W. A. SNYDER.

WALL BED.

APPLICATION FILED MAY 24, 1913.

1,094,684.

Patented Apr. 28, 1914.

Fig. 1.

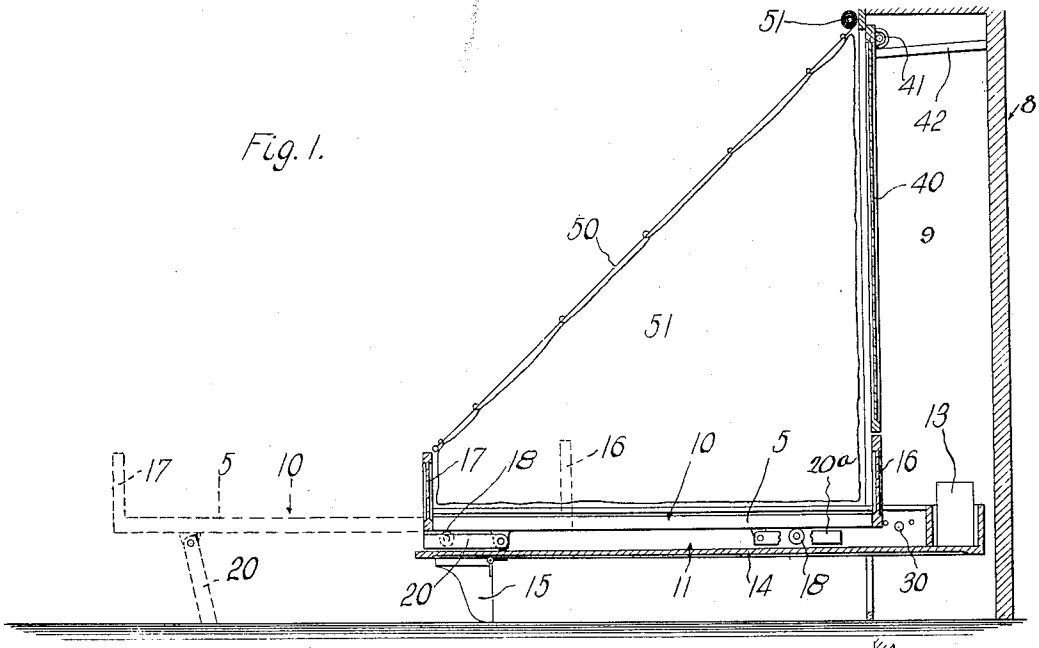


Fig. 2.

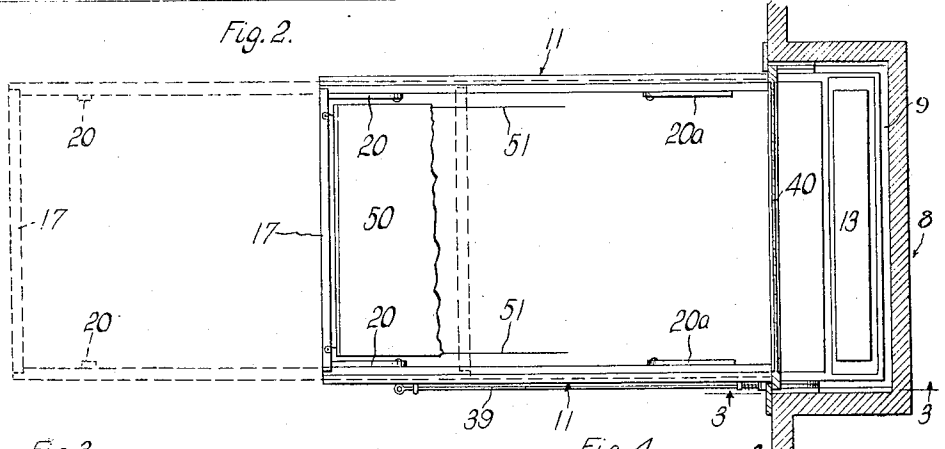


Fig. 3.

