

March 25, 1941.

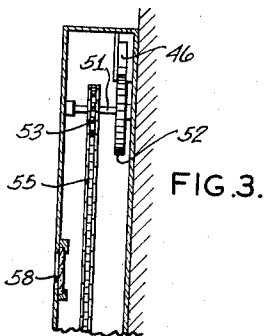
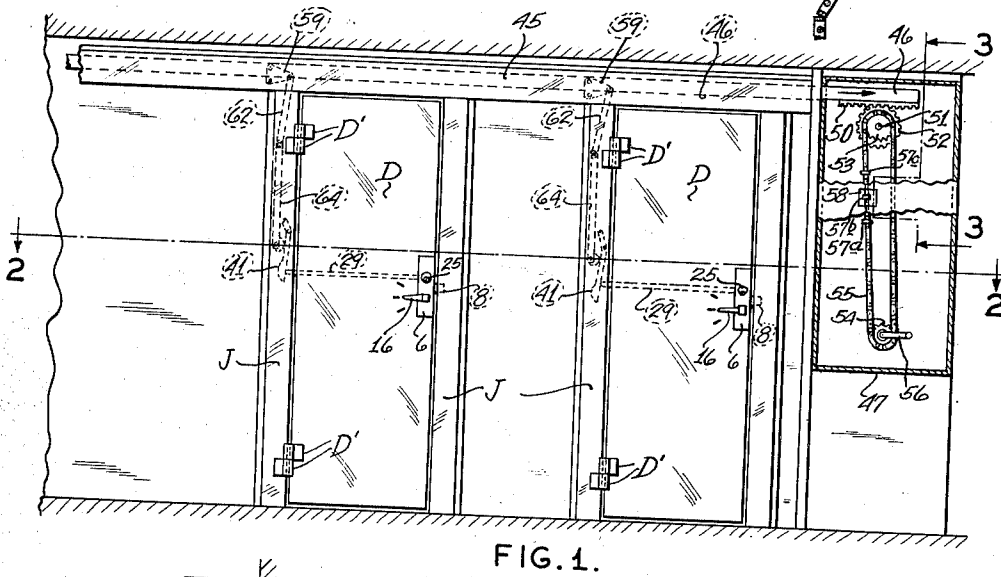
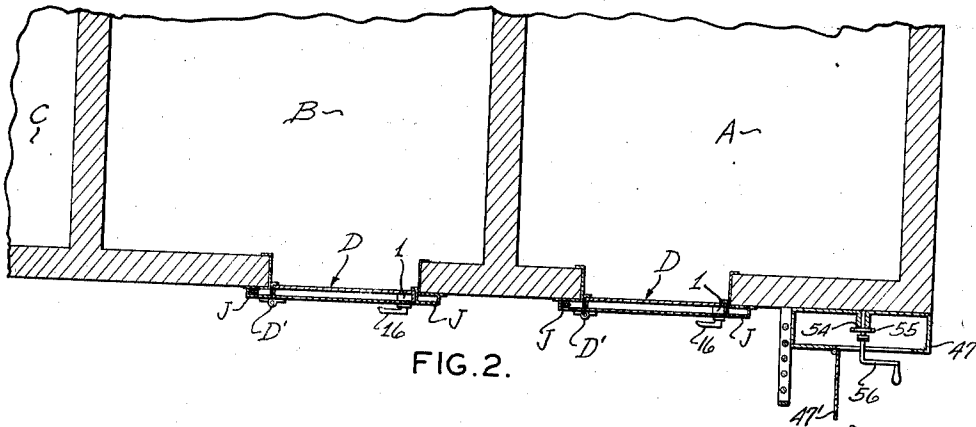
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2,236,043

