March 1, 1960 J. H. MORAWITZ 2,926,516

PUSH BUTTON COMBINATION LOCK

Filed Aug. 7, 1956 5 Sheets-Sheet 1

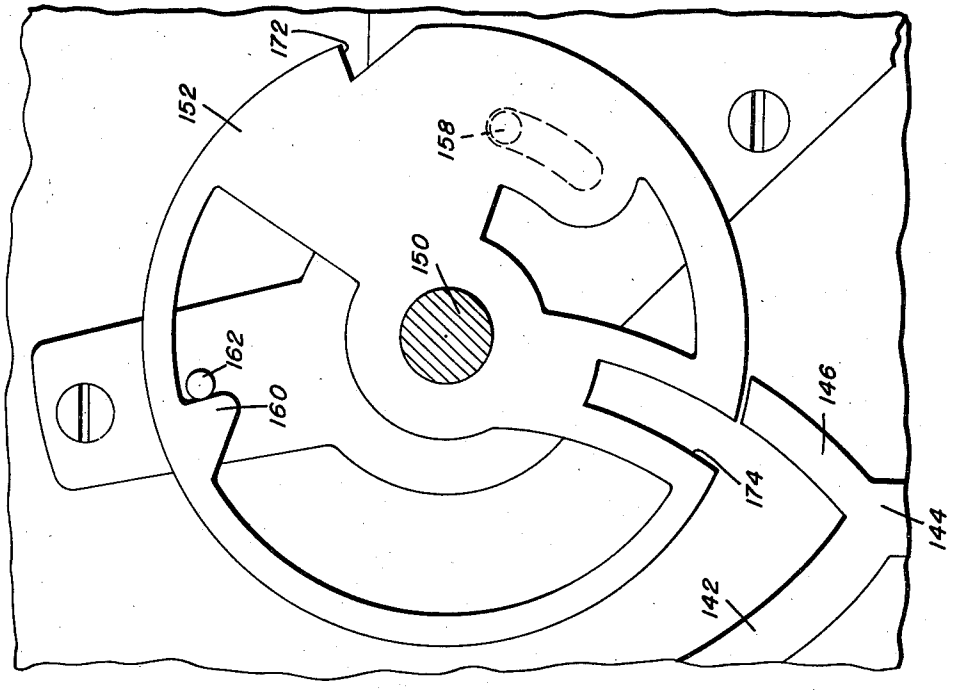


Fig. 8

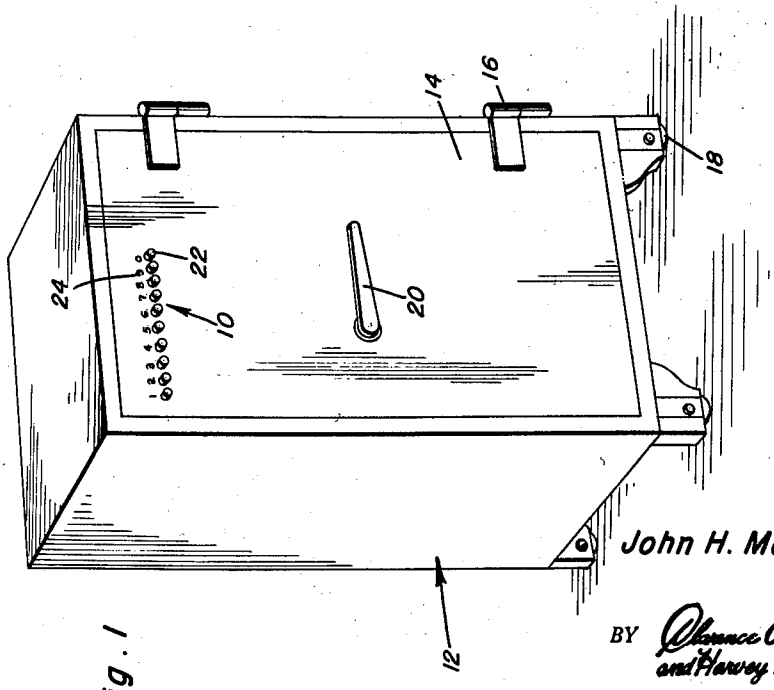


Fig. 1

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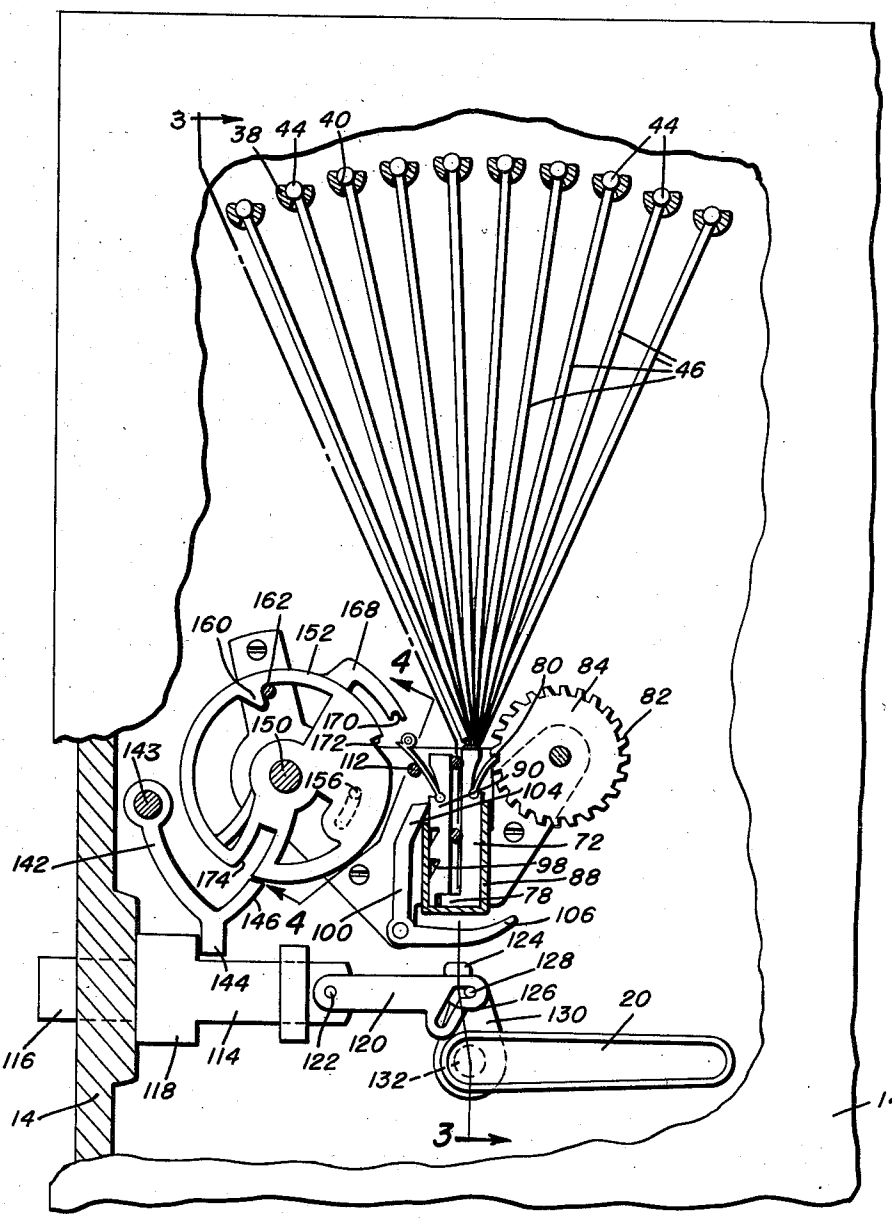
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PUSH BUTTON COMBINATION LOCK