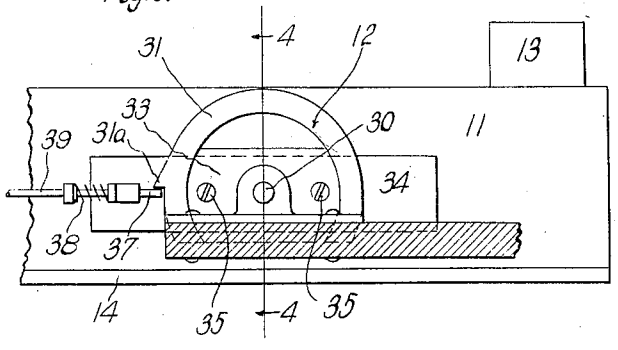
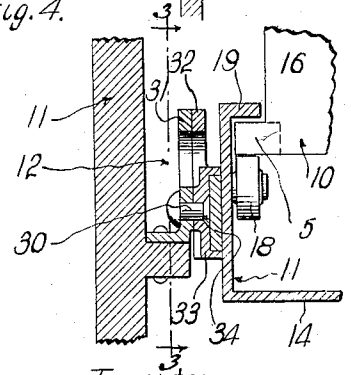


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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WALL-BED.

1,094,684. Specification of Letters Patent. Patented Apr. 28, 1914.

Application filed May 24, 1913. Serial No. 769,631.

To all whom it may concern:

Be it known that I, WILLIAM A. SNYDER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented new and useful Improvements in Wall-Beds, of which the following is a specification.

This invention relates to a wall bed adapted to swing upwardly into a recess in a wall or in any other suitable structure; and the invention consists particularly in certain features of combination and in certain details of construction to be hereinafter more clearly pointed out, and claimed.

I have shown preferred forms of my invention in the accompanying drawings, in which;

Figure 1 is a vertical longitudinal section of my invention. Fig. 2 is a sectional plan of the same. Fig. 3 is a detail section taken as indicated by lines 3—3 of Fig. 2 and Fig. 4. Fig. 4 is a detail section taken as indicated by line 4—4 of Fig. 3.

In the drawings, 9 may designate any suitable recess formed in a structure 8, which structure may be a part of a house or dwelling or may be a box or cabinet containing the recess 9, in which recess the bed is normally contained. The bed comprises principally a main pivoted frame 11 and a bed frame 10. The main pivoted frame 11 is supported on suitable pivot constructions 12 which are shown and will be hereinafter described in detail. These pivots 12 are placed at the lower portion of the recess 9, so that the bed may swing in the ordinary manner from the horizontal position shown to a vertical position within the recess. The frame 11 may be constructed in any suitable manner with a counter-balance weight 13, and preferably with a front panel 14 which is adapted to present a sightly appearance when the bed is in its vertical position in the recess. Folding supports or brackets 15 are used to support the outer end of the frame 11 when in the horizontal position shown in Fig. 1.

The bed frame 10 is carried in the pivoted frame 11 so as to be longitudinally slidable therein and capable of movement as is indicated by the full and dotted lines in Figs. 1 and 2. This bed frame 10 is composed of the usual horizontal frame members 5 and head and foot boards 16 and 17. The horizontal frame members 5 are mounted on suitable rollers 18 and are beneath ledges 19 on the main frame 11; so that the bed frame is confined to longitudinal movement on the frame 11. The bed frame also carries folding leg supports 20 which are adapted to fold as indicated in full lines in Fig. 1 and adapted to drop to vertical positions when the bed frame is pulled out to such a position as shown in dotted lines in Figs. 1 and 2. It will be seen that the bed frame may be pulled out to the position shown in dotted lines in Figs. 1 and 2 or to a position beyond that shown, thus moving the bed a considerable distance from the recess 9. Such movement of the bed is often desired for the purpose of placing a sleeper out of a draft, or for taking advantage of the circulation of fresh air through a window. It may also be that the bed frame is provided with a second set of supporting legs 20^a which may form supports for the head end of the bed frame when it is entirely removed from the frame 11. This allows of the entire removal of the bed from the frame 11 and movement of the bed to any desired location; thus combining the advantages of a freely movable bed with the advantages of one folding up into a wall recess when not in use.

