

1,043,068.

Patented Nov. 5, 1912.

Fig-2-

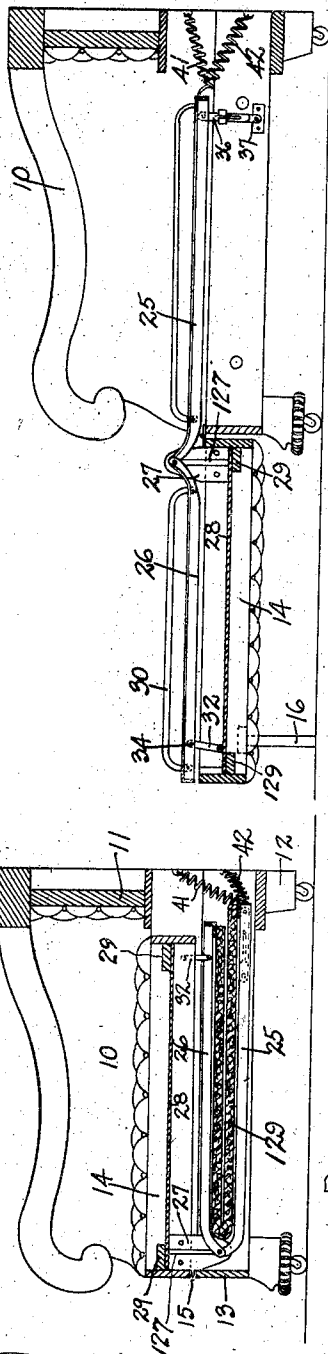
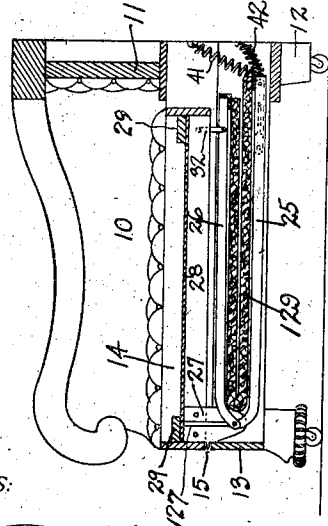


Fig-1-



WITNESSES:

A. H. Esterson
O. M. McLaughlin

Fig-3-

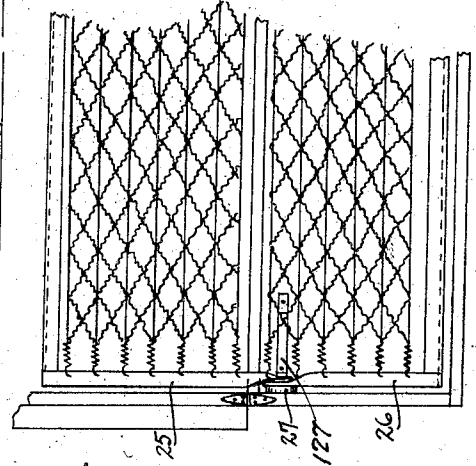


Fig-6-

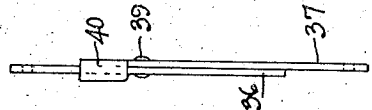


Fig-4-Fig-5-



Fig-7-

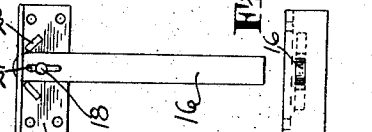


Fig-8-



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DAVENPORT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MICHAEL CLUNE, a citizen of the United States, and a resident of Indianapolis, county of Marion, and State of Indiana, have invented a certain useful Davenport; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings.

The object of this invention is to provide a folding sofa bed provided with a mattress frame composed of only two sections arranged to contain the mattress when folded so that the bed can be folded and unfolded without removing or replacing the mattress. Also the mattress frame at the joint of the sections is connected with the folding seat near its hinged side and the other side of the seat is connected with the upper section of the mattress frame so that the mattress frame will be unfolded and folded by the seat as it is opened out and folded up.

The nature of the invention will be understood by the accompanying drawings and the following description and claims:

In the drawings, Figure 1 is a transverse vertical section through the sofa bed folded, near one end so that it shows the mattress frame in end elevation. Fig. 2 is the same as Fig. 1 with the sofa bed unfolded. Fig. 3 is a plan view of a portion of what is shown in Fig. 1, with the mattress removed and parts broken away and omitted. Fig. 4 is a detail view of the supporting connection between the seat and the outer edge of the outer section of the mattress frame. Figs. 5 and 6 are detail views of the telescoping bars for supporting the inner end of the lower section of the mattress frame. Fig. 7 is a detail of the leg for supporting the outer end of the seat and its connection therewith. Fig. 8 is a plan view of Fig. 7.

