

H. H. HALL.
FOLDING WALL BED.
APPLICATION FILED MAR. 20, 1912.

1,058,580.

Patented Apr. 8, 1913.

3 SHEETS—SHEET 1.

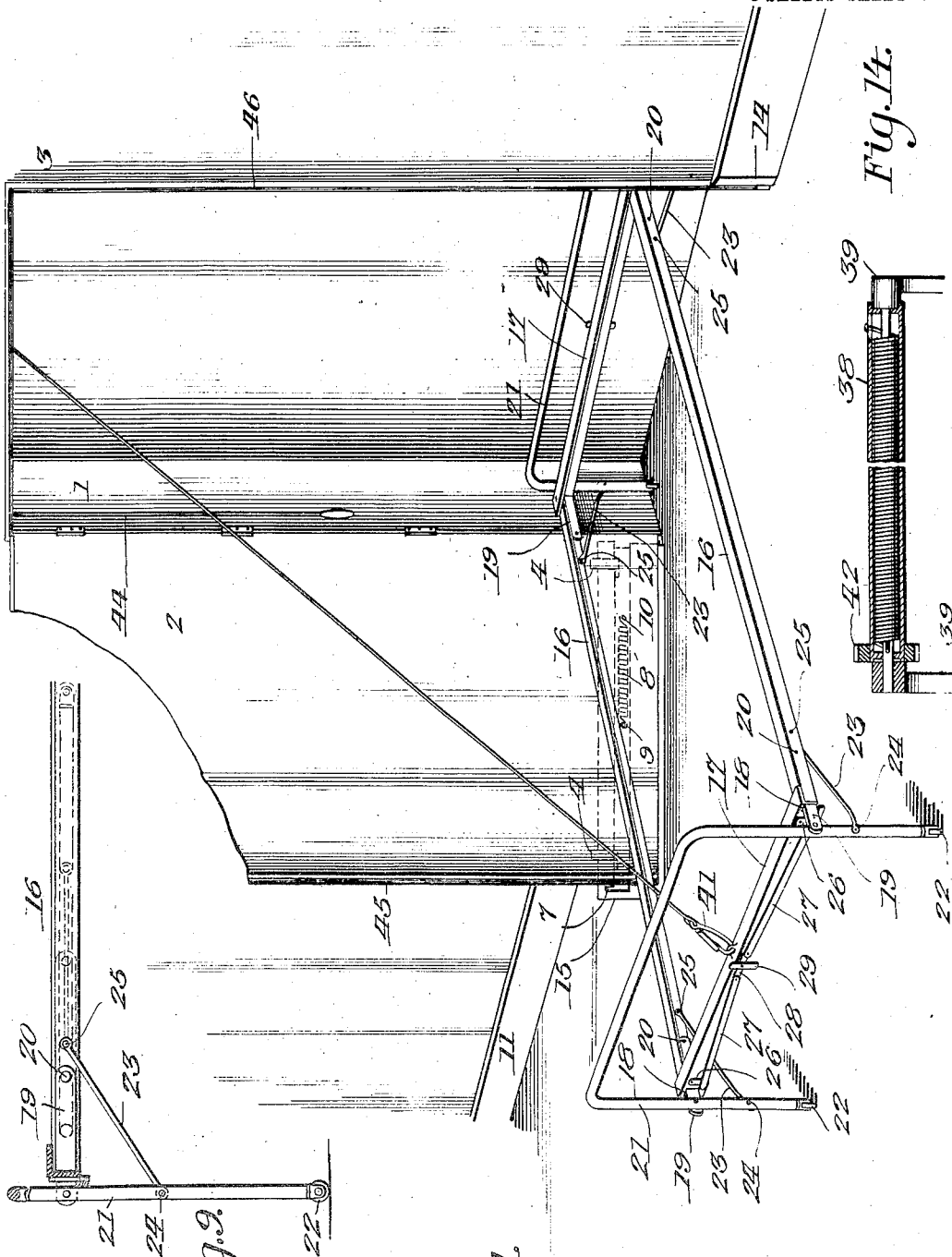


Fig. 14.

Fig. 1.

WITNESSES

Philip E. Barnes
Paul Albright

Fig. 9.

INVENTOR

Harvey H. Hall
E. B. Stocking Attorney

Patented Apr. 8, 1913.

3 SHEETS—SHEET 2.

1,058,580.

Fig. 2.

