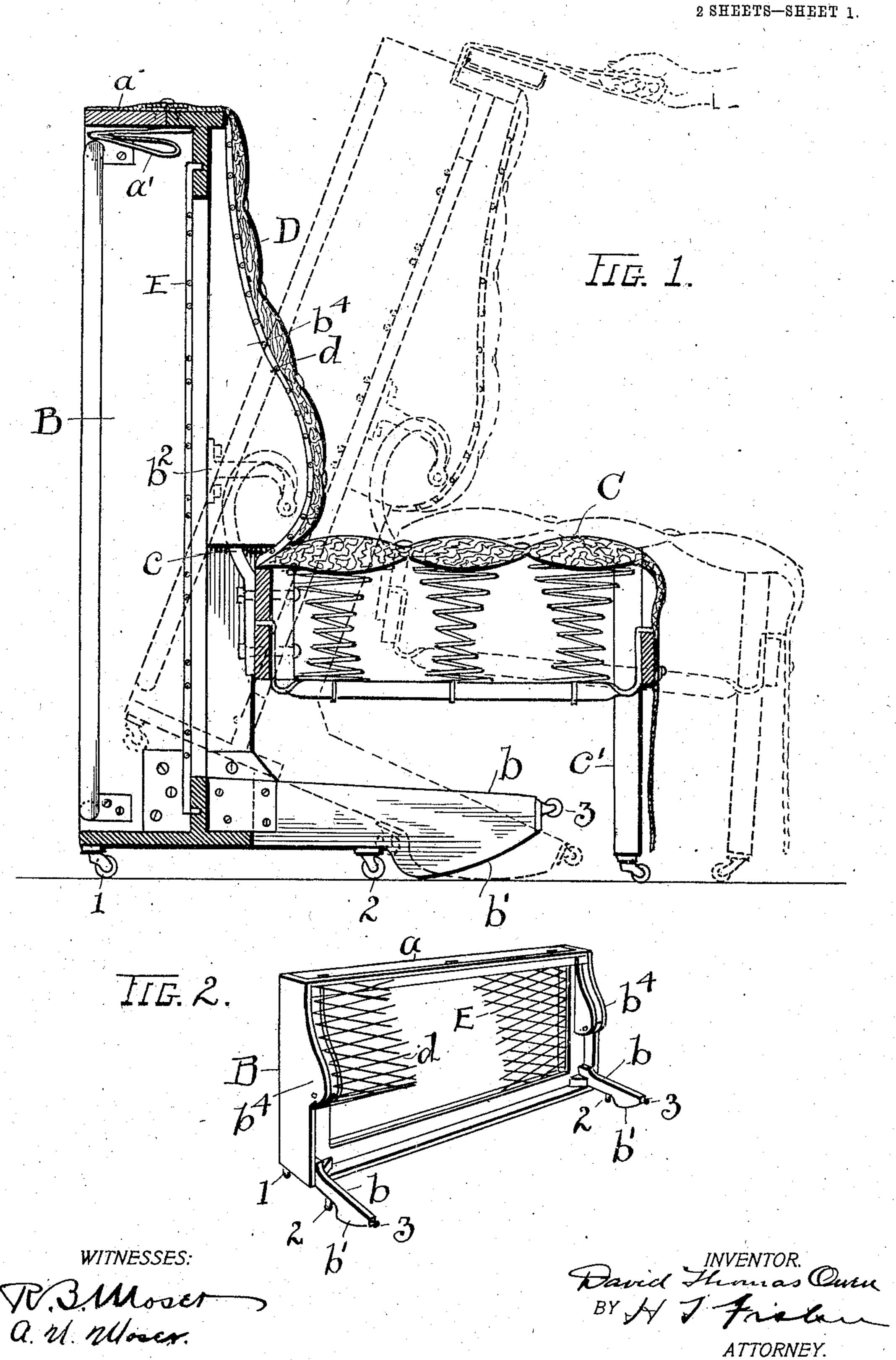
D. T. OWEN. COMBINED BED AND COUCH. APPLICATION FILED DEC. 30, 1903.

