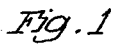


D. SALFIELD & H. KOHLBERG.
JAIL CONSTRUCTION.

Patented Mar. 13, 1894.



Inventors,
David Balfield
Hermann Kehlberg.
M. Dewey & Co attys

UNITED STATES PATENT OFFICE.

DAVID SALFIELD AND HERMANN KOHLBERG, OF SAN FRANCISCO, CALIFORNIA.

JAIL CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 516,450, dated March 13, 1894.

Application filed November 1, 1893. Serial No. 489,734. (No model.)

To all whom it may concern:

Be it known that we, DAVID SALFIELD and HERMANN KOHLBERG, citizens of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Building Constructions; and we hereby declare the following to be a full, clear, and exact description of the same.

Our invention relates to improvements in the construction of buildings, and it consists in certain details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a plan of floor showing the construction. Figs. 2, 3 and 4 are enlarged views showing the construction of the cell doors. Fig. 5, shows the perforated plate in front of the cell windows.

The object is to construct a building which will be especially applicable for use in jails, prisons, and buildings where it is desirable to incarcerate persons to retain them safely under constant surveillance, and at the same time to keep them separate from, and invisible to each other.

In the construction of jails, prisons and such buildings, it is of great importance, first, that the inmates be so situated as to be subject to the vigilance of the keepers at all times, and also to so separate them from each other that they can have little or no communication, as well as to prevent the inmates already in the cells from having a knowledge of others that may be brought in from time to time. In order to effect this we have shown a circular construction, in which A is a central room designed for the use of guards and other officials. This room is built of any suitable material, such as masonry, brick, iron, steel, or a combination of these, and it has a single entrance door at B, which is preferably the only entrance into the jail or prison portion of the building. In the present case we have shown the construction as forming a segment of a circle, and the remainder of the offices and rooms of the building not occupied for confinement purposes may be of rectangular or other suitable form. It is also manifest that the whole structure may be made in a cylindrical, elliptical, or polygonal form

having as many floors one above the other as the necessities of the structure require. These floors are preferably reached from the single entrance B and the room A, by flights of stairs extending from one guard room to the other, so that all persons entering or leaving the prison or structure must pass through the single entrance B.

C is another door opening, as shown in the present case, at about the center of the segment forming the outer wall of the room A, and giving access to a circular or segmental corridor D which surrounds the room A, as shown. Exterior to this corridor is the inner wall E of the cell space which may be made of any suitable material, either masonry or steel or both as preferred. The outer wall F is also made in the same manner, of any suitable material. In the present case we have shown it as constructed of heavy brick or masonry having an inner lining wall G of steel or iron.

H H are radial aisles or passages extending between the walls I' and G, and having cells I upon each side, so that the two walls of a passage H form two walls of two cells which front upon that radial aisle. Between the cells which lie between any two aisles are the intermediate or party walls J which are made, as before stated, of steel, iron, masonry, or other suitable material to divide the two adjacent cells from each other.

In order to allow the occupants of the central guard room A to inspect all parts of the intermediate corridor D, and also each of the radial aisles H, grated or protected windows K are made in the walls of the room A in radial lines with the aisles H, so that by looking through the windows K, the guard or occupant of the central room A has full command of the entire aisles H intermediate between any two cells I, and thus anything suspicious or wrong which takes place can be easily and instantly detected.

A single person centrally situated within the room A can by simply turning about, examine all of the aisles H which surround this room.

The number of passages and the number of cells opening into them may be increased by

increasing the diameter of the circle which forms the cell space.

