W. L. MURPHY.

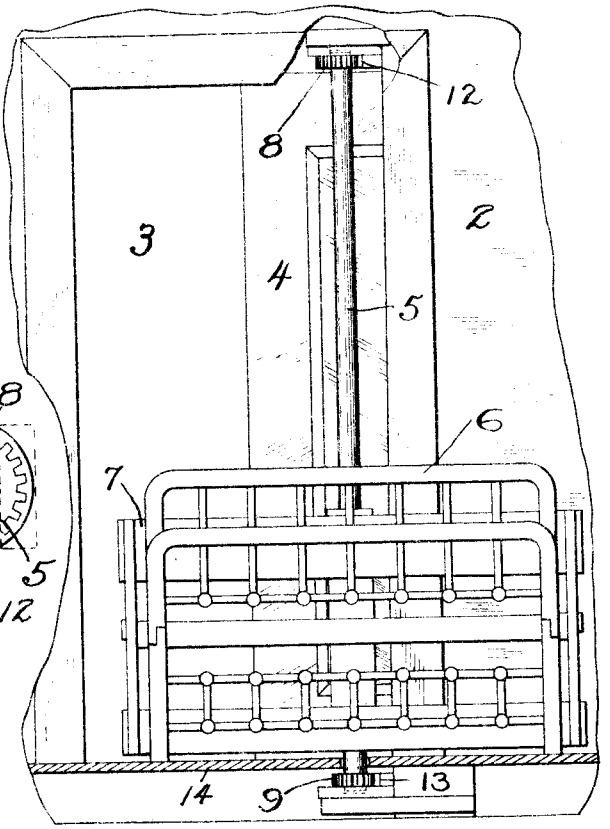
DISAPPEARING BED.

APPLICATION FILED APR. 13, 1912

1,068,806.

Patented July 29, 1913.

Fig.1



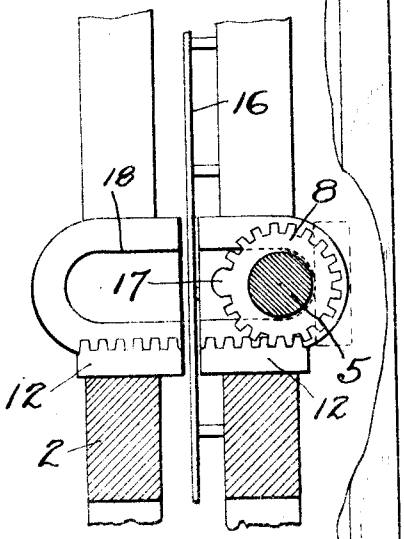


Fig.3

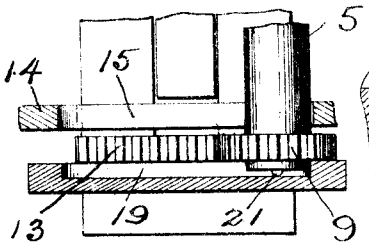


Fig.4

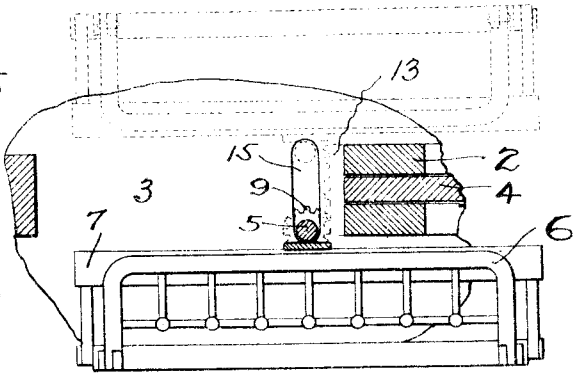


Fig.2

WITNESSES

N. G. Prest.

H. A. Scholten.

INVENTOR

Wm L. MURPHY

BY Miller & White

his ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM L. MURPHY, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO MURPHY WALL BED COMPANY, A CORPORATION OF CALIFORNIA.

DISAPPEARING BED.

1,068,806. Specification of Letters Patent. Patented July 29, 1913.

Application filed April 13, 1912. Serial No. 690,549.

To all whom it may concern:

Be it known that I, WILLIAM L. MURPHY, a citizen of the United States, and a resident of the city and county of San Francisco and State of California, have invented certain new and useful Improvements in Disappearing Beds, of which the following is a specification.

The invention relates to beds which are adapted to be concealed when not in use, by being moved into a closet or recess, or through an opening in a wall which may be closed by a door.

The object of the invention is to provide an apparatus whereby a bed may be moved through an opening which is of less width than the width of the bed.

Another object of the invention is to provide an apparatus whereby the bed is connected intermediate its edges to a support arranged adjacent to one side of an opening in a wall of less width than the width of the bed, so that the bed may be moved through the opening to lie on either side of the wall, and the opening may be closed by a sliding door when the bed is in either position, the door being arranged preferably on that side of the opening adjacent which the bed is connected.

