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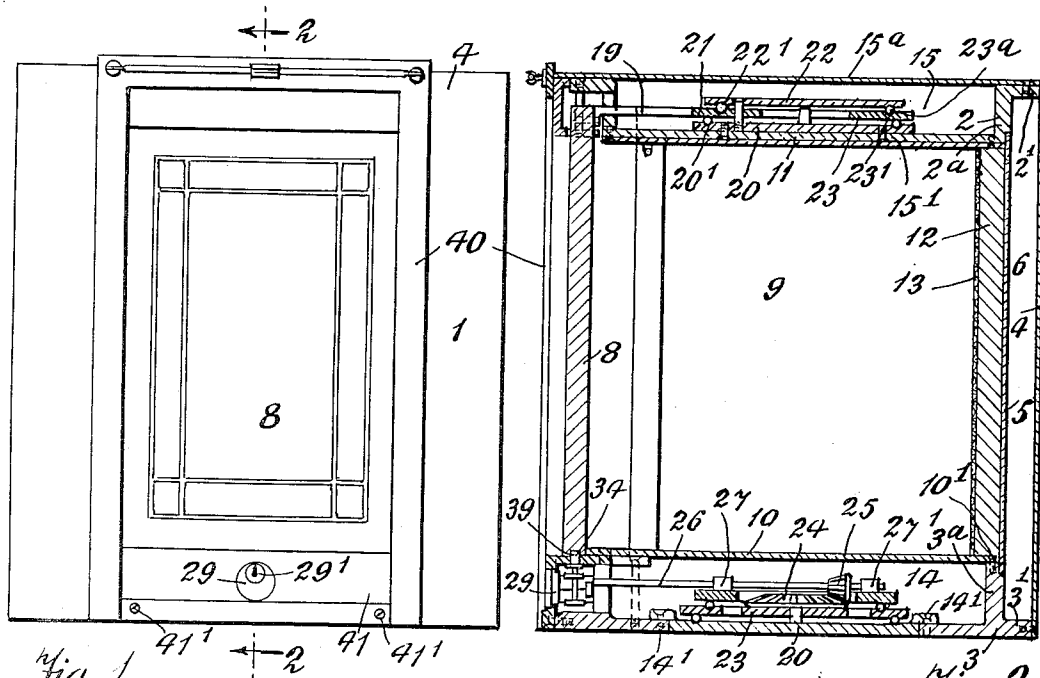
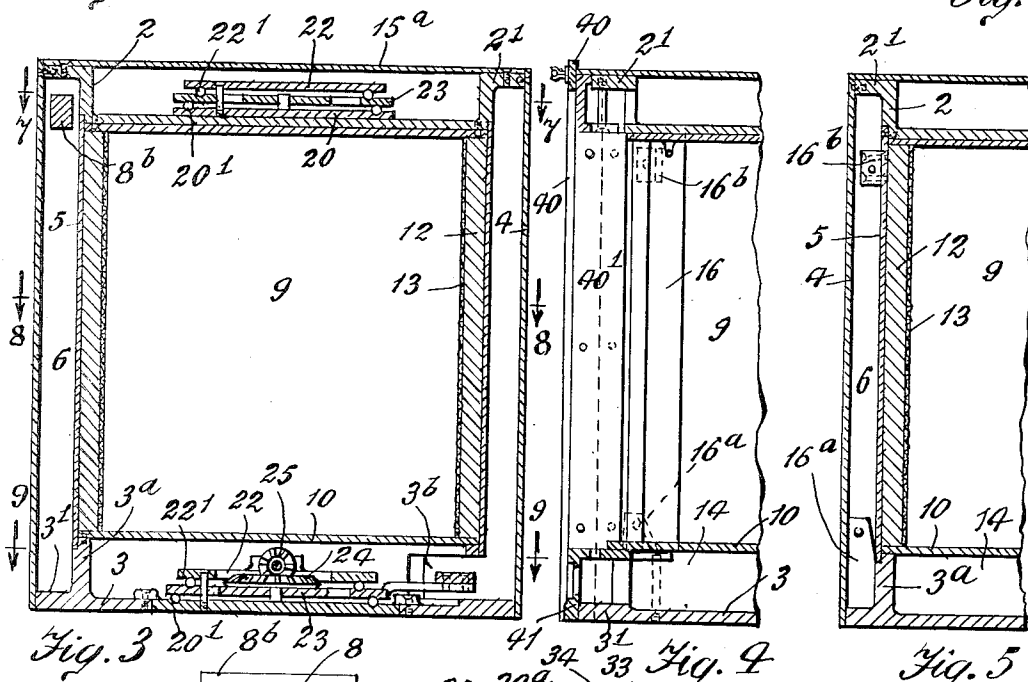
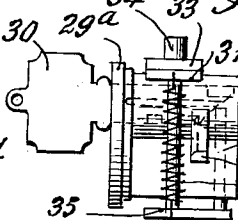
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1,956,958

