

J. W. POST.
Core for Casting Puppet.

No. 221,741.

Patented Nov. 18, 1879.

FIG.1.

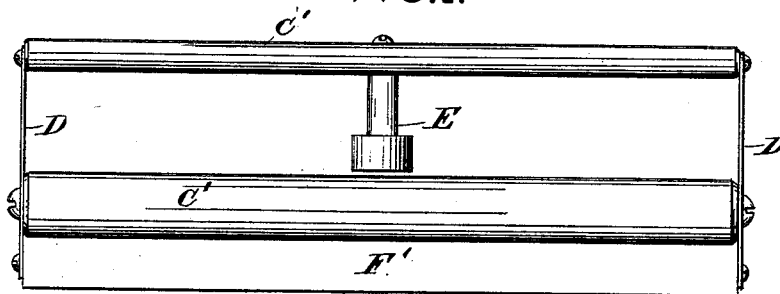
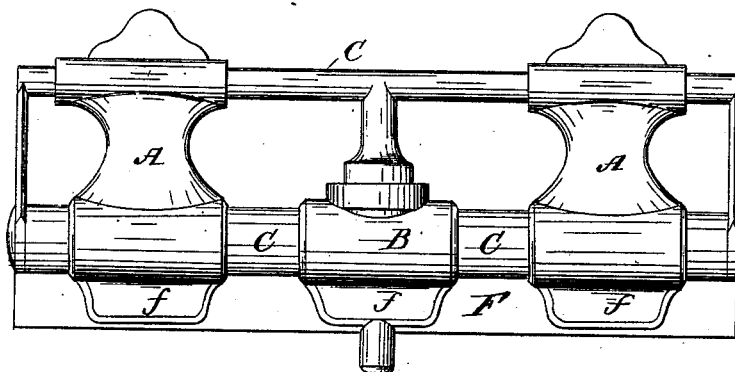


FIG.2.



WITNESSES

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IMPROVEMENT IN CORES FOR CASTING PUPPETS.

Specification forming part of Letters Patent No. 221,741, dated November 18, 1879; application filed February 7, 1879.

To all whom it may concern:

Be it known that I, JOHN W. POST, of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in the Methods of Casting; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved method of casting the puppets and slide-rest of that class of lathes known as "bar-lathes," and to certain improved patterns and cores to be employed in connection with said method of casting.

The invention has for its object to provide an expeditious method of casting said puppets and rests, and at the same time to form, during the process of casting, the openings in the same, by means of which said puppets and rests are mounted upon the bar, and through openings in which the revolving and sliding mandrels of the stationary and movable puppets are mounted, whereby the labor of boring or reaming out said aperture is obviated.

The invention consists in a core made in three pieces, removably secured together, as shown.

In the drawings, Figure 1 represents a view of the core to be employed in connection with my improved pattern, and Fig. 2 the pattern.

A. represents the portions of the pattern which are designed to form the mold for the puppets, and B the pattern to form the mold for the slide-rest. These patterns are each formed in one and the same piece with the core-prints C, which form the impression in the mold, and are arranged at proper distance apart to form core-prints of sufficient area to suitably support the core proper therein.

The core consists of longitudinal parallel bars C' C', accurately formed and removably secured to each other at each end by means of connections D, so as to bear the same relative positions in respect to each other as the core-prints C, so that said cores will fit accu-

rately in the core-prints in the mold after the pattern is removed.

The letter E represents a core, also of metal, secured to the upper core bar for the formation of the recess in the upper part of the slide-rest. This core, consisting of the bars C' C', and the core E are formed of separate pieces, the bars C' C' being secured together in such manner as to be readily taken apart when desired, and the core E is similarly secured to the upper bar, as shown.

The core-prints may be cylindrical, square, triangular, or polygonal, as desired, the core, of course, of corresponding form.

In the process of molding by my improved means the patterns A and B, with core-print C, are embedded in the sand in the lower flask, and the surface of the sand is struck off and faced in the usual manner. The upper flask is then secured in place, and the sand filled and packed into the same in the manner well known to foundrymen.

The proper gates for the introduction of the molten metal are then made, after which the flasks are separated and the metallic core placed in the lower half of the mold. The upper flask is then put in place, and the metal is cast into the mold.

The core has a lower cylindrical bar and a downward longitudinal extension, F', which will form rectangular openings, extending downwardly from the cylindrical openings, through the bases of the puppets and rest, to correspond with the downwardly-extending longitudinal guides on the bar of the lathe, to hold the puppets and rest in position upon the lathe bed or bar. This longitudinal extension is formed in one piece with the portions of the pattern A B C, and a corresponding portion, F', is made in one with the lower bar C' of the core.

The mold-print being made from the pattern A B C F, the pattern is removed, and the core C' C' E F' D is placed in the print, and the metal poured in.

After casting, the connections D of the core are detached, and the lower bar, C' F', being removed leaves the puppets and rests formed with the bar-openings and holding-flanges f. The core E, being detached from the upper bar C', is removed, leaving the recess in the

upper side of the rest, and withdrawing the upper bar C' leaves the aperture for the mandrels in the puppets, as shown.

I am aware that it is not new to place a removable core in a print previously formed from a pattern, and then cast around it, and such broad ground is not sought to be covered in this application.

What I claim is—

The core described, consisting of the accurately-formed bars C' C', detachably secured together at their ends by connections D, the

lower bar having formed in one piece with it a longitudinal extension, F', and the upper bar having a core, E, detachably secured thereto, constructed, adapted, and arranged to serve as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN W. POST.

Witnesses:

J. R. NOTTINGHAM,
WILLIAM FITCH.