109. SAFES, BANK PROTECTION AND RELATED DEVICES.

Search Room

84

Feb. 6, 1934. C. F. MEILINK 1,946,028

SAFE

Filed Feb. 25, 1932 2 Sheets-Sheet 1

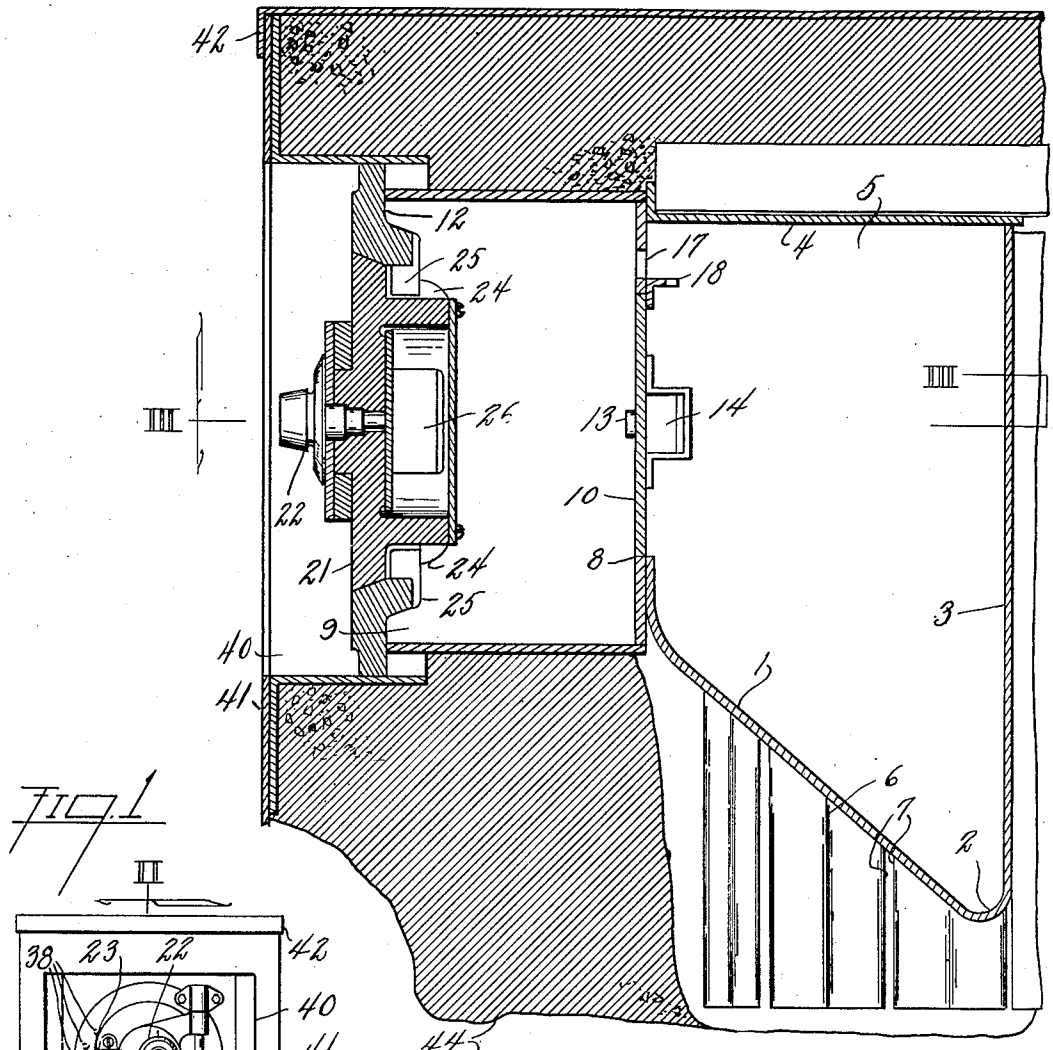


FIG. 1

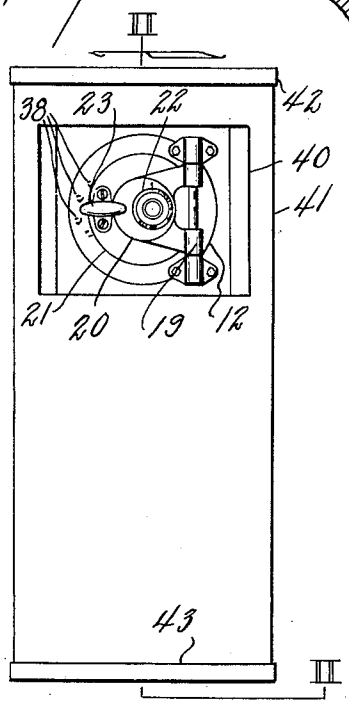


FIG. 2

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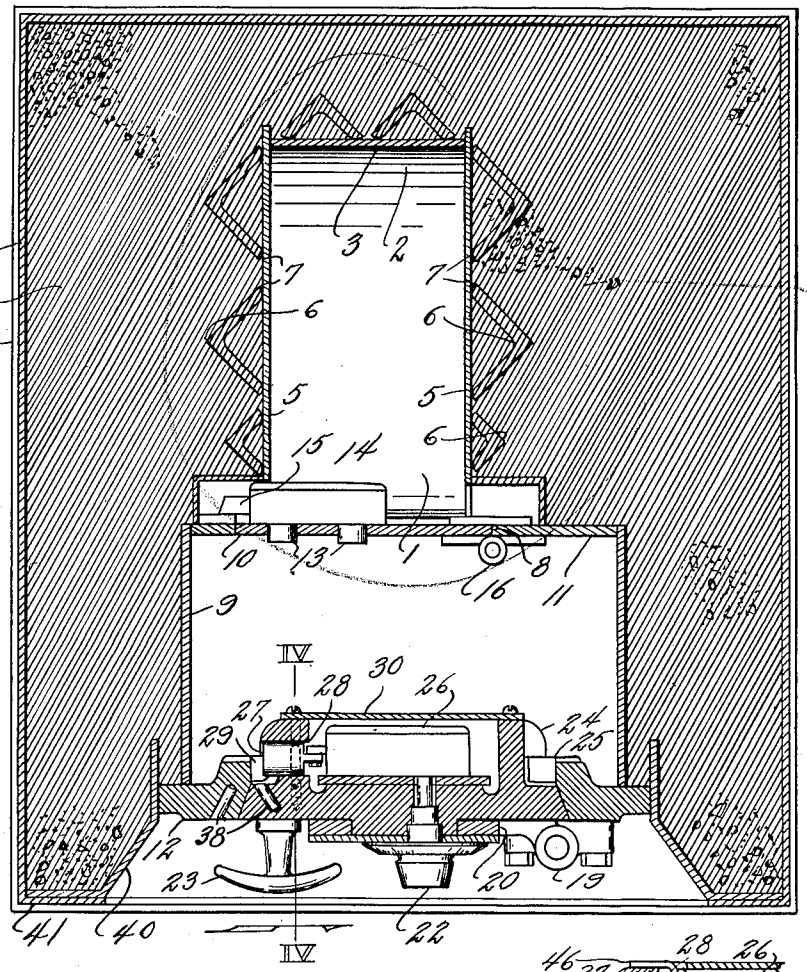
x sec. Spec.
x cam lock.
x drill proof

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Fig. 3



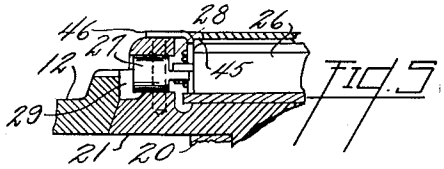
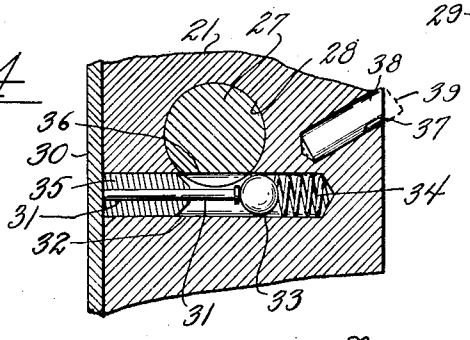


Fig. 5

Fig. 4



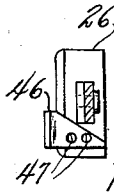


Fig. 6

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AND RELATED DEVICES.

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3 Claims. (Cl. 109—1)

This invention relates to safety features in security boxes.

This invention has utility in loaded money boxes, especially in cast stone and metallic reinforcements with cooperating means, against even disturbance of locking mechanism, further interfering with access.

Referring to the drawings:

Fig. 1 is a front view of an embodiment of the invention in a security box such as may be desirable for homes, places of business, such as chain stores and filling stations;

Fig. 2 is a fragmentary vertical section on the line II—II, Fig. 1;

Fig. 3 is a section on the line III—III, Fig. 2;

Fig. 4 is a section on the line IV—IV, Fig. 3;

Fig. 5 is a view similar to Fig. 3 of the relocker holding clip; and

Fig. 6 is a view at right angles to Fig. 5, of such clip.

Security box is shown comprising primary wall having depending portion 1 to back 3 with top 4 and sides 5. This box proper as thus provided with primary walls has angle iron or structural metal in form of steel shapes at the tops and sides thereof, and protruding below the bottom. These reinforcements, as an additional wall, have angle portion 6 outwardly and termini 7 of the angles adjacent the sides of the box. These separate parts may be weld assembled. Opening 8 from this inner box is a vestibule having wall 9 between inner door 10 having frame 11 at the opening 8 and outer door frame 12. The inner door is provided with key receiving portions 13 for lock 14 effective in its operation to withdraw bolt 15, and thereby permit swinging of the door 10 on its hinge 16 into the vestibule away from the inner security box.

