2 Sheets—Sheet 1.

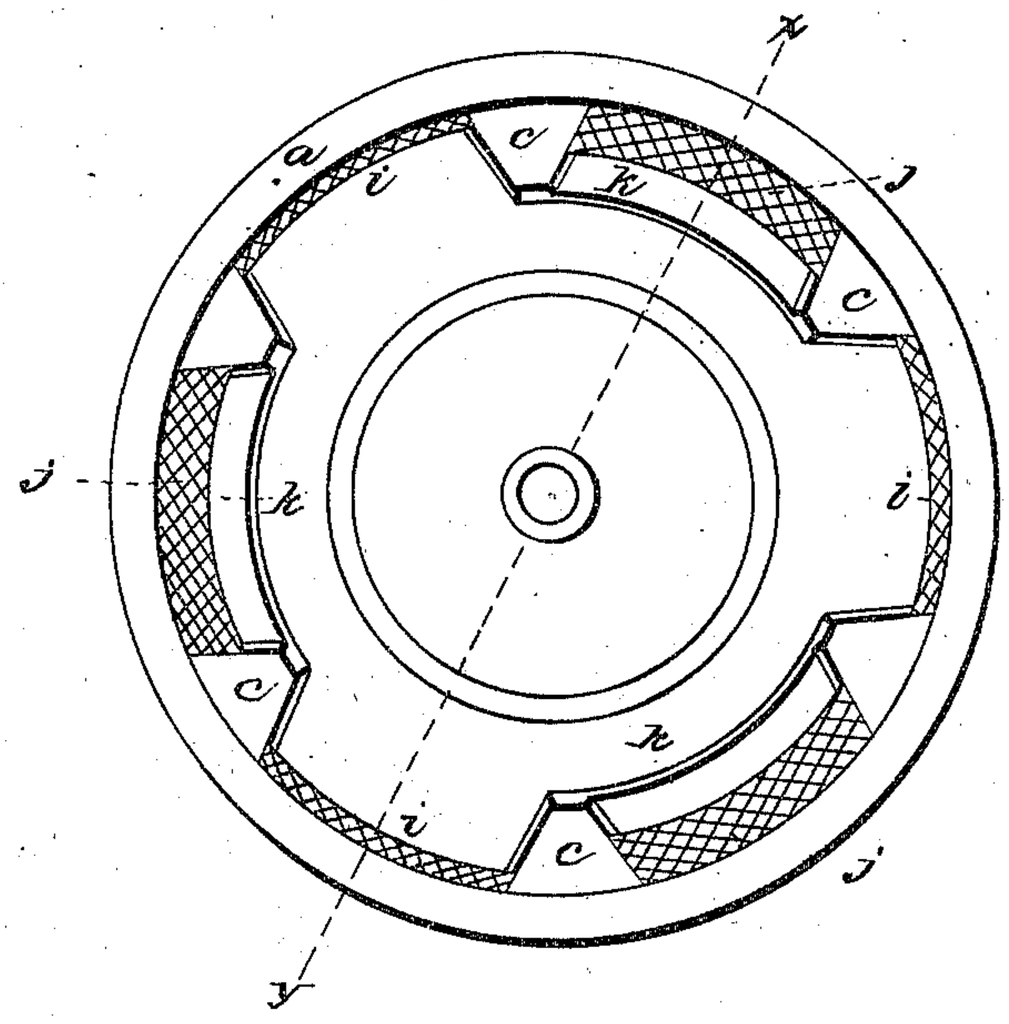
J. T. OWEN.

Car Wheel.

No. 97,433.

Patented Jan. 30, 1869.

Fig. 1



Witnesses

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Wm. L. Burns.

Inventor

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Car Wheel.

2 Sheets—Sheet 2.

No. 97,433.

Patented Jan. 30, 1869.