TABERNACLE SAFE

Filed Nov. 27, 1929

2 Sheets-Sheet 1



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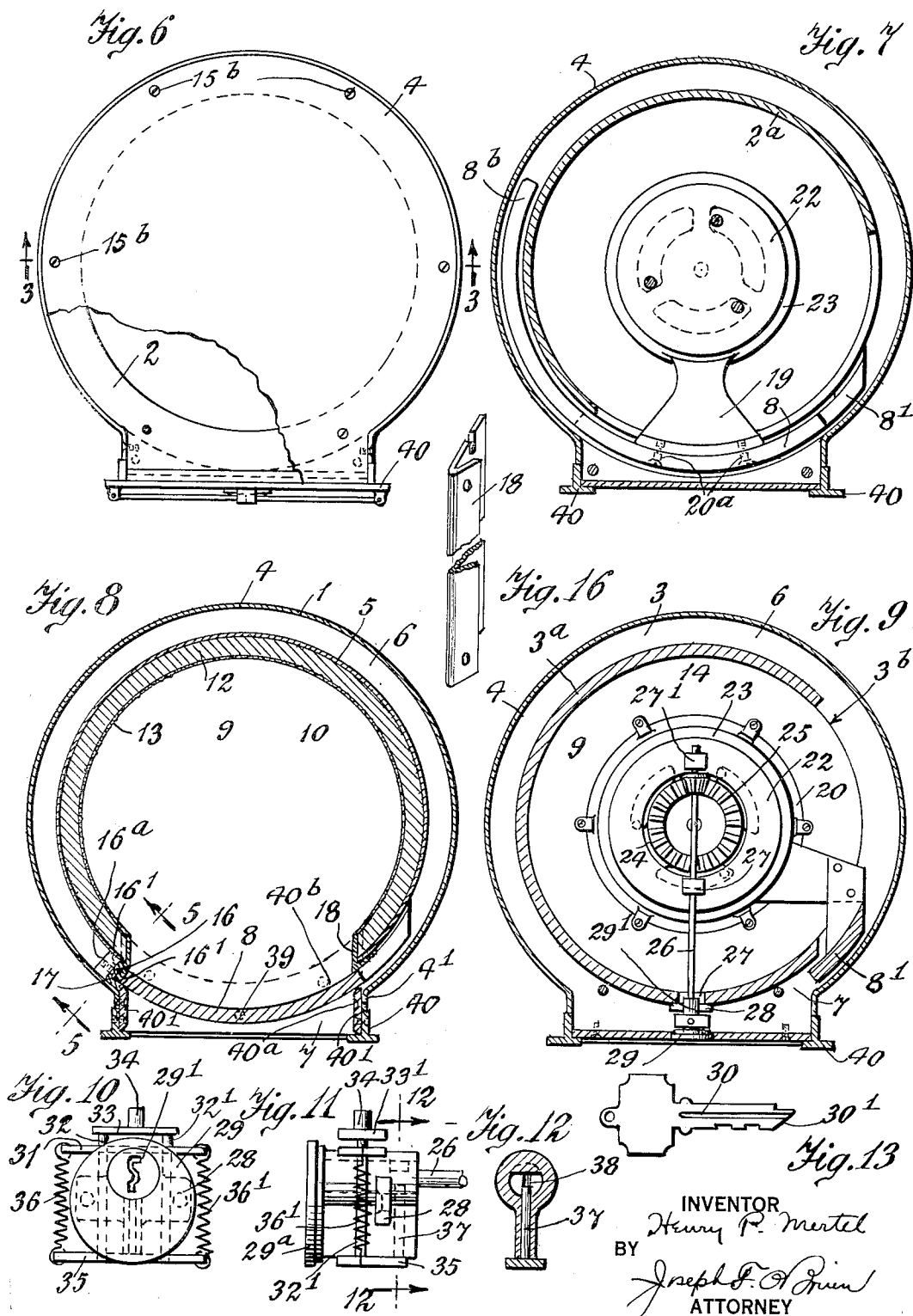
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TABERNACLE SAFE

