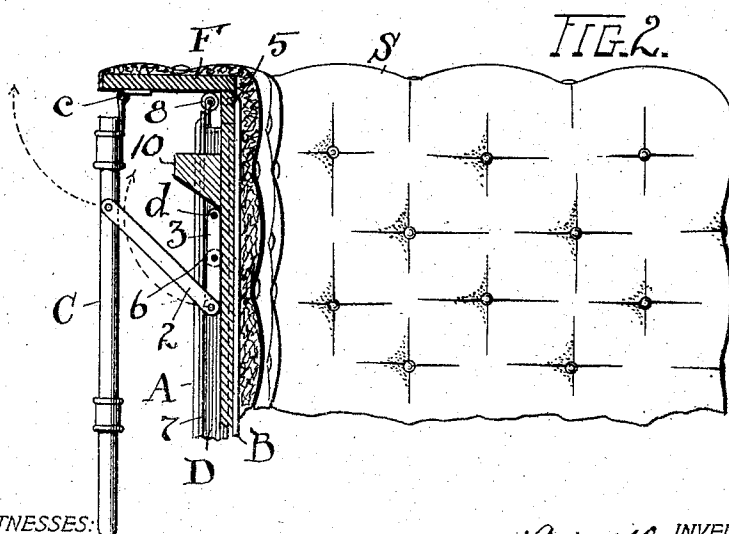
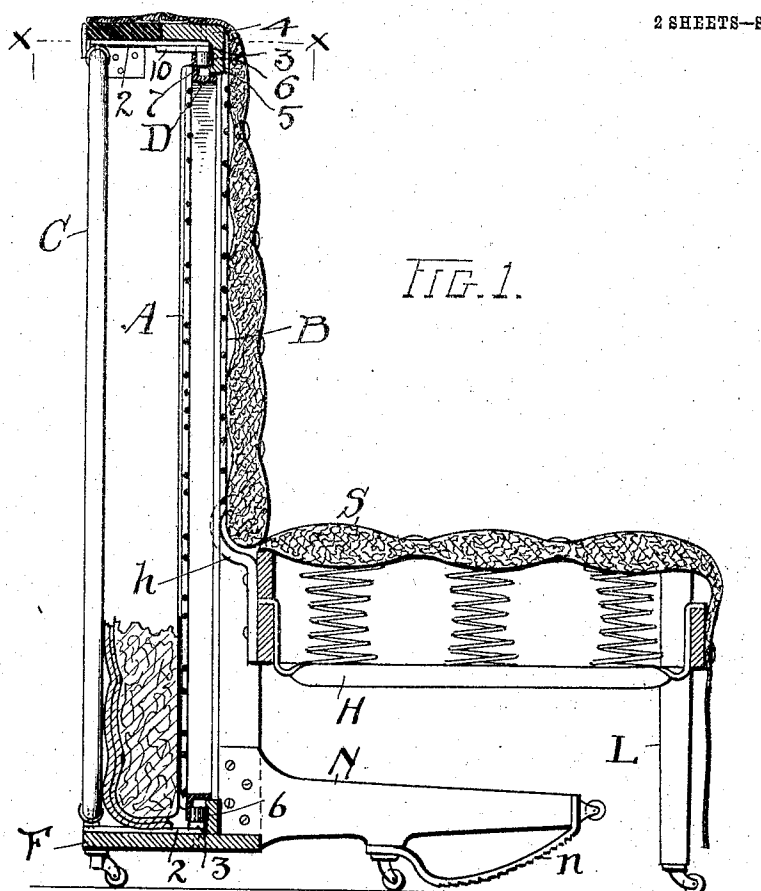


No. 781,153.

PATENTED JAN. 31, 1905.

D. T. OWEN.
COMBINED BED AND COUCH.
APPLICATION FILED DEC. 14, 1903.

2 SHEETS—SHEET 1.



WITNESSES:

