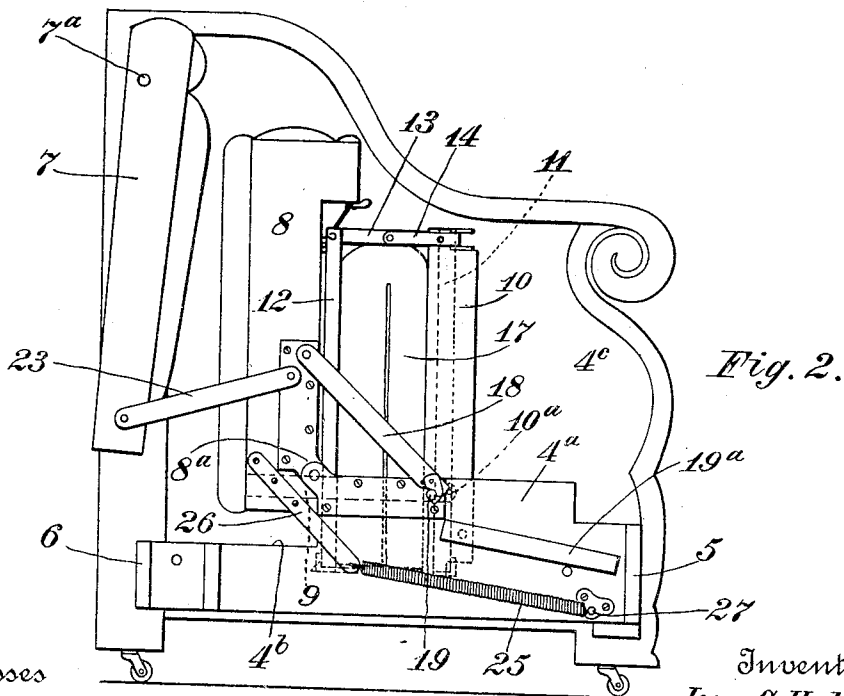
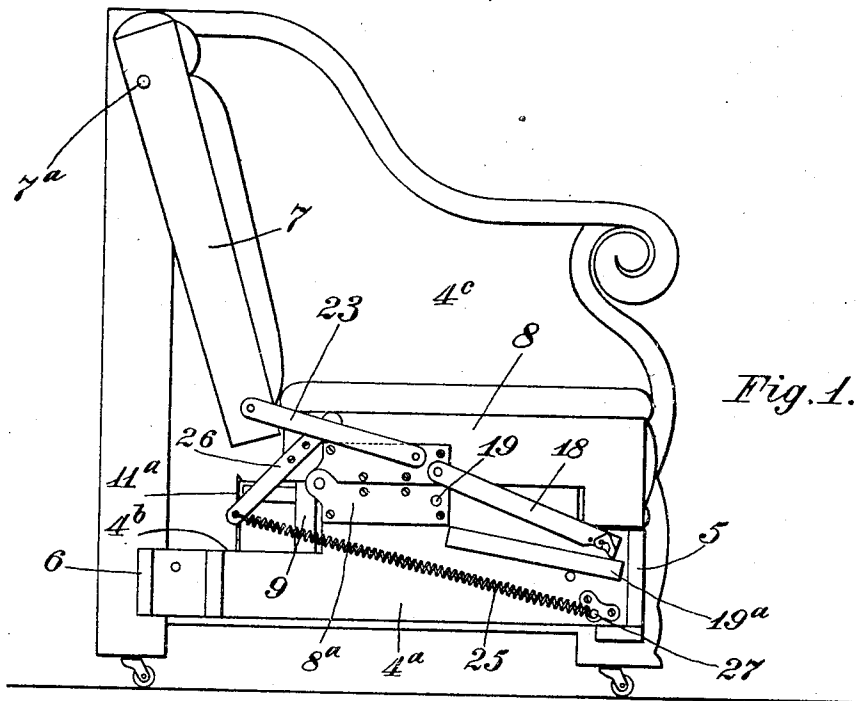


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 COMBINED DAVENPORT AND BED.
 APPLICATION FILED MAR. 28, 1910.

962,761.

Patented June 28, 1910.