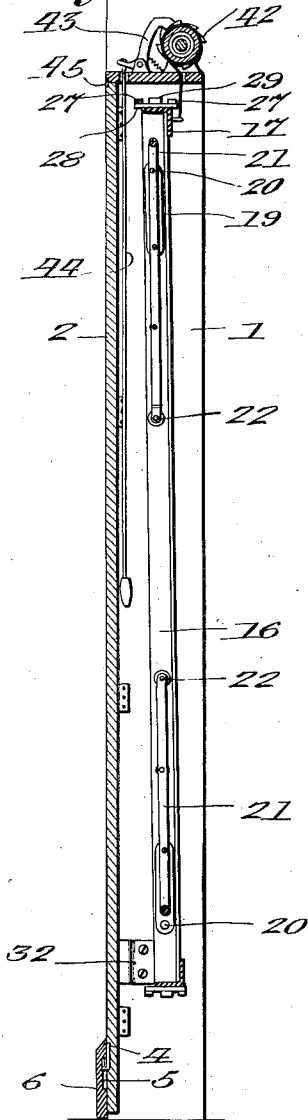
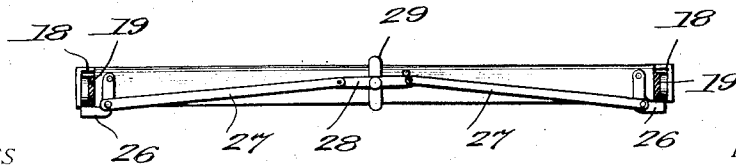
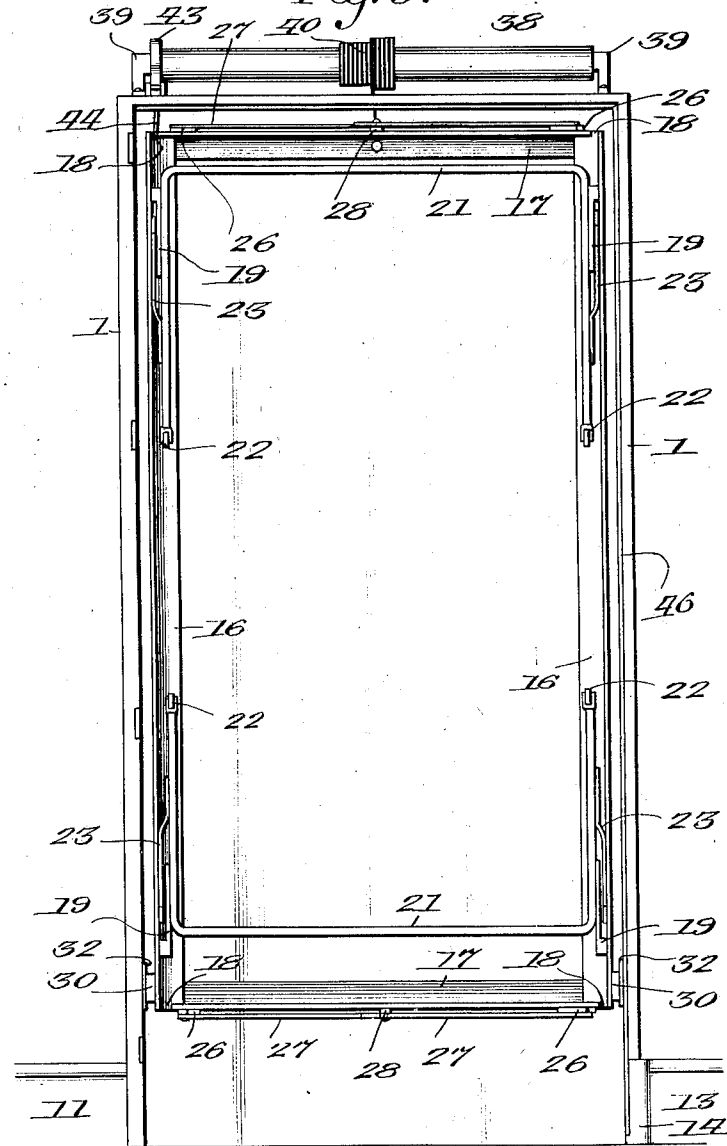


Fig. 3.



