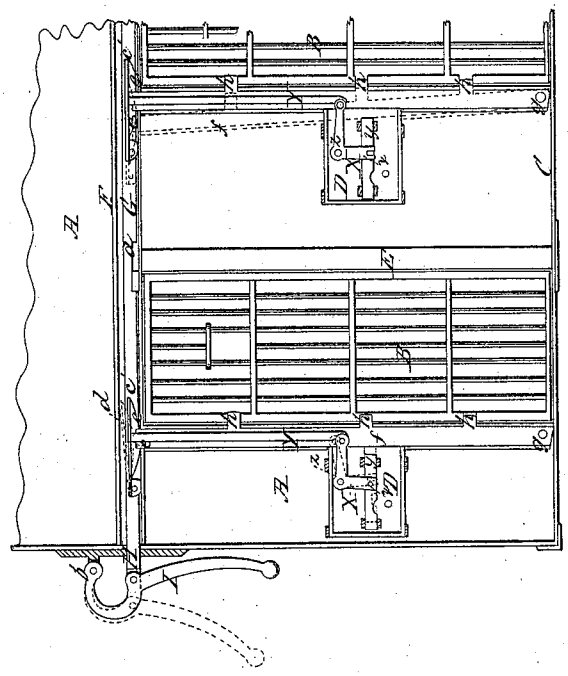
E. Jacobs,

Lock,

No. 43,915, Patented Aug. 23, 1864.

Fig. 2.



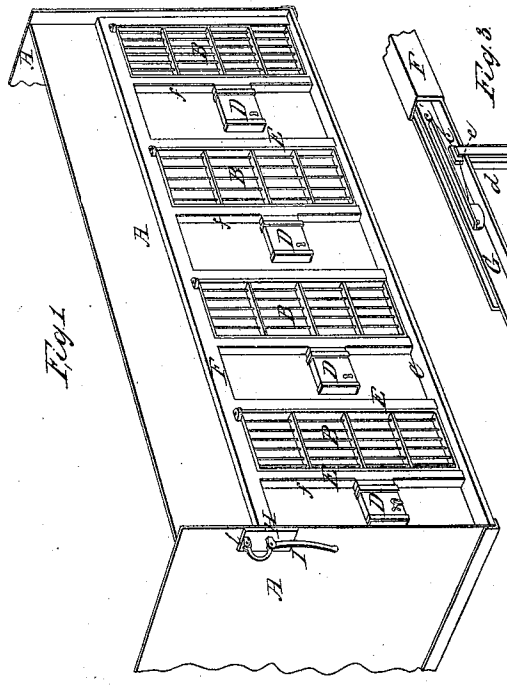


Fig. 1.

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

ENOCH JACOBS, OF CINCINNATI, OHIO.

IMPROVED LOCK FOR JAIL-DOORS.

Specification forming part of Letters Patent No. **43,915**, dated August 23, 1864; antedated October 19, 1861.

To all whom it may concern:

Be it known that I, E. JACOBS, of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Fasteners for Jail-Doors; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and letters of reference marked thereon, which form part of this specification.

My invention relates to the manner of opening the door of any particular cell by the turnkey while in a part of the jail comparatively remote therefrom and out of sight of the prisoner; and it consists of certain concealed bar, clutches, or dogs, bolts, &c., in addition to the lock belonging to each cell-door, all of which will be described hereinafter.

In order that others duly skilled may be enabled to understand and construct and use my invention, I shall proceed to describe it in detail.

In the accompanying drawings, Figure 1 is a perspective view of a series of cell-doors and their separate locks, having the arrangement which constitutes my invention attached. Fig. 2 is an elevation of two of the same cell-doors, showing the details and operation of locks and concealed bar, dogs, &c. Fig. 3 is a perspective view of a portion of concealed bar, dog, and bolt from lock laid open by the removal of iron casing.

Like letters of reference designate like parts in all the drawings.

A A A are the walls of the cells. B B B B are the grated doors. C is the sill of doors, forming also the floor of cells. D D D D are the locks, one to each cell-door. The locks are not, however, placed on the cell-doors, but on the wall to the left or right thereof and contiguous thereto, and thus, being placed out of sight and out of reach of the prisoner, there is no chance of his tampering therewith. The internal construction of locks will be described further on in this specification.