Filed Aug. 7, 1956 5 Sheets-Sheet 2

Fig. 2



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March 1, 1960 J. H. MORAWITZ 2,926,516

PUSH BUTTON COMBINATION LOCK

Filed Aug. 7, 1956 5 Sheets-Sheet 3

Fig. 6

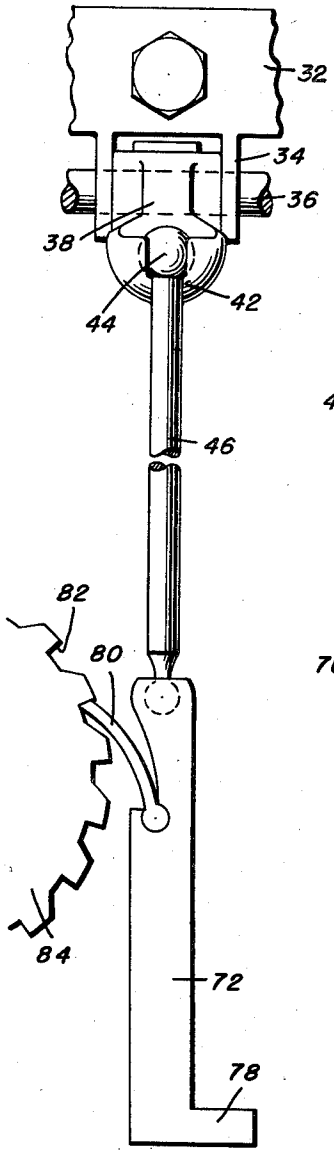


Fig. 7

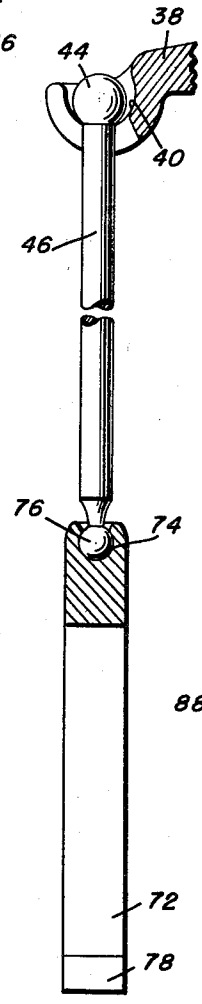
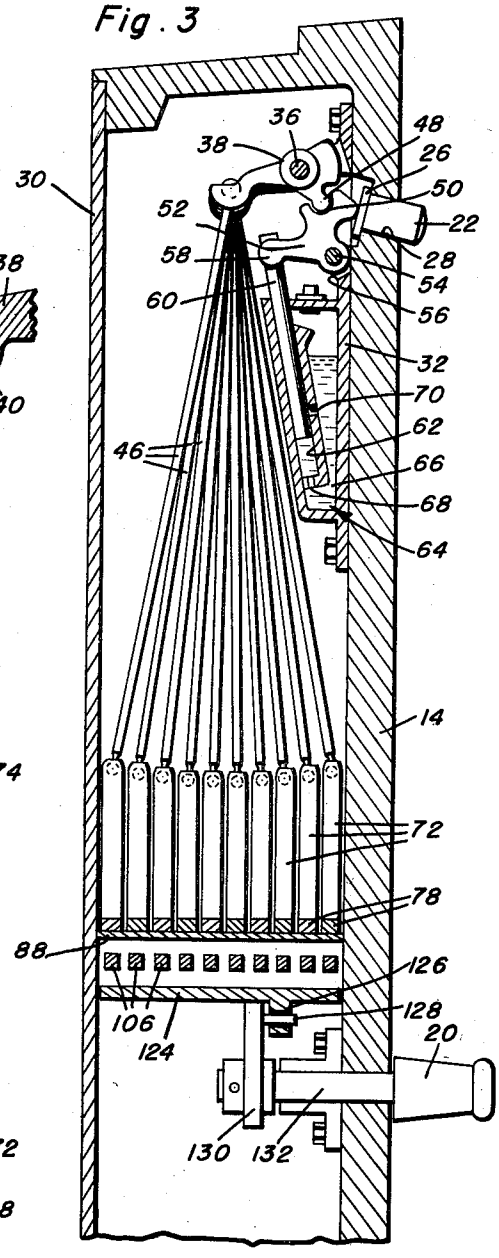


