

A. WHITNEY.
CAST IRON CAR WHEEL.

No. 7,202.

Patented Mar. 19, 1850.

FIG. 1.

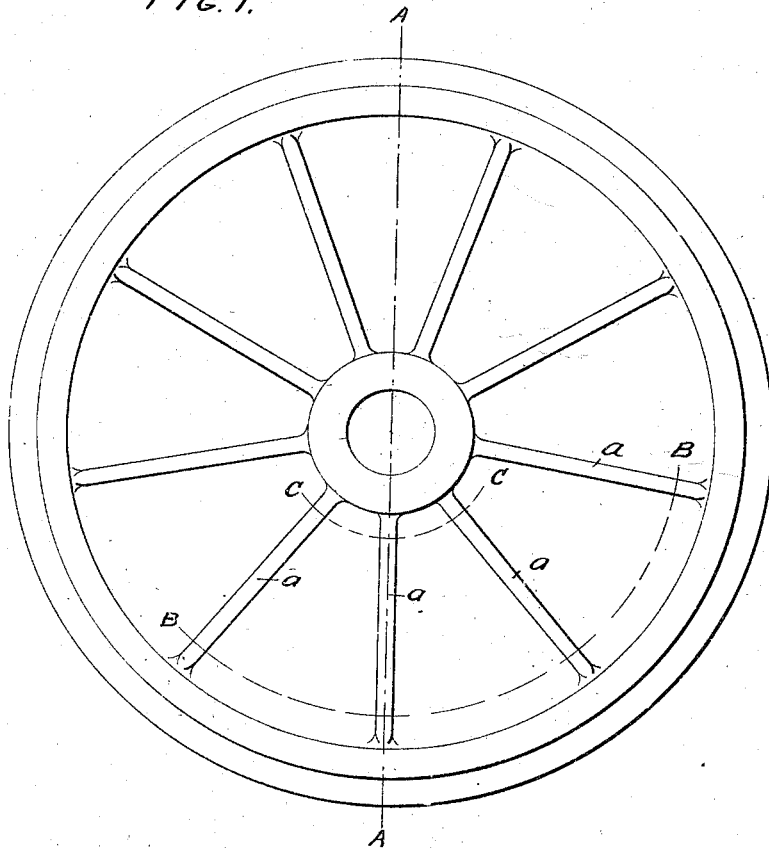


FIG. 2.

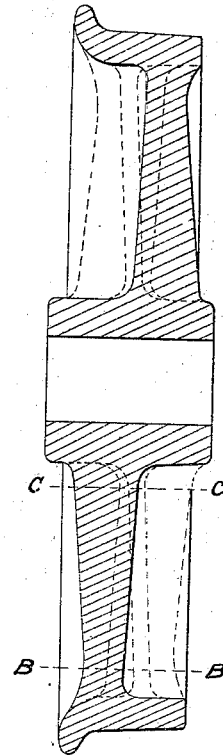


FIG. 3.

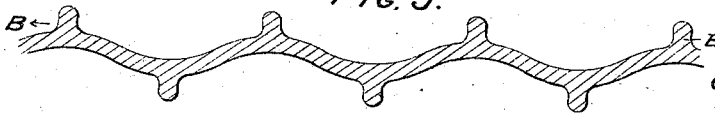
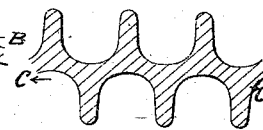


FIG. 4.



UNITED STATES PATENT OFFICE.

ASA WHITNEY, OF PHILADELPHIA, PENNSYLVANIA.

CAST-IRON CAR-WHEEL.

Specification of Letters Patent No. 7,202, dated March 19, 1850.

To all whom it may concern:

Be it known that I, ASA WHITNEY, of the city of Philadelphia, in the State of Pennsylvania, have made a new and useful Improvement in Wheels for Railroad Cars or Carriages; and I do hereby declare that the following is a full and exact description thereof.

The design of my improvement is to give railroad wheels more strength with the same or a less amount of material than has heretofore been employed for that purpose. This I do by making the form of the main part of the disk, or that part of the wheel between the rim and hub corrugated in radii from the center, with projecting ribs alternately on each side extending from the hub to the rim.

Figure 1, in the annexed drawings shows a side view of one of these improved wheels; the lines *a, a, a, a, &c.*, extending from the hub to the rim represent the projecting ribs on one side of the corrugated disk. Fig. 2, is a vertical section on the line A, A, of the side view showing the outline of the ribs and disk on that line. Figs. 3 and 4, are sections of portions of disk, viz, from B, to B, and from C, to C, on Figs. 1 and 2, showing the form of disk plate and ribs at these points—the circumference being represented on a horizontal plane.

These wheels may be made wholly or in part either of wrought or cast iron or other metal or any combination of them. When made wholly of cast iron the hub, disk and rim may be all cast together at the same heat, or the disk may be cast separately, and when thus cast, placed in the mold and the rim and hub subsequently cast on to the

disk, or the disk and hub may be cast together at one heat and those parts laid in the mold and the rim cast on to them at a subsequent heat, and in the same manner, the disk and rim may be cast first and the hub added subsequently. When the wheels are made in parts of any material the attachments between the hub, rim and disk may be made in any of the known ways of making such attachments.

The advantage expected to result from the use of wheels made in the form above described is that they can be made stronger if of the same weight than any spoke or any other form of disk wheels heretofore used. This form of corrugated disk in combination with the projecting ribs as herein described constitutes what may be termed a continuous spoke around the entire wheel, while at the same time the alternating waves of the corrugations in combination with the projecting ribs serve to stiffen the wheel in the direction of the lateral strain when in use and also to support the rim at all points in its circumference.

I do not claim that the invention above described is an improvement on the form of any part of railroad wheels than that contained between the hub and rim, but

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

The projecting ribs in combination with the corrugated disk in the manner and for the purposes herein set forth.

ASA WHITNEY.

Witnesses:

WM. D. WASHINGTON,
EDWARD S. RENWICK.