

J. H. Belter,

Bedstead,

N^o 15,552.

Patented Aug. 19, 1856.

Fig. 2

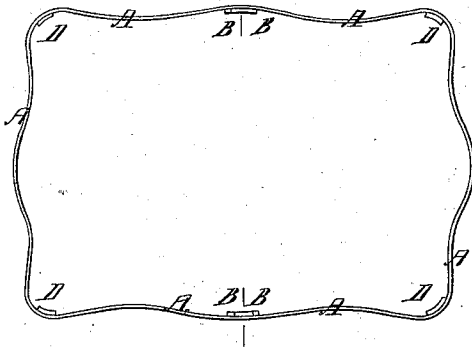


Fig. 3

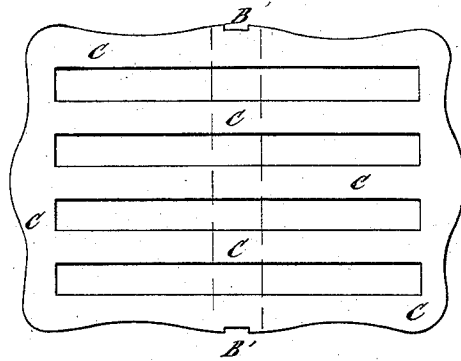


Fig. 1

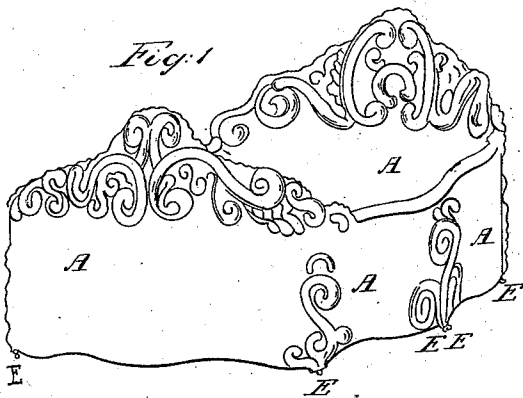


Fig. 5

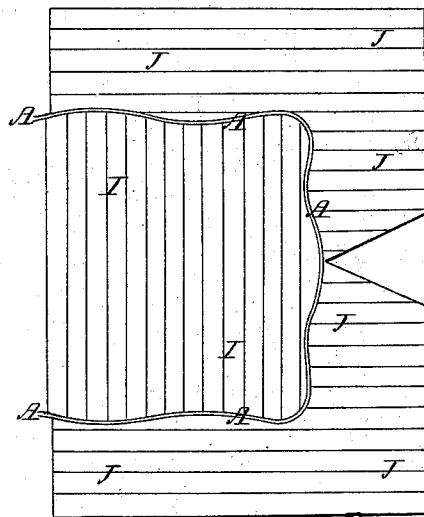


Fig. 4

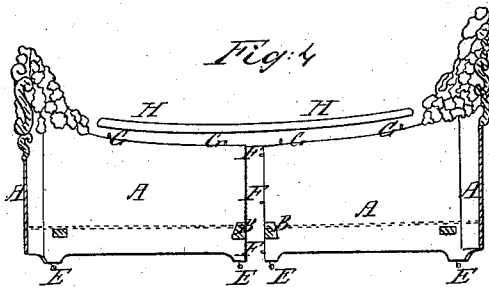


Fig. 7

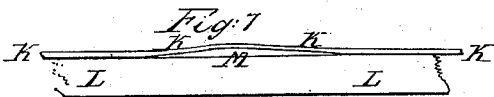


Fig. 8

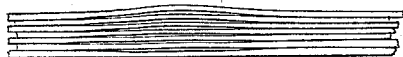
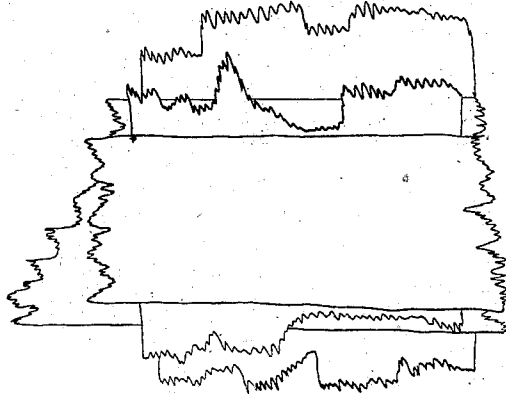


Fig. 6



UNITED STATES PATENT OFFICE.

JOHN H. BELTER, OF NEW YORK, N. Y.

BEDSTEAD.

Specification of Letters Patent No. 15,552, dated August 19, 1856.

To all whom it may concern:

Be it known that I, JOHN HENRY BELTER, of the city and county of New York, in the State of New York, have invented a new and Improved Bedstead; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings and to the letters of reference marked thereon.

Figure 1 is a perspective view of the bedstead complete. Fig. 2, is a horizontal section of the bedstead proper, A A, with the inside frame removed. It is made in only two parts, the line of their juncture being indicated by the blue line. Fig. 3 is a plan view of the internal frame C showing the rectangular notches, B' B', which hold the bedstead together. Fig. 4 is a vertical section taken longitudinally through the center of the bedstead, the inside frame C being removed, and the parts, A A, slightly separated, while an additional side rail, H H, which may be employed or not at pleasure, is represented elevated slightly above its proper position. Fig. 5 is a plan view of the "calls" used in shaping the parts. Fig. 6 shows a few pieces of veneer glued together in the same manner as are the veneers in my bedstead. Fig. 7 shows an edge view of an ordinary veneered bedstead, which when glued has been compressed unequally between imperfect "calls." Fig. 8 shows an edge view of the material I employ, which when glued has been compressed unequally between the same "calls" as Fig. 7, showing that the space between the veneers will in Fig. 8 be divided between the different layers and all filled with glue.