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UNITED STATES PATENT OFFICE

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TABERNACLE SAFE

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2 Claims. (Cl. 312—33)

This invention relates to improvements in tabernacle safes.

Tabernacle safes comprising the subject-matter of my invention are, in Roman Catholic churches, utilized as altar receptacle for the Eucharist, and it is desirable that the door or doors of the tabernacle be unlocked and opened and closed and locked with facility and ease.

While various mechanisms for mechanically-actuating the doors of such tabernacles have been used, such doors have usually heretofore either been hinged at their edges to swing outwardly or have been slidably mounted on conventional hangers in a manner to leave grooves adjacent to the doorway. Such tabernacles are unsatisfactory because, in order to comply with the rubric of said church, it is necessary that the interior surfaces of the tabernacle, including the surfaces of the doorway, be smooth and free of grooves. By my invention, I have been enabled to take advantage of the use of mechanism for operating the door of my tabernacle construction and at the same time to eliminate the objectionable grooves and to produce a tabernacle in which the interior surfaces, including the entrance or doorway, will be free of grooves, slots and the like.

Another object of my invention is to provide, in combination with a tabernacle construction having a mechanically-actuated door, a key-actuated locking mechanism operable to unlock and release the door by insertion of the key into the lock and thereafter, upon further movement of the key to operate door-moving mechanism to swing the door into open or closed positions, and when the door is moved into closed position and it is desired to lock the same, this is accomplished automatically by withdrawal of the key from the lock.

Still another object of my invention is to provide a combined locking and door-moving mechanism in which the parts are so arranged that insertion of the key into the lock will withdraw the locking bolt to unlock the door and a turning of the lock spindle by the key will maintain the locking bolt in withdrawn position until the door is in closed position and a socket therein is in registry with the locking bolt, and the key will be capable of withdrawal from the lock only when the door is in fully closed position with its socket in registry with the bolt.

Mechanically-operated doors in safes of this character also produce considerable noise in the opening and closing movements, and it is one of the objects of my invention to produce a con-

struction in which the doors may be opened and closed noiselessly.

Another object of my invention is to provide a tabernacle safe in which the internal space will be relatively large in proportion to the width and depth of the safe.

Still another object of my invention is to provide a safe in which the door may be moved so as to be completely out of the way of the entrance or door-opening when the door is in open position.

Still another object of my invention is to provide a door-mounting and door-operating mechanism which will, first, be substantially noiseless in operation and, second, will be substantially completely enclosed in compartments above and below the main tabernacle compartment so as further to eliminate noise.

Still another object of my invention is to provide a tabernacle safe construction in which the door-mounting and operating means and other parts are removable to enable refinishing or repairing of such parts without removing the main structural parts of the safe from the altar.

Another object of my invention is to provide a locking mechanism which will at all times maintain the door in unlocked condition when the key is inserted in the lock so that the door will be capable of being opened by engagement of the hand with the door in case the key is broken off while in the lock.

