

May 8, 1951

J. W. PATTON ET AL
BASIN NIGHT LATCH

2,552,058

Filed Jan. 29, 1948

2 Sheets-Sheet 1

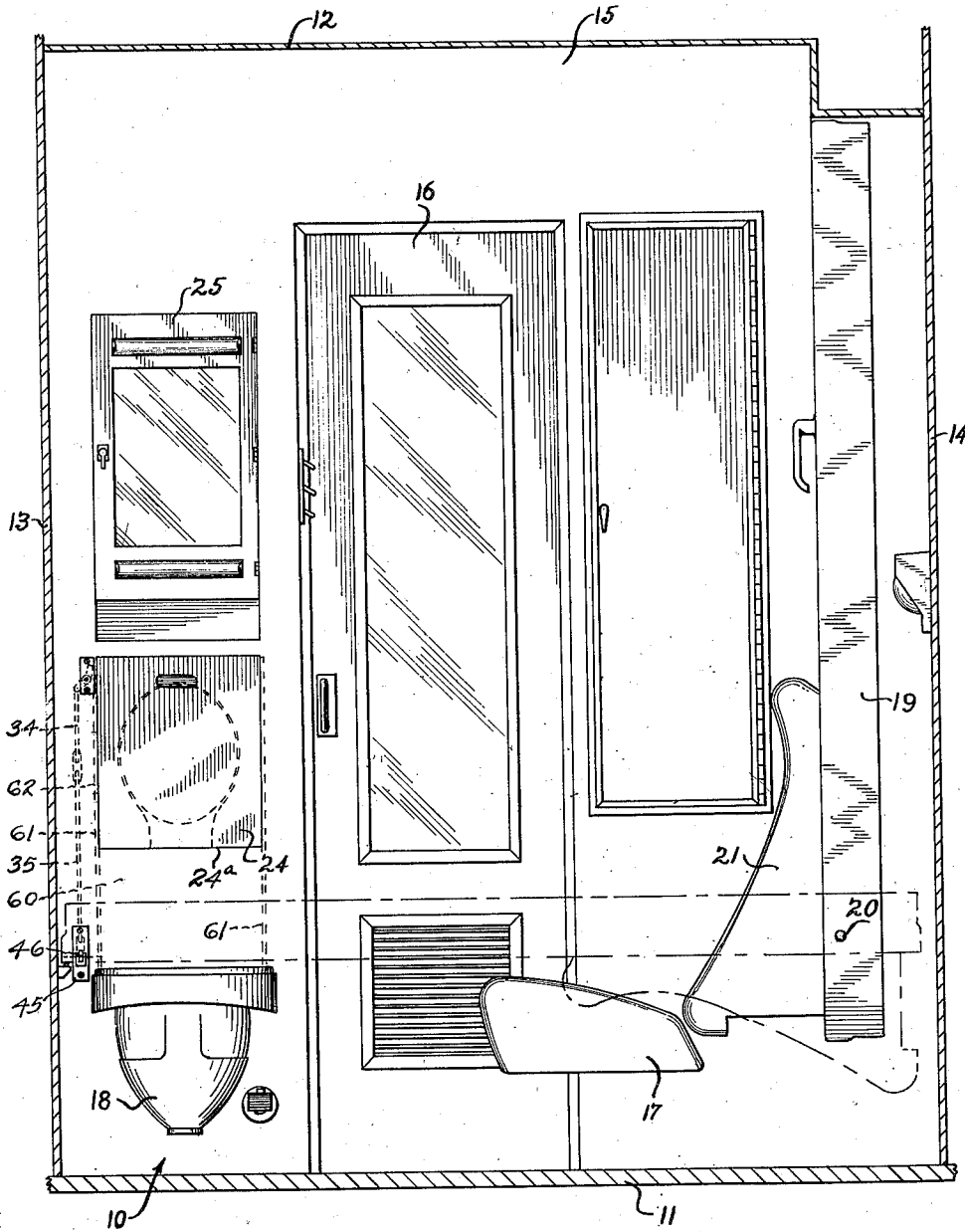


FIG. 1.