WITNESSES

Philip E. Barnes
Chas. Albright

INVENTOR

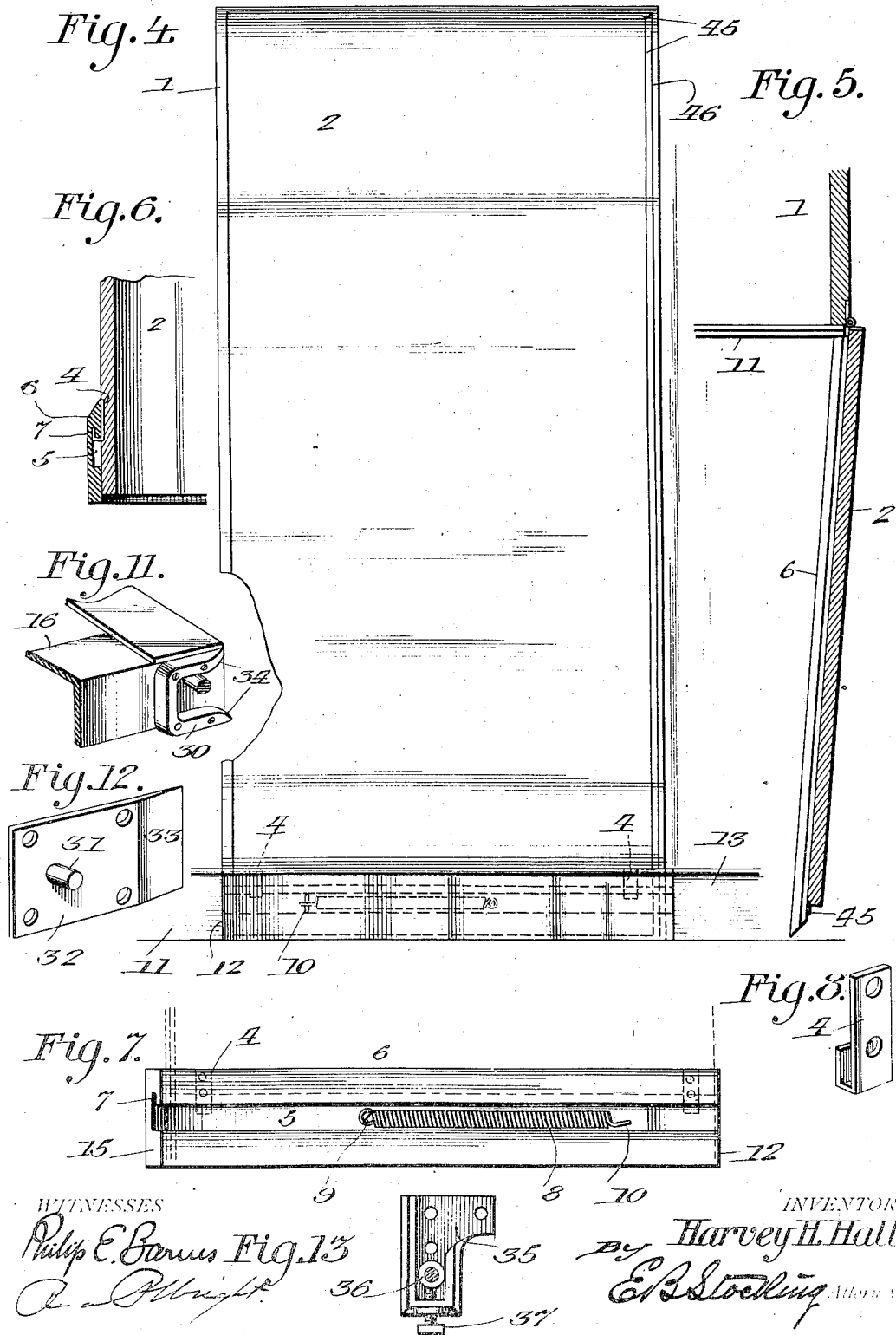
Fig. 10. By Harvey H. Hall
E. B. Stocking Attorney

H. H. HALL.
FOLDING WALL BED.
APPLICATION FILED MAR. 20, 1912.

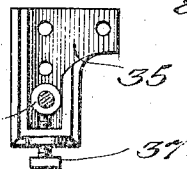
1,058,580.

Patented Apr. 8, 1913.

3 SHEETS-SHEET 3.



WITNESSES
Philip E. Barnes
C. A. Wright



INVENTOR
Harvey H. Hall
By E. J. Stocking

UNITED STATES PATENT OFFICE.

