

No. 668,273.

Patented Feb. 19, 1901.

E. W. WHITLOCK.
FURNITURE.

(Application filed Dec. 8, 1899.)

(No Model.)

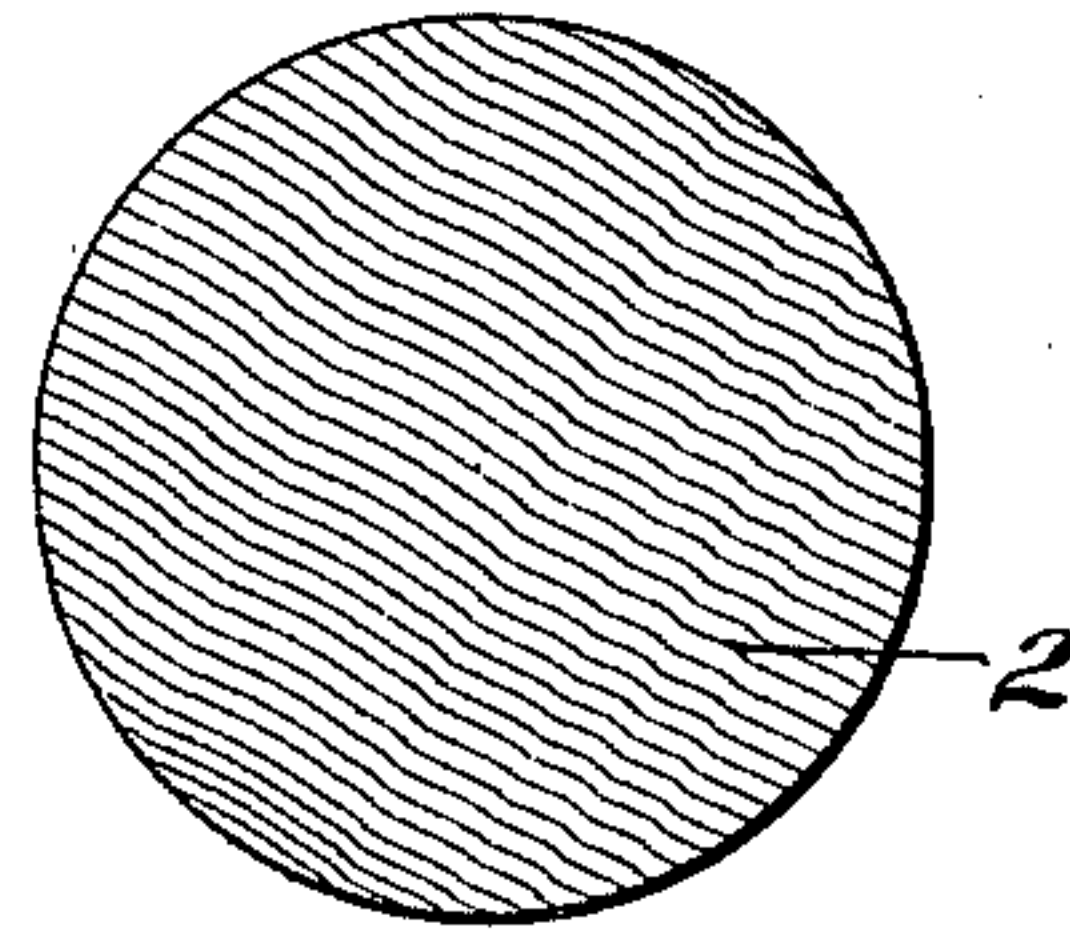
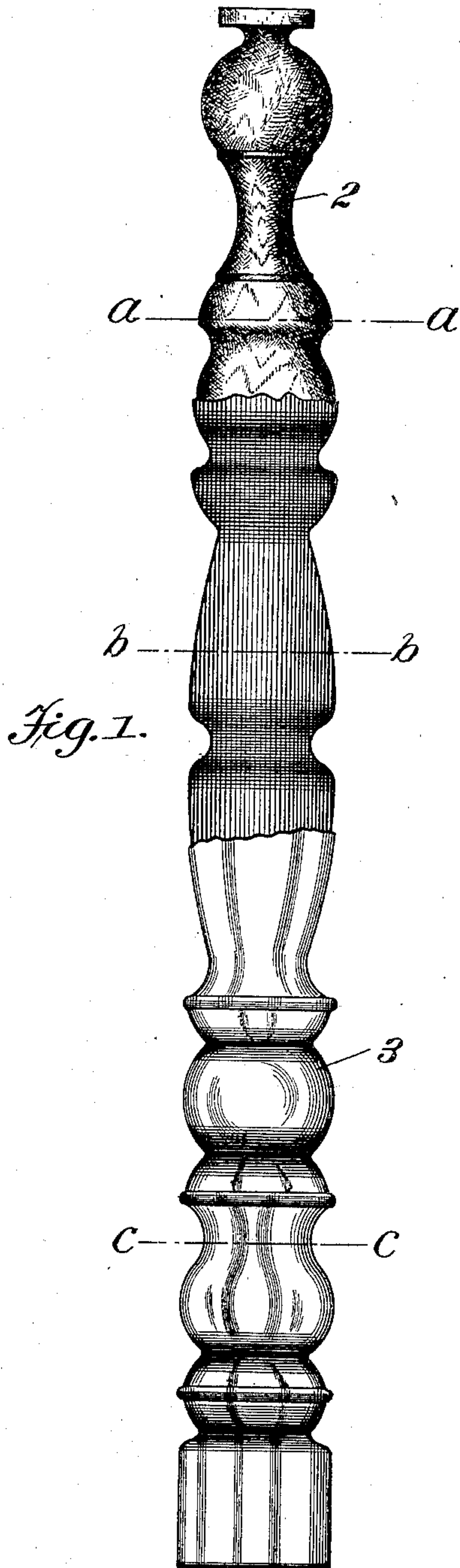


