J. G. CURTIS.

SOFA OR DAVENPORT BED.

APPLICATION FILED JUNE 12, 1909.

1,019,606. Patented Mar. 5, 1912.

Fig. 1.

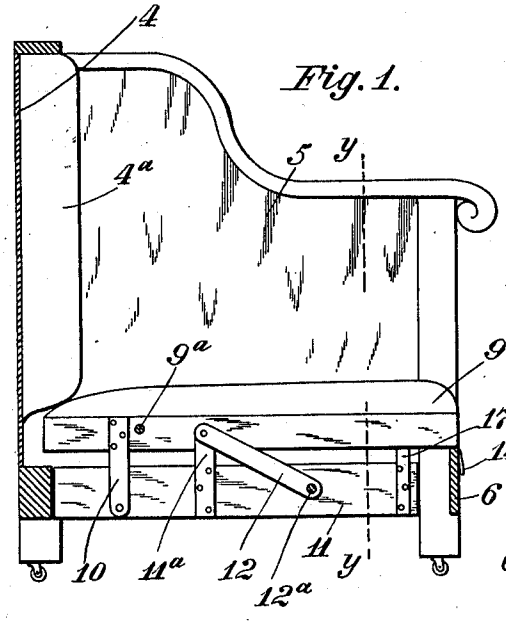

Fig. 4.

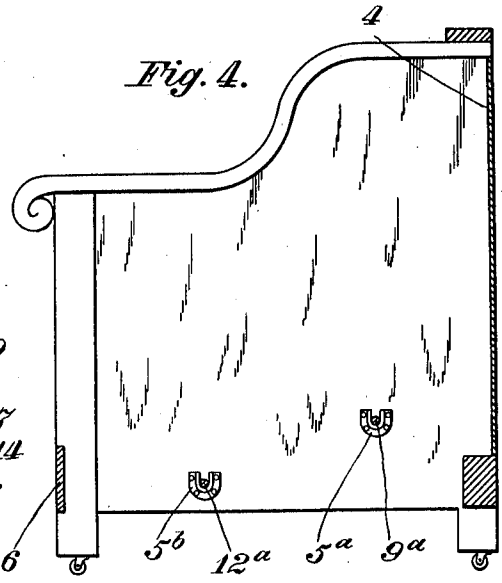

Fig. 2.

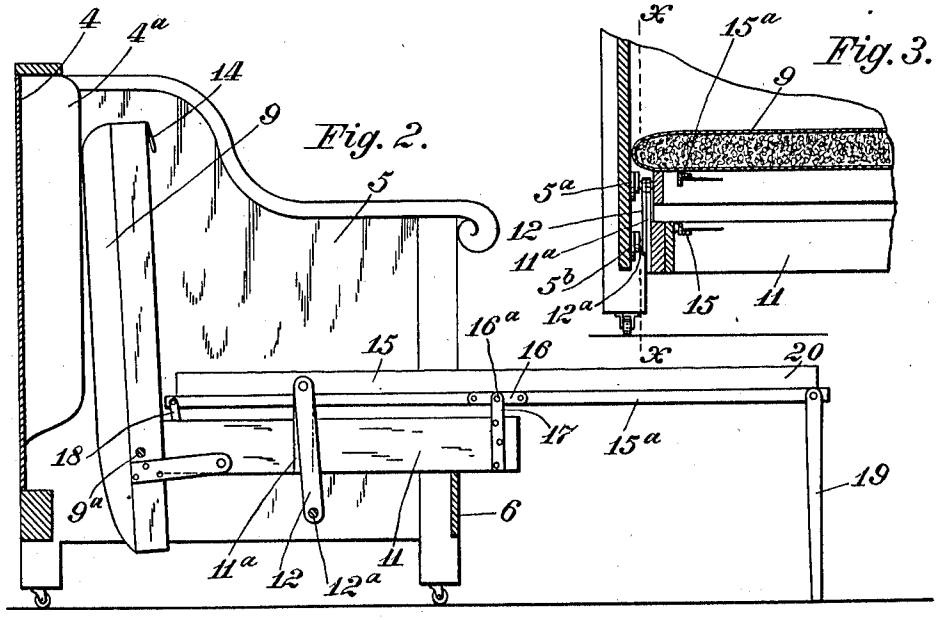

Fig. 3.

