B. B. ENGLANDER.

ADJUSTABLE BACK DIVANETTE.

APPLICATION FILED NOV. 18, 1912.

1,061,533. Patented May 13, 1913.

Fig. 1.

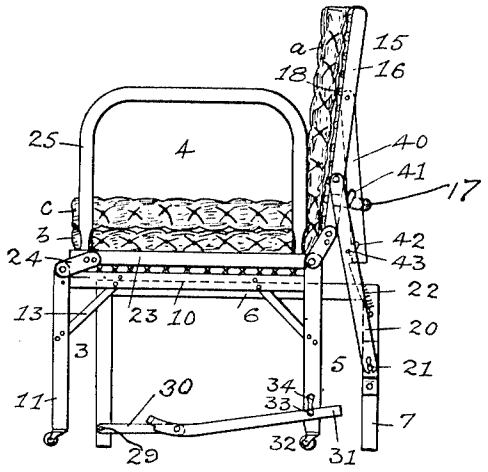


Fig. 2.

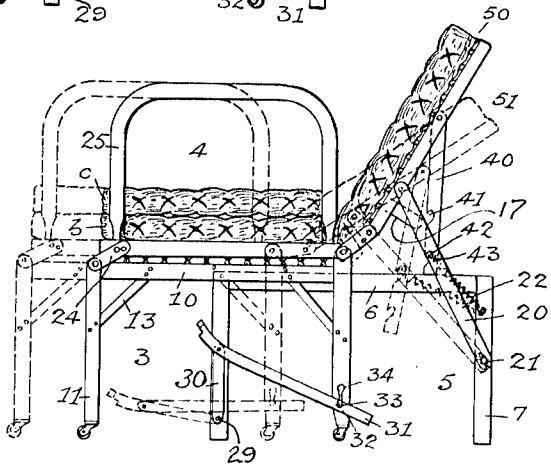
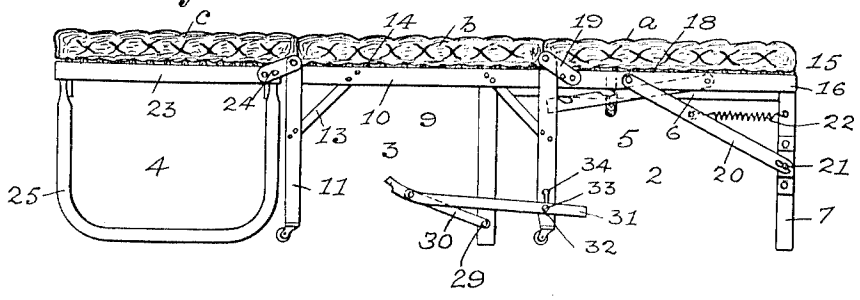


Fig. 3.



WITNESSES:

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ADJUSTABLE-BACK DIVANETTE.

1,061,533. Specification of Letters Patent. Patented May 13, 1913.

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To all whom it may concern:

Be it known that I, BENJAMIN B. ENGLANDER, a citizen of the United States, residing at New York, borough of Manhattan, in the county of New York and State of New York, have invented certain new and useful Improvements in Adjustable-Back Divanettes, of which the following is a specification.

This invention relates to convertible beds or divans of that character known on the market as divanettes, the object of the invention being to provide an improved convertible divan simple in its construction and operation, and which can be readily opened without withdrawing the same from the wall against which it may be placed, and the opening of which may be controlled by pedally operated means so that it may be readily operated by a woman with comparatively little effort, and in which that part forming the back, when the structure is in the form of a divan, may be readily adjusted into different positions relatively to the seat, so that the structure may be converted either into an ordinary divan or a bed, or into a reclining chair.

In apartments, flats and small rooms where it is necessary to economize space the usual six-foot length convertible couch or bed frequently requires too much room lengthwise of the structure.

Consequently, one object of the present improvement is to provide a compact, convertible, ornamental and comfortable structure having an adjustable back, and which will take up, when constructed to form a full size bed, but four feet lengthwise thereof,—in other words, will be about as long as the width of the ordinary double bed—and yet can be transformed into a double bed having the usual length of such a structure, to wit about six feet, thereby making a highly desirable article of furniture. Furthermore the structure can be opened from the front without the necessity of moving the structure from the wall and by the expenditure of very little effort, so that the structure as a whole, when in the form of a divan, can be placed in a small space.

In the drawings accompanying and forming part of this specification Figure 1 is an end view of this improved divanette when in the form of a divan; Fig. 2 is an end view thereof showing the back lowered into different positions, the full lines indicating one position and the dotted lines another; and Fig. 3 is likewise an end view illustrating the structure transformed into a six-foot length bed.

Similar characters of reference indicate corresponding parts throughout the figures of the drawings.