W. B. Moser
A. W. Moser

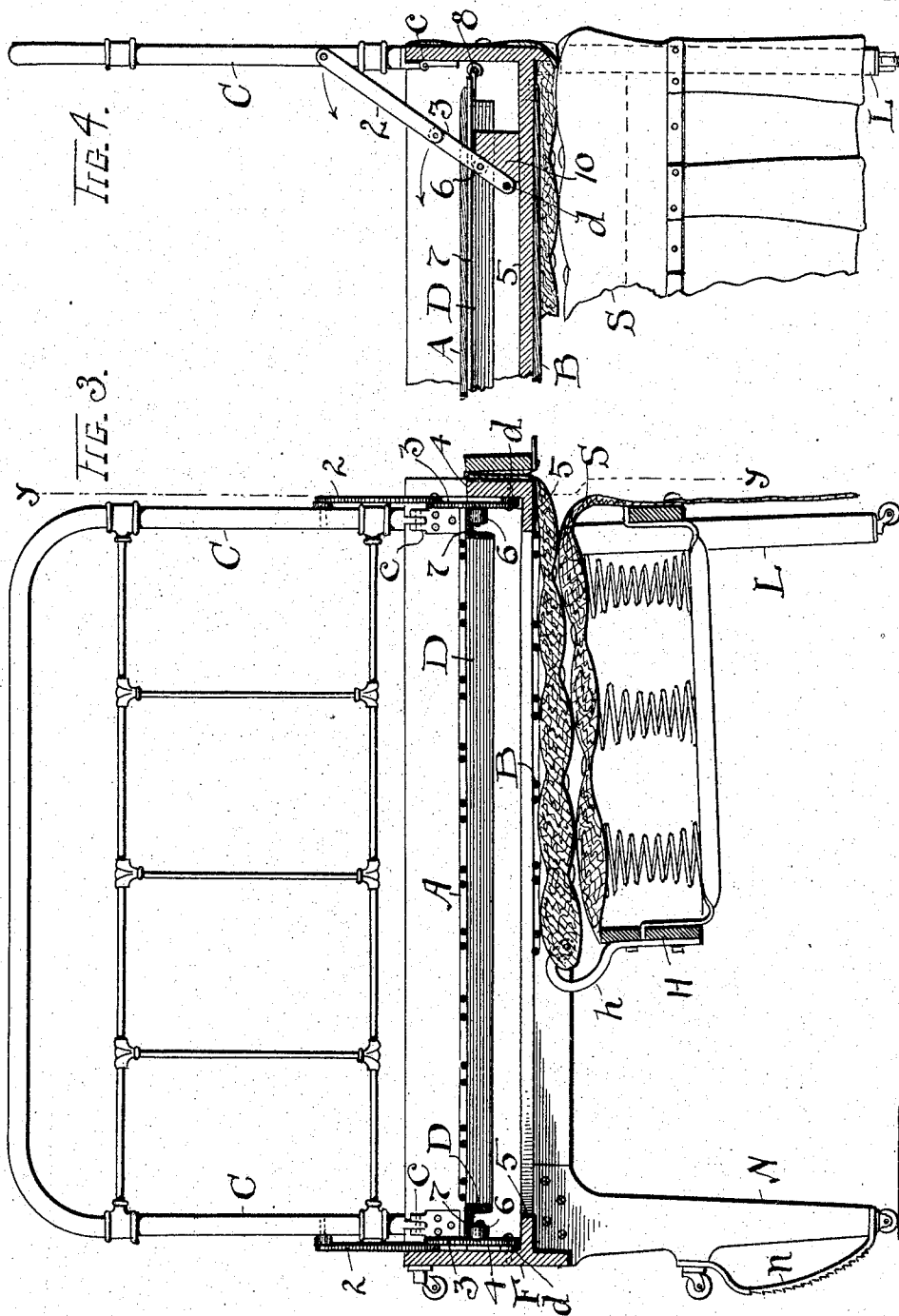
INVENTOR.
David Thomas Owen
BY *H. T. Fisher*
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UNITED STATES PATENT OFFICE.

DAVID THOMAS OWEN, OF CLEVELAND, OHIO.

COMBINED BED AND COUCH.

SPECIFICATION forming part of Letters Patent No. 781,153, dated January 31, 1905.

Application filed December 14, 1903. Serial No. 185,158.

To all whom it may concern:

Be it known that I, DAVID THOMAS OWEN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in a Combined Bed and Couch; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in combined beds and couches; and the invention consists in the construction and combination of parts, substantially as shown, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a cross-sectional elevation of the invention shown as a couch; and Fig. 2 is a plan view on line *xx*, Fig. 1. Fig. 3 is a cross-sectional elevation of the invention shown as a bed; and Fig. 4 is a side elevation or section on line *yy*, Fig. 3.

The manner of connecting the couch and bed and of supporting the same one with the other is fully set forth in a concurrent application, Serial No. 187,235, and is not claimed herein. On the other hand, this invention has to do chiefly with the manner of supporting and raising and lowering the bed-spring or spring-mattress and its supporting-frame and upon which the bed-mattress proper is a wholly separate thing, as usual in beds. In a combined structure of this general kind, in which provision must be made for parts piling one on top of or over the other, it is always difficult to keep down proportions so that bulkiness or clumsiness will be avoided and the appearance will be that only of a rich and massive piece of furniture, especially in the dress distinctly of a couch and as it appears for all-day use.

In carrying out my invention the problem has been how to get the comforts of a perfect bed when the bed is used and the appearance simply of a couch and without the suggestion of a bed under cover when the bed is retired.

My present invention is planned to meet all these requirements of utility and artistic effect by providing the bed with a spring or mattress of its own that is raised for use and

lowered when not used, thereby giving the utmost freedom beneath for the spring to act as it would upon a bed and retiring it within the back of the couch so as not to make the depth of said back objectionable for appearances.

To these ends I have adopted two wholly separate and independent springs A and B, respectively, for the bed and couch-back. A is stretched across or upon its own angle-iron frame D, which is independently supported upon and from the main or angle frame F of the bed and couch by lifting and lowering mechanism, as will hereinafter appear. On the other hand, spring B of couch-back is secured directly to frame F and extends down only as far as the back of the couch requires to bring it to the couch-seat.

