

W. Wilmington,
Car Wheel Chill.

N^o 85,046.

Patented Dec. 15. 1868.

Fig. 1

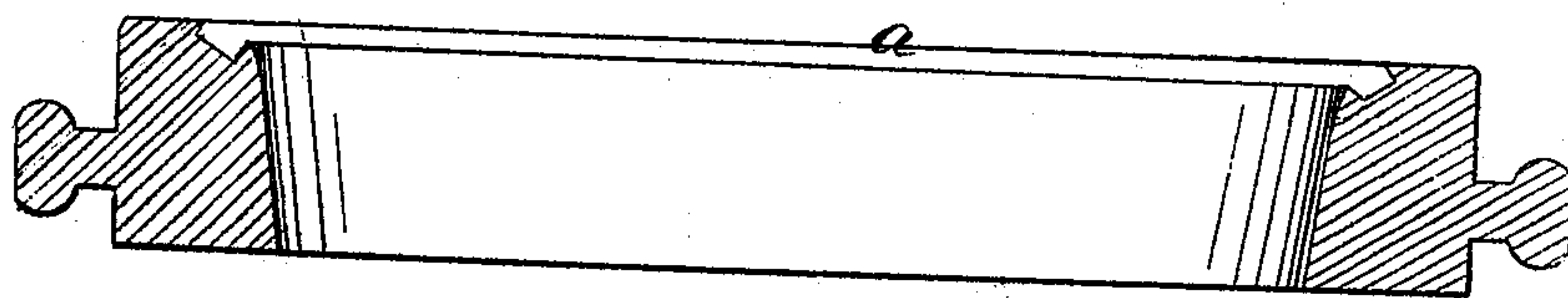
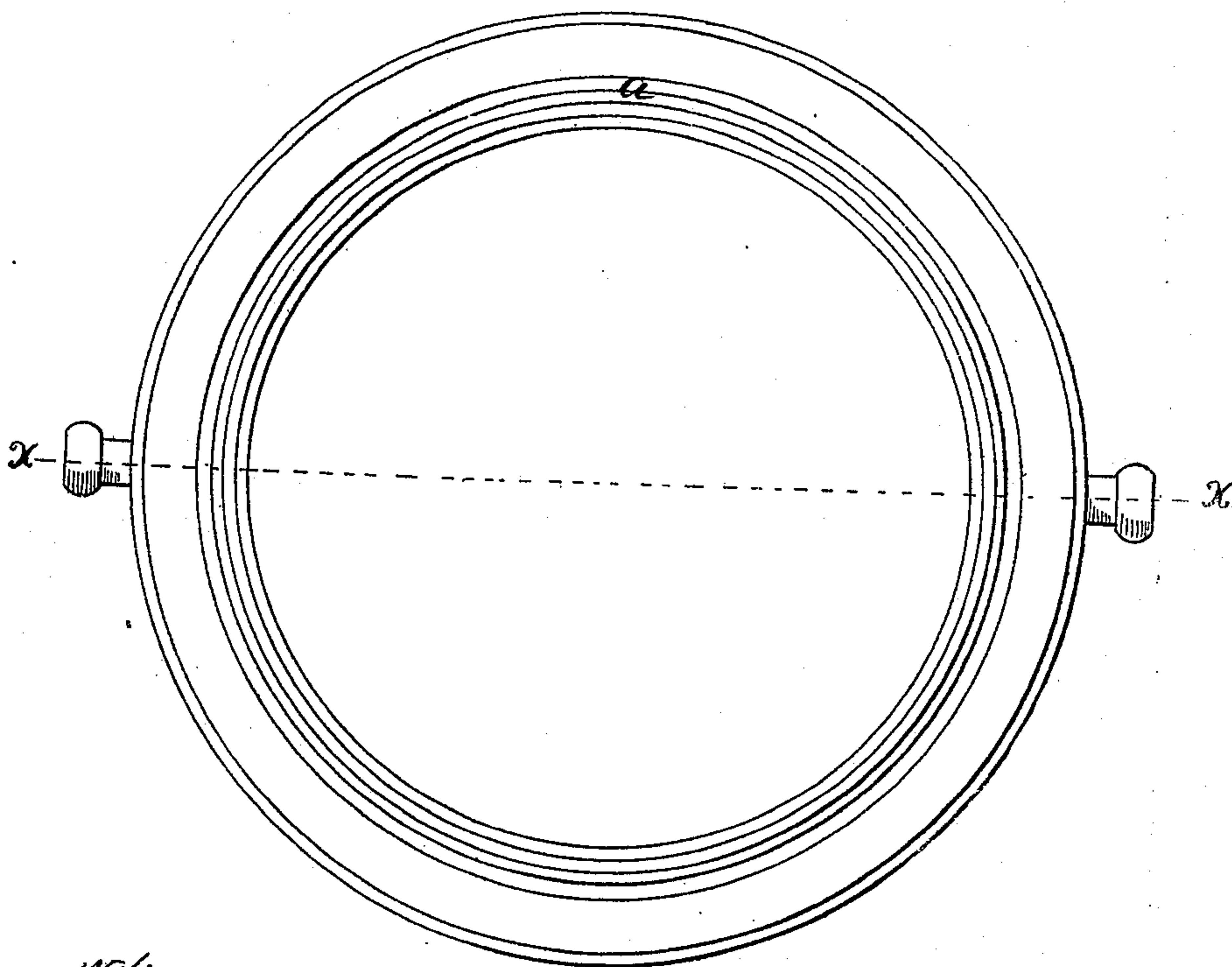


Fig. 2.



Witnesses:
J. Sumner Bell
Sydney E. Smith

Inventor,
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By his attorney
J. C. Robbins

United States Patent Office.

WILLIAM WILMINGTON, OF TOLEDO, OHIO.

Letters Patent No. 85,046, dated December 15, 1868.

IMPROVEMENT IN CHILL FOR CASTING CAR-WHEELS.

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, WILLIAM WILMINGTON, of Toledo, in the county of Lucas, and State of Ohio, have invented a new and useful Improvement in the Annular Metallic Portion or Chill which Forms the Periphery of a Car-Wheel Mould; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which form a portion of this specification.

It is well known to all manufacturers of cast-iron car-wheels, that many wheels have to be condemned in consequence of the occurrence of ugly fractures at the angle or curve between the inner face of the flange and the periphery or tread of the said imperfect wheels; the said fractures being caused by the sudden chilling and contraction of the melted metal when it comes in contact with the inner periphery and the outer face of the annular metallic chill which forms the periphery of the car-wheel mould.

I have remedied this defect by an improvement in the said metallic portion of a car-wheel mould, my improvement consisting in forming the chill with a groove, *a*, in the angle or curve thereof between the inner periphery and the outer horizontal face of said chill, as

shown in the accompanying drawings, and then filling said groove with clay or sand preparatory to the casting of a car-wheel. A sufficient portion of the horizontal face of the chill is left unprotected by the sand-filled groove to chill the portion of the inner face of the flange of the car-wheel which is to come in contact with the inner sides of the railroad-rails.

In the accompanying drawings—

Figure 2 is a top view of my improved metallic portion of a car-wheel mould, and

Figure 1, a section in the line *x x* of fig. 2.

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

The within-described improvement in the annular metallic portion, or chill, of a car-wheel mould.

The foregoing specification of my improvement in the annular chill employed in the casting of molten-iron car-wheels, signed and witnessed, this 16th day of November, 1868.

WM. WILMINGTON.

Witnesses:

FRANK COLLINS,
JAMES C. POTTER.