There is shown herein a main frame consisting of ends 10, a back 11, legs 12, and a front bar 13. There is a seat 14 hinged so that it can be opened out or folded up, as shown. It is here shown connected with the front bar 13 by hinges 15, although it may be hinged to the ends 10, if desired, so far as this invention is concerned. Legs 16 are pivotally connected with the outer end of the seat when unfolded so that the same will drop down by gravity into a vertical position as the seat is opened, and will serve to support the outer edge of the seat and the parts supported by the seat. This leg is piv-

oted to a plate 17 by a pin 18. The plate 17 is secured to the end of the seat and it has two oppositely located and inclined guide lugs 20 which engage the sides of the legs at its upper end, as the seat is being unfolded, for alining said leg to its vertical position. The leg has a vertical slot 21 through which the pin extends to permit the action mentioned.

The mattress frame consists of two sections, an inner section 25 and an outer section 26 with their adjacent ends or edges pivoted to each other and to a plate or post 27 extending down from said seat 14 when folded or upward from the seat when it is unfolded. A brace 127 extends from the free end of said post 27 to the plate 28 of the seat 14 and longitudinal bar 29. The adjacent ends of the end bars of the sections of the mattress frame are curved toward each other, as shown, at their pivotal connection with the post 27, so that when said mattress frame sections are folded up, as seen in Fig. 1, there is ample space left between the sections of the mattress frame, say five inches, for the folded mattress 129. This enables said mattress frame to be folded and unfolded without removing or replacing the mattress. At each end of each section of the mattress frame there is a loop bar 30 to prevent the longitudinal displacement of the mattress.

The seat 14 has at each end, near its outer edge when unfolded, a bar link 32 pivoted at one end thereto and pivotally connected at the other end with the outer edge of the outer section 26 of the mattress frame. The form of this link bar 32 is shown in Fig. 4. It has a notch 33 with a contracted mouth adapted to engage a pin 34 on the mattress frame so that it can be disengaged, if desired, from the mattress frame and the outer edge of the mattress frame lifted for the purpose of inserting bedding between the seat and the outer section of the mattress frame. A spring 35 tends to hold said link 32 from disengagement with its pin 34. Said bars support the outer portion of the outer section of the mattress frame upon the seat when unfolded and also when folded, as shown in Figs. 1 and 2.

The lower end of the spring 35 is secured to the link 32 below the notch 33 and the upper end is bent to hook over the pin 34 and between its ends said spring is twisted or coiled so that when the bent end is caught

over the pin 34, said pin will be held in the notch. Lifting the upper end of said spring shortens the coiled portion and allows the hook to be disengaged from said pin.

5 The inner edge of the inner section 25 of the mattress frame is, in its unfolded condition, supported by telescoping link bars 36 and 37. The former link bar 36 is pivoted to each end of the mattress frame and the latter link bar 37 to each end of the main frame and below the mattress frame so that said bars will be substantially vertical when the mattress frame is unfolded. One of said link bars has a longitudinal slot 38 through which a pin 39 from the other link bar extends. The last mentioned link bar has flanges 40 which overlap the first-mentioned link bar, whereby the link bars are slidably connected. In the unfolded condition, the link bars are as shown in Fig. 5, that is, contracted, but during the folding and unfolding movements of the inner section of the mattress frame the link bars have to slide upon each other and in the folded position, said link bars are substantially horizontal, as shown in Fig. 1. Springs 41 and 42 connect the inner edge of the inner section 25 of the mattress frame with the rear part of the ends of the main frame so as to facilitate the upward movement of the inner section of the mattress frame.

I claim as my invention:

1. A sofa bed including a main frame, a seat pivoted to said frame, a mattress frame composed of two sections with their adjacent ends curved toward each other when folded, a post secured to the seat with which the adjacent ends of both sections of the mattress frame are pivoted so that the pivots at the two ends of the sofa bed are in alignment with each other, movable means connecting the inner section of the mattress frame with the main frame of the sofa bed, and a connection between the seat and outer section of the mattress frame when unfolded.
2. A sofa bed including a main frame, a

seat pivoted to said frame, a mattress frame having inner and outer sections, a post secured to the seat with which both sections of the mattress frame are pivotally connected, telescoping links pivotally connecting the inner section of the mattress frame with the main frame, said links being provided with means for limiting the contracting movement thereof, and a connection between the seat and outer section of the mattress frame when unfolded.

3. A sofa bed including a main frame, a seat pivoted to said frame, a mattress frame having inner and outer sections, a post secured to the seat with which both sections of the mattress frame are pivotally connected, telescoping links pivotally connected with the inner section of the mattress frame and said main frame, one member of said links being longitudinally slotted, and the other member having a pin operating in said slot and also flanges loosely enveloping said first-mentioned link, and a connection between the seat and outer section of the mattress frame when unfolded.

4. A sofa bed including a main frame, a seat pivoted to said frame, a mattress frame having inner and outer sections, a post secured to the seat with which both sections of the mattress frame are pivotally connected, movable means connecting the inner section of the mattress frame with the main frame, a supporting link pivoted to the seat when unfolded and having a notch in the free end of said link with a contracted opening, a pin on the outer section of the mattress frame adapted to rest in the notch in said link, and a spring for releasably holding said link on said pin.

In witness whereof, I have hereunto affixed my signature in the presence of the witnesses herein named.

MICHAEL CLUNE.

Witnesses:

G. H. BOINK,
E. H. MAYO.