

W. W. LOBDELL.
CHILLED CAR-WHEEL.

No. 172,461.

Patented Jan. 18, 1876.

FIG. 1.

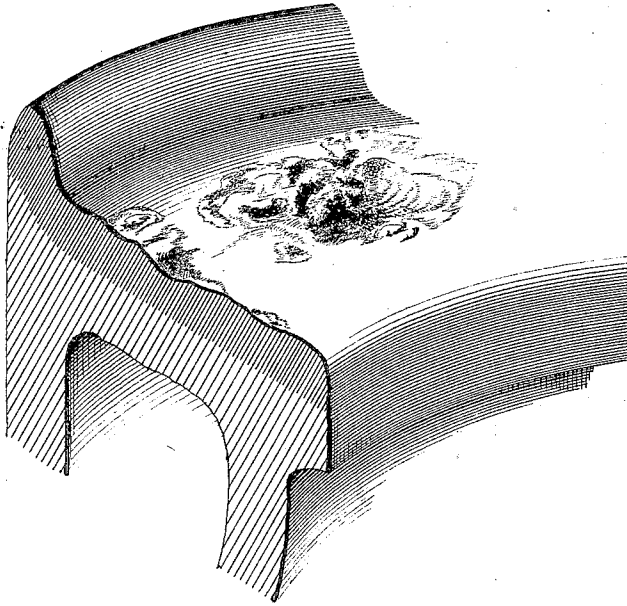
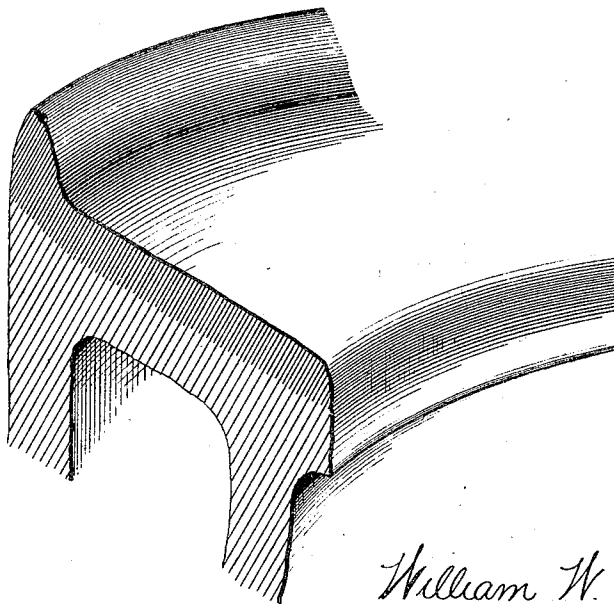


FIG. 2.



Witnesses
James H. Shidmore
Harry Smith

William W. Lobdell
by his Attorneys,
Howson and Son

UNITED STATES PATENT OFFICE

WILLIAM W. LOBDELL, OF WILMINGTON, DELAWARE.

IMPROVEMENT IN CHILLED CAR-WHEELS.

Specification forming part of Letters Patent No. **172,461**, dated January 18, 1876; application filed October 29, 1875.

To all whom it may concern:

Be it known that I, WILLIAM W. LOBDELL, of Wilmington, Delaware, have invented an Improved Chilled Car-Wheel, of which the following is a specification:

The object of my invention is to render chilled car-wheels more durable, and this object I attain in the manner which I will now proceed to describe.

In manufacturing chilled wheels for railroad-cars and locomotives it has heretofore been considered essential to their durability that the skin of the chilled peripheries or rims should remain intact.

I have discovered, however, that the durability and value of a chilled wheel may be enhanced by the removal of the skin, providing certain defects concealed by, and situated beneath, the skin are also removed. These latent defects consist of recesses or chambers, generally very minute; but I have ascertained that they are the cause of the formidable scabs which frequently appear on the surface of the chilled rim of a wheel which has been in use for some time, the skin of the wheel being fractured where the defects occur, and the fractures increasing in size until the wheel must eventually be discarded.

Figure 1 of the accompanying drawing will

serve to illustrate the character of the wounds or scabs to which I allude.

I obviate this evil by turning, grinding, or otherwise removing the skin of the chilled rim, and so much of the chilled metal beneath the skin as contains the latent defects; the result of this operation being a car-wheel not only free from the incipient and damaging imperfections, but a perfectly true wheel with a smooth periphery, as shown in Fig. 2.

The general supposition that the removal of the skin would detract from the durability of the wheel I have ascertained to be erroneous, a small portion only of the chilled metal being turned off. Practical tests have, in fact, proved that wheels thus treated are more lasting than ordinary chilled wheels with the skin intact.

I claim as my invention, and as a new article of manufacture—

A cast-iron car-wheel having a chilled rim from which the latent defects beneath the skin have been removed, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses: WILLIAM W. LOBDELL.

HARRY HOWSON, Jr.,

HARRY SMITH.