

J. Herald,
Casting Pattern.

No. 111,931.

Patented Feb. 21. 1871.

Fig. 1.

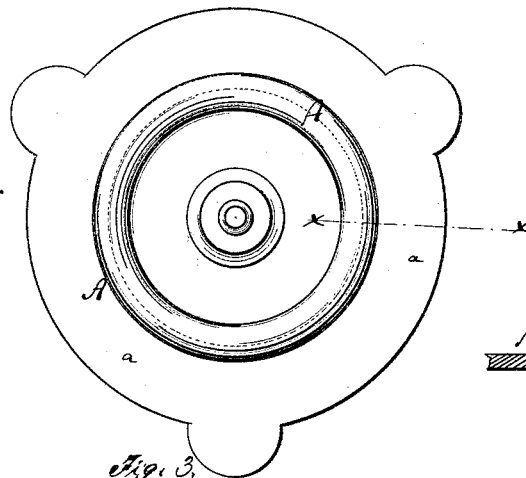


Fig. 2.



Fig. 3.

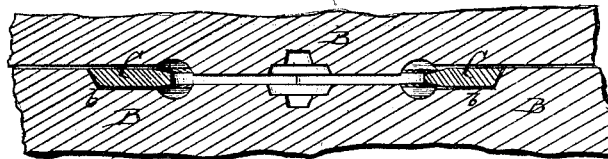
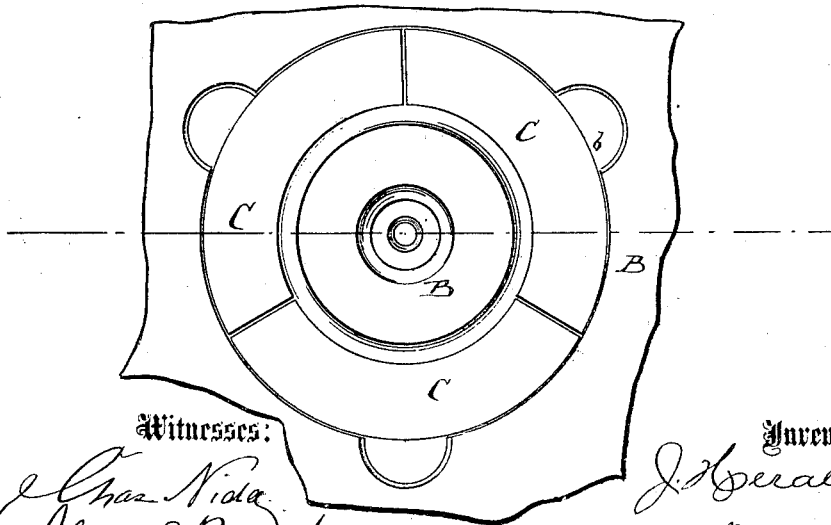


Fig. 4.



Witnesses:

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United States Patent Office.

JOHN HERALD, OF UNADILLA, NEW YORK.

Letters Patent No. 111,931, dated February 21, 1871.

IMPROVEMENT IN PATTERNS FOR CASTING GROOVED ROLLERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN HERALD, of Unadilla, in the county of Otsego and State of New York, have invented a new and useful Improvement in Molds and Patterns for Casting Grooved Rollers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a plan view of the pattern used by me preparatory to the application of my improved sectional plate.

Figure 2 is a detail transverse section of the same, *x x*, fig. 1, being the section line.

Figure 3 is a vertical transverse section of my improved sectional annular plate, showing it as part of the mold.

Figure 4 is a plan view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to so construct the molds for casting rollers or sheaves with grooved edges, that the grooves in the edges will be accurate and throughout of the desired shape.

My invention relates to molds for casting grooved rollers, and consists in an improved construction of the pattern-plate thereof.

I will first describe my invention, in connection with all that is necessary to its full understanding, and then clearly point it out in the claim.

The projection on the sand-mold heretofore used for the same purpose could not be made sufficiently accurate and sharp to make a clean groove, nor sufficiently strong to remain in good shape after successive castings had been taken.

These objections to the old method are entirely overcome by my invention, which will consequently reduce the labor of working the molds.

A in the drawing represents the pattern-plate used for preparing the molds for the reception of my improved sectional plate.

This pattern, besides having the shape of the wheel or roller to be molded, has also a projecting rim, *a*, at the edge, whereby it makes a depression, *b*, in the mold B, for the reception of the grooving-plate.

C is an annular metallic plate, its inner diameter being of the same length as the intended diameter of the grooved portion of the wheel or roller. This plate is made in a suitable number of sections, as shown in fig. 4, to be more easily handled.

The plate C is placed into the depression which is provided in the mold by the rim *a* of the pattern, its outer circumference being substantially of the same form as that of *a*, (see figs. 2 and 3.)

The inner part of the ring C will then enter the space left in the mold for the reception of the casting, and will, when the wheel has been cast, form a perfect, well-defined groove in the edge of the same. This groove may be smooth or corrugated, as may be desired, the plate C being shaped accordingly.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The pattern-plate A, provided with the rim *a*, which will provide in the mold a depression for receiving the annular plate C, as set forth.

JOHN HERALD.

Witnesses:

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