No. 859,741. PATENTED JULY 9, 1907.

S. B. COMSTOCK.

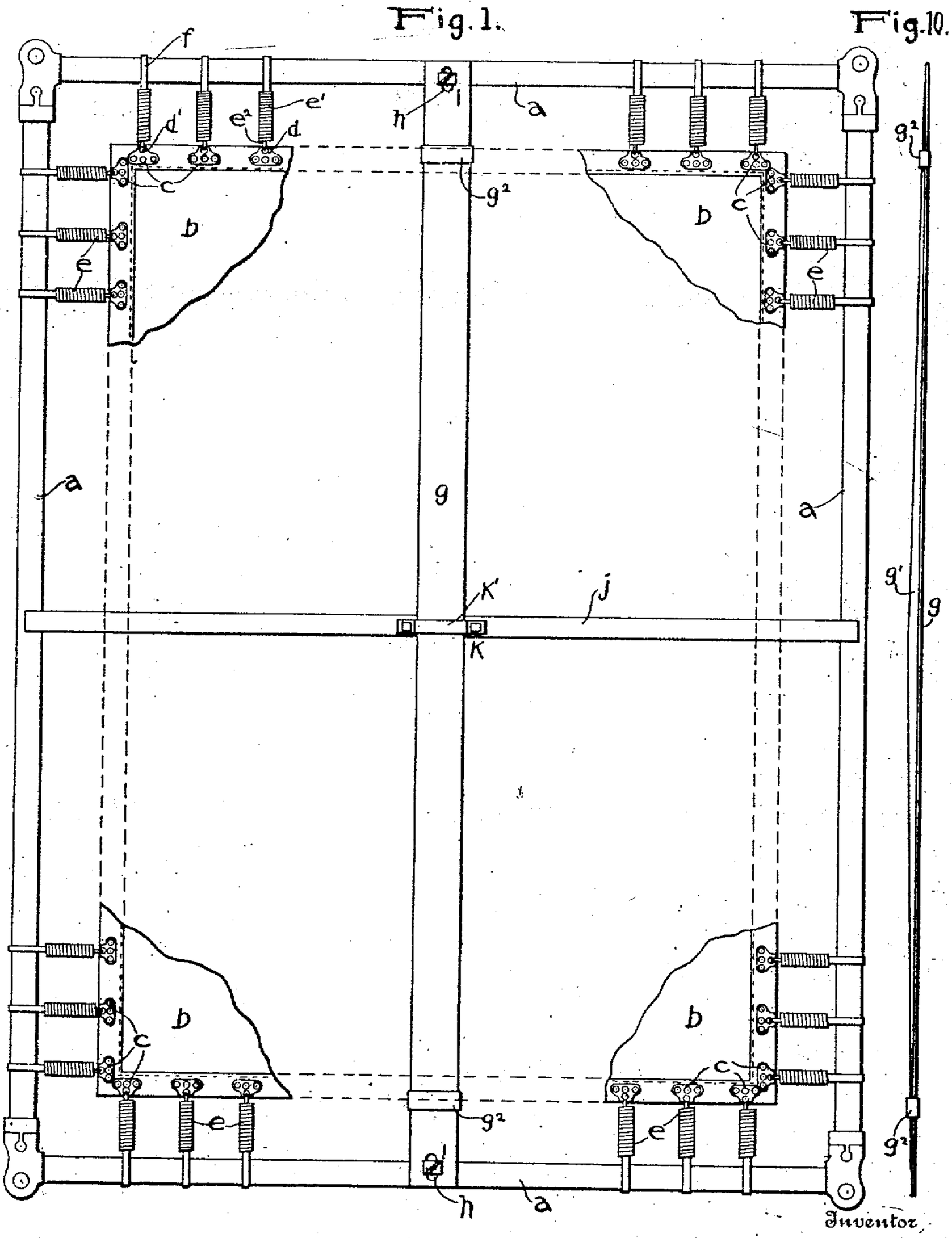
BED.

APPLICATION FILED APR. 16, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

Fig. 10.