Fig. 3



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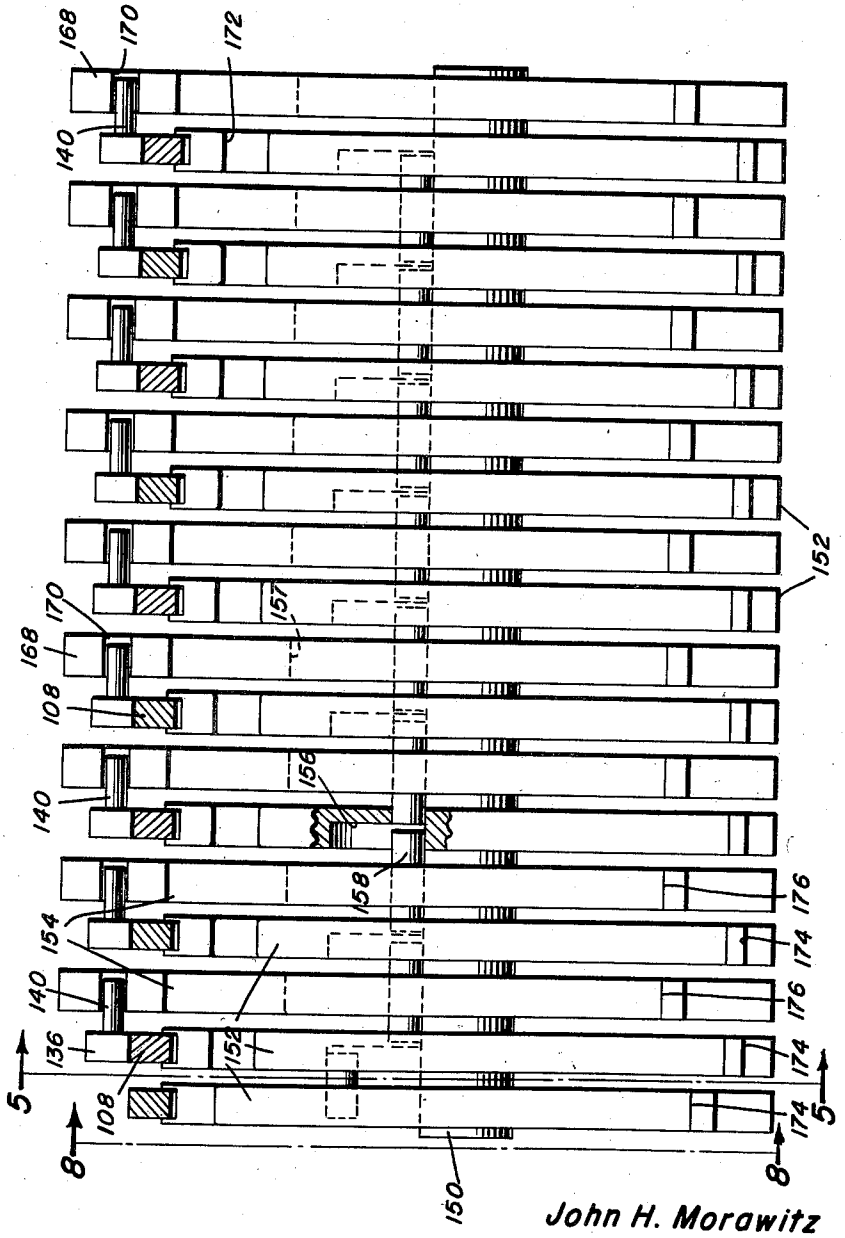
March 1, 1960 J. H. MORAWITZ 2,926,516

PUSH BUTTON COMBINATION LOCK

Filed Aug. 7, 1956

5 Sheets-Sheet 4

Fig. 4



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March 1, 1960 J. H. MORAWITZ 2,926,516

