

W. S. G. BAKER.
Car-Wheel.

No. 215,202.

Patented May 13, 1879.

Fig. 1.

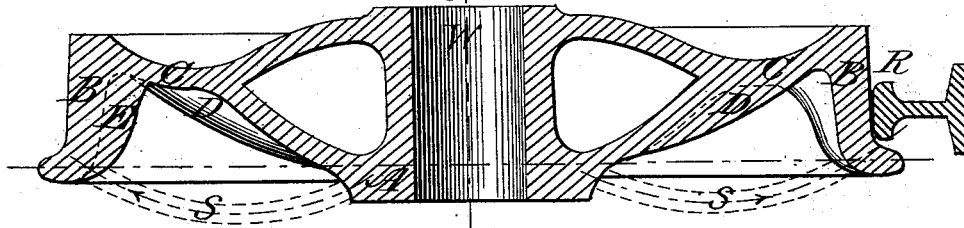


Fig. 2.

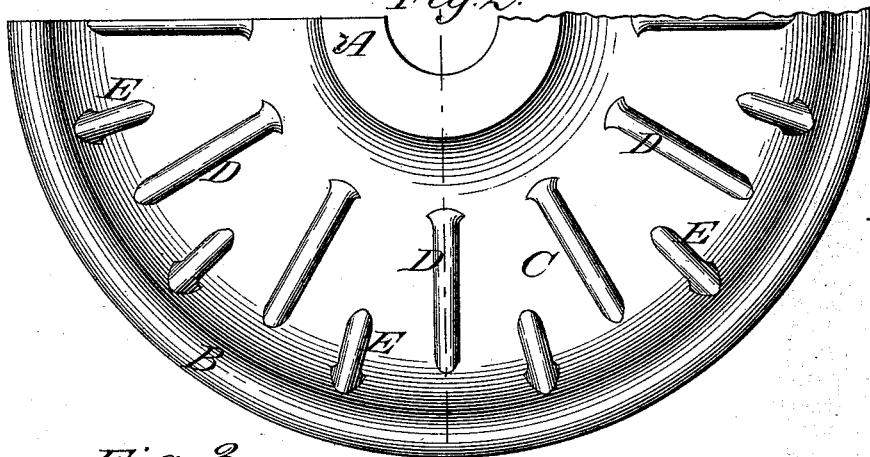


Fig. 3.

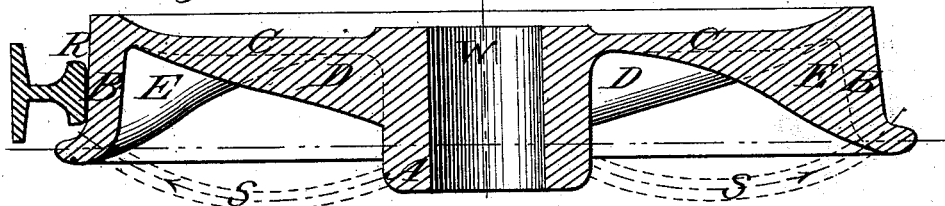
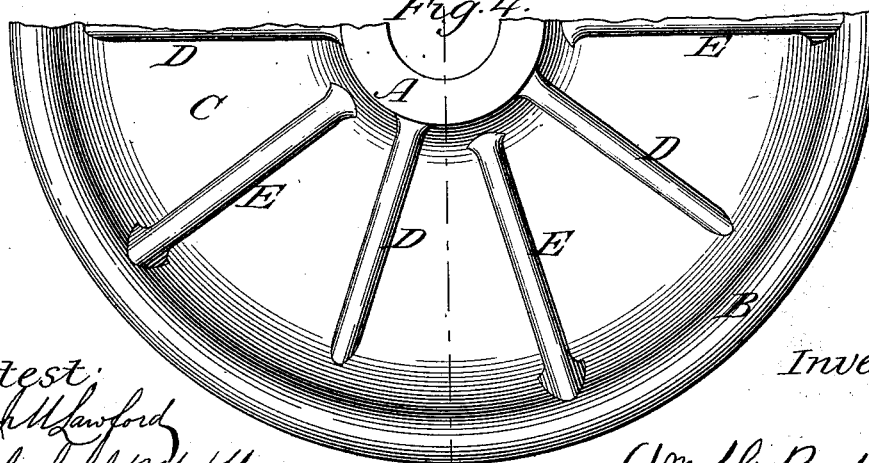


Fig. 4.



Attest:

John Lawford
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Inventor:

Wm S G Baker

UNITED STATES PATENT OFFICE.

WILLIAM S. G. BAKER, OF BALTIMORE COUNTY, MARYLAND.

IMPROVEMENT IN CAR-WHEELS.

Specification forming part of Letters Patent No. **215,202**, dated May 13, 1879; application filed January 18, 1879.

To all whom it may concern:

Be it known that I, WILLIAM S. G. BAKER, of the county of Baltimore, in the State of Maryland, have invented a new and useful Improvement in the Construction of Chilled Cast-Iron Car-Wheels, of which the following is a specification.

My invention consists in the arrangement of the brackets of car-wheels, single or double plate, in such way that part of the brackets brace the rim to the plates and part the plate to the hub.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a cross-section, which shows the double-plate pattern of car-wheel. Fig. 3 is a cross-section, which shows the single-plate pattern of car-wheel. Fig. 2 and Fig. 4 are plan views of the inner sides, showing the brackets.

The object of my invention is to brace the rim part B of the wheel W to the plate C by one set of brackets, E E, and to brace the plate C to the hub A by another set of brackets, D D. By so placing the brackets D D and E E greater strength is secured than could be obtained from the same weight of metal in the brackets of uniform pattern and distribution. By covering the plate C with thick bodies of metal in the brackets E E and D D at double the number of places the heat is held longer and cracking is prevented. The brackets also are relieved from strain, as they are so placed as to allow the plate to yield without cracking the brackets, the rim-brackets

E E being independent of the hub-brackets D D.

This form is most desirable where wheels are cast by filling the rim part B and hub-part A at the same time, the rim part B being filled by sprueways leading from the hub part A to the rim part B, as indicated by the dotted lines S S. When wheels are so cast this arrangement of rim-brackets E E and hub-brackets D D to the plate C will prevent any metal passing to the rim B B and brackets E E, except through the sprueways shown in dotted lines S S, until the metal rises in the molds forming casting of wheel W to the line of the plate C, which is generally placed, or can be so placed, as to be on a line outside rail-intersection R.

I do not here claim the method of pouring the mold by means of sprues S S, the same forming the subject-matter of patent granted to Baker & Hysen February 11, 1879, No. 212,087.

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

A car-wheel of either single or double plate pattern, having a plain outer side, and having two sets of brackets on the inner side, one set bracing the hub and the other set bracing the rim, and connecting them with the plate, substantially as described.

WM. S. G. BAKER.

Witnesses:

J. M. LAWFORD,
CHARLES M. HARDY.