Like letters refer to the same parts in all the drawings.

Bedsteads as ordinarily constructed are necessarily composed of several parts secured together in a manner which requires considerable time and in some cases peculiar wrenches or other instruments to effect either their junction or their separation. This is an evil more particularly apparent when it becomes necessary to separate the parts very hurriedly in case of fire. One object of my invention is to surmount this difficulty, and allow the parts to be immediately separated without tools. Again the ordinary bedstead contains deep and intricate recesses about the joints and fastenings which are difficult of access and notorious as

hiding places for bugs. A second object of my invention is to avoid the necessity for these recesses. Again the thickness of the posts and other parts in ordinary bedsteads intrudes upon what would otherwise be valuable space either on their interior or exterior faces. A third object of my invention is to avoid this evil. And again an ordinary veneered bedstead is liable to contain empty spaces between the veneer and the solid wood in which spaces young bugs may be concealed. These spaces result from inequalities in the "calls" as the large molds are turned which press the veneer upon the solid wood. Whenever a depression exists in the "calls" the solid wood having little or no ability to yield does not adapt itself thereto, and an empty space M is the result as shown in Fig. 7. A fourth object of my invention is to avoid this evil.

My bedstead is composed entirely of wood and glue. I will describe minutely its construction. The bedstead proper, A A, is about $\frac{5}{8}$ of an inch in thickness throughout with rounded corners, and without posts, or joints in the ordinary sense of the term. It is represented as consisting of only two pieces but can be made in four if desired. It is by its peculiar construction immensely strong and durable. Its whole thickness is composed of thin layers glued together. Each alternate layer is placed with the grain standing perpendicularly, while the others are placed with the grain running in a horizontal direction as shown on a larger scale in Fig. 6. The whole are glued together at one time under pressure as further explained below.

The veneers which are presented to the eye on both the internal and external surfaces of A A, should be of rosewood or other choice wood while those concealed beneath the surface may as well be of oak or of black walnut. There is no limit to the size in which the parts may be formed without joints by these means, and I prefer to make the whole in two parts as represented. I provide casters, E E, for each part, so that the weight of each is supported without depending on the other or others, and on urging the parts together the short dowels, F F, on the edge of one part fitting into corresponding cavities in the edge of the other part insure a perfect harmony in their positions. The internal frame, C, Fig. 3 is

adapted to support the mattresses but in addition to this it serves the important purpose of retaining the parts A A in their proper relative positions for which latter end the plain shallow matches B' B' are formed in its edge.

On the inner surface of each part I provide projections, B B, which projections are widest at the bottom and so arranged that they shall be tightly embraced in the notches B' B' when the internal frame C is dropped into its place. The parts A A each supported independently on its own casters, are thus simply held together by means of the frame C and are separated by any slight force when the latter is lifted out of its place. Additional projections W D are provided on the interior of A A which serve as additional supports to C.

I prefer to finish the top of each side by attaching additional pieces of wood, H H, by means of dowels. These pieces are not essential except as affording an agreeable finish.

The frame C may for convenience be made in several parts by providing additional projection D for their support. In such case the part containing the notches B' B' should be a simple board extending transversely across the bedstead as represented by the blue lines in Fig. 3.

The veneers from which the parts A A are formed may as well be a little thicker than ordinary, say, about 1/16 inch thick. The glue should be of the very best quality, pretty thin and hot. The sheets to form one surface being spread on the table, and liberally covered with glue, each successive layer should be treated in the same manner, taking care to lay the veneers in each layer so that the grain shall run at right angles to the grain in the last. Any odd number of layers may be used, but I prefer nine, and the whole mass if sheets should then be immediately pressed between hot "calls," I, J, which bend it to the form required. When the "calls," I J, are firmly pressed to their places, the superfluous glue will exude at the edges of the sheets, and after remaining seven hours or more, under pressure the "calls" may be carefully separated but the compound sheet must be allowed a few days to become thoroughly dry. After this period the work may be finished by ordinary tools, gluing on more wood to form

a sufficient thickness for the carved portion when necessary.

The faces of "calls" are quite liable to be more or less distorted and indented at various points, particularly if they have been in use. When a single veneer with no very extraordinary surplus of glue is pressed by such a call upon solid wood a cavity is frequently left beneath it, as somewhat exaggerated in Fig. 1 where, K K, represents the veneer, L L, the solid wood, and M the empty cavity. But my calls, if quite imperfect in surface, do not leave such spaces in the material of which my bedstead is composed, as the flexibility of the veneers and the surplus of glue between the layers, induces a greater or less yielding of all the layers, as represented in Fig. 8, leaving no space so large as to be unfilled with glue.

It is in many cases very convenient to make the parts A A in several separate pieces and glue them together with a tapering scarf as represented at N N. The strength of such a scarf is very nearly or quite equal to the other portions and I do not term such a scarf a "joint" in the ordinary acceptance of the term. In general when I make the bedstead proper in only two parts I prefer to manufacture each of the parts in three pieces and then glue them together as described.

I am aware that veneers glued together with the grain of each layer standing at right angles to the next have been long in use for the purpose of combining strength and lightness. This I do not claim nor do I claim the above described method of producing it but

What I claim as my invention and desire to secure by Letters Patent is—

1. A bedstead constructed of thin parts A A supported independently without posts or joints, when the parts are composed of veneers and arranged substantially as described and for the purposes set forth.

2. I also claim the wedge-shaped projections B B on the inside face of each part and the shallow notches B' B' on the edge of the internal frame C when combined substantially as described and for the objects made plain.

J. H. BELTER.

Witnesses:

JNO. WARD, JR.,
THOMAS D. STETSON.