PUSH BUTTON COMBINATION LOCK

Filed Aug. 7, 1956 5 Sheets-Sheet 5

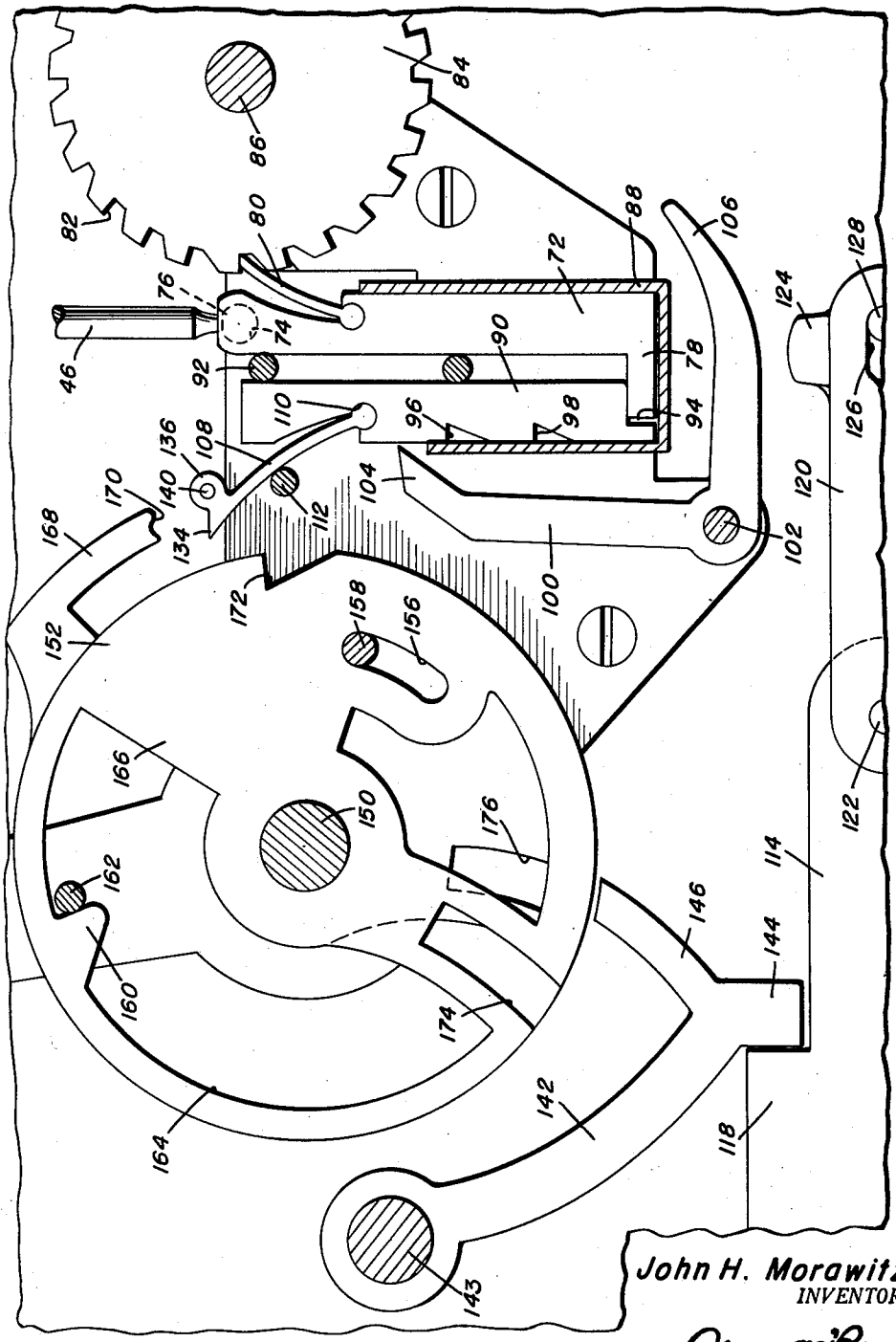


Fig. 5

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United States Patent Office 2,926,516
Patented Mar. 1, 1960

2,926,516

PUSH BUTTON COMBINATION LOCK

John H. Morawitz, Hannibal, Mo., assignor of thirty percent to Robert A. Poage, Hannibal, Mo.

Application August 7, 1956, Serial No. 602,622

7 Claims. (Cl. 70—313)

This invention generally relates to a novel concept in lock construction and more particularly provides a combination type of lock for safes of various types and may be employed in any orientation desiring a combination type of lock.

An object of the present invention is to provide a combination type of lock which incorporates a plurality of push buttons for operation of a locking mechanism which replaces the presently used disk-type of combination lock and is much simpler in construction, easier to unlock and remains as impregnable as the existing type.

Another object of the present invention is to provide a push button combination type of lock in which the push buttons when operated in the proper sequence permits the door handle to withdraw the bolt for opening the door.

A further object of the present invention is to provide a push button combination lock in which the push buttons may be located near the top of the safe door thereby making them more accessible with the door bolt or locking bolt being disposed at the middle of the door for maximum locking strength.

Yet another object of the present invention is to provide a push button type of combination lock in which all of the push buttons require an exactly equal pressure to operate them whether they are operated in proper sequence or improper sequence thereby preventing unauthorized persons from employing some pressure indicating device for determining the proper combination thus making the lock more impregnable.

A still further object of the present invention is to provide a push button type of lock in which the combination may be easily changed from the inside of the safe by anyone without any special mechanical skill.

Another important feature of the present invention is to provide a push button type of combination lock requiring no springs whatsoever and employing the force of gravity to return the mechanism to a reset position but still preventing operation of the mechanism by rolling or inverting the safe.

A still further important object of the present invention is to provide a push button type combination lock in which the exact same clicking sounds are heard whether the push buttons are pushed in the proper or improper sequence thus further rendering the lock impregnable.