2 SHEETS—SHEET 1.



Witnesses

Mayme Ford
 Benj. Lusk

Inventors

Jesse G. Hulse
 Adolph F. Schramm
 by Finckel & Finckel
 Attorneys

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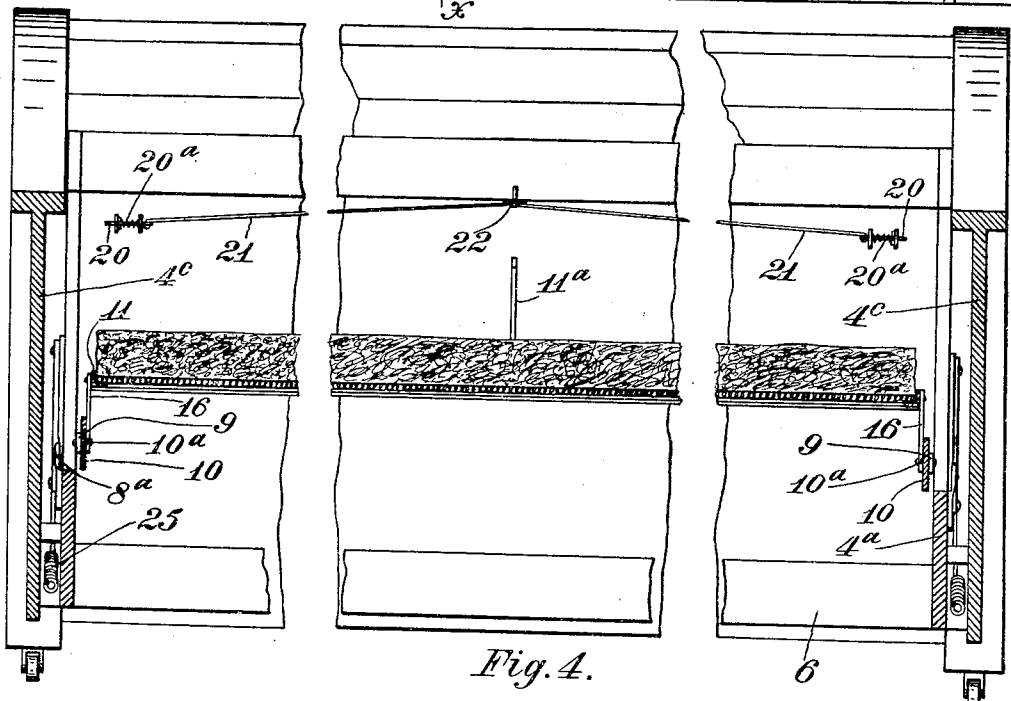
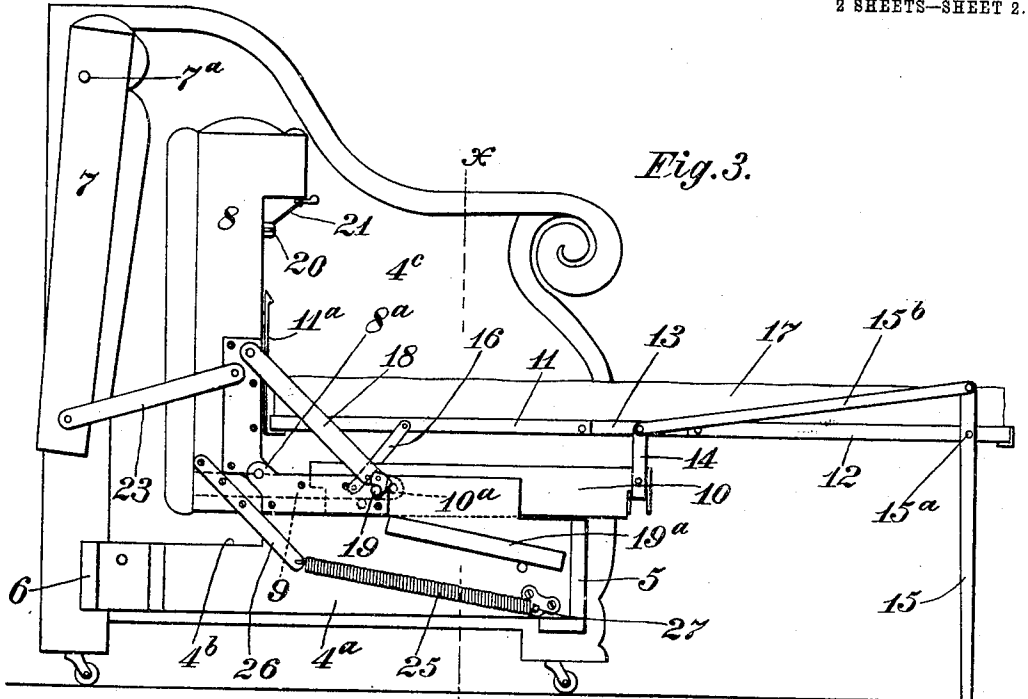