HARVEY H. HALL, OF GOLDEN, COLORADO, ASSIGNOR TO THE IDEAL DISAPPEARING WALL BED COMPANY, A CORPORATION OF COLORADO.

FOLDING WALL-BED.

1,058,580.

Specification of Letters Patent.

Patented Apr. 8, 1913.

Application filed March 20, 1912. Serial No. 685,007.

To all whom it may concern:

Be it known that I, HARVEY H. HALL, a citizen of the United States, residing at Golden, county of Jefferson, State of Colorado, have invented certain new and useful Improvements in Folding Wall-Beds, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in wall beds, the object being to provide a disappearing bed which will entirely be concealed within a recess formed in a wall by a door which is so constructed that the same will be flush with the wall, thereby enabling the same to be covered with wall paper in order to give the wall an unbroken appearance.

Another object of the invention is to provide novel means for supporting the mop board on the invisible door whereby the mop board is capable of moving independently of the door in order to allow the door to be opened and when closed, will fit snugly against the corresponding ends of the mop board to each side of the door so as to give the door the appearance of a portion of the wall.

A further object of the invention is to provide a novel form of bed which is pivotally and detachably mounted within the recess whereby the bed can be lifted into upright position or lowered into horizontal position and removed from the recess to be used.

A still further object of the invention is to provide a novel construction of bed having pivotally mounted leg frames which are capable of being swung back into folded position so as to occupy a small space when the bed is raised into position within the recess.

Another object of the invention is to provide novel means for locking the leg frame in a set-up position so that all danger of the bed collapsing when in use is prevented.

Another object is to provide novel means for pivotally mounting the bed within the recess whereby the same can be quickly removed from its pivots in order to allow the bed to be drawn out into the room when desired.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawings—Figure 1 is a perspective view of my improved bed showing the bed in lowered position; Fig. 2 is a vertical section through the casing of the recess and the bed in a raised position; Fig. 3 is a front elevation showing the bed within the recess; Fig. 4 is a front elevation of the casing and door showing the door in closed position in order to entirely conceal the bed therein; Fig. 5 is a horizontal section through the casing and door showing the door in open position, the mop board being extended in order to allow the door to assume such position; Fig. 6 is a detail vertical section through the door and mop board showing the manner of mounting the mop board; Fig. 7 is a perspective view of the mop board; Fig. 8 is a perspective view of one of the mop board hangers; Fig. 9 is a detail longitudinal section through a portion of the bed frame showing the manner of swinging the leg frames into folded position; Fig. 10 is an end elevation of the bed frame partly in section showing the leg frame locking means; Fig. 11 is a detail perspective view of a portion of the bed frame showing the bearing socket and the bearing carried by the casing; Fig. 12 is a perspective view of the bearing carried by the casing; Fig. 13 is an elevation of a modified form of bearing socket adapted to be secured to the casing showing a bearing carried by the bed frame in section arranged therein; and Fig. 14 is a detail longitudinal section through the roller.

Like numerals of reference refer to like parts in the several figures of the drawings.

In the drawings, 1 indicates a casing arranged within a recess formed in the wall having a hinged door 2 for closing the casing so mounted as to be flush with the edges of the casing when in closed position in order to allow the door to be covered with the same design of paper as that upon the wall 3 in order to form a substantially invisible door.

Secured to the outer face of the door 2 adjacent its lower end are angled hangers 4 adapted to extend into a groove 5 of a mop board 6, one wall of said groove being provided with an undercut portion 7 forming a track to receive the hanger and upon which the same is slidably mounted.

Arranged within the groove 5 of the mop board 6 is a coiled spring 8 one end of

which is connected to the mop board as shown at 9 and the other end to the door frame as shown at 10 in order to hold the mop board in its proper position when the door is closed. The mop board 11 to one side of the casing is formed with a square edge adapted to engage the square edge 12 of the mop board 6 and the mop board 13 to the other side of the casing is beveled as shown at 14 to engage the beveled end 15 of the mop board 6 whereby an exceedingly tight joint is formed when the door is in closed position in order to give the mop board an unbroken appearance.