Other objects of the present invention will reside in its simplicity of construction, its solution to the problems in safe lock construction, impregnability and its relatively inexpensive manufacturing cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of a safe employing the push button lock of the present invention and illustrating the accessibility of the push buttons by the operator and the relationship of the push buttons to the operating handle;

Figure 2 is an enlarged front elevational view of the safe door with portions thereof being removed for illustrating the details of construction of the push button lock with portions of the lock being shown in section;

Figure 3 is a vertical sectional view taken substantially upon a plane passing along section line 3—3 of Figure 2 illustrating the specific construction of the push button mechanism and the associated elements;

Figure 4 is a detailed sectional view taken substantially upon a plane passing along section line 4—4 of Figure 2 illustrating the relationship and construction of the rotatable disk;

Figure 5 is a detailed sectional view taken substantially upon a plane passing along section line 5—5 of Figure 4 illustrating the details of the second disk;

Figure 6 is an elevational view of a portion of the push button mechanism;

Figure 7 is a detailed sectional view of the construction of Figure 6; and

Figure 8 is a detailed sectional view taken substantially upon a plane passing along section line 8—8 of Figure 4 illustrating the details of the first rotatable disk.

Referring now specifically to the drawings, the numeral **10** generally designates the push button lock of the present invention incorporated in a safe generally designated by the numeral **12** and including a pivotal door **14** mounted on hinges **16** together with suitable supporting casters **18** or any other supporting mechanism. The door **14** is provided with a centrally disposed pivotal handle **20** and ten push buttons **22** adjacent the upper edge thereof with each of the push buttons **22** having an associated numerical indicia **24** for indicating the numerical number of the push buttons **22**.

For purposes of description, the operation of a single push button **22** will be described and it is pointed out that the operation of each push button **22** is substantially the same.

Referring now specifically to Figures 3, 6 and 7, it will be clearly seen that each push button **22** is provided with a base member **26** and the push button **22** is slidably received in an inclined aperture **28** in the safe door **14** with the safe door **14** being provided with a removable backing panel **30** for providing access to the lock mechanism.

Immediately rearwardly of the openings **28** is a mounting bracket **32** that has a plurality of pairs of ears **34** projecting therefrom for supporting a rocker arm shaft **36** which supports a plurality of rocker or lifter arms **38** in the form of bell cranks. Each of the arms or bell cranks **38** terminates in a ball socket **40** at its free end with the ball socket having an entrance slot **42** for detachably receiving the ball headed end **44** of a lift rod **46** thereby permitting the lift rod **46** to be removed and interchanged with the lift rod **46** on an adjacent arm **38**.

Each of the arms or bell cranks **38** is provided with a depending rounded portion **48** received in the socket **50** of a snubbing bell crank **52** which is mounted on a shaft **54** supported by lugs **56**. The outer end of the bell crank **52** is provided with a rounded portion **58** engaging with the slotted upper end of a plunger **60** which is slidably received in a cylinder **62** disposed in the snubbing unit which is generally designated by the numeral **64** and includes a supply of liquid **66**. The cylinder **62** has a small opening **68** in the lower end thereof and a similar small opening **70** in spaced relation to the lower end wherein the liquid **66** will snub or dampen the movement of the plunger **60** wherein a constant resistance to the movement of the push button **22** is pro-

vided so that all of the push buttons will have exactly the same force required for pushing them inwardly at a given rate since all of the plungers 60 resist movement of the bell crank 52 in the same manner thereby requiring the same force to overcome the plunger and force the plunger to move downwardly which permits the rocker arm 38 to move. This snubbing unit 64 also prevents any rapid movement of the bell cranks 52 and 38 thereby eliminating the possibility of the lock construction being turned very rapidly for the purposes of determining the characteristics of the lock. As seen in Figure 2, the lift rods 46 are all identical in length and may be interchanged with each other. That is, the upper ends of the rods 46 may be taken from one socket 40 and placed in an adjacent socket 40 wherein the rods 46 may be selectively associated with different numbered push buttons 22.

Connected to the lower end of each of the lift rods 46 is a lift bar 72 having a ball socket 74 at the upper end thereof for universal connection to the ball end 76 on the lower end of the lift rod 46. The lower end of the lift bar 72 is provided with a laterally extending portion 78 for a purpose described hereinafter and adjacent the upper end thereof is mounted a pivotal pawl 80 for engagement with one of a series of circumferentially spaced notches 82 on a cylindrical spool 84. The pawls 80 dropping into the notches 82 provide a clicking noise and will tend to confuse a person attempting to "work" the combination, that is, listen to such noises and determining the proper sequence of operation. Also, the weight of the spool 84 will discourage the rapid rotation of the lock mechanism by sharp punching of the push buttons 22. This also will be substantially prevented by the snubbing unit 64. If the mechanism were operated rapidly, the clicking of the pawls 80 engaging with the notches 82 would effectively blanket any noise that might serve to disclose the combination. The spool 84 may be in the form of a cylindrical member rotatably mounted on a central shaft 86. In a device having ten push buttons, nine pawls 80 click once each for each notch the spool is moved by the single button depressed since each button operates the spool and only one pawl will follow the spool 84.

Referring now specifically to Figures 2 and 5, it will be seen that the lower end of each of the lift bars 72 is slidably received in an upwardly opening casing 88 which may be in the form of any suitable type of supporting casing.

Slidably disposed in the casing 88 along with the lifting bar 72 is a like number of holding bars 90 which are separated from the lifting bar 72 by a plurality of transverse spacers 92 which may be in the form of rods thereby retaining the bars 72 and 90 in spaced parallel relation. The lower end of each holding bar 90 is provided with a notch 94 which receives the lateral projection 78 on the lift bar 72 whereby upward movement of the lift bar 72 will cause corresponding upward movement of the holding bar 90.