Fig. 2.

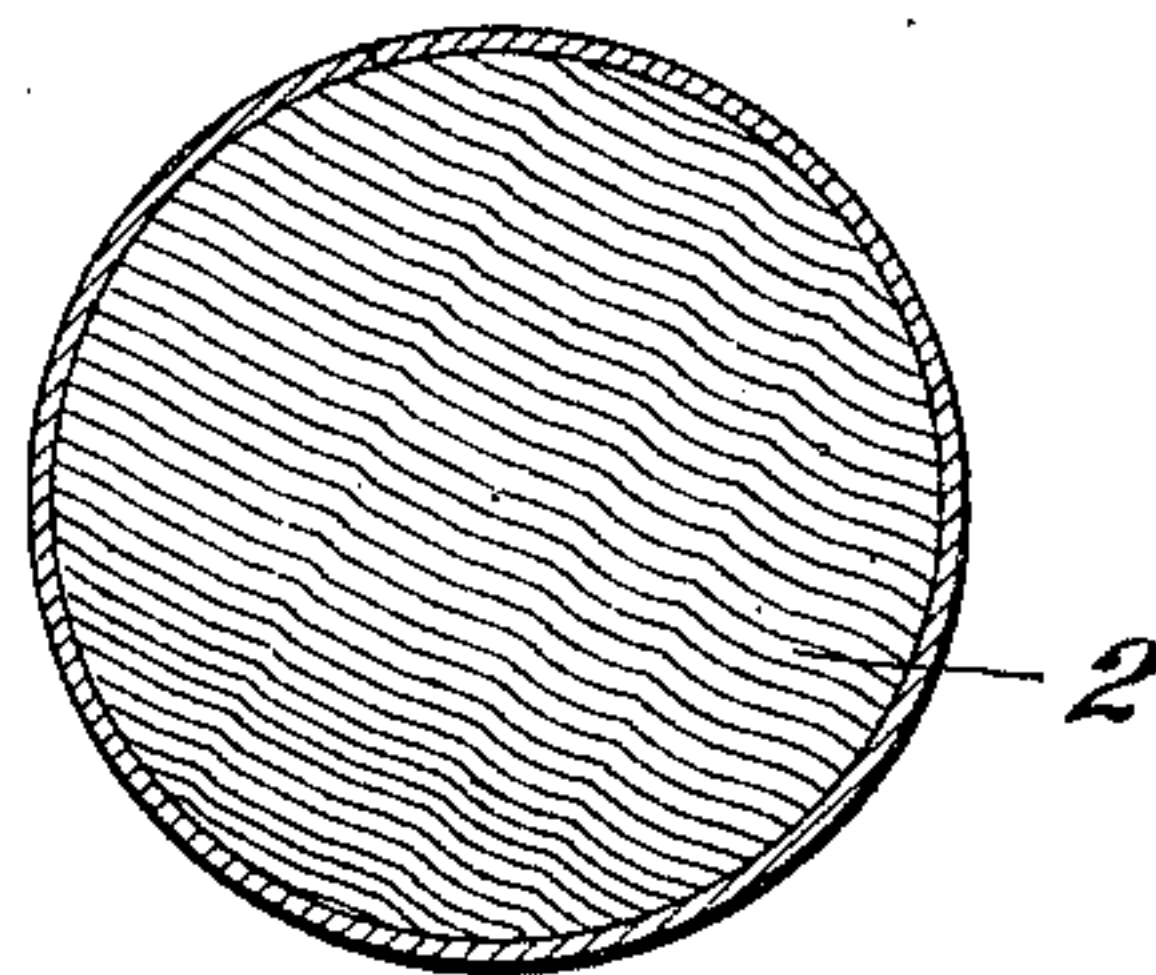


Fig. 3.

