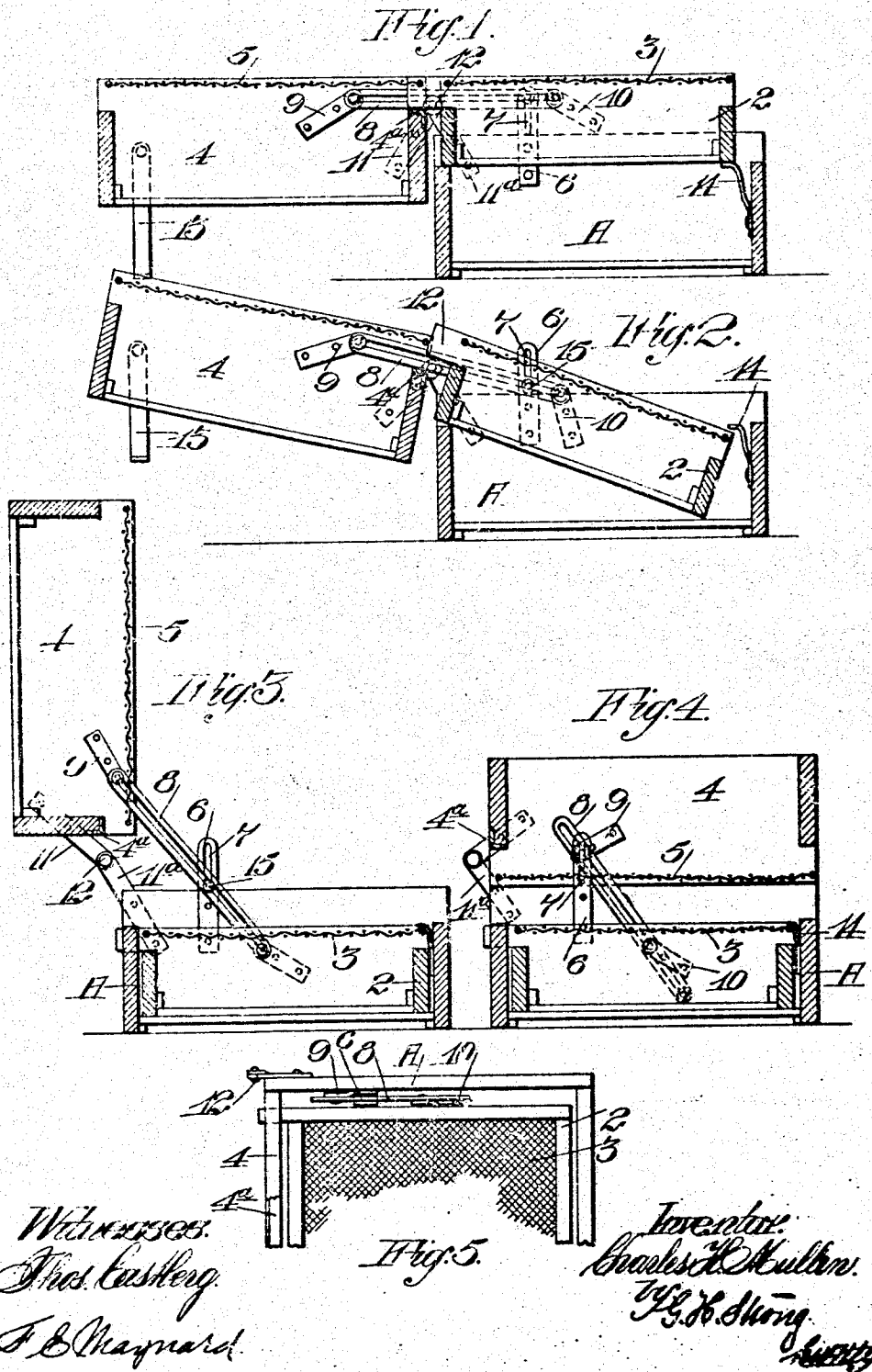


C. H. MULLEN.
FOLDABLE COUCH.
APPLICATION FILED MAY 4, 1910.

968,386.

Patented Aug. 23, 1910.



UNITED STATES PATENT OFFICE.

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FOLDABLE COUCH.

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To all whom it may concern:

Be it known that I, CHARLES H. MULLEN, citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Foldable Couches, of which the following is a specification.

My invention relates to improvements in foldable couches.

It consists in the combination of parts and details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 shows the couch open or extended. Fig. 2 shows the couch in the act of being closed. Fig. 3 shows the foldable part raised to right angles with the main frame, and the bed portion sunk within said frame. Fig. 4 shows the couch entirely closed. Fig. 5 is a plan view of one end showing the relative positions of the parts.

It is the object of my invention to provide a couch formed of a plurality of parts which may be normally folded close together when not in use, and which may be unfolded and extended with mattress portions contained on two parts, which may be raised into a common plane and properly supported in such position.