Witnesses

Benj. Finckel

H. A. Sechler

Inventor

James G. Curtis

by Finckel & Finckel

his Attorneys

UNITED STATES PATENT OFFICE.

JAMES G. CURTIS, OF COLUMBUS, OHIO, ASSIGNOR TO THE E. M. HULSE COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

SOFA OR DAVENPORT BED.

1,019,606. Specification of Letters Patent. Patented Mar. 5, 1912.

Application filed June 12, 1909. Serial No. 501,741.

To all whom it may concern:

Be it known that I, JAMES G. CURTIS, a citizen 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 Sofa or Davenport Beds, of which the following is a specification.

This invention is an improvement upon the type of sofa or davenport bed shown in the application of Edwin M. Hulse for patent of the United States, filed May 10, 1909, S. No. 495,063. In the device shown in said application no provision is made for elevating the bed containing frame or box when opened or exposed above the horizontal plane it occupied when closed, and unless in such construction the seat be made rather high the bed when opened will lie so near the floor as to be distasteful to some users. In said Hulse construction also it was expedient to provide a vertically standing front rail that was movable so as to be gotten out of the way of the bed containing frame or box as the latter was moved forward.

In my present invention, the act of raising the seat not only throws the bed containing box or frame forward, as in the Hulse invention, but also elevates it, and I contemplate raising it so far as to clear the top of the front rail. The front rail in my invention can be immovably secured in its proper place and serve, among its usual functions, the important one of imparting rigidity to the main frame and especially that of bracing the ends.

The invention, therefore, is embodied in the construction and combination of parts herein shown, and described and pointed out in the appended claims, the invention not being confined in its practical embodiment to the instance of it particularly shown in the accompanying drawing.

In said drawing: Figure 1 is a view in vertical section at the left hand end of the davenport bed with the end removed or on a line x—x, Fig. 3, and showing the bed folded in under the seat. Fig. 2 is a similar view showing the seat raised and the bed extended. Fig. 3 is a fragmentary longitudinal section on the line y—y, Fig. 1, looking toward the rear of the structure. Fig. 4 is an elevation with parts in section of the inner side of left hand end of the structure to show the hardware thereon.

The davenport frame comprises a back, 4, upholstered as seen at 4^a, and ends like that indicated at 5 as usual secured to the back. In the present case, the forward portions of the ends, 5, are tied together and braced by the usual permanent front rail, 6. The inner side of each of the ends is provided with two metallic pieces, as seen, 5^a and 5^b constituting bearings for pivot members to be hereinafter referred to. These bearings on the separate ends are correspondingly arranged and the forward bearings, 5^b, are arranged in a horizontal plane lower than those designated, 5^a.

The box or frame that contains the spring bed is designated 11. This box has upon each end near the middle thereof a shoulder 11^a, to the upper of end of each of which is hinged a downwardly extending hanger, 12. Each hanger, 12, has at its lower end a stud journal, 12^a, that rests in its corresponding bearing, 5^b. In other words, the box is hung or supported by the hangers, 12, and is capable of oscillation from or toward the back of the davenport on the bearings, 5^b.

9 designates the seat of the davenport. The seat has on each of its ends near the rear corners a stud journal, 9^a, which is seated in the bearings, 5^a, so that the seat is capable of being raised and lowered by taking hold of its front edge; and rigidly secured to each end of the seat in rear of the journals, 9^a, are arms, 10, said arms being hingedly connected to the ends of the bed-containing box in rear of the standards, 11^a. By raising the seat, therefore, the bed-containing box is thrown upward and forward, the extreme upward and forward position being indicated in Fig. 2; and conversely by lowering the seat the bed-containing box is thrown rearward and downward; the extreme rear-

ward and downward position being that of the closed position of the parts indicated in Fig. 1.

14 designates a convenient strap for manipulating the seat to raise and lower it.

The pivotal line of the seat with reference to the back is such that when the seat is raised to throw out the bed-containing box, it may be moved rearward at its upper portion beyond the vertical position to rest against the back of the davenport as seen in Fig. 2. Both the seat and back can be upholstered as usual.

