May 12, 1931. G. A. STACKHOUSE 1,804,820

SOFA BED

Filed April 12, 1929 2 Sheets-Sheet 1

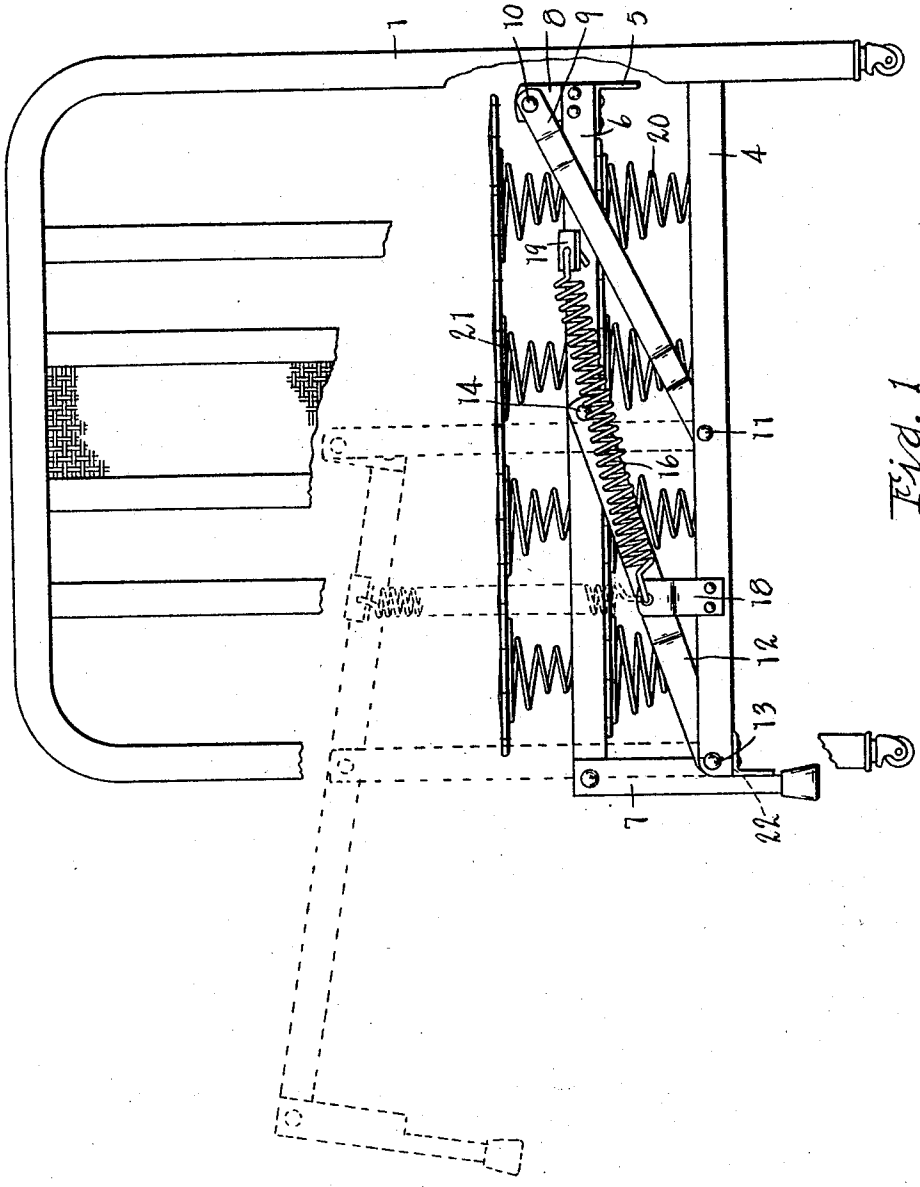


Fig. 1

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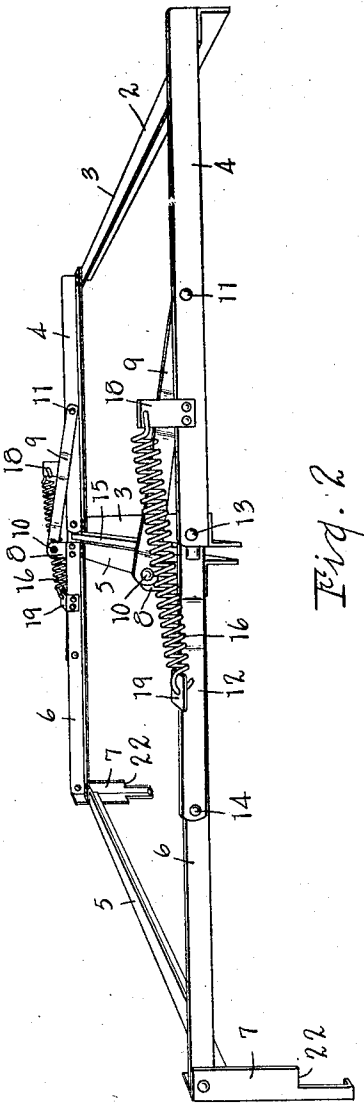


