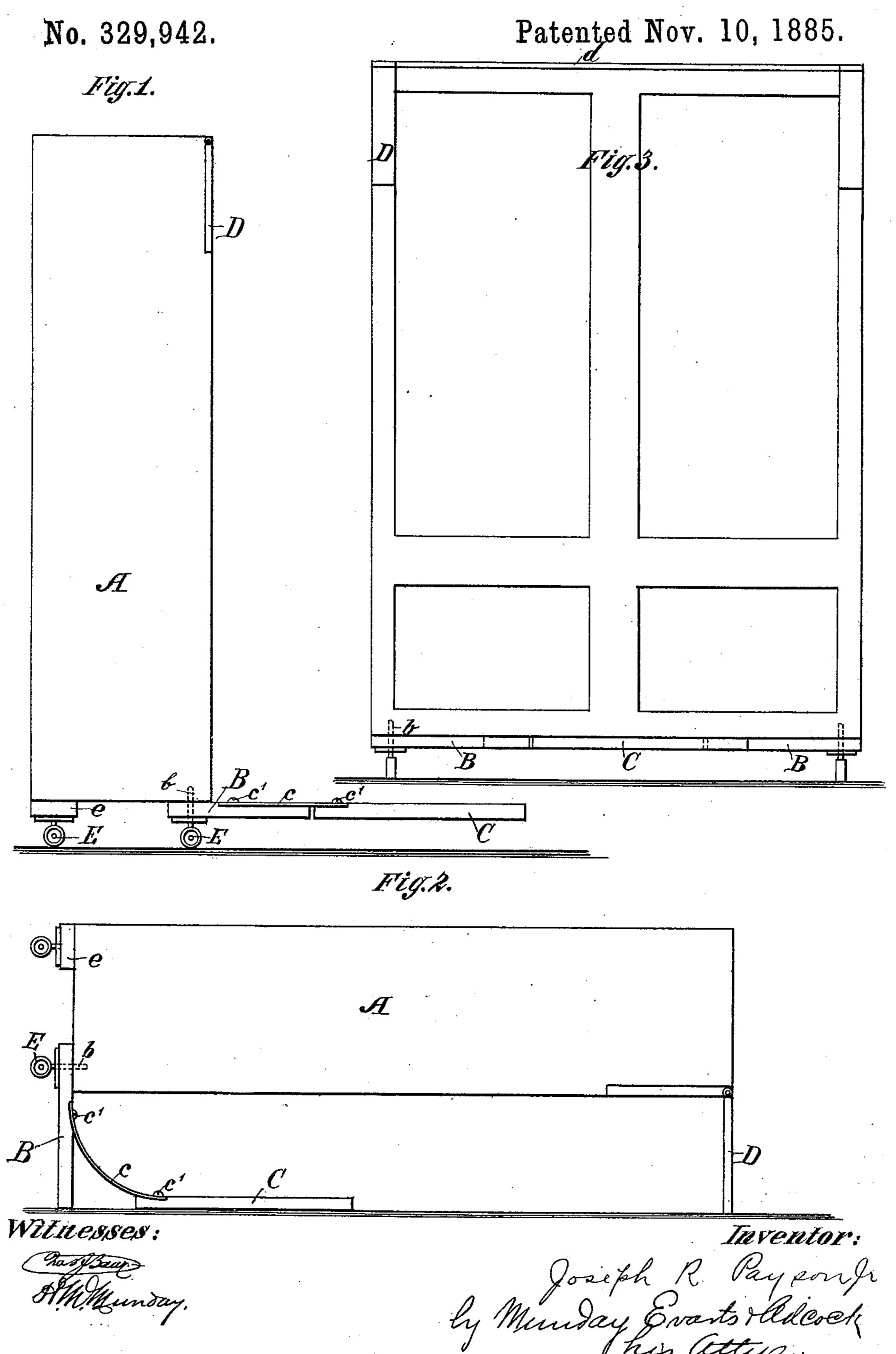
J. R. PAYSON, Jr.

FOLDING BED.



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Patented Nov. 10, 1885.