The edge of the holding bar 90 remote from the lift bar 72 is provided with a pair of vertically spaced notches 96 and 98 and a bell crank in the form of a holding bar anchor 100 is provided and pivotally mounted at its apex on a pivot shaft 102. One end of the bell crank 100 is provided with an offset pointed portion 104 for selective engagement with one of the notches 96 and 98 for anchoring the holding bar 90 in vertically elevated position. The other end of the bell crank 100 is provided with a rounded portion 106 forming an abutment for a purpose described hereinafter.

The upper portion of each holding bar 90 is provided with a pawl 108 mounted in a recess 110 in the same edge of the bar 90 as the notches 96 and 98 and projecting laterally therefrom. The undersurface of each pawl 108 rides against a transverse shaft or bolt 112 which moves the pawl 108 back towards the bar 90 when the bar 90 moves downwardly into the casing 88 during the reset operation to be described hereinafter.

Now referring specifically to Figure 2, the sliding lock bolt is designated by the numeral 114 and has a portion 116 projecting from the door 14 for engagement with a suitable keeper on the stationary part of the safe for retaining the door 14 in closed position. The lock bolt 114 is provided with extending projections 118 for engagement with the door 14 when the lock bolt 114 is in extended or locked position. At the inner end of the lock bolt 114 is provided a link 120 secured thereto by pivot pin 122. The free end of the link 120 is provided with an upstanding projection 124 for selective engagement with the abutment forming portion 106 of the anchor bell crank 100. The free end of the link 120 is also provided with an angulated slot 126 slidably receiving a projecting pin 128 mounted on an offset arm 130 which is rigidly secured to the pivot shaft 132 which mounts the handle 20 in the door 14 whereby pivotal movement of the handle 20 will cause corresponding pivotal movement of the offset arm 130. When the handle 20 is swung downwardly towards an open position, the pin 128 engages the rear edge of the slot 126 and pulls the link 120 along with the bolt 114 rearwardly for retracting the bolt 114 and retracting the projecting portion 116 to permit opening of the door 14. When the handle 20 is moved upwardly or to the left, the pin 128 will ride forwardly in the slot 126 until it engages the downwardly inclined portion whereby the link 120 will be pivoted upwardly about pivot pin 122. This will cause the projection 124 to engage the abutment portion 106 of bell crank 100 thereby raising this portion of the bell crank 100 thus releasing the pointed end 104 thereof from one of the notches 96 and 98 thereby permitting the holding bar 90 to move downwardly to a reset or locked position by the force of gravity.

The pawl 108 on the holding bar 90 is provided with a pointed upper end 134 and also includes an upstanding projection 136 on the rear surface thereof which has a projecting pin 140 extending laterally therefrom as will be clearly seen in Figure 4.

For selectively locking the lock bolt 114 in extended position, a bolt locking blade 142 is pivotally mounted on a pivot shaft 143 and includes a depending abutment portion 144 at the lower end of a downwardly curved portion for positioning in the path of movement and against the projection 118 when the projecting portion 116 of the lock bolt 114 is in extended position. An upwardly curved portion 146 is provided on the blade 142 with this upwardly extending portion 146 normally forming an abutment for preventing upward pivotal movement of the blade 142 when the lock bolt 114 is urged rearwardly thereby preventing rearward movement of the lock bolt 114. When the proper combination of push buttons 22 has been pushed, the blade 142 may swing upwardly when the handle 20 is moved downwardly thereby permitting retraction of the bolt 114 and unlocking of the door 14 in a manner described hereinafter.

Freely rotatably mounted on a shaft 150 is a plurality of locking disks 152 which are provided with an alternate disk 154 therebetween. Between the first two locking disks there is no alternate disk thus there are ten locking disks 152 illustrated and eight alternate disks 154. Each of the locking disks 152 except the first locking disk 152 is provided with an arcuate groove 156 for slidably receiving connecting pins 158 which interconnect the adjacent locking disks. Each pin 158 is rigidly attached to a locking disk 152 and projects through an alternate disk 154 and is slidably received in the groove 156 in the next adjacent locking disk. Each of the disks 152 and 154 is provided with a radially inwardly extending stop lug 160 for engagement with a single stationary stop bolt 162 for limit-

ing the free pivotal movement of the disks **152** and **154**. Also, each of the disks **152** and **154** is provided with an enlarged open area **164** in which the lug **160** is disposed and also is provided with a solid area **166** which forms a limit for its pivotal movement in relation to the stop bolt **162** wherein the bolt **162** will either engage the lug **160** or the solid area **166**. This solid area **166** also acts as a counterbalance to assure that the disks **152** and **154** will be rotated to a position with the lug **160** against bolt **162** by the force of gravity when the device is moved to reset position.

Each of the alternate disks **154** is provided with a projection **168** which is in the form of an arcuate member spaced outwardly from the circumference of each disk **154** and the projection **168** terminates in a notch **170** which may be engaged by the pin **140** on the pawl **108** under certain circumstances as described hereinafter. Also, each of the locking disks **152** is provided with a notch **172** in the periphery thereof for engagement by the pointed end **134** of the pawl **108** under a given set of circumstances and each of the disks **152** is provided with an inwardly extending radial and slightly curved slot **174** and each of the alternate disks **154** is provided with a similar radial slot **176**. When the notches **174** and **176** are all aligned with each other and in alignment with the upwardly extending projection **146** on the blade **142**, the blade **142** may be pivoted upwardly thus releasing the lock bolt **114**.