With these and other objects in view, the invention comprises the combination of members and arrangement of parts so combined as to contact and cooperate with each other in the performance of the functions and the accomplishment of the results herein contemplated, and comprises in one of its adaptations the species or preferred form illustrated in the accompanying drawings, in which:—

Fig. 1 is a front elevation of a tabernacle safe embodying my invention;

Fig. 2 is a vertical section on the line 2—2 of Fig. 1, looking in the direction of the arrow;

Fig. 3 is a vertical section on the line 3—3 of Fig. 6, looking in the direction of the arrow;

Fig. 4 is a vertical section substantially on the line 2—2 of Fig. 1, looking in the direction of the arrow, with the door in open position;

Fig. 5 is a section on the line 5—5 of Fig. 8, looking in the direction of the arrow;

Fig. 6 is a top or plan view of my improved safe with a portion of the top plate being broken away;

Fig. 7 is a section on the line 7—7 of Fig. 3, looking in the direction of the arrow;

Fig. 8 is a section on the line 8—8 of Fig. 3, looking in the direction of the arrow;

Fig. 9 is a section on the line 9—9 of Fig. 3, looking in the direction of the arrow;

Fig. 10 is a view, in front elevation, of my preferred form of locking mechanism removed from the safe;

Fig. 11 is a side elevation of the locking mechanism shown in Fig. 10;

Fig. 12 is a section on the line 12—12 of Fig. 11, looking in the direction of the arrow;

Fig. 13 is a side elevation of a form of key employed by me;

Fig. 14 is a front elevation of the door employed by me;

Fig. 15 is a fragmentary section similar to Fig. 2, showing the locking mechanism in withdrawn position; and

Fig. 16 is a perspective view, partially in section, of the right-hand stile strip shown in section in Fig. 8.

Referring now to these drawings, which illustrate a preferred embodiment of my invention, 1 indicates a tabernacle safe which, in accordance with the preferred form of my invention, is cylindrical in conformation and comprises a shell or body portion composed of a top annular frame member comprising a ring 2, a bottom annular frame member, comprising a ring 3, each having outwardly-projecting horizontal flanges 2', 3' and inset vertical flanges 2^a, 3^a. The outer edges or perimeter of the flanges 2', 3' are connected together by an outer metallic shell 4 and the vertical flanges 2^a, 3^a are connected together by an inner wall 5 which, as shown, is fitted within seats in side edges of such vertical flanges 2^a, 3^a respectively. The arrangement of the walls 4 and 5 on the top and bottom members 2 and 3 provide a narrow annular compartment 6 between the walls 4 and 5. The walls 4 and 5 are generally cylindrical in conformation with an opening formed therein at the front portion to provide a doorway 7 and I utilize the cylindrical compartment 6 between the walls 4 and 5 as a sheathing compartment for a door 8 adapted to close the door-opening 7 formed in said walls 4 and 5 respectively.

In tabernacle safes of the type under consideration, it is necessary, in order to comply with the rubric of the Catholic Church in which these tabernacle safes are utilized to have the interior surfaces of the compartment used for the Eucharist, including the surfaces of the doorway of said compartment, free of groove slots and the like. I, therefore, provide a main interior compartment 9, the surfaces of which will be entirely free of grooves notwithstanding the fact that I utilize mechanism for mounting and operating the door. To this end I mount my door-supporting and operating mechanism in compartments 14 and 15 above and below the said main compartment. By operating my door through an opening below the main compartment which communicates with the door-sheathing compartment 6 out of registry with the door opening, I am enabled to use a floor plate which will be free of all grooves or slots. Furthermore, by utilizing an extension on the front of the door at the top thereof, I am enabled, when the door is in open position, to close the groove through which the door has moved and thus free the top of the opening from this groove.

As illustrated, I provide a floor plate 10 which rests upon and is fastened to the upper edge of the annular vertical flange 3^a, a ceiling plate 11

which is fastened to the lower edge of the flange 2^a and this compartment 9 is preferably provided with an intermediate wooden lining 12 and an internal surface lining 13 of silk. The attachment of the floor plate 10 on the flange 3^a provides, directly beneath the same, a shallow compartment 14 and similarly the arrangement of the flanges 2^a provided above said compartment another shallow compartment 15, and I utilize these compartments 14 and 15 to mount my supporting and operating mechanism for the door 8.

