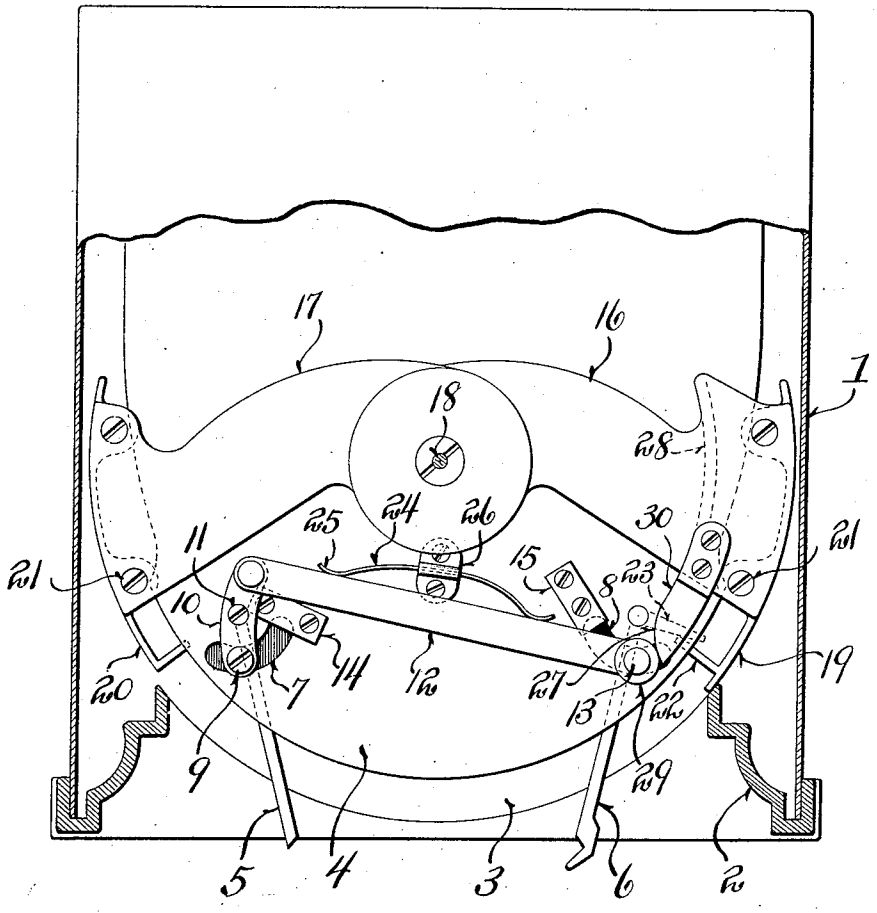
Nov. 15, 1927. 1,649,504

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SAFE

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UNITED STATES PATENT OFFICE.

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SAFE.

Application filed May 16, 1927. Serial No. 191,894.

This invention relates to safes, and is particularly directed to a safe adapted for association with an altar for use as an altar tabernacle.

This invention is an improvement over that disclosed in United States Patent No. 1,254,433 of January 22, 1918, for a safe, issued to J. Rauwald, and has in general the same objects as those set forth in such patent.

Further objects are to provide a novel form of safe structure in which the necessity for accurately machining slots to provide stops is avoided, and a simple construction provided for causing the accurate stopping of the inner doors when they are swung to closed position, and to provide means for preventing clashing or a noisy operation of the doors either during opening or closing motion.

An embodiment of the invention is shown in the accompanying drawing in which:

The single figure is a plan view broken away and partly in section through the safe.

Referring to the drawings, it will be seen that the safe comprises an outer casing 1 having inwardly directed converging side walls 2 defining the entrance opening. This device is provided with a bottom inner floor 3 or plate, and an upper plate 4 between which the inner doors 5 and 6 move. The doors 5 and 6 are positioned adjacent arcuate slots 7 and 8 formed in the upper plate 4. The door 5 is provided with a lug which is joined by means of a screw 9 to a small lever 10. This lever is pivoted, as indicated at 11, and its inner end is connected to a link 12. The other door is joined to the other end of the link as indicated at 13. The members 9 and 13 pass through the slots 7 and 8, as in the patent referred to above, and the details of construction in this drawing have been omitted except such as directly bear upon the inventive idea disclosed, as the construction is otherwise identically like that of the patent. The slots 7 and 8 need not be machined, but may be cast in the upper plate 4. The correct stopping of the doors in their extreme inner or closed position is secured by means of the stop plate 14 and 15, which bridge the inner portion of the slots 7 and 8, and thus are adapted to contact with the pins or screws 9 and 13, and thereby limit the inward swinging of the doors 5 and 6.

