

H. H. WISER.
CAST IRON CAR WHEEL.

No. 6,930.

Patented Dec. 4, 1849.

Fig. 3.

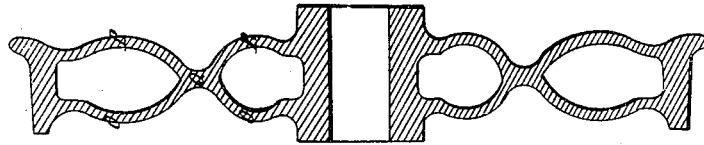


Fig. 2.

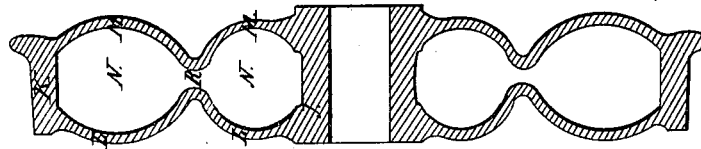
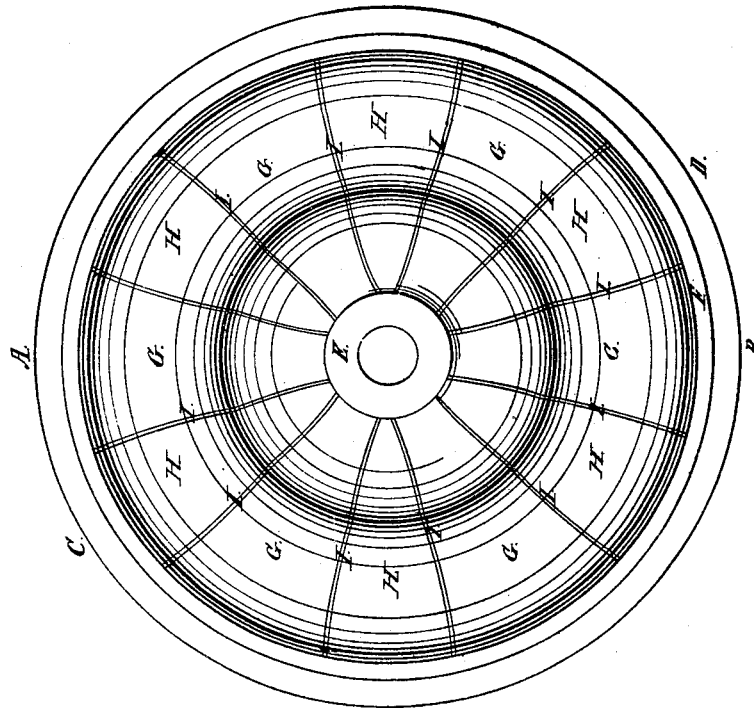


Fig. 1.



UNITED STATES PATENT OFFICE.

HIRAM H. WISER, OF ROCHESTER, NEW YORK.

CAST-IRON CAR-WHEEL.

Specification of Letters Patent No. 6,930, dated December 4, 1849.

To all whom it may concern:

Be it known that I, HIRAM H. WISER, of the city of Rochester, county of Monroe, and State of New York, have invented a new and useful Railroad-Car Wheel; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in constructing a railroad car wheel, by combining sunk and raised panels, which I apply to the plates of which the wheel is formed. The face of the plate being semicircular, or otherwise. By means of the sunk and raised panels the plates are braced so as to produce a wheel of great strength and at the same time, admitting of a circumference shrinkage, and obviating the difficulty arising from the expanding and contracting of the metal, when the wheel is cast or in cooling.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation by referring to the annexed drawings making a part of this specification in which—

Figure 1 is an elevation of my wheel. Fig. 2, is a section through A, B, Fig. 1. Fig. 3, is a section through, C, D, Fig. 1. E, Fig. 1, represents, the hub, and F, Fig. 1, the rim or tread of my car wheel. The parts marked G, Fig. 1, represent the raised panels, which form a part of the plate of the wheel, between the hub and the tread. The parts marked H, Fig. 1, represent the sunk panels which together with the flanges, or parts represented I, Fig. 1, which connect the sunk panels H with the raised panels, G, form the whole of the outside plate of my wheel, the opposite or inside plate is formed in the same manner.

J, Fig. 2, is a section of the hub represented E, Fig. 1.

K, Fig. 2, represents a section of the tread represented, F, Fig. 1.

L, L, Fig. 2, represent a section of the outside plate of which the raised panels G, Fig. 1, are formed.

M M, Fig. 2, represent a section of the inside raised panels.

N N, Fig. 2, represent a space between the inside and outside plates which form the raised panel.

O, O, Fig. 3, is a section of the outside and P, P, Fig. 3, the inside of the plates which form the sunk panels represented H, Fig. 1.

Now it will be seen that the space, between the raised panels, represented N N, Fig. 2, extends from the hub to the tread of the wheel, while the plates in the sunk panel are connected as represented Q, Fig. 3, in consequence of the plates, which form the raised panels not coming together as represented R, Fig. 2, and the sunk and raised panels, being connected by the flanges, I Fig. 1, the plates together admit of a circumference shrinkage, when the wheel is cast, or in cooling which preserves the wheel, from being weakened, when cast. Again the flanges which connect the sunk and raised panels form braces so as to give great strength to the wheel and render it one of the most durable cast iron wheels now in use.

Having described and represented my railroad car wheel, by the foregoing drawings and specifications, what I claim as my invention and desire to secure by Letters Patent, is—

The particular manner of forming my wheel it being formed of an inside and outside plate, each plate being formed of sunk and raised panels alternately, the space between the raised panels extending from the hub to the tread—the part of the plates which form the sunk panels join between the hub and the tread for the purposes, substantially as herein described and represented.

HIRAM H. WISER.

Witnesses:

MATTHIAS MOOT,
WILLIAM JOHNSON.