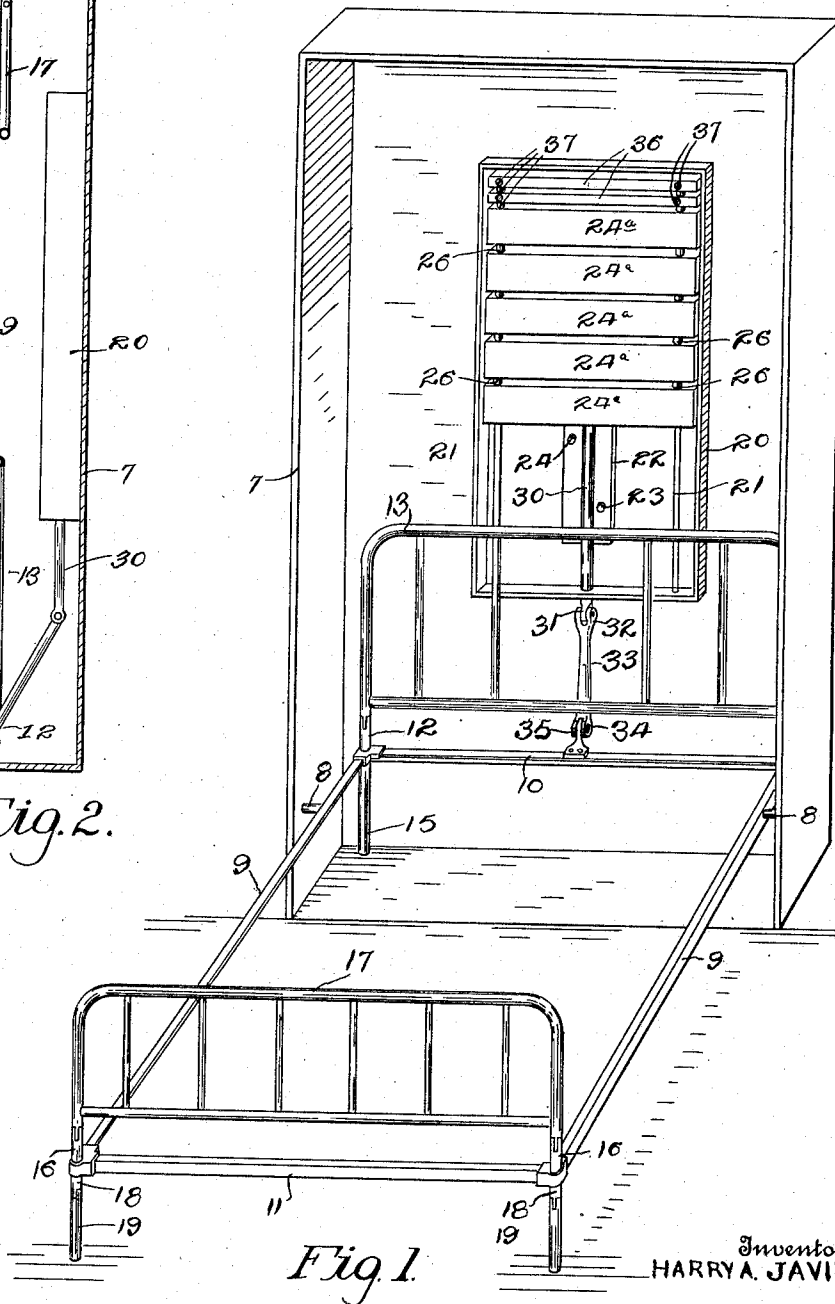
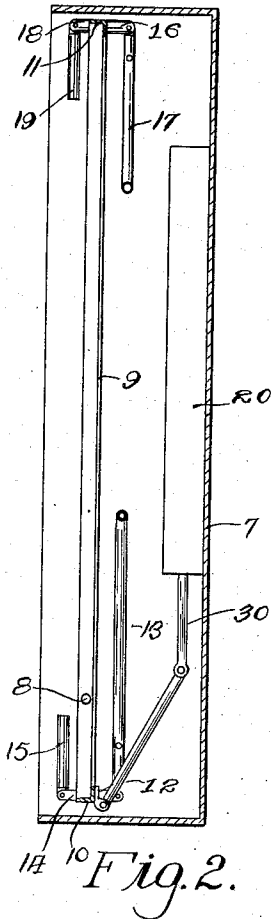


H. A. JAVINS.
WALL BED WEIGHTS.
APPLICATION FILED MAR. 4, 1911.

1,015,318.

Patented Jan. 23, 1912.