Fig. 4.

Witnesses
 Benj. Finckel
 Mayme Ford

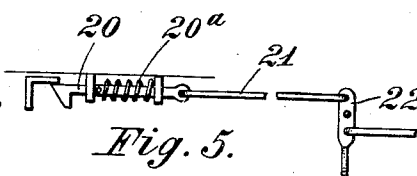


Fig. 5.

Inventors
 Jesse G. Hulse
 Adolph F. Schramm
 by Benj. Finckel
 Their Attorneys

UNITED STATES PATENT OFFICE.

JESSE G. HULSE AND ADOLPH F. SCHRAMM, OF COLUMBUS, OHIO, ASSIGNORS TO THE
E. M. HULSE COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

COMBINED DAVENPORT AND BED.

962,761.

Specification of Letters Patent. Patented June 28, 1910.

Application filed March 28, 1910. Serial No. 551,946.

To all whom it may concern:

Be it known that we, JESSE G. HULSE and ADOLPH F. SCHRAMM, citizens of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Combined Davenports and Beds, of which the following is a specification.

The object of this invention is to provide a combined sofa or davenport and bed in which there are a number of features of improvement tending to simplify and cheapen the construction and make it easy of operation.

The invention is embodied in the construction herein shown, set forth and claimed.

In the accompanying drawings illustrating one example of the invention—Figure 1 is an elevation of the left hand end of the structure with the end piece of the main frame removed and showing the parts closed or in davenport or sofa-forming position. Fig. 2 is a similar view showing the seat and bed in raised position as they appear when the bed is about to be opened or after the bed has been closed and preparatory to lowering the seat and bed to davenport or sofa-forming position. Fig. 3 is a similar view showing the bed opened. Fig. 4 is a vertical section on the line $x-x$ Fig. 3. Fig. 5 is a detail view illustrating one of the catches for securing the bed to the under side of the seat.

The interior frame which supports the seat and bed is a rectangular structure comprised of front and rear rails 5 and 6 respectively and two end pieces 4^a the latter being deeply notched out at their rear corners, as shown at 4^b, to make room for the rear edge of the seat when that member is raised at its forward edge.

The main end pieces 4^c of the structure are made ornamental as usual and are detachably connected to the interior frame before described by means of bolts passed through both and secured by nuts. The main end pieces 4^c are shown as provided with casters and support the structure on the floor as usual.

The back 7, in the instance shown, consists of a suitably upholstered frame pivoted to the end pieces 4^c at their upper portions, as seen at 7^a, or so that its lower edge can be swung rearward from ordinary sofa or davenport position.

The seat 8 consists of a suitably upholstered frame hinged at its rear portion between the ends 4^a by hinges 8^a secured at the corners where the notches 4^b are made. The seat 8 has secured to its ends near its rear portion rigid arms 9 extending downward from the under side thereof, and pivoted at 10^a to the ends of these is the bed carrying frame 10. The bed carrying frame is provided with an ordinary folding spring comprising spring frame members 11 and 12 pivoted to short intermediate connecting members 13, the latter being pivotally supported on standards 14 secured to the said carrying frame.

15 are legs pivoted at 15^a on the outer member 12 for supporting said member 12 when the bed is turned out to bed forming position. The upper ends of the legs have pivoted to them links 15^b connecting them with the standards 14 to cause the legs to assume vertical position when the member 12 is turned to bed forming position.