The present improvement comprises what may be designated as a stationary or back supporting section 2, a sliding or middle section 3 sliding over the stationary or back supporting section 2, a swinging front or seat section 4 and a rear or back swinging section 15. The stationary section consists of a pair of end frames 5, each comprising a transverse or cross member 6 having supporting means or legs 7. These end frames are connected by suitable longitudinally extending members or side bars and braces. This section rests upon the floor and is not ordinarily moved and therefore need not be provided with casters. It forms a frame work over which the sliding or middle section 3 and the front swinging section 4 rest when in the form of a divan and from the top of which the sliding or middle section and the front or seat section are shifted when the structure is transformed into a bed, in which position it forms the support for the back section. The sliding or middle section 3 is somewhat similarly formed, and consists of a pair of end frames 9, each consisting of transverse or cross members 10 and legs 11, and which end frames are suitably connected by lengthwise extending members or side bars and braces 13. Stretched between the end frames of the sliding or middle section is a suitable spring 14, which may be of any desired form.

Hinged to the sliding or middle section 3, at the rear thereof, is the back section 15, comprising a frame made up of a pair of end members or bars 16 connected at their outer ends by a longitudinally extending bar and preferably adjacent to their inner ends by a drop form of side bar 17. This frame likewise carries a metallic fabric or spring 18 of any suitable construction. In the present instance the fabric 14 and that forming the back is made as one continuous structure, whereby there is no break between the back and middle sections, thus providing a much more comfortable spring to sleep

upon. The back is hinged to the sliding section by a pair of short links 19, one at each end.

The back section is connected to the rear of the stationary section by a pair of links 20, one at each end thereof, these links being pivotally connected to the ends of the back section, while the lower ends of the links are slotted for the reception of headed pins 21 carried by the rear leg of the stationary section, and to facilitate the lowering and raising of the back section suitable coil springs 22 are provided, one at each end, each connected to a link and to the stationary section.

Hinged to the front of the sliding or middle section 3 is the swinging front or seat section 4, likewise comprising a pair of end bars 23 suitably connected at their outer ends by a lengthwise extending bar, the inner ends being hinged by means of short links 24 to the outer ends of the sliding or middle section 3. This swinging section, when the structure is in the form of a divan, rests upon the sliding or middle section, which in turn rests over the stationary section, so that the divan has a very resilient seat. Connected to each end of the swinging section is a side or end arm 25, which arm is of an integral structure and forms the end of the structure when in the form of a divan and is of such height that when the swinging front section is swung to the front of the middle section 3 the arms will rest upon the floor and form supports or legs for the swinging front section. In the present instance these end or side arms may be hinged, whereby the arms may be folded down under the stuffed mattress when desired, as for instance when the structure is to be shipped or stored away.

Carried by the back section 15 and front swinging section 4, when the structure is in the form of a divan, is a three-section stuffed mattress *a*, *b* and *c*, the sections *b* and *c* forming the seat of the divan while the section *a* forms the back. The section *a* is permanently attached in any suitable manner to the back section 15, while the other two may be shifted on to the back when the latter is in a horizontal position, and from thence on to the middle or sliding section 3 and the front or swinging section 4 when the structure is in the form of a bed as in Fig. 3.

For shifting the sliding section to convert the structure into a double bed, and to facilitate the change thereof into a divan, pedally operated means is provided, and this in the present instance comprises a rock shaft 29 extending from end to end of the stationary section and supported by the forward legs thereof. Connected to the ends of this rock shaft are a pair of crank arms 30 to which is pivotally connected at each end of the structure a lever 31, which is also pivotally connected to the rear leg of the sliding section, as at 32, by means of a headed pivot 33 projecting into a slot 34 carried by the leg of the sliding section. By operating either of these pedal levers the sliding section and its swinging seat section will be shifted forward together from over the stationary section to the front thereof, and simultaneously the back will be carried forward with the sliding section and lowered to rest upon the stationary section, whereupon the two parts *b* and *c* of the stuffed mattress may be thrown over upon the back part *a* and thereupon the swinging section may be swung from off the top of the sliding section and on to the floor to form a full length double bed. Then the two stuffed sections *c* and *b* of the mattress may be swung over upon the sliding and swinging sections respectively in the manner shown in Fig. 3, in readiness for use.

To convert the structure into a divan, it is merely necessary to reverse this operation by throwing the sections *b* and *c* of the stuffed mattress on to the back, then swinging the swinging front or seat section back on the sliding section and thereupon throwing the stuffed sections *b* and *c* on to the seat section and operating the pedal, whereupon the back will be raised and the seat sections returned to their position over the stationary section in the manner shown in Fig. 1. Thus it will be observed that the heaviest part of the structure, comprising the middle or sliding section 3 and the swinging front section 4, together with the two sections of the stuffed mattress thereon and the back and its section of the stuffed mattress, may all be operated by means of either pedal without the necessity of a woman bending down and manipulating these structures by hand. Consequently a comparatively small part of the structure, to wit the sections *b* and *c* of the stuffed mattress and the swinging front section 4, without the stuffed mattress attached thereto, need be manipulated by the hand, and as these are light in weight compared with the entire structure it follows that the divanette may be readily handled with comparatively little effort.