Fig. 2

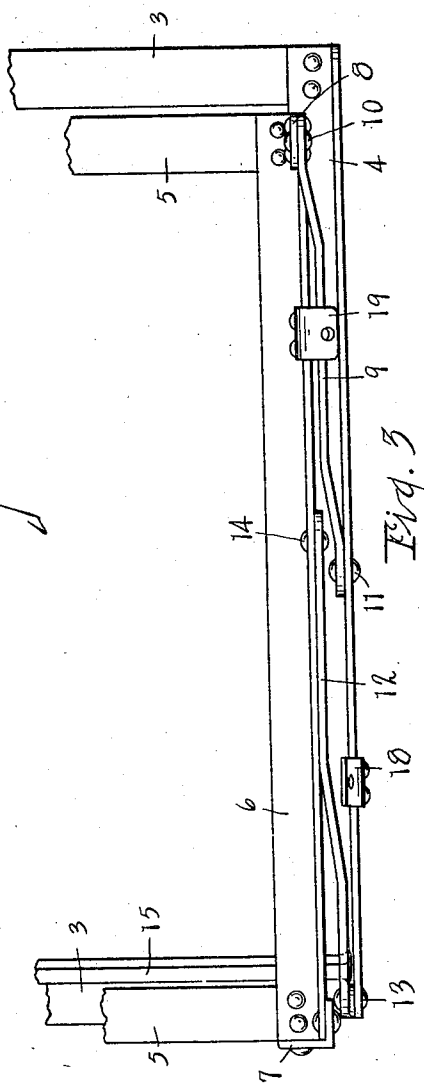


Fig. 3

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Patented May 12, 1931 1,804,820

UNITED STATES PATENT OFFICE

GEORGE A. STACKHOUSE, OF OAKLAND, CALIFORNIA, ASSIGNOR TO L. A. YOUNG SPRING AND WIRE CORPORATION, OF DETROIT, MICHIGAN

SOFA BED

Application filed April 12, 1929. Serial No. 354,455.

The main objects of this invention are:

First, to provide a sofa bed or day bed which is very simple in structure and easily adjusted from extended to collapsed position and vice versa.

Second, to provide a sofa bed in which the bottom springs of both sections are utilized when the bed is in collapsed position or adjusted as a sofa.

Objects relating to details and economies of my invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is illustrated in the accompanying drawings, in which:

Fig. 1 is an end elevation view of my improved day or sofa bed, parts being broken away to better show the structure, the adjustable section being shown by dotted lines in one of the positions during adjustment.

Fig. 2 is a perspective view showing the frames of the main and adjusting sections in their extended relation.

Fig. 3 is a fragmentary plan view of the frames in collapsed position.

In the embodiment illustrated, 1 represents one of the end members of the bed which is provided with suitable legs.

The main frame designated generally by the numeral 2 is mounted upon the end members, the details of the mounting however not being illustrated as they form no part of this invention. This main frame comprises the side rails 3 preferably formed of angle iron arranged with their angles facing inwardly and downwardly and end members 4 also formed of angle iron arranged with their angles facing upwardly and inwardly. The rails and end members are rigidly secured together.

The adjustable section comprises longitudinal rails 5 formed of angle iron and arranged with their angles facing inwardly and downwardly and end members 6 formed of angle iron and arranged with their angles facing inwardly and upwardly. The adjustable section is provided with legs 7 at its outer corners.

The adjustable section is provided with upwardly projecting arms 8 at its rear corners, the upper ends of the links 9 being pivoted on the outer side of these arms, the pivots being shown at 10. The lower ends of the links 9 are pivoted at 11 on the inner side of the upwardly projecting flanges of the end members 4, these pivots 11 being disposed centrally of the members 4.

