Jan. 10, 1950 F. DANNINGER 2,493,947

TABERNACLE SAFE

Filed Nov. 20, 1945 4 Sheets-Sheet 1

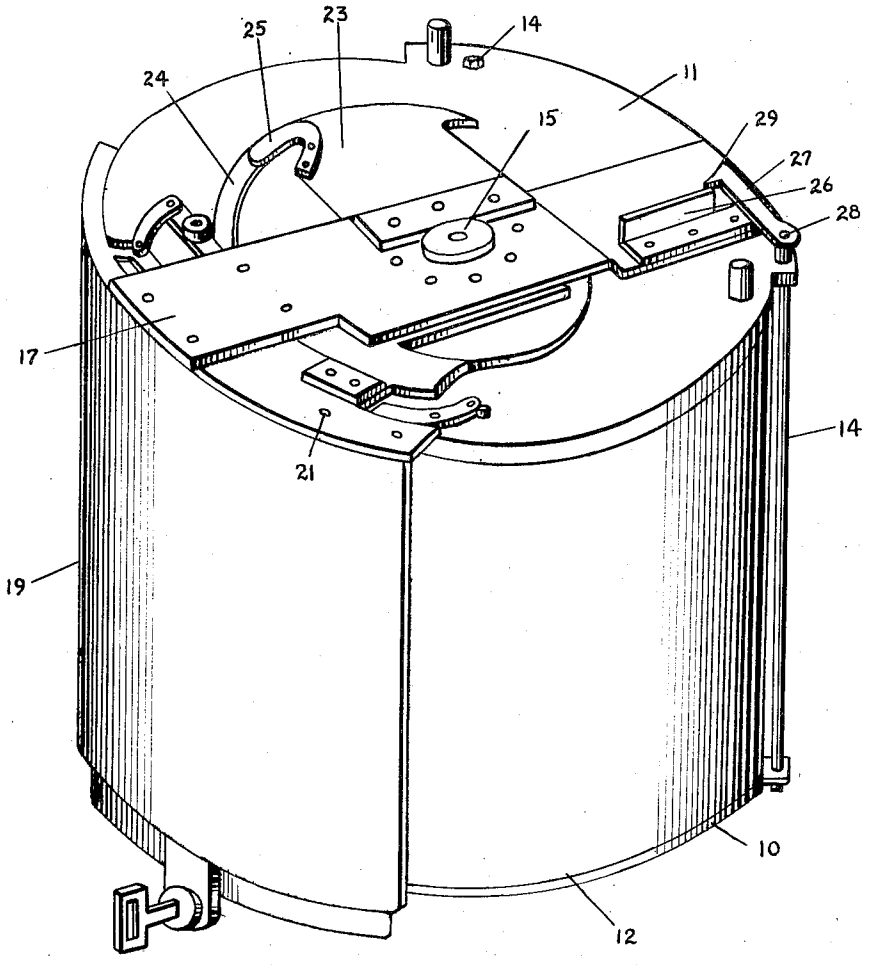


Fig. 1

INVENTOR.
FELIX DANNINGER
BY
Christian R. Nielsen
ATTORNEY

Jan. 10, 1950 F. DANNINGER 2,493,947

TABERNACLE SAFE

Filed Nov. 20, 1945 4 Sheets-Sheet 2

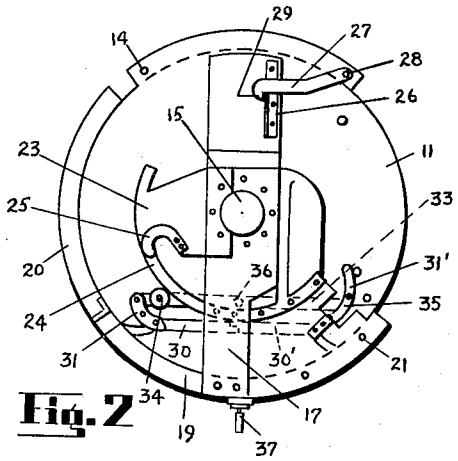


Fig. 2

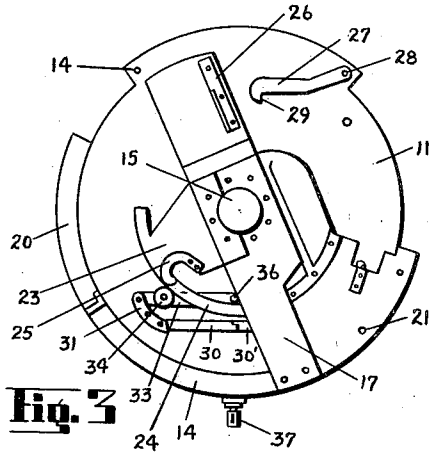


Fig. 3