LOCKING MECHANISM FOR CELL DOORS

Filed May 8, 1940

3 Sheets-Sheet 1



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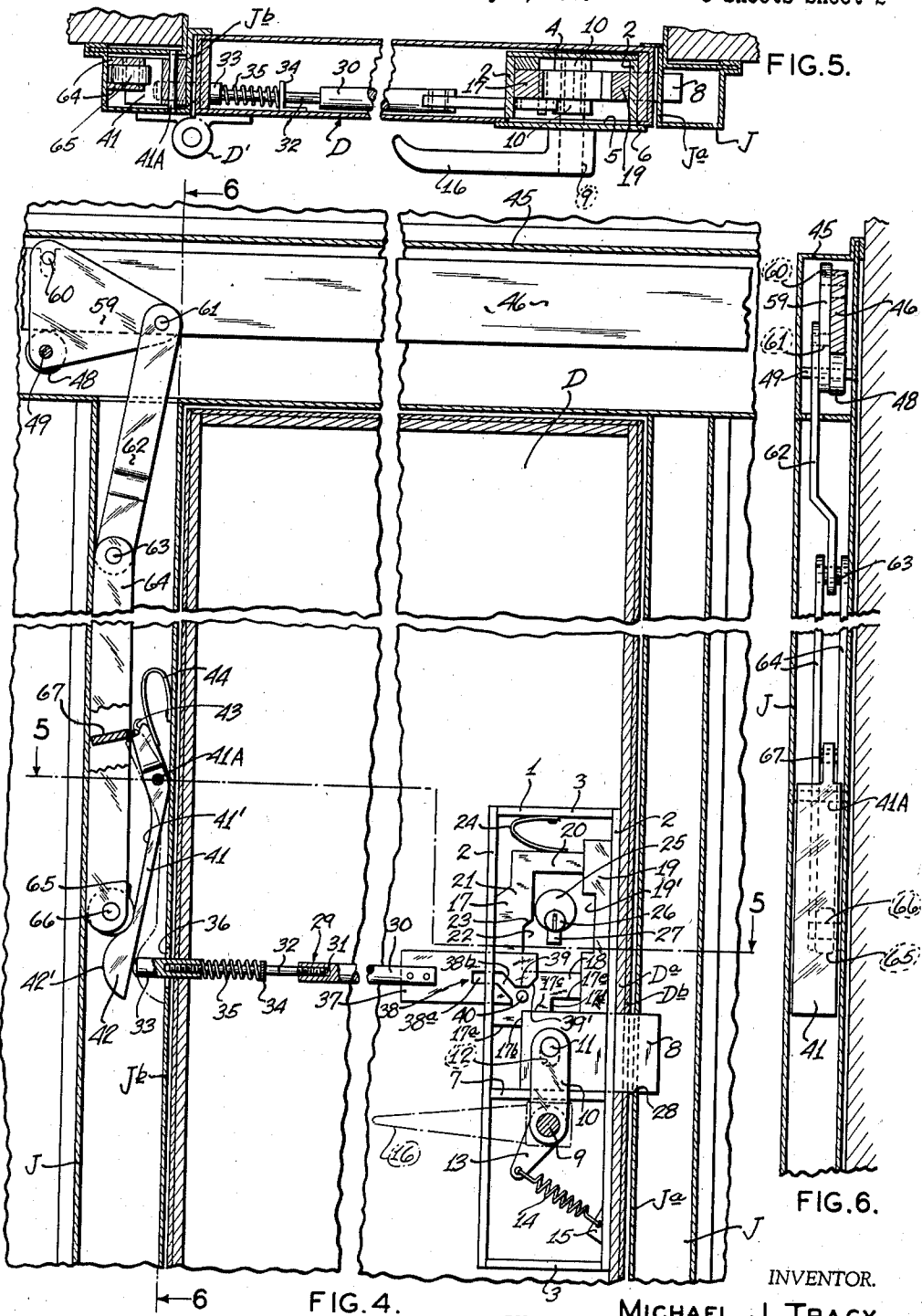
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LOCKING MECHANISM FOR CELL DOORS

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3 Sheets-Sheet 2



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LOCKING MECHANISM FOR CELL DOORS

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3 Sheets-Sheet 3

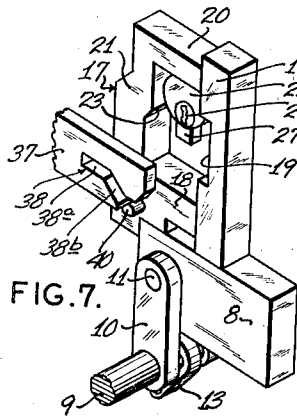


FIG. 7.

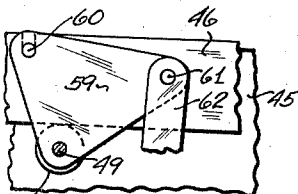


FIG. 8.

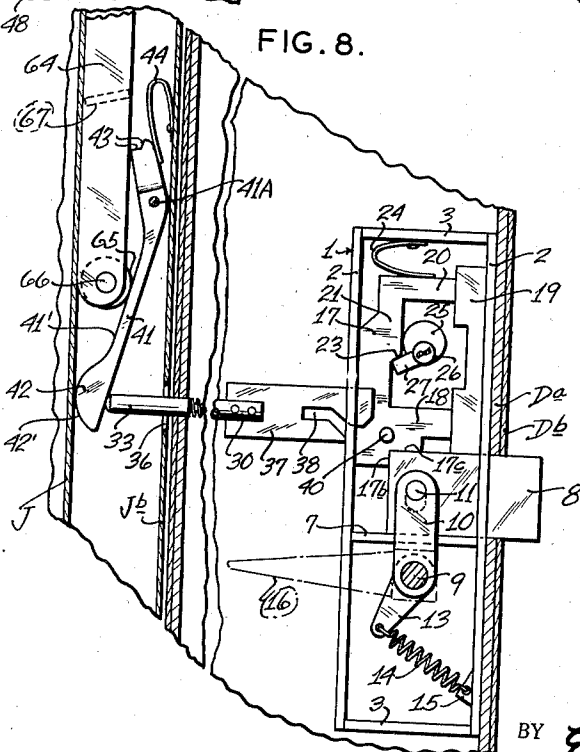


FIG. 9.

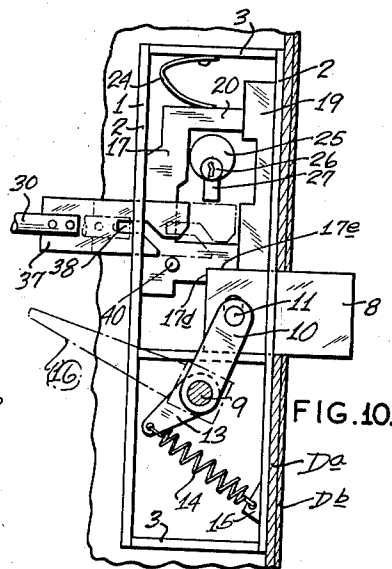


FIG. 10.