Witnesses

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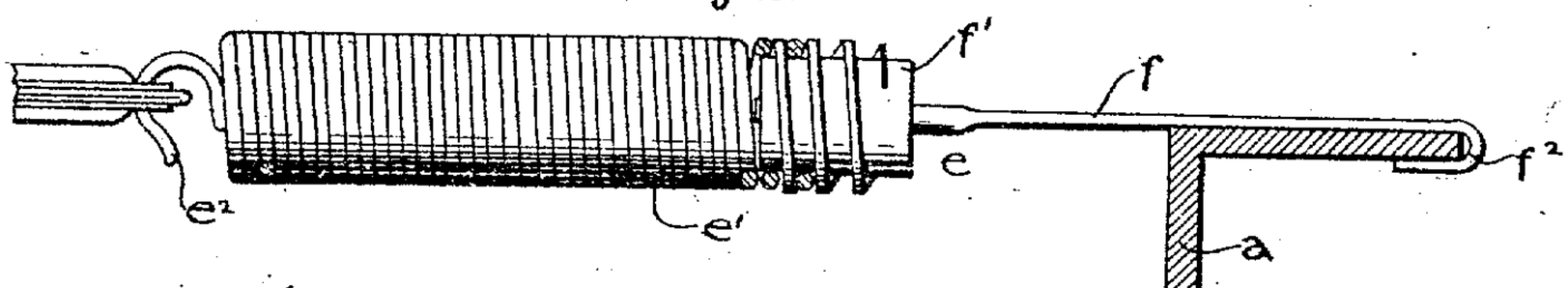
2 SHEETS—SHEET 2.

Fig. 2.



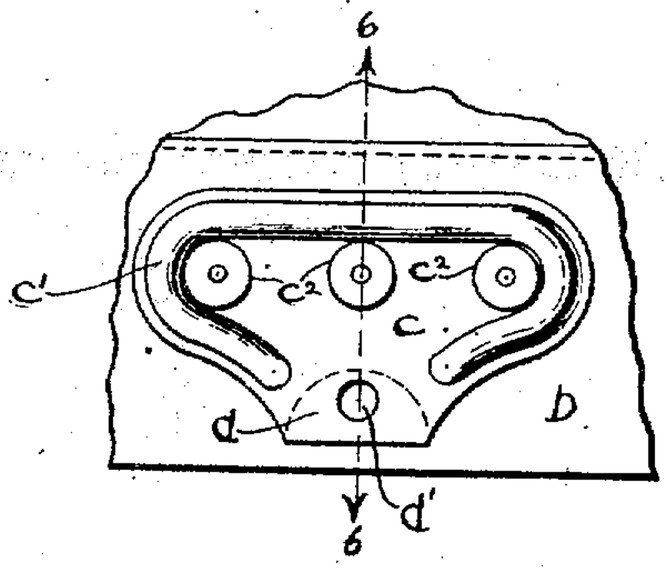


Fig. 3.

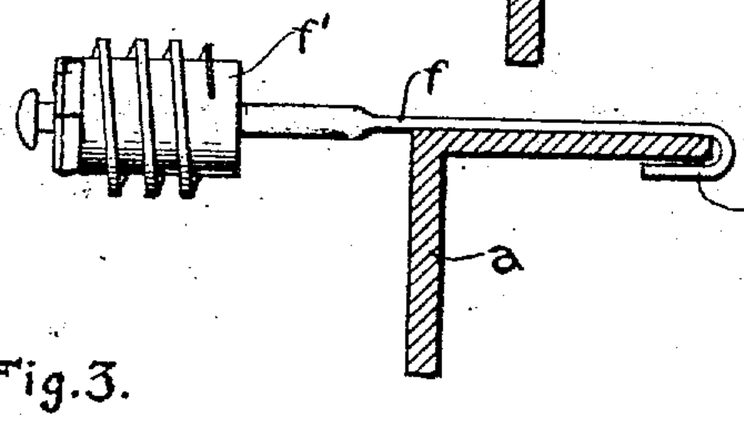


Fig. 8.

Fig. 4.