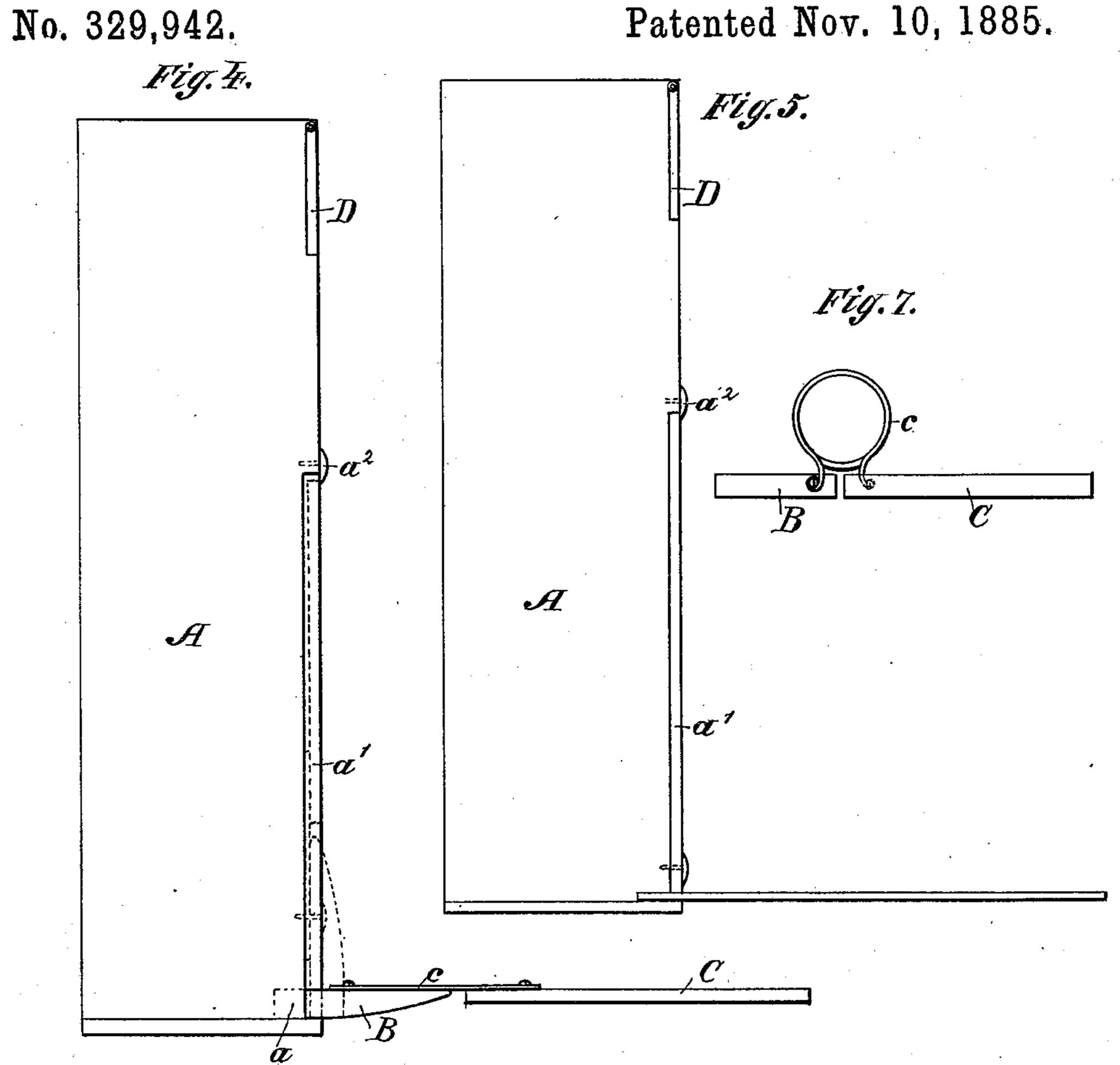