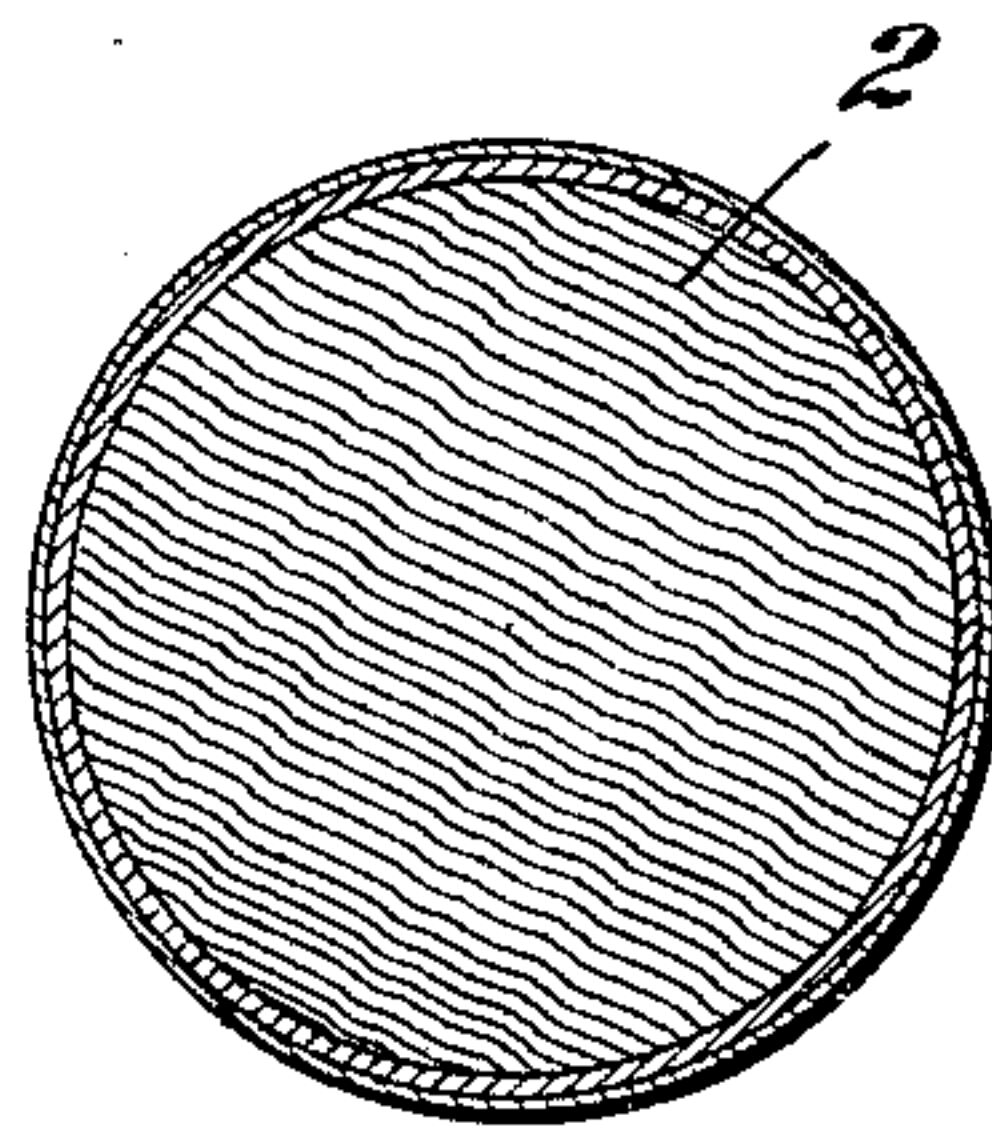


Fig. 4.

Witnesses:-

Attest
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By his Attorney,

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UNITED STATES PATENT OFFICE.

ERASTUS W. WHITLOCK, OF NAUGATUCK, CONNECTICUT, ASSIGNOR OF
TWO-THIRDS TO WILLIAM T. RODENBACH AND CHARLES S. PHINNEY,
OF SAME PLACE.

FURNITURE.

SPECIFICATION forming part of Letters Patent No. 668,273, dated February 19, 1901.

Application filed December 8, 1899. Serial No. 739,689. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS W. WHITLOCK, a citizen of the United States, residing in Naugatuck, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in the Manufacture of Furniture, of which the following is a specification.

This invention relates to the manufacture of furniture; and one object of the invention is to provide an inexpensive substitute for the expensively-formed brass or analogous tubing now used in the manufacture of furniture—such, for instance, as bedsteads—and which substitute will have all the pleasing effects and decorative qualities of such tubing, as well as its durability, while it will also have greater rigidity and strength to withstand hard usage and knocks.

A further object of the invention is to provide improved metallic head and foot boards of beds each composed of a plurality of members united together, each of such members comprising a core formed of non-metallic material, such as wood, and effective to impart to the member a major part of its strength and rigidity, an outer surface or layer of another material and effective to impart to the article a highly-decorated appearance, and an intermediate layer of metal of that degree of thinness which will enable it to be readily compressed on and conform to the shape of such core, and which constitutes a base for the outer layer and effective to preserve said core.