Fig. 2

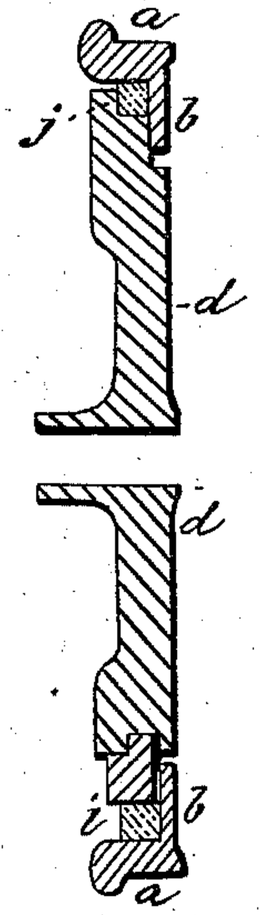


Fig. 3

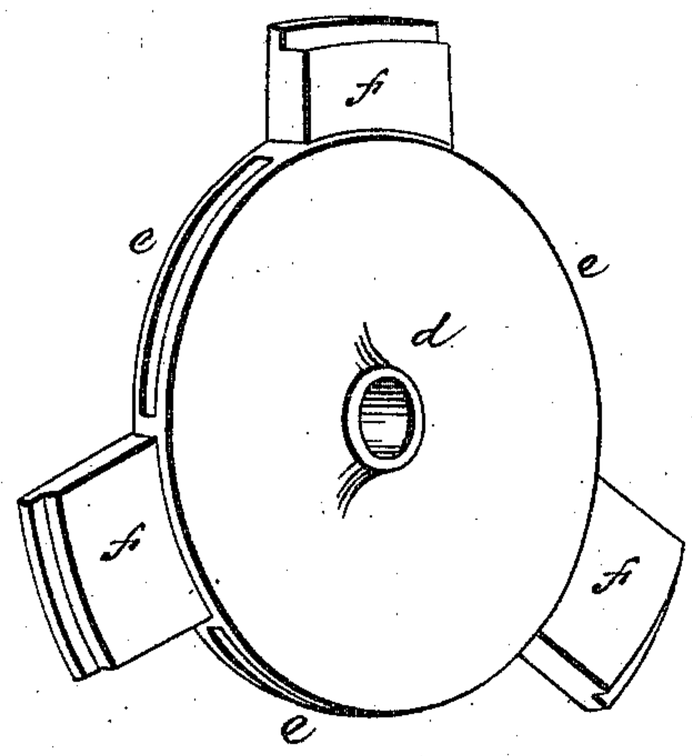


Fig. 4

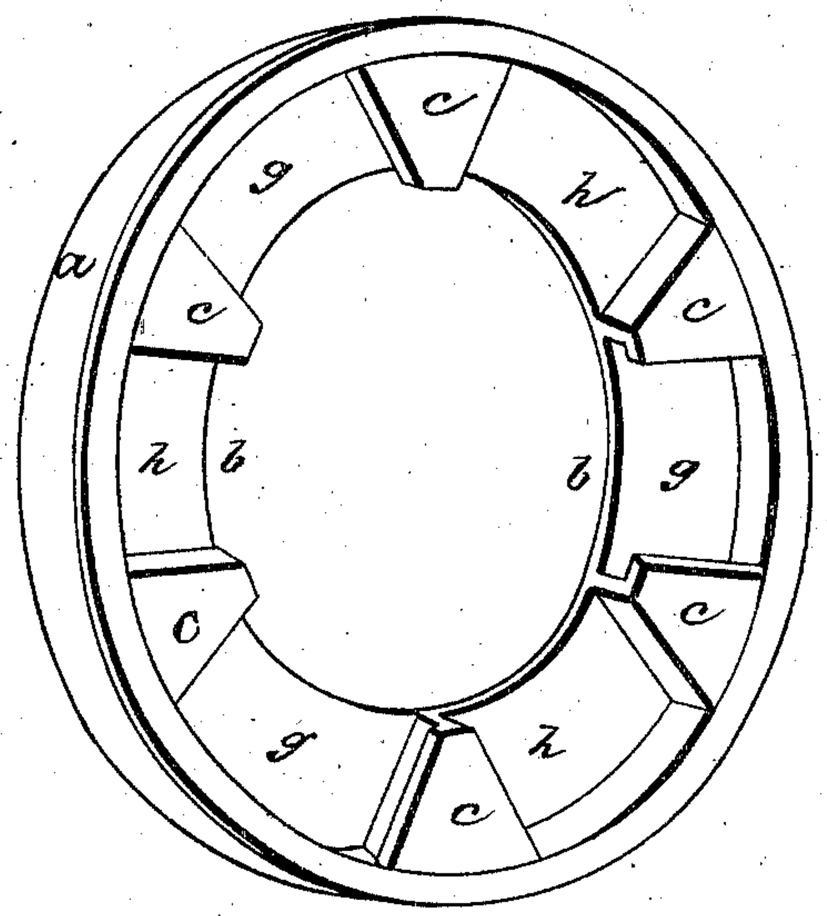


Fig. 5

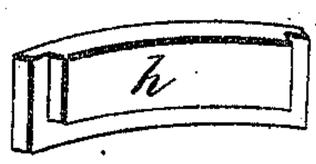


Fig. 6

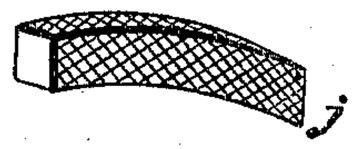
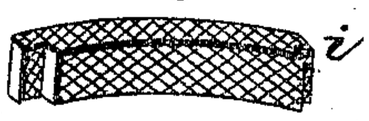


Fig. 7



Witnesses

Geo. T. Buckley
Wm. L. Burns

Inventor

Joshua T. Owen

United States Patent Office.

JOSHUA T. OWEN, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 97,433, *dated November* 30, 1869.

IMPROVED RAILWAY-CAR WHEEL.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSHUA T. OWEN, of Philadelphia, Pennsylvania, have invented a new and useful Car-Wheel; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, forming part hereof, and to the several letters marked thereon, in which drawings—

Figure 1 represents an interior face view of said wheel.

Figure 2, a diametrical section of the same, on the line *x y* of fig. 1.

Figure 3, a perspective view of the detachable hub and attached central parts of said wheel, looking at the outer face thereof.

Figure 4, a similar view of said wheel, the central part being removed.

Figure 5, a similar view of the keys *k*.

Figures 6 and 7 similar views of the India-rubber springs *i* and *j*.

Referring to the drawings, in figs. 1, 2, and 4, *a* represents the periphery, which is cast with the interior annular flange *b*, and the several grooved ribs *c*, forming the sockets *g* and *h*, which appear most distinctly in fig. 4.