The jambs of doors E E are formed of double-angle iron, riveted or otherwise secured to the walls of cells; and the heads of doors are formed by F, an iron box or trough, also of double-angle iron, running along the whole length of corridor, properly fastened to walls by rivets or otherwise, and projecting as far as the jambs E E. Within this trough F the bar G is contained and concealed, running the whole length of the corridor whereon the doors open which are to be connected together and projecting through the end or cross wall, as shown at H, Figs. 1 and 2. The bar G is simply one of connection, and therefore may be straight throughout, except in any parts destined to slide over projections, in which case it may be cut out, as at *a*, Fig. 2. I is a bent lever hinged at *b* and attached to projecting extremity of bar G, for the purpose of moving it back and forward in trough F. This is done by the operator when outside of jail and out of sight of the prisoners in cell. The cell-doors are hinged at top and bottom to proper stanchions, and are strengthened when locked by bolts in the hanging rail, which, when the door is closed, pass through apertures in the jamb in the same manner as the bolts of a lock. The object of inclosing bar G and pawl-clutches or dogs *c* in trough F is concealment and protection from tampering by the prisoners when walking in the corridors.

To the bar G several pawl-clutches or dogs, *c c c*, (one to each cell-door,) are attached in such position that when said bar is pushed into its casing fully and the cell-doors are locked the square notch *d* in lower edge of each dog comes over and clutches the upper end, *e*, of swing-bar *f*. This swing-bar is ⊤-shaped in section, is pivoted or hinged at *g*, near the lower end of jamb E, and carries three or more bolts, *h h h*, which, shooting into mortises in lock-rail of cell-doors, lock the same. By drawing out the bar G by lever I the swinging bars *f* of the whole number of doors will be drawn back and all the doors opened. By means of an attachment to locks, now to be described, the clutches or dogs *c* to each or any cell-door is thrown off the end of swinging bar *f*, and thus, when the bar G is drawn back, the door is yet left locked. Thus only one cell-door may be opened by means of the bar G, or any required number, or all of them at once. Here it is proper to describe the construction of clutches or dogs *c*. The cross-section of dog is ⅂ thus, the vertical part form-

ing the effective clutch, and the horizontal flange being caught by the vertical bolt or bar Y for lifting it from swing-bar *f*.

The locks D may be constructed in any manner, so far as regards the wards, tumblers, &c. Additional to the works of lock proper, an elbow, X, is provided, pivoted at *z*, and being connected with the bolt *y* by means of a projecting pin, *x*. A vertical bar, Y, hinged on elbow X at *w*, passes up the jamb of door alongside of swinging bar *f*. When the bolt of lock D is drawn back, the upper extremity of bar Y is level with top of swinging bar *f*, but when the bolt of the lock is shot out against back of swing-bar *f* the upper extremity of bar Y is pushed up, and, striking against the flange *c'* of dog or clutch *c*, lifts it above the top of swing bar *f*. If, now, the bar G is drawn back, it will not affect the swing-bar *f*, thus relieved of clutch, and therefore will not open the cell-door. As soon, however, as the bolt of any given lock is drawn back or opened fromthe back of swing bar *f*, the clutch or dog *c* is permitted to fall down on top of said swing-bar *f*, and then by drawing out bar G the swing-bar *f* will be drawn back and the door opened.

Having described my invention, I desire to disclaim the swinging bars *f* and the longitudinal bar G, apart from their use in combination with the pawls, clutches, or dogs *c*, as the same are set forth in my patent of November 15, 1859; but

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the longitudinal sliding bar G, swinging bars *f*, and clutches or dogs *c*, the latter so constructed and arranged as to operate the swinging bars *f* or to be separately disengaged from the same, substantially as and in the manner and for the purpose set forth.

2. The combination of the elbow X and vertical bar Y with the pawl-clutches or dogs *c*, by which the latter, or either of them, may be disengaged from its respective swing-bar *f*, permitting any number of cells to be opened by the movement of the longitudinal bar G while the rest remain locked, as set forth.

3. Operating the clutches or dogs by the same key which operates the lock-bolt and simultaneously therewith, substantially in the manner described.

4. Inclosing the bar G and pawl-clutches or dogs *c* in the casing F, for the purpose set forth.

ENOCH JACOBS.

Witnesses:
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