2 SHEETS—SHEET 1.



Witnesses
W. A. Stock
H. C. Schroeder

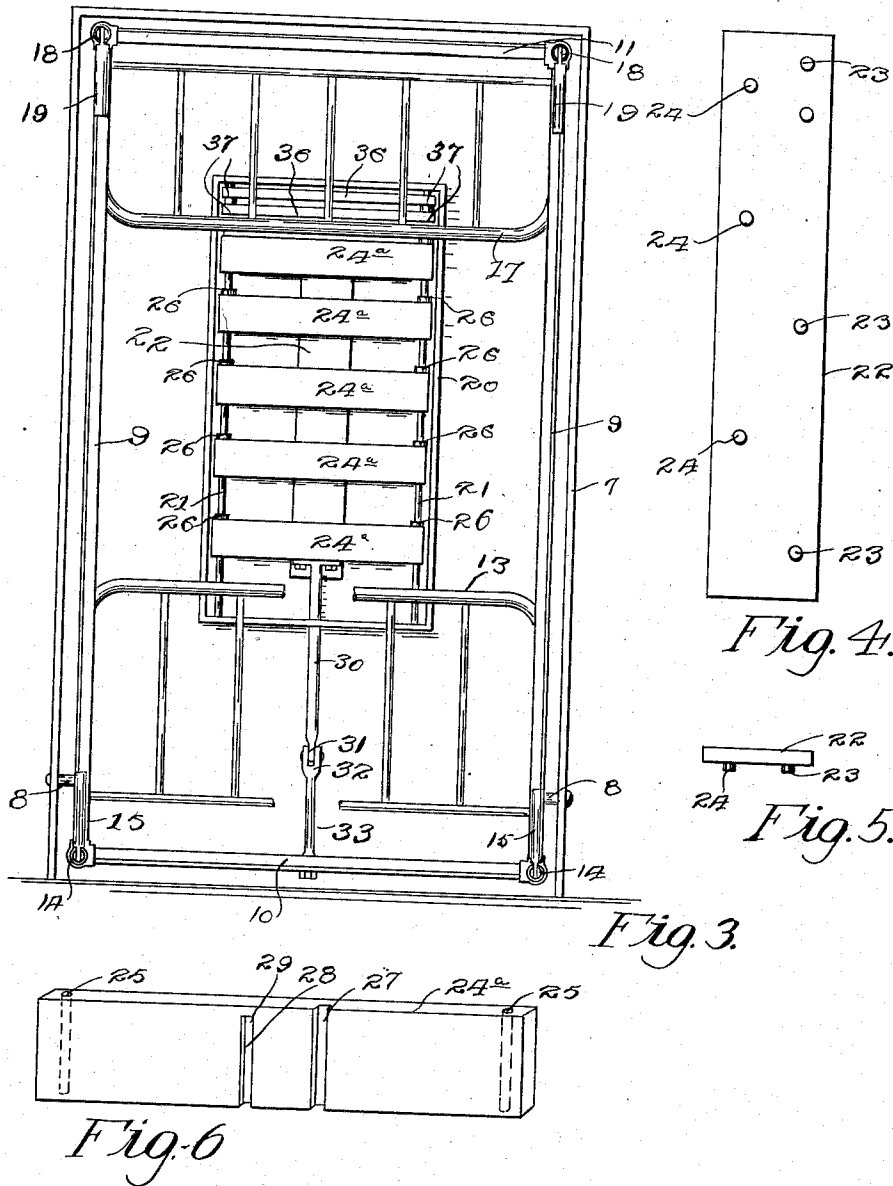
Inventor
HARRY A. JAVINS
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HARRY A. JAVINS.

Witnesses
H. A. Stick
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UNITED STATES PATENT OFFICE.

HARRY A. JAVINS, OF OAKLAND, CALIFORNIA, ASSIGNOR TO JAVINS-McGEEHAN MANUFACTURING COMPANY, A CORPORATION OF CALIFORNIA.

WALL-BED WEIGHTS.

1,015,318.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed March 4, 1911. Serial No. 612,305.

To all whom it may concern:

Be it known that I, HARRY A. JAVINS, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Wall-Bed Weights, of which the following is a specification.

This invention relates to folding beds of the type that are folded into a wall casing or alcove, and the principal object of the same is to provide novel means which will counterbalance the bed so that it will not fall to an open or a folded position suddenly and which will retain the bed in any position desired relative to the floor or wall.

The invention also contemplates novel means which can be added to the counterbalancing means to compensate for the additional weight of the bed incidental to the use of heavy bed clothes.

In the accompanying drawings a preferred and practical embodiment of the invention has been shown wherein:—

Figure 1 is a perspective view of the improved bed shown open. Fig. 2 is a vertical sectional view showing the bed closed. Fig. 3 is a front view thereof. Fig. 4 is a plan view of a holding plate used in connection with the counterbalancing weights. Fig. 5 is an end view thereof. Fig. 6 is a detail perspective view of one of the counterbalancing weights.