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2,236,043

LOCKING MECHANISM FOR CELL DOORS

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Application May 8, 1940, Serial No. 333,893

14 Claims. (Cl. 70—264)

This invention relates generally to locking mechanisms for doors of cells of jails and prisons, and more specifically to improved mechanism for locking cell doors which is capable of such operation that the locking mechanisms of the doors of a group of cells may be operated independently at the respective cell doors or may be gang-operated by remote control, the predominant object of the invention being to provide a locking mechanism of this general description which is of such improved construction and arrangement that it is capable of performing its intended function in an improved and highly efficient manner.

An important feature of this invention is that each door of a group of associated cells is provided with a handle which is cooperatively associated with the locking mechanism of the cell door so that, in addition to providing a hand grip for opening and closing the door, it performs the function of providing means which may be actuated at the cell door for operating the locking mechanism of the door independently of the locking mechanisms of the doors of the other cells of the associated group of cells. Furthermore the handle of each cell door serves as a visual indicator which, by various positions in which the operation of the locking mechanism of the cell door causes it to be disposed, will indicate to a person in authority the condition or position of the locking mechanism of the cell door with which it is associated. Thus a person in authority need only note the position of the handle of the door of a cell to be advised as to the condition of the locking mechanism of the cell door.

Another important feature of the present invention is that the remote control mechanism thereof, which is operable for gang-operation of the locking mechanisms of the doors of a plurality of associated cells, operates through the rear jambs of the cell doors instead of through the front jambs thereof as was usually the case heretofore. Because of this arrangement portions of the remote control mechanism which are located immediately adjacent to the cell doors are rendered inconspicuous and less susceptible to tampering by unauthorized persons.

Still another important feature of the invention is that the keepers associated with the door jambs and which receive the bolts of the locking mechanisms of the cell doors, are complete at all times and are not provided with movable portions which are actuated to open the keepers to permit the forwardly extended bolts of the door locking mechanisms to pass therefrom, as frequently was

the case heretofore. Because of this arrangement a cell door may be unlocked only by withdrawing the bolt to a position where it completely clears the associated keeper.

Yet other important features of the invention are that under certain circumstances the locking mechanisms of individual doors may be operated independently of the remote control mechanism, and under other circumstances locking mechanisms of individual doors may be so set in a dead locked condition that the locking mechanisms of such dead locked doors are not affected by operation of the remote control mechanism. Also the mechanism of the invention is so arranged that under certain circumstances the remote control mechanism is rendered incapable of any effective operation when a door of a cell of a group of associated cells is not in fully closed position.

Fig. 1 is a view partly in front elevation and partly in vertical section showing a plurality of cells having the improved locking mechanism associated therewith.

Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1.

Fig. 3 is a fragmentary vertical section taken on line 3—3 of Fig. 1.

Fig. 4 is an enlarged fragmentary vertical section illustrating the portion of the locking mechanism which is associated with a cell door and a portion of the remote control of the locking mechanism.

Fig. 5 is a horizontal section taken on the staggered line 5—5 of Fig. 4.

Fig. 6 is a vertical section taken on line 6—6 of Fig. 4.

Fig. 7 is a fragmentary perspective of a portion of the locking mechanism which is associated with a cell door, the door not being shown in this view.

Figs. 8 and 9 are fragmentary vertical sections illustrating similar portions of the locking mechanisms in different positions and in positions different from the positions in which said portions of the locking mechanism are shown in Fig. 4.

Fig. 10 is a fragmentary vertical section of the portions of the locking mechanism which are associated with a cell door and showing said portions of the locking mechanism in positions different from the positions of said portions as illustrated in Figs. 4, 8, and 9.

In the drawings, wherein is shown for the purpose of illustration, merely, one embodiment of the invention, A, B, and C designate in Fig. 2 a plurality of associated cells, the cells A and B, as illustrated in Fig. 2, being provided with door

openings which are closed by doors which are designated generally by the reference character D and are supported by suitable hinge members D'. The cells A, B, and C are units of a row of cells which may be made up of any desired number of cells, the cells A, B, and C, merely being illustrated in simplified form so that the operation of the invention may be understood.

Mounted on the door D of each of the cells A and B is a lock housing 1, this lock housing, in the particular embodiment of the invention shown in the drawings, being disposed within the hollow interior of a hollow door with which it is associated. As shown in Figs. 4 and 5 the lock housing 1 is comprised of a pair of spaced, relatively long, vertically disposed walls 2, and shorter top and bottom walls 3, and said lock housing is provided with a rear wall 4. The walls 2, 3, and 4 of the lock housing 1 are suitably secured together to provide a unitary housing structure and this housing structure is suitably secured in place within the door D. An opening 5 (Fig. 5) is formed in the front wall portion of the door D which gives access to the interior of the lock housing 1, and this opening is closed by a cover plate 6 which is suitably secured in place.

Mounted on a support 7 for horizontal movement with respect thereto is a lock bolt 8 which operates through registered openings formed through the outer wall 2 of the lock housing and through outer edge portions Da and Db of the door D. Extended transversely of the lock housing 1 is a rod 9 which is supported for rotary movement in openings formed in the rear wall 4 of the lock housing 1 and in the cover plate 6. The rod 9 has fixed to it a pair of spaced arms 10 which extend upwardly from the rod 9 at opposite sides of the bolt 8, and a pin 11 is fixed at its opposite ends to said arms 10 and extends through a vertically elongated opening 12 formed through the bolt 8. The rod 9 also has fixed to it an arm 13 which extends downwardly therefrom in an angular direction, said arm having attached to its lower end portion an end of a coil spring 14 whose opposite end is attached to a fixed extension 15 formed within the lock housing. An end portion of the rod 9 is projected through the opening in the cover plate 6 in which it is supported so that this rod portion extends a considerable distance beyond said cover plate, and fixedly mounted on the extended portion of the rod 9 is a handle 16. Obviously the handle 16 may be moved in an arc of a circle to move the bolt 8 from its fully retracted, or unlocked, position, shown in Fig. 9, to its partially extended position, shown in Fig. 8, and to its fully extended position, shown in Fig. 10, the coil spring 14 tending at all times to urge the bolt to its retracted position. It is obvious, also, that because the handle 16 is mechanically connected at all times to the bolt 8, said handle will assume different positions when the bolt is in its retracted, partially extended, and fully extended positions. Thus, the handle by its position provides at all times a visual indication as to the position of the bolt.