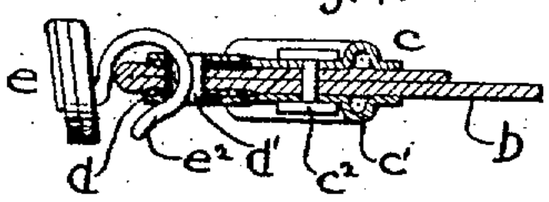
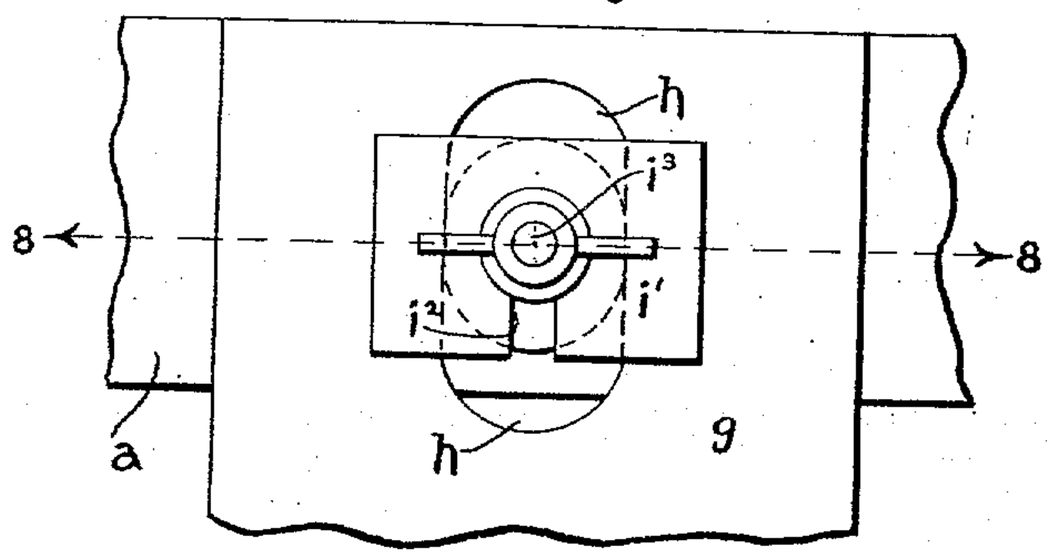


Fig. 5.



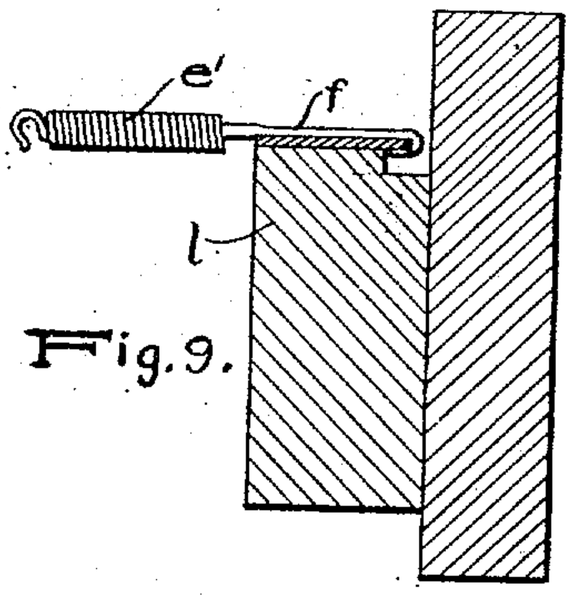
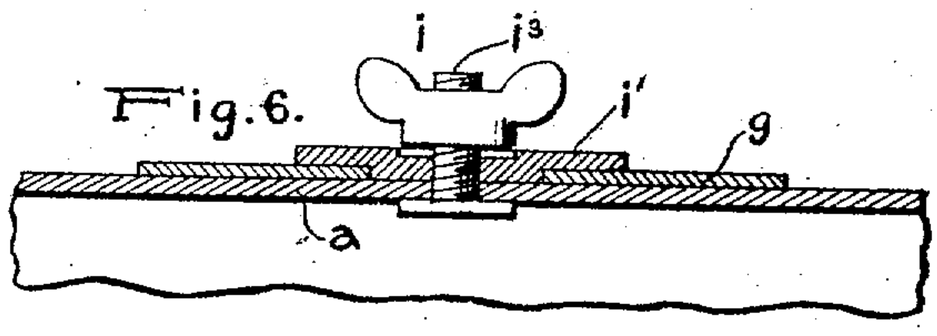


Fig. 9.

