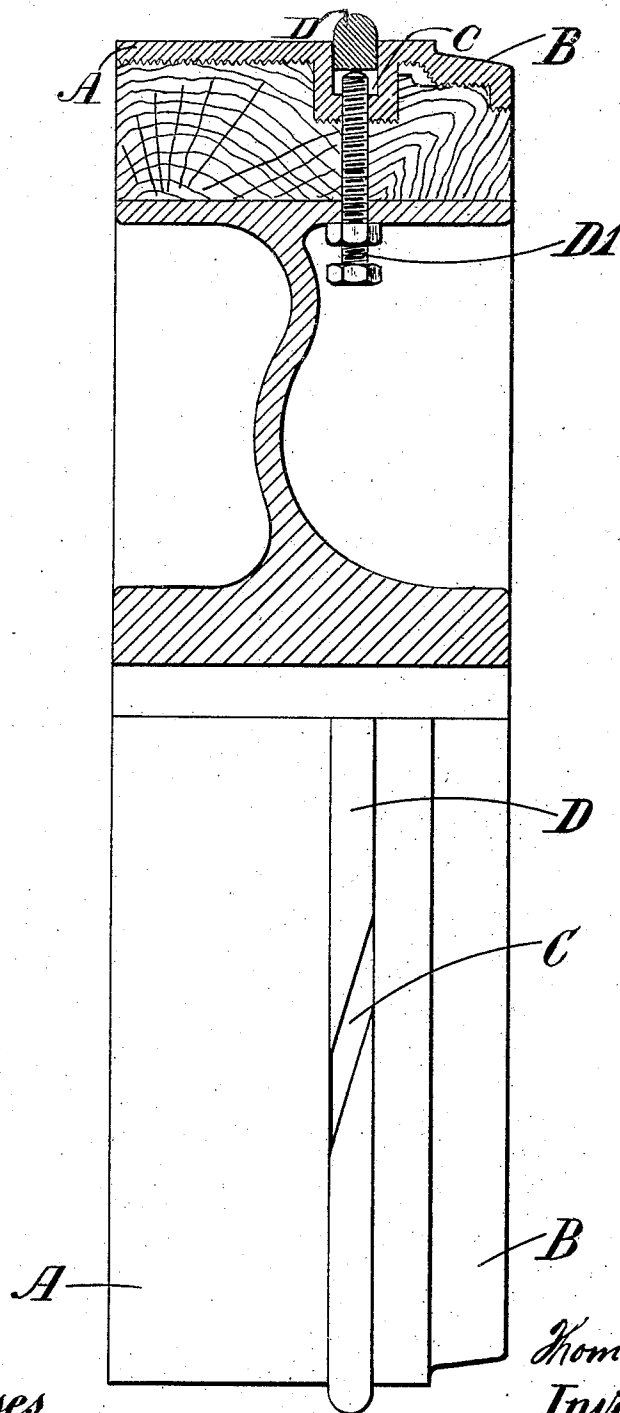


No. 848,747.

PATENTED APR. 2, 1907.

T. JONES.
WHEEL FOR VEHICLES.
APPLICATION FILED AUG. 31, 1906.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS JONES, OF HAMPTON-IN-ARDEN, ENGLAND.

WHEEL FOR VEHICLES.

No. 848,747.

Specification of Letters Patent.

Patented April 2, 1907.

Application filed August 31, 1905. Serial No. 276,570.

To all whom it may concern:

Be it known that I, THOMAS JONES, a subject of the King of Great Britain, and a resident of Hampton-in-Arden, in the county of Warwick, England, have invented certain Improvements in Wheels for Vehicles, of which the following is a specification.

This invention relates to wheels for vehicles, and has for its object to provide means whereby a vehicle can be directly used either on road, tramway, or railway without changing the wheels. This is particularly advantageous in the case of motor-vehicles used for the transport of goods, as the goods do not have to be unloaded from the motor-vehicle when transport by railway is necessary, and the vehicle can run on rails as an ordinary railway-truck, yet be ready for use at the end of its rail journey.

According to this invention as applied to a vehicle for use on either road or rail the road-wheels, which may be of any convenient construction, have attached to them concentrically-flanged wheels or the like suitable for use upon the railway. It is obviously necessary that the relative sizes of the road and railway wheels be proportioned according to the circumstances under which they are to be used. Further, the gage of the flanged railway-wheels must conform to the gage of the railway upon which the vehicle is to be used, while the gage of the road-wheels is not restricted.

In one construction where the road-wheels are of metal the railway-wheels may be cast integral with them. In another construction the railway-wheels, which are of necessity flanged, may be bolted or otherwise attached to the road-wheels by bolts passing through the above-mentioned or other flanges, as desired.

Where it is necessary for the vehicle to run upon a tramway as well as, or instead of, a railway, the road-wheels may have their peripheries suitably grooved. The distance between the groove in one wheel and that in the adjacent wheel is proportioned to the gage of the tramway. In each groove lies a suitable spring-ring, the ends of which may abut or overlap. The tendency of this

spring-ring is to contract into the groove and lie flush with the periphery of the road-wheel. It will be obvious that by the operation of some suitable expanding device the rings may be caused to project from the grooves in the manner of flanges and will engage the tramway-rails in the ordinary manner. The expanding device must be of such a strength as to hold the ring expanded against the pressure to which it is subjected; otherwise its construction is not restricted and may be of any continuous type, employing, say, toggles, eccentric, cams, wedge-pieces, or the like.

It will be obvious that by combining the above constructions each wheel may be prepared for use upon road, railway, or tramway, or for any two of the above.

The accompanying drawing shows one method of carrying out this invention.

In the drawing I have shown my improved wheel, the upper portion being in vertical section and the lower portion being in elevation.

The wheel is provided with a tread portion A for road use, and formed integral with it is a tread portion B for railway use, these two tread portions being of the ordinary type adapted for their respective purposes. In the portion A is a groove C, in which lies a spring-ring D. Normally this is adapted to lie flush with the tread portion A when the vehicle is being used upon road or railway. When it is desired to run the vehicle on a tramway, the spring-ring D is expanded, as by operating the screwed spindles D', a number of which are arranged around the wheel.

It will be seen that by this invention the wheel is adapted for use upon the road, railway, or tramway with practically no alteration. It will be clear that by this invention much trouble and expense is saved in the transport of goods on combined road, rail, and tram journeys.

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

1. The combination with a road or similar wheel, of a spring-ring adapted to be expanded to engage a tramway or similar rail, substantially as described.

2. The combination with a road or similar wheel having a tread portion adapted to engage a road-surface, of a second tread portion adapted for railway use a peripheral groove
5 in the road-tread surface, and a spring-ring normally lying within said groove, adapted to be expanded to engage a tramway or similar rail substantially as described.

In testimony whereof I have signed my name to this specification in the presence of 10 two subscribing witnesses.

THOMAS JONES.

Witnesses:

ERNEST HARKER,
JOHN T. FAZAKARLEY.