

H. B. ARNOLD.
EXTENSION BEDSTEAD.
APPLICATION FILED JULY 17, 1909.

949,291.

Patented Feb. 15, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

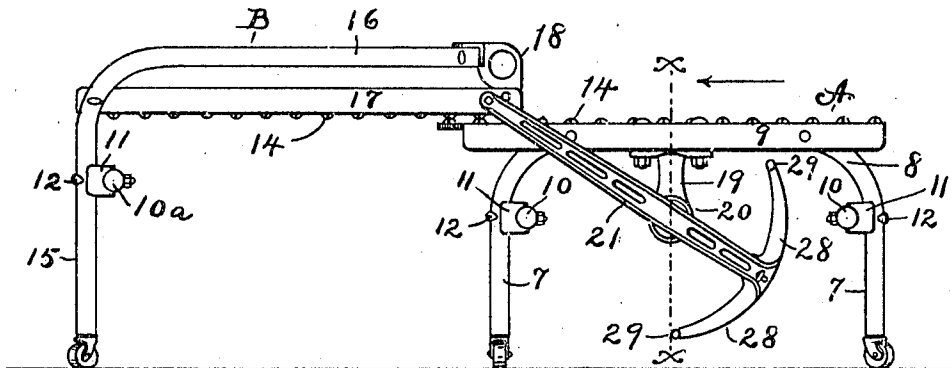
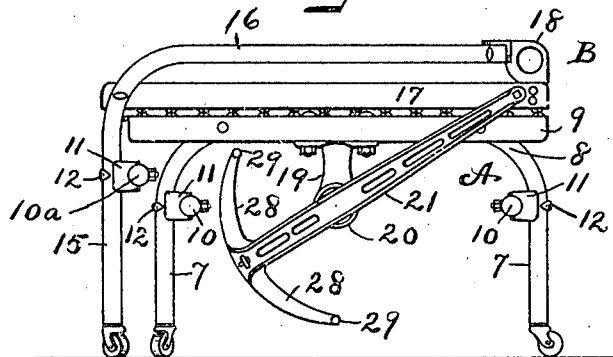


Fig. 2.



Witnesses:

S. H. Glauke
Bennett Nelson

Inventor.

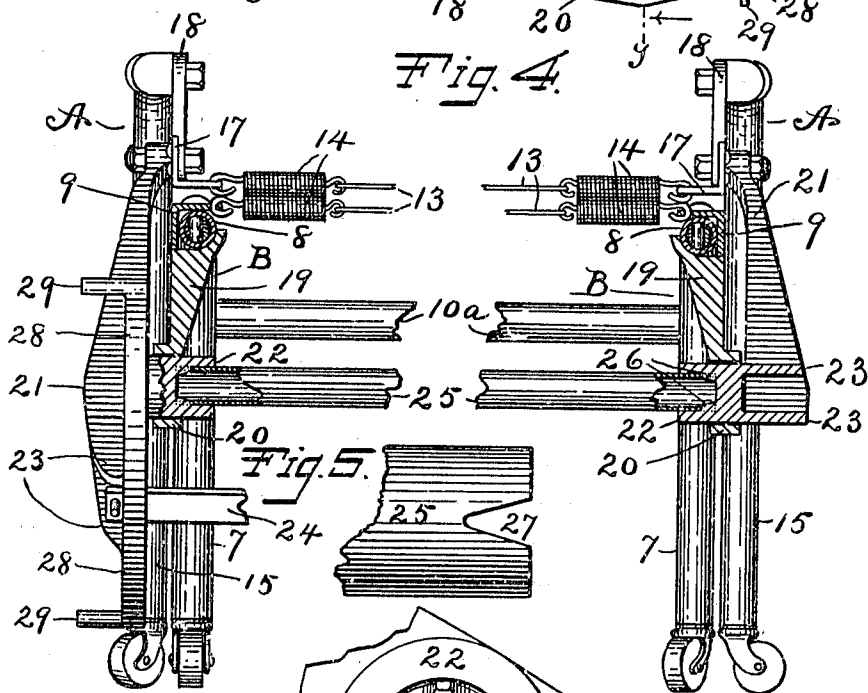
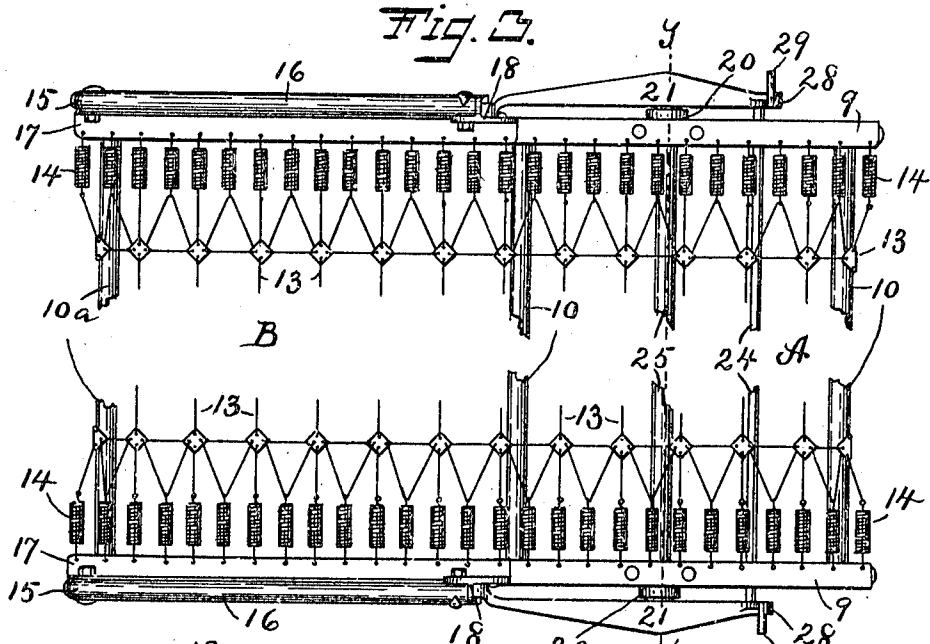
Harry B. Arnold.
By Louis M. Schmidt.
Atty.

