No. 630,140. Patented Aug. 1, 1899.

J. VARCOE.

FOLDING BEDSTEAD

Application filed May 4, 1897.

(No Model.) 3 Sheets—Sheet 1.

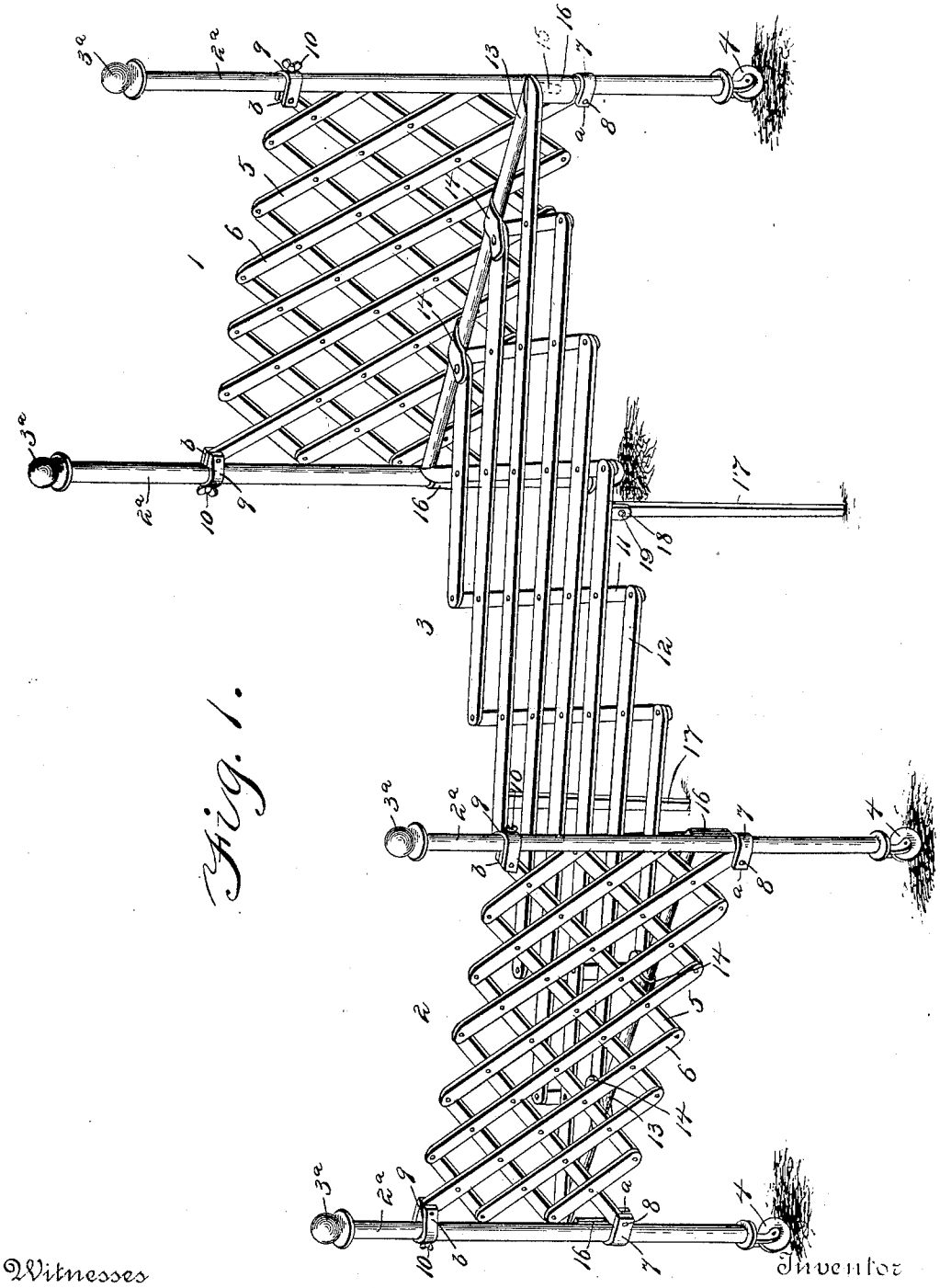


Fig. 1.