The invention possesses other advantageous features, which, with the foregoing will be set forth in the following description where I shall outline in full that form or embodiment of the invention which I have selected for illustration in the drawings accompanying and forming part of the present specification. The novelty of the invention will be included in the claims succeeding said description. From this it will be apparent that I do not restrict myself to the showing made by said drawings and description as I may adopt many variations within the scope of my invention as expressed in said claims.

Referring to the drawings: Figure 1 is an elevation showing the bed in position for use, the door being shown partly closed. Fig. 2 is a sectional view of the opening for the bed, showing the bed folded upward and showing in dotted lines the position of the bed on the other side of the opening. Fig. 3 is a section, looking upward, taken above the top edge of the door showing the means for guiding the bed in its movement through the opening. Fig. 4 is a vertical section taken through the floor showing the lower part of the guiding and supporting means for the bed.

In my application for Letters Patent of the United States, Serial No. 619,776 filed April 8, 1911 I have shown a bed connected adjacent one side of an opening in a wall and adapted to be moved through said opening. When the bed is moved into position on either side of the wall, the opening is closed by a sliding door which seats in the wall at the other side of the opening from that to which the bed support is arranged adjacent. In the present instance I have provided a construction whereby the door may seat in the wall adjacent which the bed is mounted although I do not desire to limit myself to a door so arranged.

The wall 2 is provided with an opening 3, of less width than the width of the bed, which may be closed by the sliding door 4. Arranged in the opening, adjacent one side thereof is a vertical post or standard 5 to which the head end of the bed 6 is attached, at a point intermediate the sides of the bed. I generally prefer to attach a frame or support 7 to the standard 5 and to attach the bed to said frame or support, but it may be attached directly to the standard when desired. The standard is provided at its upper and lower ends with pinions 8 and 9 which mesh respectively with the racks 12 and 13 which extend across the depth of the opening in the wall and which are properly held in place by being secured to the framework of the wall or floor. The pinion 9 and the rack 13 are preferably arranged below the top board 14 of the floor which is provided with an elongated opening 15 in which the standard is movable.

The pinion 8 and the rack 12 are arranged above the door 4 and below the track or guide 16 on which the door is hung. The upper rack 12 is cut away in the path of the door-hanger, so that the door may be moved to close the opening in the wall when the bed is in either position. The pinion 8 is provided with a tooth 17 of larger dimensions than the remainder of the teeth, which engages the slot in the rack 12 through which the door hanger passes, and allows the pinion to pass over said slot without any interruption in its movement. The pinions are held in mesh with their respective racks by means of the guide ways 18—19

which are engaged by the ends of the standard projecting beyond the pinions. The guide way 18 is provided with a slot, in line with the slot in the rack 12 to allow the door hanger to pass. The guide way 19 also acts as a support for the standard, which may be provided at its lower end with an anti-friction bearing 21, so that the device may be easily manipulated.

The bed 6 is attached at its head end, at a point intermediate the sides of the bed, to the standard 5 and the main body of the bed is foldable or collapsible in a vertical arc, so that it may be moved to lie adjacent to and substantially parallel with the standard. In this position it may be readily moved through the opening to lie on either side of the wall. As the bed is moved, the standard is rotated and travels across the depth of the opening, so that as the head of the bed arrives at a position parallel to the wall at either side, the standard reaches the limit of its throw at that side.

I claim:

1. In combination with a wall having an opening, a standard arranged adjacent to one side of said opening and adapted to be moved forward and backward in said opening, and a bed connected intermediate its sides to said standard.

2. In combination with a wall having an opening, a standard arranged adjacent to one side of the opening, a bed attached intermediate its sides to said standard, and means operative by the movement of the bed through said opening to move the standard transversely of said wall.

3. In combination with a wall having an opening, a standard arranged adjacent to one side of the opening, a bed connected intermediate its sides to said standard and adapted to be moved through said opening, a rack attached to said wall, and a pinion on said standard engaging said rack.

4. In combination with a wall having an opening, a standard arranged adjacent one side of the opening, a bed connected intermediate its sides to said standard and adapted to be moved through said opening, racks arranged above and below said opening, pinions on the standard engaging said racks, and means for holding said pinions in engagement with said racks.

5. In combination with a wall having an opening, a standard arranged adjacent one side of the opening, a bed connected intermediate its sides to said standard and adapted to be moved through the opening, a pinion attached to the upper end of said standard, a rack formed in two alined parts spaced apart adapted to be engaged by said pinion and a tooth on the pinion adapted to engage with the adjacent ends of said two-part rack.

6. In combination with a wall having an opening, a standard arranged adjacent to one side of said opening, a bed of greater width than said opening attached intermediate its sides to said standard and adapted to move through said opening, and means operative by the movement of the bed through the opening to move the standard transversely of said wall.

7. In combination with a wall having an opening, a bed attached to a vertical axis arranged adjacent to one side of said opening and intermediate between the sides of the bed, and means operative by the movement of the bed about said axis to move said axis transversely of said wall.

In testimony whereof, I have hereunto set my hand at San Francisco, California, this 8th day of April 1912.

WILLIAM L. MURPHY.

In presence of—
H. G. Prost,
P. S. Pidwell.