In accordance with my invention, one side of the doorway is provided with a stile strip 16 which covers the edge of the lining members 12 and 13 and has a portion 16' forming a door-stop and having suitably fastened thereto a rubber or felt buffer 17.

In the preferred embodiment of my invention, this strip 16 is fastened to lugs 16^a and 16^b (see Figs. 4 and 5) on the shell and the opposite edge of the doorway is provided with a vertical stile strip 18 which, however, does not close the cylindrical space 6, but is fastened by screws to the cylindrical wall 5.

In order to avoid any groove in the bottom plate 10 and still to provide mounting and operating means for the door below said bottom, I provide the flange 3^a with a cut-away or open portion 3^b which communicates with the door-mounting compartment 6 beneath the floor plate 10 at a position out of registry with the door-opening of the safe and I provide the door with a rearward extension 8' which, in the closed position of the door, extends opposite to a portion of the opening 3^b and an operating connection which, in the preferred construction is also a partial mounting connection, is made between the door and the mounting mechanism in the compartment 14 and it will be seen that this connection is made within the sheathing compartment 6 and will be entirely concealed in any position of the door either open or closed. In the preferred embodiment of my invention, the door is preferably mounted above the ceiling plate to swing pivotally on a radial arm 19 connected by screws 20^a with the upper edge of the door 8 and the door is preferably provided at its upper edge with an extension element 8^b which is preferably of similar dimensions to the door and is adapted, when the door is in closed position, merely to extend within the sheathing compartment 6 but when the door is in open position, this extension 8^b closes the operating groove at the upper edge or top of the doorway in which the door moves so that when the door is in open position, the doorway will be bounded on one side by the stile strip 16; on the other side by the stile strip 18 and the forward edge of the door; at the bottom by the bottom plate 10 and at the top by the extension 8^b of the door, thus closing all grooves or slots in the doorway or entrance to the compartment 9 and, in this respect, complying with the rubric of the Roman Catholic religion within whose churches the safes are adapted to be used.

In the preferred embodiment of my invention, I provide within each of the compartments 14 and 15 ballbearing door-mounting elements, each preferably comprising a base member 20 comprising a substantially circular plate having segment-shaped ballbearing grooves 20' provided with ballbearings, a top plate 22 similarly provided with segmental grooves 22' and an annular intermediate movable member 23 having segmental ballbearing grooves 23' registering with the

ballbearing grooves of the upper plate and segmental ballbearing grooves 23^a registering with the ballbearing grooves of the lower plate and I provide in all of these registering grooves, ballbearings 21.

Said movable member 23 is arranged between the stationary members 22 and 20 and has connected thereto the radial arm 19 so as to form a ballbearing pivotally movable supporting hanger for the door. In the similar pivotally-movable door-mounting element provided below the door 10 in the compartment 14 I utilize, in the preferred form of my invention, the movable member 23 as an operating element, and, as shown, this member 23 is provided with a bevelled gear 24 which meshes with a bevelled pinion 25 mounted on a shaft 26 supported in bearings 27, 27' and extending below and parallel to the floor to the middle of the doorway and, as shown, passing through an opening 27^a in the lower flange 3^a. Registering with the shaft 26 and fastened by means of a bracket 28 to the flange 3^a is a locking mechanism 29, the locking spindle 29' of which engages the shaft 26 and is, upon turning, adapted to cause the turning of said shaft which, of course, will result in the turning of the bevelled pinion 25 which, in turn, rotates the pinion 24 to cause the movement of the intermediate member and a swinging of the door 8 within the sheathing compartment 6.