Referring to the accompanying drawings by numerals it will be seen that the improved bed has been shown as including an upright, substantially rectangular open front casing 7, but it will of course, be readily understood that the same may be an alcove of a room. The side members of said casing have laterally projecting pivot shafts 8 extending from the lower portions of their inner surfaces.

The side bars 9 of the bed have their forward portions pivotally mounted on the shafts 8 and said bars 9 are connected at their forward ends by the head bar 10, and at their rear ends by the foot bar 11. The front corners of the bed are provided with the upwardly projecting lugs 12 to which the head 13 is pivotally connected and the downwardly projecting lugs 14 to which the front legs 15 are pivotally connected. The rear corners of the bed are similarly provided with upwardly projecting lugs 16 to which the foot 17 is pivotally connected and

the downwardly projecting lugs 18 to which the rear legs 19 are pivotally connected. This structure obviously permits the head and foot to be folded onto the top of the bed, the front and rear legs to be folded onto the bottom of the bed, and the entire bed to swing on the shafts 8 so that said bed will be entirely within the casing 7.

A rectangular frame 20 is centrally located within the casing 7 and has vertical guide rods 21 arranged at each side portion thereof. A vertically arranged plate 22 is centrally located within frame 20 and is provided with two vertical rows of laterally projecting pins 23 and 24, the pins of each row being suitably spaced, and the pins of one row being arranged in staggered relation to the pins of the other row. A plurality of weights 24^a have end openings through which the guide rods 21 extend, said weights being slidable on said rods. Cushion washers 26, preferably rubber, are carried by the rods 21 and interposed between the weights 24^a. The rear surface of each weight is provided with a groove that extends the entire width of said weight and also with a second groove 28 that is in spaced parallel relation to groove 27 and extends from the lower edge of the weight to a point adjacent the upper edge thereof, so that an abutment shoulder 29 is formed at the upper end of said groove 28. As will be clear, the grooves 27 and 28 slidably engage the pins 23 and 24 respectively, the pins 23 limiting the downward movements of the weights 24^a by contact with the abutment shoulder 29.

The lowermost weight has the flanged end of an operating rod 30 fastened to the central portion of its lower edge, said rod extending through the bottom of frame 20 and terminating in an ear 31 that is pivotally fastened in the bifurcated upper end 32 of a link 33. The lower end 34 of said link is also bifurcated and has a bracket ear 35 that projects from the center of the front bar 10 of the bed pivotally fastened therein. The weights 24^a hang on the pins 23 through the medium of the abutments 29 of the grooves 28 when the bed is within the casing 7.

When it is desired to open the bed, it will be seen that the pivotal movement of the bed causes its forward end to force the push rod 30 upward, said rod obviously

carrying with it the lowermost weight 24^a. Further pivotal movement of the bed elevates the next to the lowest weight, this operation being continued until the bed is
 5 resting on the floor, at which time all weights will have been elevated. With this arrangement it will be clear that the force opposing the outward swing of the bed increases as the bed swings outward so that the bed will
 10 be gradually lowered to the floor. To return the bed to the casing 7 it will be seen that the pivotal movement of the bed lowers the bracket ear 35 and all of the weights 24^a are pushing down on the rod 30. The
 15 pressure of the weights on the rod 30 continues until the bed is within the casing 7, at which time all of the weights except the lower one are suspended on the pins 23. The weights 24^a are such that they exactly
 20 counterbalance the bed without heavy bedding, and to compensate for the additional weight of such bedding, auxiliary weights 36 are slidable on the rods 21 above the weights 24^a. The auxiliary weights 36 are
 25 smaller than the weights 24^a and may be locked against movements on the rods 21 when their use is not desired by means of the thumb screws 37.

What I claim as my invention, is:—

30 1. A folding bed comprising a casing,

a weight frame therein, guide rods in said frame, a plate in said frame between said rod, vertical rows of laterally projecting pins carried by said plate, weights slidable on said rods and provided with rear grooves 35 into which said pins project, one groove of each weight being provided with an abutment for limiting the movements of the weights in one direction, a rod fastened to the lowermost weight and slidable through 40 said frame, a bed pivotally connected to said casing, a bracket ear carried by said bed, and a link connection between said ear and said weight rod.

2. A folding bed comprising a casing, 45 guide rods therein, bed counterbalancing weights slidable on said rods, means for controlling said weights to regulate their counterbalancing actions, a bed pivotally mounted in said casing, auxiliary weights slidable 50 on said rods for use in counterbalancing extra weight on the bed, and means for locking said auxiliary weights to said rods.

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

HARRY A. JAVINS.

Witnesses:

H. C. SCHROEDER,
 F. P. SCHROEDER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."