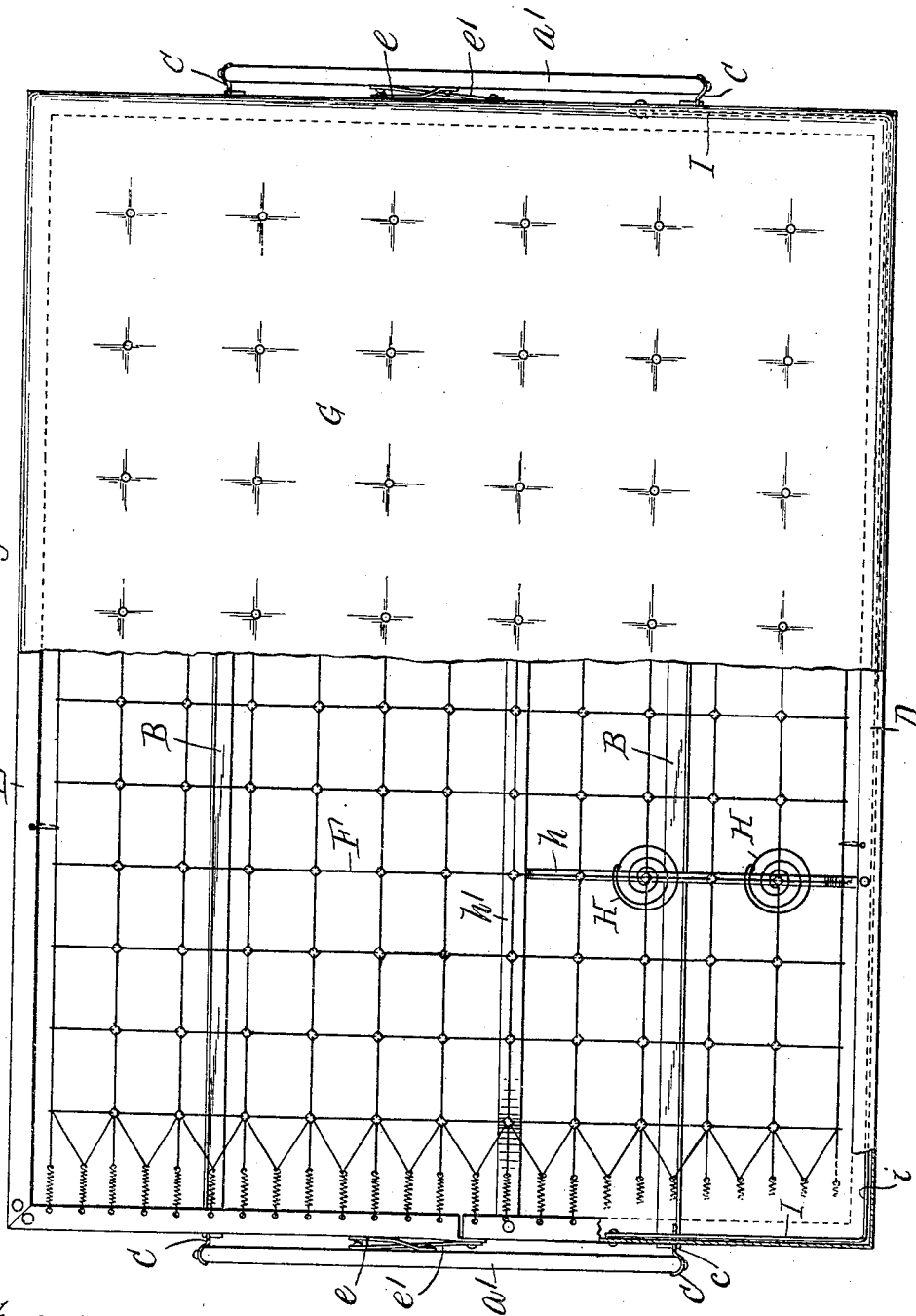


J. H. DYETT & C. HULPIAN.
 CONVERTIBLE COUCH.
 APPLICATION FILED MAY 2, 1910.

962,948.

Patented June 28, 1910.
 2 SHEETS—SHEET 1.

Fig. 1.



Witnesses.
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 C. H. Bund.