Pivottally mounted within the casing 1 is a rectangular bed frame 16 adapted to be covered with a suitable spring fabric, not shown, to support the mattress, not shown, said frame being preferably formed of angled irons, and the end rails 17 thereof being notched as shown at 18 to receive the links 19 which are pivottally mounted on the side rails as shown at 20. The outer ends of the links 19 are pivottally connected to substantially inverted U-shaped leg frames 21 which are provided with casters 22 and form head and foot pieces. The legs are provided with braces 23 which are pivottally connected as shown at 24 to the leg frames and to the side rails of the bed frame as shown at 25, whereby said leg frames can be swung under the bed frame as shown in Figs. 2, 3 and 9, where they will be held by the links and braces. In order to hold the leg frames in set-up position when the bed is to be used, I provide a pair of angled locking members 26 which are pivottally mounted on the end rail and adapted to be swung under the links 19 by rods 27 pivottally connected thereto and extending toward each other, having their ends mounted upon a lever 28 operated by a handle 29 whereby when said handle is turned in one direction, the locking members 26 will be swung under the links 19 and when turned in a reverse direction, will be swung out of the path of the links in order to allow the leg frames to be folded. The head legs are constructed identical with the foot legs and locked in the same manner so that a description of one will be sufficient for both.

The preferred form of mounting the bed frame 16 within the recess is to provide the side rails of the bed frame with horse-shoe shaped bearing members 30 adapted to receive the bearing pins 31 of plates 32 secured to the side walls of the casing and which are provided with beveled ends 33 adapted to co-act with the beveled ends 34 of the bearing members 30 in order to allow the same to be withdrawn and forced into position.

In Fig. 13, I have shown a modified form of bearing 35 which is adapted to be secured on the wall of the casing to receive the

bearing pin 36 carried by the bed frame and is provided with an adjusting screw 37 in order that the bed can be alined to compensate for the sagging of either side of the bed frame.

For raising the bed into vertical position within the recess, I provide a spring actuated roller 38 mounted in brackets 39 secured upon the top of the casing 1 and having a cable 40 wound thereon and extending through an opening formed in the casing having a snap hook 41 at its free end which is adapted to be connected to the end rail of the bed frame. The spring actuated roller 38 carries a ratchet wheel 42 having a co-acting pivoted pawl 43 for locking the roller against rotation, said pawl being released by a cable 44 extending into the recess having a knob at its end for grasping the same and it will be seen that by releasing the pawl, the cable will be wound upon the roller in order to raise the bed into the recess, it, of course, being understood that the legs have been previously folded and by closing the door, the bed is entirely concealed.

In order to form an exceedingly tight joint at the jamb of the door, I provide the casing with a rabbeted side and top 46 adapted to receive a strip 45 carried by the edge of the door as clearly shown in Figs. 1, 3 and 5.

What I claim is—

1. A bed, comprising a frame, movable members carried by said frame and extending outwardly beyond one end thereof, leg frames carried by said movable members, and pivoted locking members co-acting with said movable members for holding said leg frames in set-up position.

2. A bed, comprising a frame, pivoted members mounted upon the side rails of said frame and extending beyond one end thereof, inverted U-shaped leg frames carried by said members, braces connecting said leg frames to said side rails, and pivoted locking members co-acting with said pivoted members.

3. A bed, comprising a frame, pivoted members carried by the side rails of said frame and capable of extending beyond one end thereof, legs carried by said members, and means mounted upon said frame for locking said members in extended position.

4. A bed comprising a frame having angled side and end rails, links pivottally mounted on the side rails of said bed frame, inverted U-shaped leg frames carried by said links, braces connecting said leg frames to said bed frame, and pivoted locking members co-acting with said links.

5. A bed comprising a rectangular frame formed of angled side and end rails, said end rails being provided with notches, links pivottally mounted in the side rails of said frame extending through said notches, in-

5 verted U-shaped leg frames pivotally carried by the ends of said links, braces pivotally mounted on the side rails of said frame connected to said leg frames, locking members pivotally mounted on the end rails of said bed frame capable of extending under said links, rods connected to said locking members, and a lever connected to said rod for operating the same.

10 6. A bed comprising a substantially rectangular shaped frame having angled side and end rails, said end rails being provided with notches, links pivotally mounted on the

vertical portions of said side rails, leg frames pivotally carried by the ends of said 15 links, braces connecting said leg frames to said side frames, angled locking members mounted on the end rails for holding said links in horizontal position, and means for operating said locking members. 20

In testimony whereof I affix my signature in presence of two witnesses.

HARVEY H. HALL.

Witnesses:

F. W. WELLAND,
H. T. CANDEE.