marginal side and end walls 6 and a flat horizontally extending upper wall 7, upon which a casket or the like is adapted to be placed in the usual manner and supported above the plane of the base flanges 8 which extend outwardly and horizontally from the lower edges of the walls 6, and upon which the horizontal walls 4 of the cover section are received. The base section is provided with the usual handles 9.

The four corners of the base section are each formed to receive fastening units, indicated at 10, for securing the base and cover sections together, and it is to the specific construction of these fastening units that the present invention is principally directed. Since the units are identical in construction a description of one will suffice for all.

Each fastening unit consists of a casing 11 welded or otherwise secured beneath the wall 7 to the side and end wall 6, the casing extending parallel with and inside of the adjacent end wall of the base. Slidably mounted within the casing is a bolt 12, preferably in the form of an open frame casting. As shown especially in Figures 2 and 3, the bolt is formed to comprise an open frame portion 13, with which is integrally formed a pair of spaced longitudinally extending arms 14, the latter terminating at their ends in oppositely directed lugs 15 which, in connection with the upper and lower walls of the frame portions 13, serve to confine the bolt against undue movement in the casing 11 and control or guide the bolt in its movement.

One of the side walls of the frame portion

13 is provided with an aperture through which extends a rod or stem 16, the inner end of the latter being downwardly turned as at 17 so as to connect the bolt therewith. The stem is also slidably received within an opening provided in the end wall of the casing 11, and is then bent angularly to produce a hook shaped actuating portion 18, which is located beyond the confines of the casing in which the bolt is contained. Surrounding the stem 16 and confined between the end wall of the casing 11 and one of the side walls of the frame 13 is a coil spring 19 of the expansible type, which operates normally upon the bolt so as to force the later forwardly and longitudinally with respect to the casing, in order that the head 20 of the bolt may normally be forced through an opening 21 in the side wall 6 and passed over the flange 5 and into the compartment 22. The forward movement of the bolt in response to the influence of the spring is limited by the engagement of a shoulder 23 with the wall 6. The head 20 includes an arcuate outer face 24, which terminates in an inwardly directed horizontal wall 25, arranged normally immediately over the lower edges of the opening 21 and the flange 5, that is, when the bolt occupies an advanced position, in order to fasten the hood and cover sections together. It will be understood that the arms 14 also act to limit the inward or retractive movement of the bolt, when the head 20 of the latter has been withdrawn to a sufficient extent to clear the flange 5. These arms serve also to confine the main spring 19.

In order to retain the bolt in its retractive or inactive position there is provided a resilient catch 26. This catch is preferably formed from a single piece of bent wire and includes a main body portion 27, mounted upon the outer wall of the casing 11. This body portion includes an inwardly bent offset 28, which projects through a longitudinally extending slot 29 provided in the casing 11. The offset portion 28 includes a shoulder *a*, which extends transversely of the bolt and which terminates inwardly in a rounded corner and in a forwardly directed angularly disposed portion *b*. The portions *a* and *b* lie in the path of movement of the bolt, and it will be seen that as the bolt is retracted, the frame 13 thereof engages first with the angular portion *b* so as to move the catch outwardly against the resistance of a spring coil *c*. When the bolt has been fully retracted the inner wall of the frame 13 is positioned beyond the confines of the offset 28, so that the latter responds to the influence of the coil *c* and moves inwardly from the dotted line position shown in Figure 3 to the full line position, whereupon the shoulder *a* is positioned within the frame 13 of the bolt and serves to positively fasten the latter against movement. The free end of the catch is provided with an eye *d* which permits the catch to be manually grasped and pulled outwardly so as to release the bolt when desired and cause the same to advance to its operative position. The coil *c* terminates in an inwardly directed hook *e*, which passes through an opening provided in one of the walls of the casing 11, and the hook *e* in turn terminates in an upstanding portion *f* which cooperates with the inner wall of the casing to prevent rotation of the catch and to positively maintain the same in a true horizontal plane of operation by preventing the said rotating or twisting of the catch. The stem 16 is provided with registering notches 30, which weakens that portion of the stem so that when the bolt is fully retracted the actuating portion 18 of the stem may be removed or broken from the balance of the stem, whereby upon the subsequent release of the catch the bolt will be projected forwardly to its active locking position and permanently retained in such position if desired.

In view of the foregoing it will be seen that the present invention provides an efficient and positive fastening means for uniting the separable sections of a metallic grave vault. The construction has the advantage of being simple and economical to manufacture and yet is highly efficient and effective in use.

What is claimed is:

1. In a grave vault, a casing, a bolt slidably mounted in said casing, a stem connected with said bolt and slidably projecting through said casing, a spring surrounding said stem and confined between said casing and said bolt to normally project the latter toward an operative position, and a frangible actuating portion formed with the outer end of said stem and arranged exteriorly of said casing.

2. In a grave vault, a casing, a bolt slidably mounted in said casing and embodying a head provided with a recess, an actuating stem connected with said bolt and slidably projecting through said casing for moving the bolt manually, a spring surrounding said stem and confined between said casing and said bolt and serving to project the latter normally toward an operative position, and a resilient catch mounted upon the outer portion of said casing and having an offset portion movably received within a slot provided in said casing, said offset portion being adapted for engagement with said bolt recess when the bolt is retracted in order to positively retain said bolt in its retracted position.

3. In a grave vault, separable base and cover sections, fastening means for uniting said sections consisting of a casing, a bolt slidably mounted within said casing and formed to include a frame shaped body, one end of said body terminating in a head formed to include an inclined outer face and

a longitudinally extending shoulder, said head being arranged to enter registering openings provided in the base and cover sections of the vault when the bolt occupies an extended position, the opposite ends of said bolt being formed to include longitudinally extending arms terminating in vertically offset lugs, a stem positioned between said arms and extending exteriorly of said casing, a coil spring surrounding said stem and confined between said casing and the body portion of said bolt, and a catch of bent wire mounted in connection with said casing for movement in a horizontal plane, said catch including an inwardly offset portion arranged within said casing and coactive with said bolt to retain the latter in its retracted position against the influence of said spring.

In testimony whereof I affix my signature.

ALLEN F. BECK.