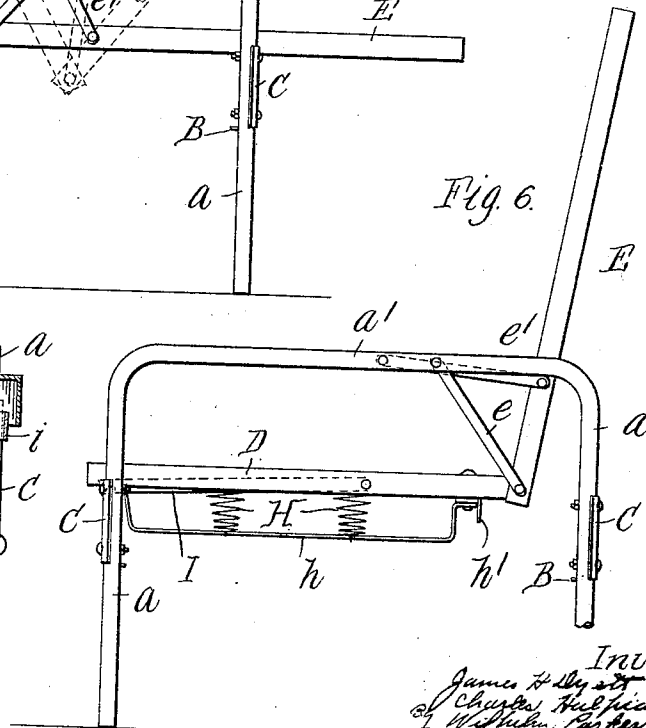
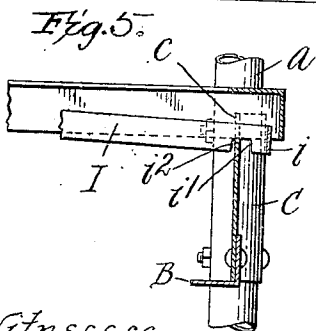
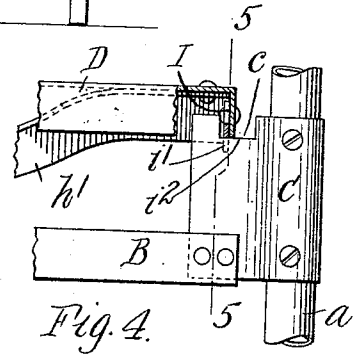
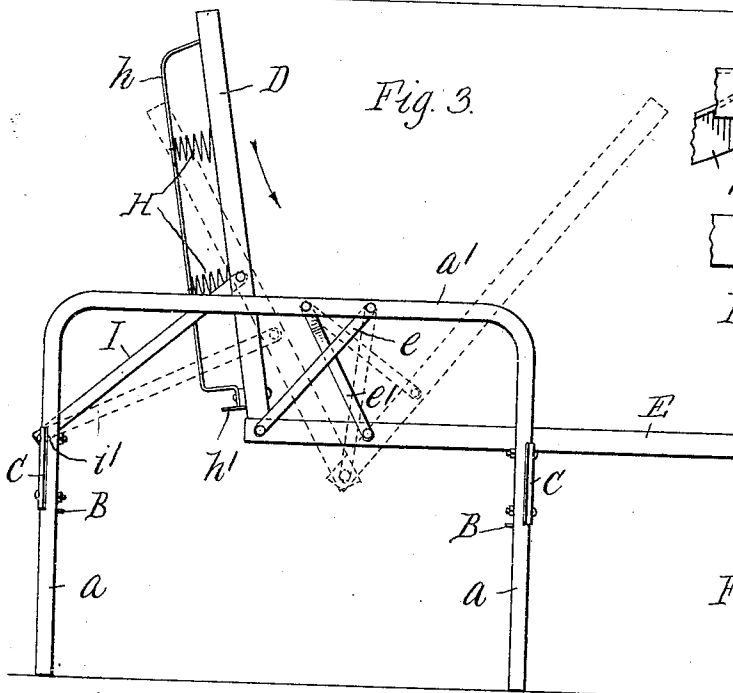
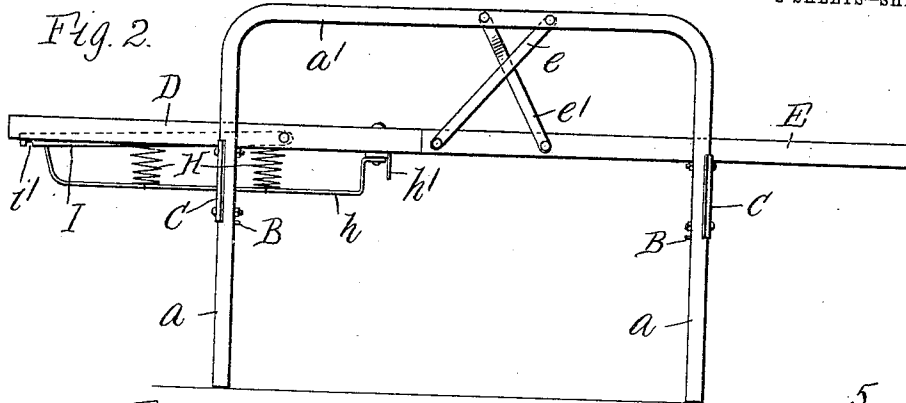
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

JAMES H. DYETT AND CHARLES HULPIAN, OF BUFFALO, NEW YORK, ASSIGNORS TO
HARD MANUFACTURING COMPANY, OF BUFFALO, NEW YORK.