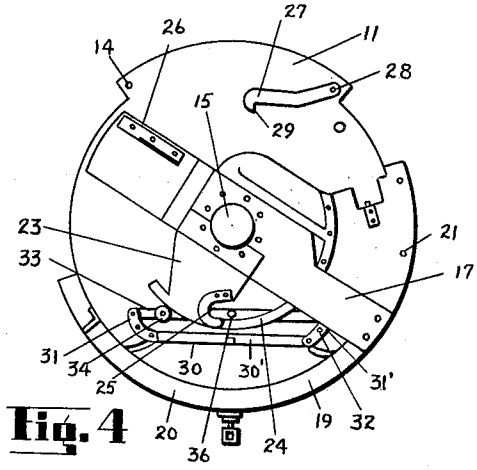


Fig. 4

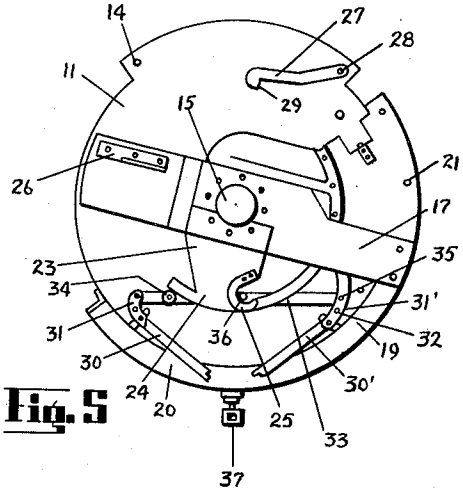


Fig. 5

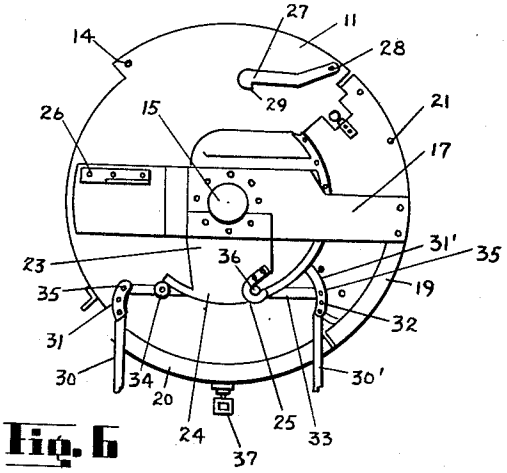


Fig. 6

INVENTOR.
FELIX DANNINGER
BY
Christian R. Nielsen
ATTORNEY.

Jan. 10, 1950 F. DANNINGER 2,493,947

TABERNACLE SAFE

Filed Nov. 20, 1945 4 Sheets-Sheet 3

Fig. 7

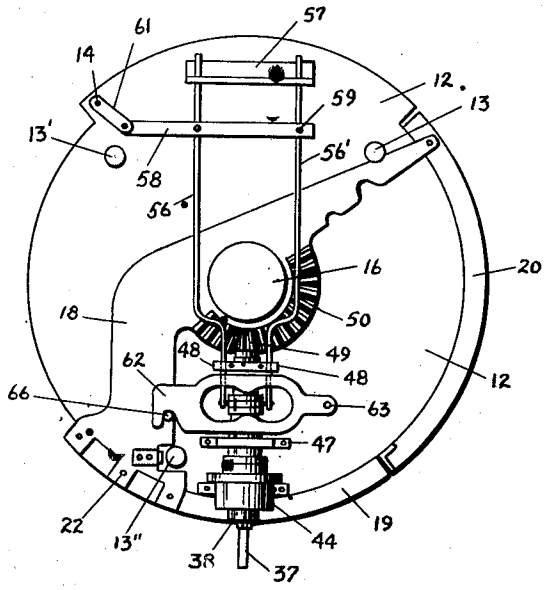
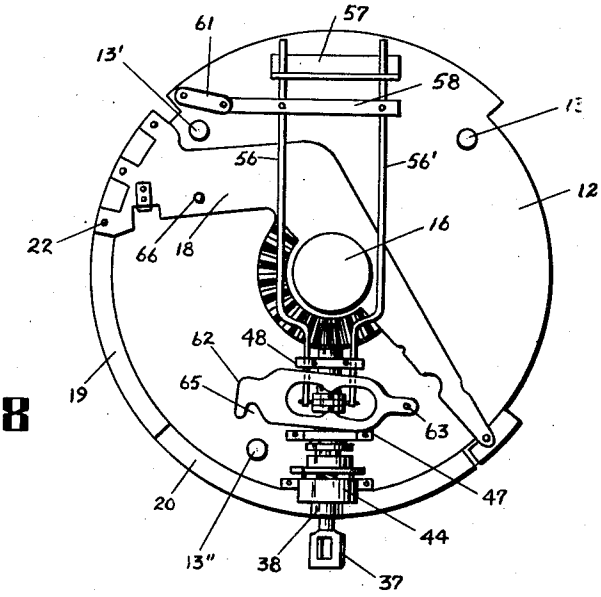