In the drawings accompanying and forming part of this specification, Figure 1 represents one member or post for a metallic head or foot board of a bed, the upper part representing the non-metallic core, shown herein as of wood, the intermediate part the base layer of metal, usually comprising metallic foil, and the lower part representing the outer layer adapted to give to the article its decorative appearance. Fig. 2 is a cross-sectional view of the core, taken in line *a a*, Fig. 1. Fig. 3 is a cross-sectional view of the core and the metallic base layer, taken in line *b b*, Fig. 1; and Fig. 4 is a cross-sectional view of the completed structure, taken in line *c c*, Fig. 1.

Similar characters of reference designate like parts in all the figures of the drawings.

It is a well-known fact among those conversant with the subject that superior metallic furniture—such, for instance, as brass bedsteads, as well as other articles formed of brass or analogous material—is very expensive, so that articles of this character are not within the reach of many who would otherwise have the same. Moreover, such structural members are usually formed tubular to reduce as far as possible the cost of the product. This tubular formation, however, necessarily requires the article to be handled with considerable and more than ordinary care to avoid the knocks and dents which frequently occur to mar the article and which destructive and injurious features and disadvantages would not be present were it possible to form the article as a solid member without thereby increasing the cost; but, as is well known, furniture or other articles of solid brass or analogous material is a rarity, it costing many hundreds of dollars to manufacture even a bedstead so formed. Therefore it follows that to provide articles of the class specified, which while having all of the pleasing and decorative qualities of brass or analogously-formed articles also have that solidity and rigidity which is not present in tubular articles as usually placed upon the market, and at the same time to furnish such an article at materially less cost than such tubular articles, constitutes an important advance in the art. The practicability and comparative inexpensiveness of this improved article have been thoroughly demonstrated by the actual manufacture of metallic bedsteads formed of structural members produced in the manner about to be described.