INVENTORS
JOHN W. PATTON &
ROGER G. CUDINI
BY
George R. Eielson
ATTORNEY

May 8, 1951

J. W. PATTON ET AL

2,552,058

BASIN NIGHT LATCH

Filed Jan. 29, 1948

2 Sheets-Sheet 2

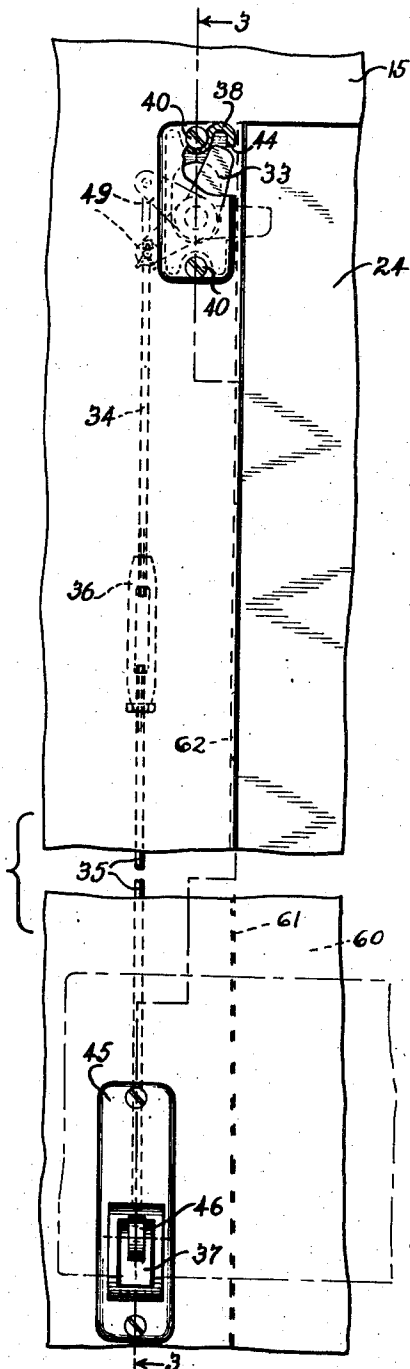


FIG. 2.

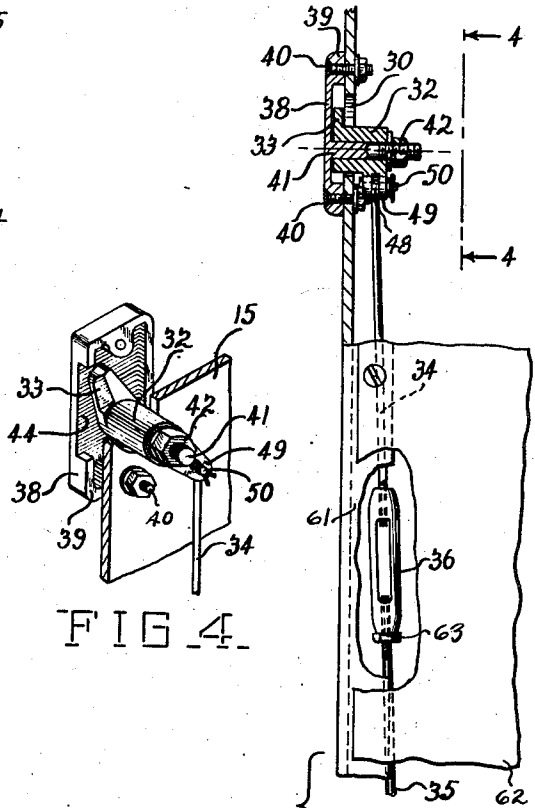


FIG. 4.

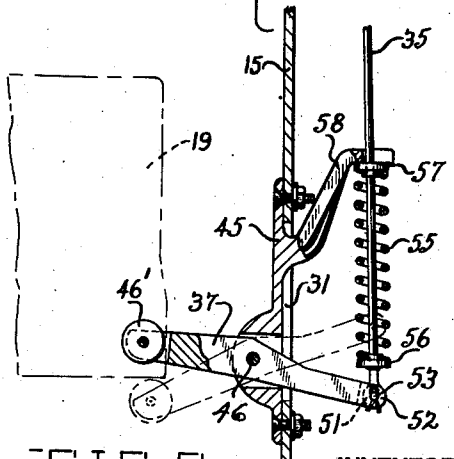


FIG. 3.

INVENTORS
JOHN W. PATTON &
ROGER G. CUDINI
BY
George R. Ellison
ATTORNEY

UNITED STATES PATENT OFFICE

2,552,058

BASIN NIGHT LATCH

John W. Patton, Philadelphia, Pa., and Roger G. Cudini, Birmingham, Mich.; said Patton assignor to American Car and Foundry Company, New York, N. Y., a corporation of New Jersey, and said Cudini assignor to Moynahan Bronze Company, Detroit, Mich., a corporation of Michigan

Application January 29, 1948, Serial No. 5,168

4 Claims. (Cl. 105—315)

1

This invention relates to lock mechanism and more particularly to mechanism for locking washbasins in a railroad sleeping car.