A second pair of links 12 are provided, these links being pivoted at 13 to the forward ends of the upwardly projecting flanges of the end members 4, and also are pivoted at 14 to the outer sides of the upwardly projecting flanges of the end members 6 of the adjustable section. The links 12 are connected by a bar 15 arranged adjacent the pivots 13, this bar serving to synchronize the swinging of the links. The arms 8 permit the mounting of the lower ends of the links on the inner sides of the upwardly projecting arms of the angle iron end members 4 and prevent the links falling into a locking position when the bed is extended, the links also clearing the longitudinal rails 3 and 5.

Counterbalancing springs 16 are connected to the upwardly projecting arms 18 on the end members 4 of the main frame, these arms being located centrally between the pivots 11 and 13. The other ends of the springs are connected to the longitudinally projecting ears 19 located centrally between the pivots 10 and 14. These springs are placed under tension on the swinging of the adjustable section to its completely collapsed position and also its completely extended position so that they serve to counterbalance the weight of the adjustable section.

The main section is provided with a bed spring unit 20 while the adjustable section has a bed or bottom spring unit 21.

When the adjustable section is collapsed the shoulders 22 on the legs 7 engage or rest upon the front longitudinal rail of the main section, the adjustable section and its spring unit being further supported by the spring unit of the main section so that both spring units are effective when the structure is adjusted as a sofa, the engagement of the legs 7 with the front rail, however, stabilizing the structure so that the upper section does not

weave or oscillate laterally but may swing up and down as the spring unit 20 yields.

My improved sofa or day bed is very simple in structure, and at the same time is strong and durable and easily adjusted. I have illustrated the same in an embodiment which I find very practical. I have not attempted to illustrate various adaptations or modifications as it is believed that this disclosure will enable those skilled in the art to embody or adapt as may be desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In a sofa bed, the combination with a main section provided with legs and comprising side rails and angle iron end members, the end members being disposed with their angles facing inwardly and upwardly, an adjustable section comprising side rails and angle iron end members, the end members being disposed with their angles facing upwardly and inwardly, said adjustable section having upwardly projecting arms at the rear corners thereof, a pair of links pivoted at their upper ends to the said arms and at their lower ends on the inner side of the upwardly projecting flanges of the main section end members and centrally thereof, said links having oppositely offset ends, a second pair of links pivoted on the inner side of the upwardly projecting flanges of the main section end members at the front ends thereof and to the outer sides of the end members of the adjustable section centrally thereof, a bed spring unit on the main section, and legs at the forward corners of the adjustable section shouldered to engage and be supported by the front rails of the main section when the adjustable section is collapsed thereon, the adjustable section resting upon and supported by said bed bottom spring unit.

2. In a sofa bed, the combination with a main section provided with legs and comprising side rails and angle iron end members, the end members being disposed with their angles facing inwardly and upwardly, an adjustable section comprising side rails and angle iron end members, the end members being disposed with their angles facing upwardly and inwardly, said adjustable section having upwardly projecting arms at the rear corners thereof, a pair of links pivoted at their upper ends to the said arms and at their lower ends on the inner side of the upwardly projecting flanges of the main section end members and centrally thereof, said links having oppositely offset ends, a second pair of links pivoted on the inner side of the upwardly projecting flanges of the main section end members at the front ends thereof and to the outer sides of the end members of the adjustable section centrally thereof, and legs at the forward corners of the adjustable section shouldered to engage and be supported by the front rails of the main section when the adjustable section is collapsed thereon.

3. In a sofa bed, the combination with a main section provided with legs and comprising side rails and angle iron end members, the end members being disposed with their angles facing inwardly and upwardly, an adjustable section comprising side rails and angle iron end members, the end members being disposed with their angles facing upwardly and inwardly, said adjustable section having upwardly projecting arms at the rear corners thereof, a pair of links pivoted at their upper ends to the said arms and at their lower ends on the inner side of the upwardly projecting flanges of the main section end members and centrally thereof, said links having oppositely offset ends, a second pair of links pivoted on the inner side of the upwardly projecting flanges of the main section end members at the front ends thereof and to the outer sides of the end members of the adjustable section centrally thereof, a rod connecting said second pair of links secured thereto adjacent their pivots to the main section, and legs at the forward corners of the adjustable section shouldered to engage and be supported by the front rails of the main section when the adjustable section is collapsed thereon.

In witness whereof I have hereunto set my hand.

GEORGE A. STACKHOUSE.