16 are links for causing the spring members 11 to level horizontally with the members 12 and 13 when the bed is opened.

17 is a mattress for the spring.

The inner or rear edge of the inner member 11 is provided with a stiff spring arm 11^a having at its upper end a catch head with a beveled upper end and the outer spring member 12 is provided at its outer edge with a metallic catch-engaging piece 12 to automatically catch under the catch head 11^a when the outer member 12 is folded inward and pressed down. The outer member 12 is disengaged from the inner member 11 by pressing the catch head rearward.

Slidingly secured in suitable guiding ears at the forward portion of the under side of the seat frame are catch bolts 20, 20, with beveled faces each bolt having a rod 21 extending to a lever 22 with a suitable handle, said lever being pivoted near the middle of the forward portion of the under side of the seat. The rods 21 are connected to the lever 22 at opposite sides of its pivot so that when the lever is worked the rods and catches are moved in opposite directions, but the catch bolts are provided with springs 20^a that tend to hold them projected in the path of the frame bar of the member 12 which is of angle iron so that the frame is automatically caught and held when the bed is closed up against the under side of the seat.

18 are catch or prop arms pivoted to the ends of the seat frame and extending forwardly, said arms having notches to engage pins 19 secured to the ends 4^a of the intermediate rectangular frame before described. The catch arms 18 have dogs 18^a automatically operative by moving the seat to release the arms from the pins 19. The function of the arms 18 is to latch and prop the seat in raised position when the bed is to be extended. Inclined cleats 19^a of wood support and guide the ends of the arms 18 when the seat is turned down. By pressing the seat when in raised position at the top rearward the latch arms 18 can be released to let the seat down after the bed has been folded up toward and secured to the seat. The said latch arms are of a kind in common use and no claim is made to them by themselves.

The seat and back are connected by links 23 so that when the seat is raised the lower portion of the back is pushed rearward out of position to interfere with the movement of the rear edge of the seat. When the bed is extended or unfolded to bed forming position it can rest on the front rail 6. In operation with the construction shown it is important that the bed be folded and secured against the under side of the seat preparatory to letting the seat down to sofa forming position.

The seat with the bed folded and secured against it when of ordinary davenport size is somewhat heavy and oftentimes to weakly persons difficult to manipulate. We therefore propose to apply at each end a coil spring 25 connected with the lower end of a downwardly projecting arm 26 at the rear corner of the seat and with a pin 27 at the forward corner of the intermediate frame before described. This spring 25 should be of sufficient strength to pull upon the arms and to largely counterbalance the weight of the seat and bed when connected so that little effort is required to raise or lower the seat and bed. The power of the springs should

not, of course, be sufficient to raise the seat and bed but to permit the seat to rest in normal seat forming position by gravity alone.

What we claim is:

1. In a combined sofa or davenport and bed, a supporting frame, a seat pivoted at its rear edge in said frame, a bed hinged to fold against the under side of the seat, means for securing the bed against the seat, and a spring for counterbalancing the weight of the united seat and bed.

2. In a combined sofa or davenport and bed, a supporting frame, a seat pivoted at its rear edge in said frame, a folding bed frame pivoted with said seat, means for automatically latching the parts of the folding bed together and means for automatically latching the folded bed to the under side of the seat.

3. In a combined sofa or davenport and bed, a supporting frame, a seat pivoted at its rear edge in said frame, a folding bed frame pivoted with said seat, and means for automatically latching the parts of said folding bed together.

4. In a combined sofa or davenport and bed, a supporting frame, a seat pivoted at its rear edge in said frame, a folding bed frame pivoted with said seat, and means for automatically latching the folded bed to the under side of the seat.

5. In a combined sofa or davenport and bed, a supporting frame, a seat pivoted at its rear edge in said frame, a folding bed frame pivoted with said seat, means for latching the folding bed in folded condition to the under side of said seat, automatically operative props to support the united seat and bed when raised, and cleats upon which said props rest and are guided when the seat is turned down.

JESSE G. HULSE.

ADOLPH F. SCHRAMM.

Witnesses:

GEO. M. FINCKEL,
BENJAMIN FINCKEL.