Means, not shown, are provided for rocking the levers 16 and 17 which are pivoted about the central axial portion 18. These levers are connected to the outer doors 19 and 20, and may be attached thereto in any suitable manner, as by means of the screws 21. The door 19 is provided with an inwardly extending web or lug 22 which is adapted to engage the projecting arm or lever 23 which is integral or rigid with the door 6, and thus when the door 19 is swung open, the lug 22 strikes the lever 23 and swings the door 6 open, the door 5 is simultaneously swung open due to the link 12 and the lever 10, previously described.

It has been found that the operation of these devices is sometimes noisy, particularly if they are carelessly operated. To guard against this difficulty, a bowed spring 24 is provided with curved feet 25 which ride upon the link 12 and offer a yielding frictional drag to its motion in either direction. This spring may be carried in any suitable manner, a convenient way being illustrated in the drawing. For example, it may be secured by means of a clip 26 fastened to the upper plate 4 by means of screws and located approximately centrally of the device.

The closing of the inner doors is secured by means of the cam lug 27 carried by the lever 16. This cam lug is secured to the lever by means of screws, as illustrated, and extends downwardly below the plane of such lever and in line with a cam track or locking track 28 formed on the underside of the lever 16. The cam 27 cooperates with a roller 29 carried by one end of the link 12, so that as the levers or arms 16 and 17 are rocked inwardly to close the outer doors 19 and 20 the cam 27 will engage the roller 29 and rock the inner doors 5 and 6 closed during the early or initial movement of the outer doors. Thereafter, the inner doors are held locked as the cam roller 29 rides upon the circular portion of the cam, as indicated at 30 and thereafter rides upon the circular cam track 28, the circular portions 30 and 28 constituting a locking means for the inner doors. The outer doors are swung shut after the inner doors have completely closed, as is obvious from an inspection of the drawing.

It has been found that the spring 24 keeps the doors from clashing or causing any noise whatsoever, as the spring provides a frictional drag mechanism which cooperates

with the cam mechanism. The device is extremely quiet in operation, even if it is inadvertently carelessly handled.

Further, it will be seen that the device is of relatively simple construction and is of very attractive appearance, as all of the mechanism is housed with the exception of the inner and outer doors, such members being the only visible portions of the device between the inwardly converging front walls 2.

Although the invention has been described in considerable detail, such description is intended as illustrative rather than limiting as the invention may be variously embodied and as the scope of such invention is to be determined as claimed.

I claim:

1. In a safe structure, the combination of a pair of outer doors adapted to be swung open or closed, a pair of inner doors pivotally supported and located inside of the path of movement of the outer doors, cam means for closing the inner doors, and a frictional drag device cooperating with the cam means to provide a yielding frictional drag upon the operation of the inner doors, whereby clashing is avoided.

2. A safe construction comprising a compartment, a pair of curved doors, means for rocking said doors in an arcuate path, a pair of inner pivotally mounted doors positioned inside of the path of movement of said curved doors, link mechanism joining the inner doors and causing simultaneous operation of the inner doors, frictional means bearing upon said link mechanism and offering a frictional drag to its motion, and cam means associated with the curved doors for operating the said link mechanism.

3. A safe structure comprising a container having an upper and a lower plate provided with curved front edges, a pair of curved doors, means for swinging said curved doors in a circular path, a pair of inner doors pivotally mounted between upper and lower plates, said upper plate having slots adjacent said inner doors, link mechanism having means passing through said slots and coupled to said inner doors, cam means associated with said outer doors for operating said link mechanism, and stops secured to said upper plate and bridging portions of said slots to limit the course of said inner doors.

4. A safe structure comprising a container having an upper and a lower plate provided with curved front edges, a pair of curved doors, means for swinging said curved doors in a circular path, a pair of inner doors pivotally mounted between upper and lower plates, said upper plate having slots adjacent said inner doors, link mechanism having means passing through said slots and coupled to said inner doors, cam means associated with said outer doors for operating said link mechanism, and stops secured to said upper plate and bridging portions of said slots to limit the closing of said inner doors, said stops being separate and removable from the upper plate.

5. A safe construction comprising a compartment provided with an upper and a lower plate, a pair of inner doors pivotally mounted between said plates one of said inner doors having a projecting lever extending laterally therefrom, a pair of outer curved doors, means for swinging said outer doors in a circular path, a projecting lug carried by one of said outer doors and adapted to engage the laterally extending lever when said outer doors are swung to open position, mechanism including a link operatively joining said inner doors and causing simultaneous opening and closing movements thereof, cam means associated with one of said outer doors for operating said link, a bowed spring secured to said upper plate and having its ends bearing upon said link and offering a frictional drag to the motion of said link, whereby clashing of the inner doors is avoided.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin.

FRANCIS X. BERGS.