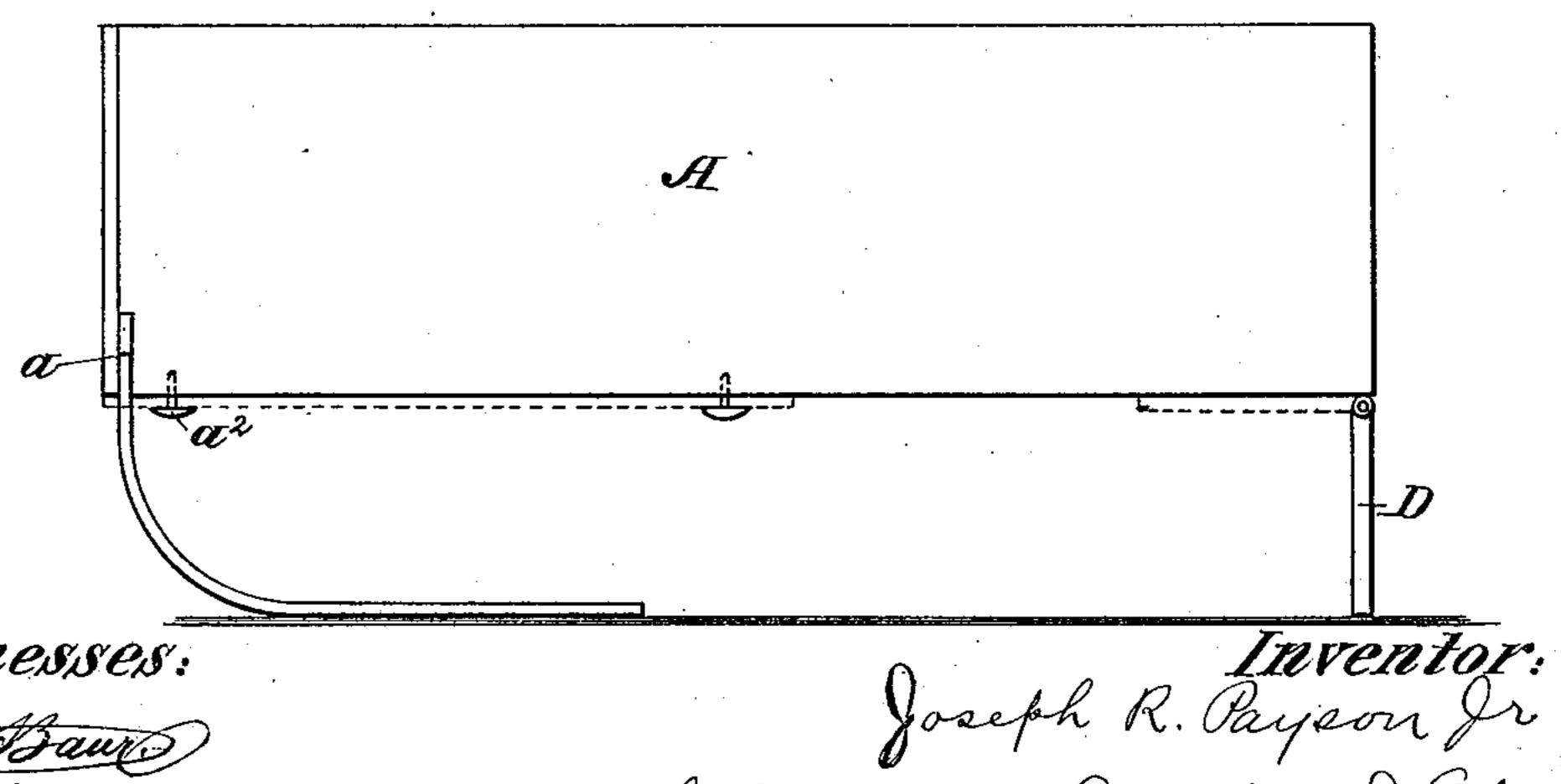