Fig. 8



INVENTOR.
FELIX DANNINGER
BY
Christian R. Nielsen
ATTORNEY.

Jan. 10, 1950 F. DANNINGER 2,493,947

TABERNACLE SAFE

Filed Nov. 20, 1945 4 Sheets-Sheet 4

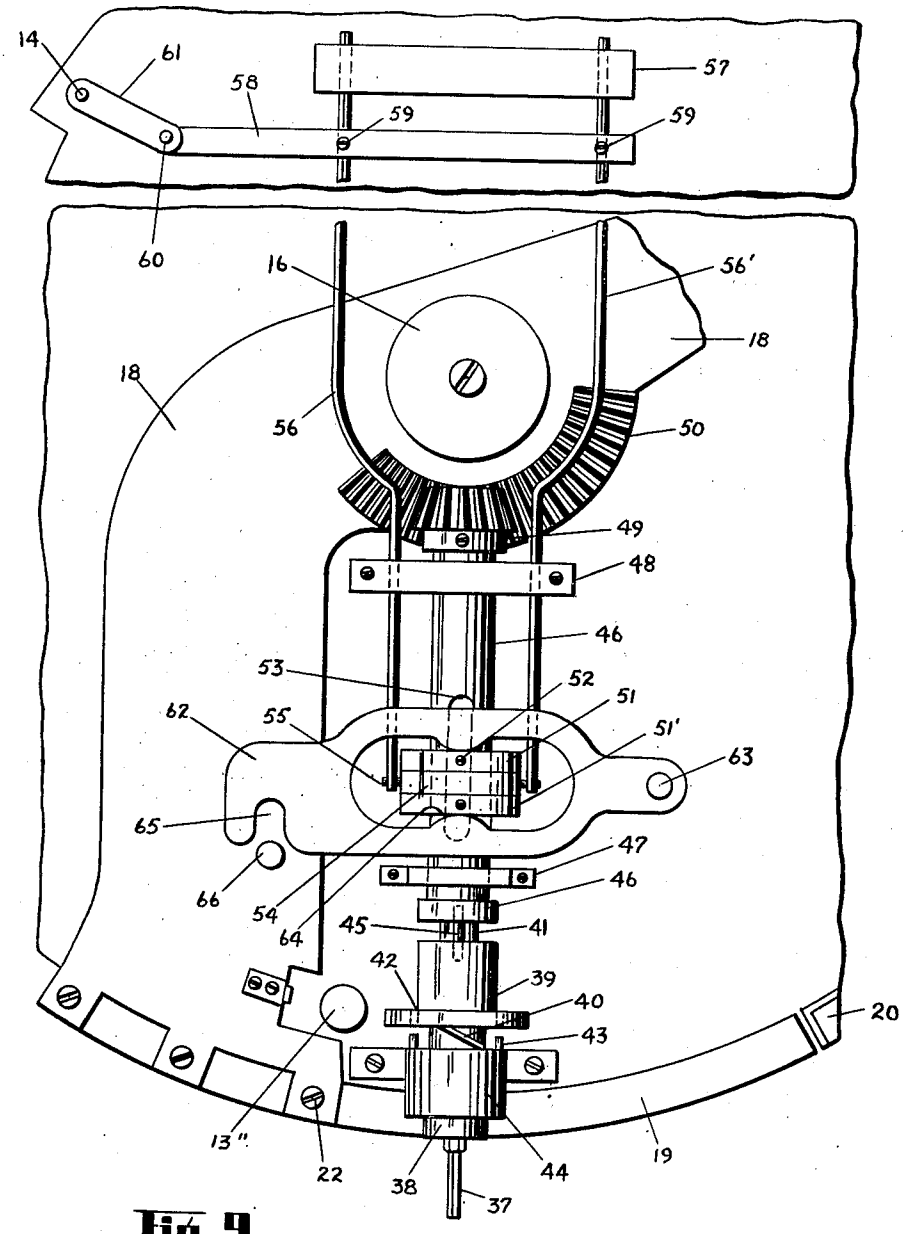


Fig. 9

INVENTOR.
FELIX DANNINGER
BY
Christian K. Nielsen
ATTORNEY.

Patented Jan. 10, 1950

2,493,947

UNITED STATES PATENT OFFICE

2,493,947

TABERNACLE SAFE

Felix Danninger, Milwaukee, Wis.

Application November 20, 1945, Serial No. 629,905

4 Claims. (Cl. 312—33)

1

My invention relates to tabernacle safes, and more particularly to safes used as tabernacles on an altar.

The object of my invention is to provide a tabernacle safe that has a single radially formed outer door and a pair outwardly of swinging inner doors, and providing a means of actuating both the inner and outer doors by means of a single shaft through a continuous revolution of the shaft.

Another object of my invention is to provide a device of the character described that is smooth in operation, equally balanced, and providing a synchronized action whereby the inner doors open outwardly when the outer door is completely open.

Still another object of my invention is to provide such a device that is equipped with a key actuated locking mechanism that will lock the inner and outer doors when the key is removed.

Still another object of my invention is to construct the device in a manner to permit its being inserted into the structure of an altar without having any of the operating mechanisms exposed.

The device has a positive operating mechanism actuated by the insertion of a key which permits the revolving of a single shaft, which opens the arc shaped outer door and a pair of hingedly supported inner doors in a synchronized manner and permits locking of all doors when the key is withdrawn.

Other and further objects of my invention will become more apparent as the description proceeds when taken in conjunction with the drawings, in which:

Figure 1 is a perspective view of the device in a closed position.

Figure 2 is a top view of the device showing all doors in a closed position and illustrating the manner in which the engaging catch holds the device in a locked position.

Figure 3 is a top view of the device showing the key slightly turned, the locking catch released and the outer door beginning to open.

Figure 4 shows a similar view of the device with the outer door half open and the inside swinging doors still in a closed position.

Figure 5 shows a view as shown in Figure 4, in which the key is revolved still further and the outside door is very nearly in an open position, and the inner swinging doors starting to open.