CONVERTIBLE COUCH.

962,948.

Specification of Letters Patent.

Patented June 28, 1910.

Application filed May 2, 1910. Serial No. 558,957.

To all whom it may concern:

Be it known that we, JAMES H. DYETT and CHARLES HULPIAN, citizens of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Convertible Couches, of which the following is a specification.

This invention relates to improvements in convertible couches of that type in which the back of the couch is adapted to be moved into a horizontal position in the plane of the seat to convert the couch into a bed.

The object of this invention is to produce a couch of this character, of simple and inexpensive construction, which can be readily operated from the front side thereof for moving the back into and out of both its horizontal and upright positions and can thus be easily converted into a bed or from a bed back into a couch by a person standing at the front side thereof.

In the accompanying drawings, consisting of two sheets: Figure 1 is a plan view of a convertible couch embodying the invention, showing the same extended to form a bed, a portion of the mattress being broken away to disclose the underlying parts. Fig. 2 is an end elevation thereof with the mattress removed. Fig. 3 is a similar view showing the seat raised preparatory to swinging the back to its upright position. Fig. 4 is a fragmentary front elevation, partly in section, on an enlarged scale, of one of the seat supporting brackets. Fig. 5 is a sectional view on line 5—5, Fig. 4. Fig. 6 is a fragmentary end elevation of the couch with the back in its upright position.

Like reference characters refer to like parts in the several figures.

As shown in the drawings, the frame of the couch is of the usual metal construction and consists of corresponding tubular end frames which are of inverted U-shape having legs *a* joined at their upper ends by horizontal top portions *a'*, and angle iron side rails *B* which connect the corresponding legs of the opposite end frames and are secured thereto by supporting brackets *C* projecting laterally from the legs, to which the ends of the side rails are riveted or otherwise suitably secured.

The couch has the usual seat *D* and back *E* which are hinged together at their inner

ends. The back *E* is suspended from the top portions *a'* of the end frames by pivoted links *e* and *e'* which are so arranged that they permit the back to swing thereon into both its upright and horizontal positions, and assist in supporting the back in such positions. The seat *D* is not secured directly to the frame but its forward or free end is adapted to rest upon the supporting brackets *C* at the front side of the couch, these brackets being provided for this purpose with suitable notches or grooves *c* in which the ends of the seat slidably engage. The brackets *C* at the rear side of the couch have similar notches in which the back engages when in its horizontal position.

The seat and back are provided with a suitable woven wire spring *F* which extends over the same and upon which rests the mattress *G*. The seat is also provided with supplemental springs *H* which are arranged beneath the spring *F* and are supported on rails *h* which are secured at their front ends to the side of the seat and at their rear ends to a longitudinally extending rail *h'* which connects the ends of the seat, the rails *h* and *h'* being bent downwardly away from the seat to allow sufficient space for the supplemental springs beneath the seat.

All of the parts so far described may be of any suitable construction and formed from any suitable material.

The present invention relates to the means employed for enabling the back and seat to be moved into and out of their couch and bed-forming positions from the front side of the couch and for locking them against movement in their couch-forming position. For this purpose, an operating and locking device is employed which, in the construction shown, is of bail or U-shape and consists of links *I* which are pivoted at their inner ends to the opposite ends of the seat *D* and are connected together at their outer ends by a bar or rail *i*. The links and connecting bar preferably extend parallel with the ends and front side of the seat on the inner underside thereof where they are concealed from view and thus do not detract from the appearance of the seat. The links *I* rest in the notches *c* of the brackets *C* in which they are movable endwise, and each is provided on its underside, adjacent to the connecting bar *i*, with a notch *i'* which is

adapted, when the link is moved inwardly, to engage a locking shoulder i^2 formed on the under side of the notch c for locking the links from further movement. The length
 5 of the link is such that when the seat is in its couch-forming position, the links will be in interlocking engagement with the locking shoulders on the brackets C and will thus securely hold the seat from movement
 10 in such position until released.