In operation of the device, when the handle **20** is moved to reset position, the upstanding projection **124** engages abutment portion **106** thereby releasing the holding bars **90**. The force of gravity causes the holding bars **90** to move downwardly to their lowermost position and have the recess **94** engaged with the projection on the lift bar **72**. Due to the eccentric weighted condition of the disks **152** and **154**, each of the disks **152** and **154** will be rotated to a predetermined position with the lug **160** against the stop bolt **162** after the blade **142** pivots downwardly to a position with the downwardly projecting portion **144** disposed behind the projecting portion **118** of the lock bolt **114**. In this condition, the lock bolt **114** cannot be retracted until such time as all of the slots **174** and **176** have become aligned with each other and have become aligned with the curved or upstanding portion **146** of the blade **142**. When this condition exists, the bolt **114** may be retracted by merely putting pressure thereon by pivoting the handle downwardly. In this condition, all of the alternate disks **154** have their slots **176** in alignment with the curved portion **146** on the locking blade **142** substantially as illustrated in Figure 5. If the alternate disks **154** are moved during the unlocking operation, this will prevent unlocking and withdrawing of the door bolt **114** since the slots **176** will be misaligned with the projection **146** on the blade **142**.

The first locking disk **152** is the only disk which is properly positioned for the notch **172** to receive the pointed end **134** of the pawl **108** on the holding bar **90**. Therefore, the first locking disk **152** must be operated first, otherwise any other pawl **108** being moved except the number one pawl will ride the periphery of its respective disk **152** and the alternate disk actuating pin **140** will engage the notch or recess **170** on the alternate disk **154** thus moving the alternate disk **154** to a non-unlocking position and will be held thus by the holding bar anchor or bell crank **100** since the pointed end **104** will engage a notch **96** or **98** therein until such time as the handle **20** is lifted to a reset position. This resetting operation releases the anchor bell crank **100** and permits all of the disks **152** and **154** to assume an initial starting position by the force of gravity.

Each push button is to be operated once and only once in the combination that unlocks the door. As the distance from the socket in each lift bar **72** to the pockets in the rocker arm **38** is equal, the lift rods **46** may be interchanged for giving varied operations and combinations.

The first button to be operated in the combination, regardless of its positoin or number, is to be connected by a lift rod to the first lock disk **152**. The second button used in the combination is to be connected to the second disk, the third to the third, etc.

As an example, the combination of **853927416** would have the lifting rods coupled to the rocker arms in the following order, first rod to pocket **8**, second rod to **5**, third to **3**, fourth to **9**, fifth to **2**, etc.

The first disk **152** requires only one move to align its slot **174** with the projection **146** on the bolt locking blade **142**, as will be seen in Figure 8. The other locking disks **152** require two moves to align their slots **174** with the projection **146** on the blade **142**. Moving the first disk **152** imparts to the second disk **152** by means of the connecting pin **158** extended into the recess **156** in the second disk, the second disk's first move but positions its notch **172** in position for engagement with the pawl **108**. Operation of the second button then imparts to the second disk **152** its required second move and at the same time imparts to the third disk the third disk's first move. Thus, the locking disks **152** are progressively moved to unlocked position when the combination is properly followed.

It is pointed out that the weight or tendency to recover position of an alternate disk **154** should be exactly equal to the weight, or recovery of two locking disks **152** so as to offer the same resistance to operation so that the same force is required to depress a button whether it is proper sequence or improper sequence. The slots in the alternate disks **154** which are designated by the numeral **157** permits movement of the locking disk without causing movement of the alternate disks **154** since it is necessary that the alternate disks remain in their normal position since they are already so positioned that the slots **176** will receive the projection **146** on the blade **142**. The slots **157** in the alternate disks **154** should permit free passage of the pins **158** therethrough, and also permit free arcuate movement of the pins **158**. The slots **157** should extend both upwardly and downwardly of the pins **158**. Movement of the pin **158** should not impart movement to the alternate disk **154** and, conversely, movement of the alternate disk **154** should not impart movement to the pin **158**.

All the alternate disks **154** are identical in construction, weight, recovery tendency and inertia.

All the locking disks **152** (except number one—left side in Figure 4) are identical in construction, weight, recovery tendency and inertia. Number one locking disk differs from the other locking disks in construction only. The weight, recovery tendency and inertia of one alternate disk **154** is equal to the weight, recovery tendency and inertia of two locking disks **152**. Hence; the effort required to "push" a button, in or out of the proper sequence, is equal to the effort required to "push" any other button in the combination. This "equality" holds true until the "second move" of the tenth (last) locking disk, and inasmuch as this disk has no other locking disk to impart a "first move" to, this last disk will require one-half the effort to move it when the proper combination has been followed throughout. However, by this time the combination has been "worked out."

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A push button lock for use in safes comprising a slidable lock bolt, a handle for actuating said bolt, means for locking the bolt in locking position, push button means for releasing the locking means to permit the bolt

to be moved to unlocked position, and means actuated by said handle for resetting the bolt lock means in one direction of movement of the handle, said push button means including a plurality of push buttons mounted remotely of the lock bolt, a lifter arm connected to each push button, a lift rod interchangeably connected to each arm, and a lift bar connected to each lift rod, all of said lift rods being equal in length and detachably connected to the arms whereby the sequential combination of depression of the push buttons may be changed by interchanging the ends of the lift rods attached to the arms, said means for locking the bolt including a plurality of freely rotatable locking disks, means connecting the lift bars to the disks for rotation of the disks in one direction, stop means for limiting the movement by gravity of the disks, said disks being weighted for movement to a position against the stop means, each of said disks having a radial slot therein, a pivotal locking blade misaligned in relation to the slots and mounted for movement into said slots when all the slots are aligned therewith, said locking blade including a portion in locking engagement with the lock bolt when the blade is not positioned in the slots thus preventing retraction of the lock bolt until all of the slots are aligned with the blade, a notched spool disposed alongside said lift bars, a pawl on each lift bar for engagement with the notches in the spool for rotating the spool when one button is depressed whereby the pawls on the other lift bars will produce a clicking noise each time a button is depressed.