Single occupancy rooms in railway sleeping cars usually contain a bed, a hopper and a washbasin. The bed is suitably supported to be shifted into either prone or storage position. As the bed is usually substantially the same in dimensions as the room space when in prone horizontal position for occupancy, it overlies the hopper rendering the same inaccessible. The washbasin is usually mounted for shifting to an inaccessible position in a wall opening or to an accessible position within the room which is above the bed when in prone position. As the bed renders the hopper inaccessible and clears the washbasin when in prone position for occupancy, it is desirable to lock the washbasin in its inaccessible position to prevent improper use thereof by the occupant.

An object of the invention is to provide mechanism operable by the bed, when moved to prone position, for locking a washbasin in inaccessible position.

Another object of the invention is to provide washbasin locking mechanism of the character referred to that is located in part exteriorly of the room.

A further object of the invention is to provide locking mechanism for a washbasin of the character referred to, that cannot be manipulated to open position by the room occupant while the bed is in prone position.

These and other objects of the invention will be apparent to those skilled in the art from a study of the following description and accompanying drawings, in which:

Figure 1 is a longitudinal section view of a sleeping car room showing the general arrangement of the accessories and washbasin locking mechanism.

Figure 2 is an enlarged fragmentary view of the room shown in Figure 1 illustrating the washbasin and locking mechanism.

Figure 3 is a sectional view taken on line 3—3 of Figure 2 further illustrating the washbasin locking mechanism and the bed relation therewith.

Figure 4 is a fragmentary sectional view taken on line 4—4 of Figure 3 showing the lock portion of the mechanism and its mounting.

Numeral 10 indicates a conventional room in a railway sleeping car of the type adapted to be occupied by a single passenger. The room includes floor 11, ceiling 12, end walls 13 and 14

2

and wall 15 along the aisle side having the usual door 16. In the room is arranged a seat 17, hopper 18 and bed 19 pivotally mounted at 20 to swing endwise into horizontal prone position or into vertical stored position adjacent end wall 14. Seat back 21 is fixed to the bottom of the bed and swings therewith. As the bed is substantially the same size as the room, it overlies and renders the hopper inaccessible when in prone position.

The room is also equipped with a washbasin 24 and a toilet cabinet 25 above the hopper. Wall 15 on the aisle side of the room is formed with an opening 24a and an interior sump structure 30 having end walls 61 into which the basin can be swung to inoperative position. In such position the bottom of the basin will lie substantially flush with the room surface of the wall 15. Suitable means (not shown) are provided for mounting the washbasin on sump walls 61 so that it can be pivotally swung into inaccessible position in the wall and sump, or into the room for use by the passenger, or removed from the wall. The washbasin is located in a plane above the prone position of the bed and mechanism is provided to lock the washbasin in inaccessible position in the wall when the bed is in its prone position covering the hopper.

The washbasin locking mechanism is preferably arranged to be actuated by and moved into basin locking position by the bed when moved from stored position to prone position and is arranged, in part, exteriorly of the room. An integral lock member consisting of a sleeve 32 and arm 33, link means consisting of rods 34 and 35 connected by turnbuckle 36, and lever 37 comprise the locking mechanism. The lock member sleeve 32 projects through opening 30 in wall 15 adjacent one side of the washbasin and lever 37 projects through an opening 31 in wall 15 in a plane with the bed when in prone position. The link means lies behind the room aisle wall and operatively connects the portions of lever 37 and the lock member sleeve 32 projecting through the aisle wall.

Opening 30 is closed by a cover 38 having a flange 39 secured against the aisle wall interior surface by bolts 40. Pintle 41 is formed integral with the cover and projects through opening 30 for the purpose of providing a mounting for sleeve 32. The end of the pintle is threaded for the reception of nut 42 which retains the locking member sleeve from endwise displacement. Retainer or latch arm 33 of the lock member is located within the cover 38 and is

3

rotatably mounted to swing partly through recess 44 in the cover flange so that it will overlie the washbasin and prevent outward movement thereof from inaccessible position in the aisle wall.

Lever 37 extends through a slot in cover 45 secured over opening 31 against the interior surface of the aisle wall. Pin 46 transverses the slot in this cover and lever 37 is mounted on the pin. The end of lever 37 projecting into the room carries a roller 46' which lies in the path of the bed movement and is shifted by the bed while being moved to prone position.

Rod 34 has an eye 48 at its upper end extending between ears 49 on sleeve 32 and is mounted on pin 50 carried by the ears. Rod 35 has an eye 51 on its lower end extending between ears 52 on lever 37 and is mounted on pin 53 carried by the ears. Turnbuckle 36 is mounted on the adjacent threaded ends of rods 34 and 35 and can be adjusted to determine the length of the actuator link means between lever 37 and lock member sleeve 32. Lock nut 63 on rod 35 holds the turnbuckle in adjusted position.