The respective head and foot or end frames C of the bed are each hinged at *c* to or upon main frame F and adapted to be folded inward upon the bed when the bed is folded, thereby both getting said frame out of the way and making them serve to keep the bed-clothing in place. Each of said end frames C is also provided at each side of the bed—front and rear—with a brace-link 2, which in turn is pivotally connected with another and shorter brace-link 3, pivotally fixed at its other end to the upright or vertical side 4 of angle-frame F. The other angle, 5, of said frame lies horizontally, as shown. Said links have a rule-joint or like connection, so that when the end frames C are raised to occupy the bed the said links serve as braces for said end frames and hold them in fixed erect position. Rollers or sheaves 6 are secured on the inside of each link 3 near its middle, which engage beneath the horizontal side 7 of mattress-frame D. Now with the pivot of link 3 at *d* and roller 6 under flange or side 7 it follows when an end frame C is raised the mattress-frame D must be raised also, and the mutual bracing of links 2 and 3 will inevitably hold the bed ends up, as it does also the bed-mattress frame. By these simple means I lift the bed-spring bodily away from everything beneath or behind it which could obstruct its freedom for use and make the bed as comfortable as it could be if wholly disassociated from the couch. By

these means also I am enabled to produce a compact or consolidated effect to the couch-back and promote the desired symmetry and neatness in appearance when the bed is folded 5 and only the couch is seen. For ease in its operation I provide frame D with end rollers 8, which bear against the vertical or upright end portions of frame F, and each end of the mattress-frame is raised as each end frame C 10 is raised, and the reverse movements of said end frames lowers the bed or mattress, as seen in Fig. 1.

Links 2 are connected with end frames C above their own pivot or hinge connections 15 with frame F at such height as to give the desired action to the links and to preserve the bracing effect, the angle of said links being substantially forty-five degrees, and the said frames themselves abut or shoulder upon 20 frame F at offset 10, as shown. This effectually prevents said frames swinging back past an upright position.

For convenience, especially in the claims, the bed-mattress A and its frame D are referred to herein under the generic term 25 "spring-mattress" in contradistinction to a cushioned or hair mattress as such, and the said spring-mattress is regarded as over or above the back of the couch rather than behind it, because this is its relation when its adjustments and use occur. At other times it is a dead member of the organization. 30

Obviously a sliding rather than a rolling engagement could be used in or upon links 3 35 with mattress-frame D; but rollers are preferred, and the same is true as to rollers 8.

The back of the couch terminates below at the edge of couch-seat S, and the seat-frame H is suspended at its rear by hangers *h* from 40 the main frame and is supported at its front by legs L. The legs N are rigid with main frame F and have metallic, and preferably serrated, rockers *n* at their lower and rear portions adapted to promote the tilting of the 45 main frame.

What I claim is—

1. In a bed and couch, a folding frame for the bed and couch-back and a spring-support for the back secured upon the bottom thereof, 50 a movable bed spring-mattress providing a false bottom within said frame and independent of the said back, and means supporting the said mattress movably in respect to said spring-support for the back, substantially as 55 described.

2. In a bed and couch, a main bed-frame and

a couch-back at the bottom thereof, a spring-mattress for the bed separate from the said back and forming a false bottom horizontally within said frame and means to raise and lower 60 the said mattress within limits and from said back, substantially as described.

3. The main frame for the bed and back of the couch, the spring-mattress separately movable up and down in respect to said frame and 65 braces to hold said mattress in raised position, said braces having pivoted connections with said main frame at their lower ends and a traveling engagement with the sides of said mattress between their ends. 70

4. In a combined bed and couch, a main frame and a couch-back fixed thereon, in combination with a spring-mattress for the bed 75 above said back, end frames foldable upon the bed and links connecting said frames with the main frame and having traveling engagement with the said spring-mattress, whereby said mattress is raised when said end frames are raised.

5. The main frame for the bed and couch, 80 in combination with a spring bed-mattress, end frames foldable upon the bed, links connecting the said end frames with said main frame and constructed to brace said end frames in a raised position, and side projections on 85 said links operatively engaged with said mattress, substantially as described.

6. The main frame for the bed and couch, a couch-back fixed on said frame, a bed-mattress over said back, end frames for the bed 90 hinged to fold thereon, links pivotally connecting said end frames with the main frame and supports on said links for said mattress, said links constructed to serve as braces to hold both the mattress and the end frames in 95 raised positions, substantially as described.

7. In a bed and couch, a frame for the bed and couch-back, a spring-support for the couch-back covering stretched on said frame, a spring-mattress for the bedding movably 100 supported within said frame, an end frame pivotally supported upon said bed-frame at each end thereof, and means connecting said mattress and end frames to raise said mattress when said end frames are raised, substantially 105 as described.

In testimony whereof I sign this specification in the presence of two witnesses.

DAVID THOMAS OWEN.

Witnesses:

R. B. MOSER,

C. A. SELL.