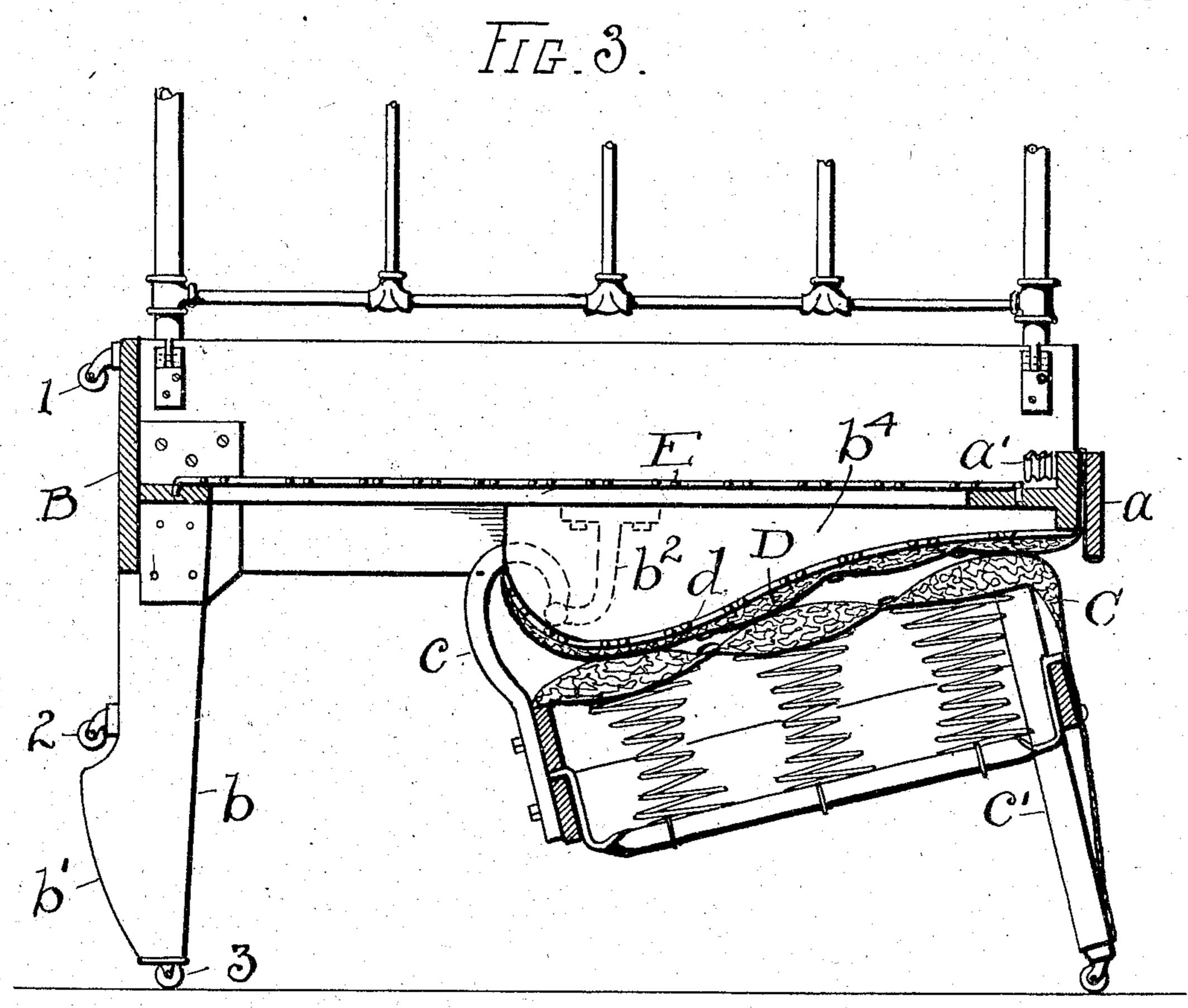


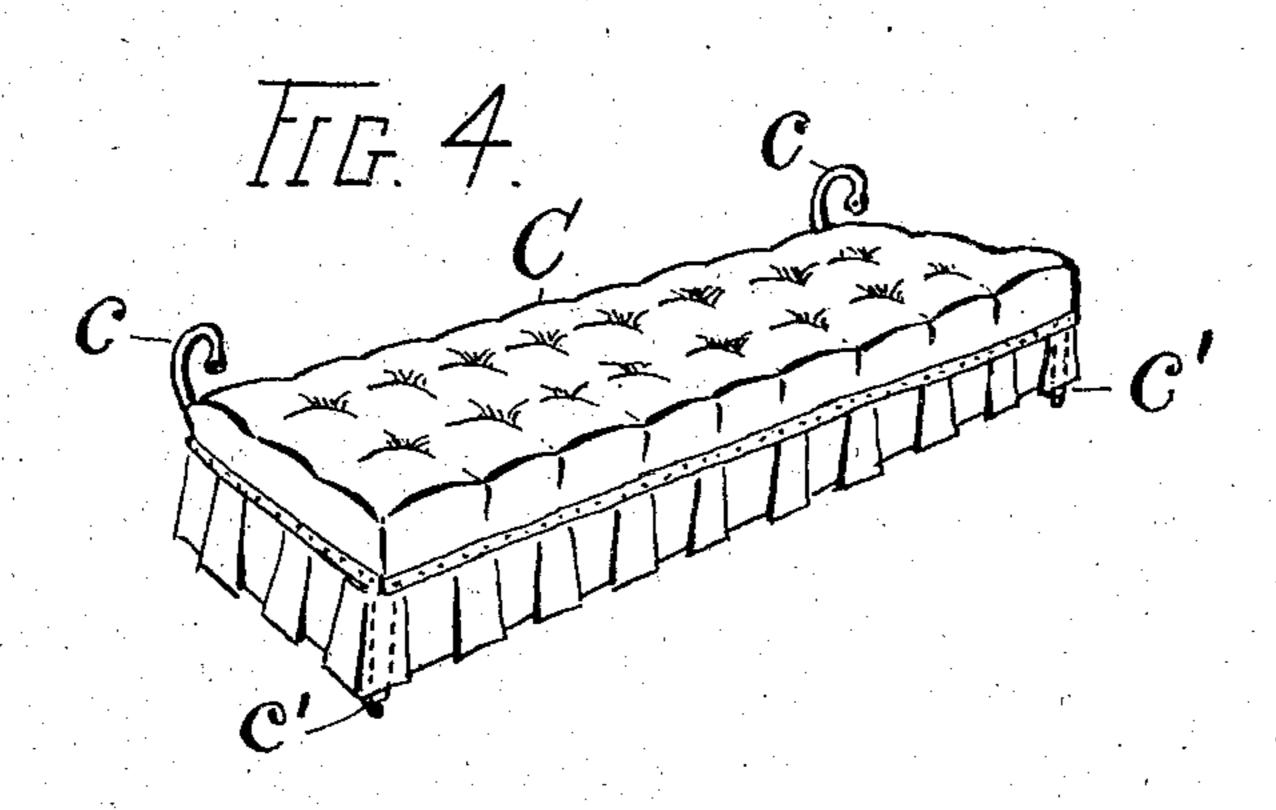
D. T. OWEN.

COMBINED BED AND COUCH

APPLICATION FILED DEC. 30, 1903.

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WITNESSES: Quiloser a. W. Woser.

David Thomas Ouru,

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ATTORNEY.

United States Patent Office.

DAVID THOMAS OWEN, OF CLEVELAND, OHIO, ASSIGNOR TO THE D. T. OWEN COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF NEW JERSEY.

COMBINED BED AND COUCH.

SPECIFICATION forming part of Letters Patent No. 791,718, dated June 6, 1905.

Application filed December 30, 1903. Serial No. 187,235.

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 has reference to a combined bed and couch; and the invention consists in a construction and combination of parts in which the bed and couch are mutually dependent one upon the other and convertible into a perfect bed and a perfect couch alternately at will, all substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a cross-section of the parts as they appear when used as a couch and showing the parts in dotted lines as partially tilted, as occurs in converting the structure in either direction. Fig. 2 is a perspective view of the bed
25 frame reduced in size as compared with Fig. 1 and showing the construction for the couchback at the front thereof. Fig. 3 is a cross-sectional view of the parts as they appear when converted into a bed, and Fig. 4 is a perspective view, reduced, of the couch proper less the back.