Figure 6 is a similar view with the key turned at a ninety degree (90°) angle and all the doors open.

Figure 7 is a bottom view of the assembled device in a locked position.

Figure 8 is a similar view, as shown in Figure 7, but with the key slightly turned and the outer door starting to open, and

2

Figure 9 is a fragmentary view of the key actuated shaft and its relation to the locking mechanism and the synchronized door actuating arrangement.

Similar characters of reference indicate corresponding parts throughout the several views, and referring now to the same, the character **10** shows a cylindrical body constructed of metal or the like and provided with a metallic upper plate **11** and a lower plate **12**. The cylindrical body is open at the front end, is supported in a level position by means of leg members **13** and **13'** and **13''** fastened to the bottom plate **12**. There are a plurality of rods indicated by the character **14** which are employed for retaining the upper and lower plates **11** and **12** against the upper and lower edges of the cylindrical body **10**. Centrally disposed on the upper and lower plates **11** and **12** respectively are projecting members, the member **15** at the top and the member **16** at the bottom. These members act as a mounting for a top support bracket, shown as **17**, and a bottom support bracket, shown as **18**, and an arc shaped door **19** of a size to correspond with the front opening in the body **10** has the same contour as the outer periphery of the body portion **10** and is supported by the top and bottom brackets **17** and **18** respectively. There is an arc shaped member attached to the door **19**. This member **20** follows the door **19** in its opening movement. The door **19** is attached to the support brackets **17** and **18** by attaching means **21** at the top and **22** at the bottom. The top support bracket **17** has an auxiliary bracket **23** attached thereto and this bracket **23** is provided with a radially formed member **24** having a receiving slot **25** attached thereto. Near the rearward end of the support bracket **17** is an upwardly extending member **26** arranged to contact a locking latch **27** hingedly attached at **28** to the rod shown as **14**. This locking latch has an inwardly projecting element **29** which is designed to engage the member **26** as shown in Figure 2 and thereby holding the entire device in a locked position.