Fig.6.



Witnesses:

by Munday, Evarts, and Adcock his attyo

United States Patent Office.

JOSEPH R. PAYSON, JR., OF CHICAGO, ILLINOIS.

FOLDING BED.

SPECIFICATION forming part of Letters Patent No. 329,942, dated November 10, 1885.

Application filed June 25, 1885. Serial No. 169,744. (No model.)

To all whom it may concern:

Be it known that I, Joseph R. Payson, Jr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Folding Beds, of which the following

is a specification.

My invention relates to that class of folding beds which are termed "upright" beds, such 10 as are made in the form of wardrobes, mantels, &c.; and my invention consists in certain improvements in the lower or head legs of the same, so that the bed may be raised or lowered without the use of any frame or 15 casing whatever, thereby making a folding bed almost as cheap and portable as an ordinary bedstead.

By reference to my application filed June 5, 1885, No. 167,723, it will be seen that I there use a framed base-support for the bed proper.

The object of my present invention is to dispense with the use of any frame or base and to produce a leg which shall serve all the purposes of raising and lowering the bed, as hereinafter shown.

I attain this object; and herein my invention principally consists, by means of a spring-extension to the ordinary head-legs of the bed. The bed-legs are attached to the bed box or 30 body pivotally or detachably, so that they, together with the spring-extension attached thereto, may be folded in out of the way when the bed is in its upright position or not in use. In the direction that the bed frame or body 35 turns down the head-legs are rigidly jointed to the bed-body, so that as the body turns down it will turn on the lower ends of the legs as a pivot. The spring - extension of these head-legs is preferably made in the form of a 40 bar or stick attached to the head-leg by a spring, and this spring may preferably be a flat steel spring secured at one end to the headleg and at the other to the extension-bar. A coil-spring may, however, be used, and, if de-45 sired, the leg and spring-extension may be made all in one piece in the form of a strong long flat spring of metal or wood. It is also desirable to round or curve the lower surface of the head-legs, so that as the bed turns down 50 it may in a manner roll on this curved surface of the legs, whereby its movement is rendered more easy. The head-legs, with their spring-

extensions, are preferably attached to the body by vertical pivots, so as to fold underneath; but the legs may be connected to the body in 55 any other suitable manner to adapt them to be folded or stored out of the way when the bed is in an upright position, as, for example, the legs may fit in sockets at the lower corners of the bed; and when the bed is turned 60 in an upright position the legs may be pulled out of their sockets and placed in suitable recesses made to receive them in the edges of the bed-box and secured therein in any suitable manner, as, for example, by turn-but- 65 tons. By this means a folding bed may be made almost as light and at very little additional cost over that of any ordinary bed.

In the accompanying drawings, which form a part of this specification, and in which simi- 70 lar letters of reference indicate like parts, Figure 1 is a side elevation of a device embodying my invention, showing the head-legs with their spring-extension in position ready for turning the bed down. Fig. 2 is a similar 75 view showing the bed turned down in position for use. Fig. 3 is a front view showing the legs with their spring-extensions folded underneath. Fig. 4 is a side elevation showing the head-legs with curved or rounded under sur- 80 face and removably attached to the bed-body by means of sockets. Figs. 5 and 6 are views similar to Figs. 1 and 2, showing the head-legs and their spring-extensions made in one piece; and Fig. 7 is a detail view of the leg and its 85 extension, showing a coil spring in place of the flat spring.

In said drawings, A represents the bed box, frame, or body, which contains the mattress. It may be of any suitable or desired construction, and its front or bottom face may be made in imitation of a wardrobe, mantel, or other

article.

B represents the head or lower legs of the bed. They are extensibly connected to the 95 bed body A, so as to fold in and out of the way when the bed is not in use in any suitable manner—as, for example, by vertical pivots b, as shown in Figs. 1, 2, and 3, where the legs fold horizontally under the bed. These legs B are 100 each provided with a spring-extension, preferably consisting, as shown in Figs. 1, 2, and 3, of an extension-bar, C, and spring c_connecting the two. This spring is preferably

made in the form of a flat spring, and connected at one end by suitable screws or bolts, c', to the leg B, near its inner or upper end, and at its other end to the exterior bar C near the inner end of the same. The spring may, however, be made in any other suitable form—as, for example, a coil-spring, as shown in Fig. 7.