In this construction of bed and couch I have in view the making of a comparatively cheap article, or one which can be sold at a price 35 within the reach of people generally who need conveniences of this kind, such as the occupants of apartment-houses and where room needs to be economized. To these ends every part is made to serve as many pur-40 poses as possible, and simplicity of construction is everywhere consulted. Thus the bedframe B, Fig. 2, is a plain rectangular structure of wood or metal and provided with two rigid rear legs b, adapted to constitute a rock-45 ing fulcrum or turning-point for the bed in its change from a vertical to a horizontal position and back again. To this end the said legs have each a rocker enlargement or extension b' at or upon their rear, and three several

casters 1, 2, and 3 are used at each end of 50 said frame on what is properly the under side of the frame and legs when the bed is up or raised, and the said bed rests on casters 1 and 2 in its raised position and on casters 3 when down. This construction enables me to over- 55 come a former difficulty in the use of legs disposed and working substantially as do legs bin this instance, because when said legs were made long enough to get the necessary elevation of the bed in its tilted position, as in Fig. 3, 60 the tilting fulcrum was thrown to the extremities of said legs, and this made it necessary to exert in the neighborhood of sixty pounds pull on the top of the bed or bed-frame to turn it from vertical to horizontal position. 65 By my present improvement I retain the requisite elevation of leg; but by means of a rocking-fulcrum back on the bottom of said leg approximately half its length the tilting of the bed-frame forward is accomplished 7° with very much greater ease and on a rocking surface in addition, which is a very great advantage, because it overcomes the tendency of the legs otherwise to slide on the floor. Hence formerly I had to use a catch to pre- 75 vent such sliding. Now none is needed, and whether up or down the bed is upon casters to be moved over the floor like the furniture. In the movement of the frame B forward and down the couch C necessarily moves some- 80 what toward the front by reason of its connection with frame B, relatively as seen in dotted lines, Fig. 1, and the person who draws the bed down may, if necessary, help to prevent the parts from creeping forward together 85 rather than tilting of frame B by interposing himself against the couch as he draws forward on the bed-frame. This is only liable to occur on reaching casters 3 and is easily checked, because by this time the bed-frame 90 is brought where its own gravity helps to make the turn. Indeed, with my present improvement a comparatively frail woman can change the bed from one position to the other both ways without undue exertion. The couch C is provided at its rear and ends

with hook-shaped hangers c, which are piv-

otally connected with pendants or brackets

b² on the ends and middle of bed-frame B. The hangers c have a gooseneck form, which especially adapts them to use in the present organization and whereby the couch is bodily supported or suspended at its rear in all its positions from the bed. At its front the couch has legs c' rigid with its frame and provided with casters, as usual.

The back D of the couch and the flexible spring or other suitable support E of the bed are in this invention wholly separate and independent of each other, and the said back D has a flexible supporting portion d of its own secured along one edge to the top and front edge of the bed-frame and at its ends or upon the back-supporting extensions b on what is herein referred to as the "bed-frame,"

but which in as true a sense is also the couchback frame. These extensions bt have a curved edge, as herein shown, and gradually deepen toward their lower portions, where they abruptly turn rearward on a plane which brings them down about even with the seat of the couch, as seen in Fig. 1, and which is about

at the middle of the bed. The back-support d of the couch is stretched over these extensions and secured thereon, and this gives the graceful and shapely outline for the back plainly shown in Fig. 1 and wherein the back and seat of the couch are shown as coming together as if built together, but yet perfectly independent on each other structurally. This arrangement also leaves the flexible

This arrangement also leaves the flexible spring or mattress-support E for the bed35 mattress proper entirely separate from the couch-back and as though it were not associated with a couch. The front of the bed when down rests upon the front of the couch, or rather upon the legs c of the couch, at its ends, so that to this extent the bed is supported by the couch and is dependent

Practically the brackets b^2 and the gooseneck-curves of hangers c for the couch come into the space behind the couch-back and are protected by the forward end extensions b^4 , which sustain the couch-back apart from the bed-bottom, relatively as seen in Fig. 1.

Whatever mattress is used for the bed is a separate article, as usual, and rests upon the support E within such boxing or other edge or end construction there may be for the mattress within or upon frame B, and the cross-sectional view in Fig. 3 shows how perfectly independent the bed is of the back of the couch and the back of the couch of the bed. It will be seen that the deepest portion of rockers b' is at their rear nearest to frame B, and the casters do not touch when the rockers are at work.

The curved back d adds greatly to the appearance of the couch and provides a rest for the curve of the back of a person sitting on the couch and also gives the necessary space between the bed-spring and the couch-back

spring or support, whereby a free play of the bed-spring is obtained when in use and an easy-lying bed is gained thereby. The curve of the back is most pronounced and the space greatest where most needed, and that is the 70 center of the bed, where the greatest depression of the bed-spring occurs.

Portion a of the top board or side of frame B is hinged to permit seating upon the mattress without hindrance.

