CONVERSE & COOLEY.

Car Wheel.

No. 6,026. Patented Jan. 9. 1849.

Fig: 1.

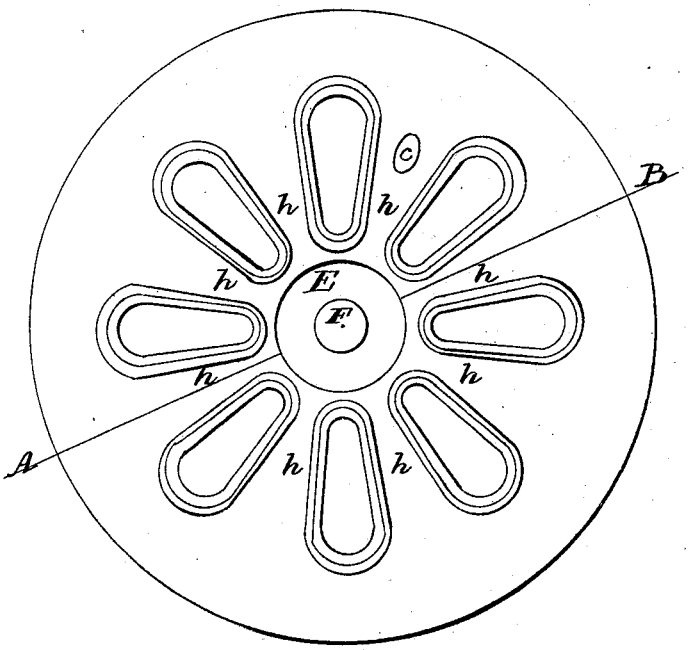
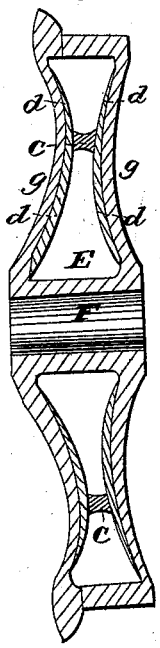


Fig: 2.



UNITED STATES PATENT OFFICE.

A. T. CONVERSE AND W. S. COOLEY, OF NORWICH, CONNECTICUT.

CAST-IRON CAR-WHEEL.

Specification of Letters Patent No. 6,026, dated January 9, 1849.

To all whom it may concern:

Be it known that we, ALBERT T. CONVERSE and WILLIAM S. COOLEY, of the city of Norwich, in the county of New London, State of Connecticut, have invented a new and Improved Form of Cast-Iron Wheels for Railroad Cars and Engines; and we do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings and model accompanying.

We give to the rim of our wheel, the same form which is usually applied to car wheels, the periphery being inclosed in an iron chill when cast.

Our improvement consists, in making a wheel with solid hub, having two sets of arms placed in such position, that their outsides are nearly parallel with, and form part of the sides of the wheel. It will be perceived that the position of the arms are at right angles, with those usually employed in the construction of armed wheels, thereby obviating the important objection which has been made heretofore, inasmuch as a perfectly uniform chilled surface on the tread of the wheel, could not be obtained, with the arms attached transversely to the inside of the rim, owing to the portions of the tread opposite the ends of the arms, being to a certain extent, annealed, by the presence of a greater thickness of metal at those parts. We also greatly increase the strength of the wheel, by uniting each arm of both sides with its opposite fellow, as delineated in the drawing. We form the inside, and also the vacant spaces between the arms, by inserting in the mold, dry sand cores, in a manner well known to founders, and make the wheel entire, at one casting.

Figure 1 is a plan of the side of the wheel which has the flange, (the other side being nearly similar) showing the shape of the arms, *h*, of which, there are eight on each side, directly opposite each other, and connected together by the tie piece, shown at C. Fig. 2 is a sectional view of the wheel, as it would appear if divided at the line A B. *g g* shows a longitudinal section, through the center of the arms. *d d* are braces on the inside, by which the same are strengthened. *c* is the connecting piece, which ties each arm to its opposite fellow; E, the hub, which is made without the divisions necessary, in casting other armed wheels. The hole to receive the axle, is indicated at F.

What we claim, and desire to secure by Letters Patent, is—

The mode of connecting the arms of one side with those of the other side, when formed substantially in the manner before mentioned.

A. T. CONVERSE.
WM. S. COOLEY.

Witnesses:
HENRY M. WITTER,
CHARLES A. CONVERSE.