

C. H. YOUNG.

COUCH BED.

APPLICATION FILED MAY 31, 1912.

Patented Aug. 20, 1912.

1,035,934.

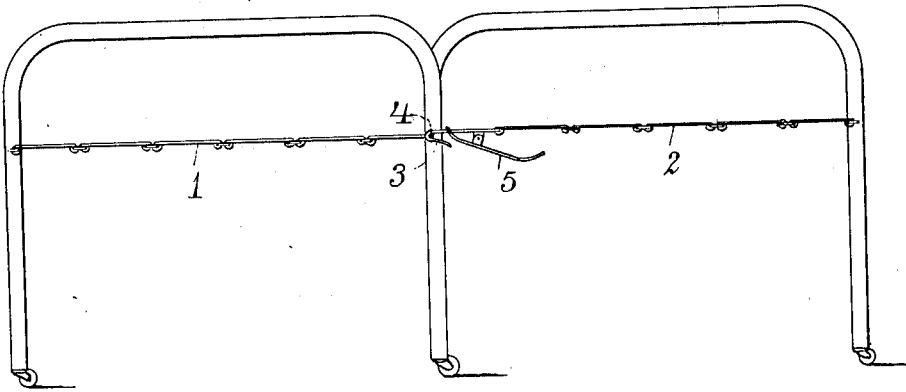


Fig. 1

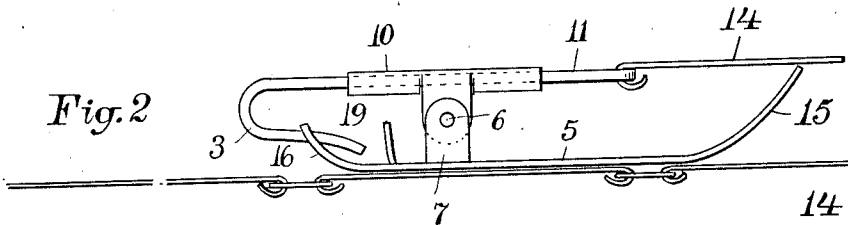


Fig. 2

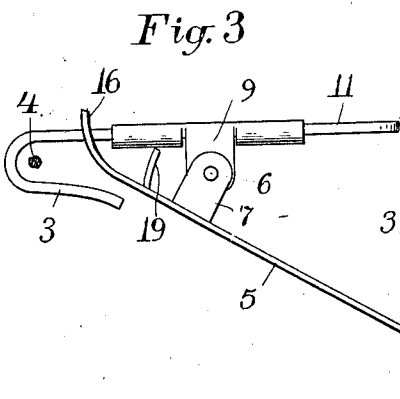


Fig. 3

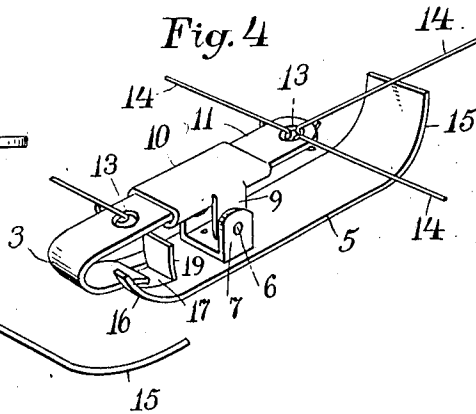


Fig. 4

Witnesses;

Edw. Shivel

Norman MacLaffin

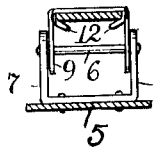


Fig. 5

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COUCH-BED.

1,035,934.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLARENCE H. YOUNG, a citizen of the United States, and a resident of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Couch-Beds, of which the following is a specification.

This invention relates to couch beds wherein a movable section is superposed upon a stationary section to form the couch, and is drawn away therefrom and positioned beside it to compose the bed; and in which the sections are provided with metallic springs or fabrics for the support of the mattresses.

One difficulty found to exist in connection with such couch beds is that, as the sections are being drawn apart, the springs will catch one with the other and thereby interfere unpleasantly with their movement, and the springs interfere even more awkwardly when the movable section is being returned. Another point is that when the sections are disposed side by side to form a bed, the springs separate and permit the mattress to sag through.

The objects of this invention are, first, to keep the springs from such interference; and, second, to lock the sections together automatically.

Referring to the drawings forming part of this specification, Figure 1 is a transverse section of a couch bed, showing the same extended and the spring sections locked together. Fig. 2 is a transverse section of said springs when partly extended, showing how the same are kept from interference. Fig. 3 is a similar view showing the springs locked together. Fig. 4 is a perspective view of the combined lock and separator, the last three figures being drawn on a larger scale. Fig. 5 is a cross section of the same.