Supported within the lock housing above the bolt 8 is a locking member 17 which is guided for vertical movement within said lock housing. The locking member is provided at its lower end with a bottom face 17a, an angular recess provided by rectangularly disposed faces 17b and 17c, and a slightly higher angular recess provided by rectangularly disposed faces 17d and 17e. The lower portion of the locking member 17 in which

the angular recesses are formed is in the form of a horizontal bar 18 which contacts at an end thereof with a fixed guiding element 19, and at its upper end the locking member 17 is provided with a similar horizontal bar 20 which likewise contacts at an end thereof with the guiding element 19. The horizontal bars 18 and 20 are joined by a vertical portion 21 of the locking member 17 which is located at one side of said locking member and from which said horizontal bars extend, the inner wall of the vertical portion 21 and the upper and lower faces of the horizontal bars 18 and 20, respectively, defining three sides of a cutout portion or cavity 22 with which the locking member is provided. Additionally the inner face of the vertical portion 21 of the locking member 17 is provided with offset portions which are connected by an inclined face 23, and the guiding element 19 is provided with a recess 19' which is disposed opposite to said inclined face 23. The top wall of the lock housing has fixed thereto a leaf spring 24 which bears against the top face of the locking member 17 and tends to move said locking member downwardly.

A cell door with which parts of the improved locking mechanism is associated supports a key-operated lock structure 25 which may be of any suitable construction and arrangement. The particular lock structure illustrated in the drawings is of the barrel type and is suitably supported by the cell door so that the key-receiving portion of the lock structure is exposed at the outer face of the cover plate 6 as shown in Fig. 1 and so that the barrel of the lock structure is extended into the recess 22 formed in the locking member 17. The lock structure 25 includes a rotatable element 26 on which is fixedly mounted a lug 27. When a proper key is introduced into the key opening of the key structure 25, the rotatable element 26 may be rotated to cause the lug 27 thereon to move in an arc of a circle, and if the locking member 17 is in the position in which it is illustrated in Fig. 8, or in the position in which it is illustrated in Fig. 10, the locking member will be raised by contact of the lug 27 with the inclined face 23 of said locking member against the force exerted thereagainst by the spring 24.

The door opening of a cell, the door D of which has associated with it a portion of the improved locking mechanism disclosed herein, is provided with a door jamb J the front and rear jamb portions of which are of hollow construction as shown to the best advantage in Figs. 4, 5, and 6. The inner wall Ja of the front jamb portion of the door jamb has formed therein an opening 28 (Figs. 4 and 5) which provides a keeper that is adapted to receive the forward portion of the lock bolt 8 to lock the associated door in a closed position.

It is obvious that when the door is in a closed position, and the bolt 8 is in a retracted position, the handle 16 may be grasped and moved upwardly to move the bolt forwardly through the keeper opening 28 to the position in which said bolt is shown in Fig. 8. This is the normal door-locking position of the bolt and when the bolt has reached that position the spring 24 will move the locking member 17 downwardly so that the angular faces 17b and 17c will engage portions of the rear face and the top face of the bolt to lock the bolt in its extended position and prevent retraction of the bolt by the coil spring 14. Also it is obvious that by additional upward movement

of the handle 16 the bolt may be projected an additional distance forwardly through the keeper opening 28 to the position in which said bolt is shown in Fig. 10. This is a dead lock position of the bolt 8 and when said bolt reaches that advanced position the spring 24 will move the locking member 17 downwardly to cause the angular faces 17d and 17e to engage portions of the rear face and the top face of the bolt to lock said bolt in its advanced position and prevent retraction of the bolt by the coil spring 14. As has already been stated herein, a proper key introduced into the lock structure 25 will permit the rotary element 26 of said lock structure to be rotated to cause the lug 27 to engage the inclined face 23 of the locking member 17 to raise said locking member against the force of the spring 24, and thereby release from engagement with portions of the rear face and top face of the bolt the angular faces 17b and 17c, when the bolt is in the normal locking position shown in Fig. 8, or the angular faces 17d and 17e of said locking member 17, when the bolt is in the dead lock position shown in Fig. 10. Such raising of the locking member by operation of the lock structure 25 will result in the bolt 8 being returned to its retracted position, shown in Fig. 9, by the coil spring 14.

