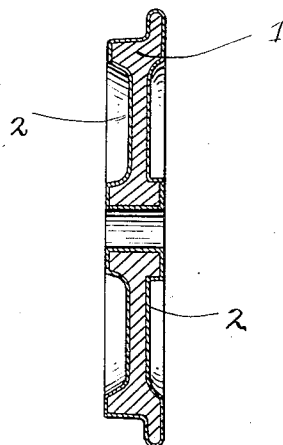


T. R. BELL.
PATTERN.
APPLICATION FILED MAY 15 1912

1,050,201.

Patented Jan. 14, 1913.



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UNITED STATES PATENT OFFICE.

THADDEUS R. BELL, OF WESTFIELD, NEW JERSEY.

PATTERN.

1,050,201.

Specification of Letters Patent.

Patented Jan. 14, 1913.

Application filed May 15, 1912. Serial No. 697,389.

To all whom it may concern:

Be it known that I, THADDEUS R. BELL, a citizen of the United States, residing at Westfield, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Patterns, of which the following is a specification.

My present invention relates to an improved pattern for the use of foundries in making castings, and further relates to a method for making said pattern, and comprises an ordinary pattern of wood or other similarly delicate material covered with a protective skin of metal which makes it for all practical purposes unbreakable and prevents it warping or cracking or becoming otherwise injured. This method of making patterns does away with the cast iron pattern that is ordinarily made from the original wooden pattern and subsequently used in the molding operations to save the wooden pattern from deterioration and injury. Therefore, my present invention obviates the expense of filing and finishing said iron patterns and the disadvantage of handling and transporting their necessarily great weight.

The drawing illustrates a pattern within my invention and is a vertical section through such pattern for casting car wheels.

In the drawing, 1 is an ordinary pattern made, for instance, of wood, and 2 is the aforesaid protective coating of metal that covers it all over like the skin covers the human body. The preferred method of making my improved pattern is as follows: First, I make an ordinary pattern of the ordinary materials such as wood or any other desirable or preferred material of a perishable character, and provide that all of its dimensions shall be uniformly smaller than those required for the finished pattern. Then I coat the surface of said pattern with an electrically conductive substance, and then proceed in well-known way to electroplate a uniform thickness of suitable metal such as copper all over said original pattern until the same is brought up to the required finished size. Thereupon, the metal coated pattern is cleaned up and is complete.

It is arranged that the metal skin or coating shall be sufficiently thick to prevent breakage of the pattern in ordinary usage. Further, the original pattern, even though of wood, cannot warp or crack because it is completely inclosed and protected from the elements; and in any event its efforts so to do would be prevented by the inclosing metal shell or skin.

The advantage of my present pattern over the ordinary wooden pattern is that it makes same, practically speaking, unbreakable and does away with warping and splitting.

I have discovered that the electro-depositing step in my process is of essential importance in order to build up the perishable core to pattern-size with a uniform thickness all over of the protective metal. Furthermore, this step permits any one or more of a large variety of metals to be deposited, such as may be best suited to the particular conditions of use.

The advantage compared with the usual cast iron pattern made from the original wooden pattern is that my metal coated pattern is so much lighter in weight and therefore so much more portable and easy to handle. Further, it is so much cheaper because the electroplating operation is relatively very simple and easy of accomplishment, whereas the rough cast iron pattern requires a tremendous amount of labor to file and finish it for use.

What I claim is:

The method of making molding patterns consisting in making an ordinary pattern of perishable material, of smaller all around dimensions than those required for the finished pattern; and then electro-depositing metal on the foregoing to produce thereon a sufficiently thick protective coating and at the same time to build up the pattern to the required size.

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

THADDEUS R. BELL.

Witnesses:

WILLIAM R. BAIRD,
E. W. SCHERR, Jr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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