The locking mechanism is normally urged to a position wherein the lock arm 33 is swung under the cover 45 whereby the washbasin may be made accessible. For this purpose coil spring 55 encircles rod 35 and seats against a stop 56 on rod 35 at its lower end against a bearing washer 57 at its upper end. The washer bears against the inner slotted end of arm 58 on cover 45 that project through opening 31.

As the bed moves to prone position it will move roller 46' therewith and rock lever 37 thereby shifting rods 34 and 35 upwardly and rocking sleeve 32 to swing lock arm 33 across the edge portion of the washbasin to prevent displacement from the opening in the wall. In order to render the washbasin accessible, the bed must be swung upwardly which can only be done when the bed is unoccupied.

One end wall 61 of the sump structure outside of wall 15 has an opening therein normally closed by a detachable cover 62. This opening provides a handhole through which nut 63 and turnbuckle 36 can be manipulated by an operator standing in the bedroom to engage or disengage rods 34 and 35 or to adjust the length of the rod structure. When the turnbuckle is disengaged from one of the rods the rods can be moved through the wall openings 30 and 31 while attached to the covers 38 and 45 when the covers are detached from the wall. Thus, the lock operating mechanism outside of the bedroom can be installed and removed from within the bedroom.

The invention may be modified in various respects as will occur to those skilled in the art and the exclusive use of all modifications as come within the scope of the appended claims is contemplated.

What is claimed is:

1. In a room having a wall with openings therein, a washbasin adapted to move between an inaccessible position in one of the wall openings and an accessible position extending into the room, a bed pivotally mounted on the wall opposite the washbasin and substantially the same width and length as the room, a pivoted lock member extending through an opening in the wall adapted to lock the basin in its inaccessible position when the bed is in prone position, an actuating lever extending through an opening in the wall and disposed in the path of the bed during bed movement between stored and prone

4

positions, and link means including a turnbuckle operatively connecting the lock member and lever outside of the room wall, the bottom of said bed engaging and rocking the lever to actuate the lock member to lock the washbasin when adjacent prone position.

2. In a room having a wall with openings therein, a washbasin adapted to move between an inaccessible position in one of the wall openings and an accessible position extending into the room, a bed pivotally mounted in and of substantially the same width and length as the room, a plate fixed over one of the wall openings, a lock member pivoted on said plate and extending through an opening therein and the adjacent wall opening adapted to lock the basin in its inaccessible position when the bed is in prone position, a plate secured to the wall over another opening therein, an actuating lever pivoted on said last mentioned plate and extending through an opening therein and in the adjacent wall opening, said lever being disposed in the path of the bed during bed movement adjacent prone position, a link connected to the lever outside of the wall, a link connected to the lock member outside of the wall, a turnbuckle connecting the links, the bottom of said bed engaging and rocking the lever to actuate the links and move the lock member into basin locking position as it moves downwardly, and spring means associated with the link connected to the lever exerting a force thereupon normally urging the lock member into basin releasing position.

3. In a room having a wall with openings therein, a washbasin adapted to move between an inaccessible position in one of the wall openings and an accessible position extending into the room, a bed pivotally mounted on the wall opposite the washbasin and substantially the same width and length as the room, a pivoted lock member extending through an opening in the wall adapted to lock the basin in its inaccessible position when the bed is in prone position, an actuating lever extending through another opening in the wall and disposed in the path of the bed during bed movement adjacent prone position, a plate fixed to the wall and overlying the opening through which the lever extends, a mounting for the lever fixed to the plate, link means connecting the lock member and lever outside of the room wall, said bed when adjacent prone position engaging and rocking the lever to move the lock member into basin locking position, and spring means associated with the link means and the mounting to normally urge the lock members to basin releasing position.

4. In a room having a wall with openings therein, a washbasin adapted to move between an inaccessible position in one of the wall openings and an accessible position extending into the room, a bed pivotally mounted on the wall opposite the washbasin and substantially the same width and length as the room, a cover plate over one of the openings having an opening in the side adjacent the washbasin and a pintle extending through the opening, a lock member having a sleeve portion rotatably mounted on the pintle and an arm adapted to swing through the cover plate recess adapted to overlie the basin in its inaccessible position when the bed is in prone position, a mounting plate over another opening in the wall, an actuating lever carried by the mounting plate and extending through the adjacent wall opening and disposed in the path of the bed during bed movement adjacent

2,552,058

5

prone position, said last mentioned plate having an arm extending upwardly through the adjacent wall opening, link means connecting the lock member and lever outside of the room wall, the bottom of said bed engaging and rocking the basin when adjacent prone position, and a spring engaging the mounting plate arm and the link means in a relation urging said link means in a direction to rock the lock member into basin releasing position.

JOHN W. PATTON.
ROGER G. CUDINI.

6

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,323,069	McKinnon	June 29, 1943