In figs. 1, 2, and 3, *d* is the detachable hub and attached solid central parts of the wheel, it being provided with grooves, *e*, in the edge, and with projections, *f*, which last, when the central portion of the wheel is in place, enter the sockets *h*, fitting said sockets loosely, as shown in fig. 1.

i, figs. 1, 2, and 7, represent India-rubber springs, inserted into the sockets *b*, and retained there by the recessed edges of the projections *f*, and by the sides of the ribs *c*, which are slightly under-cut or dove-tailed.

j, figs. 1, 2, and 6, represent India-rubber springs, inserted into the sockets *g*, and retained there by the sliding removable key-pieces *k*, the side edges of which (see fig. 5) slide in the grooves in the sides of ribs *c*, and the end tongues of which enter the grooves *e*.

This wheel is applied to the axles of cars in the ordinary manner; and, from its peculiar construction, it acts as an adjunct to the springs usually employed in breaking the force of concussions due to obstructions or unevennesses on the track.

In many cases, these wheels may be employed as substitutes for the ordinary springs.

I do not wish to confine myself to the use of India-rubber springs, as other elastic gums might be employed, or spiral springs might be substituted in place of the springs *i* and *j*.

Having thus described my invention,

I claim, and desire to secure by Letters Patent—

A car-wheel, constructed substantially as set forth.

Witnesses: JOSHUA T. OWEN.

GEORGE E. BUCKLEY,

WM. BURNS.