

(No Model.)

H. S. PRUYN.
TRACTION WHEEL AND RAIL.

No. 505,845.

Patented Oct. 3, 1893.

Fig. 1.

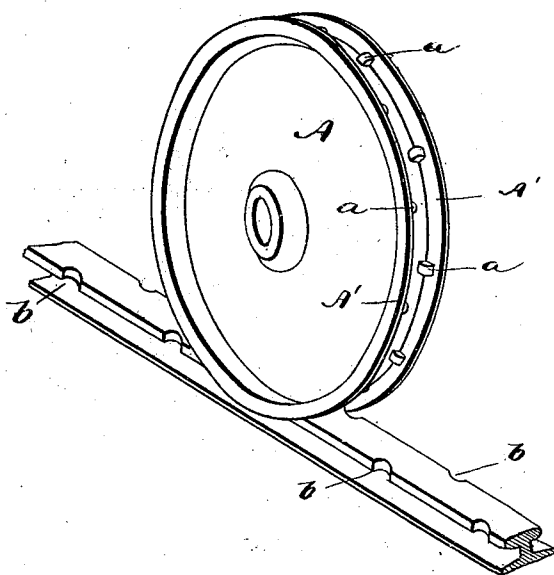


Fig. 3.

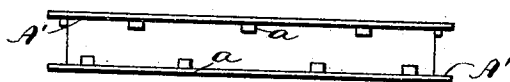


Fig. 2.



WITNESSES:

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TRACTION WHEEL AND RAIL.

SPECIFICATION forming part of Letters Patent No. 505,845, dated October 3, 1893.

Application filed June 10, 1890. Serial No. 354,979. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. PRUYN, a citizen of the United States, residing in Hoosick Falls, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Traction Wheels and Rails, of which the following is a specification.

My invention relates to improvements in traction wheels and rails for railroads, particularly those the grades of which are too steep to allow of the ordinary wheels and rails being relied upon to insure the draft of a heavy load. Wheels and rails having teeth similar to those of ordinary gears and racks have frequently been employed, but are objectionable for many reasons, among them being the liability of the spaces between the teeth of the rack or rail becoming clogged with dirt, snow or ice, and the consequent liability of the wheels being lifted or running off the rail.

The object of my invention is to produce a rail in or on which no dirt or other obstructions can accumulate and between which and the wheel the friction will be very small. These objects I attain by the construction hereinafter described and claimed and in which my invention consists.

In the accompanying drawings: Figure 1 is a perspective view of my improved track and wheel. Fig. 2 is a sectional view of the rail, and Fig. 3 is a plan view of the wheel.

A is the wheel having its periphery provided with two flanges A', A', and with lugs *a* at intervals located adjacent to each flange,

and the lugs on one side alternating with those on the other side.

The rail is of the usual form but the sides of its tread are provided with vertical notches *b* which alternate with each other on the two sides and correspond as to distance from each other with the lugs *a* of the wheel; the width of the notches *b* is of course slightly greater than the lugs *a*, and their shape is rounding, so that when engaged by the rounding lugs of the wheel there will be but little friction and great speed may be acquired. It will be understood that dirt, snow or ice or other obstructions cannot well lodge in the vertical notches and even if this should happen, would readily be pushed out by the lugs of the wheels. The lugs taking into the notches of the rail, serve the purpose of greatly increasing the power of the traction and the notches in the rail being round, may be formed in the rolling process when the rail is fabricated.

Having thus described my invention, I claim—

A wheel having rounded lugs on each edge of its flat periphery in combination with a rail having correspondingly rounded notches in each side for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY S. PRUYN.

Witnesses:

FRANK S. OBER,
THOMAS K. TRENCHARD.