The pivot constructions 12, hereinbefore mentioned, are particular features of my improved wall bed. I provide means for effectively holding the pivoted frame in correct alinement by providing broad wearing surfaces on each of the pivot constructions. These constructions each preferably comprises a stationary member mounted upon the recess wall in its lower part, such stationary member carrying a suitable pivot trunnion or stud, or equivalent, 30 and having an outer circular bearing member 31 with a flat bearing face engaging a similar bearing face of a similar member 32 of the movable element of the pivot construction. This movable element of the construction is mounted upon the pivot stud 30, and may have a suitable channel portion 33 adapted to receive a tongue or similar projection 34 on the side of frame 11. Screws or any other suitable holding means 35 serve to secure the frame 11 solidly to the movable element of the pivot construction by securing the tongue 34 in the channel 33. The pivot construction as herein described has several advantages; among which are the ample bearing areas provided on the circular portions 31 and 32, and ease of assembly of the

device. The pivot constructions are each set up in the recess in their proper places opposite each other and the frame 11 is then slipped into place with the tongue 34 in the channel portions 33 of the pivot construction. The pivots may thus be easily and accurately set without the interference of the relatively heavy and unwieldy frames 10 and 11.

In Figs. 2 and 3 I have shown a manually releasable locking device for holding the pivoted frame 11 from upward displacement when in its horizontal position. A lug 31^a extends from the bearing portion 31 of the stationary member of the pivot construction, under which lug a bolt 37 may be pressed by its spring 38. The bolt is mounted on frame 1^7; and a pull rod 39 is conveniently arranged so as to be manually operable from the foot of the bed to release the bolt and allow upward movement of the frame.

I have illustrated a closure board 40 which is carried on suitable rollers 41 traveling on inclined tracks 42. The foot board 17 of the bed frame is adapted to strike the closure board 40 when the bed frame is thrown into the recess and to press the closure board back to the rear part of the recess. The front panel 14 then closes the recess. I have shown also the feature of inclosing curtains for the bed, comprising an upper curtain 50 which may be adapted to roll up on roller 51. The lower end of curtain 50 may be hooked to the foot board 17; and side curtains 51 may be supported by the upper curtain. With these curtains complete privacy may be had, such being often desired where the wall bed is used in a room also used for other purposes, or where the wall bed is used on an open sleeping porch.

Having described, a preferred form of my invention, I claim.

1. A wall bed, comprising a horizontally pivoted frame adapted to swing up into a recess, manually releasable means for locking the pivoted frame in a horizontal position, supports for the outer end of said frame, a bed frame slidably mounted in said pivoted frame, and swinging leg supports for the outer end of said bed frame.

2. In a device of the character described, a stationary structure having a recess therein, a frame, and pivot supports for the frame at opposite sides of the recess, each comprising a stationary member carrying a central pivot stud and having an outer segmental flat bearing face, and a movable member supported on said pivot stud and having a corresponding outer segmental bearing face to bear against the first mentioned bearing face, said movable member being connected with the frame through the medium of a channel formed in the face of said member and a corresponding tongue on said frame adapted to fit into said channel.

3. In a device of the character described, a stationary structure having a recess therein, a frame, and pivot supports for the frame at opposite sides of the recess, each comprising a stationary member carrying a central pivot stud and having an outer segmental flat bearing face, and a movable member supported on said pivot stud and having a corresponding outer segmental bearing face to bear against the first mentioned bearing face, and manually releasable means for locking the pivoted frame in horizontal position to the stationary member of one of the pivot supports, and swinging leg supports for said bed frame independent of said pivoted frame.

4. In a device of the character described, a stationary structure having a recess therein, a frame, and pivot supports for the frame at opposite sides of the recess, each comprising a stationary member carrying a central pivot stud and having an outer segmental flat bearing face, and a movable member supported on said pivot stud and having a corresponding outer segmental bearing face to bear against the first mentioned bearing face, said movable member being connected with the frame through the medium of a channel formed in the face of said member and a corresponding tongue on said frame adapted to fit into said channel, and manually releasable means for locking the pivoted frame in horizontal position to the stationary member of one of the pivot supports.

In witness that I claim the forgoing I have hereunto subscribed my name this 15th day of May 1913.

WILLIAM A. SNYDER.

Witnesses:
ELWOOD H. BARKELEW,
JAMES T. BARKELEW.