In order to prevent the occupants of cells which open into any one aisle from seeing each other, we have placed the cell doors L alternately at the inner and outer ends of the passage, so that each door faces the blank wall upon the opposite side of the passage. In order to prevent the occupants of these cells from seeing each other, or seeing to any distance upon each side of the cell door, by looking diagonally through the gratings or wickets, we construct the door of lateral flat bars M and vertical angle, channel, or T bars, or bars set on edge, and properly secured to the flat bars M by angle plates. These bars are formed as shown at N, so that vertical flanges of any desired depth project at right angles from the face of the door and outwardly therefrom, these bars N extending from top to bottom of the door. As the gratings or spaces between the bars are small, it will be manifest that any person attempting to look through these gratings will have the line of vision arrested and limited by the projecting flanges of the vertical bars N and therefore no occupant of either cell can see the door of the opposite cell opening upon the same passage. In order to prevent the door from being lifted, we have shown angle bars O extending above the door in such position that the upper bars of the door will engage with these angle bars if any attempt is made to lift the door.

To fasten the door we employ bolts P which slide in holes made in the angle bars N and engage with keepers Q upon the wall of the cell. These bolts P are connected together by a single bar R which extends vertically, and is fixed to the bolts so that by pushing it to one side or the other the bolts are all moved together. When the bar is moved toward the edge of the door, after the latter is closed, it forces the bolts into the keepers Q, and the bolts of the lock S, being then moved by the key will engage the edge of the vertical bar R and prevent its being drawn backward.

It has been found very desirable to prevent prisoners already within the building from seeing later additions that may be brought in, and in order to prevent this we have shown doors T opening from the passages H into the corridor D. These doors normally remain open so that there is a free view into the aisles H, but when a new prisoner is to be brought in the doors T are first closed temporarily, thus cutting off all view from the cells or aisles H of the corridor D. The prisoner may then be brought into the corridor and taken to either of the cells to which he is assigned, without being seen by any of the other occupants.

The corridor D is especially useful for exercising purposes, when it is necessary, and

forms an intermediate space between the central room A and the cell space into which any prisoner must pass, and where he will be under surveillance and control of those occupying the central room.

The windows of the cells are grated upon the outside, with glazed sashes interior to the gratings and between them and the steel lining which forms the outer wall of the cells and extends across the window openings. This steel wall E' is perforated with small holes e coincident with the window openings, and these serve to admit air and light, but prevent the passage of weapons or tools.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A building having a central segmental room, a segmental corridor surrounding it upon the same level, an exterior circular segmental wall, and a corresponding concentric wall intermediate between the exterior wall and the corridor, radial passages made between said wall and the outer wall, and cells constructed in pairs with intermediate partitions having the walls adjacent to the passages provided with doors facing upon said passages, substantially as described.

2. In a building, a series of concentric walls forming a central room, a surrounding corridor separated therefrom by an intermediate wall, and a series of cells or chambers extending from the exterior wall of the corridor to the outer wall of the building; radial aisles leading from the corridor to said outer wall between each side of the cells, and doors opening from the cells into the aisles at opposite ends thereof, substantially as herein described.

3. A construction for buildings consisting of a series of concentric walls forming a central room, a corridor surrounding said central room and separated therefrom by an intermediate wall, and a cell space formed between the outer wall of the corridor and the exterior wall of the building; radial aisles extending from the inner to the outer wall of the cell space having doors opening into these aisles at opposite ends from adjacent cells, windows or gratings made in the wall surrounding the central chamber in line with the radial aisles between the cells whereby all of the latter may be inspected from the central point, substantially as herein described.

4. In a building, a series of concentric walls forming a central chamber, a surrounding corridor and an exterior cell space; radial aisles leading from the inner to the outer wall of the cell space between each two adjacent cells, doors opening from the cells at opposite ends of the aisle, said doors being formed of lateral flat bars and vertical bars having continuous ribs projecting outwardly at right angles with the face of the door, substantially as herein described.

5. In a building, a series of concentric walls forming a central chamber, a surrounding independent corridor, and an exterior cellspace with radial passages between adjacent cells; doors controlling the openings from the central room to the corridor and thence to the passages between the cells, and inspection windows in the wall of the central room in line with the radial passages, windows in the cells, and an interior metal lining with per-

forations coincident with the window openings, substantially as herein described.

In witness whereof we have hereunto set our hands.

DAVID SALFIELD.
HERMANN KOHLBERG.

Witnesses:

GEO. H. STRONG,
S. H. NOURSE.