Fig. 6.



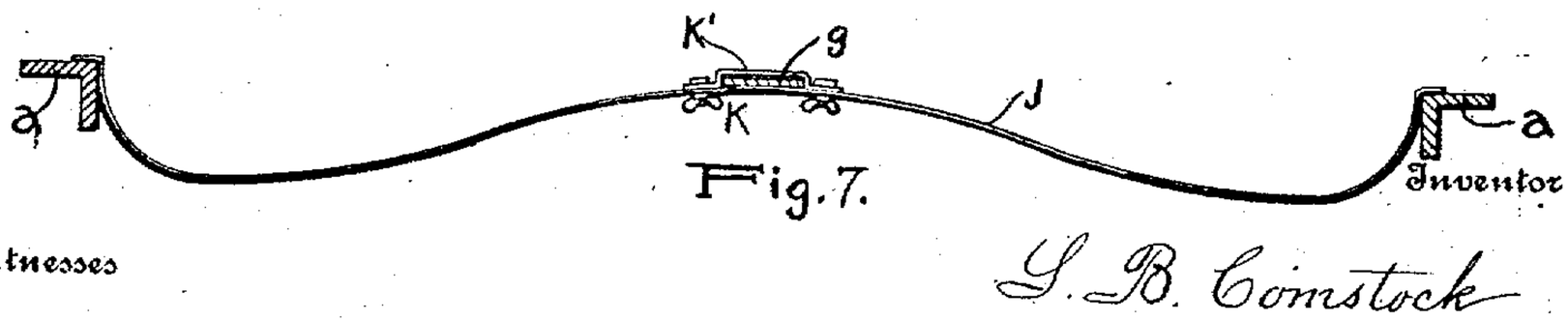


Fig. 7.

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UNITED STATES PATENT OFFICE.

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BED.

No. 859,741. Specification of Letters Patent. Patented July 9, 1907.

Application filed April 16, 1906. Serial No. 312,024.

To all whom it may concern:

Be it known that I, SYLVESTER B. COMSTOCK, a citizen of the United States, and a resident of Nogales, in the county of Pima and Territory of Arizona, have made a certain new and useful Invention in Beds; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view of a bed partly broken away showing the invention as applied. Fig. 2 is a detail sectional view of one of the spring connection devices *e*. Fig. 3 is a detail plan view of one of the metal clips *c*. Fig. 4 is a section on the line *x*—*x*, Fig. 3. Fig. 5 is a detail plan view of the connection of the central longitudinal slat with the end rails. Fig. 6 is a section on the line 6—6, Fig. 5. Fig. 7 is a transverse sectional view showing the spring brace. Fig. 8 is a detail view of a modification of the connection device having a wrench seat. Fig. 9 is a detail view showing the connection device applied to a wooden bed. Fig 10 is a detail view showing the manner of forming the longitudinal center slat.

The invention relates to beds and bed-bottoms, having for its object the provision of a durable, inexpensive spring canvas bed-bottom, which may be applied either to a wooden, or metal bed; designed to save in cost of transportation; which may be made cool or warm, as required, and requiring no mattress to render it comfortable.

With this object in view the invention consists in the novel construction and combination of parts as hereinafter set forth.

Referring to the accompanying drawings, illustrating the invention, the letter *a*, designates the framework of a metal bed, having L-form side and end rails, disposed with the horizontal branch of the L uppermost, and extending outward.

The canvas sheet bottom is indicated at *b*, being doubled at the edges, and has along its margins, the metal clips *c*, riveted thereto, said clips having outward extending perforated arms or branches *d*, which are, preferably, reversed at the ends for reinforcing purposes.

e are the spring means of connection for the canvas sheet to the bed rails, consisting, each, of a spiral spring section *e'*, having the hook form termination e^2, for engagement with the perforation d', of each clip d, and the flat bar section *f*, resting upon the horizontal surface of the top of the bed rails and having a cylindrical externally threaded inner end portion *f'*, with which the coils of the spring section *e'*, have engagement, said section *f*, having an open hook form outer termination f^2, engaging the free edge of the top arm of the bed rail. The threaded portion *f'*, and the coil spring portion *e'*, have adjustment by rotation of one part with respect to the other, so as to vary the tension of the spring.

