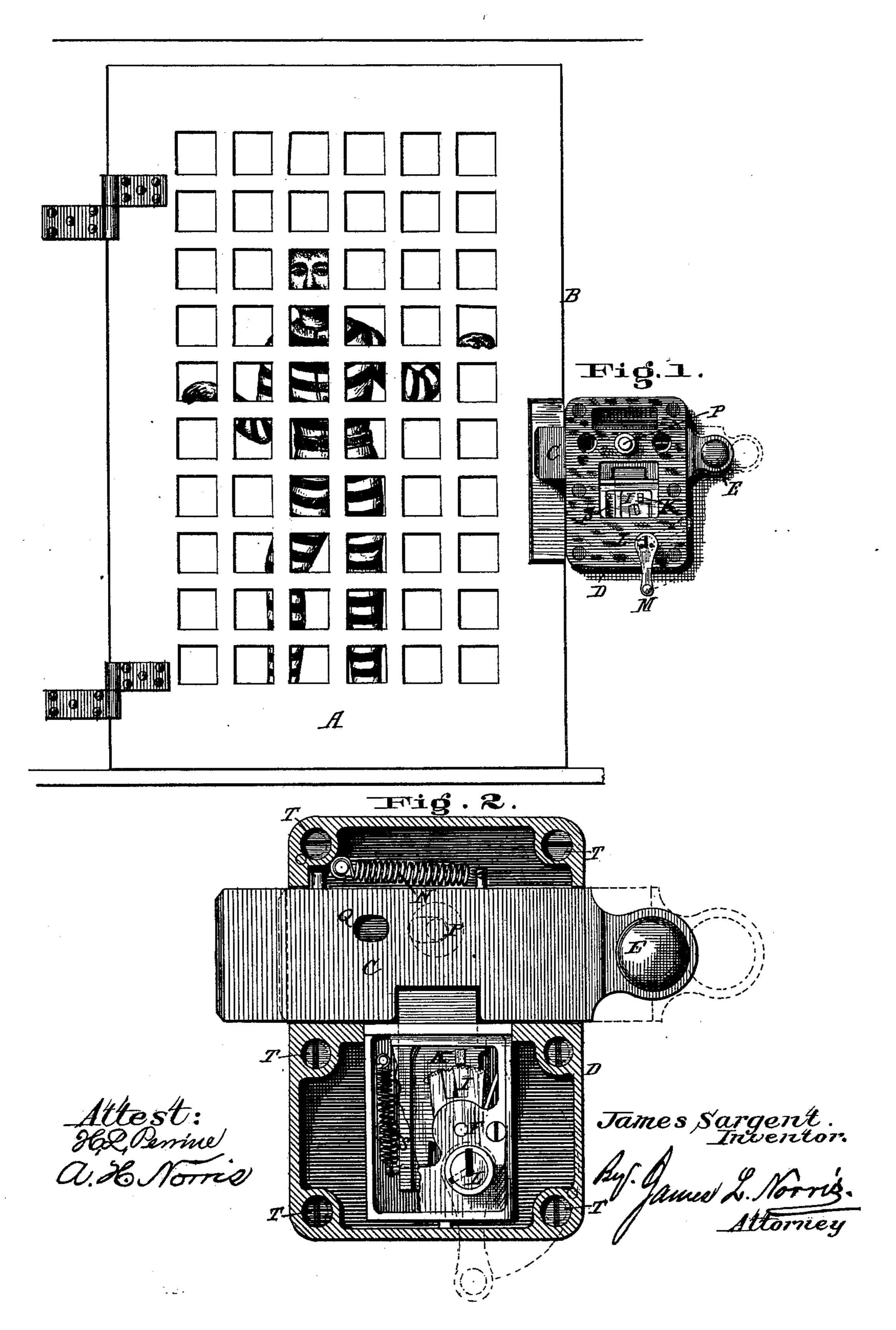
J. SARGENT.

LOCKS FOR CELL DOORS.

No. 190,627.

Patented May 8, 1877.



UNITED STATES PATENT OFFICE.

JAMES SARGENT, OF ROCHESTER, NEW YORK.

MPROVEMENT IN LOCKS FOR CELL-DOORS.

Specification forming part of Letters Patent No. 190,627, dated May 8, 1877; application filed February 5, 1877.