The reference numeral 1 designates the springs or fabric of a couch bed section, and 2, the springs or fabric of the other bed section, said sections being adapted for relative transverse movement in order to permit one thereof to be superposed over the other to form a couch, or to be drawn out therefrom to form a full-width bed. Said springs or fabric is of the well known type comprising short wire links united by eye-members and extending in longitudinal and transverse lines, the longitudinal links being kept taut by helical springs.

For locking the springs of one section to the springs of the other when in their extended position, I provide the springs which override the other set, with one or more hooks 3 adapted to engage the links 4 composing the edge of the springs 1, and so to keep the two sets of springs from further separation. Each hook 3 is provided with a coacting member adapted both to direct the wires 4 into engagement with the hook, and also to prevent the two fabrics or sets of springs from objectionable mutual engagement or catching while the movable section is being shifted. Said member comprises a shoe 5 curved upward at each end, and pivotally supported at 6 from a hook 3 by means of ears 7 bent upward from the shoe and ears 9 turned downward from the hook.

The ears 7 may be a strap riveted to the shoe, as shown in Figs. 4 and 5, or formed integral with the shoe. The ears 9 I prefer to strike up from a metallic sheet separate from the hook 3, but formed with incurved edges adapted to tightly clasp the shank 11 of the hook. This enables the latter to be formed from narrow strap metal, with maximum economy, and also permits the hook to be longitudinally adjusted relative to the shoe, a blow upon said incurved edges 12 fixing the parts in position. The hook is also formed with eyes 13 for the engagement of the wire links 14 composing part of the fabric 2, as shown in Figs. 1 and 4.

When the fabrics are sliding one beneath the other, the shoe or shoes 5 maintain a horizontal position, as illustrated in Fig. 2, and keep the two fabrics sufficiently far apart to insure that they cannot catch one against the other, the rear up-turned end being made of a height to contact with one of the transverse links when the shoe is horizontal. The instant, however, the rear edge of the fabric 1 passes beyond the pivot 6 in being extended, the rear end of the shoe drops to the inclined position shown in Figs. 1 and 3, and said edge 4 is guided up into the hook 3, the normal inclination of the fabric 1 being to rise from the position to which it is depressed by the shoe. The edge 4 being thus held by the hook or hooks 3, the two fabrics 1 and 2 become practically a single wire spring incapable of separation at their adjacent edges.

Upon pushing the movable section backward to the couch-position, the up-curved

front end 16 of the shoe meets the link or edge 4 and guides it down along the same past the pivot 6 and thence along the shoe, the latter immediately flying up to a horizontal position and so sliding along the under set of springs or fabric 1 and keeping the same from catching in the other fabric.

While it would work if the front end 16 of the shoe moved up past one side of the hook 3, I prefer to have said end formed with a deep notch 17, as shown in Fig. 4, through which the hook freely moves. In making this notch, a portion of the metal is bent upward to compose a stop 19 which, by meeting the under surface of the hook's shank, keeps the shoe from descending below the proper angle illustrated in Figs. 1 and 3.

What I claim as my invention and for which I desire Letters Patent is as follows, to wit:

1. The combination of movable bed sections adapted to be superposed and extended by sliding one relative to the other, each section having springs or fabric, a hook at the edge of one section's fabric adapted to engage the edge of the other fabric, and means carried by said hook and adapted to separate the fabrics to prevent their mutual interference, and to direct the hook into engagement with the opposite fabric edge when the sections are extended.

2. The combination of relatively movable bed sections each having springs or fabric,

a hook held by one fabric and adapted to engage the opposite fabric-edge of the other section, a shoe pivotally supported by said hook and adapted to lie horizontally and to separate the fabrics when the latter are superposed, and while thus horizontal being adapted to prevent the hook from meeting the opposite fabric.

3. The combination of relatively movable bed sections each having springs or fabric, a hook held by one fabric and adapted to engage the opposing fabric-edge of the other section, a shoe pivotally supported by said hook to hang at an acute angle but to be horizontal and separate the fabrics when the sections are superposed, the ends of said shoe being curved upward.

4. The combination of relatively movable bed sections each having springs or fabric, a hook held by one fabric and adapted to engage the opposing fabric-edge of the other section, and a shoe pivotally supported near one end from said hook, said shoe having up-turned ends, the shorter end of the shoe being in the field of the hook and notched to swing past the latter.

In testimony that I claim the foregoing invention, I have hereunto set my hand this 29th day of May, 1912.

CLARENCE H. YOUNG.

Witnesses:

JOHN H. FOWKES,
J. G. SUTHERLAND.