Each door of an associated group of cells whose doors have associated therewith the improved locking mechanism disclosed herein, has mounted thereon for horizontal sliding movement a member 29. Each member 29 comprises a rod 30 which at one of its ends is provided with an opening 31 having a screwthreaded wall, said opening receiving the screwthreaded end portion of a rod 32 which is of smaller diameter than the rod 30. At the opposite end of the rod 32 a head 33 of slightly increased diameter, is screwthreadedly attached thereto, said head being extended through aligned openings formed through edge portions of the door D and being supported for sliding movement by the walls thereof. Also the rod 32 is supported by an angular bracket 34 for sliding movement, said angular bracket being secured to the door D, as shown in Fig. 5, and having an opening formed therethrough through which the rod 32 extends. Arranged in embracing relation with respect to a portion of the rod 32 and interposed between a part of the bracket 34 and an adjacent end of the head 33 is a coil spring 35. The coil spring 35 tends to move the rods 30 and 32, and the head 33 to the left in Figs. 4 and 5. Also when the door D is closed the head 33 is extended through an enlarged opening 36 formed through the wall Jb of the rear jamb portion of the door jamb J into the hollow interior of said rear jamb portion (see Fig. 4).

At the end of the rod 30, opposite to the end thereof to which the rod 32 is attached, a flat element 37 is attached to said rod 30. This element extends through an opening formed through the rearmost wall 2 of the lock housing 1 for sliding movement therein. The element 37 has a slot 38 formed therein which includes a horizontal portion 38a and a downwardly inclined portion 38b, the horizontal portion of the slot being closed at its rear end and the forward end of the inclined slot portion being open at its forward end. The element 37 is provided with a flat face 39 which is located in a raised position with respect to the lower edge of said element and immediately in advance of the open forward end of the inclined portion of the slot 38. The

flat face 39 is joined at one of its ends by the upper wall of the inclined portion of the slot 38 and at its opposite end by an inclined face 39' which leads from said flat face 39 to the forward edge of the element 37. The locking member 17 associated with each cell door of a group of cell doors with which the improved locking mechanism is associated has fixed thereto and extended therefrom a pin 40 which is adapted to cooperate with the slot 38 of the associated element 37 in a manner and for a purpose to be hereinafter set forth.

Disposed within the hollow rear portion of the door jamb of each cell of a plurality of cells whose doors have the improved locking mechanism associated therewith is a member 41. Each member 41 is supported for pivotal movement by a pivot pin 41a which extends through an opening formed through the member and is supported at its opposite ends in openings formed in opposed walls of the hollow rear portion of the door jamb. Each member 41 is shaped in side elevation as shown in Figs. 4, 5, 6, 8, and 9; that is to say each member includes a substantially straight lower portion which has formed at its lower end a thickened portion 42 on which is formed a curved face 42' which merges into a straight face 41' of the member. The upper portion of the member 41 is extended at an angle with respect to the lower portion thereof, and the upper end of this angular upper portion of the member 41 is provided with angular faces 43 that produce a latch portion. Also each member 41 has associated therewith a leaf spring 44, one end portion of which is fixed to the wall Jb of the rear portion of the door jamb and the other free end of which contacts with the upper portion of the member 41. Obviously the leaf spring 44 tends to move the upper portion of the associated member 41 rearwardly and the lower portion thereof forwardly, or toward the wall Jb.

Arranged above all of a row of cells with which the improved door locking mechanism is associated is a hollow housing 45, in which is supported a horizontally disposed bar 46. The bar 46 is extended throughout the row of cells with which the improved door locking mechanism is associated, and said bar extends from an end of said housing 45 into a remote control housing 47 located at one end of the row of cells (Figs. 1 and 2). The bar 46 is supported for horizontal sliding movement on rollers 48 which are mounted for rotation on pins 49 that are fixedly supported at their opposite ends in apertures formed in opposed wall portions of the housing 45 (Fig. 5).

By referring to Fig. 1 of the drawings it will be noted that the portion of the bar 46 which is extended into the remote control housing 47 has fixed to, or formed on, its lower face a rack 50, and mounted within the remote control housing 47 on a suitably supported shaft 51 is a pinion 52, the teeth of which mesh with the teeth of the rack. Mounted on the shaft 51 is a sprocket wheel 53, and supported for rotary movement within the lower portion of the remote control housing 47 is a second sprocket wheel 54. Arranged for operation over the sprocket wheels 53 and 54 is a sprocket chain 55, and associated with the sprocket wheel 54 is a removable crank 56 which may be turned to rotate the sprocket wheel 54 and thereby transmit rotary movement to the sprocket wheel 53 through operation of the sprocket chain 55. Such rotation of the sprocket wheel 53 will impart like rotary move-

ment to the shaft 51 and the pinion 52 with the result that the bar will be moved horizontally in one or the opposite direction, depending on the direction of rotation of the crank 56. The sprocket chain 55 has fixed thereto a plurality of indicating elements 57a, 57b and 57c which, as the sprocket chain is operated, move into alinement with a glass covered sight opening 58 in the front wall of the remote control housing 47. These indicating elements indicate to an operator of the remote control mechanism the position of said remote control mechanism. Also the remote control housing 47 is provided with a hinged door 47' which may be key-locked to prevent access to the remote control mechanism by unauthorized persons.