2. A push button lock for use in safes comprising a slidable lock bolt, a handle for actuating said bolt, means for locking the bolt in locking position, push button means for releasing the locking means to permit the bolt to be moved to unlocked position, and means actuated by said handle for resetting the bolt lock means in one direction of movement of the handle, said push button means including a plurality of push buttons mounted remotely of the lock bolt, a lifter arm connected to each push button, a lift rod interchangeably connected to each arm, and a lift bar connected to each lift rod, all of said lift rods being equal in length and detachably connected to the arms whereby the sequential combination of depression of the push buttons may be changed by interchanging the ends of the lift rods attached to the arms, said means for locking the bolt including a plurality of freely rotatable locking disks, means connecting the lift bars to the disks for rotation of the disks in one direction, stop means for limiting the movement by gravity of the disks, said disks being weighted for movement to a position against the stop means, each of said disks having a radial slot therein, a pivotal locking blade misaligned in relation to the slots and mounted for movement into said slots when all the slots are aligned therewith, said locking blade including a portion in locking engagement with the lock bolt when the blade is not positioned in the slots thus preventing retraction of the lock bolt until all of the slots are aligned with the blade, a hydraulic piston and cylinder arrangement connected to each push button for snubbing rapidly the movement of the buttons and providing an equal resistance to depression thereof.

3. A push button lock for use in safes comprising a slidable lock bolt, a handle for actuating said bolt, means for locking the bolt in locking position, push button means for releasing the locking means to permit the bolt to be moved to unlocked position, and means actuated by said handle for resetting the bolt lock means in one direction of movement of the handle, said push button means including a plurality of push buttons mounted remotely of the lock bolt, a lifter arm connected to each push button, a lift rod interchangeably connected to each arm, and a lift bar connected to each lift rod, all of said lift rods being equal in length and detachably connected to the arms whereby the sequential combination of depression of the push buttons may be changed by interchanging the ends of the lift rods attached to the arms, said means for locking the bolt including a plurality of freely rotatable locking disks, means connecting the lift bars to the disks for rotation of the disks in one direction, stop means for limiting the movement by gravity of the disks, said disks being weighted for movement to a position against the stop means, each of said disks having a radial slot therein, a pivotal locking blade misaligned in relation to the slots and mounted for movement into said slots when all the slots are aligned therewith, said locking blade including a portion in locking engagement with the lock bolt when the blade is not positioned in the slots thus preventing retraction of the lock bolt until all of the slots are aligned with the blade, a notched spool disposed alongside said lift bars, a pawl on each lift bar for engagement with the notches in the spool for rotating the spool when one button is depressed whereby the pawls on the other lift bars will produce a clicking noise each time a button is depressed, a hydraulic piston and cylinder arrangement connected to each push button for snubbing rapidly the movement of the buttons and providing an equal resistance to depression thereof.

4. A push button combination lock comprising a lock bolt, handle means for actuating said lock bolt, a movable lock member mounted for releasable engagement with said lock bolt for holding the lock bolt in locking position or permitting movement thereof to an unlocking position, and means releasably holding said lock member in engagement with said lock bolt, said means including a plurality of pairs of rotatable disks, one disk of each pair of disks forming a locking disk normally preventing movement of the lock member out of engagement with the lock bolt, the alternate disk of each pair of disks being normally positioned to permit movement of the lock member away from the lock bolt, a plurality of push buttons, and means interconnecting each of the push buttons and the plurality of disks for sequential movement of the locking disks of each pair to a position permitting movement of the lock member away from the lock bolt when the buttons are depressed in proper sequence and for moving the alternate disk of a pair to a position to prevent movement of the lock member away from the lock bolt when the push buttons are depressed in improper sequence, said locking disk of a given pair being interconnected with a locking disk of an adjacent pair with a lost motion connection for imparting a portion of the movement of the given locking disk as it moves from its normal to its release position upon depression of its associated button to the adjacent locking disk whereby the adjacent locking disk is then properly positioned to be moved by depression of its associated button to release position thereby effecting completion of a mechanical connection between the succeeding adjacent locking disk and its associated button only after completion of a mechanical connection between a preceding locking disk and its associated button whereby the mechanical connection will not be completed if an improper sequence of button depression occurs.

5. The combination lock of claim 4 wherein said means includes a plurality of identical rods detachably connected with the push buttons with an identical detachable connection whereby the sequence of depression of the buttons necessary for moving the locking disks to a position permitting the lock member to move away from the lock bolt may be changed by interchanging the rods in relation to the buttons.

6. The combination lock of claim 5 wherein each push button is provided with a hydraulic piston and cylinder cushioning arrangement connected thereto for rapidly snubbing the movement of the buttons and providing an equal resistance to depression thereof.

7. The combination lock of claim 5 wherein the connection between the rods and the push buttons is a ball and socket joint, each rod having a lift bar connected to the lower end thereof for movement therewith, a notch spool disposed alongside each lift bar, a pawl on each lift bar for engagement with the notches in the spool for rotating the spool when one button is depressed whereby the pawls on the other lift bars will produce a clicking noise each time a button is depressed whereby the number of clicks will be the same for each depression of a button regardless of whether the button is depressed in the proper sequence or in the improper sequence.

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