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Fig. 2.

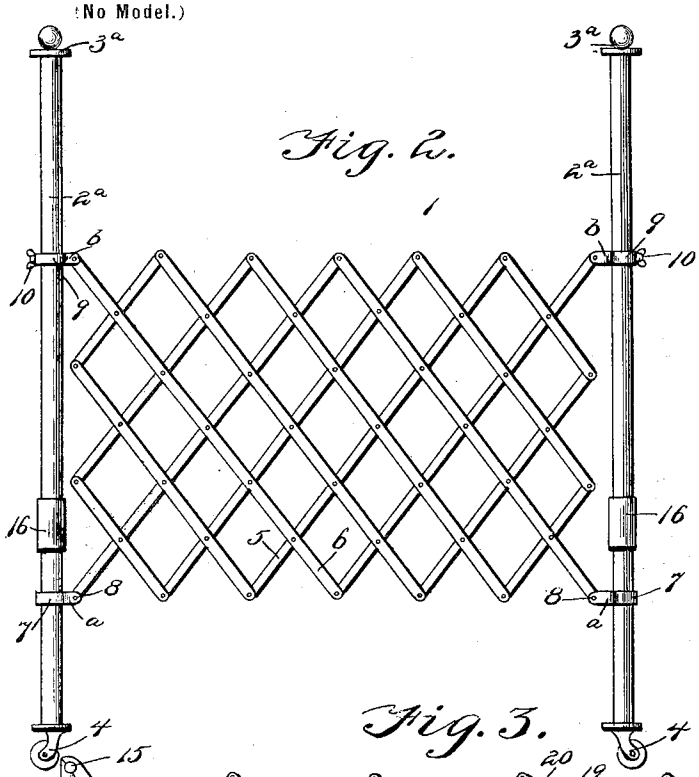


Fig. 4.

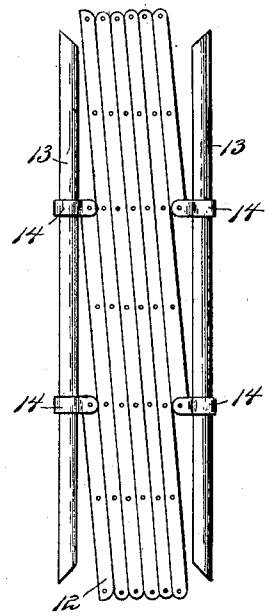
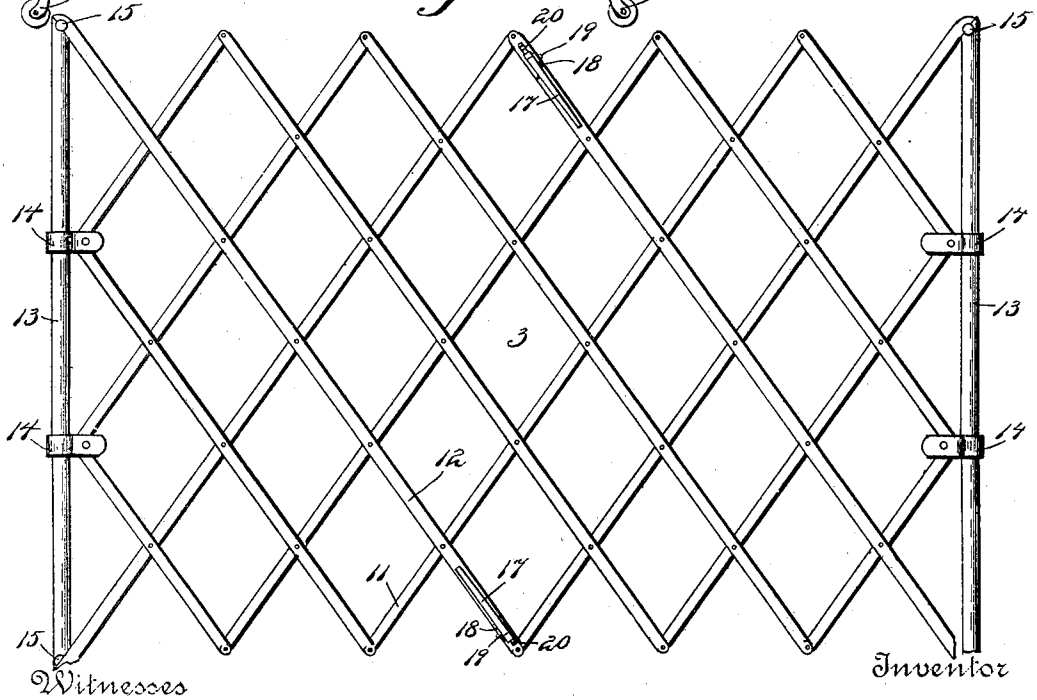