Each pin 49 on which a roller 48 is mounted is located adjacent to the upper end of the hollow rear portion of the door jamb of a cell of a group of cells with which the improved door locking mechanism is associated, and supported by each of said pins for pivotal movement with respect thereto is an element 59 (Figs. 4, 6, 8, and 9). Each element 59 has fixed thereto and extended rearwardly therefrom a pin 60. The pin 60 of each element 59 is seated in a notch formed in the upper portion of the bar 46, said notches being open at the top edge of said bar. Also each element 59 has pivotally attached thereto at an end thereof, by means of a pivot element 61, the upper end portion of a link 62, the opposite, or lower end portion of the link 62 being pivotally attached by means of a pivot 63 a pair of spaced vertically disposed bars 64. The links are each extended downwardly from the element 59 to which it is attached into the hollow rear portion of the door jamb of a cell and each pair of spaced bars 64 are located within the rear hollow portion of the door jamb of a cell (see Fig. 4). Also at the lower ends of each pair of spaced bars 64 a roller 65 is supported therebetween for rotation on a pin 66 which is supported by the lower end portions of the spaced bars and extends therebetween. As will presently appear herein, the roller 65 associated with each pair of spaced bars 64 is adapted during operation of the remote control mechanism of the improved door locking mechanism to ride against and actuate the associated member 41. Additionally each pair of spaced bars 64 is joined by a short, rigidly disposed, transverse bar 67 which is arranged in a slightly inclined position. The transverse bar 67 of each pair of bars 64 is adapted to be engaged by the latch portion, provided at the upper portion of the associated member 41 by the angular faces 43, to prevent operation of the remote control mechanism when the door of one of the cells of a group of cells, with which the improved door locking mechanism is associated, is in an open condition.

In the operation of the improved locking mechanism disclosed herein doors of a group of cells with which the improved locking mechanism is associated, may be individually locked at the doors by rotating the handles 16 of the doors, as has been previously explained herein, to move the lock bolts 8 of such doors to the normal locking position in which the bolt is illustrated in Fig. 4. Also, as has been previously explained herein, the bolts so moved to the normal locking position may be retracted to the unlocked position by use of a proper key in association with the lock structures 25 of the doors so as to raise the locking member 17 and permit the coil

springs 14 to move the lock bolts to their retracted position.

Assume, now, that the doors of a group of associated cells have been locked in a closed position by having the lock bolts thereof moved to the normal locking position, and it is desired to unlock all of the doors so locked by gang operation of the remote control mechanism of the improved locking mechanism. This is accomplished by rotating the crank 56 to move the bar 46 in the direction indicated by the arrow in Fig. 1, and as a result of such movement of said bar 46 the elements 59 will be pivoted about the pins 49 and the links 62 and spaced bars 64 will be moved downwardly within the hollow rear portions of the door jambs of the cells. The rollers 65 at the lower ends of the spaced bars 64 contact with the faces 41' of the pivoted members 41 during downward movement of said spaced bars with the result that the lower end portions of the members 41 are cammed toward the walls 7b of the rear portions of the door jambs, and because the heads 33 contact with said members 41 the members 29 of which the heads form parts are moved forwardly toward the lock housings 1 of the cell doors. As the elements 37 at the forward ends of the members 29 move forwardly as described the walls of the inclined portions 38b of the slots 38 of said elements engage the pins 40 extended from the locking members 17 with the result that all of the locking members 17 are cammed upwardly, against the force exerted by the springs 24, to disengage the angular faces 17b and 17c from the lock bolts 8 and permit said lock bolts to be simultaneously moved to their retracted and unlocked positions by the coil springs 14, as shown in Fig. 9.

It frequently happens that it is desired to maintain a certain cell door, or certain cell doors, of a group of associated cells in a locked condition when the doors of the remaining cells of the group are unlocked by gang operation. This may be accomplished in the use of the improved locking mechanism disclosed herein by moving the lock bolts 8 of the selected cell or cells to the dead locked position shown in Fig. 10, by operation of the handles 16 of the selected door or doors as has been previously explained, before the gang operation is performed. By so dead locking the selected door or doors the locking members 17 of said doors are positioned in such lowered position that the elements 37 of the members 29 will move above the pins 40 of said locking members, as shown in Fig. 10, without subjecting such lowered locking members to movement. Obviously the cell doors of the group of cells which are in the normal locked position will be unlocked during forward movement of the members 29 as has been previously explained.

In the use of the improved locking mechanism disclosed herein all the doors of a group of cells with which the locking mechanism is associated may be gang dead locked by operation of the remote control mechanism of the locking mechanism. This is accomplished by rotating the crank 56 to bring the elements 37 of the members 29 to the position shown in Figs. 4 and 7 where the faces 39 of said elements 37 are positioned above, and in vertical alinement with, the pins 40 of the locking members 17. When the faces 39 of the elements 37 are so positioned the doors of the cells may not be unlocked even by use of a proper key in association with the lock structures 25, because the pins 40 will contact with

the faces 39 of the elements 37 and prevent the required upward movement of the locking members 17 to free the angular faces 17b and 17c from the lock bolts 8.

5 When a door of a group of cells with which the improved locking mechanism is associated is in an open condition the head 33 of the member 29 supported by said door will not extend through the opening 36 in the wall 7b of the rear portion of the associated door jamb, as said head is withdrawn from said opening when the door swings on its hinges to the open condition. Also, when a door is in an open condition the pivoted member 41 associated with the door, because of the action of the associated spring 44, is in the position shown in Fig. 9, where the latch provided by the angular faces 43 at the upper end of the member 41 is in the vertical line of travel of the transverse bar 67 of the associated spaced bars 64. Because of this situation any attempt to operate the remote control mechanism with a door open will result in the entire remote control mechanism being locked, as the spaced bars 64 associated with the open cell door, moving downwardly from the elevated starting position of said spaced bars will be engaged by the angular faces 43 of the members 41 associated with said open door to lock the remote control mechanism until the open cell door is closed. Closing of the cell door will cause the head 33 of the member 29 to move the lower end portion of the member 41 inwardly whereby the upper end portion of said member 41 will be withdrawn out of the path of travel of the transverse bar 67 of the spaced bars 64.