The spring bed shown is comprised of two bed members, 15 and 15ª, connected at their sides by links like that indicated at 16; and stretched between the said frame is any suitable foldable spring fabric. The spring bed is supported on the box, 11, by standards, 17, on the sides of the box, 11, near its forward corners, the links, 16, being pivotally connected to said standards by pins as seen at 16ª. The inner bed member, 15, is connected to the inner sides of the ends of the box, 11, by links 18, and the outer bed member, 15, is supported when extended by suitable legs as at 19 foldingly hinged to said member.

20 designates the mattress. When the bed members and mattress are folded, the bed member, 15, is somewhat depressed from the position it occupies in Fig. 2 by reason of the action of the links, 16 and 18.

What I claim is:

1. In a sofa or davenport bed, the combination with the main frame, of a seat pivoted therein, a frame or box to support a bed, hangers pivoted at their lower ends to the main frame and pivotally supporting the said box at their upper ends, and means connecting the seat and box whereby the latter can be projected upward and forward toward the front of the main frame by raising the seat.

2. In a sofa or davenport bed, the combination with the main frame, of a seat pivoted therein, a frame or box to support a bed, hangers pivoted at their lower ends to the main frame and pivotally supporting the said box at their upper ends, and means rigidly attached to the seat and connected with the box to project the box upward and forward toward the front of the sofa when the seat is raised.

3. In a sofa or davenport bed, the combination with the main frame, of a seat pivoted therein to swing upward toward the back, a frame or box to support a bed, hangers pivoted at their lower ends to the main frame and pivotally supporting the said box at their upper ends, and means connecting the rear of the seat and the box whereby the latter can be projected upward and forward toward the front of the main frame by raising the seat.

4. In a sofa or davenport bed, the combination with the main frame, of a seat pivoted at its rear portion in said main frame, a bed supporting box or frame pivotally hung on hangers supported in the main frame below and forward of the points of their connection with the bed supporting box or frame, and arms on the rear of the seat connected with the bed supporting box or frame and adapted when the seat is raised to move the latter upward and forward toward the front of the sofa.

5. In a sofa or davenport bed, the combination with the main frame, of a seat pivoted at its rear portion in said main frame, a bed supporting box or frame pivotally hung on hangers supported in the main frame below and forward of the points of their connection with the bed supporting box or frame, and rigid arms on the rear of the seat connected with the bed supporting box or frame and adapted when the seat is raised to move the latter upward and forward toward the front of the sofa.

6. In a sofa or davenport bed, the combination with the main frame including an upright back, a movable seat hinged to fold toward the back, a box or frame carrying a folded bed, hangers pivotally supporting the box or frame, said hangers being supported at their lower ends in the main frame and supporting the box or frame to swing in an arc of which the lower hanger supports are the center, and means connecting the rear of the seat and box or frame operative by moving the seat to swing the box or frame in said arc.

7. In means of the character set forth, the combination of a frame, a movably mounted seat, a carrier-frame mounted in the main frame beneath said seat and adapted to be shifted forwardly and elevated by a compound movement, and a folded bed mounted on said carrier frame and comprising a plurality of foldably related sections.

8. In means of the character set forth, the combination of a frame, a rearwardly swinging seat adapted to assume a standing position, a carrier frame normally housed in said frame beneath said seat, means for shifting said carrier frame forwardly and elevating the same with relation to the main frame, and a folded bed mounted on said carrier frame and comprising a plurality of foldably related sections.

9. In means of the character set forth, the combination of a main frame, a rearwardly swinging seat, a carrier frame normally housed beneath said seat, links connected with said carrier frame and said main frame

and adapted to carry and elevate said carrier frame, and a folded bed mounted on said carrier frame and comprising a plurality of foldably related sections, one of said sections raisably mounted on said carrier frame.

10. In means of the character set forth, the combination of a main frame, a rearwardly swinging seat, a carrier frame, mechanism connecting said carrier frame and main frame and serving to carry forward and elevate said carrier frame, and a folded bed mounted on said carrier frame and comprising a plurality of bed-sections, one of said bed-sections being mounted on links foldably connected with said carrier frame.

JAMES G. CURTIS.

Witnesses:
BENJAMIN FINCKEL,
EDWIN M. HULSE.