While the operating and locking device shown has two links which are connected together at their outer ends so as to act in unison, this connection may be dispensed
 15 with and separate links or a single link employed, if desired.

The operation of the device is as follows: When it is desired to move the back and seat from their bed-forming position, shown in
 20 Fig. 2, to their couch-forming position, shown in Fig. 6, the operator stands in front of the couch and raises the front side of the seat until the seat stands in a substantially upright position, as shown in Fig. 3. This
 25 movement of the seat causes the links I to slide inwardly on the brackets C until their notches i' engage the locking shoulders i^2 of the brackets and lock the links against further movement. The seat is then swung
 30 downwardly in the direction of the arrow shown in Fig. 3 to a horizontal position, the links acting as a fulcrum upon which the seat is turned as a lever, and this movement
 35 of the seat swings the back on its supporting links to a substantially upright position. The seat and back are now in their couch-forming position and retained in this position by the links I, which still remain in interlocking engagement with the brackets C
 40 and hold the seat from forward movement on the frame.

To convert the couch into a bed, it is only necessary to raise the links I out of engagement with the locking shoulders on the
 45 brackets and slide the seat forwardly. This causes the back to swing downwardly on its supporting links to a horizontal position.

The locking device is exceedingly simple and inexpensive in construction and is positive in operation, having no springs or other
 50 parts which can easily get out of order and become broken or inoperative. It can be easily operated from the front side of the couch for shifting the seat and back to either
 55 their bed or couch-forming position and forms an effective means for securing these parts in the latter position.

We claim as our invention:

1. In a convertible couch, the combination
 60 with a supporting frame, of a back which is hung on said frame to swing upwardly from a substantially horizontal position to a substantially upright position, a seat which
 65 is pivoted at one edge to the adjacent edge of the back and is adapted to swing up-

wardly on said pivotal connection, and a link which is pivoted to said seat and is adapted to interlock with said frame when said seat is swung upwardly and form a
 70 fulcrum upon which the seat is adapted to be swung downwardly for swinging said back upwardly to its upright position, substantially as set forth.

2. In a convertible couch, the combination with a supporting frame, of a back,
 75 swinging links connecting each end of the back with said frame and permitting said back to swing upwardly from a substantially horizontal position to a substantially upright position, a seat which is movably
 80 supported on said frame and pivoted at its inner edge to the adjacent edge of the back and is adapted to swing upwardly on said pivotal connection, and a link which is pivoted to said seat and is adapted to slide on
 85 the frame when the seat is swung upwardly and to interlock with said frame and form a fulcrum on which said seat is adapted to swing as a lever for swinging said back upwardly to its upright position, substantially
 90 as set forth.

3. In a convertible couch, the combination with a supporting frame, of a back which is hung on said frame to swing upwardly from a substantially horizontal position to a substantially upright position, a seat which is
 95 pivoted at one edge to the adjacent edge of the back and is adapted to swing upwardly on said pivotal connection, and a link which is pivoted to said seat and is adapted to interlock with said frame when said seat is
 100 swung upwardly and form a fulcrum on which said seat is adapted to swing as a lever for swinging said back upwardly to its upright position, said link being adapted to lock said back in its upright position, substantially
 105 as set forth.

4. In a convertible couch, the combination with a supporting frame, of a back which is hung on said frame to swing thereon to substantially horizontal and upright positions,
 110 a seat which is pivoted at one edge to the adjacent edge of said back and is adapted to swing upwardly on said pivotal connection, and a link which is pivoted to said seat and is adapted to interlock with said frame when said seat is moved upwardly and form a fulcrum upon which said seat is adapted to be swung as a lever for swinging said
 115 back to its upright position, said link being adapted to lock said back in its upright position and being adapted to be disengaged from the frame for lowering said back to its horizontal position, substantially as set forth.
 125

5. In a convertible couch, the combination with a supporting frame, of a back which is hung on said frame to swing upwardly from a substantially horizontal position to a substantially upright position, a seat which is
 130

pivoted at one edge to the adjacent edge of
the back and is adapted to swing upwardly
on said pivotal connection, and a U-shaped
link pivoted to said seat and having notches
5 at its free end which are adapted to engage
said frame when said seat is swung upwardly
and lock said link against endwise move-
ment thereon, said link forming a fulcrum
upon which said seat is adapted to swing as
10 a lever for swinging said back upwardly to

its upright position, substantially as set
forth.

Witness our hands, this 28th day of Apr.
1910.

JAMES H. DYETT.
CHARLES HULPIAN.

Witnesses:

EDWARD C. HARD,
W. W. ORTHOUT.