35 The indicator 57a fixed to the sprocket chain 55, when positioned at the sight opening 58 indicates that the remote control mechanism is in its neutral, or starting position, where the pairs of spaced bars 64 associated with the various cell doors are in their elevated and non-effective positions. The indicator 57b when visible at the sight opening indicates that the remote control mechanism is in the gang dead locking position illustrated in Figs. 4 and 7, and when the indicator 57c is visible at the sight opening 58 the remote control mechanism is in the gang unlocking position illustrated in Fig. 9. If desired the indicators 57a, 57b, and 57c may bear suitable identifying indicia so that an operator may be readily advised as to the position of the remote control mechanism. Also, if desired the cover plates 6 at the doors of the various cells may have displayed thereon indicia which would indicate the positions of the lock bolts 8 when the handles are in different positions.

I claim:

1. A locking mechanism for cell doors, comprising a lock bolt, a handle cooperatively associated with said lock bolt and adapted to be actuated to move said lock bolt to a plurality of projected locking positions, locking means provided with a plurality of bolt-engaging portions which are adapted to engage said lock bolt to lock same in any one of a plurality of projected locking positions, and means for releasing said lock bolt from said locking means for movement to a retracted position.

2. A locking mechanism for cell doors, comprising a lock bolt, a handle cooperatively associated with said lock bolt and adapted to be actuated to move said lock bolt to a plurality of projected locking positions, locking means provided with a plurality of bolt-engaging portions which are adapted to engage said lock bolt to lock

same in any one of a plurality of projected locking positions, and key-actuated means for releasing said lock bolt from said locking means for movement to a retracted position.

3. A locking mechanism for cell doors, comprising a lock bolt, a handle cooperatively associated with said lock bolt and adapted to be actuated to move said lock bolt to a plurality of projected locking positions, locking means supported for movement at an angle to the direction of movement of said lock bolt and provided with a plurality of bolt-engaging portions which are adapted to engage said lock bolt to lock same in any one of a plurality of projected locking positions to which it is moved by said handle, and means for moving said locking means so as to release said lock bolt from said locking means for movement to a retracted position.

4. A locking mechanism for cell doors, comprising a lock bolt, a handle cooperatively associated with said lock bolt and adapted to be actuated to move said lock bolt to a plurality of projected locking positions, locking means supported for movement at an angle to the direction of movement of said lock bolt and provided with a plurality of bolt-engaging portions which are adapted to engage said lock bolt to lock same in any one of a plurality of projected locking positions to which it is moved by said handle, and key-actuated means for moving said locking means so as to release said lock bolt from said locking means for movement to a retracted position.

5. A locking mechanism for cell doors, comprising a lock bolt, a handle cooperatively associated with said lock bolt and adapted to be actuated to move said lock bolt to a plurality of projected locking positions, locking means supported for movement at an angle to the direction of movement of said lock bolt and provided with a plurality of bolt-engaging portions which are adapted to engage said lock bolt to lock same in any one of a plurality of projected locking positions to which it is moved by said handle, and key-actuated means for moving said locking means so as to release said lock bolt from said locking means for movement to a retracted position, the cooperative association of said handle with said lock bolt being such that said handle assumes different maintained positions when the lock bolt is in different positions.

6. A locking mechanism for cell doors, comprising a lock bolt movable to a projected locking position, locking means for locking said lock bolt in its projected locking position, and remote control mechanism for releasing said lock bolt for movement to a retracted position, said remote control mechanism including as a part thereof a bolt-releasing member which is operated from the hinged side of a door with which the locking mechanism is associated.

7. A locking mechanism for a cell door which is associated with a door jamb having a hollow rear portion, comprising a lock bolt movable to a projected locking position, locking means for locking said lock bolt in its projected locking position, and remote control mechanism for releasing said lock bolt from its projected locking position for movement to its retracted unlocked position, said remote control mechanism including a member supported by the door for movement with respect thereto and having an end portion which extends through an opening in a wall of the hollow rear portion of the door jamb into the hollow interior of said rear portion of

said door jamb, and means supported for movement within the hollow interior of the rear portion of said door jamb for subjecting said member to movement which releases said lock bolt for movement from its projected locking position to its retracted unlocked position.

8. A locking mechanism for a cell door which is associated with a door jamb having a hollow rear portion, comprising a lock bolt movable to a projected locking position, locking means for locking said lock bolt in its projected locking position, and remote control mechanism for releasing said lock bolt from its projected locking position for movement to its retracted unlocked position, said remote control mechanism including a member supported by the door for movement with respect thereto and having an end portion which extends through an opening in a wall of the hollow rear portion of the door jamb into the hollow interior of said rear portion of said door jamb, means supported for movement within the hollow interior of the rear portion of said door jamb for subjecting said member to movement which releases said lock bolt for movement from its projected locking position to its retracted unlocked position, and means operable from a remote position for actuating the movable means within the hollow rear portion of the door jamb.

9. In combination with a cell door associated with a door jamb having a hollow rear portion at which the door is hinged, a locking mechanism for said door comprising a lock bolt movable from a retracted unlocked position to a projected locking position, a movable locking member adapted to engage and lock said lock bolt in its projected locking position, and remote control mechanism for releasing said lock bolt from said locking member for movement to its retracted unlocked position, said remote control mechanism including a member supported by the door for movement with respect thereto and having an end portion which is adapted to extend through an opening in a wall of the hollow rear portion of the door jamb into the hollow interior thereof, means adapted for movement within the hollow interior of the rear portion of the door jamb for subjecting said door-supported member to movement, means for transmitting movement from said door-supported member to said locking member, and means operable from a remote point for subjecting the movable means within the hollow rear portion of the door jamb to movement.