There are a pair of inner doors **30** and **30'** which are fastened to a pair of angle members **31** and **31'** hingedly attached to the plate **12** at **32**. These doors **30** and **30'** are normally in a closed position, as shown in Figures 2, 3 and 4, at which time the forward ends of the angular members **31** and **31'** extend inward.

A link member **33** has a roller **34** which is rotatably attached to its upper face and extends from one angular member **31** to the other member **31'**. This link member **33** is attached to the angular members **31** and **31'** at **35**. There is also a contact pin **36** extending upward from the upper face of the link member **33** at a point centrally disposed between the attaching points **35**. The roller **34** contacts the outer peripheral

edge of the radial member 24 when this member is revolved and the receiving slot 25 is caused to contact the pin 36 while the member 24 revolves thereby moving the link member 33 sidewise and causing the angular members to pivot and gradually open the doors 30 and 30', as shown in Figures 5 and 6, and thus the inner doors 30 and 30' remain closed while the radial outer door is opened until it reaches a point of contact of the receiving slot 25 with the pin 26.

In Figure 9 I show the locking and the actuating mechanism employed to unlock and open the outer door 19 and the inner doors 30 and 30' in a synchronized manner. This mechanism is attached to the bottom plate 12. The key 37 is inserted into the tumbler 38 and as the key is revolved the collar 39 is caused to move rearwardly due to the spiral groove 40 on the end of the tumbler shaft 41. The collar 39 is provided with apertures 42 registering with the pins 43 forming a part of the bearing 44 into which the tumbler 38 is rotatably mounted. Obviously, the bore of the collar 39 is provided with an engaging means not shown to fit into the spiral slot 40. The collar 39 has key pins 45 extending outward from its rearward face. These pins 45 engage the ends of the drive shaft 46 which shaft is supported at its front end by a bearing 47 and at its rearwardly disposed end by the bearing 48, and the extreme rearward end of the shaft 46 is equipped with a bevel gear 49. The bottom support bracket 18, pivotally mounted at 16 and supporting the door 19, has a segmental gear portion 50 integrally formed therewith and the revolving of the shaft 46 will cause the gear 49 to revolve, thereby actuating the support bracket 18 due to the engagement of the gear 49 with the segmental gear portion 50. A pair of annular disc members 51 and 51' encircle the shaft 46 and are attached thereto by means of pins 52 which engage a slot 53 within the shaft 46, and an auxiliary plate 54 is disposed between the disc members 51 and 51'. This plate 54 also encircles the shaft 46 and is provided with outwardly extending hinge pins 55 which engage a pair of pushing arms 56 and 56' which are slidably journalled in the rearward bearing 48. These pusher arms extend rearward past the projecting member 16 and are supported at their extreme rearward end by the bearing 57 which is attached to the lower plate 12. A cross member 58 attached at 59 to both the pusher arms 56 and 56' is hingedly attached at 60 to a link member 61 which is employed to actuate the latch 27 attached to the rod, shown as 14, at 28 on the top of the device.

A yoke 62, supported at 63 to the plate 12, is provided with a pair of inwardly extending radial contact surfaces 64 which engage the annular disc members 51 and 51'. This yoke acts as a locking means to keep the support bracket 18 from turning when the open slot 65 of the yoke 62 engages the lock pin 66 attached to the bracket 18 as shown in Figure 7.

In operation, the device functions as follows: The key 37 is inserted into the tumbler 38, and as the key is revolved, it will cause the collar 39 to move backward out of engagement with the pins 43 and cause the pins 45 to engage the end of the shaft 46, and as the shaft 46 revolves and moves backward due to the engaging means within the collar 39 engaging the slot 40, the discs 51 and 51' will cause the plate 54 to move backward due to the contact of the radial surfaces 64 with the discs 51 and 51' thereby disengaging the slot 65 in the yoke 62 from the pin 66. The pusher rods cause the cross member 58 to actuate the link 61 thereby releasing the latch 27, and as the shaft 46 is revolved further, the pinion gear 49 will actuate the bracket 18 due to the contact of the gear 49 with the segmental section 50. As the yoke 62 is pushed backwards by the contact 64, it releases from the lock pin 66, and permits the bracket 18 to be moved by the gear 49. As the bracket 18 revolves, the outer door 19 will be caused to move along the peripheral edge of the body 10 and when the receiving slot 25 contacts the pin 36 on the link member 33, it will cause the hingedly supported inner doors 30 and 30' to be actuated and opened. Obviously, when the shaft 46 is revolved in the opposite direction the opposite motion takes place and all the component parts will again reach a closed position and be locked by means of the slot 65 contacting the pin 66 and the latch 27 contacting the upwardly extending member 26.