As shown in the drawings, A is the main permanent frame, and 2 is a frame of smaller size carrying a mattress 3, and adapted to be moved within the main frame so as to be inclosed therein when not in use or raised to a level above the frame. In conjunction with these parts is a frame 4, which also carries a mattress portion 5, and which is so connected with the frames A and 2 that it will act to depress the frame 2 within the frame A and be itself closed over these two, or when opened it will act to raise the frame 2 into a position above the main frame and with the two mattress portions 3 and 5 substantially level.

6 is a stout strap, one of which straps is bolted to each end of the main frame A; the upper ends of these straps project above the main frame and are slotted, as shown at 7.

8 are slotted links, one end of each link being connected by a pin or pivot to a strap 9 which is secured to the frame 4, and the other end of each link is similarly connected with a strap 10, which is secured to the frame

11 and 11^a are straps secured to the ends of the frame 4 and the frame A. These straps converge upwardly to form a hinged joint, at 12, about which the frame 4 is turnable. This frame 4 has legs 13 which support its outer edge when in extended position, as shown in Fig. 1, the inner end being supported by the hinged joint 12.

When the couch is opened ready for use, the outer edge of the frame 2 is supported upon elastic brackets 14, which are fixed to the inner front side of the frame A.

The couch being in the position shown in Fig. 1, the operation of closing it will be as follows: The spring brackets 14 are first retracted to clear the bottom edge of the frame 2, the frame 4 is then lifted, turning about its fulcrum point 12, and the end of the links 8, which are connected with the frame 4, will be lifted in unison. The opposite ends acting upon the brackets on straps 10, with which they are connected, will press the frame 2 down, as shown in Fig. 2, and pins 15, which are slidable in the slots 7 of the arms 6, will move downwardly in the slots. The continued motion forces the frame 2 forward until the rear or back portion of this frame will drop within the back portion of the frame A, which position is accomplished when the frame 4 has been turned up to a position as shown in Fig. 3. The pin 15 resting in the bottom of the slot 7 of the strap 6 at each end of the couch, forms the fulcrum about which the link 8 moves during this operation. When the position shown in Fig. 3 has been reached, the frame 2 will have been depressed within the frame A, so as to normally rest upon the floor. A further continued folding movement of the frame 4 will bring it into the position shown in Fig. 4, where it lies upon the top of the frame A, the two mattress sections 5—3, lying one above the other, and the links and connecting parts being substantially inclosed between the ends of the frames A and 2.

The opening of the couch produces a reverse movement of the parts, and as the part 4 is unfolded and extended it will act through the link 8 and its connections to raise the bed-frame 2, the spring 14 yielding to allow the front edge of the frame 2 to pass, and as this frame 2 rises the action of the link 8 will draw it backwardly so that its rear edge will rest upon the corresponding

portion of the frame A, and the front edge will be supported by the springs 14. The legs 13, which are pivoted to the frame 4, will drop by gravitation into a vertical position, and will support that part when it is at a level with the top of the frame 2, as shown in Fig. 1.

In order to protect the edge of the frame 4, with which the links 8 contact, from being cut or injured, this edge is protected by an angle bar 4^a so fitted that it receives the contact and pressure of the links 8 during the movements of the parts.

Having thus described my invention, what I claim and desire to secure by Letters-Patent, is—

1. The combination in a couch, of a main body, a frame foldable with relation to the main body, a frame movable within the main body, and connections including slotted links between the two frames and slotted arms on the body whereby said second frame is moved in unison with the folding frame.

2. The combination in a couch, of a stationary body, a mattress-carrying frame movable within the body, a second mattress-carrying frame hinged to the body, and slotted links connecting the mattress-carrying frames and fulcruming on the stationary body, and acting to raise and depress the interior frame in unison with the opening and closing of the hinged frame.

3. The combination in a couch, of a stationary body, a mattress-carrying frame movable within said body, with the rear side adapted to rest upon the rear side of the body, elastic brackets on the body to support the front side of the frame, a second mattress-carrying frame hinged to the rear of the main body, slotted links connecting the mattress-carrying frames, and fulcrum standards on the body through which the links act to raise or depress the inner mat-

tress frame, in unison with the movements of the outer frame about its hinges.

4. A couch consisting of a stationary body, a mattress-carrying frame hinged to one side and foldable with relation to the body, a second mattress-carrying frame vertically movable within the body, and slotted fulcrumed links connecting said mattress-carrying frames and acting to raise and depress the inner frame in unison with the folding movements of the hinged frame.

5. A couch consisting of a stationary body, a mattress-carrying frame hinged to one side and foldable with relation to the body, a second mattress-carrying frame vertically movable within the body, slotted fulcrumed links connecting said mattress-carrying frames and acting to raise and depress the inner frame in unison with the folding movements of the hinged frame, and elastic brackets by which the front of the inner frame is supported in its raised position.

6. A couch consisting of a stationary body, a mattress-carrying frame hinged to one side and foldable with relation to the body, a second mattress-carrying frame vertically movable within the body, slotted fulcrumed links connecting said mattress-carrying frames and acting to raise and depress the inner frame in unison with the folding movements of the hinged frame, elastic brackets by which the front of the inner frame is supported in its raised position, and an angle iron guard bar upon the foldable frame to receive contact of the links.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES H. MULLEN.

Witnesses:

ERNEST J. SULTAN,
HENRY S. GREEDE.