In the manufacture of furniture having the appearance, durability, and strength set forth I first provide a core 2, constituting each member thereof, of some suitable material and of any desired shape, but preferably composed of non-metallic material, usually of wood, and solid. This core is shaped or milled as may be desired or to accord with the design of the article into which it is to be incorporated—as shown, for instance, at 3, Fig. 1. The core 2 is then completely incased or

inclosed within a layer or casing of some suitable material, preferably very thin—such, for instance, as metallic foil, such as lead, tin, or other foil adapted for the purpose, the elasticity of which is practically zero. In practice I have found that lead-foil is well adapted for the purpose. This foil may be placed, usually in sheet form, upon the core in any desired manner, as by pressure—for instance, hydraulic pressure—in which case the metallic sheet and the wood are immersed in a tank or tube of water and the parts hermetically sealed, so that the water will not get between the metal and the wood, whereupon the water is placed under the required pressure, thereby forcing the metal or foil into all the crevices and shapes of the wood and completely covering the wood and fixing the foil rigidly thereto. In practice, however, when the article is of such shape as to permit it the foil is spun upon the core, so as to conform to the shape thereof and completely inclose the same, thereby forming a metallic casing therefor. In either instance the foil is compressed upon the core closely and uniformly to engage the same. The partly-finished article is then provided with an outer decorative layer of any desired material—such, for instance, as copper or brass. This is preferably accomplished by immersing the core, provided with its layer of foil, into an electroplating-bath to electroplate the same, and which plating may be of any desired thickness. The article formed in the manner above set forth is then polished or burnished and is then in condition to be worked into a piece of furniture.

From the foregoing it will be seen that an article of furniture having any desired appearance, as brass, copper, or otherwise, but having a foundation of wood, is provided, the wood being protected by an intermediate metallic layer or casing, usually of foil, and which metal layer constitutes a base for the reception of the outer plating.

By covering the core with metallic foil it will be seen that the same will fit snugly into every part and joint thereof owing to its flexibility and pliability, while the weight of such core is not materially increased, so that the weight of the finished article, owing to the lightness of the wood which may be used, is no greater, if as great, than the weight of an ordinary metallic tube as heretofore pro-

duced, while the solidity of the same is greater than such tube, the expense of producing the same materially less, the appearance equal, and the durability superior to such tube.

It is to be understood, of course, and the claims are to be so interpreted, that only such parts of an article of furniture or of the head and foot boards of a bed as are usually or necessarily decorated need be constructed or given the decorated appearance herein set forth.

Having described my invention, I claim—

1. An article of furniture composed of a plurality of members united together, each comprising a core; a layer of metallic foil inclosing the same and conforming to the shape thereof; and an outer layer or coating thereon.

2. A bed the head and foot boards of which are composed of a plurality of members, each comprising a core of wood; a layer of metallic foil completely inclosing and conforming to the shape of such core; and an outer layer or coating deposited thereon.

3. A bed the head and foot boards of which are composed of a plurality of members, each comprising a non-metallic core; a layer of metallic foil compressed thereon; and a coating of metal deposited on such foil.

4. An article of furniture composed of a plurality of members, each comprising a solid non-metallic core; a layer of lead-foil compressed thereon; and one or more coatings or layers of metal deposited thereon.

5. A bed the head and foot boards of which are composed of a plurality of members, each comprising a solid, milled core of wood; a layer of metallic lead-foil compressed thereon completely to inclose and conform to the shape of such milled core; and an outer plating or coating of metal deposited on such foil.

6. An article of furniture composed of a plurality of members secured together, each comprising a non-metallic core inclosed in a layer of sheet material of that degree of thinness which will enable it to be readily compressed on and conform to the shape of such core, and the elasticity of which is practically zero, and a coating of metal deposited on such layer.

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Witnesses:

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