Fig. 3.



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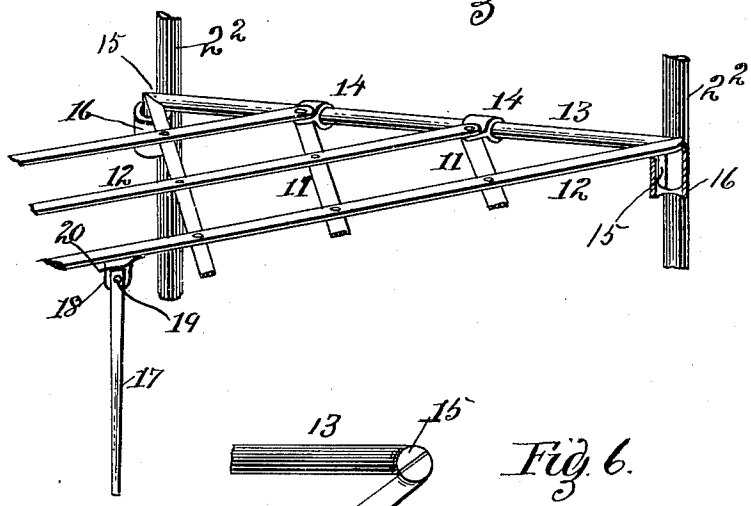
J. VARCOE.

FOLDING BEDSTEAD.

(Application filed May 4, 1897.)

(No Model.) 3 Sheets—Sheet 3.

Fig. 5.



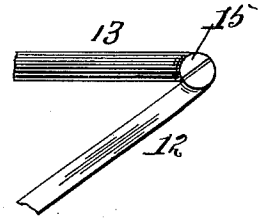


Fig. 6.

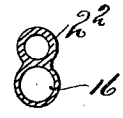


Fig. 7.

Witnesses

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UNITED STATES PATENT OFFICE.

JAMES VARCOE, OF BOSTON, MASSACHUSETTS.

FOLDING BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 630,140, dated August 1, 1899.

Application filed May 4, 1897. Serial No. 635,061. (No model.)

To all whom it may concern:

Be it known that I, JAMES VARCOE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Folding Bedsteads; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide a bedstead in which the several sections can be readily detached and folded in such a manner as to occupy but a minimum amount of space and when extended will present a bedstead which is strong and durable, the parts being susceptible of ornamentation to form a neat and attractive piece of household furniture when constructed for this purpose. To this end the head and foot sections as well as the bottom section of the bedstead are made up of end pieces connected to each other by diagonal cross-bars connected by toggle-joints after the manner of lazy-tongs, the several sections being detachably connected in order that each independent section may be folded within the several sections, bundled together, or carried separately.

The invention contemplates a construction by which the head-sections, being made up of pivoted cross-bars or lazy-tongs construction, are firmly held when expanded and securely connected to each other, the bottom section having supplementary supports or legs which are centrally disposed with respect to the said section.

With the above ends in view the invention consists in making the head and foot sections of a bedstead of corner-posts and cross-bars which are connected to the corner-posts and to each other by toggle-joints and pivoted at their intersections to allow for folding and extending the said foot and head sections.

The invention further consists in forming the head, foot, and bottom sections of a bedstead of cross-bars connected to each other after the manner of lazy-tongs, which permits them to be folded in a compact form.