This inner door 10 of the vestibule is provided with slot or port 17 having protecting flange 18 therebelow, so that the filling station attendant or clerk may deposit an envelope of cash or other matter desired to have located within the security box without opening the box proper.

Hinge 19 on the outer door frame 12 mounts ring 20 to swivel door 21 having spindle 22 and handle 23. The handle 23 may be effective to rock the door 21 relatively to the ring 20 upon thrusting the door into the frame 12, thereby to bring the door 21 into the interacting position for flanges 24 behind lugs 25. At such thrown position, the spindle 22 may be operated to effect lock 26 in shifting bolt 27 in way 28 radially of the door and into engaging position with seat 29, thereby holding the door 21 against rotation, and maintaining the door in this locked position. This lock 26 is located in the door 21 within rear plate 30.

In the event of attack upon this security box by attempting to force the spindle 22, any shifting of the plate 30 relatively to the door 21 allows stem 31 to move in way 32 under the action of ball 33 and compression helical spring 34. This stem 31 is guided by plug 35 (Fig. 4) in this movement of the ball 33. From inactive position it enters tangential way 36 in the bolt 27 and thus precludes any retraction of this bolt 27, and the door is effectively locked against such mode of attack.

Should the one seeking entrance adopt other means to effect access, say by drilling, this is intercepted. The door 21, in places as desired, say in the vicinity of bolt 27, may have openings 37 into which may be forced high carbon steel plugs 38. These plugs 38, as driven in position, have slight over-all excess portion 39, which is fused off by welding.

This welding action expands the plug and thereby welds it into the body of the metal. Quenching at this occasion gives this insert an extreme of hardness to resist drilling attack.

Besides locating these plugs 38 in the door, these plugs 38 may also be located in the door frame or elsewhere to intercept attack. This frame 12 is assembled at throat 40 of wall housing 41 of tubular form having cap portion 42 and base portion 43. There may be introduced lengthwise into this tube as having the security box therein, attack resistant cast stone or cement 44 compounded to resist ready fracture and thereby provide an armor in this shell or tube 41 with which the angle metal 6, 7, coacts as a substantial metallic reinforcement for the security box proper. Besides this effective resistance in introducing a time factor against access, the cement is a loading which in a device, say up to counter or standing desk height, may be 500, 600, or even 700 pounds. There is thus a mass difficult to transport and thereby is safeguarded the location and stability of the safety factor.

In the matter of the relocker, instead of having the plate 30 directly overhang as to the stem 31, there may be (Figs. 5, 6) opening 45 with clip 46 directly connected by bolts 47 with the lock 26. This clip 46 has portion 47 thereof overhang the region of the stem 31, so that upon any disturbance of the spindle 22 for shifting the lock 26, this clip releases the stem 31, so that the ball 33 may coact with the bolt 27 and hold such against shifting toward unlocked position.

The general attack resisting properties herein disclosed cooperate in safety effectiveness, notwithstanding, the shell or outer housing 41, 42, 43, may be of thin sheet steel in close association with the cast filler 44. The cast filler 44 is compounded to resist ready fracture and be resistant against drilling. Drilling tools directed through artificial stone when impinging upon the inclines of the angles 5, 6, deflects the tool and make most difficult attack from such source. The hardened wrought metal plugs 38 are likewise at angles to deflect drilling tools.

In the use of this security box, say as a filling station safety means, the attendant may have the combination for opening the door 21, and may have a key for one of the locks 13 but such not permitting the attendant to open the inner door 10. The traveling auditor or collector may have a key for the other lock 13 so that it will be necessary for both to be present to obtain access to the inner chamber. The attendant may be given instructions, say to hold no amount of cash, say over $20.00. There could be the depositing of the surplus, say in marked envelopes in numbered succession, inserted through the slot or entrance 17, there to fall upon the inclined bottom 1 to settle at the return bend 2 as meeting the box rear 3. These envelopes, say in consecutive numbered relation, are thus automatically stacked for the collector or auditor to have the series for verification with the record of the attendant.

What is claimed and it is desired to secure by Letters Patent is:

1. A security box having a primary wall, an additional sectional wall of parallel independent outwardly extending V-shaped ribs, each rib comprising a pair of legs abutting the box and converging in their extent therefrom, and embedding means for the box and ribs.

2. A security box having a primary wall and thereabout an additional structural angle metal sectional wall with the angles thereof outward from the primary wall, each angle comprising a pair of legs abutting the primary wall of a box and converging in their extent therefrom, and an attack resisting cement envelope for the angle metal.

3. A security box having a primary wall, and thereabout an additional structural angle metal sectional wall with the angles thereof outward from the primary wall, an attack resisting cement envelope for the angle metal, from the outer face of the envelope, said angle metal providing inclined converging portions, there being a way to the box through the envelope embodying attack resistant elements assembled with the box to provide surfaces also at an angle to the way outer face.

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