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2 SHEETS—SHEET 2.



Witnesses.

S. H. Clarke

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Fig. 5.

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UNITED STATES PATENT OFFICE.

HARRY B. ARNOLD, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO NATIONAL SPRING BED COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION.

EXTENSION-BEDSTEAD.

949,291.

Specification of Letters Patent.

Patented Feb. 15, 1910.

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To all whom it may concern:

Be it known that I, HARRY B. ARNOLD, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Extension-Bedsteads, of which the following is a specification.

My invention relates to improvements in extension bedsteads and the objects of my improvements are to simplify the construction of the opening mechanism and to provide the said mechanism with operating arms that are specially adapted for being moved by one foot of the user.

In the accompanying drawing:—Figure 1 is an end view of my bedstead when extended. Fig. 2 is a like view of the same when closed. Fig. 3 is a broken out plan view of the same when extended. Fig. 4 is an enlarged and broken out vertical section of the same on the lines $x x$ of Fig. 1, and $y y$ of Fig. 3. Fig. 5 is an enlarged plan view of an end portion of the longitudinal bar of the opening mechanism, and Fig. 6 is a side elevation of the hub portion of one of the levers of the opening mechanism, showing that side thereof which contains the socket for the longitudinal bar.

My bedstead is of the class which generally speaking consists of three elements in combination, viz:—A main bed section, an extension bed section and an opening mechanism by means of which the two sections are operatively connected.

My present improvement resides in the opening mechanism and the special construction of the main bed section for mounting the said opening mechanism thereon.

A designates the main bed section and B the extension bed section. In the main these parts are old and although I have shown some special details of construction for these parts these details are not essential to my present invention and other known constructions of main and extension bed sections of this class of beds may be substituted for the special constructions herein shown. I form each pair of legs 7, 7, of the main bed section of a piece of tubing bent into substantially the form of an inverted U, with the connecting middle portion 8 at the top. To the said middle portion I secure the fabric supporting end rail 9 of angle iron. One such piece of tubing so bent, and the

attached fabric supporting end rail constitutes an end frame. The two end frames are connected together by side bars 10 which are connected with the respective legs by means of socket blocks 11 and bolts 12. An ordinary metallic fabric 13 with springs 14 at each end, is stretched between the two fabric supporting end rails of the said main bed section. I form the front legs 15 and horizontal end guard 16 of the extension bed section from one piece of tubing bent into form as shown, and I secure one end of a fabric supporting end rail 17 to the upper part of the front leg while the other end of the said rail is secured to a special corner iron 18, which corner iron is in turn secured to the adjacent end of the end guard 16 as shown. One such leg, end guard, end rail and corner iron constitutes an end frame for the extension bed section. A longitudinal side bar 10^a connects the front legs of the two end frames, the same being connected by blocks 11 and bolts 12. An ordinary metallic fabric 13 and springs 14 stretched between the fabric supporting end rails, as in the main bed section, completes the extension bed section.