The invention further consists in the particular construction of the several sections and manner of connecting them to each other in forming a rigid structure for the purpose set forth.

In the following specification I have entered into a detail description of the several parts which constitute my invention, reference being had to the accompanying drawings, and to letters and numerals thereon, and what I consider to be the novel features of construction are specifically recited in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view of a bedstead constructed in accordance with my invention. Fig. 2 is an elevation of the head-section. Fig. 3 is an inverted plan view of the bottom-section. Fig. 4 is a view showing one of the sections folded. Fig. 5 is a detail view particularly showing the diagonal bars and end bars formed with depending portions of the bottom of the bedstead in engagement with the vertical corner-posts. Fig. 6 is an inverted detail plan view of the respective ends of the diagonal bar and end bar of the bedstead-bottom. Fig. 7 is a transverse plan section of a corner-post, illustrating the pocket 16.

Referring to the drawings by letters and numerals, 1 designates the head-section of the bedstead, 2 the foot-section, and 3 the bottom section, these several sections being constructed in a similar manner in order that each may be folded to occupy but a small space. The head and foot sections are constructed exactly alike and are, in fact, duplicates, the only difference being in the height of the corner-posts. Therefore a description of one of these sections will answer as well for the other, and the letters and numerals which I employ to designate the several parts are duplicated upon the said head and foot sections.

2^a 2^a designates the corner-posts of the bedstead, which are preferably made cylindrical or tubular and are provided at their upper ends with caps or top pieces 3^a of any suitable design and at their lower ends are fitted with the ordinary casters 4. These corner-posts are connected to each other to form the usual head and foot boards, respectively, by means of diagonal bars or metal strips 5 and 6, which are connected to each other after the manner of lazy-tongs—that is to say, the several bars

are connected at their ends by toggle-joints and at their intersections are pivoted to each other—the bars or strips which form the corner-posts of the frame so constructed being connected to the corner-posts in a particular manner, which permits the frame being contracted or folded between the said corner-posts. To this end the corner-posts are each provided with a rigid collar 7, presenting lugs *a*, which are pierced transversely to receive the pivot-pins 8, that connect the ends of the bars or strips thereto, the bars or strips which form the other or upper corners of the frame being pivoted between lugs *b*, projecting from collars 9, that are in sliding engagement with the corner-posts and held in adjusted positions thereon by means of an ordinary set-screw 10. By this particular manner of forming the head and foot sections of a bedstead the part or frame which represents the head and foot boards, respectively, is capable of being contracted lengthwise to such an extent as to bring the corner-posts close together in having said sections occupy but a minimum amount of space. A headboard constructed in this manner and made on a large scale can be conveniently moved into a house having winding stairs or small doors, that make it inconvenient for handling rigid headboards of a similar size.

In connection with the head and foot sections constructed as hereinbefore described I form the bottom of the bedstead in a similar manner and connect the same to the corner-posts 2. The bottom section is composed of the cross-bars 11 and 12, which are connected to each other at their ends by toggle-joints and at their intersections are connected by pivot-pins or rivets which allow of the said cross-bars being folded and extended. The cross-bars so connected form a frame similar to that used in connection with the head and foot sections, and the ends of the bars which provide the corners of said frame are extended downward, forming arms which are shaped semicylindrical in cross-section for the purpose hereinafter specified. The pivoted bars which form the intermediate portions of the ends of the frame are connected to bars 13 by means of collars 14, loosely mounted thereon, the said bars being preferably cylindrical in cross-section. The ends of these bars 13 are bent downward to form depending arms 15, that are semicylindrical in cross-section, the flat side being so disposed with respect to the flat side of the corresponding arms at the ends of the diagonal bars that when the frame is extended these arms will be brought together, the registered end forming a cylindrical arm which fits in the sockets 16, formed on the corner-posts of the head and foot sections. The said sockets 16 are merely enlarged portions, having vertical openings of the proper dimension to receive the depending corner pieces or arms of the bottom section. It will be noted that by this arrangement or manner of forming the bottom section a rectangular frame is presented when the parts are extended and the arms are then brought in position to engage the sockets of the corner-posts to form a rigid frame or bed-bottom. In the construction of this bottom the diagonal bars 11 and 12, which form the means of connecting the same to the corner-posts, are preferably made heavier or stronger to act as additional braces for the said bottom section. It will be understood, of course, that in folding or contracting this bed-bottom after it is removed from the corner-post of the head and foot sections the collars 14 will ride upon the bars or tubes 13 in order to allow the proper pivotal movement to the several cross-bars. In order to further brace the central or intermediate portion of this bed-bottom, it is provided with folding legs 17, that are preferably connected to the outer diagonal bars or strips heretofore mentioned. For the purpose of connecting these legs to said bars or strips they are provided with depending lugs 18, pierced transversely to receive the pivot or bearing pins 19, that connect the said legs thereto, and in order to hold the legs when extended and also when folded the inner end of said leg is made angular to engage a flat spring 20. This spring acts upon the leg in the same manner as the spring which throws and holds the blade of a jack-knife. The legs are of a proper length to engage the floor when extended, and when they are folded will lie against the under side of the diagonal bars to which they are pivoted.