To all whom it may concern:

Be it known that I, James Sargent, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Locks for Cell-Doors, of which the following is a specification:

This invention relates to certain improvements in cell-door locks for prisons, its principal object being to provide a lock in which the bolt which secures the door may be held in a retracted position when unlocked, and automatically projected into a locked position

The invention consists in the combination, with the main spring-bolt of a lock for cell or other doors, adapted to be held in a retracted position by means of a dog, pawl, or catch, and be released by the action of the door in riding past the end of said bolt, of a tumbler-lock having a spring-bolt which, when locked, connects with and holds the main bolt in a locked condition, and when unlocked admits of the main bolt being retracted, as more fully hereinafter set forth.

In the drawings, Figure 1 represents a view of a prison cell-door, showing my improved lock attached to the jamb of the door, with the bolts in a locked position, and Fig. 2 represents an enlarged view of the lock detached, having its face or front removed to show the interior of the lock.

The letter A represents the cell-door opening outwardly, and B the jamb or framing thereof. C represents the main bolt of the lock, constructed and arranged to slide back and forth in a casing, D, or other suitable support secured to the jamb or frame of the door, in such position that the front end of the bolt will project over the edge of the door, and securely hold it when the bolt is projected forward into a locked position, the rear end of said bolt, or other convenient portion of the same, being provided with a knob or handle, E, by means of which it may be retracted.

The letter F represents a supplemental lock arranged in such relation to the main bolt C that when the bolt is projected forward it will dog and lock the said main bolt and securely hold it in position, the main bolt being provided with a recess in its under side, into

which the end of the bolt of the supplementary lock projects for the purpose. Said supplementary lock is constructed with a series of tumblers, I, operated by the key which operates the bolt, said tumblers being serrated at their free ends, and slotted outwardly for the passage of the fence K when said tumblers are all in line, the edge of the fence adjoining the tumblers being also serrated, preferably in an opposite direction to the serrations on the edges of the tumblers to secure the lock against picking. To the outer end of the key-hub L, which turns with the key, is secured a lever, M, by means of which the bolt and tumblers may be more conveniently operated and held in an unlocked position while retracting the main bolt.

In order to automatically lock the main bolt by the act of closing the door, the said bolt is provided with a spring, N, one end of which is secured to the bolt and the other to the casing or support of said bolt, and a dog, pawl, or catch P, which is adapted to catch and hold the main bolt in a retracted position, is arranged to enter a recess, Q, formed in the bolt, being held therein by the forward pressure of the main bolt. The said dog, pawl, or catch is so constructed and arranged as to hold the main bolt in its retracted position only when said bolt is pressed forward on the dog, catch, or pawl, the latter being released automatically by means of a spring when the bolt is moved slightly to the rear.

To effect this movement of the bolt it is beveled at its front end, which projects so as to be slightly in the way of the edge of the door when in its retracted position, so as to be subjected to a snubbing action as the door is closed, which forces the bolt slightly backward, releasing the dog, pawl, or catch, and allowing the spring N to project the bolt and lock the door.

The bolt of the supplemental lock is connected to one end of a spring, S, the other end of which is secured to the interior of the supplemental-lock casing, which has a constant tendency to project the bolt forward, and will, when the main bolt is projected into a locked position, be automatically projected into the recess in the main bolt, and thus securely lock it.

The lock casing or support may be secured to the jamb of the door in any convenient manner, but preferably by means of screws T passing through suitable apertures which are countersunk, the portion above the shoulder upon which the screw-head rests being threaded in order to hold a filling to be inserted after the screws are driven in, in order to prevent the screws from being readily unscrewed for the unauthorized removal of the lock.

The operation of the invention will be readily understood. To unlock the door the bolt of the supplemental lock is retracted by means of a proper key, releasing the main bolt, which can then be retracted by its handle. The dog, pawl, or catch is locked into the main bolt by hand while said main bolt is in its retracted position, holding said bolt in place to be snubbed and automatically projected by the closing of the cell-door.

Having thus described my invention, what I claim is—

The combination, with the main springbolt of a lock for cell and other doors, adapted to be held in a retracted position by means of a dog, pawl, or catch; and be released by the action of the door in riding past the end of said bolt, of a tumbler-lock having a springbolt which, when locked, connects with and holds the main bolt in a locked condition, and when unlocked admits of the main bolt being retracted, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of

the subscribing witnesses.

JAMES SARGENT.

Witnesses:

JAMES L. NORRIS,

Jos. L. COOMBS.