The entire device is operated by means of the key 37 being inserted into the tumbler 38 and the shaft 46 being revolved thereby causing the outer door to open to a pre-determined position before the inner doors are actuated and when the outer door 19 is in a full open position the inner doors will also be in an open position.

In the chosen embodiments of my invention there are present many features not here disclosed in the prior art, and while I have described a specific construction and manner of arrangement of the component parts, I am fully cognizant of the fact that the arrangement of the parts and the shape and contour may vary without interfering with the operativeness and efficiency of the device, and I reserve the right to make such changes in the construction and arrangement of the parts as I may deem convenient and necessary without departing from the spirit of my invention or the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A tabernacle safe of the character described comprising a vertical cylindrical enclosure open at its forward face, a pair of vertical projecting means centrally disposed extending outward at right angles from the top and bottom of said enclosure, a single outer door having a radial contour corresponding with the peripheral surface of said enclosure, said door supported by horizontal members engaging the top and bottom projecting means, a pair of inner doors pivotally mounted to the top and bottom of said enclosure, a link member connecting the mountings for said inner doors, a revolvable shaft supported horizontally by the bottom of said enclosure, said shaft arranged for the arcuated movement of the outer door, a contact pin extending outward from said link member, an engaging member on one of the horizontal members supporting said arcuated outer door, said engaging member contacting said contact pin on said link thereby actuating the inner doors simultaneously with said outer door when said horizontal shaft is revolved.

2. A tabernacle safe of the character described comprising a vertical cylindrical wall having an opening therein, an upper plate, a lower plate, said upper and lower plates horizontally mounted to and forming an enclosure with said cylindrical wall, projecting members extending outward at right angles from said upper and lower

plates, a single arcuated outer door having a contour corresponding with the outer peripheral surface of said cylindrical walls, mounting brackets pivotally mounted to said projecting members said mounting brackets supporting the outer door, a key actuated shaft journalled horizontally to one of said plates, means on said mounting brackets for actuating said outer door when said key actuated shaft is revolved, a pair of inner doors, pivoted mounting brackets for supporting said inner doors, a connecting link engaging both of said pivoted mounted brackets, a contact pin extending outward from said link, engaging means on one of the mounting brackets for engagement with said contact pin thereby actuating said inner doors in a synchronized manner with said outer door when said outer door is actuated by means of the revolving shaft.

3. A device as described in claim 2, in which the key actuated revolving shaft operates locking means for retaining all the doors in a locked position when said key is removed.

4. A tabernacle safe of the character described comprising an enclosure of cylindrical contour, vertically disposed and provided with an opening in its vertical wall, vertical members projecting outward at a point centrally disposed at the top and bottom plate of said enclosure, an arcuated outer door of a size to provide a cover for the opening in said vertical wall, said door supported by horizontal mounting brackets, rotatably attached to the vertical projecting members, a pair of inner doors, angularly disposed brackets pivotally supporting said inner doors and attached to said enclosure at its upper and lower end, a connecting link pivotally attached to said angular brackets, said link provided with an outwardly extending pin, means on one of the horizontal brackets supporting said outer door for engagement with said pin, a key operated shaft horizontally supported by the bottom plate of said enclosure, engaging means on said shaft and said lower mounting bracket, said means permitting arcuated actuation of the mounting bracket when the shaft is revolved, latching means for arresting the actuation of said inner and outer door before said key operated shaft is revolved, and slidable means engaging said key operated shaft for providing a synchronized action of said outer and inner doors when said shaft is revolved.

FELIX DANNINGER.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,649,504	Bergs	Nov. 15, 1927
1,924,365	Mariotti	Aug. 29, 1933
2,115,415	Danninger et al.	Apr. 26, 1938