From the foregoing description in connection with the accompanying drawings the construction and operation of my improved folding bedstead will be readily understood, for supposing the several sections to be contracted or folded the bed is formed by first extending the head and foot sections and then the bottom section, the latter being connected to the head and foot sections by causing the abutting pieces which form the arms to engage the sockets on the corner-posts. The detachable sleeves of the corner-posts may then be securely held in rigid engagement with the posts, also the sleeves on the end pieces of the bed-bottom may also be secured, if desired. When the several sections are thus connected, the legs or intermediate supports may be lowered to form an additional brace for the bed-bottom. This will present a very strong and durable bedstead, and if desired the intermediate portions of the frames which form the head and foot sections may be also connected to the corner-posts by collars, as indicated in dotted lines.

It will be understood, of course, that the posts and cross-bars which constitute the bedstead are preferably made up of metal, in which case they can be ornamented to suit circumstances, and when enameled, with certain parts finished with brass, will present a bed that will form a neat and attractive piece of household furniture. However, I also contemplate constructing the bedstead as light

and cheap as possible for use in the military service or for general camping purposes. In this latter connection the sections could be stored away without taking up any great amount of space and when put together will form a bed of large dimensions. It will be understood that a bedstead constructed in this particular manner provides one that could be arranged to form what is known as a "single" bed and susceptible of being extended to form larger sizes. When forming a bedstead adjustable as to size, the bars forming the ends of the bedstead could be made extensible and the depending members forming the means of connecting said bed-bottom to the corner-posts could be pivoted in order to bring the flat sides in contact.

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

1. A folding bed, comprising head and foot sections and corner-posts connected by a frame consisting of cross-bars pivoted to each other after the manner of lazy-tongs, said bars being connected to the corner-posts; with the bottom section made up of diagonal bars or strips pivoted to each other after the manner of lazy-tongs, bars forming the ends of the frame to which the bottom section is connected, arms depending from the ends of said bars and corresponding arms depending from diagonal bars or strips which extend to the corner of the frame, and sockets formed in the corner-posts to receive said depending arms, substantially as shown, and for the purpose set forth.

2. In a folding bed, the combination with the head and foot sections, of a bottom section comprising diagonal bars or strips pivoted to each other after the manner of lazy-tongs, end bars with which the diagonal bars are in sliding engagement, the adjoining end of the diagonal bars and end bars when extended being provided with depending portions forming arms and means by which the said arms are connected to the corner-posts, substantially as shown and described.

3. In a folding bed, the combination with the head and foot sections presenting corner-posts connected to each other by diagonal bars or strips arranged and pivoted after the manner of lazy-tongs, of a folding bottom section made up of diagonal bars or strips pivoted to each other, and folding legs pivoted to the intermediate portion of the bottom section, and springs for holding the legs in adjusted position, substantially as and for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES VARCOE.

Witnesses:
J. T. POINDEXTER,
E. C. SHEILD.