In the preferred form of my invention, the locking mechanism 29 (see Figs. 10 and 11) comprises a face plate 29^a having a key spindle 29' rotatable upon the insertion of a key 30. In accordance with my invention, the lock is provided with a stationary yoke 31 having slidably mounted therein a pair of rods 32, 32' connected together by a connecting member 33 on which is mounted a bolt 34. The bolt 34 and rods 32 are connected at their lower ends to a connecting member 35 and stretched between the base member 35 and yoke 31 are a pair of springs 36, 36' adapted to normally move the bolt 34 upwardly. The base plate 35 is also provided with a pin or rod 37 extending upwardly into the key groove 38 of the lock spindle. The rod 37 is adapted to be engaged by the inclined end 30' of the key 30 to cause the base plate to be moved downwardly and the locking bolt 34 to be drawn downwardly.

It will be seen from the above that the bolt will be withdrawn upon the insertion of the key 30 and the engagement of the inclined surface 31 with the pin or rod 37. This insertion movement will, therefore, withdraw the bolt from a registering socket 39 in the lower or bottom edge of the door 8, it being understood that the movement of the door-moving mechanism will be arranged to cause the socket 39 in the door to register with the bolt when the key slot is in substantially vertical position and when the rod 37 is in registry with the end 30' of the key so that when the key is withdrawn, the rod 37 will be permitted to move upwardly and the bolt will be shot into the socket 39'. The locking mechanism per se is conventional and need not be described except to say that the arrangement is such that the key cannot be withdrawn until the key groove reaches vertical position and is in registry with the pin 37.

In the preferred embodiment of my invention, I provide an exterior door frame 40 and the front portion of the compartment 14 is closed by a panel member 41 in which is mounted the locking mechanism 29.

It is also desirable that the door, the door hang-

ers, the door-operating mechanism and other internal parts of the safe be removable for the purpose of repair or for the purpose of refinishing the parts and that this may be accomplished without removal of the shell of the tabernacle from the altar. To this end, the various interior parts of the safe are mounted so as to be removable when the door is opened and in the construction illustrated, the door-frame 40 is separable from the shell and is removably mounted thereon by means of stile strips 40' which are fastened to the frame 40 by screws 40^a and are fastened to an outwardly-projecting lip 4' of the shell by screws 40^b; thereafter other parts of the device may be removed in the following order:

Strips 16 and 18; the silk lining 13; the wooden lining 12; whereupon screws 10', of the floor plate, which are located beneath the wooden lining are exposed and may be taken out which will permit the floor plate to be removed; then the lock panel 41 may then be removed by releasing the screws 41'. Thereafter, the door-supporting and operating mechanism in the compartment 14, which is also removably-mounted in said compartment by the screws 14', may be bodily removed through the door-opening. The door-mounting mechanism in the top compartment 15 is also removably mounted and may be released and removed upon removal of the screws 15'. This top mechanism is accessible by removal of the top plate 15^a which is removably held in place by the screws 15^b.

Having described my invention, I claim:—

1. A tabernacle safe embodying, in combination, an outer wall substantially cylindrical in conformation and having a vertical axis, an inner wall of similar conformation spaced from the outer wall to provide an arcuate door-sheathing groove therebetween, said walls having registering openings therethrough to form a doorway and except for said doorway enclosing a main Eucharist-receiving compartment, a door of approximately the width of said opening and having at its lower edge an extension portion arranged to be concealed in said arcuate sheathing compartment when the door is in its closed position, door-operating mechanism arranged in a separate compartment below the main compartment and communicating with said door-sheathing compartment through an opening out of registry with the doorway, and means for connecting said operating mechanism with the extension on the rear edge of said door through said communicating opening to provide a concealed connection between said door and said mechanism.

2. A tabernacle safe embodying, in combination, an outer side wall of substantially cylindrical conformation and having a doorway opening, an inner wall of similar conformation spaced from said outer wall and having a registering opening to form a doorway, and providing a door-sheathing compartment between said walls, top and bottom walls, floor and ceiling plates spaced from said top and bottom walls to provide a main internal compartment with smooth walls and upper and lower subsidiary compartments arranged respectively above and below said floor and ceiling plates, door-operating mechanism mounted in said lower compartment, a door arranged to move through said door-sheathing compartment, and a connecting element between the door-operating mechanism and said door movable through a wall of said lower compartment out of registry with the door-opening, said wall having an opening therethrough.

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