Instead of pivoting the legs B to the bedto box A, they may be connected thereto in any
other suitable manner—as, for example, by
means of sockets or holes a in the bottom of
the bed; and the legs B, with their spring-extensions C c, may be placed in a recess, as a',
formed in the edge of the body, and held therein by any suitable means—as, for example,
turn-buttons a². This means of extensibly connecting the legs B to the bed-body so that they
may be folded or stored out of the way is
shown in Figs. 4, 5, and 6.

The lower surface of the legs B should be curved or rounded, substantially as shown in Fig. 4, in the form of a rocker, so that as the bed begins to turn down it may roll or rock onto the point or end of the leg. By this means I find that the bed can be more easily turned down and raised to its upright position.

D are the upper or foot legs of the bed. 30 They are hinged or otherwise extensibly connected to the bed-body, so as to fold in out of the way. A bar, d, should connect these legs, so that they may be both operated at once.

the bed rests when in an upright position. A block, e, equal in thickness to the legs B, is attached to the lower end of the bed, so that it may set level on the casters, in the construction shown in Figs. 1, 2, and 3.

Where a flat spring is employed, as shown in Figs. 1 to 6, it may be veneered or covered with paper in imitation of veneer, or otherwise ornamented, and where the construction shown in Figs. 5 and 6 is employed the legs may be made of wood.

The extension-bar C, as shown in Figs. 1 to 4, should ordinarily be made about two feet long, or about twice the length of the legs 5° B. When the legs B are therefore folded in,

as shown in Fig. 3, the exterior bars, C, will lap over each other, as indicated in dotted lines in said figure.

By reason of the length of the extension-55 bars C they will lie flat upon the floor when the bed is being turned down or raised, and render the action of the springs effective.

The head-legs B B, with their spring-extensions C c C c, whether made in separate pieces, as shown in Figs. 1, 2, 3, 4, and 7, or in one piece, as shown in Figs. 5 and 6, constitute yielding or spring supports when ex-

tended in front of the bed, by means of which the bed is raised and lowered.

In my previous application, above referred 65 to, the bed box or body is mounted upon a separate base or pedestal, and this base is furnished with rigid, extensible, or folding arms, which may be extended in front or in the direction the bed folds down to increase the area 70 of the base-support while the bed is being folded or unfolded. As this forms the subject-matter of my previous application, I do not herein claim the same.

I claim—
1. A folding bed having yielding or spring extensible supports attached to the bed-box and bearing upon the floor in front of the bed when the same is lowered, substantially as

specified.

2. A folding bed consisting of a body or box, as A, extensible head-legs, as B, connected to said bed-body rigidly in the vertical direction and having spring-extensions, substantially as specified.

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3. In a folding bed, the combination of a bed body or box, as A, with extensible headlegs, as B, and extension-bars, as C, and springs, as c, connecting said legs and extension-bars, substantially as specified.

4. In a folding bed, the combination of bed body or box A with legs B, pivoted thereto to fold horizontally and provided with spring-extensions, substantially as specified.

5. In a folding bed, the combination, with 95 bed-body A and legs B, pivoted thereto to fold horizontally, of extension-bars C and flat spring c, connecting said legs and extension-bars, substantially as specified.

6. In a folding bed, the combination of bed- 100 body A with legs B, provided with a curved or rounded under surface and having spring-extensions, substantially as specified.

7. In a folding bed, the combination, with bed-body A, of legs B, having a rounded un- 105 der surface, extension-bars C, and springs c, substantially as specified.

8. A folding bed having yielding or spring supports extending from and attached to the bed-box and adapted to bear on the floor in 110 front of the bed, to assist in raising and lowering the bed, substantially as specified.

9. A folding bed provided with one or more spring extensions or arms attached at or nearly at its base for raising and lowering the bed, 115 as described.

10. A folding bed having means for raising and lowering it consisting of pivoted extensible spring-arms attached to the lower portion of the bed, substantially as described.

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Witnesses:
H. M. Munday,
Edmund Addock.