The thread of the portion *f'* of the section *f* has an outward extension from the cylindrical body or height similar to the diameter of the wire of which the coil spring *e'* is composed, being adapted to enter between and spread the coils of the spring in such manner as to make it impossible to withdraw the threaded portion from the spring by endwise traction. This result is accomplished to the best advantage by using a square thread, as shown, wherein the straight lateral walls of the thread are disposed at right angles or substantially so to an endwise traction.

In case a double bed is desired, a center slat *g*, is employed, being preferably, a thin sheet-metal strip reinforced by a wooden strip or batten, indicated at *g'*, of tapering form and having connection with the metal strip by means of the hoops g^2, designed to be forced downwardly toward the thicker end of the wooden batten, to securely connect the parts together. This center slat has a longitudinal slot *h*, at each end thereof, and has a detachable connection with the end rails of the bed by means of the clamps *i*, consisting each of a top plate or washer *i'*, having an elongated boss at the bottom engaging the slot of the slat, and having an open end slot i^2, leading to the central perforation with which the clamping bolt i^3, is engaged, said bolt engaging a central perforation of the bed rail and being headed at the bottom and having a thumb nut at the top. It will thus be apparent that the center slat may be readily disconnected by loosening the thumb nut of each clamp, when the top plate or washer may be removed in a sliding manner, owing to its open slot engagement with the clamp bolt, and the slat removed over the clamp nut, the slot in each end of the slat being large enough for this purpose. The top plate or washer is then replaced, and the thumb nut tightened to secure the parts in position.

The center slat is supported in the center to provide against buckling under unusual strain by a transverse spring strip *j*, of sheet steel of convex form, having its end portions arched upward and bent outward at right angles to their terminations, which rest upon the side rails of the bed. This strip is connected with the center slat by a clamping device *k*, having a lower loop member *k'*, embracing the slat transversely and provided with outward extending end flanges, having bolt and thumb nut connection with the spring strip.

The clips *c*, are preferably of elongated or oval form, having strengthening marginal ribs *c'*, stamped from the sheet-metal thereof, and are secured to the canvas of the bed bottom by means of three rivets c^2, lying within such strengthening ribs, the ribs *c'* abutting against the rivets.

In case my invention is to be applied to a wooden

bed, a batten strip 1, of wood is secured to the bed rails, as shown in Fig. 10, the edge of the strip next the rail being rabbeted and a thin metal strip secured horizontally over the wooden batten and having its outer edge portion projecting over the rabbet of the batten, sufficient space being left between the outer edge of the metal cover strip and the bed rail for the adjustment of the hook of the portion *f*, of the spring connection devices. A thin wrench may be inserted between the coils of the spring to engage a wrench seat upon the end of the portion *f'*, as shown in Fig. 4.

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

1. A bed bottom consisting of a sheet of canvas, a series of metal clips having direct riveted connection with the canvas sheet along its margin, and marginal reinforcing ribs abutting against the rivets, said clips having outward extending perforated arms having reversed registering reinforcing perforated end portions, and spring connection devices.

2. A bed-bottom consisting of a sheet of canvas, a series of metal clips having direct riveted connection with the canvas sheet along its margin and marginal reinforcing ribs, said clips having outward extending perforated arms having reversed registering reinforcing perforated end portions, and spring connection devices consisting each of a coil spring section, and an externally threaded section having adjustment with respect to each other.

3. A bed-bottom consisting of a sheet of canvas, a series of metal clips having direct riveted connection with the canvas sheet along its margin and marginal reinforcing ribs, said clips having outward extending registering reinforcing perforated arms having reversed perforated end portions, and spring connection devices consisting each of a coil spring section having a hooked end portion engaging one of said clips and an externally threaded section having a hooked arm.