It will also be observed that the stationary section supports the sliding and swinging front sections when in the form of a divan and also forms the support for the back section, which is carried forward and downward on to said stationary section without the necessity of moving the same from the wall when the structure is in the form of a double bed.

It will also be observed that the swinging back section and the swinging front section are both connected to the sliding or middle section and move therewith when the structure is transformed into a double bed to carry the back forward and downward to rest upon the stationary section and to carry

the front or swinging section into position to be swung from the top of the sliding section to the front thereof.

Pivotally connected to the back, and preferably one at each end thereof, is a pair of members or bars 40 each having a plurality of notches, two in the present instance, as 41 and 42, being shown, adjacent to its lower end, and these notches are in position to engage a pin 43 carried by the bar 20. When it is desired to lower the back only part way it is merely necessary to operate the pedal a part of its ordinary movement and this will shift forward the seat section, as shown in full lines in Fig. 2, partly lowering the back into the position shown at 50 Fig. 2, whereupon the notch 42 of the bar may be shifted to engage the pin 43 of the link 20, and so hold the back in its adjusted position. When, however, it is desired to lower the back still farther the notches 42 may be withdrawn from the pins and the next notches 41 engage the pins 43 of the bar 20 in the manner shown in dotted lines, as at 51 Fig. 2. In both instances it will be observed that the seat moves forward in proportion to the distance the back is dropped so that a very efficient reclining structure is obtained.

It will also be observed that the back may be adjusted while the front swinging section is in either of its positions, shown in Figs. 1, and 3.

I claim as my invention:—

1. A convertible bed comprising a main or stationary section, a seat section supported for sliding movement relatively thereto, an adjustable back hinged to said seat section for movement therewith, means connecting the back with the main section, said main section supporting the back when it is lowered to form a bed, and means for supporting said back in an adjusted position between its bed forming and divan forming positions.

2. A convertible bed comprising a main or stationary section, a seat section supported for sliding movement relatively thereto, an adjustable back hinged to said seat section for sliding movement therewith, means connecting the back with the main section, said main section supporting the back when it is lowered to form a bed, and means for supporting said back in an adjusted position between its bed forming and divan forming positions, said means comprising pivoted and notched members connected with the back and means carried by the structure coöperating with said notched members.

3. A convertible bed comprising a main or stationary section, a seat section supported for sliding movement relatively thereto, an adjustable back section hinged to said seat section for movement therewith, means connecting the back with the main section, said main section supporting the back when it is lowered to form a bed, and members connecting the back with said means for supporting the back in any of its adjusted positions.

4. A convertible bed comprising a main or stationary section, a seat section supported for sliding movement relatively thereto, an adjustable back section hinged to said seat section for movement therewith, means connecting the back with the main section, said main section supporting the back when it is lowered to form a bed, and bars connecting the back with said means for supporting the back in any of its adjusted positions, one of each set of bars having one or more notches and the other having a pin adapted to engage each of said notches.

5. A convertible bed comprising a seat section, an adjustable back section hinged thereto, means for supporting it in its upright divan forming position or in its lowered position to form with the seat section a bed, and means for supporting it in different positions intermediate its bed and divan forming positions, said seat section and back section being shiftable together and forwardly of the back supporting means a predetermined distance each time the back is lowered a predetermined distance.

6. A convertible bed comprising a shiftable section, an adjustable back section hinged thereto at one side, a front section hinged thereto at the opposite side, and all simultaneously movable together into position to permit the front section to be swung over in front of the shiftable section when the latter is moved forward thereby to convert the structure into a full-length bed, means stationary during the movement of said sections for supporting the back section in its bed forming position, and means for supporting said back in different adjusted positions between its bed and divan forming positions.

7. A convertible bed comprising a stationary bed section, a sliding bed section shiftable thereover, a swinging and adjustable back section hinged to the sliding section, a front section also hinged to the sliding section, all of said movable sections shiftable simultaneously a pair thereof, one over the other, to the front of said stationary section and one thereof onto said stationary section whereby on reversing the front section the structure will be converted into a full-length bed, pedally operated means for shifting said sections, and means for adjusting the back into different positions intermediate its bed forming and divan forming positions.

8. A convertible bed comprising a sliding section, a front section hinged thereto, an adjustable back section hinged thereto, means connected to said back section for sup-

porting it, means connected to said supporting means and to said sliding section for shifting the latter and therewith the front section, means connected to the front section and in one position forming the arms thereof and in another position supporting means thereof, and means for supporting the back in any of its adjusted positions between its bed forming and divan forming positions.

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Witnesses:
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