10. In combination with a cell door associated with a door jamb having a hollow rear portion at which the door is hinged, a locking mechanism for said door comprising a lock bolt movable from a retracted unlocked position to a projected locking position, a handle cooperatively associated with said lock bolt and adapted to be actuated to move said lock bolt to a projected locking position, a movable locking member adapted to engage and lock said lock bolt in its projected locking position, and remote control mechanism for releasing said lock bolt from said locking member for movement to its retracted unlocked position, said remote control mechanism including a member supported by the door for movement with respect thereto and having an end portion which is adapted to extend through an opening in a wall of the hollow rear portion of the door jamb into the hollow interior thereof, means adapted for movement within the hollow interior of the rear portion of the door jamb for subjecting said door-supported member to movement, means for transmitting movement from said door-supported

member to said locking member, and means operable from a remote point for subjecting the movable means within the hollow rear portion of the door jamb to movement.

11. In combination with a cell door associated with a door jamb having a hollow rear portion at which the door is hinged, a locking mechanism for said door comprising a lock bolt movable from a retracted unlocked position to a projected locking position, a handle cooperatively associated with said lock bolt and adapted to be actuated to move said lock bolt to a projected locking position, a movable locking member adapted to engage and lock said lock bolt in its projected locking position, key-actuated means at the door for moving said locking member so as to release said lock bolt therefrom for movement to its retracted unlocked position, and remote control mechanism for releasing said lock bolt from said locking member for movement to its retracted unlocked position, said remote control mechanism including a member supported by the door for movement with respect thereto and having an end portion which is adapted to extend through an opening in a wall of the hollow rear portion of the door jamb into the hollow interior thereof, means adapted for movement within the hollow interior of the rear portion of the door jamb for subjecting said door-supported member to movement, means for transmitting movement from said door-supported member to said locking member, and means operable from a remote point for subjecting the movable means within the hollow rear portion of the door jamb to movement.

12. In combination with a cell door associated with a door jamb having a hollow rear portion at which the door is hinged, a locking mechanism for said door comprising a lock bolt movable from a retracted unlocked position to a projected locking position, a handle cooperatively associated with said lock bolt and adapted to be actuated to move said lock bolt to a projected locking position, a movable locking member adapted to engage and lock said lock bolt in its projected locking position, key-actuated means at the door for moving said locking member so as to release said lock bolt therefrom for movement to its retracted unlocked position, and remote control mechanism for releasing said lock bolt from said locking member for movement to its retracted unlocked position, said remote control mechanism including a member supported by the door for movement with respect thereto and having an end portion which is adapted to extend through an opening in a wall of the hollow rear portion of the door jamb into the hollow interior thereof, means adapted for movement within the hollow interior of the rear portion of the door jamb for subjecting said door-supported member to movement, means for transmitting movement from said door-supported member to said locking member, and means operable from a remote point for subjecting the movable means within the hollow rear portion of the door jamb to movement, said means adapted for movement within the hollow rear portion of the door jamb including a portion adapted to lock the remote control mechanism against operation when the cell door is in an open position.

13. In combination with a plurality of cell doors, a locking mechanism comprising a lock bolt associated with each of the cell doors and movable from retracted unlocked positions to a plurality of projected locking positions, a handle cooperatively associated with the lock bolt

of each door and adapted to move the associated lock bolt to a plurality of projected locking positions, a movable locking member associated with the lock bolt of each door and provided with a plurality of bolt-engaging portions which are adapted to engage the associated lock bolt to lock same in any one of a plurality of projected locking positions, means at the doors for moving the locking member of each door so as to release the associated lock bolt therefrom for movement to its retracted unlocked position, and remote control mechanism for simultaneously releasing the lock bolts of the plurality of cell doors from the associated locking members of the doors for movement to their retracted unlocked positions when said lock bolts are in predetermined projected locking positions, said remote control mechanism including members supported by the cell doors for movement with respect thereto and adapted to engage engageable portions of the movable locking members of the doors so as to subject said movable locking members to bolt-releasing movement, said engageable portions of said movable locking members being out of position for engagement by said door-supported members when the lock bolts are in projected locking positions other than said predetermined projected locking positions.

14. In combination with a plurality of cell doors, a locking mechanism comprising a lock bolt associated with each of the cell doors and movable from retracted unlocked position to a

plurality of projected locking positions, a handle cooperatively associated with the lock bolt of each door and adapted to move the associated lock bolt to a plurality of projected locking positions, a movable locking member associated with the lock bolt of each door and provided with a plurality of bolt-engaging portions which are adapted to engage the associated lock bolt to lock same in any one of a plurality of projected locking positions, key-actuated means at the doors for moving the locking member of each door so as to release the associated lock bolt therefrom for movement to its retracted unlocked position, and remote control mechanism for simultaneously releasing the lock bolts of the plurality of cell doors from the associated locking members of the doors for movement to their retracted unlocked positions when said lock bolts are in predetermined projected locking positions, said remote control mechanism including members supported by the cell doors for movement with respect thereto and adapted to engage engageable portions of the movable locking members of the doors so as to subject said movable locking members to bolt-releasing movement, said engageable portions of said movable locking members being out of position for engagement by said door-supported members when the lock bolts are in projected locking positions other than said predetermined projected locking positions.

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