4. A bed bottom consisting of a sheet of canvas, and spring connection devices having engagement therewith and consisting each of a coil spring section having a hook at one end, and a threaded section having a flat bar extension terminating in an open hook, said threaded section having threads of substantially the same diameter as the outside diameter of the coil spring, whereby the engaged coils of the spring are separated by the threads and clasp the same in a secure manner.

5. The combination with a bedstead having a flat top rail and a canvas sheet provided with a series of metal clips having direct riveted connection therewith, said clips having outward extending perforated arms, of spring connection devices consisting each of a coil spring section having a hook at one end for engagement with one of the metal clips, and a threaded section having a flat bar extension overlying the flat top rail of the bedstead, and an open hook embracing the outer edge of said rail, said threaded section having threads of substantially the same diameter as the outside diameter of the coil spring, whereby the engaged coils of the spring are separated by the threads and clasp the same in a secure manner.

6. The combination with a bedstead, of a detachable longitudinal spring center slat on a level with the side rails of the bedstead, a sheet of canvas, and spring connection devices between the canvas sheet and the bed rails consisting each of a coil spring section having an open hook at one end, and an externally threaded section having adjustable engagement with said spring and provided with a flat bar extension having an open hook at its free end.

7. The combination with a bedstead, of a longitudinal center slat, having a slot at each end portion, clamp devices consisting each of a top plate having an open-end slot and a boss engaging the slot in the end of the slat, and bolts having engagement with the end rails of the bedstead and passing through the open-end slots of the top plates, said bolts being provided with thumb nuts, a sheet of flexible material resting upon said center slat, and spring connections between the flexible sheet and the bed rails, consisting, each of a coil spring section and an externally threaded section having adjustable engagement with each other.

8. The combination with a bedstead, of a longitudinal center slat, a transverse central brace for the same, a flexible sheet, and spring connection devices between the sheet and bed rails consisting, each, of two sections having adjustment with respect to each other to adjust the tension of the springs.

9. The combination with a bedstead, of a longitudinal center slat, a transverse spring brace for the same, a flexible sheet, and spring connection devices between the sheet and bed rails consisting each of two sections having adjustment with respect to each other to adjust the tension of the springs.

10. The combination with a bedstead, of a longitudinal center slat, having detachable connection with the end rails of the bed, a transverse spring brace for the same having detachable connection therewith, a flexible sheet and spring connection devices between the sheet and bed rails consisting, each, of two sections having adjustment with respect to each other to adjust the tension of the springs.

11. The combination with a bedstead of a longitudinal center slat, a transverse spring brace for the same resting thereupon and consisting of a strip of thin metal of convex form, having upward curved end portions having outward turned ends resting upon the side rails of the bed, a flexible sheet, and spring connection devices between the sheet and bed rails consisting, each, of two sections having adjustment with respect to each other to adjust the tension of the springs.

12. The combination with a bedstead, of a longitudinal center slat, having connection with the end rails of the bed and consisting of a thin strip of metal, a tapering wooded reinforcing strip and hoop connections, a flexible sheet, and spring connection devices between the sheet and bed rails consisting, each, of two sections having adjustment with respect to each other to adjust the tension of the springs.

13. The combination with a bedstead, of a longitudinal center slat having connection with the end rails of the bed and consisting of a thin strip of metal, a tapering reinforcing wooden strip and hoop connections, a transverse spring brace, a flexible sheet, and spring connection devices between the sheet and bed rails consisting, each of two sections having adjustment with respect to each other to adjust the tension of the springs.

14. The combination with a bedstead, having side rails composed of a horizontal top flange having a free outer edge and a downward extending inner vertical flange, of a bed bottom consisting of a sheet of canvas, and spring connection devices having each a coil spring section and a threaded section, the threads of which are of substantially the same diameter as the outside diameter of the coil spring section, whereby the engaged coils are separated by the threads and clasp the threads in a secure manner, each threaded section having a flat bar extension provided with a horizontal open hook end portion adapted to hook over the free outer edge of the horizontal flange of a bed rail.

In testimony whereof I affix my signature, in presence of two witnesses.

SYLVESTER B. COMSTOCK.

Witnesses:
T. J. HAAS,
THOMAS DWYER.