The special feature of the main bed section for mounting thereon my opening mechanism consists of a bracket 19 secured to and depending from the middle portion of each end frame, the said bracket having at its lower end a box or bearing 20 for the pivot or axle of the opening mechanism. The levers 21 of the opening mechanism are each provided with a hub 22 which is mounted within the respective bearings 20 of the main bed section while the upper or longer ends of the said levers are pivotally connected with the inner ends of the fabric supporting end rails of the extension bed section as shown. The said levers may each be provided with strengthening flanges 23, Fig. 4, on their outer sides. The lower or shorter ends of the said levers are connected with each other at the opposite ends of the opening mechanism by a tie 24 that extends longitudinally underneath the main bed section. The hubs 22 of the levers 21 are made hollow to receive the ends of a strut or longitudinal bar 25 and in order to make the said bar turn with the hubs, I provide the interior of each hub with lugs or projections 26 and provide notches 27 in the ends of the said bar to interlock with the

said lugs and necessitate the simultaneous movement of the levers 21 at the opposite ends of the main bed section. The said bar 25 extends longitudinally of the bed between the pivotal bearings 20, and rotates a fractional part of a revolution in a common axis with the said levers. Of the parts thus far specifically described the levers 21, the strut or bar 25, and the tie 24 connected as described, constitute the opening mechanism which pivotally connects the two bed sections so that by taking hold of one of the corner irons 18 and lifting the inner edge of the extension bed section, the latter may be moved from the extended position shown in Fig. 1, to its closed position shown in Fig. 2, or vice versa.

In some cases it may be desirable to have the opening mechanism arranged for being operated by the foot of the user. For such use I provide the lower or short ends of the levers 21 with pedals 28 which are preferably curved as shown so as to bring the uppermost tread or foot piece 29, always into a position substantially in the vertical plane of the lower end of the levers 21 when the bed is fully extended or fully closed, as shown in Figs. 1 and 2. To open or close the bed by foot power, it is only necessary to depress the uppermost tread with the foot until the levers pass the vertical position.

I claim as my invention:

1. In an extension bedstead, the combination of a main bed section having downwardly extended brackets at the middle portion of its end frames with pivotal bearings formed therein, a pair of levers pivoted in the bearings of the said brackets, a longitudinal bar extending from lever to lever between the said bearings and rotating on a common axis with the said levers, and an extension bed section pivotally connected at each end by its inner edge with the upper ends of the said levers.

2. In an extension bedstead the combination of a main bed section having downwardly extended brackets at the middle portion of its end frames with pivotal bearings formed therein, a pair of levers pivoted in the bearings of the said brackets, a longitudinal bar extended from lever to lever between the said bearings, rotating on a common axis with the said levers and acting as a strut to receive the inward thrust on the upper ends of the said levers, a longitudinal

tie connecting the lower ends of the said levers, and an extension bed section pivotally connected at each end by its inner edge with the upper ends of the said levers.

3. In an extension bedstead, the combination of a main bed section with a pair of levers pivoted by their middle portion to the main bed section at the opposite ends thereof and extended in both directions from their pivotal point, a longitudinal bar underneath the top of the said main section and extending from lever to lever between their pivotal points and rotating on a common axis with the said levers, a pair of pedals at the lower extremities of that portion of the said levers which extends downwardly from their pivotal points and an extension bedstead pivotally connected at each end by its inner edge with the upper ends of the said levers.

4. In an extension bedstead, the combination of a main bed section and extension bed section relatively movable thereto, with a pair of opening levers pivoted on the main bed section and operatively connected by one end with the extension bed section, the said levers being extended downwardly below their pivotal connection with the main bed section and provided with oppositely extended foot pedals at the lower extremities thereof whereby the uppermost tread is always in a position substantially in the vertical plane of the lower extremities of the said levers when the bed is fully extended or fully closed.

5. In an extension bedstead, the combination of a main bed section having downwardly extended brackets at the middle portion of its end frames with pivotal bearings formed therein, a pair of levers having inwardly projecting hollow hubs on their middle portion at one side thereof, the said hubs being journaled within the bearings of the said brackets, a longitudinal bar extended from the hollow hub of one lever to that of the other with its ends received in the said hubs, means for necessitating the axial movement of the said bar with the said hubs and an extension bed section pivotally connected at each end by its inner edge with the upper extremities of the said levers.

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Witnesses:

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M. R. CODAIRE.