In the operation of bringing the bed forward and down a forward pull from the top edge of the bed-frame B is necessary, and this is most easily accomplished by means of a long strap or loop a', attached to the inner side of 80 frame B and adapted to be folded or tucked within the frame when not in use. The long strap a' gives a purchase or hold for the operator, which permits him to stand back and away from the front of the couch and give 85 free space for it to roll or advance and also places him in a position of advantage as regards the benefit of his own weight, which he can throw into use to overcome the weight of the bed and bedclothing. When the bed is 90 on edge, this is very material, because without said strap it can be readily seen that the depth of the couch necessitates a stooping or inclined position of the body to permit a hold or grip on the top edge of frame B, and which 95 position overbalances the operator and places him at a disadvantage at once and at the time when the greatest power is required. The beds in use have demonstrated a benefit of twenty pounds pull where the strap has been 100 used and as compared with a bed not so equipped.

What I claim is—

1. In a combined bed and couch, a bed-frame provided with rigid rear legs having a floor 105 engaging and riding surface upon their rear sides, and a couch-seat provided with gooseneck-hangers pivotally connected with said bed-frame.

2. In a combined bed and couch, the combination of a bed-frame provided with rigid rear legs projecting at an angle to the plane of the bed-bottom and having a floor engaging and riding portion on their rear sides, with a couch-seat provided with gooseneck-hangers at its rear, said hangers having pivotal connections at their end with said bed-frame.

3. In a combined bed and couch, a bed-frame having rear fixed legs projecting at right angles and provided with a curved floor-riding 120 portion on their rear side, in combination with a couch-seat pivotally supported from the bottom of said frame and a support for the couch and bed at their front, said bed-frame having separate spring-supports stretched upon said 125 frame and spaced apart for a bed-spring bottom and a spring-back for the couch, respectively.

4. In a combined bed and couch, a bed-frame and legs rigid at the rear side therewith, said 130

legs provided with rockers at their rear side, casters on said legs front and rear of said rockers, in combination with a couch-seat pivotally suspended from the bottom of the bedframe, and a support for the front of said couch, substantially as described.

5. In a combined bed and couch, a bed-frame having legs with rockers on their rear to turn the bed down, in combination with a couch pivotally supported from said bed-frame and having legs at its front supporting the front

of the bed, substantially as described.

6. In a combined bed and couch, an open bed-frame provided with a fixed spring-mattress bottom stretched therein between its top and bottom, and a spring-support for the couch-back stretched over the bottom of said frame and spaced apart from said spring-mattress bottom, in combination with a couch-seat, substantially as described.

7. In a combined bed and couch, a bed-frame having rear legs and a couch-frame having front legs, mechanism pivotally suspending the rear of the couch from the bed-frame, extensions for the couch-back on the ends of said bed-frame above the couch-seat, and a support for the back of the couch stretched between said extensions, substantially as de-

scribed.

8. In a combined bed and couch, a bed-frame having forwardly-curved extensions on its bottom and ends deepest at their lower portion and terminating substantially at the middle of the frame, and the back of the couch stretched upon said extensions, in combination with a couch suspended at its rear from said bed-frame and having its seat flush with the bottom of the couch-back, substantially as described.

9. In a combined bed and couch, an open 40 frame adapted to confine bedding and a spring-mattress stretched within said frame, a separate spring-support at one side of said frame adapted to form the back of the couch, said spring-mattress and spring-support spaced 45 apart with the greatest space centrally between the sides of said frame, and a couch-seat, substantially as described.

10. The bed-frame and a set of casters at each end upon the rear side of said frame, in 50 combination with a couch pivotally connected at its rear with said frame said pivot being on a line parallel with the plane of the bed-bottom between said casters at each side and whereby a strain upon the couch is distrib-55 uted to all the casters on said frame and a firm rear support for the couch is provided,

substantially as described.

11. In a combined bed and couch, an open bed-frame having legs adapted to provide a 60 rocking fulcrum for changing the bed from a vertical to a horizontal position, a set of casters at each end of said frame and upon said legs adapted to provide a rolling support for the bed in both said positions, a couch having 65 legs at its front and pivot connections at its rear with said frame, and said open frame having two distinct spring-supports stretched between its ends and spaced apart to provide independent flexible supports for the bedding 70 and the couch - back, respectively, substantially as described.

In testimony whereof I sign this specifica-

tion in the presence of two witnesses.

DAVID THOMAS OWEN.

Witnesses:

R. B. Moser, C. A. Sell.